



User Manual

English

- I General User Manual
- II User Manual | Fast Pedelec
- III User Manual | Pedelec with centre motor
- IV User Manual | Pedelec with front motor
- V User Manual | Pedelec Impulse
- VI User Manual | Pedelec Impulse Ergo
- VII User Manual | Pedelec Groove
- VIII User Manual | Pedelec Xion
- IX User Manual | Bosch Speed
- X User Manual | Bosch Cruise
- XI User Manual | NuVinci Harmony (English version) *



I

General User Manual

English



1 The bike and its components

- 1 Handlebar
- 2 Handlebar stem
- 3 Bell
- 4 Headset
- 5 Front light
- 6 Mudguard
- 7 Fork
- 8 Front wheel brake
- 9 Tyres
- 10 Wheels
- 11 Bottom bracket
- 12 Pedals
- 13 Chain
- 14 Rear derailleur
- 14 a Front derailleur
- 14 b Rear derailleur
- 15 Rear light
- 16 Reflector
- 17 Pannier rack
- 18 Saddle
- 19 Frame



2 Preface

Your bike has been delivered to you fully assembled. If parts of your bike have not been installed, please consult your specialist cycle shop.

The purpose of this User Manual is to help you use your bike safely in the manner for which it is intended, and enjoy all its benefits for many years to come. We assume that you have general knowledge on the handling of bikes.

Every person who uses, cleans, maintains or disposes of this bike must have read and understood the entire content of this User Manual.

In addition to texts, tables and lists, the User Manual contains the following symbols that denote important information or dangers.



WARNING about possible physical injury, increased risk of falls or other injuries



IMPORTANT ADDITIONAL INFORMATION or special information on using the bike



NOTE about possible damage to property or the environment

3 Content

1	The bike and its components	2	9.2.4 Adjusting the saddle angle	15
2	Preface	3	9.2.4.1 With a two-bolt seatpost	15
3	Content	4	9.2.4.2 With a seatpost saddle clamp	15
4	Safety information	7	9.2.4.3 With a suspension seatpost	16
4.1	Basic safety information	7	9.3 Adjusting the handlebar position	16
4.2	For your own safety	7	9.3.1 Adjusting / aligning the handlebar height with a conventional handlebar stem	16
4.3	Information for parents and legal guardians	7	9.3.2 Adjusting the handlebar height with A-head systems	17
4.4	Safety in road traffic	7	9.3.3 Aligning handlebars with A-head systems in relation to the front wheel	17
4.5	Bike safety	8	9.3.4 Adjusting the handlebar position by turning the handlebar	17
5	Legal provisions	8	9.3.5 Adjusting the handlebar height with an adjustable handlebar stem	18
5.1	Applicable road traffic licensing regulations	8		
6	Intended use	9		
6.1	General information	9		
6.2	Trekking bike / all-terrain bike (ATB), if equipped in accordance with the applicable road traffic licensing regulations	9	10 Frame	18
6.3	City, touring, sports, child's and youngster's bike, if equipped in accordance with the applicable road traffic licensing regulations	9	11 Headset	19
6.4	Mountain bike (MTB) / cross bike	10	12 Fork	19
6.5	Road bike / fitness bike	10	13 Suspension frame and suspension elements	20
6.6	BMX	10	13.1 Frame with rear suspension	20
7	Before the first ride	11	13.2 Care and maintenance	20
8	Before every ride	12	14 Bottom bracket and cranks	21
9	Setting up the bike for the rider	12	15 Checking the bottom bracket	21
9.1	Fitting the pedals	12	16 Wheels	21
9.2	Adjusting the seat position	13	16.1 Checking the wheels	21
9.2.1	Adjusting the bike saddle	13	16.2 Checking the hubs	21
9.2.2	Operating the quick-release device	13	16.3 Checking the rims	22
9.2.3	Determining the correct saddle height	14	17 Tyres and inner tubes	22
			17.1 Tyres	22
			17.2 Tubeless tyres	23
			17.3 Tubed tyres	23
			17.4 Inner tubes	23

18 Repairing a puncture	24	20 Bike chain	40
18.1 Opening the brake	24	20.1 Maintenance of bike chains	40
18.1.1 Opening the cantilever or V-brake	24	21 Brake, brake levers and brake systems	41
18.1.2 Removing the hydraulic rim brake	24	21.1 Important information and precautionary measures	41
18.1.3 Opening the side-pull calliper brake	25	21.2 Brake lever	42
18.1.4 Releasing the hub gears, roller, drum or back-pedal brakes	25	21.2.1 Standard brake lever	42
18.2 Removing the wheel	25	21.3 Hub brakes	42
18.2.1 Removing the front wheel	25	21.3.1 Drum and roller brakes	42
18.2.2 Removing the rear wheel	25	21.3.2 Back-pedal brake	43
18.3 Removing the tyre and inner tube	26	21.4 Rim brakes	44
18.4 Mending the inner tube	26	21.4.1 Readjusting the brake	44
18.5 Fitting the tyre and inner tube	27	21.4.2 Adjusting the brake-pad clearance in relation to the rim	44
18.6 Fitting the wheel	27	21.4.3 Wear of brake pad	45
18.6.1 Inserting the front wheel	27	21.5 Disc brakes	45
18.6.2 Inserting the rear wheel	27	21.5.1 Hydraulic disc brake	46
18.6.2.1 Bikes with derailleur gears	27	21.5.2 Vapour bubble formation	47
18.6.2.2 Bikes with hub gears	27	21.5.3 Cleaning the brake system	47
19 Bike gears	30	21.5.4 Fitting/removing the wheel	47
19.1 Derailleur gears	30	22 Lighting system	48
19.1.1 Operating the shifting lever	31	22.1 Specifications for lighting system	48
19.1.1.1 Shifting lever on road bike	31	22.2 Special regulations for road bikes	48
19.1.1.2 Shifting lever on MTB, trekking and touring bike	35	22.3 Generator / dynamo	48
19.2 Hub gears	38	22.3.1 Sidewall dynamo	48
19.2.1 Operating the hub gears	38	22.3.1.1 Switching the sidewall dynamo on and off	48
19.2.1.1 Shimano 7/8-speed shift lever	38	22.3.2 Hub dynamo	49
19.2.2 Adjusting gears with Shimano hub gears	39	22.4 Failure of the lighting system	49

23 Add-on components	50	27.5 Brake pads	58
23.1 Pannier rack	50	27.6 Brake discs	58
23.1.1 Front pannier rack	50	27.7 Bike chains or toothed belts	58
23.1.2 Rear pannier rack	50	27.8 Chainrings, sprocket wheels and jockey wheels	58
23.2 Wheel guards / mudguards	51	27.9 Lamps of lighting set	58
23.2.1 Re-engaging the safety-release mechanism	51	27.10 Handlebar tapes and handle grips	59
24 Accessories and equipment	52	27.11 Hydraulic oils and lubricants	59
24.1 Child seat	52	27.12 Gear-shift and brake cables	59
24.2 Bike stand	53	27.13 Paint finishes	59
24.3 Bike trailer	53	27.14 Bearings	59
24.4 Bike basket	53	27.15 Sliding bearings and bearings for full-suspension frames, suspension forks or other suspension elements	59
24.5 Bar ends	53		
25 Bike carriers for mounting on roof and rear of car	54	28 Regular inspections	60
26 Carbon components	54	28.1 Inspection schedule	60
26.1 Properties	54	28.1.1 Maintenance / checks	60
26.2 Torques	54	29 Link list	61
26.3 Visual inspection	55	30 Technical data	62
26.4 Carbon frame	55	30.1 Maximum permitted gross weight of bike	62
26.5 Carbon handlebar	55	30.2 Maximum permitted loading of pannier rack	63
26.6 Carbon handlebar stem	55	30.3 Tightening torques for screw connections	63
26.7 Carbon wheels	56	30.3.1 General tightening torques for screw connections	65
26.8 Carbon fork	56	30.4 Tyres and tyre pressure	65
26.9 Carbon seatpost	56	30.5 Lighting set	65
26.10 Splinters	56	31 Warranty conditions	66
26.11 Fastening in mounting stand	56	31.1 Prerequisites for the validity of warranty claims	66
26.12 Transportation by car	56	31.2 Warranty exclusions	66
27 Care and maintenance of the bike	57		
27.1 Care	57		
27.2 Wear parts	57		
27.3 Tyres	58		
27.4 Rims in conjunction with rim brakes	58		

4 Safety information

4.1 Basic safety information

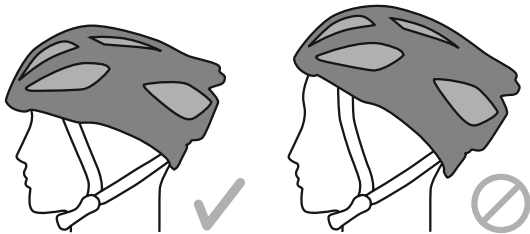
Please read all the warnings and information in this User Manual carefully before using the bike. Keep this User Manual near your bike for ready reference.

If you hand this bike over to someone else, don't forget to give them the User Manual as well.

4.2 For your own safety



- › Always use a suitable bicycle helmet and wear it correctly.



- › Wear bright clothing or reflective elements so that other road users can see you in good time.
- › Wear shoes with a stiff, and whenever possible, non-slip sole.
- › Wear close-fitting clothing on your legs, or wear trouser clips.
- › Wear protective clothing such as robust shoes and gloves.

4.3 Information for parents and legal guardians



- › Make sure that your child has been taught, and also understands, how to handle the bike safely and responsibly in the environment in which it is going to be used.
- › Explain to your child how to operate all the brakes, and also how they work and any special features. For further important information on this matter, refer to ➔ *Chapter 21 "Brake, brake levers and brake systems"*.
- › As the legal guardian, you are responsible for the safety of your child and any damage he/she may cause when cycling. You should therefore make absolutely sure that the bike is in technically sound condition and adjust it regularly to the size of the child.

4.4 Safety in road traffic




- › Observe the applicable traffic regulations.
- › Never ride with no hands!
- › In some countries children below a certain age must ride on the pavement and must also dismount when crossing the road. Please familiarise yourself with the applicable regulations.
- › Adjust your handling on wet or slippery roads; ride more slowly and brake carefully and in good time as you will require a much greater braking distance.
- › Adopt a speed that reflects the terrain as well as your riding ability.
- › Do not listen to music through headphones when cycling.
- › Do not cycle when using a mobile phone.
- › Use designated cycle paths when not using public roads.

- › Be ready to brake, especially if you are not sure what lies ahead or are riding downhill.

4.5 Bike safety



- › Only bikes that have been approved for use in public places, as per the applicable regulations (e.g. StVZO in Germany), may be used.
- › Observe the maximum permitted gross weight of the various bike types, as this could otherwise lead to breakage or failure of safety-relevant components. The brake system is also only designed for the maximum permitted gross weight of the bike. For a list of the maximum permitted gross weights, refer to **Chapter 30 "Technical data"**.
-  The gross weight is the sum of the weight of the bike + weight of the rider + weight of the luggage. The gross weight also includes towed weights such as trailers.
- › If you notice that a part is damaged or warped, do not use the bike until you have had the part replaced as otherwise parts that are important to operation of the bike may fail.
- › Observe the maximum load-carrying capacity of the pannier rack. This is marked on the pannier rack directly (also refer to **Chapter 30 "Technical data"**).
- › Have maintenance and repairs carried out by a professional bike workshop (for maintenance intervals, refer to **Chapter 28 "Regular inspections"**).
- › If you make technical changes to your bike, take the national traffic regulations and applicable standards into account. Bear in mind that this could render your warranty invalid.
- › Only replace electrical components on your bike with type-tested parts.
- › Only ride with suitable lighting in unfavourable lighting conditions such as fog, rain, dawn/twilight or in the dark.



Bear in mind that with intensive use of your bike wear increases accordingly. Many bike parts, particularly on light sports bikes, are only designed for a specific period of use. If this is exceeded, there is a considerable risk that components could fail.

Perform care and maintenance on your bike regularly. In doing so, check important components, particularly the frame, fork, wheel suspension, handlebar, handlebar stem, seatpost and brakes for warping and damage. If you notice changes such as cracks, bulges or warping, have your bike checked by a specialist cycle shop before using again.

5 Legal provisions

If you wish to use your bike in road traffic, make sure that your bike complies with the road traffic regulations. If necessary, observe **Chapter 22.2 "Special regulations for road bikes"**.

5.1 Applicable road traffic licensing regulations

Before you take your bike on the road, find out what the relevant national regulations in your country are – in Germany, these are the Road Traffic Licensing Regulations (StVZO) and the Road Traffic Ordinance (StVO).

In Switzerland, the applicable regulations can be found in the Ordinances relating to Technical Requirements for Road Vehicles, Articles 213 to 218.

If you wish to ride in road traffic in Austria, you must observe Ordinance 146 / Bicycle Ordinance.

Make sure each time you use your bike that it actually is in the prescribed roadworthy condition, that the brakes are properly adjusted and that the bell and lighting set comply with the relevant regulations in your country, in Germany these are the Road Traffic Licensing Regulations (StVZO).

In some EU countries, battery-operated front lights and rear lights may only be used by road bikes weighing less than 11 kg. They must always be carried and have an official approval (sinuous line and K number). All other bikes must use dynamo lighting sets. Every component of the system must carry the official test mark which identifies it as "approved". The applicable regulations in your country apply in this regard, e.g. the Road Traffic Licensing Regu-

lations (StVZO) in Germany. When performing technical modifications, bear in mind that electrical components must only be replaced by type-tested components.

6 Intended use

6.1 General information

Bikes are a means of transportation for one person. In some countries, regulations exist governing the carrying of passengers, such as the Road Traffic Ordinance (StVO) in Germany (tandem or bike child seat).

If you wish to carry luggage, you will require a suitable fixture on your bike. Bear in mind the maximum load-bearing capacity of the carrier (see **Chapter 30 "Technical data"**).

Not every bike type is suitable for every surface. Bikes are not designed to cope with extreme stresses such as jumping or riding over steps.

You must not take part in competitions with your bike. The only exceptions to this are bikes that are offered explicitly for use in competitions.

The information in this User Manual applies for all bike types.

Any deviations for individual bike types are identified accordingly.

Observe the relevant user manual from the individual component manufacturers which can be found on the CD or in the Internet. If you have any questions once you have read the documentation, your specialist cycle shop will be pleased to provide assistance.

Intended use also includes compliance with the operating, maintenance and repair instructions provided in this User Manual.

The manufacturer and cycle shop will not accept liability claims should the bike not be used as intended.

6.2 Trekking bike / all-terrain bike (ATB), if equipped in accordance with the applicable road traffic licensing regulations



You may use these bikes on surfaced routes and in road traffic, providing they are equipped accordingly. They are also suitable for gentle offroad riding, such as on country lanes.

The manufacturer and cycle shop will not accept liability claims should the bike not be used as intended. This particularly applies for non-observance of the safety information and damage resulting for example from:

- overloading or
- incorrect repairs.

6.3 City, touring, sports, child's and youngster's bike, if equipped in accordance with the applicable road traffic licensing regulations



You can use these bikes in road traffic and on surfaced routes.

The manufacturer and cycle shop will not accept liability claims should the bike not be used as intended. This particularly applies for non-observance of the safety information and damage resulting (for example) from:

- offroad use,
- overloading or
- incorrect repairs.

6.4 Mountain bike (MTB) / cross bike



You can use these bikes offroad. You must not use these bikes in road traffic or competitions. If you wish to use your bike on public roads, it must have the requisite equipment features (see ►► *Chapter 5 "Legal provisions"*).

The manufacturer and cycle shop will not accept liability claims should the bike not be used as intended.

This particularly applies for non-observance of the safety information and damage resulting for example from:

- use in competitions,
- overloading,
- incorrect repairs.
- riding over steps,
- jumping,
- riding through deep water
- extreme stresses on non-designated MTB routes or MTB courses.

6.5 Road bike / fitness bike



You may use these bikes on public roads for training purposes. You may use road bikes weighing up to 11 kg without permanently fitted dynamo lighting. If you choose to do so, you must carry a battery-operated front light and a rear light. If the light has the required approval, there will be an embossed sinuous line and K-number on it.

When using road bikes that weigh more than 11 kg in road traffic, the required equipment features must be installed. Please familiarise yourself with the applicable regulations.

The bike is exempt from these requirements for the duration of officially approved cycling events.

The manufacturer and cycle shop will not accept liability claims should the bike not be used as intended. This particularly applies for non-observance of the safety information and damage resulting for example from:

- offroad use,
- overloading,
- incorrect repairs or
- use in competitions,

6.6 BMX

These bikes are designed for BMX routes and/or BMX practice facilities.

In some EU countries, they are not approved for use in road traffic, e.g. by the Road Traffic Licensing Regulations (StVZO) in Germany, and in this case must not be used for this purpose (see ►► *Chapter 5 "Legal provisions"*). Always wear a helmet and protective clothing, such as elbow and knee pads.

The brakes normally installed on BMX bikes produce a less effective braking action. You should therefore bear in mind that this increases the braking distance, especially in wet conditions. Please test this thoroughly in a safe location and always adjust your handling accordingly.

The manufacturer and cycle shop will not accept liability claims should the bike not be used as intended.

This particularly applies for non-observance of the safety information and damage resulting for example from

- use in competitions,
- overloading,
- incorrect repairs.
- riding over steps or
- jumping.

7 Before the first ride



Make sure that your bike is ready for use and is set up for your body size.

Check the following:

- Positioning and secure fastening of saddle and handlebar
- Installation and correct adjustment of the brakes
- Secure fastening of wheels in frame and fork

Adjust the handlebar and stem until you find a safe and comfortable riding position. Instructions on how to adjust the handlebar are provided in **Chapter 9.3 "Adjusting the handlebar position"**.

Adjust the saddle until you find a safe and comfortable riding position. Instructions on how to adjust the saddle are provided in **Chapter 9.2 "Adjusting the seat position"**.

Make sure the brake levers are always within easy reach and that you know how to operate the right/left brake levers and where to find them. Make a note of which brake lever operates the front and which the rear wheel brake.

Modern brake systems can have a far more powerful and different braking effect than those you are already familiar with. Before setting off, familiarise yourself with the effects of the brakes on a safe traffic-free area.

If you are using a bike with carbon-fibre rims, bear in mind that the braking behaviour of this material is much poorer than aluminium rims.

Make sure that the wheels are securely fastened in the frame and forks. Check that the quick-release device and all important fastening screws and nuts are securely fastened.

Chapter 9.2.2 "Operating the quick-release device" contains instructions on how to operate quick-release devices safely and **Chapter 30 "Technical data"** contains a table of the tightening torques for important screws and nuts.

Check the tyre pressure. Information on the prescribed tyre pressure appears on the tyre sidewall.

Never inflate the tyres to less than the minimum or more than the maximum specified tyre pressure. As a rule of thumb, e.g. when on the road, you can check the tyre pressure as follows: If you press your thumbs into the inflated tyre, there should not be much give in the tyre even if you press hard.

Check the tyres and rims for damage, foreign bodies, e.g. glass fragments or sharp stones and deformation.

If cuts, cracks or holes are visible, do not ride off. Instead, take your bike to a professional bike workshop and have it checked.

8 Before every ride



Although a great deal of care has been taken during production and assembly, parts may still come loose or change function during transportation for example.

You should therefore always check the following before every ride:

- Bell and lighting are working properly and securely fastened
- Brake system is working properly and securely fastened
- If a hydraulic brake is fitted to your bike, make sure the lines and connections are tight
- Check the tyres and rims for damage and foreign bodies and check the wheel runs true, especially after riding offroad
- Sufficient tread depth on the tyres
- The suspension elements are in working order and are securely fastened
- Screws, nuts and quick-release devices are secure
- Frame and fork for deformation and damage
- Handlebar, handlebar stem, seatpost and saddle in the correct position and safely and properly secured

If you are not sure whether your bike is in a technically sound condition, do not ride it and have it checked by a professional bike workshop instead.

9 Setting up the bike for the rider

Road bikes or mountain bikes can also be supplied without pedals.

Proceed as follows if you wish to fit pedals to your bike yourself:

9.1 Fitting the pedals

- › Coat both pedal threads with lubricant (grease).



The left pedal has a left-handed thread which is normally indicated by an "L" embossed on the axle. The right pedal has a right-handed thread which is normally indicated by an embossed "R".



Axle with **right** pedal thread



Axle with **left** pedal thread

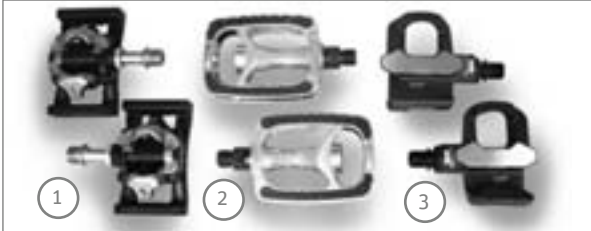
- › Screw the left pedal anticlockwise into the left crank.
- › Screw the right pedal clockwise into the right crank (on the side of the bike chain).



- › Tighten both pedals using a suitable size 15 open-ended spanner or Allen key. Tighten all screws to the prescribed torque (→ **Chapter 30 "Technical data"**). If you do not do this, the pedals may come loose.



Make sure you fit or screw in the pedals straight, as otherwise you could damage the thread in the crank arm beyond repair.



- 1 MTB system pedals
- 2 Touring or sports pedals
- 3 Road bike system pedals



Only use the designated cleats and shoes for MTB, racing and system pedals. If you use other cleats/shoes you may slip out of the pedals.

Riders who are inexperienced in the use of MTB system pedals or road system pedals, also referred to as click pedals, are vulnerable to falls with potentially serious consequences. If you use system pedals, practise clicking into the pedal and releasing the shoe from the pedal when the bike is stationary. Never practise this in road traffic.

Read the user manual of the pedal and shoe manufacturer.



You can also find more information on this subject in the Internet. A list of links is provided in **Chapter 29 "Link list"**.

9.2 Adjusting the seat position

9.2.1 Adjusting the bike saddle

The seat position is decisive for your well-being and cycling performance.



- Do not remove or change the seatpost or saddle clamp. If you change or modify components, this renders the warranty invalid.



- Tighten all screws to the prescribed torque as otherwise screws could shear off and components could come loose or detach altogether (see **Chapter 30 "Technical data"**).



Only work on the bike if you have the correct tools and requisite knowledge. Always have complex or safety-relevant work carried out by a specialist cycle shop.

9.2.2 Operating the quick-release device



- All quick-release devices must be tightened securely before you set off. Check this before every journey.
- If you leave your bike unattended, check that all quick-release devices are correctly secured before setting off again.
- When closing the quick-release lever to lock it, it must be necessary to apply a force that causes you to make a fist with your hand as otherwise the quick-release device could come loose.

Quick-release device



- 1 Quick-release lever
- 2 Adjusting nut

To open the quick-release device, proceed as follows:

- › Throw back the quick-release lever so that its inner face or the lettering OPEN is visible.



- › Open the quick-release device as far as possible.
- › Turn the adjusting nut anticlockwise to further slacken the quick-release device.

To close the quick-release device, proceed as follows:

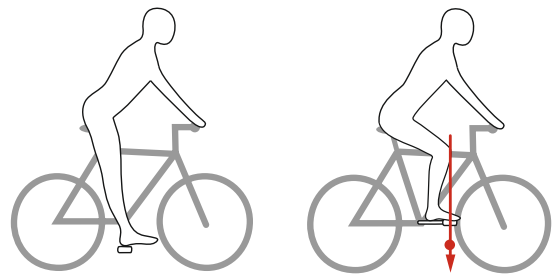
- › Adjust the clamping strength by turning the adjusting nut.
- › If the quick-release device closes too easily, open it again and turn the adjusting nut clockwise.
- › If the quick-release device still closes too easily, repeat the previous step.
- › If the quick-release device is too difficult to close, turn the adjusting nut anticlockwise.
- › Turn back the quick-release lever from the OPEN position so you can see the outer side of the lever or the lettering CLOSE.



- › When closed, quick-release levers must lie flat against the frame, fork and saddle clamp. Make sure that quick-release devices for the hubs point backwards when closed as otherwise they could snag on obstructions when the bike is moving and open. This could lead to serious accidents.

9.2.3 Determining the correct saddle height

- › Sit on the bike saddle.
- › Try to reach the pedal with your heel when it is in the bottom position. Your knee should be more or less fully straightened out.
- › Place the balls of your feet on the centre of the pedal. If your knee is now slightly bent, the saddle height is correct.



- › Never tighten the seatpost if the maximum mark or stop mark is above the top of the seat tube as otherwise you could injure yourself or damage the seatpost. Always observe the specified tightening torques.

In full-suspension mountain bikes the seat tube is also open at the bottom, so the seatpost should only be inserted a certain distance downwards to ensure the rear swing arm and suspension element never come into contact when the bike is in use.



The minimum insertion depth is marked on the seatpost. If this is not the case, the minimum insertion depth must be 7.5 cm. In frames with long seat tubes that project beyond the top tube, the minimum insertion depth is 10 cm.



Observe stop mark.

9.2.4 Adjusting the saddle angle

- › Your bike saddle should be as close as possible to horizontal.
- › You can make use of longer bike rides to find out what your most comfortable seat position is. If you want to tilt the saddle, try tilting it very slightly forwards. If you tilt the saddle back, this can quickly lead to pain or physical injury.

Adjust the saddle angle as follows:

- › Turn the clamping screw anticlockwise to loosen it.
- › Tilt the bike saddle to the required angle.
- › Turn the clamping screw clockwise to tighten it. (For tightening torques see [Chapter 30 "Technical data"](#)).



Adjusting the saddle angle

9.2.4.1 With a two-bolt seatpost

Some seatposts have two screws for adjusting the saddle angle, one in front of and one behind the seat tube. If you want to tilt the saddle forwards, loosen the rear screw with an Allen key and tighten the front screw by the same number of revolutions. To tilt the saddle backwards, loosen the front screw and tighten the other to the same degree. Then retighten both screws observing the correct tightening torque (see [Chapter 30 "Technical data"](#)).



Two-bolt seatpost

9.2.4.2 With a seatpost saddle clamp

If the saddle is attached to the seatpost by a clamp, the clamping nut will be at the side. Adjust the saddle angle as follows:

- › Turn the clamping nut anticlockwise to loosen it. You may need to counter the nut on the other side using another wrench.
- › Tilt the bike saddle to the required angle.
- › Turn the clamping nut clockwise to tighten it. You may need to counter the nut on the other side using another wrench. Use the correct tightening torque (see [Chapter 30 "Technical data"](#)).



Seatpost saddle clamp

9.2.4.3 With a suspension seatpost

Suspension seatposts reduce vibrations caused by uneven roads thereby reducing stress on the spinal column.

If you need to adjust the suspension elements in the seatpost, consult your specialist cycle shop.



Suspension seatpost

9.3 Adjusting the handlebar position



Tighten all screws to the prescribed torque as otherwise screws could shear off and components could come loose or detach altogether (see ► **Chapter 30 "Technical data"**).

You can also influence your riding position by changing the handlebar height.

The lower you set the handlebar, the further you will have to lean forwards. This increases the strain on your wrists, arms and upper body and you will need to bend your back further.

The higher the handlebar is, the more upright your riding position will be. This increases the stress on your spinal column due to jolting.

You can determine a handlebar height that best suits your body size as follows:

- › Sit on the bike saddle.
- › Ask another person to hold the bike steady if required.

- › Bend your upper body towards the handlebar until you have found a position that is comfortable for your back.
- › Stretch out your arms towards the handlebar.
- › Note the approximate position of your hands and set the handlebar at this height.

9.3.1 Adjusting / aligning the handlebar height with a conventional handlebar stem

To release the stem shaft in the head tube, proceed as follows:

- › Release the stem expander bolt to loosen the handlebar stem. Turn it anticlockwise by two or three revolutions using an Allen key.



- › Clamp the front wheel between your legs to prevent the bike fork from turning with the stem shaft.
- › Holding the handlebar by the handles, turn it from right to left and vice-versa.
- › If it is not possible to do this, tap lightly on the stem expander bolt with a plastic hammer to loosen the clamping fixture inside the stem.
- › Set the handlebar stem to the required height.
- › Align the handlebar so that it is exactly at right angles to the front wheel.
- › To secure the stem shaft again, turn the stem expander bolt clockwise using an Allen key until it is tight (see ► **Chapter 30 "Technical data"**).



Never tighten the handlebar stem if the maximum mark or stop mark is above the top of the shaft. If you cannot find a mark, insert the handlebar stem into the head tube to a depth of at least 6.5 cm. If you do not do this, the handlebar stem could come loose or break.

9.3.2 Adjusting the handlebar height with A-head systems

With the A-head stems shown here, the handlebar height must be adjusted by a professional bike workshop.

9.3.3 Aligning handlebars with A-head systems in relation to the front wheel

To align the handlebar with the front wheel, proceed as follows:

- › Loosen the hexagon socket screws on the rear of the handlebar stem by turning them anticlockwise with an Allen key.



- › Turn the handlebar so that it is exactly at right angles to the front wheel.
- › Tighten the hexagon socket screw by turning it clockwise with an Allen key (see ► *Chapter 30 "Technical data"*).

9.3.4 Adjusting the handlebar position by turning the handlebar

Loosen the hexagon socket screws on the front of the stem. Turn the handlebar until you find the position that is comfortable for you. Make sure that the handlebar is always exactly in the centre of the stem. Now retighten the hexagon socket screws by turning them clockwise. If the tightening torque is stamped on the stem, use this value, and if not, use the tightening torques in ► *Chapter 30 "Technical data"*.

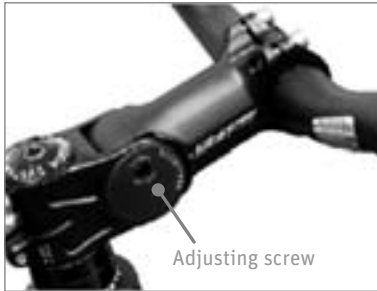


Once you have adjusted the handlebar, you will also need to adjust the brake levers and gear-shift handles. Loosen the hexagon socket screws on the handle grips. Sit on the saddle and put your finger on the lever. Turn the lever until your hand and lower arm are in a straight line. Retighten the screws in the handle grips by turning them clockwise. (For tightening torques see ► *Chapter 30 "Technical data"*).



9.3.5 Adjusting the handlebar height with an adjustable handlebar stem

With some types of handlebar stems, you can vary the handlebar tilt. The stem angle can be adjusted via the clamping screws which are on the side of the articulation or the top/bottom of the stem. Models equipped with additional stop notches or adjusting screws are available.



Adjusting screw



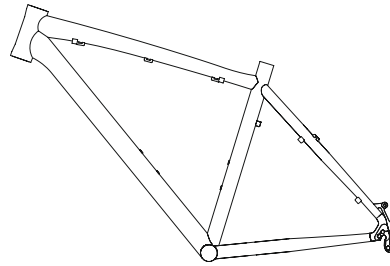
Hexagon socket screw (integrated stop notch)

Adjust the handlebar tilt as follows:

- › Undo the clamping screw by turning it anticlockwise through two or three revolutions using an Allen key.
- › If you own a model that is also equipped with detents, continue turning the clamping screw anticlockwise to disengage the detents.
- › If you own a model with integrated stop notch, loosen the screw of the stop notch. In many stem types this is located on the underside of the stem.
- › Tilt the handlebar stem to the required angle.
- › To fasten the handlebar stem, tighten the clamping screw clockwise using an Allen key. If tightening torques are specified on the stem, use exactly these torques, and if not, refer to the table of tightening torques in **Chapter 30 "Technical data"**.
- › In models with an integrated stop notch, tighten the screw of the stop notch carefully clockwise. In doing so, the stop notch must engage with the teeth.

10 Frame

The form of the frame depends on the bike type and function. Frames are manufactured from different materials – steel or aluminium alloys or carbon (carbon fibre), for example.



The frame number of the bike is stamped on the seat tube, the dropout or the bottom bracket housing.

It may also be found on the motor suspension in Pelecs. The bike can be identified by the frame number if it is stolen. To identify the bike properly, it is important to note down the whole number in the right order.



Never ride your bike if the frame is warped or cracked. On no account should you attempt to repair damaged parts. This can lead to accidents. Replace defective parts before you ride the bike again.

After an accident or crash, have your bike checked by a professional bike workshop before riding it again. If defects on the frame or components go unnoticed this can lead to accidents.

If your bike does not roll forwards easily in a straight line, this could mean that the frame is warped. In this case, have the steering stability checked by a professional bike workshop.

11 Headset



Headset

The headset is the bearing for the bike fork in the frame. If the headset has been properly adjusted, it will turn easily. In doing so, no play should be evident.

The headset is subject to a large amount of stress due to impacts with the road surface. This can cause it to come loose or affect its setting. Have the play and ease of movement of the headset checked regularly by your specialist cycle shop (for inspection intervals see ► **Chapter 28.1 "Inspection schedule"**).



Checking the headset

If you do not adjust the headset properly or tighten it too tightly, this could cause breakages. This should therefore always be carried out by a professional bike workshop.

If you ride with the headset loose, this could damage the bearing shells or fork.

12 Fork

The front wheel is held in place by the bike fork. The bike fork consists of two fork blades, the fork crown and steering tube.



Carbon fork



Suspension fork

The suspension fork is a feature of most mountain bikes, trekking bikes and city bikes. They can be adjusted in different ways and provide a greater degree of riding comfort.

For information on the function, maintenance and care of suspension elements, refer to ► **Chapter 13 "Suspension frame and suspension elements"**. Specific information on your suspension fork is provided in the manufacturer's operating instructions which you can find on the CD or the manufacturer's website.



Never ride with a damaged bike fork. Do not attempt to repair a defective bike fork. This can lead to serious accidents. If you notice that the bike fork is warped or otherwise damaged, replace it before using the bike again.

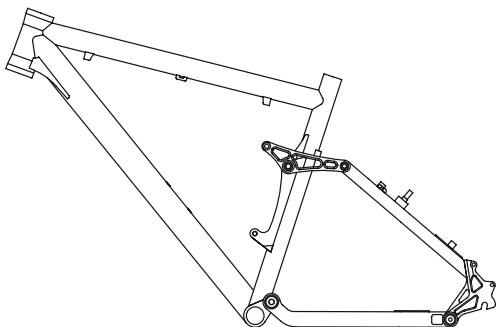
Avoid sudden changes in ground level and riding off high kerb stones. This can damage the fork and lead to serious accidents.

Check regularly that the screws on the bike fork are securely fastened. If screws are allowed to come loose, this can cause serious accidents.

13 Suspension frame and suspension elements

13.1 Frame with rear suspension

If you wish to ride offroad in a particularly sporty manner or with a high degree of comfort, you may have opted for a full-suspension model. In this case, the rear triangle of the main frame is not rigid; instead it can move and is spring mounted and damped by a shock absorber.



Full-suspension frame

Different types of suspension elements are used. These are mainly shock absorbers equipped with a steel spring or an air chamber whose air is compressed due to the action of the suspension. In high-quality shock absorbers, the damping action, that regulates the speed of compression and rebound, can be adjusted. This task is performed by a system of oil chambers and ducts.

Although this type of shock absorber offers a higher degree of riding safety and comfort, it requires special handling. This User Manual contains only general information in this regard. Detailed information and advice is provided in the instructions from the shock absorber manufacturer enclosed with the CD and can also be obtained from your specialist cycle shop.



The website of the relevant suspension element manufacturer may also prove to be a valuable source of information. Informative and helpful links are provided in **Chapter 29 "Link list"**.

Your specialist cycle shop should have adjusted the suspension for you before handing over your new bike. Your bike and the seat position may look different to what you are used to, and may also feel different when you are riding. The spring strut must be tuned so that it has a soft

response, but does not strike through if you ride over an obstruction. It must give slightly when you sit on your bike.

13.2 Care and maintenance

You can clean your full-suspension MTB in the usual manner. Hot water with a little washing-up liquid or a gentle detergent which you can obtain from your specialist cycle shop are suitable for this.



You should avoid using a high-pressure cleaner to clean your bike as the cleaning fluid can also enter sealed bearings due to the high pressure and damage them beyond repair.

You should carefully wipe down the piston of the shock absorber and the seal with a soft cloth as part of your regular bike maintenance. If you spray a little spray oil, e.g. from Brunox, on the running surface of the shock absorber and the seal, this increases its performance and service life.

You should regularly check the articulations of the rear triangle for play. To do this, lift the wheel and try to move the rear wheel sideways.

You can detect play in the mounting bushes of the shock absorber by lifting the rear wheel up and setting it back down quickly. If you sense play or hear a rattling noise, have your bike checked immediately by a professional bike workshop.



Your safety depends to a large extent on whether the suspension elements are securely fastened and are working correctly. You should therefore regularly look after and inspect your full-suspension bike.

- Tighten all screws to the prescribed torque as otherwise screws could shear off and components could come loose or detach altogether (see **Chapter 30 "Technical data"**).

14 Bottom bracket and cranks

Chainrings are wear parts. Their service life depends on various factors, e.g.

- maintenance and care,
- type of use and
- distance travelled.

15 Checking the bottom bracket



The cranks must be securely fastened as this could otherwise damage the crankset.

- The cranks can come loose which is why you should regularly check whether they are securely fastened by attempting to rock them to and fro.
- If there is play in the cranks, have the bike checked and the cranks fastened securely by a professional bike workshop .

If your bike has a carbon frame and a bottom bracket housing for a BB30 bottom bracket please note the following:

In this case you can fit an adapter so that a bottom bracket with conventional BSA thread can be used. However, bear in mind

- You can only install the adapter if the frame is completely undamaged. Repairing a defective BB30 housing serves no purpose. If it is not installed correctly, the bottom bracket housing may be damaged which would render the warranty void. This kind of adapter should only be fitted by a specialist cycle shop.
- Once the adapter has been fitted in the carbon frame it cannot be removed.

16 Wheels

16.1 Checking the wheels

The wheels connect the bike with the surface you are riding on. The wheels are subject to a particularly high level of stress due to unevenness of the riding surface and the weight of the rider.

The wheels are carefully checked and trued prior to delivery. However, the spokes may settle when you ride the first kilometres on your bike.

- Have the wheels checked again and trued if necessary after the first 100 kilometres by a specialist cycle shop.
- You should subsequently regularly check the tension in the spokes and have loose or damaged spokes replaced, and/or have the wheel trued, by a specialist cycle shop.

The wheel can be attached to the frame and fork in a number of different ways. In addition to the standard systems in which the wheel is held on by axle nuts or quick-release devices, different types of floating axles exist. These can be held in place by a screw connection or different types of quick-release devices. If your bike has a floating axle, please also refer to the enclosed manufacturer's user manual or visit the web pages of the relevant manufacturer in the Internet.



Tighten all screws to the prescribed torque as otherwise screws could shear off and components could come loose or detach altogether (see **Chapter 30 "Technical data"**).

16.2 Checking the hubs

To check the hub bearings, proceed as follows:

- Lift the wheel and spin it.
- Check whether the wheel continues to turn through several revolutions before it stops moving. If it stops suddenly, the bearing is damaged. This does not apply for front wheels with hub dynamos.
- To determine whether there is play in the hub bearing, try rocking the wheel in the bike fork or rear

triangle backwards and forwards perpendicular to the direction of travel.

- › If you notice that there is play between the bearings or if you encounter resistance when turning the wheel, have the hub bearing adjusted by a specialist cycle shop.

16.3 Checking the rims

If you are using a rim brake, the rim is subject to a higher degree of wear.



If a rim is worn it loses stability which makes it more susceptible to damage. If the rim is deformed, cracked or broken this can lead to serious accidents. If you notice changes in a rim on your bike, do not ride on it. Have the problem checked by a professional bike workshop.



Rims for bikes with wheel sizes greater than 24" are supplied with a rim wear indicator. These rims have a characteristic curve or groove that runs round the entire circumference.

Replace the rim as soon as you notice marks (grooves, coloured spots) in one location on the rim, if an embossed marking has disappeared or if a coloured marking has worn down.

If the marking consists of a groove or several points on the rim side wall, have the rim replaced as soon as it wears off.

17 Tyres and inner tubes

17.1 Tyres

A large number of different tyre types exist. The bike's offroad capability and rolling resistance depend on tread profile.



Only inflate the tyre to the maximum permissible tyre pressure as otherwise it may burst.

Inflate the tyre at least to the specified minimum air pressure. If the tyre pressure is too low, the tyre may detach from the rim.

The maximum permissible tyre pressure, and normally also the minimum permissible pressure, can be found on the tyre sidewall.

Always replace the tyre with a tyre of the same type, dimension and profile as otherwise the ride characteristics may be adversely affected. This can lead to accidents.



Tyres are wear parts. Check the tread depth, tyre pressure and condition of the tyre sidewalls regularly. Replace worn tyres before using the bike.



Note the dimension of the fitted tyre. Standard designations are used when stating the tyre dimension.

- *Example 1:* "46-622" means the tyre is 46 mm wide and the rim diameter is 622 mm.
- *Example 2:* "28 × 1.60 inches" means that the tyre diameter is 28 inches and the tyre width is 1.60 inches.

The tyre pressure is frequently stated in PSI. ➔ *Chapter 30 "Technical data"* contains a table which you can use to convert tyre pressures from PSI into bar.

17.2 Tubeless tyres

Tubeless tyres are also used nowadays, especially with modern mountain bikes, but also with road bikes to a lesser extent. Although they offer a number of benefits, they must be used and handled with caution.



Only use tubeless tyres on suitable rims. These are identified accordingly, e.g. using the abbreviation "UST".



Only use tubeless tyres of the prescribed type and in the prescribed manner, with the right tyre pressure and, if applicable, using the recommended sealing fluid.

Tools must not be used to remove tubeless tyres from the rim as otherwise leaks may subsequently occur. If the sealing fluid does not remedy the defect, the valve can be removed and a normal inner tube used.

17.3 Tubed tyres

Tubed tyres are also used, particularly on bikes used in sports competitions. With this tyre type, the inner tube is sewn into the casing and this unit is glued firmly to the designated rim using special adhesive. Tubed tyres offer enhanced safety in the event of a puncture and improved emergency-running characteristics



Only use tubed tyres on the designated rims. These do not have turned-up edges (rim flanges) and instead have a smooth inwards-curving surface onto which the tubed tyre is glued.



Only use the tubed tyres of the prescribed type and in the prescribed manner with the correct tyre pressure.



Special skills and a great deal of experience are required to glue on tubed tyres. Always have tubed tyres replaced at a professional bike workshop. Find out how to handle tubed tyres correctly and how to replace them safely.

17.4 Inner tubes

The inner tube is necessary to maintain the pressure inside the tyre. It is inflated via a valve.

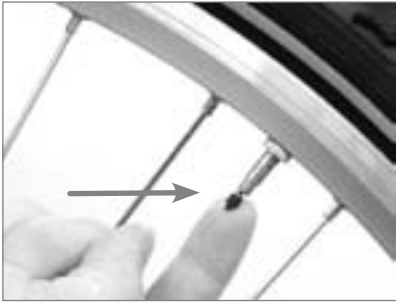
Three valve types exist:



- 1 Sclaverand or road valve
- 2 Schrader or car valve
- 3 Dunlop or Woods valve

All three have a cap to protect them from ingress of dirt.

To inflate an inner tube with a Sclaverand or road valve, proceed as follows:



- › Unscrew the valve cap anticlockwise with your fingers.
- › Unscrew the knurled nut anticlockwise.
- › Push the knurled nut with your finger briefly into the valve until air escapes.
- › Inflate the inner tube using a suitable tyre pump.
- › Screw the knurled nut back down.
- › Screw the cap clockwise back onto the valve.



Ask a specialist cycle shop for advice on which tyre pump is suitable for your valve.

To inflate an inner tube with a Dunlop/Woods valve or Schrader/car valve proceed as follows:

- › Unscrew the valve cap anticlockwise.
- › Inflate the inner tube using a suitable tyre pump.
- › Screw the cap clockwise back onto the valve.

18 Repairing a puncture

To repair a puncture, you will need the following equipment:

- Plastic tyre lever
- Patches
- Rubber solution
- Sandpaper
- Spare inner tube, if required
- Spare valve, if required
- Open-ended spanner (if your bike is not equipped with a quick-release device)
- Tyre pump

We recommend you remove the defective wheel first. Open or remove the brake beforehand. The procedure for this depends on the type of bike brake that is installed.



Read the chapter on brakes before removing the brake as otherwise you could damage the brake system and this could lead to accidents.

18.1 Opening the brake

18.1.1 Opening the cantilever or V-brake

- › Grip the wheel with one hand.
- › Squeeze the brake pads or brake arms against the rim.
- › Detach the brake cable at one of the brake arms.

18.1.2 Removing the hydraulic rim brake

- › If quick-release brake mechanisms are fitted, remove a brake unit (see [Chapter 9.2.2 "Operating the quick-release device"](#)).
- › If no quick-release brake mechanisms are fitted, deflate the tyre.

18.1.3 Opening the side-pull calliper brake

- › Open the quick-release lever on the brake arm or brake lever.
- › If no quick-release brake mechanisms are fitted, deflate the tyre. The wheel can now be pulled out between the brake pads.

18.1.4 Releasing the hub gears, roller, drum or back-pedal brakes

- › Undo the cable clamping screw or quick-release device on the brake arm.
- › With back-pedal brakes, the screw connection of the brake arm on the chain stay must be released.

18.2 Removing the wheel

Please note that the work steps described here are for a specific example.

Please observe the information by the relevant manufacturer or consult your specialist cycle shop.

18.2.1 Removing the front wheel

- › If quick-release devices are fitted to your bike, open them (see [Chapter 9.2.2 "Operating the quick-release device"](#)).
- › If axle nuts are fitted to your bike, release these by turning them anticlockwise using a suitable spanner.
- › If the dropouts are specially formed to prevent the front wheel from falling out, continue loosening the nuts by turning them anticlockwise. Once the washers and nuts are clear of the dropouts, pull the front wheel out of the fork.
- › If your bike is equipped with metal wheel locking devices, continue loosening the nuts by turning them anticlockwise.
- › Pull the metal locking devices apart until they are clear of the dropout.
- › Now pull the front wheel out of the fork.

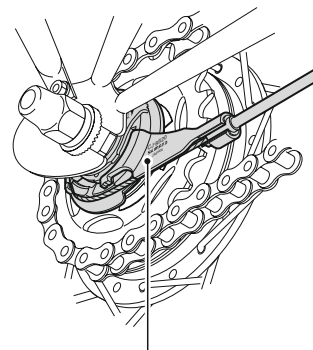
18.2.2 Removing the rear wheel

- › If your bike is equipped with derailleur gears, shift down to the smallest sprocket. The rear derailleur does not prevent the wheel from being removed in this position.
- › If quick-release devices are fitted to your bike, open them (see [Chapter 9.2.2 "Operating the quick-release device"](#)).
- › If axle nuts are fitted to your bike, release these by turning them anticlockwise using a suitable spanner.
- › Fold the rear derailleur backwards slightly.
- › Lift the bike up slightly.
- › Pull the wheel out of the frame.
- › If the rear wheel still does not come out, open the quick-release device further by turning the lock nut anticlockwise.
- › Strike the wheel from above gently with the palm of your hand to shift it.
- › The wheel should drop out.

The example here shows the removal of a Shimano hub gear:

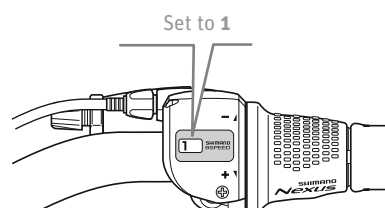
Disconnect the shifting cable to remove the rear wheel

- › Disconnect the cable from the cassette joint to remove the rear wheel from the frame

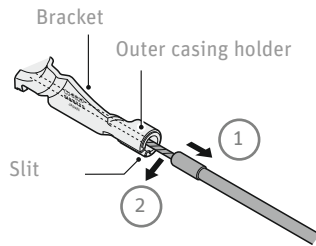


Cassette joint

- › 1. Set the Revo-shift lever to 1.

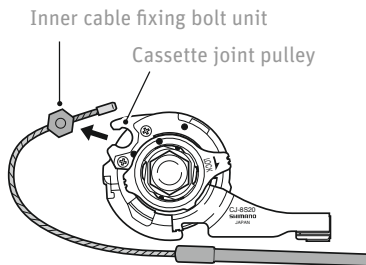


- 2. Pull the outer casing out from the outer casing holder of the cassette joint, and then remove the inner cable from the slit in the bracket.

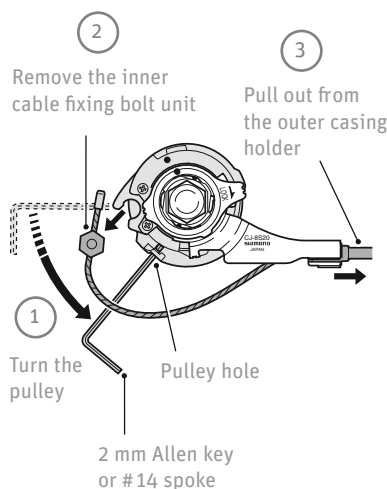


- 1 Pull out from outer casing holder
- 2 Remove from the slit

- 3. Remove the inner cable fixing bolt unit from the cassette joint pulley.



If it is difficult to pull the outer casing out from the outer casing holder of the cassette joint, insert a 2 mm Allen key or #14 spoke into the hole in the cassette joint pulley, and then turn the pulley to loosen the inner cable. Then remove the inner cable fixing bolt unit from the pulley first, and after this remove the outer casing from the outer casing holder.



- 4. Undo the screw of the brake arm and remove it.

- 5. Undo the wheel nuts and put them to one side. Remove the lock washers from the wheel axle.
- 6. Pull the rear wheel out of the dropout slits.

18.3 Removing the tyre and inner tube

- Unscrew the valve cap, fastening nut and the cap nut (if installed) from the valve. Remove the valve insert from Dunlop or Woods valves.
- Allow the remaining air to escape from the inner tube.
- Place the tyre lever on the inner edge of the tyre opposite the valve.
- Lever the tyre sidewall over the rim flange.
- Push the second tyre lever between the rim and tyre approx. 10 cm away from the first one.
- Continue levering the tyre off the rim until the tyre has detached round the entire circumference.
- Take the inner tube out of the tyre.

18.4 Mending the inner tube

- Pump up the inner tube.
- Put the inner tube in a container filled with water to locate the puncture.
- Push the inner tube below the surface of the water. Air bubbles will be visible at the point where the inner tube is torn or perforated.
- If you start losing air from the tyre on the road and cannot find the hole, simply inflate the inner tube hard. The hole will then get bigger as the air will escape with greater force and you will be able to hear more easily where it is coming from.
- Allow the inner tube to dry.
- Carefully roughen the inner tube in the area around the puncture using the sandpaper.
- Coat this area with rubber solution.
- Wait for several minutes until the rubber solution is touch dry.
- Press the rubber patch firmly onto the damaged area.
- Leave the rubber patch to dry for several minutes.

18.5 Fitting the tyre and inner tube



Make sure that foreign bodies do not enter the inside of the tyre. Make sure that the inner tube is crease-free and not pinched at all times. When fitting the tyre, bear in mind the running direction. If the tyre has a running direction, this will be indicated on the tyre sidewall.

- › Make sure that the rim tape covers the spoke nipples and is undamaged.
- › Put the rim with one edge inside the tyre.
- › Push one side of the tyre completely into the rim.
- › Insert the valve through the valve hole in the rim and fit the inner tube inside the tyre.
- › Push the tyre over the rim sidewall.
- › Pull the tyre forcefully into the centre of the rim. The area that has already been fitted will slip into the base of the rim.
- › Check once again that the inner tube is seated correctly.
- › Push the other side of the tyre completely over the rim flange using the heel of your hand.
- › With Dunlop or Woods valves: Put the valve insert back into position and screw the cap nut tight.
- › Inflate the inner tube slightly.
- › Check that the tyre is correctly seated and is true using the indicator ring on the rim sidewall. Adjust the seating of the tyre by hand if it does not run straight.
- › Inflate the inner tube up to the recommended tyre pressure.

18.6 Fitting the wheel

Please note that the work steps described here are for a specific example.

Please observe the information from the relevant manufacturer or consult your specialist cycle shop.

18.6.1 Inserting the front wheel



Bear the running direction of the tyre in mind when fitting the front wheel.



If your bike is equipped with a disc brake, make sure that the brake discs are correctly positioned between the brake pads.

18.6.2 Inserting the rear wheel

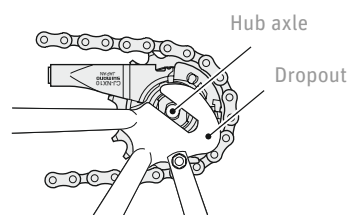
18.6.2.1 Bikes with derailleur gears

- › If your bike is equipped with derailleur gears, put the chain back onto the smallest sprocket when fitting the rear wheel.
- › Insert the wheel as far as it will go so it sits centrally in the dropouts.
- › Tighten the hub nut, or firmly close the quick-release device (see [Chapter 9.2.2 "Operating the quick-release device"](#)).

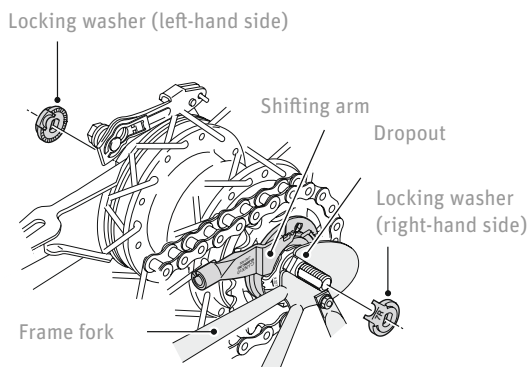
18.6.2.2 Bikes with hub gears

Fitting a wheel with gear hub in the frame

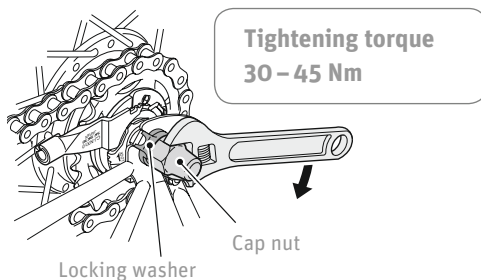
- › 1. Fit the chain on the sprocket and offer up the hub axle to the dropouts.



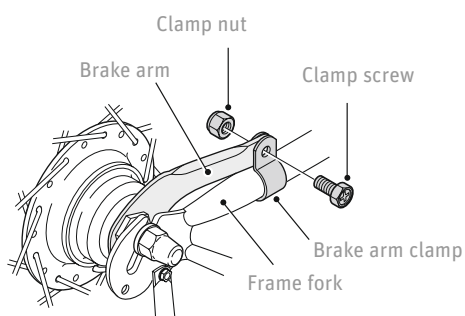
- 2. Fit the fixing washers onto both sides of the hub axle. Turn the shifting arm until the projections on the fixing washers engage with the slits in the dropouts. In this case the shifting arm can be mounted more or less parallel to the frame fork.



- The projecting part must be on the dropout side.
- Fit the fixing washers so the projections precisely engage in the slits in the dropouts on the front or rear of the hub axle.
- 3. Take up the slack in the chain and fasten the wheel onto the frame with the cap nuts.



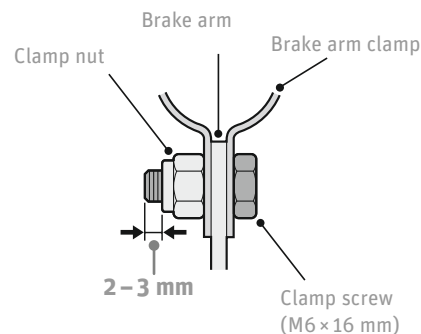
- 4. Fit the brake arm with brake arm clamp correctly onto the frame fork.



Counter the clamp nut with a 10 mm spanner when tightening the clamp screw for assembly of the brake arm clamp.

Tightening torque
2 - 3 Nm

Once you have installed the brake arm clamp, make sure the clamp screw projects roughly 2 to 3 mm beyond the clamp nut.



- 5. Before using the back-pedal brake, make sure the brake is working properly and the wheel turns easily.

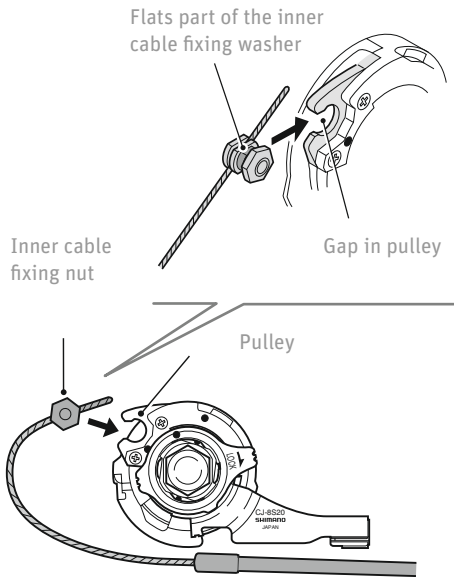


Tighten all screws to the prescribed torque as otherwise screws could shear off and components could come loose or detach altogether (see **Chapter 30.3 "Tightening torques for screw connections"**).

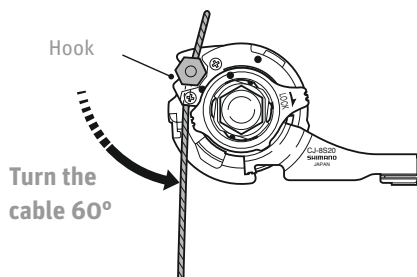
- Thread in the brake cable and secure it or close the quick-release brake mechanism.
- Check that the brake pads make contact with the brake contact surfaces.
- Check that the brake arm is securely fastened.
- Test the brakes.

Installing the shifting cable with hub gears

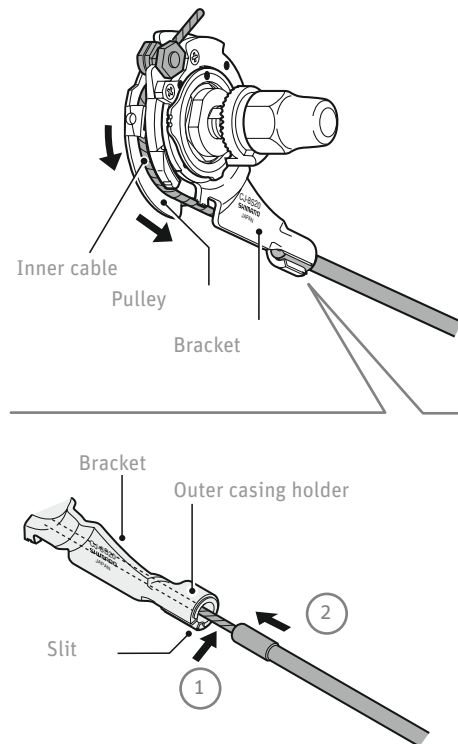
- Bring the cable around to the cassette joint pulley, hold so that the inner cable fixing nut is facing to the outside (toward the dropout), and then slide the flats part of the inner cable fixing washer into the gap in the pulley.



- Turn the cable 60° anticlockwise and attach it on the hook.

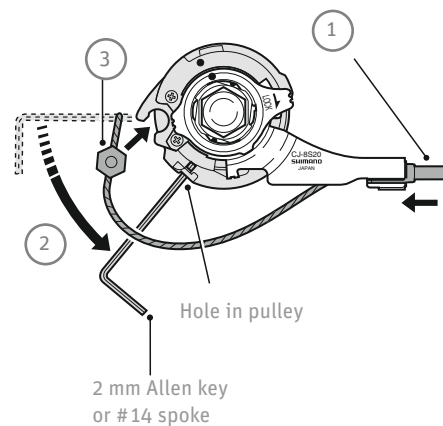


- Attach the inner cable to the pulley as shown in the illustration, pass the inner cable through the slit in the cassette joint bracket, and then insert the end of the outer casing securely into the outer casing holder.



- 1 Pass through the slit
- 2 Insert into the outer casing holder

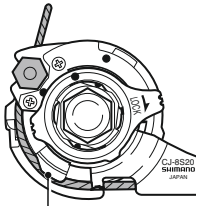
- If first inserting the outer casing into the outer casing holder is easier, then first insert the outer casing into the outer casing holder, and then insert a 2 mm Allen key or a #14 spoke into the hole in the cassette joint pulley, and then turn the pulley so that the inner cable fixing bolt unit fits into the gap in the pulley.



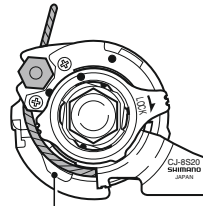
- 1 Insert into the outer casing holder
- 2 Turn the pulley
- 3 Insert the inner cable fixing bolt unit



Check that the inner cable is correctly seated inside the pulley guide.



✓ Guide OK



✗ Guide not OK

19 Bike gears

19.1 Derailleur gears

This User Manual describes the handling of typical, commercially available gear-shift components for MTB, ATB, cross and road bikes. Separate instructions are provided for other components on the CD or on the web pages of the relevant manufacturer in the Internet. If you have questions on installation, adjustment, maintenance and operation, please consult a specialist cycle shop.



If gear-shift components are loose, worn, damaged or adjusted incorrectly, this poses a risk of injury to the rider. Have the derailleur gears adjusted at a professional bike workshop.



- Always contact your specialist cycle shop if the chain jumps off the chainrings or sprockets when riding or
- you hear unusual noises or
- you cannot change gears easily or
- the rear derailleur, front derailleur or other gear-shift components are loose, damaged or distorted or
- chain links are defective or worn.



The bike chain must not be on the smallest chainring at the front and the small outer rear sprocket wheel simultaneously. The bike chain must not be on the largest chainring at the front and large inner sprocket wheel at the rear simultaneously. Otherwise the bike chain could jump off.

Never pedal backwards when changing gears as you could damage the gear-shift mechanism.

Only make changes to the gear-shift system carefully and in small increments. If settings are made incorrectly, the bike chain could jump off the sprocket wheel and cause you to fall off the bike. If you are unsure about what to do, have this work carried out by a professional bike workshop.



Even if the gear system is perfectly adjusted, it can produce noise if the chain is running at an extremely sharp angle. This does not mean it is defective and does not damage the drive. As soon as the chain is at a more shallow angle, the noise will disappear.



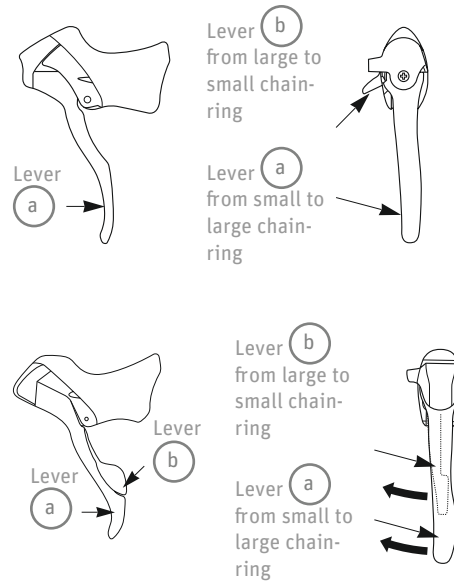
Never ride without a spoke protector. If a spoke protector is not installed, you must have one retrofitted. Otherwise the bike chain or rear derailleur could land in the gap between the sprocket and the spokes.

You should therefore select the lowest gear (largest sprocket wheel) via the gear-shift handle for the rear derailleur carefully as otherwise the rear derailleur could collide with the spokes and damage them.

19.1.1 Operating the shifting lever

19.1.1.1 Shifting lever on road bike

Shimano shifting lever



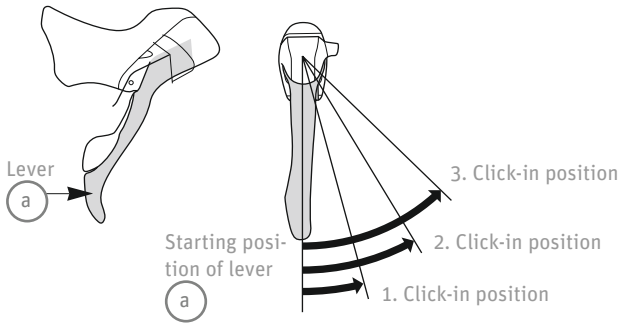
Lever a: Shift to a larger chainring
Lever b: Shift to a smaller chainring

Once released, all levers revert to their initial position.

Operating the rear derailleur shifting lever

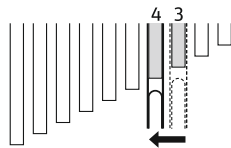
Lever **a**: Shift to a larger sprocket.

Lever **a** engages in positions 1, 2 and 3.



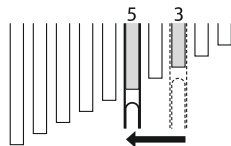
1. Shifting up one gear to next larger sprocket.

Example: shifting from 3rd to 4th gear



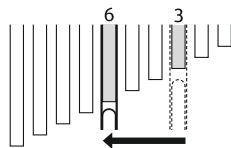
2. Shifting up two gears to a larger sprocket.

Example: shifting from 3rd to 5th gear

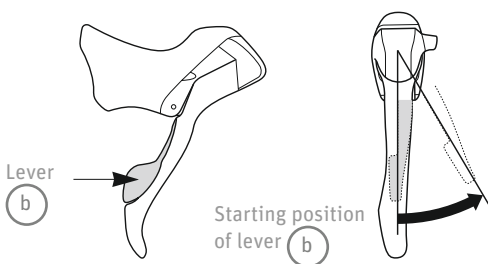


3. Shifting up three gears to a larger sprocket.

Example: shifting from 3rd to 6th gear

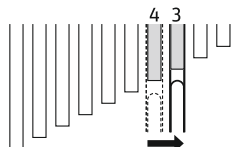


Lever **b**: Shift to a smaller sprocket. Press lever **b** once to change to the next sprocket down (smaller).



1. Shifting up one gear to next smaller sprocket.

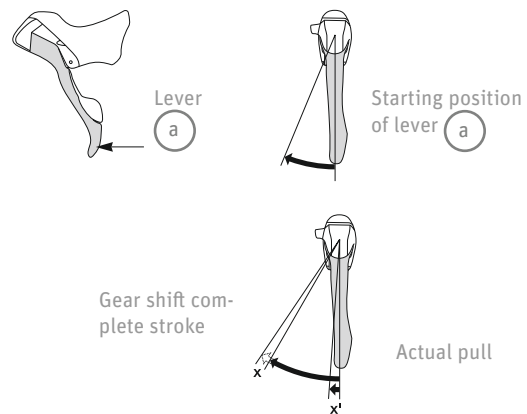
Example: shifting from 4th to 3rd gear



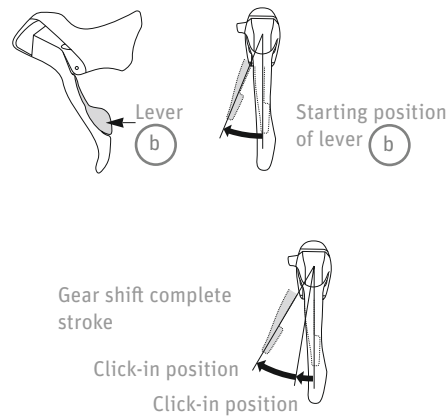
When lever **a** is pressed, lever **b** moves with it. However, you should avoid putting any pressure on lever **b** in doing so. The same applies for lever **a** when pressing lever **b**. The gear will not change if both levers are operated at the same time.

Operating the front derailleur lever (standard)

Lever **a**: Shift to a larger chainring



If the lever movement does not effect a full changeover of chainring, press the lever repeatedly by the amount (X') to move the lever the remaining distance (X) and change gears.



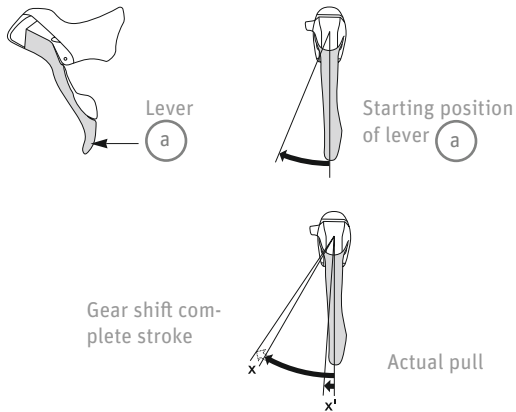
Lever **b**: Shift from intermediate chainring to smallest chainring

When lever **a** is pressed, lever **b** moves with it. However, you should avoid putting any pressure on lever **b** in doing so. The same applies for lever **a** when pressing lever **b**. The gear will not change if both levers are operated at the same time.

Operating the front derailleur lever with trimming (noise prevention), optional

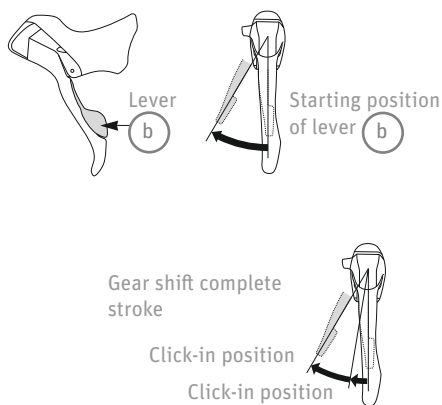
Gear shifting operations

Lever **a**: Shift to a larger chainring



If the lever movement does not effect a full changeover of chainring, press the lever repeatedly by the amount (X') to move the lever the remaining distance (X) and change gears.

Lever **b**: Shift from intermediate chainring to smallest chainring



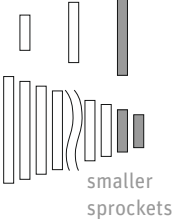
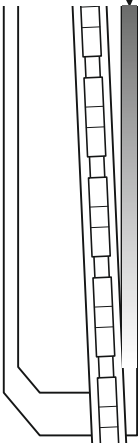

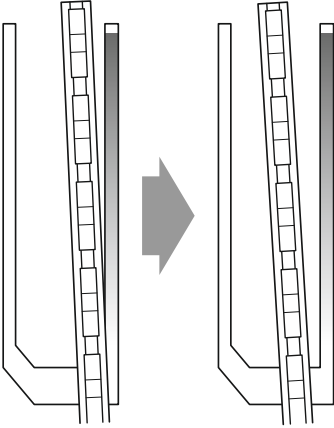
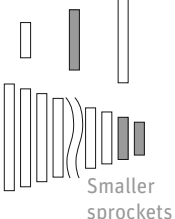
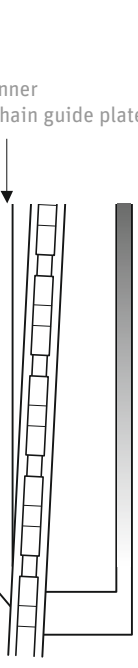
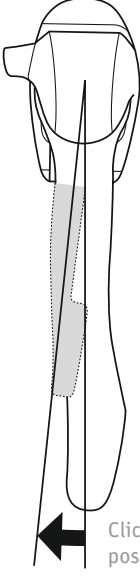
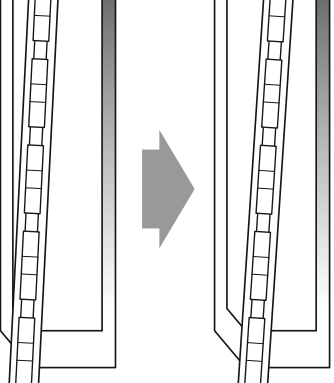
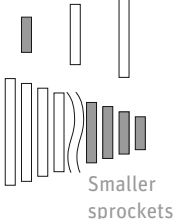
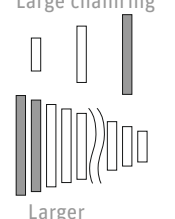
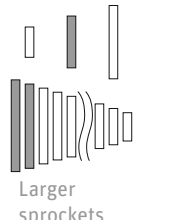
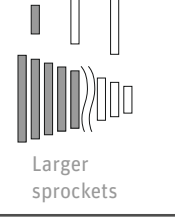
When lever **b** is operated, there is one click where trimming (the noise prevention mechanism) engages, and a second stronger click when the gear shift stroke is completed. After trimming, the next push will complete the gear shift stroke.

Trimming (noise prevention)

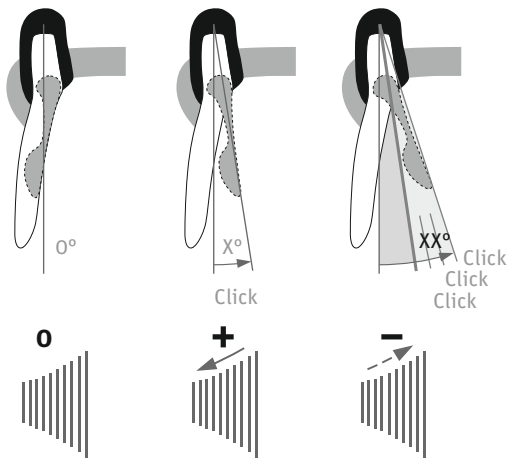
Depending on the position of the chain after shifting, it may rub against the outer chain guide plate or inner chain guide plate of the front derailleur and produce noise. In this case, lightly press lever **a** or lever **b** to move the front derailleur until it is no longer in contact with the chain.

This procedure is known as "trimming". Trimming is possible if the chain is on the large, intermediate or small chainring.

If you perform the trimming operation at one of the following positions, the noises will disappear completely.

CHAIN POSITION	INDICATION	TRIMMING			
		LEVER OPERATION	FRONT DERAILLEUR MOVEMENT		
<p>large chainring</p>  <p>smaller sprockets</p>	<p>Chain in contact with outer chain guide plate</p>  <p>Outer chain guide plate</p> <p>Chain</p>	<p>Lever (a)</p>  <p>Click-in position (contact)</p>	<p>Trimming</p> <p>before trimming → after trimming</p> <p>Front derailleur movement ←</p> 		
<p>Middle chainring</p>  <p>Smaller sprockets</p>	<p>Chain in contact with inner chain guide plate</p>  <p>Inner chain guide plate</p> <p>Chain</p>	<p>Lever (b)</p>  <p>Click-in position (contact)</p>	<p>Trimming</p> <p>before trimming → after trimming</p> <p>Front derailleur movement ←</p> 		
<p>Small chainring</p>  <p>Smaller sprockets</p>			<p>Large chainring</p>  <p>Larger sprockets</p>	<p>Middle chainring</p>  <p>Larger sprockets</p>	<p>Small chainring</p>  <p>Larger sprockets</p>

SRAM shifting lever



Rear shifting lever: To shift to a tougher (higher) gear, press the small shifting lever gently inwards until you hear or feel a click. To shift to an easier (lower) gear, press the small shifting lever further inwards until you hear or feel a second click. You can shift down by up to three gears at once.

Front shifting lever: Press the small shifting lever inwards as far as it will go to shift from the small chain wheel to the large chain wheel. To shift from the large chain wheel down to the small chain wheel, press the small shifting lever in the centre until you hear or feel a distinctive click.



To prevent chain rubbing in extreme positions, the shifting lever at the front has a trimming function for the front derailleur. You can use this if the chain is on the large chain wheel.

To shift the front derailleur to the trim position, press the small shifting lever gently inwards until you hear or feel a gentle click.

Setting the swivel range

The range of the shifting and brake lever pivoting movement can be adjusted individually to suit the size of your hand.



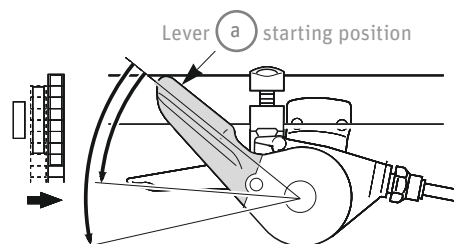
- First, set the shifting lever range then adjust the brake lever until the brake lever limit stop makes contact with the shifting lever. This ensures that the brake lever cannot strike the shifting lever when it springs back.
- To adjust the range of the shifting lever, push it inwards to reach the range adjustment screw. Push the adjustment screw inwards using a mandrel or your fingernail and turn it anticlockwise to move the shifting lever closer to the handlebars.

19.1.1.2 Shifting lever on MTB, trekking and touring bike

Standard shifting lever

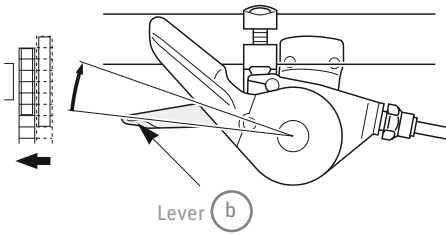
Both levers **a** and **b** always revert to the initial position after they are pressed. The crank must always be turned when a lever is pressed.

Operating the front derailleur shifting lever



Shifting from a small to a large chainring

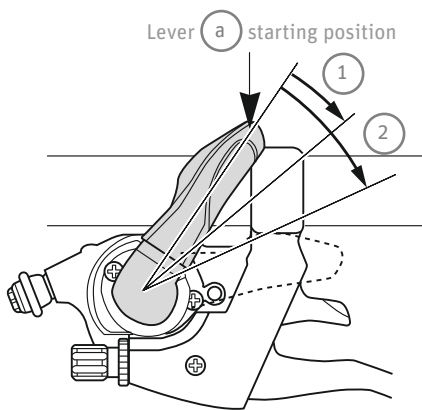
Press lever **a** once to move the chain from a small to a larger chainring.



Shifting from a large to a smaller chainring

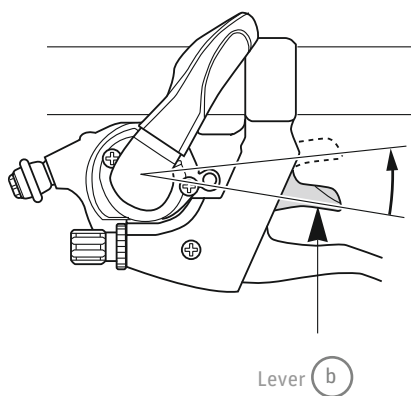
Press lever **b** once to move the chain from a large to a smaller chainring.

Operating the standard rear derailleur shifting lever



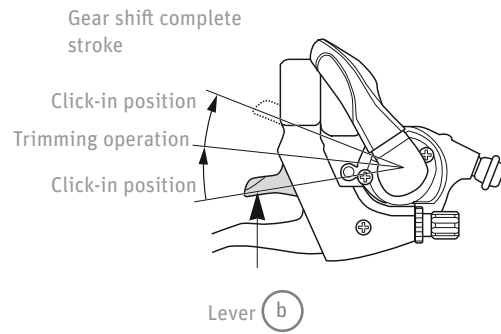
Shifting from a small to a larger sprocket

To shift by one gear only, push lever **a** to position **1**. To shift by two gears, push the shifting lever to position **2**. You can shift a maximum of 3 gears using this method.

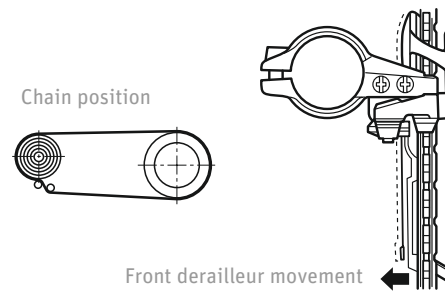


Shifting from a large to a smaller sprocket

Push once to shift to a smaller sprocket.



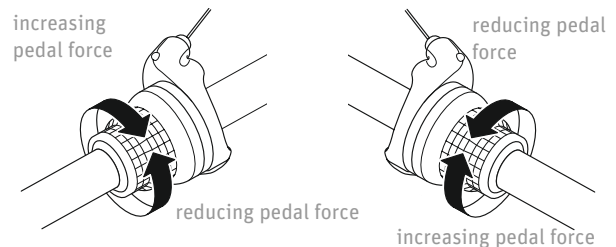
When lever **b** is operated, there is one click where trimming (the noise prevention mechanism) engages, and a second stronger click when the gear shift stroke is complete. The noise prevention mechanism no longer clicks once the trimming operation is complete which means that only the click-in positions will be heard when shifting between sprockets.



If the chain is on the large chainring and the large sprocket, the chain will rub the front derailleur producing a characteristic noise. When this happens, press lever **b** lightly to the point where it clicks, this causes the front derailleur to move slightly towards the smaller chainring, thereby eliminating the noise.

Twist-grip shifters

To shift up or down one gear only, turn the twist-grip shifter by one increment forwards or backwards.



If you wish to shift up or down several gears at once, continue turning the shifting lever by the required number of shift positions and in the required direction.

Rear derailleur

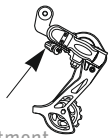
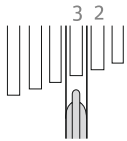


Have your specialist cycle shop carry out maintenance on the derailleur gears, or replace or adjust them.

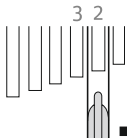
Precision adjustment/rear derailleur

Operate the shifting lever to shift the chain from the smallest sprocket to the second sprocket. Then take up the slack in the shifting cable with the shifting lever and turn the crank.

If the chain jumps to the third sprocket:

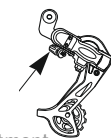
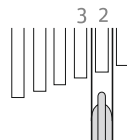


Adjustment screw

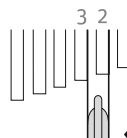


- Turn the adjustment screw clockwise until the chain moves back onto the second sprocket.

If noises cannot be heard:



Adjustment screw

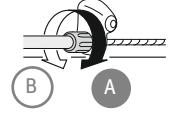
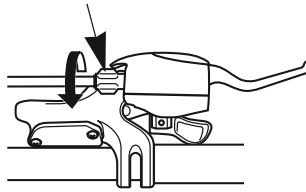


- Turn the screw anticlockwise until the chain rubs against the third sprocket.



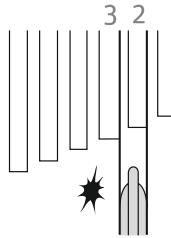
The adjustment screw may also be on the shifting lever or on the frame.

Adjustment screw



Cable housing adjustment screw

Optimum adjustment



Once the slack in the shifting cable has been taken up by the shifting lever, the chain should ideally rub the third sprocket and produce a noise.

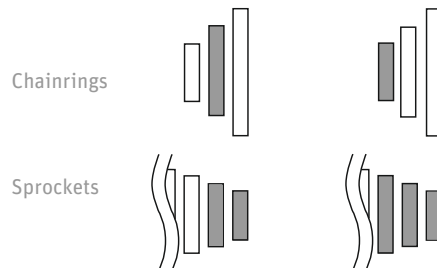
Release the shifting lever in second gear and turn the crank.

If the chain rubs the third sprocket, turn the adjustment screw clockwise slightly until the grinding noise stops.

To ensure problem-free SIS operation, you will need to lubricate all power-transmitting parts.



If the chain is in the position shown, it could rub against the chainrings or the front derailleur and make a noise. If this is the case, you can shift the chain onto the second or next largest sprocket.



Cleaning

- › Whenever possible, avoid using cleaning agents on the chain. If you use cleaning agents, such as rust remover, this may wash lubricant out of the chain which could lead to malfunctions.
- › The chainrings and sprockets should be cleaned regularly using a neutral cleaning agent.
- › You should clean the derailleur and lubricate the moving parts (mechanism and rollers) at regular intervals.

19.2 Hub gears

This User Manual describes the handling of typical, commercially available gear-shift components of a gear hub on a city or trekking bike. For other components, refer to the separate information or enclosed instructions.

If you have questions on installation, adjustment, maintenance and operation, please consult a specialist cycle shop.



If the hub is mounted on the frame, the correct fixing washers must be used on both sides and the hub nuts must be tightened to the prescribed torque (see **Chapter 30 "Technical data"**).

If the fixing washers are used on one side only or the hub nuts are tightened incorrectly, the hub may malfunction: It could rotate. This could cause the shifting cable to pull the handlebar to one side and cause a serious accident.



The gears can be changed when the pedals are turning. Very occasionally, the hub may produce a harmless noise which is caused by its internal cogs and stop notches.

If you encounter resistance when turning the wheel, the brake pads will need to be replaced or the hub will need to be lubricated. This should be done by a professional bike workshop.

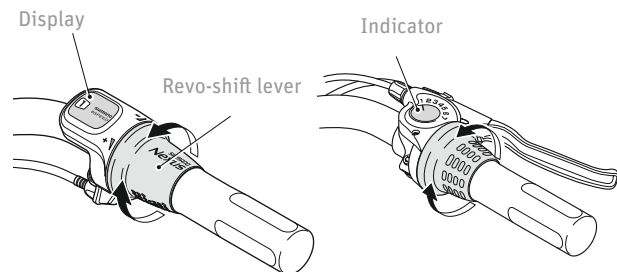
If the chain jumps off the sprockets when you are riding, the slack in the chain must be taken up immediately. If there is no further scope for adjustment, the sprockets and chain must be replaced.

19.2.1 Operating the hub gears

19.2.1.1 Shimano 7/8-speed shift lever

- › Turn the twist-shift lever to select all 8 (7) gears.

- Increasing pedal force (increasing resistance)
→ indicator towards **8 (7)**



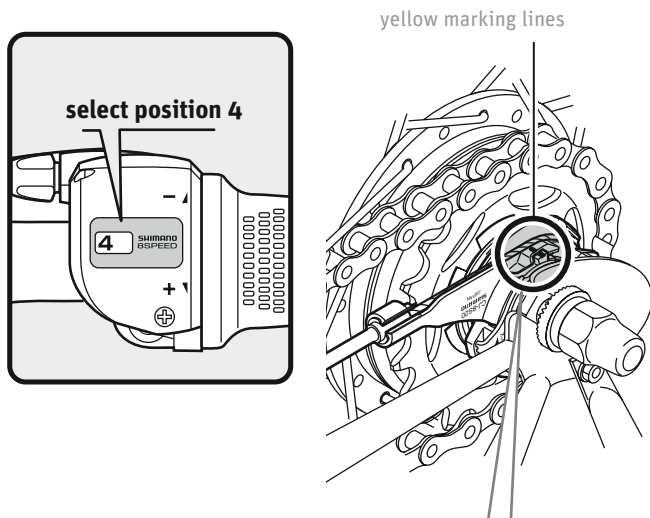
- Decreasing pedal force (decreasing resistance)
→ indicator towards **1**

These instructions on operation of the Shimano twist-shift grips also apply to other makes of twist-shift grips.

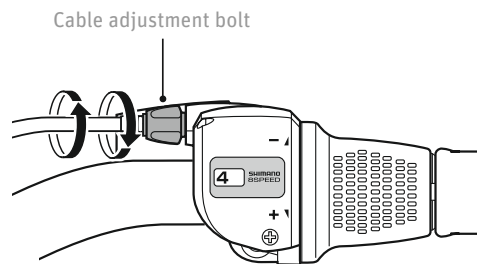
19.2.2 Adjusting gears with Shimano hub gears

Example shown is a 7/8-speed hub.

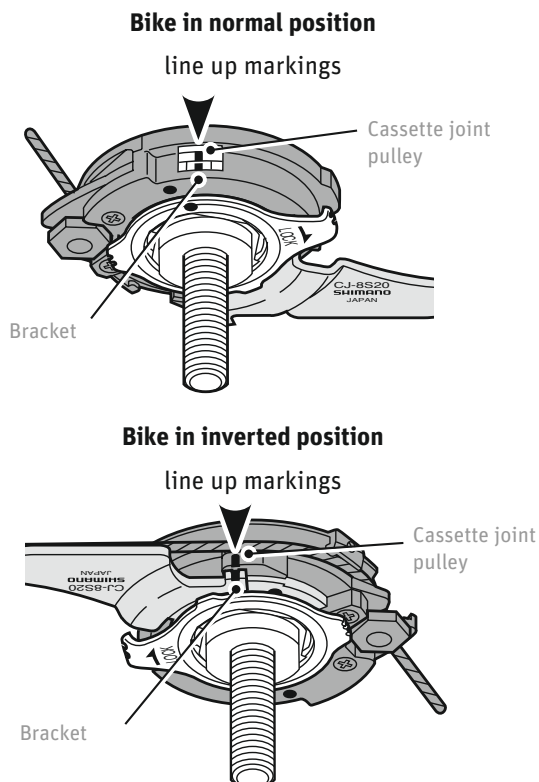
- Select shift lever position **4**.
- Check whether the yellow marking lines on the bracket and cassette joint pulley line up.



- Turn the cable adjustment bolt on the shift lever to align the marking lines. Next, set the Revo-shift lever from position **4** to position **1** then back to position **4**. Check that the yellow marking lines still line up.



Yellow marking lines appear at two points on the cassette joint. Use the line which is most clearly visible.



20 Bike chain

There are two types of bike chain:

- A wide bike chain ($\frac{1}{2} \times 1/8''$) for hub gears and
 - A narrow bike chain for derailleur gears. These are available in different widths, depending on how many sprockets are on the cassette. Only use chains that are approved for precisely the number of sprocket wheels on your bike.
- › Clean and lubricate your bike chain regularly.
- › To prevent premature wear of the bike chain when using derailleur gears, select gears that keep the chain skew as marginal as possible.

To check the wear in the bike chain, proceed as follows:

- › Take the section of the chain that rests on the front chainring between your thumb and forefinger.
- › Pull the bike chain off the chainring. If the bike chain can be lifted by a significant amount, it is worn and must be replaced by a new one.
- › With hub gears, the chain tension must be adjusted so that vertical play of one to two centimetres is present in the unsupported chain span between the chainring and sprocket wheel.

To take up the slack in the bike chain, proceed as follows:

- › Loosen the rear wheel nuts.
- › Pull the wheel back into the dropouts until only the permissible amount of play is present in the bike chain.
- › Tighten all screw connections carefully clockwise.



Tighten all screws to the prescribed torque as otherwise screws could shear off and components could come loose or detach altogether (see **Chapter 30 "Technical data"**).

20.1 Maintenance of bike chains

Bike chains are wear parts. Bike chains with hub gears wear out after roughly 3000 km, and after roughly 2000 km with derailleur gears.



If the bike chain is worn, it can break and cause a crash. If your bike chain is worn, have it replaced by your specialist cycle shop before using the bike again.

21 Brake, brake levers and brake systems

This User Manual describes the maintenance and handling of typical, commercially available brake components for MTB, ATB, cross and road bikes. For other components, refer to the separate information or enclosed instructions. If you have questions on installation, adjustment, maintenance and operation, please consult a specialist cycle shop.

21.1 Important information and precautionary measures



"Bicycles must be equipped with 2 brakes that operate independently of one another."
Paragraph 65 of the German Road Traffic Licensing Regulation (StVZO), similar rules apply in all other EU countries.



Have maintenance work on the brakes carried out by a professional bike workshop.

Do not allow fluids containing oils to come into contact with the brake pads, brake contact surfaces on the rim, brake blocks or brake disc as this could otherwise impair the effectiveness of the brake.

Brake blocks and brake pads are wear parts. Check the wear condition of these parts regularly. This can be identified by a marking. On the brake block, for example, the grooves will no longer be visible. Always replace both brake blocks at the same time.

Use genuine spare parts only as otherwise you could impair the functions of the bike or damage it.

To obtain correct friction pairing, only use brake pads that are suitable for the rim as otherwise the braking distance would be extended and wear increased. With carbon rims in particular, only brake pads that are expressly intended for this purpose should be used.

Rubber brake blocks and brake pads must not come into contact with oil or grease. If the rubber brake blocks and brake pads come into contact with oil or grease, this drastically reduces their braking performance and they must be replaced.



Tighten all screws to the prescribed torque as otherwise screws could shear off and components could come loose or detach altogether (see [Chapter 30 "Technical data"](#)).



Brake cables are wear parts. You should check the wear condition of the brake cables regularly and replace these if necessary.

Check the brake cable for rust and fraying and replace the cable if it is faulty. If you do not, the brakes could malfunction.

There are different types of brakes, the type of brake depends on what it is used for:

- hub brakes,
- disc brakes and
- rim brakes.

The brakes can be operated mechanically or hydraulically.



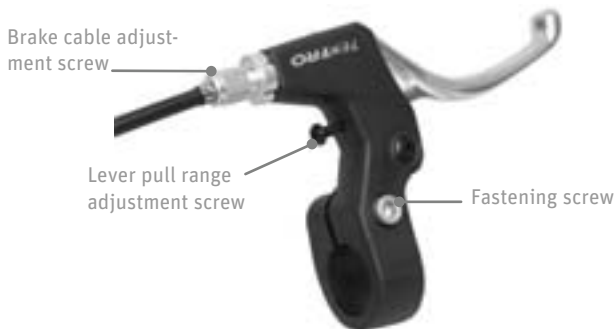
With hub gears, the brake lever that operates the front wheel brake is normally on the right-hand side, and with derailleur gears it is on the left. Remind yourself of the position of the brake lever before you ride off.

If you wish to attach the brake lever on the opposite side of the handlebar, follow the manufacturer's user manual or ask your specialist cycle shop to do this.

21.2 Brake lever

21.2.1 Standard brake lever

The bike is equipped as standard with a suitable brake lever. Check regularly that when you operate the brake lever it does not reach the handlebar and make contact with it. With the brake lever pulled, push the bike forward and check whether the braking performance is sufficient. If the bike rolls slightly forwards, you will need to have the brake cable readjusted or the brake pads replaced.



21.3 Hub brakes

Hub brakes are virtually maintenance-free as the brake block is inside the hub.



If applied continuously for an extended period, hub brakes become very hot. This reduces the braking performance and ultimately complete failure of the brake. You should adapt your handling accordingly.

21.3.1 Drum and roller brakes

With the roller brake or drum brake, the braking force is transmitted via a cable from the hand brake lever to the brake system. If applied continuously for an extended period, roller brakes or drum brakes become very hot. This reduces the braking performance and can result in complete failure of the brake. You should adapt your handling accordingly.



The brake lever of roller and drum brakes requires special tuning.

- › Check regularly that the screws on the brake lever are tight.
- › Turn them clockwise to retighten if necessary. For the correct tightening torque, refer to **Chapter 30 "Technical data"**.
- › Pull on the front wheel or rear wheel hand brake lever with the same amount of force as you would apply when braking sharply during a ride. Then push the bike forwards. The rear wheel should lock. The front wheel should decelerate so rapidly that the bike starts to tip forwards.
- › Lubricate the cable-pull regularly.

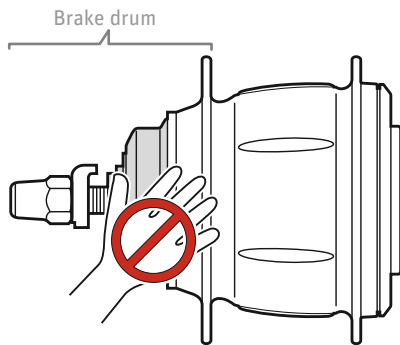


Brake pads are wear parts. Have the brake pads for back-pedal, roller and drum brakes checked regularly, and replaced if necessary, by a professional bike workshop.

If you have not used your bike for a while, there may be surface rust in the brake drum which can increase the braking force. You should therefore brake gently several times when riding off to remove the surface rust. This prevents sudden blocking of the brake.



Avoid operating the back-pedal brake continuously on long descents as the internal components of the brake system can become extremely hot which reduces braking performance. On long steep descents, always alternate between the rear wheel brake and the second brake (front wheel brake) to allow the rear wheel brake to cool down. As the brake drum can become extremely hot when braking for prolonged periods, you should not touch it for at least 30 minutes after riding.



21.3.2 Back-pedal brake

With back-pedal brakes the braking force is transmitted by the foot via the chain to the brake system. If applied continuously for an extended period, back-pedal brakes become very hot. This reduces the braking performance and can result in complete failure of the brake. You should adapt your handling accordingly.



The back-pedal brake is operated by pedalling backwards. The force applied by the back-pedal brake varies depending on the position of your feet/pedals. If the crank arms are vertical, i.e. one of your feet is in the highest position and the other is in the lowest position, you cannot brake hard. Move the crank arms into a horizontal position if you think you may want/have to brake.



The back-pedal brake is easy to apply in a controlled manner. The maximum braking performance is only reached after a certain run-in period.

Operate the back-pedal brake carefully to familiarise yourself with it and get a feel for its retarding effect.

If you have not used your bike for a while, there may be surface rust in the brake drum which can increase the braking force. If you have not used your bike for some time, you should brake gently several times when riding off to remove the surface rust. This prevents sudden blocking of the brake.

If excessive overheating of the hub occurs, this can lead to loss of lubricant and a sharper braking effect. In these cases, have the brake checked by a professional bike workshop.

21.4 Rim brakes



V-brakes produce an extremely high braking force. You should therefore familiarise yourself with the V-brake and only apply the brake gradually. Practise emergency braking until you are sure you will be able to remain fully in control of your bike if you have to apply the brakes with force.

If additional suspension elements in the brake system (power modulators) are used improperly, this can lead to serious accidents. The required spring strength of the power modulator depends on the gross weight of the bike.

If the brake blocks are so worn that you can no longer see notches, have them replaced by a professional bike workshop.

21.4.1 Readjusting the brake

The brakes on your bike are set correctly at the factory or by your cycle dealer. The gap between the brake block and the rim is roughly 1–1.5 mm. However, as the brake blocks wear down the gap steadily increases and the brake lever must travel a greater distance to achieve the same braking effect. You should therefore inspect the brake at regular intervals and adjust it if the brake lever travel distance is too great or the brake is not working properly.

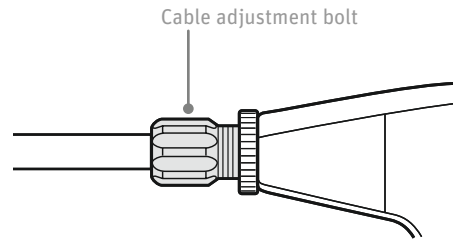
Check the brake as follows:

- Pull the front wheel and then the rear wheel hand brake lever with the same amount of force as you would apply when braking sharply during a ride. Then push the bike forwards.
- The rear wheel should lock and
- the front wheel should decelerate so rapidly that the bike starts to tip forwards.

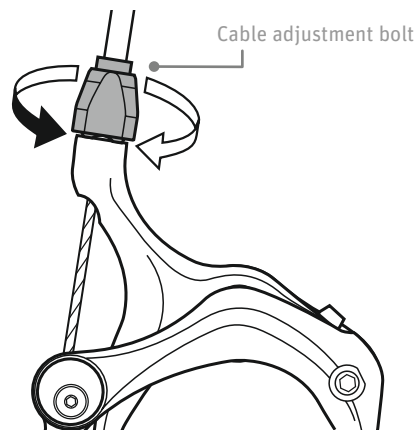
21.4.2 Adjusting the brake-pad clearance in relation to the rim

Turn the cable adjustment bolt to adjust the clearance between the brake pad and the rim. Turn the bolt inwards (clockwise) to increase the brake-pad clearance. Turn the bolt outwards (anticlockwise) to reduce the brake-pad clearance. The clearance between the brake blocks and rim should be roughly 1 mm.

Adjusting the cable-pull



With V-brakes



With side pull brakes

21.4.3 Wear of brake pad

Most brake pads for rim brakes come with grooves or notches.



New brake pad

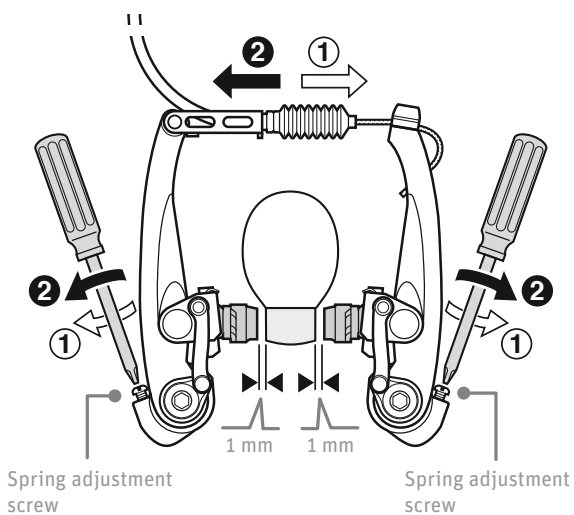
If these grooves are worn and can no longer be seen, this is normally a sign that the brake pad is worn.



Worn brake pad



Do not ride your bike if the brake pads are worn. Have them replaced by a professional bike workshop instead.



If required, you can readjust the rebound force via the spring adjustment screw so that both brake arms move symmetrically. Once you have done this, check that the brake is working properly (see [Chapter 21.4.1 "Readjusting the brake"](#)).



If the brake is still not working properly, or the brake pad is so worn that it is not possible to readjust it, have your bike checked at a professional bike workshop and replace the brake block.

21.5 Disc brakes



Disc brake

With this brake type, the brake discs are on the hub and the brake calliper is on the frame or fork.



Have your disc brakes adjusted by a specialist cycle shop. If this is done incorrectly, an accident may occur.

Once the brakes have been adjusted, always perform a brake test by pushing the bike quickly forwards and operating the brake lever. You should only use your bike if you can safely stop it using the brakes.

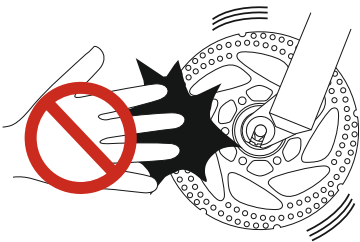
Disc brakes require a brake lead time during which the braking force increases. Bear this in mind throughout the entire brake lead time. The same effect also occurs after replacing the brake block or disc.

If you hear unusual noises when braking, the brake blocks may have reached their wear limit. Allow the brakes to cool down then check the brake block depth. Have the brake blocks replaced if necessary.



When installing, removing and carrying out maintenance on the wheel, do not touch the brake disc with your fingers when it is turning. You could be seriously injured if you catch your fingers in the cutouts of the brake disc.

The brake calliper and the disc can become extremely hot when braking. You should therefore not touch these parts when riding the bike or immediately after dismounting as you could burn yourself. Before adjusting the brakes, check that the parts have cooled down sufficiently.



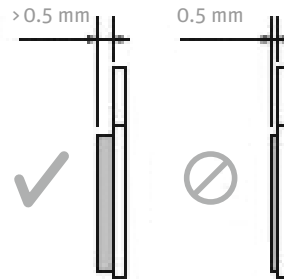
You must only fit a disc brake on your bike providing suitable mounting devices are installed on the frame and the bike fork. If in doubt, consult a specialist cycle shop.

If the brake blocks come into contact with oil or grease, they must be replaced. If the brake disc comes into contact with oil or grease, it must be cleaned as otherwise its braking performance will be drastically reduced.

Check whether the quick-release lever for the wheel is on the side opposite the brake disc. If the quick-release lever is on the same side as the brake disc, there is a danger you could burn yourself when operating the lever. The heat in the brake disc could also reduce the clamping force of the quick-release device.

If the brake disc is worn, cracked or bent it must be replaced. Have this work carried out by a professional bike workshop.

If the depth of the brake blocks is less than 0.5 mm, they must be replaced.



21.5.1 Hydraulic disc brake

The hand brake lever of the hydraulic disc brake is equipped with a master cylinder. The hydraulic fluid is fed through a tube to the brake cylinders. This actuates the brake pistons which push the brake blocks against the brake disc. This type of brake requires little maintenance and can be very powerful.



Once the brakes have been adjusted, always perform a brake test by pushing the bike quickly forwards and operating the brake lever. You should only use your bike if you can safely stop it using the brakes.

Check regularly, also before each journey, that the lines and connections are tight. If lines and connections are not tight, brake fluid may escape from the brake system. The brake may not work properly as a result.

If fluid escapes from the braking system, do not use the bike and have the necessary repair work carried out immediately by a professional bike workshop.

If you continue riding the bike in this condition, the risk of brake failure is extremely likely.

If the brake blocks come into contact with oil or grease, they must be replaced. If the brake disc comes into contact with oil or grease, it must be cleaned as otherwise its braking performance will be drastically reduced.

21.5.2 Vapour bubble formation

- › Vapour bubble formation can occur if the brakes are operated continuously for some time, e.g. during a long steep descent. Instead of applying gentle pressure continuously with the brakes, operate them for shorter periods, with more force if necessary, releasing the brake lever intermittently.
- › Vapour bubbles form if water in the brake fluid heats up, evaporates and forms bubbles in the brake system.

As these are easily compressed, the brake lever travel distance increases.



When transporting or storing the bike upside down, air bubbles can form in the brake system fluid reservoir.

If you then use the bike, the brakes could fail and cause a serious accident.

Once the bike is in the correct riding position, pull the brake lever several times to check whether the brakes respond normally.

If not, adjust them as follows:

- › Adjust the brake lever so it is parallel to the ground and operate it slowly several times so the bubbles return to the reservoir.
- › If the response is still poor, the brake system must be vented. Have this work carried out by a specialist cycle shop.



Brake pads and brake blocks are wear parts. Have the brake pads of hydraulic disc brakes checked regularly, and replaced if necessary, by a professional bike workshop.

21.5.3 Cleaning the brake system

If the brake blocks come into contact with oil or grease, they must be replaced. If the brake disc comes into contact with oil or grease, it must be cleaned as otherwise its braking performance will be drastically reduced.

- › Clean and maintain the brake system using isopropyl alcohol, soapy water or a dry cloth. Do not use commercially available brake cleaning agents or agents to prevent braking noises as these can damage components such as the seals.

21.5.4 Fitting/removing the wheel

- › When removing the wheel, we recommend you use a brake block spacer. This prevents the piston from being pushed out if the brake lever is operated once the wheel has been removed. This also prevents air bubbles in the expansion vessel from entering the system.
- › If the brake lever is operated and the brake block spacer is not inserted, the pistons may extend further than normal. Put the bike in an upright position to push back the brake blocks. Use a clean, flat screw driver or tyre lever and be careful not to scratch the brake blocks. If the brake blocks are not fitted, push the piston back carefully without damaging it. If you have trouble pushing back the brake blocks or piston, remove the reservoir cap and try again. Note that some oil may flow out the reservoir.
- › After fitting the wheel, check that the quick-release lever is on the side opposite the brake disc. If it is on the same side as the brake disc, there is a danger of the lever and brake disc obstructing one another and this could also reduce the clamping force of the quick-release device.

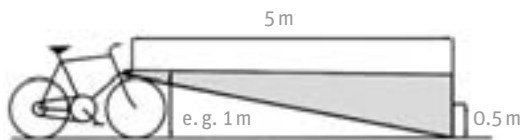
22 Lighting system



In some EU countries, only lighting systems that are prescribed by national legislation (the Road Traffic Licensing Regulations (StVZO) in Germany for example) and have been approved for use may be installed on bikes. If in doubt, ask your specialist cycle shop.

22.1 Specifications for lighting system

- At a distance of five metres, the cone of light thrown by the front light must be at half the height of its exit point. The centre of the cone of light determines its height.



Aligning the front light

- The cone of light thrown by the front light must only light the road for ten metres at the most. The centre of the cone of light determines its distance.

22.2 Special regulations for road bikes



- You can fit battery-operated front lights and rear lights to sports bikes with a maximum weight of 11 kg (road bike). Please familiarise yourself with the applicable regulations and, if applicable, have the bike refitted.
- Always carry these with you.
- Dynamo-operated lighting systems must be used with bikes that weight more than 11 kg. The lighting system must come with an official test mark. Please familiarise yourself with the applicable regulations and, if applicable, have the bike refitted.

22.3 Generator / dynamo

The dynamo produces the energy required to operate the front and rear lights. There are different types of dynamos.

22.3.1 Sidewall dynamo



Sidewall dynamo

The dynamo must be positioned so its longitudinal axis is perpendicular to the wheel axle. The roller must be in contact with the designated traction surface on the tyre across its entire width.



Only switch the dynamo on and off when the bike is stationary as otherwise you could put yourself and other road users in danger. The sidewall dynamo is less effective in wet conditions. Provide additional lighting if necessary.

22.3.1.1 Switching the sidewall dynamo on and off

- Switch the dynamo on/off via the pushbutton or the lever. The traction roller is now on the tyre sidewall.
- To switch the dynamo off, pull it away from the tyre and guide it into its starting position. The dynamo engages in the starting position.

22.3.2 Hub dynamo

The hub dynamo is inside the hub of the front wheel. The hub dynamo is highly efficient, and the wear is extremely low.



Hub dynamo

There is a switch or a sensor on the back of the front light on some bikes with a hub dynamo. The sensor switches the light on automatically in the twilight or when passing through a tunnel. Other models have a switch on the handlebar that switches the lighting on and off.



If you want to remove the front wheel, you first need to remove the connecting terminal for the light cable.

When you put the front wheel back on, turn it so that the connecting terminal for the light cable is on the right-hand side (facing in the direction of travel). If the connecting terminal is on the left, the dynamo will not be able to turn properly or the lighting system may stop working. Ensure correct polarity of the connections.

22.4 Failure of the lighting system



If the lighting system fails or develops a fault when riding in the dark this could cause a serious accident. Have the fault repaired at a professional bike workshop before you continue your journey.

Extremely powerful (rechargeable) battery-operated bicycle and outdoor lights are available from some retail outlets. With some exceptions, use of these lights on public roads is not permitted.

23 Add-on components

23.1 Pannier rack

The pannier racks on the bike satisfy the standard EN 14873.

The load-carrying capacity of the pannier rack falls into one of four possible categories: 5 kg, 10 kg, 18 kg and 25 kg.

The information on load-carrying capacity is embossed on the pannier rack.

The maximum load it can handle may be higher, depending on its design. This is stated separately.



If you carry luggage, this changes the ride characteristics of your bike. It increases the braking distance for one thing. This can lead to serious accidents. Adapt your handling to the different ride characteristics. Apply the brakes in good time and bear in mind that the bike's steering response will be more sluggish.

Only carry luggage on the pannier rack provided for this purpose. Do not attach carriers to the seatpost. It is not designed for this purpose. Overloading by a carrier can lead to component breakages and serious accidents.

If you carry luggage on your bike, it is extremely important that you do not exceed the maximum permissible loading (see ► **Chapter 30 "Technical data"**).

If you fit another carrier, it must comply with standard EN 14873.

The maximum permissible load must be stated on the carrier (see ► **Chapter 30 "Technical data"**).

23.1.1 Front pannier rack



Front pannier rack

Front pannier racks are attached to the front axle or the front fork. They are designed to carry smaller loads than rear pannier racks. If you carry luggage on this pannier rack, you must familiarise yourself with the changed steering response.



Only use suitable pannier bags.
Consult a specialised dealer.

23.1.2 Rear pannier rack



Rear pannier rack

This type of luggage carrier attaches to the rear triangle of the bike.



If you attach a rear pannier rack to a full-suspension frame, the proportion of unsprung weight increases which changes the suspension behaviour. You will therefore have to readjust your suspension/damping accordingly.



If you carry pannier bags or other loads on the pannier racks, make sure they are securely attached. Make sure that nothing can become caught in the spokes and the turning wheels.



Only fit child seats to rear pannier racks if suitable fixtures are provided. In doing so, be careful not to exceed the permissible weight category.

23.2 Wheel guards / mudguards

Additional struts are mounted to hold the mudguards in the correct position. The strut is at its ideal length if the inner edge of the wheel guard runs more or less concentrically and parallel to the tyre.



The wheel guard cannot detach when you are riding normally. If a foreign object lodges between the front wheel guard and the tyre and blocks it, the mudguard struts immediately detach from their mountings on the fork. This allows the mudguard to deflect and the wheel will not block.

If this happens, the struts must be securely reattached. Have a specialist cycle shop check that the mudguard, struts and plastic mounts are still in a serviceable condition.

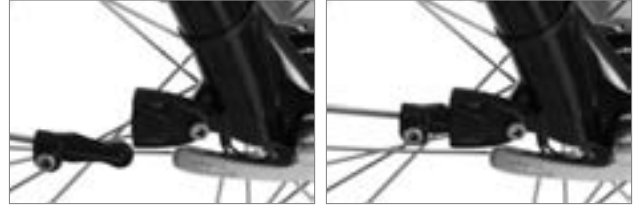


Never ride with the strut detached, it must be reattached. If this is not possible, have the strut replaced by a professional bike workshop.

Check regularly that the struts are securely fastened in the safety-release mechanisms.

If you notice that a wheel guard is damaged, always replace it before using the bike again.

23.2.1 Re-engaging the safety-release mechanism



Safety mechanism released *Safety mechanism engaged*

A plastic clip is attached to the end of the strut.

- › Insert this clip on the strut into the easy-clip mount on the fork until it engages.
- › Align the wheel guard so that the tyre and front wheel guard do not touch.



To securely reattach the safety-release mechanism, you may need to push the strut and plastic mount slightly together by pressing hard.

24 Accessories and equipment



Always install enclosed accessories according to the instructions. Use the correct tightening torques for screw connections (see ► **Chapter 30 "Technical data"**).

- › Only use accessory parts that meet the requirements of the national road traffic licensing regulations (these are the Road Traffic Licensing Regulations (StVZO) in Germany for example).
- › Non-approved accessory parts are not safe for use in traffic and can cause accidents. All accessories or add-on components must be compatible with your bike
- › Otherwise accidents could occur or the bike could be damaged. Ask your specialist cycle shop for advice.

24.1 Child seat



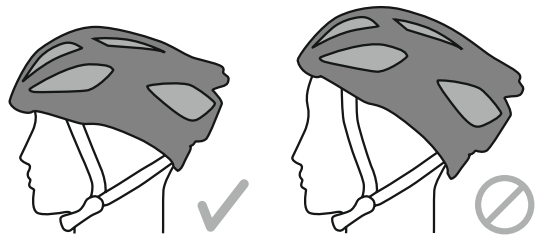
You can carry a child up to the age of seven years on the child seat. The rider must be at least 16 years old in Germany.



A child seat must not be mounted on a carbon frame as this could damage the frame.

- › Only use child seats that satisfy the standard EN 14344.
- › These child seats must safely support the child's feet.
- › Never leave your child sitting unattended in the child seat when you park your bike. The bike could fall over and severely injure the child.

- › Never attach the child seat to the bike handlebars directly as it will not be possible to steer the bike safely.
- › Do not use a suspension saddle if you are carrying a child in a child seat behind the saddle. The child's fingers could be crushed. The coil springs under the seat must always be completely wrapped or covered in such a way that it is impossible to insert fingers into the coils of the springs.
- › Always strap the child into the child seat as otherwise it could fall out and be severely injured.
- › Make sure that children wear a snug fitting bicycle helmet as otherwise a severe head injury may result in the event of a crash.



When using a child seat, this adversely affects the handling of the bike. The additional weight can cause the bike to sway and significantly increases the braking distance. Adapt your handling accordingly.

Not all bikes equipped with a suspension system are suitable for transporting child seats

Check the mounting options or consult your specialist cycle shop. If the child seat is mounted incorrectly, a serious accident may occur.

Do not exceed the maximum permissible gross weight of the bike and the maximum load-carrying capacity of the pannier rack (see ► **Chapter 30 "Technical data"**). If you do, this could damage the pannier rack and frame and cause a serious accident.

24.2 Bike stand



- › Never leave your child sitting unattended in the child seat when you park your bike. The bike could fall over and severely injure the child.
- › Never ride with the stand folded out.

24.3 Bike trailer



Not all bikes are suitable for trailers. Ask your specialist cycle shop if your bike is designed and suitable for this.

- › Only use trailers that meet the requirements of the road traffic licensing regulations in your country (the Road Traffic Licensing Regulations (StVZO) in Germany for example). Non-approved trailers can cause accidents.
- › Trailers adversely affect the handling. Adapt your handling accordingly as otherwise the bike trailer may tip up or detach and cause an accident.
- › Practise starting off, braking, cornering and riding on hills with an unladen trailer.
- › Bear in mind that the gross weight of the bike also includes the trailer.
- › A bike trailer may increase the braking distance considerably. Failure to observe these points could result in an accident.

24.4 Bike basket



The fixing for the basket must not damage the handlebar or handlebar stem.

- › Attach the basket so as not to cover the front light and front reflector.
- › In doing so, be careful not to bend the brake and shifting cables.
- › Do not carry more than five kilogrammes of luggage in the basket.
- › Bear in mind that the steering characteristics change when you use a basket.

24.5 Bar ends



Always attach bar ends securely to the handlebars as otherwise you could have an accident.



If a thin-walled handlebar is fitted to your bike, you may require additional accessory parts to protect the handlebar from damage. Read the manufacturer's instructions for use carefully.

If a carbon handlebar is fitted to your bike, find out from your specialist cycle shop whether this handlebar is approved for use with bar ends.

25 Bike carriers for mounting on roof and rear of car



- Only use roof and rear-mounted bike carriers that meet the requirements of the road traffic licensing regulations in your country (the Road Traffic Licensing Regulations (StVZO) in Germany for example). Non-approved roof and rear-mounted bike carriers are not safe for use in traffic and can cause accidents.
- Adjust your driving to take the load on your car roof into account. Bear in mind that your car's overall height has changed.

The bike could come off the carrier and cause a serious accident. When transporting the bike, check regularly that it is still securely fastened.

Loose parts such as tools, luggage and tool kits, child seats, tyre pump, etc. could detach in transit and endanger other road users. Remove all loose parts from the bike before setting off.



- Avoid transporting the bike upside down. Only attach the bike by the handlebar, handlebar stem, bike saddle or seatpost if so intended by the manufacturer of the carrier. Do not use mountings that could damage the bike fork or frame.
- Do not attach your bike to the roof or rear-mounted carrier by its pedal cranks. Always attach bikes by their wheels when transporting them, unless the carrier is designed for something else, as otherwise the frame and fork of the bike could be damaged.

You can also find important information on using and fitting add-on components and accessories in the Internet on the pages of the relevant manufacturer.

➡ **Chapter 29** contains a link list.

26 Carbon components

Carbon is a specific material that requires special handling and care when setting up and carrying out maintenance on the bike as well as when riding and also during transportation and storage.

26.1 Properties



Carbon parts must not be deformed, dented or bent following an accident or crash. It is possible that fibres have been destroyed or have detached although this is not evident externally.

You should therefore inspect the carbon frame and all other carbon components very carefully if you come off the bike or if it falls over. If you are not absolutely sure that the bike is still in a sound condition, have the carbon components in question checked by an expert.

26.2 Torques



Some carbon components require lower tightening torques than metal components. If the tightening torques are too high, this can lead to hidden damage that may not be visible externally. Frames or other components can break or change to the extent that they could fall off. You should therefore always observe the information enclosed by the manufacturer with the component(s) or ask a specialist dealer for advice. Use a torque wrench to ensure the right tightness is maintained.

If your bike has a carbon frame and a bottom bracket housing for a BB30 bottom bracket please note the following:

In this case you can fit an adapter so that a bottom bracket with conventional BSA thread can be used. However, bear in mind

- You can only install the adapter if the frame is completely undamaged. Repairing a defective BB30 housing serves no purpose. If it is not installed correctly, the bottom bracket housing may be damaged which would render the war-

ranty void. This kind of adapter should only be fitted by a specialist cycle shop.

- Once the adapter has been fitted in the carbon frame it cannot be removed.

26.3 Visual inspection



If your carbon component has pre-existing damage, it could suddenly fail completely with potentially disastrous consequences. You should therefore inspect your carbon frame and components thoroughly on a regular basis.

- › Look for splitting, deep scratches, holes or other changes in the carbon surface.
- › Check whether the components feel softer or have more give in them than usual.
- › Check whether individual layers (paint, finish or fibres) are flaking off.

If you suspect a component is no longer sound, you should definitely replace it before riding your bike again. You should ideally hand over your bike to a specialist dealer for inspection.

Inspect the following components and areas regularly (at least every 100 km) for cracks, fractures or changes in surface appearance. Furthermore, if you come off the bike or if it falls over, these components must always subsequently be inspected:

26.4 Carbon frame

Front derailleur clamp area, derailleur hanger, saddle clamp, headset spacers, bottom bracket spacers, brake boss or disc brake mount, dropout slots, suspension mounts on main frame and rear triangle, bearing mounts with full-suspension frame, transition areas around threaded bushes for drinking bottles



Mounting of a child seat to a carbon frame is not permitted. There is a danger of the frame breaking with serious consequences.

26.5 Carbon handlebar

Transition area at handlebar stem, handles, clamping areas of other components



If your bike falls on its handlebar, the best thing you can do is replace it. Always have bar ends retrofitted by your specialist cycle shop.

26.6 Carbon handlebar stem

Clamping area of all screws, head tube inside and outside



If you have changed the handlebar position, bear in mind that the stem must extensively enclose the head tube.

26.7 Carbon wheels

Surface wear, change of surface, e.g. due to heat produced when braking, abrasion of brake blocks, wheel hub or their flanks

If you are using a bike with carbon rims, bear in mind that the braking behaviour of this material is much poorer than aluminium rims.



Note that only approved brake blocks may be used.

26.8 Carbon fork

Fork blades on fork head, dropouts and clamping area of quick-release device, fork head below fork cone, clamping area of A-head stem on inside and outside



If you have changed the handlebar position, bear in mind that the stem must extensively enclose the carbon section.

26.9 Carbon seatpost

Transition area between seatpost and seat tube, transition area at head of seatpost, contact area of all screws

If other carbon parts are installed on your bike, inspect them regularly for cracks, fractures or changes in surface appearance.



Retapping of the thread and bearing shells and reaming of the seat tube is not permitted.

As a basic rule, if a fixture is not already provided on a carbon frame or component for an object (e.g. threaded inserts for bottle cage), it must not be fitted. The attach-

ment of pannier racks, trailers and other fixtures are not permitted due to the risk of breakage.

26.10 Splinters



Carbon fibres are extremely thin and hard. You should therefore handle damaged carbon parts very carefully. Individual fibres may detach and stick out. If these projecting fibres come into contact with your skin, there is a danger of them splintering off and causing an injury.

26.11 Fastening in mounting stand

Only clamp your carbon frame at the seatpost when fastening your carbon frame in a mounting stand, as otherwise the clamping mechanism may cause visible or concealed damage to the frame. If your bike has a carbon seatpost, we recommend you replace it provisionally with an aluminium or steel seatpost when carrying out this work.

26.12 Transportation by car

When transporting the bike on the roof rack or on a tow-bar cycle carrier, never attach it by its frame. Always attach the bike at the seatpost, and never at the down tube, top tube, seat tube, fork blades, steering tube, chain stay, cranks or seat stay.

The clamping mechanism could cause visible or concealed damage to the frame that may affect your safety. If your bike has a carbon seatpost, we recommend you replace it provisionally with an aluminium or steel seatpost when transporting it.

27 Care and maintenance of the bike

27.1 Care



Do not allow care products or oils to come into contact with brake pads, brake discs and the rim's brake contact surfaces. This could reduce the effectiveness of the brake.



Do not use a powerful water jet or high-pressure cleaner. If water under high pressure is directed at the bike, it can enter the bearings. This can dilute the lubricant which increases friction. This leads to rusting and irreparable damage to the bearings.

Do not clean your bike with

- acids,
- grease,
- hot oil,
- brake cleaners (apart from brake discs) or
- fluids containing solvents.

These substances attack the surface of the bike and accelerate wear.

Dispose of used lubricants, cleaning agents and care products in an environmentally sound manner. Do not pour these substances into the domestic waste, down the drain or into natural water bodies or the soil.

How well the bike works and how long it lasts depends on how well you look after it.

- › Clean your bike regularly using hot water, a small amount of cleaning agent and a sponge.
- › You should also always take this opportunity to check your bike for cracks, dents or material deformation.

- › Have defective parts replaced before you ride the bike again.
- › Touch up damaged paintwork.

Treat all parts that are susceptible to corrosion more frequently than other parts with preservatives and care products, especially during the winter and in aggressive environments such as coastal regions as otherwise your bike will corrode (rust) more powerfully and quickly.

- › Clean all galvanised and chrome-plated parts as well as stainless-steel components regularly.
- › Preserve these parts after cleaning with spray wax. Make sure that wax does not come into contact with brake discs and rims.
- › If you stop using your bike for a while, in the winter for example, store it in a dry place at a constant temperature.
- › Before putting your bike into storage, inflate both tyres to the prescribed tyre pressure.

To find out more important information on looking after your bike, visit the Internet pages of the relevant component manufacturer. The link list in **Chapter 29** provides an overview with links.

27.2 Wear parts

Your bike is a technical product that must be regularly checked.

Many parts on your bike are subject to a higher degree of wear due to their function and depending on their use.



Have your bike checked regularly at a professional bike workshop and have the wear parts replaced.

27.3 Tyres

Due to their function, bike tyres are subject to wear. This depends on how the bike is used and the rider can influence this significantly.

- › Do not brake so sharply that the wheels lock.
- › Check the tyre pressure regularly. The maximum permissible tyre pressure, and normally also the minimum permissible pressure, can be found on the tyre wall.
- › If necessary, inflate the tyre up to the specified value. This reduces wear.
- › Do not expose the tyres to things that can damage them such as sunlight, petrol, oil, etc.

27.4 Rims in conjunction with rim brakes

Owing to the interaction of the rim brake with the rim, not only the brake pad but also the rim is subject to function-related wear. If fine cracks appear or the rim flanges deform when the tyre pressure increases, this indicates increased wear. Wear indicators on the rim allow its wear condition to be easily identified.

- › Check the wear condition of the rim at regular intervals (see [Chapter 16.3 "Checking the rims"](#)).

27.5 Brake pads

The brake pads on rim, roller, drum and disc brakes are subject to wear, the extent of which depends on how the bike is used. If the bike is ridden in hilly regions, or used in a sporty manner, the brake pads may need to be replaced more often. Check the wear condition of the pads regularly and, if necessary, have them replaced by a professional bike workshop.

27.6 Brake discs

Brake discs also wear out as a result of intensive braking, or during the course of time. Find out from the manufacturer of your brakes or your specialist cycle shop about the respective wear limits. You can have worn brake discs replaced at a professional bike workshop.

27.7 Bike chains or toothed belts

The bike chain is subject to function-related wear the extent of which depends on care/maintenance and how the bike is used (mileage, rain, dirt, salt, etc.).

- › To increase the service life of the bike, clean the bike chains and toothed belts regularly and lubricate the chain.
- › Have the chain replaced by a professional bike workshop once its wear limit has been reached (see [Chapter 20 "Bike chain"](#)).

27.8 Chainrings, sprocket wheels and jockey wheels

In bikes with derailleur gears, the sprocket wheels, chainrings and jockey wheels are subject to function-related wear. The extent of the wear depends on care/maintenance and how the bike is used (mileage, rain, dirt, salt, etc.).

- › To increase the service life of the bike, you should clean and lubricate these parts regularly.
- › Have them replaced by a professional bike workshop once their wear limit has been reached.

27.9 Lamps of lighting set

Bulbs and other lamps are subject to function-related wear and therefore may need to be replaced.

- › In case you need to replace damaged bulbs, always carry spare ones with you.

27.10 Handlebar tapes and handle grips

Handlebar tapes and handle grips are subject to function-related wear and therefore may need to be replaced.

- › Check regularly that the handles are securely seated.

27.11 Hydraulic oils and lubricants

The effectiveness of hydraulic oils and lubricants decreases over time. If lubricants are not replaced, this increases the wear of the relevant components and bearings.

- › Clean and relubricate all relevant components and bearings regularly.
- › Have the brake fluid for disc brakes checked regularly, and replaced if necessary.

27.12 Gear-shift and brake cables

- › Carry out regular maintenance on all Bowden cables.
- › Have defective parts replaced at a professional bike workshop. This may be necessary especially if the bike is often left outdoors and is exposed to the effects of the weather.

27.13 Paint finishes

Paint finishes require regular care, this also ensures that your bike looks good.

- › Check all painted surfaces regularly for damage and touch up immediately if required.
- › Consult your specialist cycle shop for advice on how to care for your bike's surface finishes.

27.14 Bearings

All bearings on the bike, such as the headset, wheel hubs, pedals and bottom brackets, are subject to function-related wear which depends on the intensity and duration of use and how well the bike is looked after.

- › Check these parts regularly.
- › Clean and lubricate them regularly.

27.15 Sliding bearings and bearings for full-suspension frames, suspension forks or other suspension elements

The suspension components on the bike, particularly the sliding bearings, bearings and suspension elements, must cope with very high stresses compared to the other bearings. They are therefore subject to a high degree of wear.

- › Check these parts regularly and thoroughly.
- › Observe the enclosed user manual from the manufacturer.
- › Your specialist cycle shop can advise on how to look after these sensitive components, and also on how to replace them if necessary.

To find out more important information on maintenance of wear parts, visit the Internet pages of the relevant component manufacturer. The link list in **Chapter 29** provides an overview with links.

28 Regular inspections

As the spokes settle, the length of the brake and shifting cables increases and the bearings will run in during the first kilometres on the bike, you will have to have an initial inspection carried out by your specialist cycle shop after the first 200 kilometres, or after four to six weeks. This is also important for the acceptance of claims made under the terms of the warranty.

- › Clean your bike after every offroad ride and check it for damage.
- › Have the initial inspection carried out.
- › Inspect your bike roughly every 300 to 500 km, or every three to six months.
- › During this inspection, check that all screws, nuts and quick-release devices are securely fastened.
- › Clean your bike.
- › Grease moving parts (apart from brake contact surfaces) according to instructions.
- › Have paint damage and rust spots touched up.
- › Apply corrosion inhibitor to bare metal parts (apart from brake contact surfaces).
- › Have inoperative or damaged parts replaced.

28.1 Inspection schedule

28.1.1 Maintenance / checks

After the first 200 kilometres following purchase, and subsequently at least once a year

- › Have the following checked:
 - tyres and wheels.
- › Have the tightening torques of the following checked:
 - handlebar,
 - pedals,
 - pedal cranks,
 - bike saddle,
 - seatpost and
 - fastening screws.

- › Have the following components readjusted:
 - headset,
 - gearshift,
 - brakes,
 - suspension elements.

after every ride

- › Check the following:
 - spokes,
 - rims for wear and true running,
 - tyres for damage and foreign objects,
 - quick-release devices,
 - function of gearshift and suspension,
 - brakes, hydraulic brakes for leaks,
 - lighting and
 - bell.

after 300 to 500 kilometres

- › Have the following checked for wear and replaced if necessary:
 - bike chain,
 - sprocket,
 - sprocket wheel,
 - rims and
 - brake pads.

- › Clean the bike chain, chainring and sprocket wheel.
- › Lubricate the chain using a suitable lubricant.
- › Check that all screw connections are secure.

after 1000 kilometres

- › Have the brake hub checked and, if necessary, lubricate the brake sleeve with brake sleeve grease or replace it.

after 3000 kilometres

- › If necessary, the
 - hubs,
 - headset,
 - pedals,
 - shifting cables * and
 - brake cables
- › should be
 - dismantled,
 - checked,
 - cleaned,
 - lubricated and,
 - if necessary, replaced by a professional bike workshop.

* Do not apply lubricants or oils to teflon-coated cable casings.

Following each ride in the rain

- › Clean and lubricate the following:
 - gearshift,
 - brake (apart from brake contact surfaces) and
 - bike chain.



Not all lubricants and care products are suitable for your bike. Ask your specialist cycle shop which product you should use in each case. If you use unsuitable lubricants and care products, this can damage or impair the performance of your bike.

29 Link list

You can obtain important information on your bike and its components via these links. The relevant user manual is normally provided on the manufacturer's web pages, in addition to important tips for use and making settings.

www.rohloff.de

www.speedlifter.com

www.brooksengland.com

www.paul-lange.de/produkte/shimano

www.ritcheylogic.com

www.schwalbe.de

www.srsuntour-cycling.com

www.magura.com

www.sram.com

www.dtswiss.com

www.fullspeedahead.com

www.paul-lange.de/produkte/selle_italia

www.bike-magazin.de

www.tour-magazin.de

www.radfahren.de

www.tekro.com

www.fallbrooktech.com/nuvinci.asp

www.hebie.de

30 Technical data

30.1 Maximum permitted gross weight of bike

The maximum permitted gross weight of the bike comprises the weight of the bike, the weight of the rider and the weight of the luggage. It also includes the laden weight of a trailer.

BIKE TYPE	MAXIMUM PERMITTED GROSS WEIGHT	WEIGHT OF RIDER:
20" trailer	50 kg	
20" child's bike:	60 kg	
24" child's bike:	80 kg	
Urban bike, city/trekking	130 kg	max. 115 kg
Urban bike, semi XXL	150 kg	max. 135 kg
Urban bike, XXL	170 kg	max. 155 kg
E-Bike	130 kg	max. 105 kg
E-Bike semi XXL	150 kg	max. 125 kg
E-Bike XXL	170 kg	max. 145 kg
MTB (hardtail)	110 kg	max. 100 kg
MTB (hardtail), semi XXL	140 kg	max. 125 kg
MTB (dirt)	110 kg	max. 100 kg
MTB (full-suspension)	110 kg	max. 100 kg
MTB (full-suspension), semi XXL	140 kg	max. 125 kg
Road bike	110 kg	max. 100 kg
Road bike, semi XXL	135 kg	max. 125 kg
Cyclo Cross / Cyclo Cross Trekking	110 kg	max. 100 kg

The maximum permitted gross weights of carbon frames also apply for aluminium frames.

If other gross weights are approved, for lightweight construction components for example, this will be indicated on the bike or component.

30.2 Maximum permitted loading of pannier rack



Note that the data on your pannier rack or in the manufacturer's user manual may be different.

Maximum weight loading of front pannier rack:

- Loading area above wheel: 10 kg
- Low loading area: 18 kg

Maximum weight loading of rear pannier rack:

- 20" child's bike and trailer: 10 kg
- 24" child's bike: 18 kg
- Touring bike, city bike, trekking bike, ATB: 25 kg

30.3 Tightening torques for screw connections



Only use a suitable tool, a torque wrench for example, to tighten the screw connections as otherwise the screws could shear off or break.



If you tighten screws too tightly, this could damage the components

You should therefore always observe the prescribed tightening torque.

Observe the minimum screw-in depth. For hard aluminium alloys this is at least 1.4 times the screw diameter (e.g. nominal diameter M5 × 1.4 = 7 mm).

Whenever possible, you should tighten all safety-relevant screw connections using a torque wrench. This indicates the tightening torque in Nm (Newton metres) in each case.

- › If no values are indicated on the component, use the tightening torques in the following table.
- › If the torque has been specified by the manufacturer of the component, this has priority.
- › Carbon parts must be mounted using a special mounting paste.



Also note other information or markings on carbon components regarding the recommended torques.

	SCREW CONNECTION	THREAD	TIGHTENING TORQUE (NM)
General	Crank arm, steel	M8x1	30
	Crank arm, alu	M8x1	30
	Pedal	9 / 16"	30
	Axle nuts, front	gen.	25
	Axle nuts, rear	gen.	30
	Stem expander bolt wedge	M8	23
	Stem, A-head, angle adjustment	M6	10
	Stem, A-head, handlebar clamping fixture	M5 / M6 / M7	M5: 5 / M6: 10 / M7: 14
	Stem, A-head, head tube	M5 / M6 / M7	M5: 5 / M6: 10 / M7: 14
	Bar end, outer clamp	M5 / M6	M5: 5 / M6: 10
	Seatpost, clamp	M8	20
	Seatpost, clamp	M6	10
	Seatpost, saddle clamping bracket	M7 / M8	M7: 14 / M8: 20
	Front derailleur clamp	M5	5
	Brake, pad	M6	10
	Brake, cable clamp	M6	10
	Sidewall dynamo, fixing	M6	10
	Derailleur hanger	M10x1	16
	Bottom bracket	BSA	according to manufacturer's instructions
	Disc brake calliper, Shimano, IS and PM	M6	6 to 8
	Disc brake calliper, AVID, IS and PM	M6	8 to 10
	Disc brake calliper, Magura, IS and PM	M6	6
	Shifting lever clamp	M5	5
	Brake lever clamp	M5	5
	V-brake, fastening screw	M6	10
	Road bike brake	M6	10
	Freewheel fastening screw	n. a.	40
	Cassette, lock ring	n. a.	30
	Handles, screw-on type	M4 / M5	M4: 3 / M5: 5
	Carbon	Carbon frame, saddle clamp	M5 / M6
Carbon frame, water bottle holder		M5	5
Carbon frame, front derailleur clamp		M5	4
Carbon handlebar, shifting lever clamp		M5	3
Carbon handlebar, brake lever clamp		M5	3
Carbon handlebar, handlebar clamp		M5	5
Carbon handlebar, stem clamp		M5 / M6	5

Overview of torques, values apply for standard screws

30.3.1 General tightening torques for screw connections

The screw grade, e.g. 8.8, is embossed in the screw head.

Unless otherwise specified by the manufacturer, the following tightening torques (average values) apply depending on the screw grade:

THREAD \ GRADE	V2A / V4A	8.8	10.9	12.9
M4	3	2.7	3.8	4.6
M5	5	5.5	8	9.5
M6	8	9.5	13	16
M8	20	23	32	39
M10	40	46	64	77

30.4 Tyres and tyre pressure

The recommended tyre pressure is stated in either bar or PSI.

The following table shows standard values converted, and also information on which tyre widths these pressures normally apply.

TYRE WIDTH in mm	PSI	BAR
25 HD*	80 – 110	5.5 – 7.6
28 HD*	70 – 80	4.8 – 5.5
28	60	4.1
32	60 – 70	4.1 – 4.8
37	50	3.5
40	60	4.1
42	60	4.1
47	40 – 50	3.5 – 4.1
57 – 62	30 – 40	2.1 – 2.8

* HD = high-pressure tyre



Note that the manufacturer's specifications may differ and must be observed as otherwise you could damage the tyres and inner tubes.

30.5 Lighting set

Depending on which type of lighting set is fitted on your bike you may require different spare lamps. The following table shows which bulbs you require.

TYPE OF LIGHTING SET USED	POWER SUPPLY	
Front light	6 V	2.4 W
Front light, halogen	6 V	2.4 W
Rear light	6 V	0.6 W
Rear light with stand light	6 V	0.6 W
Lighting with LED lights	LED lights cannot be replaced	
Dynamo	6 V	3 W
Hub dynamo	6 V	3 W

31 Warranty conditions

Read ► *Chapter 27 "Care and maintenance of the bike"* carefully. Comply with the inspection and maintenance intervals specified in ► *Chapter 28 "Regular inspections"*. Compliance with the service intervals is a prerequisite for the assertion of warranty claims.

The statutory warranty period is two years. This starts when the bike is handed over by the specialist cycle shop who is also your contact partner for warranty claims.

As proof of purchase and date of handover, please retain the handover document signed by both parties and record of purchase, such as the invoice and/or sales receipt, for the duration of the warranty period.

- Non-compatible add-on components that were not part of the scope of delivery at the time the product was handed over, or damage caused by unprofessional installation of these add-on components.

31.1 Prerequisites for the validity of warranty claims

- Manufacturing, material or information error.
- The problem or error already existed at the time of handover to the customer.

31.2 Warranty exclusions

A warranty claim applies only for the initial faultiness of the defective part. The following are excluded from the warranty:

- Damage caused by use in competitions, improper use and force majeure (see ► *Chapter 6 "Intended use"*).
- All parts that are subject to function-related wear, providing this is not a production or material fault (see ► *Chapter 27.2 "Wear parts"*).
- Damage caused by incorrect or insufficient care and unprofessional repairs, conversions or replacement of components on the bike. This User Manual contains detailed information on how to look after your bike.
- Accident damage or damage caused by other external factors, providing this is not attributable to incorrect information or a product error.
- Repairs carried out with used parts or damage that occurs as a consequence of this.
- Special equipment or accessories or non-standard equipment; especially technical changes, i.e. to the gearshift system or the bike fork and frame geometries.

We hope you thoroughly enjoy using your new bike!

Copyright © 2013 Derby Cycle Werke GmbH

Reproduction in whole or in part is not permitted without the consent of Derby Cycle Werke GmbH. Subject to misprints, errors and technical modifications.

II

User Manual Fast Pedelec

English





Charger



LCD control panel



- 1 Battery
- 2 Battery lock
- 3 Motor unit
- 4 Control panel
- 5 Charger

Dear Customer,

Thank you for choosing a Pedelec (pedal electric cycle) from us. This bike is equipped with an electric drive that assists you when you are cycling. This will make your trip much more enjoyable if you are riding up hills, carrying loads or riding into the wind. You can decide yourself how much you want to use it. The purpose of this User Manual is to help you get the most out of your fast Pedelec and use it correctly.

Although this vehicle looks like a normal bike and can also be used as such, there are a number of important differences. It is for example viewed from a legal point of view as a L1e moped. You must have a moped test certificate and an insurance plate in order to ride it.

Structure of User Manual

If you want to get started right away, refer to the brief introduction in ➡ **Chapter 1 “Quick start”**

The individual steps are subsequently explained in detail, supplemented by illustrations and diagrams.

For more detailed information on your fast Pedelec, refer to ➡ **Chapter 11 “Technical data”**.

The information in this User Manual specifically refers to your fast Pedelec only. For general information, on the bike technology that features in your Pedelec for example, refer to the General User Manual.



Even if you can't wait to go for your first ride, in the interest of your own safety you should read ➡ **Chapter 1 “Quick start”** carefully without fail before use.

In addition to texts and tables, the User Manual contains the following symbols that denote important information or dangers.



WARNING about possible physical injury, increased risk of falls or other injuries




IMPORTANT ADDITIONAL INFORMATION or special information on using the bike



NOTE about possible damage to property or the environment

Content

1 Quick start	7		
2 Fast Pedelec / fundamental legal principles	8		
2.1 Legal principles	8		
2.1.1 Meaning for the rider	8		
2.1.2 Fast Pedelecs and cycle paths	8		
2.1.3 Travel speed switch	8		
3 Charging the battery	9		
			
3.1 Charging operation	9		
3.2 Fitting the battery	9		
4 LCD control panel	10		
			
4.1 Function of control panel	10		
4.1.1 On/Off button	10		
4.1.2 Selector button for display panel	10		
4.1.3 Changing the assist level	11		
4.1.4 Resetting recorded data	11		
4.1.5 Switching the display on and off	11		
4.1.6 Deleting all data	11		
4.1.7 Reprogramming the language, wheel circumference and LCD contrast	12		
4.1.8 Automatic switch-off	13		
4.1.9 Measurement and display ranges	13		
		4.1.10 Battery charge state indicator	13
		4.1.11 Power output indicator	13
		4.1.12 Switching the light on and off	14
		5 Assistance by the electric motor	14
			
		5.1 Operating principle of assistance	14
		5.2 Distance	15
		5.3 Riding your Pedelec efficiently	16
		6 Battery	17
		6.1 Straightforward charging	17
		6.2 High degree of safety due to battery management	17
		6.3 Straightforward storage	17
		6.4 Battery information system	18
		6.4.1 Checking the battery charge state	18
		6.4.2 Checking the battery capacity	18
		6.5 Service life and warranty	19
		6.5.1 of battery	19
		7 Charger	20
			

8 Troubleshooting	20
8.1 Problems/solutions: Flash patterns and their meaning	21
8.1.1 No display	21
8.1.2 Battery charge state indicator flashing or not visible	21
8.1.3 Display “E1”	21
8.1.4 Display “E9”	22
8.1.5 Assistance control indicator flashing	22
8.1.6 Additional possible sources of errors	22
9 Cleaning	22
10 Warnings	23
11 Technical data	24
12 Replacing components of the fast Pedelec	25
12.1 Components that can only be replaced by equivalent parts or approved parts	25
12.2 Spare tyres	26
12.3 Components that do not require a certificate of approval	27

1 Quick start

- › 1. Charge the battery completely before riding for the first time.



Unlocking the battery

- › 2. To remove the battery, grip the handle, insert the key into the lock and turn it anticlockwise. The battery is now unlocked.
- › 3. Tilt the battery sideways and lift it with both hands out of the holder.



Tilt to remove

- › 4. Put the battery in the docking station of the charger. The battery LEDs light up or flash. You must fully charge the battery before using it for the first time.
- › 5. Once all LEDs have gone out, take the battery out of the docking station.
- › 6. Reinsert the battery into the holder on the Pedelec from the left-hand side. Move the battery outwards at an angle of roughly 45° as you do so, as you did when you took it out of the holder. Move the battery into the upright position until the locking mechanism engages. If the key is still in the lock, you will need to turn it clockwise and pull it out to allow the battery to lock in place.
- › 7. Make sure that the battery is securely positioned and that the key is no longer in the lock.
- › 8. Push the "On / Off" button on the control panel on the handlebar. **Wait for 2 seconds before turning the pedals.** The drive system requires this time

when no force is applied to the pedals to adjust the power sensor correctly.

Press the "Assist" button to select the power assist mode. This works in both directions. The assistance output increases or decreases depending on which "Assist" button you press. If you select the most powerful setting then press the button again, you return to a mode without assistance.



Always operate one of the brakes before putting one of your feet on a pedal as the motor pulls your bike away immediately. This starting assistance is very convenient, especially when starting on hills. If you start off in road traffic or on unsurfaced roads without controlling your speed, you could come off your bike and seriously injure yourself.

- › 9. You can now ride off.

2 Fast Pedelec / fundamental legal principles

The essential idea behind the fast Pedelec is not only to be able to cover greater distances more quickly, but also more comfortably. You can choose to relax and let the bike do the work, exert yourself more physically, or simply get from A to B as fast as possible. You can decide this yourself by choosing an appropriate assist level.

This gives you more confidence on the road, as the powerful acceleration gives you more control and a greater degree of security. Your fast Pedelec assists you with 300 watts of power which takes you up to a speed of 45 km/h.

2.1 Legal principles

The fast Pedelec is classed from a legal point of view as a L1e moped. In some EU countries, like all other bikes, it must comply with certain regulations, the Road Traffic Licensing Regulation in Germany (StVZO) for example. Please observe the relevant explanations and general information provided in the General User Manual.

- When riding with the power assist only, the fast Pedelec must not travel faster than 20km/h. You will therefore reach a speed of between 15 and 18 km/h on the flat.
- The power assist switches itself off once you have reached a speed of roughly 45 km/h. You will require 700 watts to reach this speed and you cannot do this with the assistance of the electric motor alone. You can reach speeds of 35–45 km/h by combining a motor output of 300 watts with your own physical effort.

2.1.1 Meaning for the rider

- You do not legally have to wear a helmet. In the interest of your own safety, however, you should never ride without a helmet.
- You legally have to have a driving license. The moped test certificate is mandatory.
- If you have a German driving licence, you are automatically exempt from this requirement.
- In Germany, if you were born before 01.04.1965, you may also ride a fast Pedelec without a driving licence.

- You legally have to have insurance. In Germany, you can obtain the small registration mark from any insurance company.
- Use on cycle paths is restricted.



These regulations apply to you wherever you are in the European Union. It is possible that different regulations exist in other countries, also inside the EU in individual cases. Before using your fast Pedelec abroad, find out about the legal situation in the relevant country.

2.1.2 Fast Pedelecs and cycle paths

If you use your fast Pedelec as you would use a bike, i.e. without assistance from the electric motor, you can use all cycle paths without restriction. In some EU countries, restrictions apply if you use the motor on a cycle path. In Germany an amendment to the Road Traffic Ordinance (StVO) states that: You must use your fast Pedelec on cycle paths outside built-up areas, as is the case with mopeds. In exceptional cases where this is not permitted, the cycle path will also be marked with the sign "No mopeds" in accordance with Paragraph 2 Section 4 of the Road Traffic Ordinance (StVO). Inside built-up areas on the other hand, you can only use your Pedelec on cycle paths if the cycle path is marked accordingly in accordance with Paragraph 41, Sctn. 2, No. 5.

2.1.3 Travel speed switch

Your fast Pedelec is equipped with a travel speed switch. The bike is designed so that it cannot go faster than 20 km/h when you press the travel speed switch without pushing the pedals. This is why wearing a helmet is not mandatory for the fast Pedelec.



Travel speed switch

3 Charging the battery

To charge the battery, you have to take it out of the holder on the Pedelec.



Grip the battery by the handle, insert the key into the lock and turn it anticlockwise. The battery is now unlocked and can be removed from the Pedelec by tilting it sideways. In doing so, hold on tight to the battery to prevent it from being dropped.



Unlocking the battery



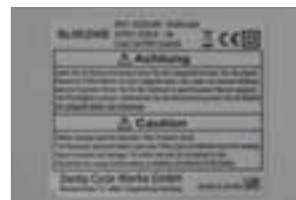
Tilt to remove

You should now remove the key and keep it in a safe place to prevent it from breaking off or being lost.

3.1 Charging operation

Before charging the battery, read the information on the charger carefully.

- 1. Take the charger provided out of its packaging and plug the mains plug into a socket (230 V, observe type plate on the charger).



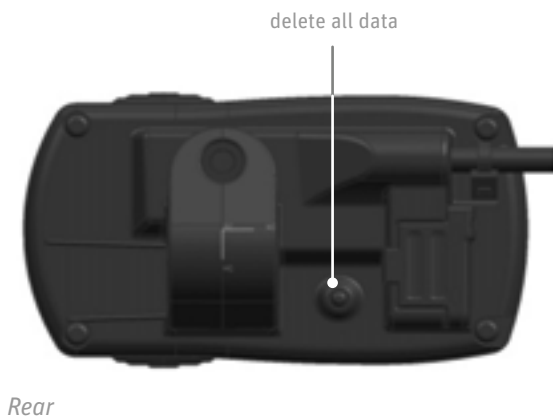
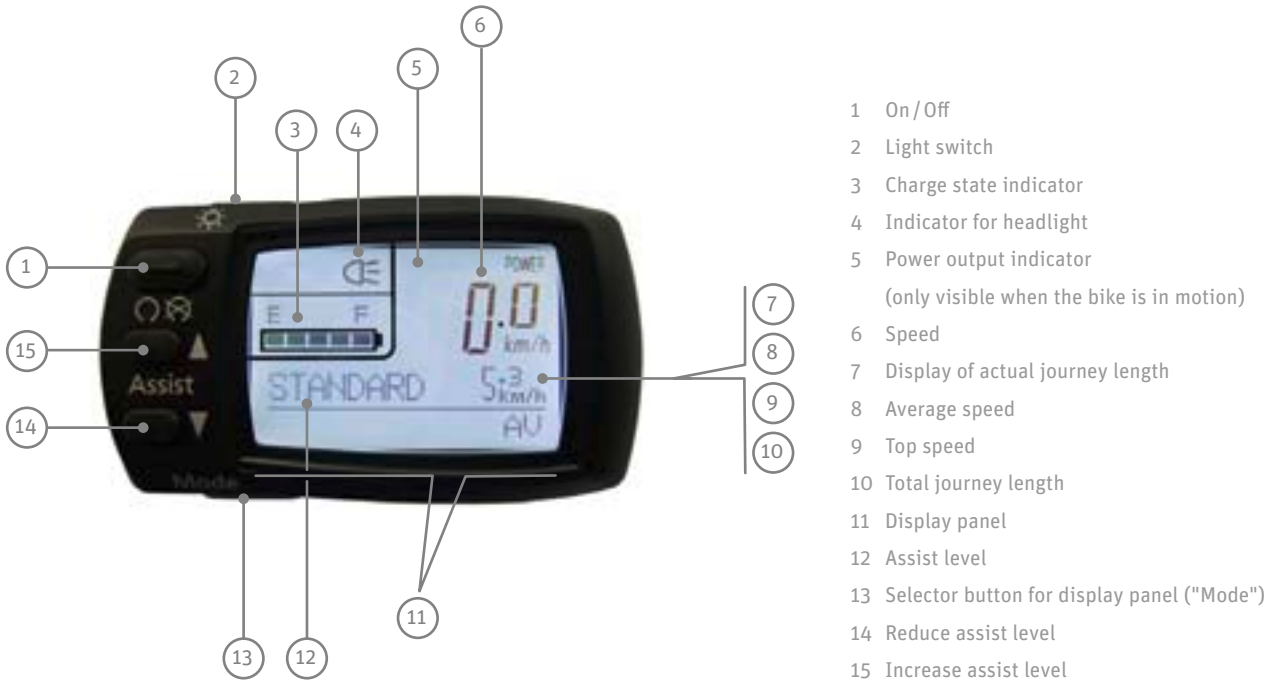
Type plate on charger: Front and back

- 2. Put the battery in the docking station of the charger.
- 3. The charging operation starts. The battery LEDs light up or flash. Once all five LEDs have gone out, the battery is fully charged. You can leave the battery standing in the charger. However, the charger always draws some current if you leave it plugged in.
- 4. To save power, pull the charger plug out of the socket once the charging operation is complete.

3.2 Fitting the battery

- 1. Insert the battery into the battery holder of the Pedelec from the left by tilting it outwards at roughly 45°.
- 2. In doing so, you must insert the lateral guides at the bottom of the battery into the guides of the holder.
- 3. Tilt the battery towards the bike until it engages in the locking mechanism. If the key is still in the lock, turn it clockwise then pull it out to lock the battery in place.
- 4. Make sure the battery is firmly in place.

4 LCD control panel



Display switched off



Display switched on

4.1 Function of control panel

4.1.1 On/Off button

Press the "On/Off" button to switch on the control panel and drive.

The assist level that was active at the time the control panel was switched off is automatically reinstated. The back-lit display is turned on briefly then goes out. All recording of data (trip, actual journey length, average speed, top speed, total journey length) starts as soon as you switch the control panel on and stops when you switch it off.

4.1.2 Selector button for display panel

You can display the information "Trip", "Average speed", "Top speed" and "Total journey length" consecutively by pressing the selector button for the display panel ("Mode").

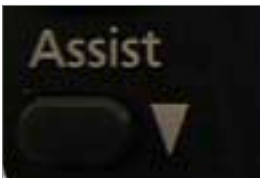
The setting that was selected when you switched off is also displayed first in this case.

4.1.3 Changing the assist level



Increase power assist

The following assist levels are displayed one by one when you press the button for selecting a more powerful assist level: "NO ASSIST/no assistance", "ECO/low assist level", "STANDARD/medium assist level", "HIGH/high assist level", followed once again by "NO ASSIST/no assistance". This means that the assistance increases each time you press the button until you reach the highest power level. If you subsequently press the button, the assistance switches off.



Reduce power assist

If you press the button that reduces the assist level, the assistance reduces each time the button is pressed and returns to the most powerful assist level when it reaches the end of the loop.

In the "NO ASSIST/no assistance" mode, you ride the bike normally without the assistance of the motor.

4.1.4 Resetting recorded data

If you press the selector button for the display panel for longer than three seconds with the control panel switched on, this resets the trip, average speed and top speed to zero. You cannot delete the total journey length using this method.

4.1.5 Switching the display on and off

The back-lit display and LCD control panel display can also be switched on even if the drive is not enabled. To do this, press the button that switches the lights on. The drive remains in "NO ASSIST/no assistance" mode. Now you cannot change the assist level.

If you press the light button when the control panel is switched on, the back-lit display turns on.

If you press the light switch when the light is on, the back-lit display turns off. The power assist is still available and you can change the assist level.

4.1.6 Deleting all data

Press the display ("Mode") selector button and the button that deletes all data on the rear of the control panel at the same time to delete all the data stored, including the total journey length. The display then automatically switches to settings mode for language, LCD contrast and wheel circumference.

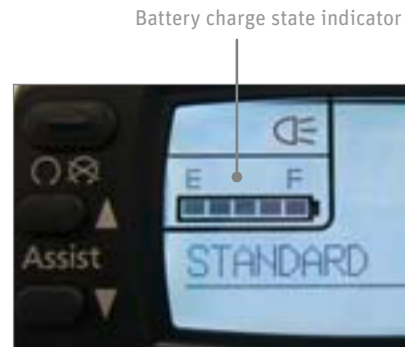
4.1.8 Automatic switch-off

If you stop your Pedelec and it does not move for 10 minutes, the system switches off automatically. If you want to use the assistance again, you will have to switch it back on via the control panel.

4.1.9 Measurement and display ranges

DESCRIPTION	DISPLAY RANGE
Speed	0.0 – 99.9 km / h
Journey length	0.0 – 99999 km (once the distance reaches 9999.9 km, this is displayed without a decimal place.)
Average speed	0 – 99.9 km / h
Top speed	0.0 – 99.9 km / h
Total journey length	0.0 – 99999 km (once the distance reaches 9999.9 km, this is displayed without a decimal place.)

4.1.10 Battery charge state indicator



This indicator helps you save power when riding which means you can travel further. The remaining battery charge is shown in 5 stages.

DISPLAY	BATTERY CHARGE STATE
5 LEDs light up •••••	80 – 100%
4 LEDs light up ••••	60 – 80%
3 LEDs light up •••	40 – 60%
2 LEDs light up ••	20 – 40%
1 LED lights up •	10 – 20%
1 LED flashes ◦	< 10%
no display –	0%

E: Battery is empty

F: Battery is full

4.1.11 Power output indicator



The power output indicator shows the actual power output being requested and the actual power consumption in 6 stages (bars).

This indicator helps you save power when riding which means you can travel further.

The fewer of the 6 bars that are displayed, the lower the actual power output of the motor and the consumption. If more bars are visible, the power output and consumption of the motor is higher.

IF YOU CAN SEE...	THE BATTERY IS SUPPLYING A CURRENT OF
6 bars	more than 20 amperes
5 bars	up to 16 – 20 A
4 bars	up to 12 – 16 A
3 bars	up to 8 – 12 A
2 bars	up to 2 – 8 A
1 bar	up to 0 – 2 A



If the power consumption is very low, no bars are displayed.

4.1.12 Switching the light on and off

If you are using the assistance and press the light switch, this switches the lighting of the fast Pedelec on and off.

If you are riding with the lights on and switch off the system, the lights also switch off automatically. You must therefore switch the lights on again.



You must always take the battery with you, even if you want to ride without assistance as the lights will only work with the battery.

5 Assistance by the electric motor



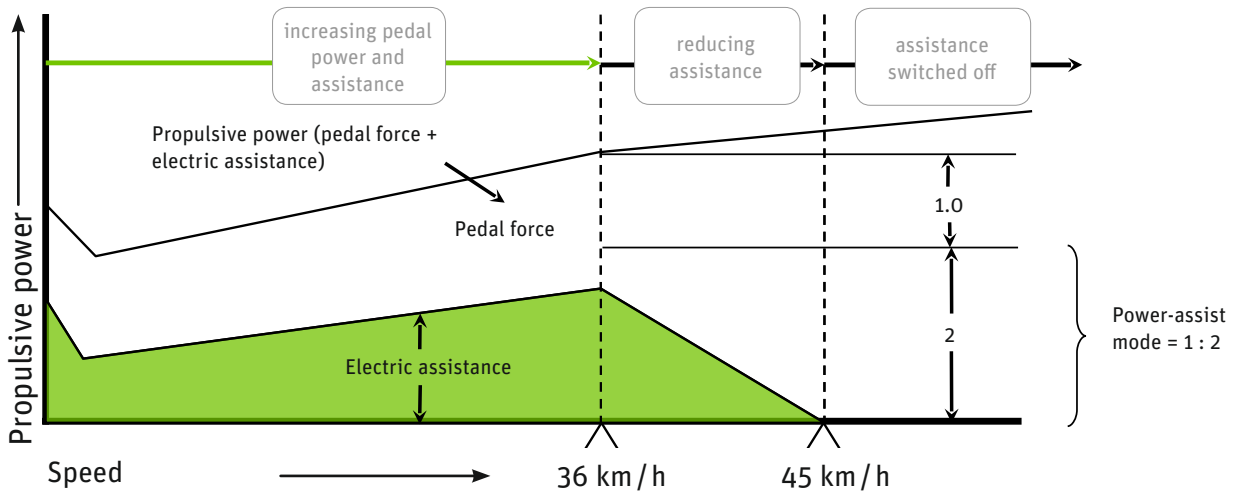
If your Pedelec is equipped with hub gears, you may have to take more load off the pedals when changing gears than you would normally do when riding your conventional bike. This is due to the additional power output of the electric motor. The hub gear system contains a device that protects it against gear shifting operations under excessive loads in order to preserve the gear unit in the hub.

5.1 Operating principle of assistance

The motor provides support as soon as you switch the assistance on and start pedalling.

The thrust delivered by the motor depends on three factors:

- Your own pedalling effort**
 The motor adapts to the force you apply. If you pedal harder, e.g. uphill or when setting off, the power sensor detects this and increases the thrust accordingly. However, the thrust is limited by the maximum motor output.
- The assist level you have selected**
 With the *"high assist level / HIGH"* setting, the power delivered by the motor is double your own effort (1 : 2).
 With the *"medium assist level / Standard"* setting, the power delivered by the motor increases your effort in a ratio of 1 : 1.3.
 With the *"low assist level / ECO"* setting, the power delivered by the motor is more than half your own effort (1 : 0.75).
- The speed at which you are currently travelling**
 When you set off on your Pedelec, the assistance increases as you build up speed until the bike reaches its maximum speed of roughly 36 km/h. The assistance then reduces automatically until you reach a speed of 45 km/h when it switches off. This applies for the largest gear only. In all other gears, the motor switches off earlier, depending on the gear ratio.



Variation in electric assistance

5.2 Distance

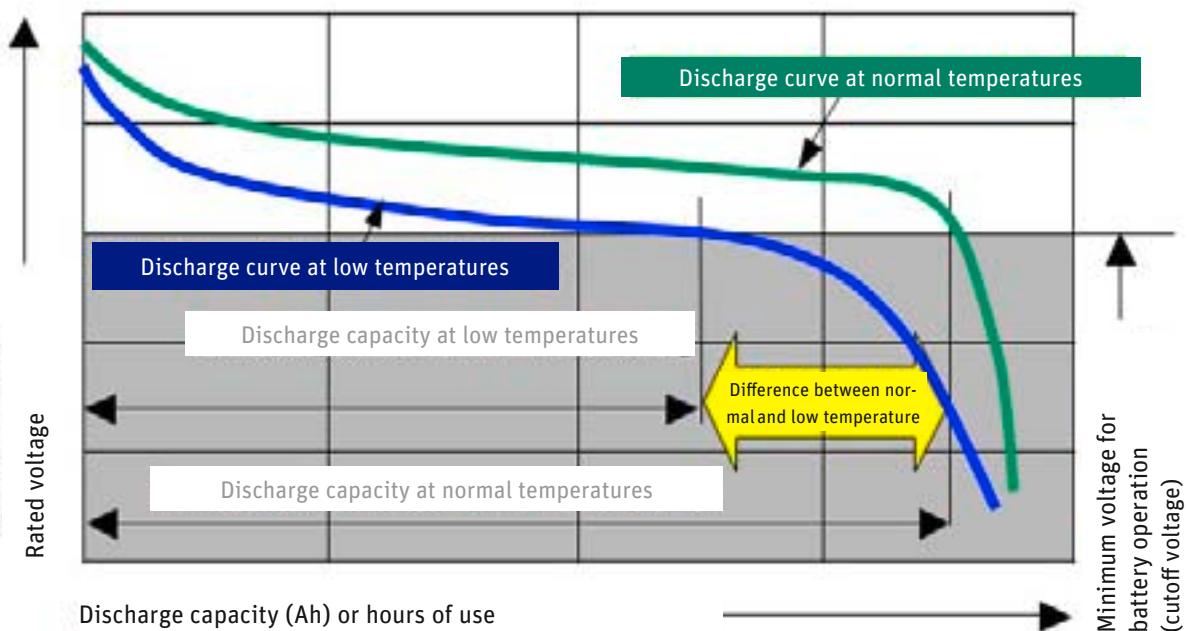
The distance you can travel using the power assist with the battery fully charged depends on several factors:

- **Ambient temperature**
If it is colder, you will travel a shorter distance with the same battery charge.

To maximise the distance you can travel, keep the battery in a heated room so that it is at room temperature when you fit it on your Pedelec.

As the battery discharges when the motor is in use, it generates enough heat to not lose too much of its power at low ambient temperatures.

- **Selected assist level**
If you want to cover a large distance assisted by the motor, select the lower gears, i.e. the ones that are easier to pedal. Also select a low assist level. "ECO" then appears on the control panel.



Rate of discharge at different temperatures

- **Handling**

If you are riding in gears that are harder to pedal and select a high assist level, e. g. when riding uphill, the motor will support you with plenty of power. However, this leads to higher consumption, as with driving a car at high speed on the motorway. You will therefore have to recharge the battery sooner. You can conserve energy when riding your bike not just by turning the pedals, but also by applying even pressure throughout each crank revolution.

- **Technical condition of your fast Pedelec**

Make sure the tyre pressure is correct. If you ride your bike with too little air in the tyres, this can significantly increase the rolling resistance. The distance you can travel also decreases if the brakes are rubbing.

- **Ascents**

You pedal harder when riding uphill. This is detected by the power sensor which then allows the motor to work harder.

Under ideal conditions, you can cover roughly 60 kilometres with the battery fully charged (18 Ah). You can expect to cover a distance of roughly 35 kilometres using different modes of operation.

DISTANCE COVERED (1 : 2 ASSISTANCE, 32 KM/H ON AVERAGE UNDER FAVOURABLE CONDITIONS)

8 Ah battery	22 km
12 Ah battery	35 km
18 Ah battery	60 km

Distance covered using different batteries

5.3 Riding your Pedelec efficiently

You can monitor and influence the cost of your journeys with the Pedelec yourself. You can reduce your consumption and therefore costs by following the tips for increasing the travel distance.

The operating costs for power assist with an 18 Ah battery are calculated as follows:

- A new battery costs roughly 599 euros.
- You can cover 48 km on average with one battery charge.
- You can charge the battery roughly 1,100 times.
- 1100 charging cycles x 48 km = 82,800 km
- 599 euros: 82,800 km = 1.13 euro cents / km
- You use roughly 0.620 kWh to fully charge the battery. Assuming a unit price of 20 euro cents / kWh, it costs you 12.4 euro cents to fully charge the battery and cover a journey length of 60 km.
- It costs you 0.20 euro cents / km to travel a distance of 60 km.
- This means the cost of consumption and the battery is a maximum of 1.33 euro cents / km.

As *Derby Cycle* is a German manufacturer, the sample calculation is based on German energy prices. The operating costs may therefore be different in locations where other energy prices apply.

6 Battery

Your battery is a lithium cobalt battery, the ideal type of lithium-ion (Li-ion) battery for this application. One of the main benefits of this type of battery is its low weight combined with a high capacity. Li-ion batteries only weigh half as much as comparable nickel metal hydride or nickel-cadmium batteries.

This means you carry less battery weight and more battery power.

6.1 Straightforward charging

- › There is no memory effect. You can therefore fully recharge your battery after every trip.
- › Recharge the battery after every trip. This means you can set off immediately the next time you use your bike and you also increase the service life of the battery.
- › If you are not using the battery, you must recharge it after 6 months at the latest.

6.2 High degree of safety due to battery management

- › The battery cannot be damaged as a result of a short-circuit. If this were to happen, the battery management would switch off the battery.
- › You can simply leave the battery standing in the charger as it prevents overcharging.

6.3 Straightforward storage

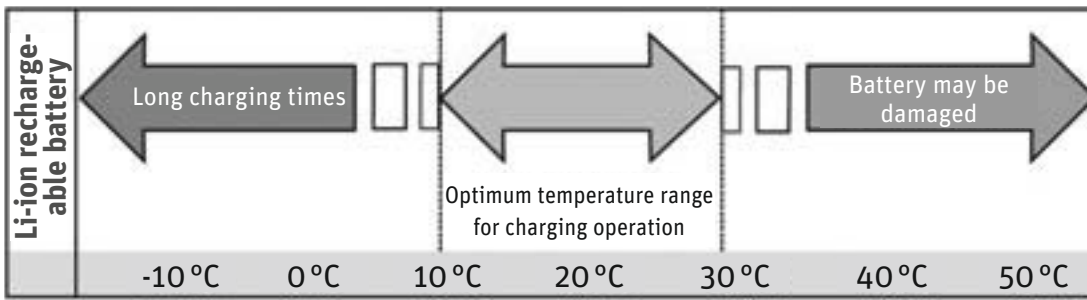
- › If you do not need your battery for a while, store it at a temperature of +10 °C at three quarters of its full charge capacity.
- › The battery enters sleep mode to prevent it from totally discharging.

These benefits are available due to highly effective battery management that has been adapted to this specific application and by tuning the battery for operation with a 300 watt motor.



Observe the following points to increase the service life of your Pedelec battery:

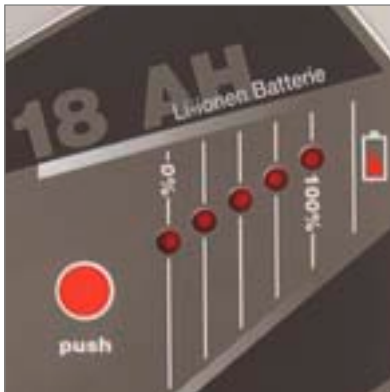
- › Make sure that the battery is fully charged before you ride your bike for the first time or after you have not used it for a while.
- › You should run the battery all the way down to empty for the first three charging cycles. This allows the battery to reach its maximum capacity. If you continuously run the battery to empty during normal operation, this reduces its service life.
- › If you partially recharge the battery frequently during normal operation, this has a favourable effect on its service life.
You should therefore partially recharge the battery whenever possible: Do not run the battery all the way down to empty and recharge it even after a short period of operation.
- › In the as-delivered condition, the battery is not fully charged and is in what is referred to as sleep mode. Sleep mode minimises the rate at which the battery discharges itself. If the battery is allowed to discharge unchecked for an extended period this can lead to total discharging which damages the battery. To "wake up" the battery, simply place it in the charger for one minute.
- › If you are having problems with the battery, place it in the charger for one minute. A reset occurs, during which the battery management disables sleep mode for example. After this, the battery will work again.
- › Ideally you should charge the battery at a temperature of between +10 °C and +30 °C. It takes longer to charge the battery at low temperatures, the battery will not charge up at temperatures higher than +30 °C. Ideally, you should charge and store the battery inside your house or in a warm garage when the outside temperature is low. In this case you should only fit the battery on your bike just before using it.
- › If you are transporting your Pedelec by car, take the battery out of its holder and transport it separately.
- › The battery should ideally be stored for longer periods charged to 75% of its capacity at a temperature of +10 °C.



Charging times at different temperatures

6.4 Battery information system

There is a control panel with five LEDs and a button ("Push") on the side of the battery that faces outwards. The LEDs light up if you press the "Push" button. Information about the battery and its charge state is provided based on the number of LEDs that light up and the way in which they light up.



Charge state and battery capacity indicator

6.4.1 Checking the battery charge state

Press the "Push" button briefly, the LEDs light up and display the current battery charge.

DISPLAY	BATTERY CHARGE STATE
5 LEDs light up •••••	80 – 100%
4 LEDs light up ••••	60 – 80%
3 LEDs light up •••	40 – 60%
2 LEDs light up ••	20 – 40%
1 LED lights up •	10 – 20%
1 LED flashes ◦	< 10%
no display –	0%
E: Battery is empty	
F: Battery is full	

6.4.2 Checking the battery capacity

If you press the "Push" button for longer than five seconds, the LEDs show the current capacity of the battery.

DISPLAY	CAPACITY
5 LEDs light up •••••	100 – 80%
4 LEDs light up ••••	80 – 60%
3 LEDs light up •••	60 – 40%
2 LEDs light up ••	40 – 20%
1 LED lights up •	20 – 0%

Capacity indicator

- › Check there is sufficient charge in the battery for the journey you intend to make before setting off.
- › In winter the distance you can normally cover with the battery operating normally is less. Only move the battery from the warm room where you store it and fit it on your Pedelec just before you set off. This prevents low temperatures from reducing the distance you can normally travel. A corresponding diagram is provided in ➔ **Chapter 11 “Technical data”**.
- › The distance you can cover can vary depending on the topography, your handling, the condition of the battery and the assist level you are using.
- › If all diodes flash consecutively, or several flash at the same time (2–3 diodes), the battery is damaged.



Before taking the battery to your specialist cycle shop to have it checked, put the battery in the charger for one minute then test it again.

6.5 Service life and warranty

The Panasonic centre motor is a fully-developed durable and maintenance-free drive. It is a wear part with a two-year warranty. As its power output is higher, wear parts such as the drive and brakes are subject to higher loads than they would be on a normal bike which is why they wear out more quickly.

6.5.1 of battery

Batteries are wear parts. Wear parts also come with a two-year warranty.

If the battery develops a fault during this period, your specialist cycle shop will of course replace it. Normal ageing and battery wear do not constitute a fault.

The service life of the battery depends on different factors. The most important wear-relevant factors are

- the **number of charge cycles** and
- the **age** of the battery.

When you have fully charged and discharged your battery 1,100 times, it will still have 60% of its initial capacity, providing it has been well looked after:

BATTERY	REMAINING CAPACITY	~ DISTANCE COVERED
8 Ah	4.8 Ah	19,360 km
12 Ah	7.2 Ah	30,800 km
18 Ah	10.8 Ah	52,800 km

From the technical standpoint above therefore, the battery is exhausted at this point. It also goes without saying that the battery ages. Even if you do not use your battery, its capacity reduces.

Providing you can still cover the journey distances with this remaining battery capacity, you can of course continue using it. If the capacity is no longer sufficient, you can take your battery to a specialist cycle shop who will dispose of your battery and sell you a new one.

- › You can extend the service life of the battery by fully recharging it after every journey, however short. The Panasonic li-ion cobalt battery has no memory effect.
- › You can also extend the service life of the battery by using the assistance selectively. Avoid, for example, using gears that make pedalling difficult with the highest assist level activated.

7 Charger

Read the two stickers on the charger before using it for the first time.



Do not use other chargers. Only charge the battery using the charger provided, or a charger approved by *Derby Cycle*.

If a fault develops or if the battery is in sleep mode, you might be able to solve this problem by placing the battery in the charger for one minute. The battery management then checks the battery and can eliminate any faults that have occurred.



If used incorrectly, the device may be damaged or inflict injuries.

- › Before cleaning the charger, always pull the plug out of the socket to avoid a short-circuit and/or physical injury.
- › Only use the charger in dry rooms.
- › Only place the charger in a secure stable position on a suitable surface.
- › Do not cover the charger or place any objects on it as otherwise it could overheat and catch fire.

8 Troubleshooting

The control panel also indicates when faults and technical errors are present. A fault code appears in the LCD display.



Control panel display



Have the electric drive inspected regularly by your specialist cycle shop. Do not carry out any work on the electric drive or battery yourself. Unless you have sufficient expertise this could lead to a serious accident. As a basic rule, always consult your specialist cycle shop if you have a problem with the electric drive or the battery.



You should only have the electrical components of your Pedelec replaced with genuine parts. This makes it safer for you and avoids problems when processing warranty claims.

8.1 Problems / solutions: Flash patterns and their meaning

If a problem occurs in the electrical system of your Pe-delec, you should initially try to solve it by referring to the following list which describes possible causes of errors and provides corresponding solutions.

If you cannot solve the problem, consult your specialist cycle shop.

8.1.1 No display

If nothing is shown in the LCD display, one of the following reasons/solutions may apply:

- Is the battery sufficiently charged?
Charge the battery if necessary.
- Is the battery capacity still sufficient?
Check the capacity. If the remaining capacity is not enough, the battery must be replaced.

Check the actual battery capacity

If you press the "Push" button for longer than five seconds, the LEDs show the capacity of the battery at present.

DISPLAY	CAPACITY
5 LEDs light up •••••	100 – 80%
4 LEDs light up ••••	80 – 60%
3 LEDs light up •••	60 – 40%
2 LEDs light up ••	40 – 20%
1 LED lights up •	20 – 0%

Capacity of 18 Ah battery (example)

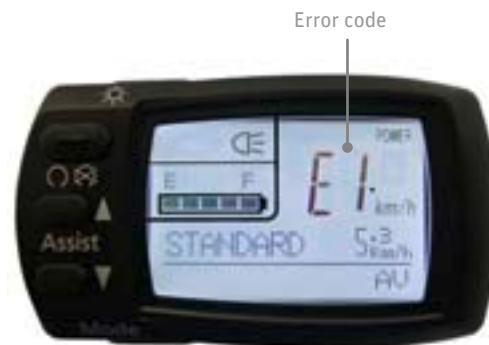
8.1.2 Battery charge state indicator flashing or not visible

If the battery charge state indicator is flashing or not visible at all, one of the following causes/solutions may apply:

- Is the battery sufficiently charged?
Charge the battery if necessary.
- The second and fourth LEDs of the battery indicator flash when you press the button on the battery. The battery management has switched the battery off. Put the battery in the charger and charge it.
- If you continue to press the button on the battery (test for battery capacity) and no LED lights up, the battery management has switched the battery off. Put the battery in the charger and charge it.

8.1.3 Display "E1"

If "E1" is displayed, the following cause/solution may apply:



- You have pushed down on the pedals shortly after pressing the "Power" button. Switch the display off then switch it back on and **do not push down on the pedals for roughly 2 seconds.**

If "E1" is displayed the distance covered will not be recorded. It will therefore no longer be possible to adjust the assistance control and the power assist will no longer work.

8.1.4 Display "E9"

If "E9" is displayed, the following cause/solution may apply:



- A problem occurred with the drive unit. Contact your specialist cycle shop if this occurs.

If "E9" is displayed the distance covered will not be recorded. It will therefore no longer be possible to adjust the assistance control and the power assist will no longer work.

8.1.5 Assistance control indicator flashing

If the assistance control indicator is flashing although the battery charge is sufficient, the following cause and solution may apply:

- The drive unit is overloaded / overheated. The battery management has switched itself on and reduced the assistance. A short period follows in which the drive recovers after which the full assistance output is available once again.

If this does not happen, contact your specialist cycle shop.

8.1.6 Additional possible sources of errors

- If you only pedal very gently, the power assist is not enabled.
- If the motor is not running and you cannot pinpoint the cause, check the buttons, cables and plugs of the electrical system.



If you find a break or a crack, do not try to repair the fault yourself. Take your Pedelec to a specialist cycle shop.

9 Cleaning



Remove the battery before you clean your Pedelec.

We recommend you clean your Pedelec with a damp cloth, a sponge or a brush. You can obtain suitable cleaning agents and additional information from your specialist cycle shop.

Make sure when cleaning that water does not enter the battery. Although the electrical components are sealed, it is not advisable to clean the bike by spraying it with a hose or a high-pressure cleaner. This could damage your bike.

When wiping down the battery, be careful not to touch and connect the contacts on the underside. This could cause the battery to switch off.

10 Warnings



- › As this motor is more powerful, you may be riding at a much higher speed than you are used to on your normal bike. Take this into account when familiarising yourself with your fast Pedelec.
- › Bear in mind that the Pedelec motor can heat up on long ascents. Be careful not to touch it with your hands, feet or legs as you could burn yourself.
- › The Pedelec operates using low voltage (25.2 volts). Never attempt to operate the Pedelec using power from a source other than a suitable genuine battery. The designations of approved batteries are listed in Chapter 11 "Technical data".
- › Live parts may be exposed when you open covers or remove parts. Connection points may also be live. Maintenance or repairs on the device when it is open and connected to the power supply must only be carried out by the specialist cycle shop.
- › When carrying out adjustments and maintenance or when cleaning the Pedelec, avoid crushing cables or damaging them with sharp edges.
- › If risk-free operation of your Pedelec cannot be assumed, take it out of operation and make sure it cannot be used until you have it checked by a specialist cycle shop. Risk-free operation is no longer possible if live parts or the rechargeable battery show signs of damage.
- › Keep children away from electrical appliances. If children are present, keep a close eye on them, especially if they could insert objects into the appliance through apertures in the housing as this poses the danger of fatal electric shock.

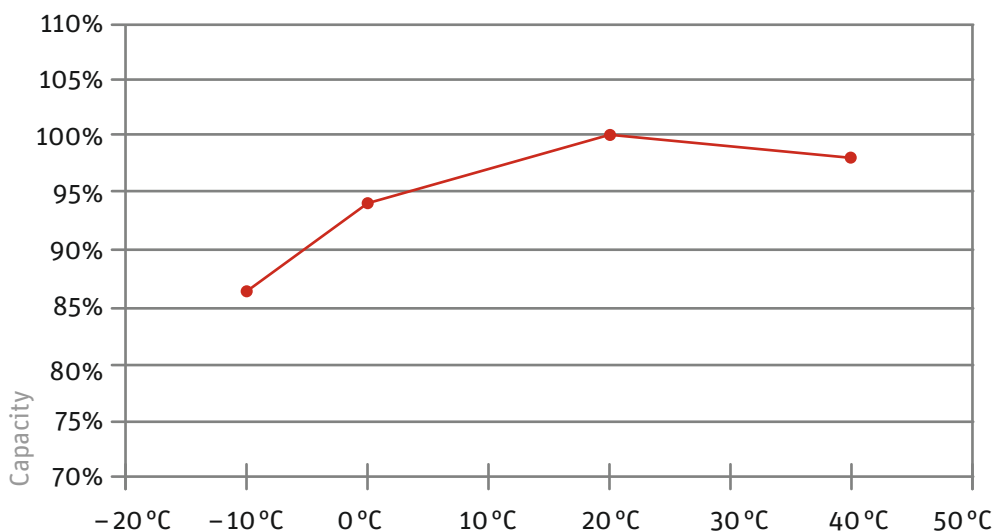
11 Technical data

MOTOR	
Brushless electric motor	
Output	300 watts
Maximum torque at drive pinion	17 Nm
Gross weight of electric drive, battery, control unit	7.8 kg (12 Ah battery)
Control	via power sensor
Maximum speed only possible with travel speed switch	20 km/h
Assist levels	1:0.75 1:1.3 1:2

PANASONIC LI-ION BATTERY	
Voltage	25.2 V
Capacities	8/10/12/18 Ah
Energy quantity	200/250/300/450 Wh

DCW ITEM NO.	ITEM NO.	CAPACITY [AH]	WEIGHT [KG]	POSSIBLE APPLICATION		
				CENTRE	FAST	FRONT
17017002	NKY226B02	10	2.4	X	250W	-
17017012	NKY226B02	10	2.4	X	250W	-
17019018	NKY252B02	10	2.4	-	-	X
17019103	NKY252B02	10	2.4	-	-	X
KD170110010	NKY266B02	10	2.4	X	250W	-
170110010	NKY266B02	10	2.4	X	250W	-
170110003	NKY265B02	10	2.4	-	300W	-
170110016	NKY267B02	10	2.4	-	-	X
170111002	NKY284B2	10	2.4	X	300W	X
170111200	NKY306B2	8	1.9	X	300W	X
170111201	NKY304B2	12	2.6	X	300W	X
170111202	14069	18	3.1	X	300W	X

Possible applications of batteries



Capacity curve at different temperatures

12 Replacing components of the fast Pedelec

As your fast Pedelec is a Category L1e moped. As is the case with other motor vehicles in Germany, it is necessary to obtain a permit from the Federal Motor Transport Authority and the technical inspection authority (TÜV). This fast Pedelec has such a permit.

During the approval process, specific components were defined as being suitable for use with this vehicle. This means that the permit for your fast Pedelec only remains valid if exactly the same components in the approved model are used.

If components are subsequently modified, the same requirements that apply with other motor vehicles take effect. You must only use replacement parts that are certified as approved for your fast Pedelec. Alternatively, you can have components approved individually by the technical inspection authority (TÜV).

The following lists show which components of your fast Pedelec can be replaced and what provisions apply.

12.1 Components that can only be replaced by equivalent parts or approved parts

- Frame
- Fork
- Motor unit
- Battery
- Tyres
- Rims
- Brake system
- Front light
- Back light
- Licence plate holder
- Side stand
- Handlebar
- Stem

12.2 Spare tyres

To make it easier for you to choose a suitable spare tyre if you need to, refer to the following list by the German manufacturer *Schwalbe*. These tyres can be fitted on a low-power category L1e moped:

MODEL	LINE	VERSION	SIZE	MAX. LOAD*
Marathon Supreme	Evolution	folding / wired	37-622	110 kg (6 bar)
Marathon Supreme	Evolution	folding / wired	50-559	140 kg (5 bar)
Marathon Dureme	Evolution	folding / wired	37-622	110 kg (6 bar)
Marathon Dureme	Evolution	folding / wired	50-559	140 kg (5 bar)
Marathon Extreme	Evolution	folding	37-622	115 kg (6 bar)
Marathon Extreme	Evolution	folding	50-559	140 kg (5 bar)
Marathon Plus	Performance	wired	37-622	110 kg (6 bar)
Marathon Plus	Performance	wired	47-559	125 kg (5 bar)
Marathon	Performance	wired	37-622	110 kg (6 bar)
Marathon	Performance	wired	50-559	140 kg (5 bar)
Big Apple	Performance	folding / wired	50-622	150 kg (5 bar)
Big Apple	Performance	folding / wired	50-559	125 kg (5 bar)
Big Apple	Performance	wired	50-305	70 kg (5 bar)
Big Apple	Performance	wired	50-203	70 kg (4 bar)
Kojak	Performance	folding / wired	35-622	110 kg (6.5 bar)
Smart Sam	Performance	wired	42-622	120 kg (6 bar)
Smart Sam	Performance	wired	54-559	140 kg (4 bar)
Crazy Bob	Performance	wired	60-507	130 kg (4.5 bar)
Energizer	Active	wired	37-622	85 kg (6 bar)
Energizer	Active	wired	40-622	95 kg (6 bar)
Energizer	Active	wired	47-559	90 kg (5 bar)

* max. load with specified tyre pressure

12.3 Components that do not require a certificate of approval

- Cranks
- Pedals:
providing type-approved pedal reflectors are used.
- Mudguard:
the front edge of the front mudguard must be rounded.
- Pannier rack
- Saddle
- Handlebar grip
- Gear-shift components:
Only if the largest gear ratio is not modified.
- Seatpost
- Bell:
Can be replaced with an equivalent bright-sounding bell.
- Rear-view mirror:
Can be replaced with a different type-approved rear-view mirror.
- Chain
- Headset
- Inner tube
- Hubs

Wij wensen u veel plezier met uw nieuwe snelle Pedelec.

Copyright © 2013 Derby Cycle Werke GmbH

*Nadruk, ook gedeeltelijk, alleen met toestemming van
Derby Cycle Werke GmbH. Drukfouten, fouten en technische
wijzigingen voorbehouden.*

III

User Manual

Pedelec with centre motor

English





Charger



LED control panel



LCD control panel



- 1 Battery
- 2 Battery lock
- 3 Motor unit
- 4 Control panel
- 4a LED
- 4b LCD
- 5 Charger

Dear Customer,

Thank you for choosing a Pedelec (pedal electric cycle) from us. This bike is equipped with an electric drive that assists you when you are cycling. This will make your trip much more enjoyable if you are riding up hills, carrying loads or riding into the wind. You can decide yourself how much you want to use it. The purpose of this User Manual is to help you get the most out of your Pedelec and use it correctly.

Structure of User Manual

If you want to get started right away, refer to the brief introduction in ➡ **Chapter 1 “Quick start”**.

The individual steps are subsequently explained in detail, supplemented by illustrations and diagrams.

For more detailed information on your Pedelec, refer to ➡ **Chapter 11 “Technical data”**.

The information in this User Manual specifically refers to your Pedelec only. For general information, on the bike technology that features in your Pedelec for example, refer to the General User Manual.



Even if you can't wait to go for your first ride, in the interest of your own safety you should read ➡ **Chapter 1 “Quick start”** carefully without fail before use.

In addition to texts and tables, the User Manual contains the following symbols that denote important information or dangers.



WARNING about possible physical injury, increased risk of falls or other injuries






IMPORTANT ADDITIONAL INFORMATION or special information on using the bike



NOTE about possible damage to property or the environment

Content

EC Declaration of Conformity			
2012	6		
2013	7		
1 Quick start	9		
2 Pedelec / fundamental legal principles	10		
2.1 Meaning for the rider	10		
2.2 Pushing assistance	10		
3 Charging the battery	11		
			
3.1 Charging operation	11		
3.2 Fitting the battery	11		
4 Control panel (display)	12		
			
4.1 LED control panel	12		
4.1.1 Automatic switch-off	13		
4.2 LCD control panel	13		
4.2.1 Function of LCD control panel	14		
4.2.1.1 On / Off button	14		
4.2.1.2 Selector button for display panel	14		
4.2.1.3 Changing the assist level	14		
4.2.1.4 Resetting recorded data	14		
4.2.1.5 Switching the display on and off	14		
4.2.1.6 Deleting all data	14		
		4.2.1.7 Reprogramming the language, wheel circumference and LCD contrast	15
		4.2.1.8 Automatic switch-off	16
		4.2.1.9 Measurement and display ranges	16
		4.2.1.10 Battery charge state indicator	16
		4.2.1.11 Power output indicator	16
		5 Assistance by the electric motor	17
			
		5.1 Operating principle of assistance	17
		5.2 Distance	18
		5.3 Riding your Pedelec efficiently	19
		6 Battery	20
		6.1 Straightforward charging	20
		6.2 High degree of safety due to battery management	20
		6.3 Straightforward storage	20
		6.4 Battery information system	21
		6.4.1 Checking the battery charge state	21
		6.4.2 Checking the battery capacity	21
		6.5 Service life and warranty	22
		6.5.1 of drive	22
		6.5.2 of battery	22

7 Charger 23



8 Troubleshooting 23

8.1	Problems/solutions: Flash patterns and their meaning	24
8.1.1	Pedelec with LED control panel	24
8.1.2	Pedelec with LCD control panel	25
8.1.2.1	No display	25
8.1.2.2	Battery charge state indicator flashing or not visible	25
8.1.2.3	Display “E1”	25
8.1.2.4	Display “E9”	25
8.1.2.5	Assistance control indicator flashing	26
8.1.2.6	Additional possible sources of errors	26

9 Cleaning 26

10 Warnings 26

11 Technical data 27

EC Declaration of Conformity 2012

The manufacturer: Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany
Telephone: +49 (0) 4471 / 966-0

hereby declares that the following products:

Product description: Kalkhoff Pedelec Panasonic

Model designation: Agattu C8-36, Agattu C8-26, Agattu C7, Agattu C3, Sahel Pro C8 Disc, Sahel Comp C8, Sahel C8 HS, Sahel C8, Sahel C7, Pro Connect C11 Disc, Pro Connect C8, Pro Connect C8 Disc, Pro Connect C9

Product description: Kalkhoff Impulse

Model designation: Agattu C8 HS Impulse, Agattu XXL C8 Impulse, Agattu Premium C11 Impulse, Agattu C8 Impulse, Impulse XXL 8C, Impulse 8C HS, Impulse Premium 8C, Impulse 8C, Impulse Compact, Sahel Compact, Tasman Classic C8, Tasman Tour XXL C8, Tasman City 8C, Tasman Tour C8, Connect Lady C8, Connect Lady 8C

Product description: Kalkhoff Groove

Model designation: Groove F8, Groove F3

Product description: Kalkhoff BionX

Model designation: Image BX27, Image BX24

Product description: Kalkhoff Bosch

Model designation: Agattu B

Year of manufacture: 2012

comply with all of the relevant requirements of the **Machinery Directive (2006/42/EC)**.

Furthermore, the machine complies with all of the requirements of the **Electromagnetic Compatibility Directive (2004/108/EC)**.

The following harmonized standards have been applied:

DIN EN 15194 Cycles – Electrically power-assisted cycles – EPAC cycles

DIN EN 14764 City and trekking bikes – Safety requirements and test methods

Technical documentation filed at:

Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany



Olaf Flunkert
Production, Purchasing and
Technology Manager



Karl-Heinz Lange
Design and Development Manager

EC Declaration of Conformity 2013

The manufacturer: Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany
Telephone: +49 (0) 44 71 / 966 -111

hereby declares that the following products:

Product description: Kalkhoff Pedelec Panasonic

Model designation: Agattu P8-26V, Agattu P8-26V 8G, Pro Connect C8 Disc

Product description: Kalkhoff Impulse Pedelec

Model designation: Agattu i8, Agattu Premium i11, Agattu XXL i8R, Agattu i8 HS, Impulse i8R HS, Impulse XXL i8R, Impulse XXL i8, Impulse Premium i8R, Impulse i8R, Pro Connect i8 HS, Pro Connect i10, Pro Connect i27, Sahel i8 light, Sahel i8, Sahel i8R, Sahel Compact i8, Sahel Compact i8R, Sahel i11 Di2, Sahel i360 Harmony, Sahel i360, Tasman Classic i8, Tasman Classic i8R, Tasman Tour XXL i8, Tasman Tour XXL i8R, Tasman Tour i8, Tasman Tour i8R, Tasman City i8 Roller, Tasman City i7 Roller, Tasman City i8, Tasman City i8R

Product description: Kalkhoff Groove Pedelec

Model designation: Groove F8

Product description: Kalkhoff Xion Pedelec

Model designation: Pro Connect R30, Pro Connect R27

Product description: Kalkhoff Bosch Pedelec

Model designation: Pro Connect B8, Pro Connect B9

Year of manufacture: 2013

comply with all of the relevant requirements of the **Machinery Directive (2006 / 42 / EC)**.

Furthermore, the machine complies with all of the requirements of the **Electromagnetic Compatibility Directive (2004 / 108 / EC)**.

The following harmonized standards have been applied:

DIN EN 15194 Cycles – Electrically power-assisted cycles – EPAC cycles

DIN EN 14764 City and trekking bikes – Safety requirements and test methods

Technical documentation filed at:

Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany



Olaf Flunkert
Production, Purchasing and
Technology Manager



Karl-Heinz Lange
Design and Development Manager

1 Quick start

- › 1. Charge the battery completely before riding for the first time.



Unlocking the battery

- › 2. To remove the battery, grip the handle, insert the key into the lock and turn it anticlockwise. The battery is now unlocked.
- › 3. Tilt the battery sideways and lift it with both hands out of the holder.



Tilt to remove

- › 4. Put the battery in the docking station of the charger. The battery LEDs light up or flash during charging. You must fully charge the battery before using it for the first time.
- › 5. Once all LEDs have gone out, take the battery out of the docking station.
- › 6. Reinsert the battery into the holder on the Pedelec from the left-hand side. Move the battery outwards at an angle of roughly 45° as you do so, as you did when you took it out of the holder. Move the battery into the upright position until the locking mechanism engages. If the key is still in the lock, you will need to turn it clockwise and pull it out to allow the battery to lock in place.
- › 7. Make sure that the battery is securely positioned and that the key is no longer in the lock.
- › 8. **If your Pedelec is equipped with a LCD control panel:** Continue at 10.

- › **If your Pedelec is equipped with an LED control panel:**

Push the "Power" button on the control panel on the handlebar. **Wait for 2 seconds before turning the pedals.** The drive system requires this time when no force is applied to the pedals to adjust the power sensor correctly.

- › 9. The intermediate power-assist mode appears on the display panel of the LED control panel. Press the "Mode" buttons to select the level of assistance: "gentle / LOW", "intermediate / MID" or "powerful / HIGH". Press this button once to change the assist level by one level. You can increase or reduce the assistance, depending on which "Mode" button you press.

- › **10. If your Pedelec is equipped with a LCD control panel:**

Push the "On / Off" button on the control panel on the handlebar. **Wait for 2 seconds before turning the pedals.** The drive system requires this period after switching on during which no force is applied to the pedals to adjust the power sensor correctly.

Press the "Assist" button to select the power assist mode. This works in both directions. The assistance output increases or decreases depending on which "Assist" button you press. If you are using the most powerful setting then press the button again, you return to a mode without assistance.



Always operate one of the brakes before putting one of your feet on a pedal as the motor pulls your bike away immediately. This starting assistance is very convenient, especially when starting on hills. If you start off in road traffic or on unsurfaced roads without controlling your speed, you could come off your bike and seriously injure yourself.

- › 11. You can now ride off.

2 Pedelec / fundamental legal principles

The essential idea behind the Pedelec is not only to be able to cover greater distances more quickly, but also more comfortably. You can choose to relax and let the bike do the work, exert yourself more physically, or simply get from A to B as fast as possible. You can decide this yourself by choosing an appropriate assist level.

This gives you more confidence on the road, as the powerful acceleration gives you more control and a greater degree of security. Your Pedelec assists you with up to 250 watts of power which takes you up to a speed of 25 km/h.

In some EU countries, the Pedelec, like all other bikes, must comply with certain regulations, the Road Traffic Licensing Regulations (StVZO) in Germany for example. Please observe the relevant explanations and general information provided in the General User Manual.

These statutory requirements apply for a Pedelec:

- The motor is designed only to provide pedalling assistance, i.e. it can only "assist" the rider when he/she turns the pedals.
- The average motor output must not exceed 250 W.
- As the speed increases, the rate at which the motor output reduces must also increase more intensely.
- The motor must switch off once the bike reaches a speed of 25 km/h.

2.1 Meaning for the rider

- You do not legally have to wear a helmet. In the interest of your own safety, however, you should never ride without a helmet.
- You do not legally have to have a driving licence.
- You do not legally have to have insurance.
- No age restriction applies for a Pedelec.
- The regulations governing the use of cycle paths are the same as for normal bikes.

These regulations apply to you wherever you are in the European Union. It is possible that different regulations exist in other countries, also inside the EU in individual cases. Before using your Pedelec abroad, find out about the legal situation in the relevant country.

2.2 Pushing assistance

You can have your specialist cycle shop fit what is known as "pushing assistance" to your bike.



Button for pushing assistance

The pushing assistance moves the Pedelec slowly at a maximum speed of 6 km/h without you having to turn the pedals, e.g. if you are manoeuvring in a tight space or are pushing your Pedelec out of a basement garage.

In Germany, if you were born later than 01.04.1965, you must have a moped test certificate before you can fit the pushing assistance. If you already have another type of driving licence, this automatically includes the moped test certificate.

The pushing assistance is not suitable for use as starting assistance.

3 Charging the battery

To charge the battery, you have to take it out of the holder on the Pedelec.



Grip the battery by the handle, insert the key into the lock and turn it anticlockwise. The battery is now unlocked and can be removed from the Pedelec by tilting it sideways. In doing so, hold on tight to the battery to prevent it from being dropped.



Unlocking the battery



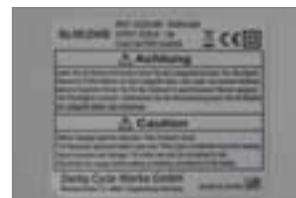
Tilt to remove

You should now remove the key and keep it in a safe place to prevent it from breaking off or being lost.

3.1 Charging operation

Before charging the battery, read the information on the charger carefully.

- 1. Take the charger provided out of its packaging and plug the mains plug into a socket (230 V, observe type plate on the charger).



Type plate on charger: Front and back

- 2. Put the battery in the docking station of the charger.
- 3. The charging operation starts. The battery LEDs light up or flash. Once all 5 LEDs have gone out, the battery is fully charged. You can leave the battery standing in the charger. However, the charger always draws some current if you leave it plugged in.
- 4. To save power, pull the charger plug out of the socket once the charging operation is complete.

3.2 Fitting the battery

- 1. Insert the battery into the battery holder of the Pedelec from the left by tilting it outwards at roughly 45°.
- 2. In doing so, you must insert the lateral guides at the bottom of the battery into the guides of the holder.
- 3. Tilt the battery towards the bike until it engages in the locking mechanism. If the key is still in the lock, turn it clockwise then pull it out to lock the battery in place.
- 4. Make sure the battery is firmly in place.

4 Control panel (display)

4.1 LED control panel



- 1 Power assist mode selection buttons
- 2 On/off (power) button

The control panel on the handlebar has three buttons and several display panels.

The display panel on the right next to the upper "Mode" button shows the assist level being used via LEDs.

The "Power" button and corresponding display panel is below this.

Press the "Power" button to switch the power assist on and off.

The battery charge state is indicated by the LEDs next to this button. All three LEDs light up for two seconds when the power is switched on.

DISPLAY (AFTER 2 SECONDS)	BATTERY CHARGE STATE
3 LEDs light up •••	70 – 100%
2 LEDs light up ••	40 – 70%
1 LED lights up •	10 – 40%
1 LED flashes slowly ◦	< 10% At this point you notice a slight loss of power.
1 LED flashes quickly ◦	~ 0% The system shuts down shortly afterwards.

You can specify the power assist level via the "Mode" buttons. The LEDs next to the top button show how much assistance the motor is currently providing.

All three LEDs light up for two seconds when the power is switched on.

Please do not put your feet on the pedals during this time.

The power sensor is reset each time the power is switched on in order for the power supply to the motor to be precisely controlled. A load must not be applied to the sensor during these two seconds.

The intermediate assist level is subsequently selected automatically.

DISPLAY LEDs	ASSIST LEVEL	RATIO
HIGH	powerful	1 : 2
MID	intermediate	1 : 1
LOW	gentle	1 : 0.5

Each time you press the "Mode" button the power assist changes by one level. If you require more assistance, press the "Mode" arrow that points upwards. If you require less assistance, press the "Mode" arrow that points downwards.



Increase power assist

Once the highest assist level has been reached, the system jumps to the lowest assist level the next time the button is pressed and then moves back up through the levels.

If you require less assistance, press the "Mode" arrow that points downwards.



Reduce power assist

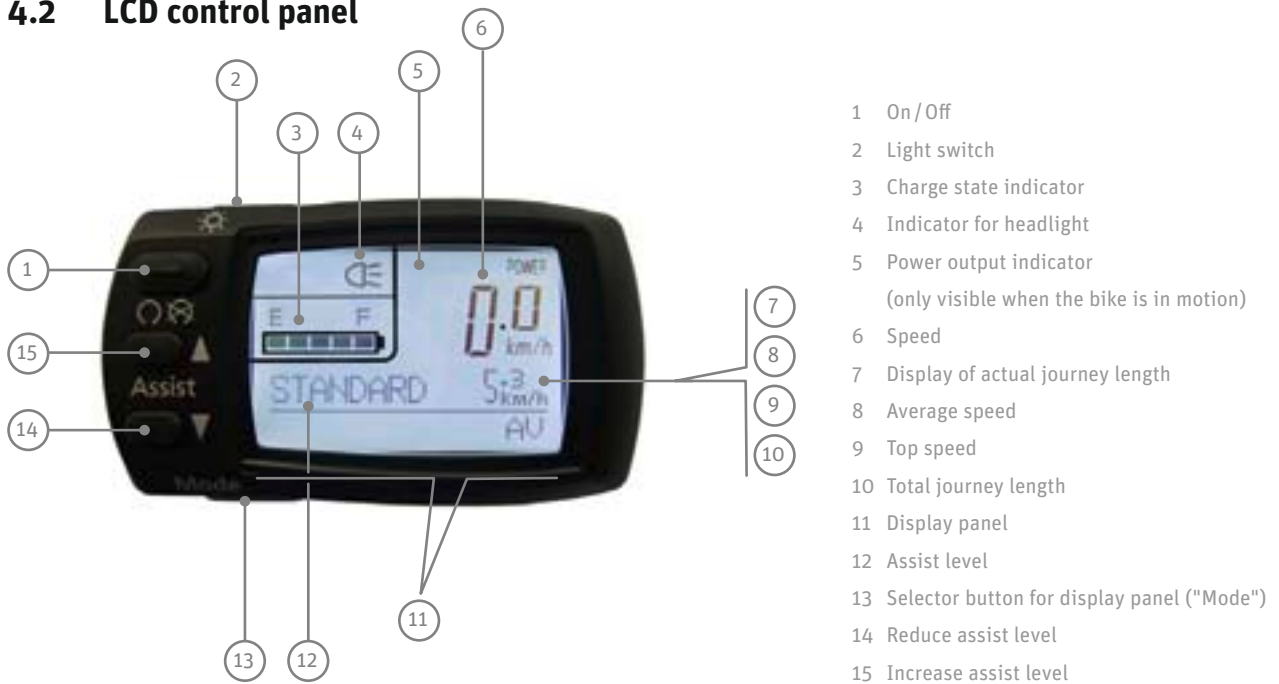
The assistance reduces in stages; when you reach "LOW" (the lowest assist level) it jumps back to "HIGH" (the highest assist level).



4.1.1 Automatic switch-off

If you stop and do not move your Pedelec for 10 minutes, the system switches off automatically. If you subsequently want to ride using the assistance, you will have to switch it back on via the control panel.

4.2 LCD control panel



delete all data



Rear



Display switched off



Display switched on

4.2.1 Function of LCD control panel

4.2.1.1 On/Off button

Press the "On/Off" button to switch on the control panel and drive.

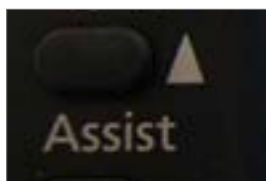
The assist level that was active at the time the control panel was switched off is automatically reinstated. The back-lit display is turned on briefly then goes out. All recording of data (trip, actual journey length, average speed, top speed, total journey length) starts as soon as you switch the control panel on and stops when you switch it off.

4.2.1.2 Selector button for display panel

You can display the information "Trip", "Average speed", "Top speed" and "Total journey length" consecutively by pressing the selector button for the display panel ("Mode").

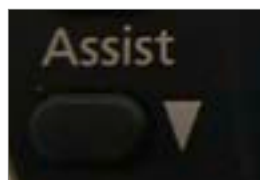
The setting that was selected when you switched off is also displayed first in this case.

4.2.1.3 Changing the assist level



Increase power assist

The following assist levels are displayed one by one when you press the button that increases the assist level: "NO ASSIST/no assistance", "ECO/low assist level", "STANDARD/medium assist level", "HIGH/high assist level", followed once again by "NO ASSIST/no assistance". This means that the amount of assistance increases each time you press the button until you reach the highest level. If you subsequently press the button, the assistance switches off.



Reduce power assist

If you press the button that reduces the assist level, the assistance reduces each time the button is pressed and returns to the most powerful assist level when it reaches the end of the loop.

In the "NO ASSIST/no assistance" mode, you ride the bike normally without the assistance of the motor.

4.2.1.4 Resetting recorded data

If you press the selector button for the display panel for longer than three seconds with the control panel switched on, this resets the trip, average speed and top speed readings to zero. You cannot delete the total journey length using this method.

4.2.1.5 Switching the display on and off

The back-lit display and LCD control panel display can also be switched on even if the drive is not enabled. To do this, press the button that switches the lights on. The drive remains in "NO ASSIST/no assistance" mode. Now you cannot change the assist level.

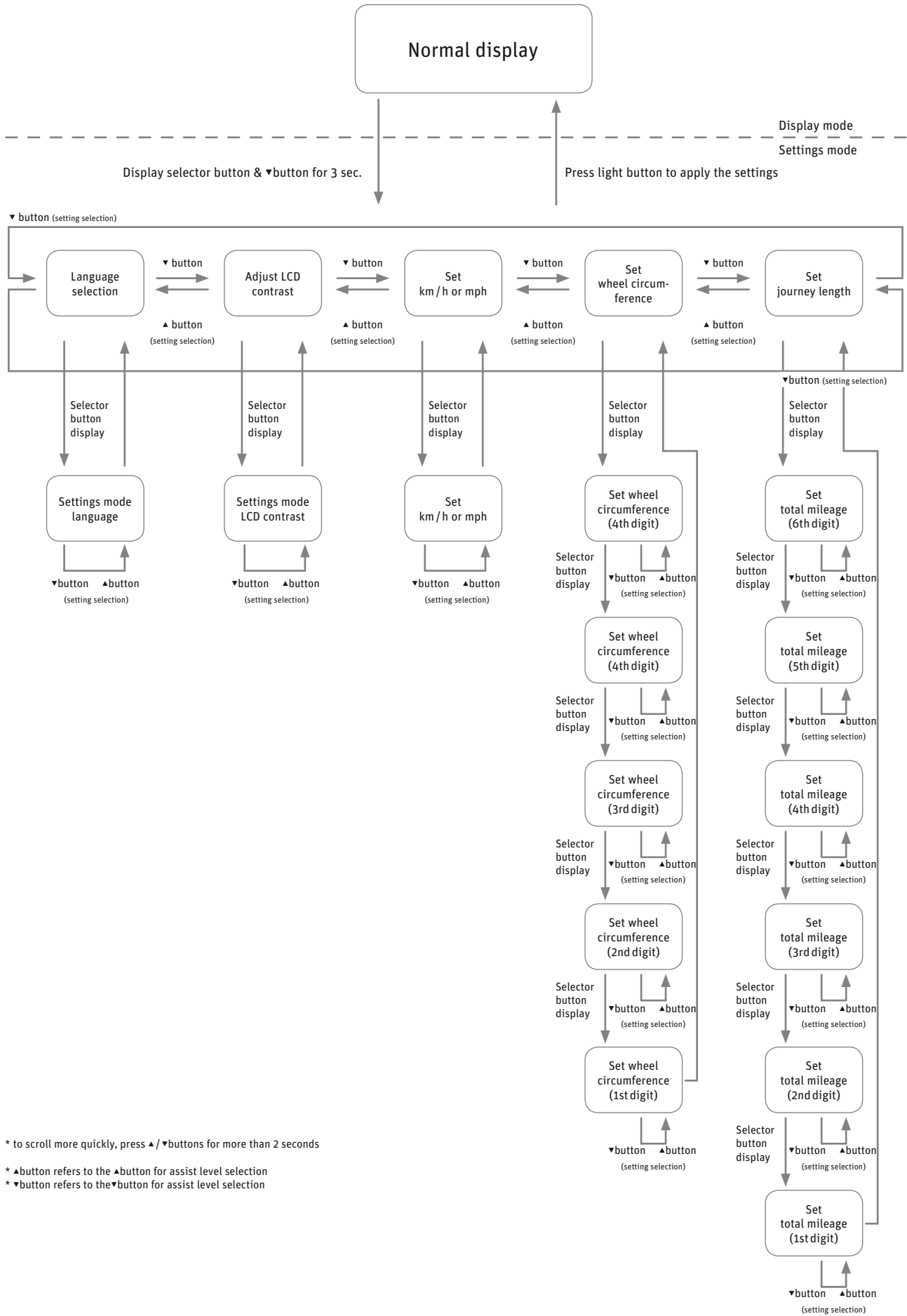
If you press the light button when the control panel is switched on, the back-lit display turns on.

If you press the light button when the light is on, the back-lit display turns off. The power assist is still available and you can change the assist level.

4.2.1.6 Deleting all data

Press the display ("Mode") selector button and the button that deletes all data on the rear of the control panel at the same time to delete all the data stored, including the total journey length. The display then automatically switches to settings mode for language, LCD contrast and wheel circumference.

4.2.1.7 Reprogramming the language, wheel circumference and LCD contrast



4.2.1.8 Automatic switch-off

If you stop your Pedelec and it does not move for 10 minutes, the system switches off automatically. If you want to use the assistance again, you will have to switch it back on via the control panel.

4.2.1.9 Measurement and display ranges

DESCRIPTION	DISPLAY RANGE
Speed	0.0 – 99.9 km / h
Journey length	0.0 – 99999 km (once the distance reaches 9999.9 km, this is displayed without a decimal place.)
Average speed	0 – 99.9 km / h
Top speed	0.0 – 99.9 km / h
Total journey length	0.0 – 99999 km (once the distance reaches 9999.9 km, this is displayed without a decimal place.)

4.2.1.10 Battery charge state indicator

Battery charge state indicator



This indicator helps you save power when riding which means you can travel further. The remaining battery charge is shown in 5 stages.

DISPLAY	BATTERY CHARGE STATE
5 LEDs light up •••••	80 – 100%
4 LEDs light up ••••	60 – 80%
3 LEDs light up •••	40 – 60%
2 LEDs light up ••	20 – 40%
1 LED lights up •	10 – 20%
1 LED flashes ◦	< 10%
no display –	0%
E: Battery is empty	
F: Battery is full	

4.2.1.11 Power output indicator



The power output indicator shows the actual power output being requested and the actual power consumption in 6 stages (bars). This indicator helps you save power when riding which means you can travel further. The fewer of the 6 bars that are displayed, the lower the actual power output of the motor and the consumption. If more bars are visible, the power output and consumption of the motor is higher.

IF YOU CAN SEE...	THE BATTERY IS SUPPLYING A CURRENT OF
6 bars	more than 20 amperes
5 bars	up to 16 – 20 A
4 bars	up to 12 – 16 A
3 bars	up to 8 – 12 A
2 bars	up to 2 – 8 A
1 bar	up to 0 – 2 A



If the power consumption is very low, no bars are displayed.

5 Assistance by the electric motor



If your Pedelec is equipped with hub gears, you may have to take more load off the pedals when changing gears than you would normally do when riding your conventional bike. This is due to the additional power output of the electric motor. The hub gear system contains a device that protects it against gear shifting operations under excessive loads in order to preserve the gear unit in the hub.

- **The assist level you have selected**

With the "high assist level / HIGH" the power delivered by the motor is double your own effort (1 : 2). With the "medium assist level / MID", the power delivered by the motor matches your own effort (1 : 1). With the "low assist level / LOW / ECO", the power delivered by the motor is half your own effort (1 : 0.5).

- **The speed at which you are currently travelling**

When you set off on your Pedelec, the assistance increases as you build up speed until your bike reaches its maximum speed of roughly 22 km/h. The assistance then reduces automatically until you reach a speed of roughly 25 km/h when it switches off. This applies for the largest gear only. In all other gears, the motor switches off earlier, depending on the gear ratio.

5.1 Operating principle of assistance

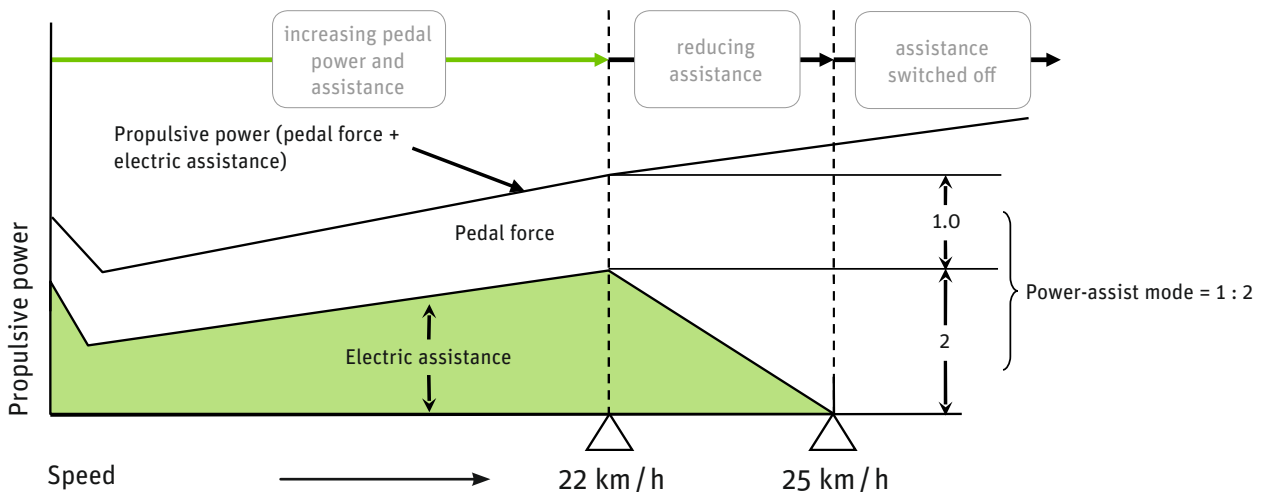
The motor provides support as soon as you switch the assistance on and start pedalling.

The thrust delivered by the motor depends on three factors:

- **Your own pedalling effort**

The motor adapts to the force you apply. If you pedal harder, e.g. uphill or when setting off, the power sensor detects this and increases the thrust accordingly. However, the thrust is limited by the maximum motor output.

Pedelec 28" • 8-speed • Shimano



Variation in electric assistance

5.2 Distance

The distance you can travel using the power assist with the battery fully charged depends on several factors:

- **Ambient temperature**

If it is colder, you will travel a shorter distance with the same battery charge.

To maximise the distance you can travel, keep the battery in a heated room so that it is at room temperature when you fit it on your Pedelec.

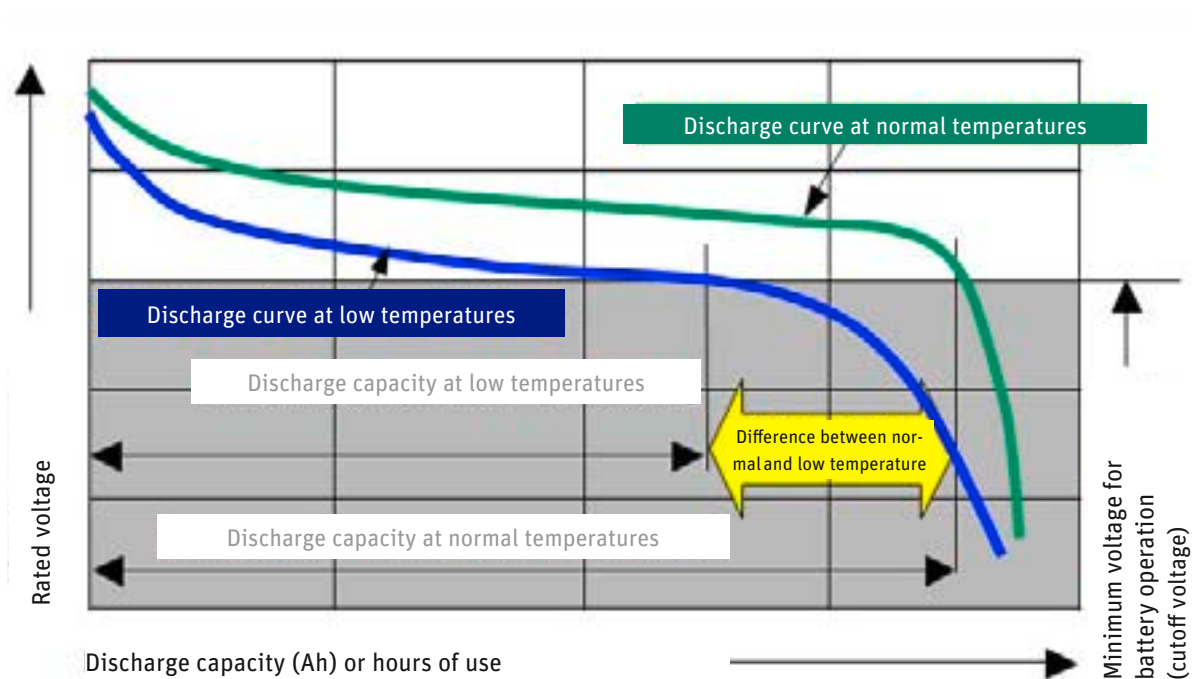
As the battery discharges when the motor is in use, it generates enough heat to not lose too much of its power at low ambient temperatures.

- **Selected assist level**

If you want to cover a large distance assisted by the motor, select the lower gears, i.e. the ones that are easier to pedal. Also change to "low assist level/LOW/ECO".

- **Handling**

If you are riding in gears that are harder to pedal and select a high assist level, e.g. when riding uphill, the motor will provide support with plenty of power. However, this leads to higher consumption, as with driving a car at high speed on the motorway. You will therefore have to recharge the battery sooner. You can conserve energy when riding your bike not just by turning the pedals, but also by applying even pressure throughout each crank revolution.



Rate of discharge at different temperatures

- **Technical condition of your Pedelec**
Make sure the tyre pressure is correct. If you ride your bike with too little air in the tyres, this can significantly increase the rolling resistance. The distance you can travel also decreases if the brakes are rubbing.
- **Ascents**
You pedal harder when riding uphill. This is detected by the power sensor which then allows the motor to work harder.

Under ideal conditions, you can cover roughly 140 km with the battery fully charged (18 Ah). You can expect to cover a distance of roughly 85 km using different modes of operation.

DISTANCE COVERED (1 : 1 ASSISTANCE, 22 KM/H ON AVERAGE UNDER FAVOURABLE CONDITIONS)

8 Ah battery	60 km
12 Ah battery	90 km
18 Ah battery	140 km

Distance covered using different batteries

5.3 Riding your Pedelec efficiently

You can monitor and influence the cost of your journeys with the Pedelec yourself. You can reduce your consumption and therefore costs by following the tips for increasing the travel distance.

The operating costs for power assist with an 18 Ah battery are calculated as follows:

- A new battery costs roughly 599 euros.
- You can cover 112 km on average with one battery charge.
- You can charge the battery roughly 1,100 times.
- 1100 charging cycles x 112 km = 123,200 km
- 599 euros: 123,200 km = 0.47 euro cents / km
- You use roughly 0.620 kWh to fully charge the battery. Assuming a unit price of 20 euro cents / kWh, it costs you 12.4 euro cents to fully charge the battery and cover a journey length of 112 km.
- It costs you 0.20 euro cents / km to travel the minimum distance of 60 km.
- It costs you 0.09 euro cents / km to travel the maximum distance of 140 km.
- This means the cost of consumption and the battery is a maximum of 0.67 euro cents / km.

As *Derby Cycle* is a German manufacturer, the sample calculation is based on German energy prices. The operating costs may therefore be different in locations where other energy prices apply.

6 Battery

Your battery is a lithium cobalt battery, the ideal type of lithium-ion (Li-ion) battery for this application. One of the main benefits of this type of battery is its low weight combined with a high capacity. Li-ion batteries only weigh half as much as comparable nickel metal hydride or nickel-cadmium batteries. This means you carry less battery weight and more battery power.

6.1 Straightforward charging

- › There is no memory effect. You can therefore fully recharge your battery after every trip.
- › Recharge the battery after every trip. This means you can set off immediately the next time you use your bike and you also increase the service life of the battery.
- › If you are not using the battery, you must recharge it after 6 months at the latest.

6.2 High degree of safety due to battery management

- › The battery cannot be damaged as a result of a short-circuit. If this were to happen, the battery management would switch off the battery.
- › You can simply leave the battery standing in the charger as it prevents overcharging.

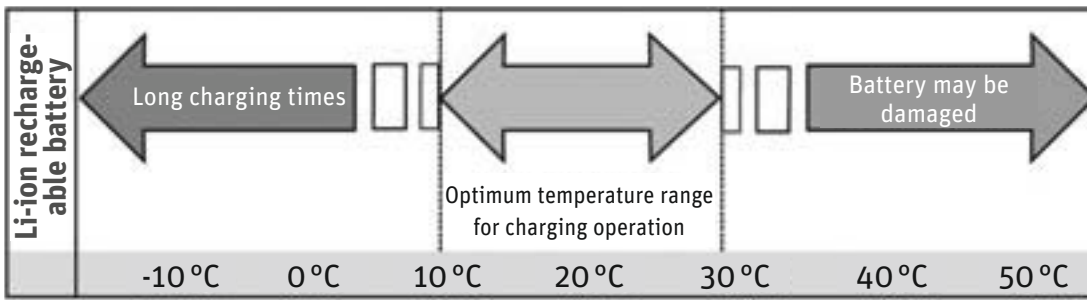
6.3 Straightforward storage

- › If you do not need your battery for a while, store it at a temperature of +10 °C at three quarters of its full charge capacity.
- › The battery enters sleep mode to prevent it from totally discharging.
- › These benefits are available due to highly effective battery management that has been adapted to this specific application and by tuning the battery for operation with a 250 watt motor.



Observe the following points to increase the service life of your Pedelec battery:

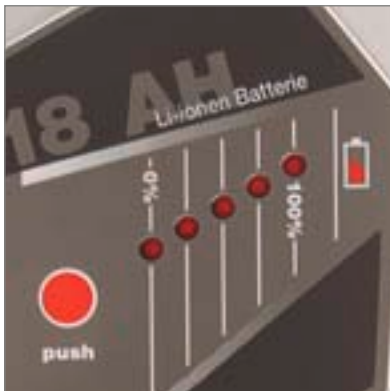
- › Make sure that the battery is fully charged before you ride your bike for the first time or after you have not used it for a while.
- › You should run the battery all the way down to empty for the first three charging cycles. This allows the battery to reach its maximum capacity.
- › If you continuously run the battery to empty during normal operation, this reduces its service life.
- › If you partially recharge the battery frequently during normal operation, this has a favourable effect on its service life.
- › You should therefore partially recharge the battery whenever possible: Try not to run the battery all the way down to empty and recharge it even after a short period of operation.
- › In the as-delivered condition, the battery is not fully charged and is in what is referred to as sleep mode. Sleep mode minimises the rate at which the battery discharges itself. If the battery is allowed to discharge unchecked for an extended period this can lead to total discharging which damages the battery. To "wake up" the battery, simply place it in the charger for one minute.
- › If you are having problems with the battery, place it in the charger for one minute. A reset occurs, during which the battery management disables sleep mode for example. After this, the battery will work again.
- › Ideally you should charge the battery at a temperature of between +10 °C and +30 °C. It takes longer to charge the battery at low temperatures, the battery will not charge up at temperatures higher than +30 °C. Ideally, you should charge and store the battery inside your house or in a warm garage when the outside temperature is low. In this case you should only fit the battery on your bike just before using it.
- › If you are transporting your Pedelec by car, take the battery out of its holder and transport it separately.
- › The battery should ideally be stored for longer periods charged to 75% of its capacity at a temperature of +10°C.



Charging times at different temperatures

6.4 Battery information system

There is a control panel with five LEDs and a button ("Push") on the side of the battery that faces outwards. The LEDs light up if you press the "Push" button. Information about the battery and its charge state is provided based on the number of LEDs that light up and the way in which they light up.



Charge state and battery capacity indicator

6.4.1 Checking the battery charge state

Press the "Push" button briefly, the LEDs light up and display the current battery charge state.

DISPLAY	BATTERY CHARGE STATE
5 LEDs light up •••••	80 – 100%
4 LEDs light up ••••	60 – 80%
3 LEDs light up •••	40 – 60%
2 LEDs light up ••	20 – 40%
1 LED lights up •	10 – 20%
1 LED flashes ◦	< 10%
no display –	0%
E: Battery is empty	
F: Battery is full	

6.4.2 Checking the battery capacity

If you press the "Push" button for longer than five seconds, the LEDs show the current capacity of the battery.

DISPLAY	CAPACITY
5 LEDs light up •••••	100 – 80%
4 LEDs light up ••••	80 – 60%
3 LEDs light up •••	60 – 40%
2 LEDs light up ••	40 – 20%
1 LED lights up •	20 – 0%

Capacity indicator

- › Check there is sufficient charge in the battery for the journey you intend to make before setting off.
- › In winter the distance you can normally cover with the battery operating normally is less. Only move the battery from the warm room where you store it and fit it on your Pedelec just before you set off. This prevents low temperatures from reducing the distance you can normally travel. A corresponding diagram is provided in ➡ **Chapter 11 “Technical data”**.
- › The distance you can cover can vary depending on the topography, your handling, the condition of the battery and the assist level you are using.
- › If all diodes flash consecutively, or several flash at the same time (2–3 diodes), the battery is damaged.



Before taking the battery to your specialist cycle shop to have it checked, put the battery in the charger for one minute then test it again.

6.5 Service life and warranty

6.5.1 of drive

The Panasonic centre motor is a fully-developed durable and maintenance-free drive. It is a wear part with a two-year warranty. As its power output is higher, wear parts such as the drive and brakes are subject to higher loads than they would be on a normal bike which is why they wear out more quickly.

6.5.2 of battery

Batteries are wear parts. Wear parts also come with a two-year warranty.

If the battery develops a fault during this period, your specialist cycle shop will of course replace it. Normal ageing and battery wear do not constitute a fault.

The service life of the battery depends on different factors. The most important wear-relevant factors are

- the **number of charge cycles** and
- the **age** of the battery.

When you have fully charged and discharged your battery 1,100 times, it will still have 60% of its initial capacity, providing it has been well looked after:

BATTERY	REMAINING CAPACITY	~ DISTANCE COVERED
8 Ah	4.8 Ah	19,360 km
12 Ah	7.2 Ah	30,800 km
18 Ah	10.8 Ah	52,800 km

From the technical standpoint above therefore, the battery is exhausted at this point. It also goes without saying that the battery ages. Even if you do not use your battery, its capacity reduces.

Providing you can still cover the journey distances with this remaining battery capacity, you can of course continue using it. If the capacity is no longer sufficient, you can take your battery to a specialist cycle shop who will dispose of your battery and sell you a new one.

- › You can extend the service life of the battery by fully recharging it after every journey, however short. The Panasonic Li-cobalt battery has no memory effect.
- › You can also extend the service life of the battery by using the assistance selectively. Avoid, for example, using gears that make pedalling difficult with the highest assist level activated.

7 Charger

Read the two stickers on the charger before using it for the first time.



Do not use other chargers. Only charge the battery using the charger provided, or a charger approved by Derby Cycle.

If a fault develops or if the battery is in sleep mode, you might be able to solve this problem by placing the battery in the charger for one minute. The battery management then checks the battery and can eliminate any faults that have occurred.



If used incorrectly, the device may be damaged or inflict injuries.

- › Before cleaning the charger, always pull the plug out of the socket to avoid a short-circuit and/or physical injury.
- › Only use the charger in dry rooms.
- › Only place the charger in a secure stable position on a suitable surface.
- › Do not cover the charger or place any objects on it as otherwise it could overheat and catch fire.

8 Troubleshooting

The control panel also indicates when faults and technical errors are present.

If a fault occurs, the LEDs flash in a specific pattern and with a specific rhythm. This indicates the cause of the problem and makes it easier for you to find a solution.

A fault code appears in the LCD display.



Control panel displays



Have the electric drive inspected regularly by your specialist cycle shop. Do not carry out any work on the electric drive or battery yourself. Unless you have sufficient expertise this could lead to a serious accident. As a basic rule, always consult your specialist cycle shop if you have a problem with the electric drive or the battery.






You should only have the electrical components of your Pedelec replaced with genuine parts. This makes it safer for you and avoids problems when processing warranty claims.

8.1 Problems / solutions: Flash patterns and their meaning

If a problem occurs in the electrical system of your Pe-delec, you should initially try to solve it by referring to the following list which describes possible causes of errors and offers solutions. If the fault persists, consult your specialist cycle shop.

8.1.1 Pedelec with LED control panel

ERROR CODE	CAUSE	SOLUTION
	No power assist. The power sensor could not set itself correctly.	Perform restart. The system performs the calibration again. No force should be applied to the pedals during this procedure which takes roughly two seconds.
	No power assist. A problem occurred in the drive unit.	Motor, sensor unit or cable defective. Contact your specialist cycle shop.
	The motor output is less. The motor is overloaded.	Allow the motor to cool down and reduce the assistance.
	The motor switches off. The motor is extremely overloaded.	Allow the motor to cool down and reduce the assistance.
	No power assist. The battery is nearly empty.	Charge the battery immediately.

8.1.2 Pedelec with LCD control panel

8.1.2.1 No display

If nothing is shown in the LCD display, one of the following reasons/solutions may apply:

- Is the battery sufficiently charged?
Charge the battery.
- Is the battery capacity still sufficient?
Check the capacity. If the remaining capacity is not enough, the battery must be replaced.

Check the actual battery capacity

If you press the "Push" button for longer than five seconds, the LEDs show the capacity of the battery at present.

DISPLAY	CAPACITY
5 LEDs light up •••••	100 – 80%
4 LEDs light up ••••	80 – 60%
3 LEDs light up •••	60 – 40%
2 LEDs light up ••	40 – 20%
1 LED lights up •	20 – 0%

Capacity of 18 Ah battery (example)

8.1.2.2 Battery charge state indicator flashing or not visible

If the battery charge state indicator is flashing or not visible at all, one of the following causes/solutions may apply:

- Is the battery sufficiently charged?
Charge the battery if necessary.
- The second and fourth LEDs of the battery indicator flash when you press the button on the battery. The battery management has switched the battery off. Put the battery in the charger and charge it.
- If you continue to press the button on the battery (test for battery capacity) and no LED lights up, the battery management has switched the battery off. Put the battery in the charger and charge it.

8.1.2.3 Display "E1"

If "E1" is displayed, the following cause/solution may apply:



- You have pushed down on the pedals shortly after pressing the "Power" button. Switch the display off then switch it back on and do not push down on the pedals for roughly 2 seconds.

If "E1" is displayed the distance covered will not be recorded. It will therefore no longer be possible to adjust the assistance control and the power assist will no longer work.

8.1.2.4 Display "E9"

If "E9" is displayed, the following cause/solution may apply:



- A problem occurred with the drive unit. Contact your specialist cycle shop if this occurs.

If "E9" is displayed the distance covered will not be recorded. It will therefore no longer be possible to adjust the assistance control and the power assist will no longer work.

8.1.2.5 Assistance control indicator flashing

If **the assistance control indicator is flashing** although the battery charge is sufficient, the following cause and solution may apply:

- The drive unit is overloaded / overheated. The battery management has switched itself on and reduced the assistance. A short period follows in which the drive recovers after which the full assistance output is available once again.

If this does not happen, contact your specialist cycle shop.

8.1.2.6 Additional possible sources of errors

- If you only pedal very gently, the power assist is not enabled.
- If the motor is not running and you cannot pinpoint the cause, check the buttons, cables and plugs of the electrical system.



If you find a break or a crack, do *not* try to repair the fault yourself. Take your Pedelec to a specialist cycle shop.

9 Cleaning



Remove the battery before you clean your Pedelec.

We recommend you clean your Pedelec with a damp cloth, a sponge or a brush. You can obtain suitable cleaning agents and additional information from your specialist cycle shop.

Make sure when cleaning that water does not enter the battery. Although the electrical components are sealed, it is not advisable to clean the bike by spraying it with a hose or a high-pressure cleaner. This could damage your bike.

When wiping down the battery, be careful not to touch and connect the contacts on the underside. This could cause the battery to switch off.

10 Warnings



- Bear in mind that the Pedelec motor can heat up on long ascents. Be careful not to touch it with your hands, feet or legs as you could burn yourself.
- The Pedelec operates using low voltage (25.2 volts). Never attempt to operate the Pedelec using power from a source other than a suitable genuine battery. The designations of approved batteries are listed in ➤ **Chapter 11 “Technical data”**.
- Live parts may be exposed when you open covers or remove parts. Connection points may also be live. Maintenance or repairs on the device when it is open and connected to the power supply must only be carried out by the specialist cycle shop.
- When carrying out adjustments and maintenance or when cleaning the Pedelec, avoid crushing cables or damaging them with sharp edges.
- If risk-free operation of your Pedelec cannot be assumed, take it out of operation and make sure it cannot be used until you have it checked by a specialist cycle shop. Risk-free operation is no longer possible if live parts or the rechargeable battery show signs of damage.
- Keep children away from electrical appliances. If children are present, keep a close eye on them, especially if they could insert objects into the appliance through apertures in the housing as this poses the danger of fatal electric shock.

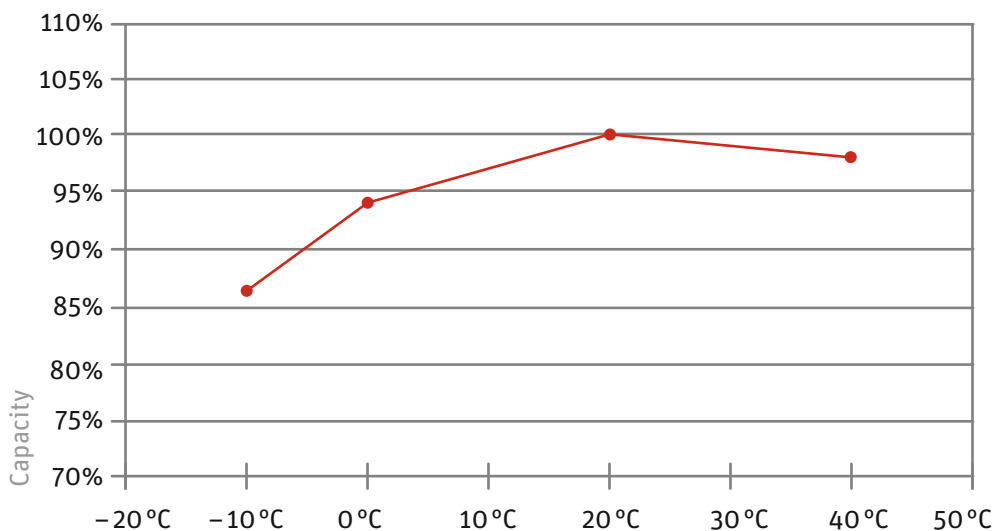
11 Technical data

MOTOR	
Brushless electric motor	
Output	250 watts
Maximum torque at drive pinion	13 Nm
Gross weight of electric drive, battery, control unit	7.8 kg (12 Ah battery)
Control	via power sensor
Assist levels	1:0.5 1:1 1:2

PANASONIC LI-ION BATTERY	
Voltage	25.2 V
Capacities	8/10/12/18 Ah
Energy quantity	200/250/300/450 Wh

DCW ITEM NO.	ITEM NO.	CAPACITY [AH]	WEIGHT [KG]	POSSIBLE APPLICATION		
				CENTRE	FAST	FRONT
17017002	NKY226B02	10	2.4	X	250 W	-
17017012	NKY226B02	10	2.4	X	250 W	-
17019018	NKY252B02	10	2.4	-	-	X
17019103	NKY252B02	10	2.4	-	-	X
KD170110010	NKY266B02	10	2.4	X	250 W	-
170110010	NKY266B02	10	2.4	X	250 W	-
170110003	NKY265B02	10	2.4	-	300 W	-
170110016	NKY267B02	10	2.4	-	-	X
170111002	NKY284B2	10	2.4	X	300 W	X
170111200	NKY306B2	8	1.9	X	300 W	X
170111201	NKY304B2	12	2.6	X	300 W	X
170111202	14069	18	3.1	X	300 W	X

Possible applications of batteries



Capacity curve at different temperatures

We hope you thoroughly enjoy using your new Pedelec!

Copyright © 2013 Derby Cycle Werke GmbH

Reproduction in whole or in part is not permitted without the consent of Derby Cycle Werke GmbH. Subject to misprints, errors and technical modifications.

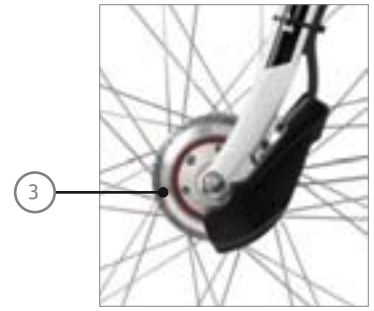
IV

User Manual

Pedelec with front motor

English





Motor



LED control panel



Charger



- 1 Battery
- 2 Battery lock
- 3 Motor unit
- 4 Control panel
- 5 Charger

Dear Customer,

Thank you for choosing a Pedelec (pedal electric cycle) from us. This bike is equipped with an electric drive that assists you when you are cycling. This will make your trip much more enjoyable if you are riding up hills, carrying loads or riding into the wind. You can decide yourself how much you want to use it. The purpose of this User Manual is to help you get the most out of your Pedelec and use it correctly.

Structure of User Manual

If you want to get started right away, refer to the brief introduction in ➡ **Chapter 1 “Quick start”**

The individual steps are subsequently explained in detail, supplemented by illustrations and diagrams.

For more detailed information on your Pedelec, refer to ➡ **Chapter 12 “Technical data”**.

The information in this User Manual specifically refers to your Pedelec only. For general information, on the bike technology that features in your Pedelec for example, refer to the General User Manual.



Even if you can't wait to go for your first ride, in the interest of your own safety you should read ➡ **Chapter 1 “Quick start”** carefully without fail before use.

In addition to texts and tables, the User Manual contains the following symbols that denote important information or dangers.



WARNING about possible physical injury, increased risk of falls or other injuries



IMPORTANT ADDITIONAL INFORMATION or special information on using the bike



NOTE about possible damage to property or the environment

EC Declaration of Conformity 2012

The manufacturer: Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany
Telephone: +49 (0) 4471 / 966-0

hereby declares that the following products:

Product description: Kalkhoff Pedelec Panasonic

Model designation: Agattu C8-36, Agattu C8-26, Agattu C7, Agattu C3, Sahel Pro C8 Disc, Sahel Comp C8, Sahel C8 HS, Sahel C8, Sahel C7, Pro Connect C11 Disc, Pro Connect C8, Pro Connect C8 Disc, Pro Connect C9

Product description: Kalkhoff Impulse

Model designation: Agattu C8 HS Impulse, Agattu XXL C8 Impulse, Agattu Premium C11 Impulse, Agattu C8 Impulse, Impulse XXL 8C, Impulse 8C HS, Impulse Premium 8C, Impulse 8C, Impulse Compact, Sahel Compact, Tasman Classic C8, Tasman Tour XXL C8, Tasman City 8C, Tasman Tour C8, Connect Lady C8, Connect Lady 8C

Product description: Kalkhoff Groove

Model designation: Groove F8, Groove F3

Product description: Kalkhoff BionX

Model designation: Image BX27, Image BX24

Product description: Kalkhoff Bosch

Model designation: Agattu B

Year of manufacture: 2012

comply with all of the relevant requirements of the **Machinery Directive (2006/42/EC)**.

Furthermore, the machine complies with all of the requirements of the **Electromagnetic Compatibility Directive (2004/108/EC)**.

The following harmonized standards have been applied:

DIN EN 15194 Cycles – Electrically power-assisted cycles – EPAC cycles

DIN EN 14764 City and trekking bikes – Safety requirements and test methods

Technical documentation filed at:

Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany



Olaf Flunkert
Production, Purchasing and
Technology Manager



Karl-Heinz Lange
Design and Development Manager

EC Declaration of Conformity 2013

The manufacturer: Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany
Telephone: +49 (0) 44 71 / 966 -111

hereby declares that the following products:

Product description: Kalkhoff Pedelec Panasonic

Model designation: Agattu P8-26V, Agattu P8-26V 8G, Pro Connect C8 Disc

Product description: Kalkhoff Impulse Pedelec

Model designation: Agattu i8, Agattu Premium i11, Agattu XXL i8R, Agattu i8 HS, Impulse i8R HS, Impulse XXL i8R, Impulse XXL i8, Impulse Premium i8R, Impulse i8R, Pro Connect i8 HS, Pro Connect i10, Pro Connect i27, Sahel i8 light, Sahel i8, Sahel i8R, Sahel Compact i8, Sahel Compact i8R, Sahel i11 Di2, Sahel i360 Harmony, Sahel i360, Tasman Classic i8, Tasman Classic i8R, Tasman Tour XXL i8, Tasman Tour XXL i8R, Tasman Tour i8, Tasman Tour i8R, Tasman City i8 Roller, Tasman City i7 Roller, Tasman City i8, Tasman City i8R

Product description: Kalkhoff Groove Pedelec

Model designation: Groove F8

Product description: Kalkhoff Xion Pedelec

Model designation: Pro Connect R30, Pro Connect R27

Product description: Kalkhoff Bosch Pedelec

Model designation: Pro Connect B8, Pro Connect B9

Year of manufacture: 2013

comply with all of the relevant requirements of the **Machinery Directive (2006 / 42 / EC)**.

Furthermore, the machine complies with all of the requirements of the **Electromagnetic Compatibility Directive (2004 / 108 / EC)**.

The following harmonized standards have been applied:

DIN EN 15194 Cycles – Electrically power-assisted cycles – EPAC cycles

DIN EN 14764 City and trekking bikes – Safety requirements and test methods

Technical documentation filed at:

Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany



Olaf Flunkert
Production, Purchasing and
Technology Manager



Karl-Heinz Lange
Design and Development Manager

1 Quick start

- › 1. Charge the battery completely before riding for the first time.



Unlocking the battery

- › 2. To remove the battery, grip the handle, insert the key into the lock and turn it anticlockwise. The battery is now unlocked.
- › 3. Tilt the battery sideways and lift it with both hands out of the holder.



Tilt when removing

- › 4. Put the battery in the docking station of the charger. The battery LEDs light up or flash. You must fully charge the battery before using it for the first time.
- › 5. Once all LEDs have gone out, take the battery out of the docking station.
- › 6. Reinsert the battery into the holder on the Pedelec from the left-hand side. Move the battery outwards at an angle of roughly 45° as you do so, as you did when you took it out of the holder. Move the battery into the upright position until the locking mechanism engages. If the key is still in the lock, you will need to turn it clockwise and pull it out to allow the battery to lock in place.
- › 7. Make sure that the battery is securely positioned and that the key is no longer in the lock.
- › 8. Push the "Power" button on the control panel on the handlebar. **Wait for 2 seconds before turning the pedals.** The drive system requires this time

when no force is applied to the pedals to adjust the power sensor correctly.

- › 9. The intermediate power-assist mode appears on the display panel of the LED control panel. Press the "Mode" buttons to select the amount of assistance: "gentle/LOW", "intermediate/MID" or "powerful/HIGH". Press this button once to change the assist level by one level. You can increase or reduce the assistance, depending on which "Mode" button you press.



Always operate one of the brakes before putting one of your feet on a pedal as the motor pulls your bike away immediately. This starting assistance is very convenient, especially when starting on hills. If you start off in road traffic or on unsurfaced roads without controlling your speed, you could come off your bike and seriously injure yourself.

- › 10. You can now ride off.

2 Pedelec / fundamental legal principles

The fundamental idea behind the Pedelec is not only to be able to cover greater distances more quickly, but also to do this comfortably. You can choose to relax and let the bike do the work, exert yourself more physically, or simply to get from A to B as fast as possible. You can decide this yourself by choosing an appropriate assist level.

This gives you more confidence on the road, as the powerful acceleration gives you more control and a greater degree of security. Your Pedelec assists you with up to 250 watts of power which takes you up to the speed of 25 km/h.

In some EU countries, the Pedelec, like all other bikes, must comply with certain regulations, the Road Traffic Licensing Regulations (StVZO) in Germany for example. Please observe the relevant explanations and general information provided in the General User Manual.

These statutory requirements apply for a Pedelec:

- The motor is designed only to provide pedalling assistance, i.e. it can only "assist" the rider when he/she turns the pedals.
- The average motor output must not exceed 250 W.
- As the speed increases, the rate at which the motor output reduces must also increase more intensely.
- The motor must switch off once the bike reaches a speed of 25 km/h.

2.1 Meaning for the rider

You do not legally have to wear a helmet. In the interest of your own safety, however, you should never ride without a helmet.

- You do not legally have to have a driving licence.
- You do not legally have to have insurance.
- No age restriction applies for a Pedelec.
- The regulations governing the use of cycle paths are the same as for normal bikes.

These regulations apply to you wherever you are in the European Union. It is possible that different regulations exist in other countries, also inside the EU in individual cases. Before using your Pedelec abroad, find out about the legal situation in the relevant country.

2.2 Pushing assistance

You can have your specialist cycle shop fit what is known as "pushing assistance" to your bike.



Button for pushing assistance

The pushing assistance moves the Pedelec slowly at a maximum speed of 6 km/h without you having to turn the pedals, e.g. if you are manoeuvring in a tight space or are pushing your Pedelec out of a basement garage.

In Germany, if you were born later than 01.04.1965, you must have a moped test certificate before you can fit the pushing assistance. If you already have another type of driving licence, this automatically includes the moped test certificate.

The pushing assistance is not suitable for use as starting assistance.

3 Charging the battery

To charge the battery, you have to take it out of the holder on the Pedelec.



Grip the battery by the handle, insert the key into the lock and turn it anticlockwise. The battery is now unlocked and can be removed from the Pedelec by tilting it sideways. In doing so, hold on tight to the battery to prevent it from being dropped.



Unlocking the battery



Tilt to remove

You should now remove the key and keep it in a safe place to prevent it from breaking off or being lost.

3.1 Charging operation

Before charging the battery, read the information on the charger carefully.

- 1. Take the charger provided out of its packaging and plug the mains plug into a socket (230 V, observe type plate on the charger).



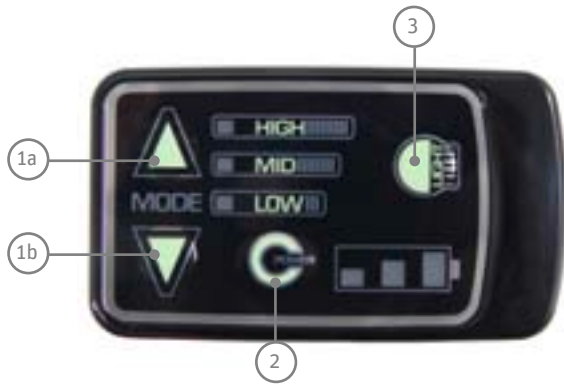
Type plate on charger: Front and back

- 2. Put the battery in the docking station of the charger.
- 3. The charging operation starts. The battery LEDs light up or flash. Once all 5 LEDs have gone out, the battery is fully charged. You can leave the battery standing in the charger. However, the charger always draws some current if you leave it plugged in.
- 4. To save power, pull the charger plug out of the socket once the charging operation is complete.

3.2 Fitting the battery

- 1. Insert the battery into the battery holder of the Pedelec from the left by tilting it outwards at roughly 45°.
- 2. In doing so, you must insert the lateral guides at the bottom of the battery into the guides of the holder.
- 3. Tilt the battery towards the bike until it engages in the locking mechanism. If the key is still in the lock, turn it clockwise then pull it out to lock the battery in place.
- 4. Make sure the battery is firmly in place.

4 LED control panel (display)



- 1 Power assist mode selection buttons
- 2 On/off (power) button
- 3 Button for lights

The control panel on the handlebar has three buttons and several display panels.

The display panel on the right next to the upper "Mode" button shows the level of active assistance via LEDs.

The "Power" button and corresponding display panel is below this.

Press the "Power" button to switch the power assist on and off.

The battery charge state is indicated by the LEDs next to this button. All three LEDs light up for two seconds when the power is switched on.

DISPLAY (AFTER 2 SECONDS)	BATTERY CHARGE STATE
3 LEDs light up •••	70 – 100%
2 LEDs light up ••	40 – 70%
1 LED lights up •	10 – 40%
1 LED flashes slowly ◦	< 10% At this point you notice a slight loss of power.
1 LED flashes quickly ◦	~ 0% The system shuts down shortly afterwards.

You can specify the power assist level via the "Mode" buttons. The LEDs next to the top button show the level of assistance you are currently receiving from the motor.

All three LEDs light up for two seconds when the power is switched on.

Please do not put your feet on the pedals during this time. The power sensor is reset each time the power is switched on in order for the power supply to the motor to be precisely controlled. A load must not be applied to the sensor during this two second period.

The intermediate assist level is subsequently selected automatically.

DISPLAY LEDs	ASSIST LEVEL	RATIO
HIGH	powerful	1:2
MID	intermediate	1:1
LOW	gentle	1:0.5

Each time you press the **"Mode" button** the power assist changes by one level. If you require more assistance, press the "Mode" arrow that points upwards. If you require less assistance, press the "Mode" arrow that points downwards.



Increase power assist

Once the highest level has been reached, the system jumps to the lowest assist level the next time the button is pressed and then moves back up through the levels.

If you require less assistance, press the "Mode" arrow that points downwards.



Reduce power assist

The assistance reduces in stages; when you reach "LOW" (the lowest assistance level) it jumps back "HIGH" (the highest assistance level).



4.1 Switching the light on and off



Button for lights

Press the button shown above to switch the Pedelec lighting on and off.

If you are riding with the lights on and switch off the assistance, the lights also switch off automatically. You must therefore switch the lights on again.



You must always take the battery with you, even if you want to ride without assistance as the lights will only work with the battery.

4.2 Automatic switch-off

If you stop and do not move your Pedelec for 10 minutes, the system switches off automatically. If you subsequently want to ride using the assistance, you will have to switch it back on via the control panel.

5 Assistance by the electric motor

5.1 Operating principle of assistance

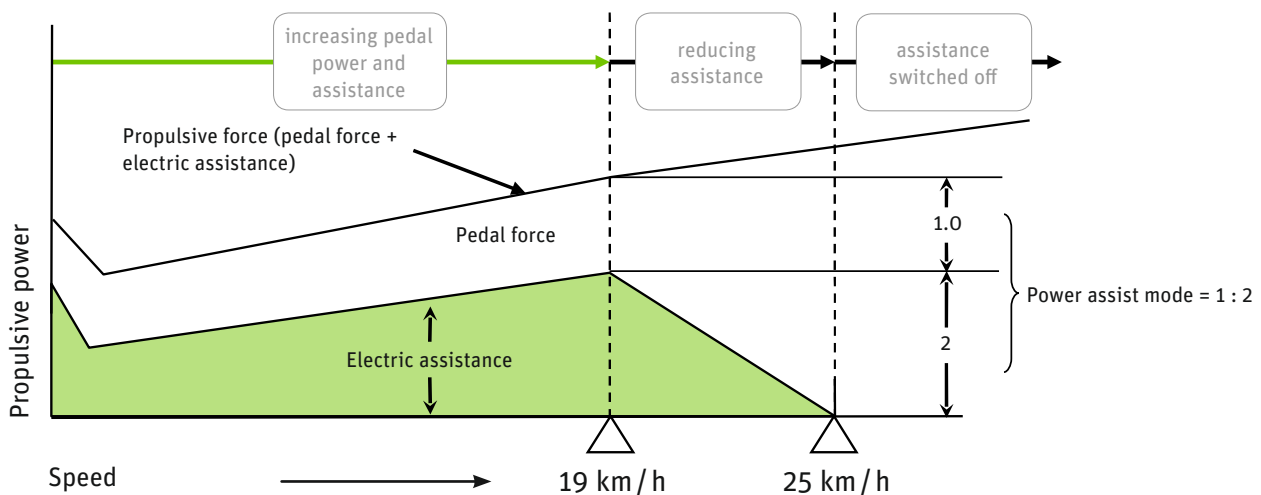
The motor provides support as soon as you switch the assistance on and start pedalling.

The thrust delivered by the motor depends on three factors:

- **Your own pedalling effort**
The motor adapts to the force you apply. If you pedal harder, e.g. uphill or when setting off, the power sensor detects this and increases the thrust accordingly. However, the thrust is limited by the maximum motor output.
- **The assist level you have selected**
With the "high assist level/HIGH" the power delivered by the motor is double your own effort (1 : 2). With the "medium assist level/MID", the power delivered by the motor matches your own effort (1 : 1). With the "low assist level/LOW/ECO", the power delivered by the motor is half your own effort (1 : 0.5).

The speed at which you are currently travelling

When you set off on your Pedelec, the assistance increases as you build up your speed until your bike reaches its maximum speed of roughly 19 km/h. The assistance then reduces automatically and switches off at roughly 25 km/h. This happens irrespective of the gear you are using.



Variation in electric assistance

Distance

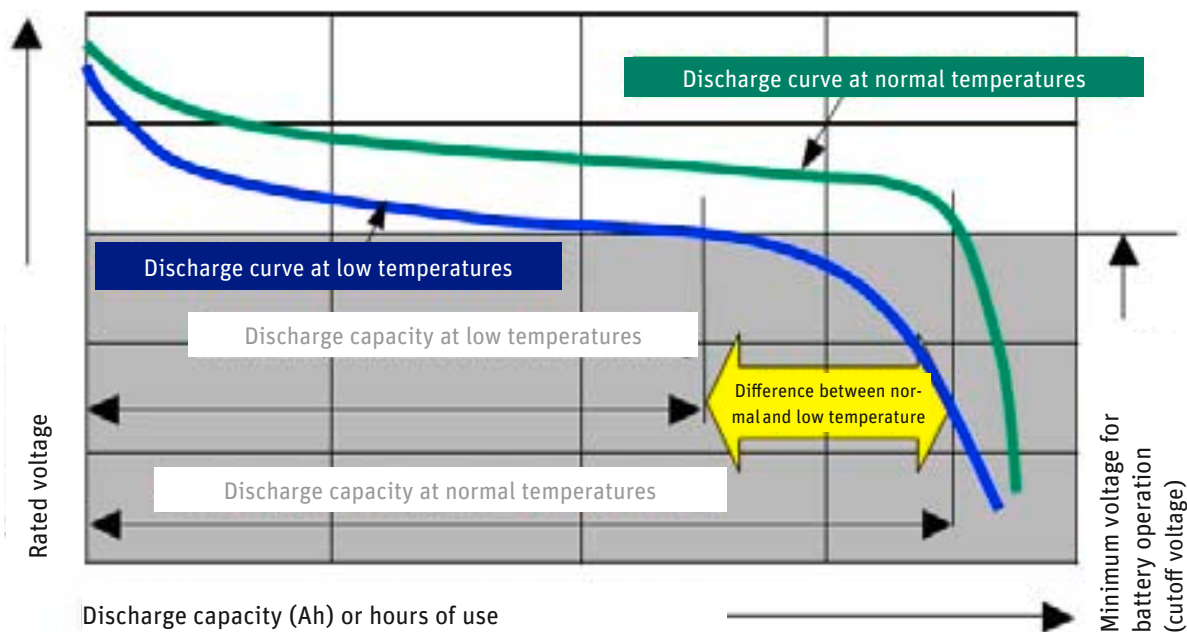
The distance you can travel using the power assist with the battery fully charged depends on several factors:

- **Ambient temperature**
If it is colder, you will travel a shorter distance with the same battery charge.

To maximise the distance you can travel, keep the battery in a heated room so that it is at room temperature when you fit it on your Pedelec.

As the battery discharges when the motor is in use, it generates enough of its own heat to not lose too much of its power at low temperatures.

- **Selected assist level**
If you want to cover a large distance assisted by the motor, select the lower gears, i.e. the ones that are easier to pedal. Also change to "low assist level/LOW".
- **Handling**
If you are riding in gears that are harder to pedal and select a high level of assistance, e.g. when riding uphill, the motor will provide support with plenty of power. However, this leads to higher consumption, as with driving a car at high speed on the motorway. You will therefore have to recharge the battery sooner. You can conserve energy when riding your bike not just by turning the pedals, but also by applying even pressure throughout each crank revolution.



Rate of discharge at different temperatures

- **Technical condition of your Pedelec**

Make sure the tyre pressure is correct. If you ride your bike with too little air in the tyres, this can significantly increase the rolling resistance. The distance you can travel also decreases if the brakes are rubbing.

- **Ascents**

You pedal harder when riding uphill. This is detected by the power sensor which then allows the motor to work harder.

Under ideal conditions, you can cover roughly 140 km with the battery fully charged (18 Ah). You can expect to cover a distance of roughly 85 km using different modes of operation.

DISTANCE COVERED (1 : 1 ASSISTANCE, 22 KM/H ON AVERAGE UNDER FAVOURABLE CONDITIONS)

8 Ah battery	60 km
12 Ah battery	90 km
18 Ah battery	140 km

Distance covered using different batteries

5.2 Riding your Pedelec efficiently

You can monitor and influence the cost of your journeys with the Pedelec yourself. You can reduce your consumption and therefore costs by following the tips for increasing the travel distance.

The operating costs of power assist with an 18 Ah battery work out as follows:

- A new battery costs around 599 euro.
- You can cover 112 km on average with one battery charge. You can charge the battery roughly 1,100 times.
- 1,100 charging cycles x 112 km = 123,200 km
- 599 euros: 123,200 km = 0.47 euro cents / km
- You use roughly 0.620 kWh to fully charge the battery. Assuming a unit price of 20 euro cents / kWh, it costs you 12.4 euro cents to fully charge the battery and cover a journey length of 112 km.
- It costs you 0.20 euro cents / km to travel the minimum distance of 60 km.
- It costs you 0.09 euro cents / km to travel the maximum distance of 140 km.
- This means the cost of consumption and the battery is a maximum of 0.67 euro cents / km.

As Derby Cycle is a German manufacturer, the sample calculation is based on German energy prices. The operating costs may therefore be different in locations where other energy prices apply.

6 Battery

Your battery is a lithium cobalt battery, the ideal type of lithium-ion (Li-ion) battery for this application. One of the main benefits of this type of battery is its low weight combined with a high capacity. Li-ion batteries only weigh half as much as comparable nickel metal hydride or nickel-cadmium batteries. This means you carry less battery weight and more battery power.

6.1 Straightforward charging

- › There is no memory effect. You can therefore fully recharge your battery after every trip.
- › Recharge the battery after every trip. This means you can set off immediately the next time you use your bike and you also increase the service life of the battery.
- › If you are not using the battery, you must recharge it after 6 months at the latest.

6.2 High degree of safety due to battery management

- › The battery cannot be damaged as a result of a short-circuit. If this were to happen, the battery management would switch off the battery.
- › You can simply leave the battery standing in the charger as it prevents overcharging.

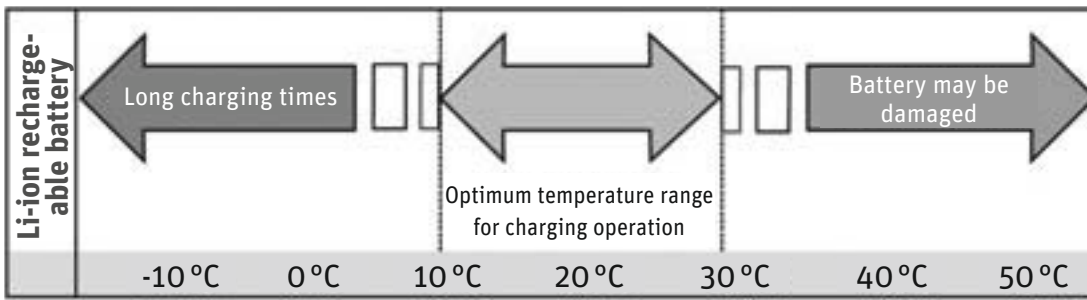
6.3 Straightforward storage

- › If you do not need your battery for a while, store it at a temperature of +10 °C at three quarters of its full charge capacity.
- › The battery enters sleep mode to prevent it from totally discharging.
- › These benefits are available due to highly effective battery management that has been adapted to this specific application and by tuning the battery for operation with a 250 watt motor.



Observe the following points to increase the service life of your Pedelec battery:

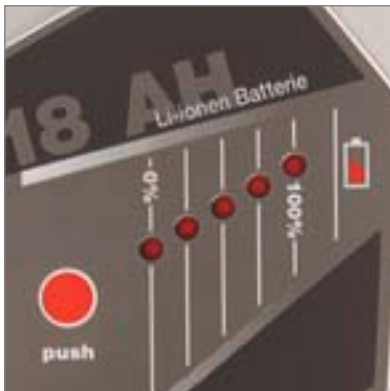
- › Make sure that the battery is fully charged before you ride your bike for the first time or after you have not used it for a while.
- › You should run the battery all the way down to empty for the first three charging cycles. This allows the battery to reach its maximum capacity.
- › If you continuously run the battery to empty during normal operation, this reduces its service life.
- › If you partially recharge the battery frequently during normal operation, this has a favourable effect on its service life.
- › You should therefore partially recharge the battery whenever possible: Try not to run the battery all the way down to empty and recharge it even after a short period of operation.
- › In the as-delivered condition, the battery is not fully charged and is in what is referred to as sleep mode. Sleep mode minimises the rate at which the battery discharges itself. If the battery is allowed to discharge unchecked for an extended period this can lead to total discharging which damages the battery. To "wake up" the battery, simply place it in the charger for one minute.
- › If you are having problems with the battery, place it in the charger for one minute. A reset occurs, during which the battery management disables sleep mode for example. After this, the battery will work again.
- › Ideally you should charge the battery at a temperature of between +10 °C and +30 °C. It takes longer to charge the battery at low temperatures, the battery will not charge up at temperatures higher than +30 °C. Ideally, you should charge and store the battery inside your house or in a warm garage when the outside temperature is low. In this case you should only fit the battery on your bike just before using it.
- › If you are transporting your Pedelec by car, take the battery out of its holder and transport it separately.
- › The battery is ideally stored for longer periods charged to 75% of its capacity at a temperature of +10 °C.



Charging times at different temperatures

6.4 Battery information system

There is a control panel with five LEDs and a button ("Push") on the side of the battery that faces outwards. The LEDs light up if you press the "Push" button. Information about the battery and its charge state is provided based on the number of LEDs that light up and the way in which they light up.



Charge state and battery capacity indicator

6.4.1 Checking the battery charge state

Press the "Push" button briefly, the LEDs light up and display the current battery charge state.

DISPLAY	BATTERY CHARGE STATE
5 LEDs light up •••••	80 – 100%
4 LEDs light up ••••	60 – 80%
3 LEDs light up •••	40 – 60%
2 LEDs light up ••	20 – 40%
1 LED lights up •	10 – 20%
1 LED flashes ◦	< 10%
no display –	0%
E: Battery is empty	
F: Battery is full	

6.4.2 Checking the battery capacity

If you press the "Push" button for longer than five seconds, the LEDs show the current capacity of the battery.

DISPLAY	CAPACITY
5 LEDs light up •••••	100 – 80%
4 LEDs light up ••••	80 – 60%
3 LEDs light up •••	60 – 40%
2 LEDs light up ••	40 – 20%
1 LED lights up •	20 – 0%

Capacity of 18 Ah battery (example)

- › Check there is sufficient charge in the battery for the journey you intend to make before setting off.
- › In winter the distance you can normally cover with the battery operating normally is less. Only move the battery from the warm room where you store it and fit it on your Pedelec just before you set off. This prevents low temperatures from reducing the distance you can normally travel. A corresponding diagram is provided in *Chapter 12 "Technical data"*.
- › The distance you cover can vary depending on the topography, your handling, the condition of the battery and the assist level you are using.
- › If all diodes flash consecutively, or several flash at the same time (2–3 diodes), the battery is damaged.



Before taking the battery to your specialist cycle shop to have it checked, put the battery in the charger for one minute then test it again.

6.5 Service life and warranty

6.5.1 the electric drive

The Panasonic front electric drive is a fully-developed durable and maintenance-free electric drive. It is a wear part for which a two-year warranty applies.

6.5.2 the battery

Batteries are wear parts. Wear parts also come with a two-year warranty.

If the battery develops a fault during this period, your specialist cycle shop will of course replace it. A fault does not constitute normal ageing and battery wear.

The service life of the battery depends on different factors. The most important wear-relevant factors are

- the **number of charge cycles** and
- the **age** of the battery.

When you have fully charged and discharged your battery 1,100 times, it will still have 60% of its initial capacity, providing it has been well looked after:

BATTERY	REMAINING CAPACITY	~ DISTANCE COVERED
8 Ah	4.8 Ah	19,360 km
12 Ah	7.2 Ah	30,800 km
18 Ah	10.8 Ah	52,800 km

From a technical standpoint therefore, the battery is "used" at this point. It also goes without saying that the battery ages. Even if you do not use your battery, its capacity reduces.

Providing you can still cover the journey distances with this remaining battery capacity, you can of course continue using it. If the capacity is no longer sufficient, you can take your battery to a specialist cycle shop who will dispose of your battery and supply you with a new one.

- › You can extend the service life of the battery by fully recharging it after every journey, even if it is small. The Panasonic li-ion cobalt battery has no memory effect.
- › You can also extend the service life of the battery by using the assistance selectively. Avoid, for example, using gears that make pedalling difficult with the most powerful assist level.

7 Charger

Read the two stickers on the charger before using it for the first time.



Do not use other chargers. Only charge the battery using the charger provided, or a charger approved by Derby Cycle.

If a fault develops or if the battery is in sleep mode, you might be able to solve this problem by placing the battery in the charger for one minute. The battery management then checks the battery and can eliminate any faults that have occurred.



If used incorrectly, the device may be damaged or inflict injuries.

- Before cleaning the charger, always pull the plug out of the socket to avoid a short-circuit and/or physical injury.
- Only use the charger in dry rooms.
- Only place the charger in a secure stable position on a suitable surface.
- Do not cover the charger or place any objects on it as otherwise it could overheat and catch fire.

8 Troubleshooting

The control panel also indicates when faults and technical errors are present. If a fault occurs, the LEDs flash in a specific pattern and with a specific rhythm. This indicates the cause of the problem and makes it easier for you to find a solution.



Control panel display







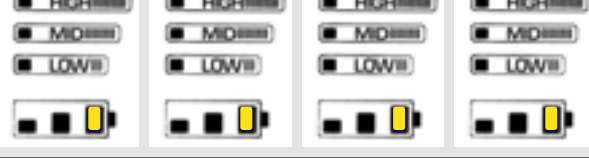
Have the electric drive inspected regularly by your specialist cycle shop. Do not carry out any work on the electric drive or battery yourself. Unless you have sufficient expertise this could lead to a serious accident. As a basic rule, always consult your specialist cycle shop if you have a problem with the electric drive or the battery.



You should only have the electrical components of your Pedelec replaced with genuine parts. This makes it safer for you and avoids problems when processing warranty claims.

8.1 Problems / solutions: Flash patterns and their meaning

If a problem occurs in the electrical system of your Pe-delec, you should initially try to solve it by referring to the following list which describes possible causes of errors and offers solutions. If the fault persists, consult your specialist cycle shop.

ERROR CODE	CAUSE	SOLUTION
	No power assist. The power sensor could not set itself correctly.	Perform restart. The system performs the calibration again. No force should be applied to the pedals during this procedure which takes roughly two seconds.
	No power assist. A problem occurred in the drive unit.	Motor, sensor unit or cable defective. Contact your specialist cycle shop.
	The motor output is less. The motor is overloaded.	Allow the motor to cool down and reduce the assistance.
	The motor switches off. The motor is extremely overloaded.	Allow the motor to cool down and reduce the assistance.
	No power assist. The battery is nearly empty.	Charge the battery immediately.

8.1.1 Additional possible sources of errors

- › If you only pedal very gently, the power assist is not enabled.
- › If the motor is not running and you cannot pinpoint the cause, check the buttons, cables and plugs of the electrical system.



If you find a break or a crack, do *not* try to repair the fault yourself. Take your Pe-delec to a specialist cycle shop.

9 Removing the front wheel

As the motor is built into the front wheel, you must perform the following steps before you can remove the front wheel:

- › Take the battery out of the Pedelec.



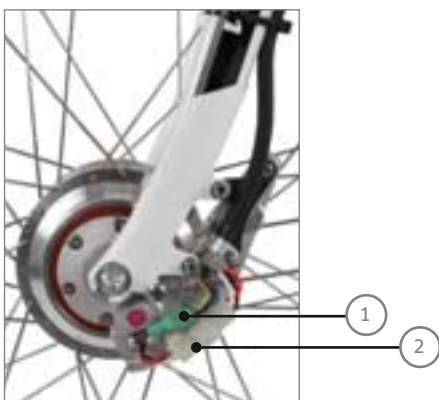
Always remove the battery before removing the front wheel and carrying out any subsequent work on the motor as otherwise you could injure yourself.

- › Undo the two small hexagon socket screws on the plastic cover that is fitted to the left of the front wheel by turning them anticlockwise using a 3 mm Allen key. Keep these in a safe place. Slide the cover to the left and take it off the fork.



1 + 2 Hexagon socket screws

- › Once the cover is removed, you should now be able to see one white and one green cable connector. Open these connectors and pull them apart.



1 Green connector
2 White connector

- › To open the white connector, push a sharp object (tip of a key or ball point pen) down onto the angled surface of the snap-in mechanism, as shown below. You can pull the two connector halves apart when pushing this surface back.



White connector

- › To open the green connector, push a flat pointed object (small screwdriver or small point of a key) under the small tab. You can disconnect the two connector halves while lifting the tab.



Green connector

- › The cables leading to the two connectors, exit from a black plastic tube just in front of the two connectors. At this point, they are joined together with metal braiding inside a metal clamp and fastened with a crosshead screw. Unscrew and remove the small screw by turning it anticlockwise.

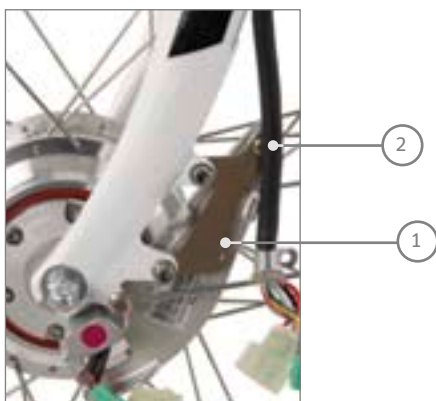


Base plate with cables and connectors

- › Undo the two hexagon socket screws on the left behind the fork using a 5 mm Allen key. You need to turn them anticlockwise.



Apply a max. tightening torque of 9.5 Nm to these screws when putting the wheel back on



1 + 2 Hexagon socket screws on the fork

- › You can now start removing the front wheel.
- › Once you have put the front wheel back on, repeat these steps in reverse. This ensures that your Pedelec will work properly.

For a detailed description on how to remove and install the front wheel, refer to the General User Manual.

The General User Manual also contains all other bicycle-related information on your Pedelec.

10 Cleaning



Remove the battery before you clean your Pedelec.

We recommend you clean your Pedelec with a damp cloth, a sponge or a brush. You can obtain suitable cleaning agents and additional information from your specialist cycle shop.

Make sure when cleaning that water does not enter the battery. Although the electrical components are sealed, it is not advisable to clean the bike by spraying it with a hose or a high-pressure cleaner. This could damage your bike.

When wiping down the battery, be careful not to touch and connect the contacts on the underside. This could cause the battery to switch off.

11 Warnings



- › Bear in mind that the Pedelec motor can heat up on long ascents. Be careful not to touch it with your hands, feet or legs as you could burn yourself.
- › The Pedelec operates using low voltage (25.2 volts). Never attempt to operate the Pedelec using power from a source other than a suitable genuine battery. The designations of approved batteries are listed in **Chapter 12 “Technical data”**.
- › Live parts may be exposed when you open covers or remove parts. Connection points may also be live. Maintenance or repairs on the device when it is open and connected to the power supply must only be carried out by the specialist cycle shop.
- › When carrying out adjustments and maintenance or when cleaning the Pedelec, avoid crushing cables or damaging them with sharp edges.
- › If risk-free operation of your Pedelec cannot be assumed, take it out of operation and make sure it cannot be used until you have it checked by a specialist cycle shop. Risk-free operation is no longer possible if live parts or the rechargeable battery show signs of damage.
- › Keep children away from electrical appliances. If children are present, keep a close eye on them, especially if they could insert objects into the appliance through apertures in the housing as this poses the danger of fatal electric shock.

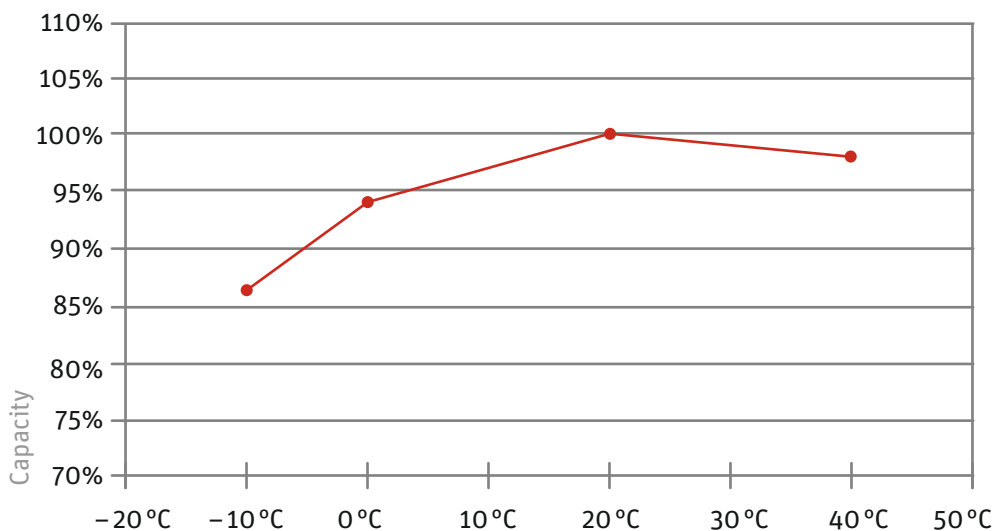
12 Technical data

MOTOR	
Hub motor with planetary gear	
Output	250 watts
Maximum torque	16 Nm
Gross weight of electric drive, battery, control unit	7.0 kg (12 Ah battery)
Control	via power sensor
Assist levels	1:0.5 1:1 1:2
Speed of front wheel , at which the assistance switches off	202 rpm

PANASONIC LI-ION BATTERY	
Voltage	25.2 V
Capacities	8/10/12/18 Ah
Energy quantity	200/250/300/450 Wh

DCW ITEM NO.	ITEM NO.	CAPACITY [AH]	WEIGHT [KG]	POSSIBLE APPLICATION		
				CENTRE	FAST	FRONT
17017002	NKY226B02	10	2.4	X	250 W	-
17017012	NKY226B02	10	2.4	X	250 W	-
17019018	NKY252B02	10	2.4	-	-	X
17019103	NKY252B02	10	2.4	-	-	X
KD170110010	NKY266B02	10	2.4	X	250 W	-
170110010	NKY266B02	10	2.4	X	250 W	-
170110003	NKY265B02	10	2.4	-	300 W	-
170110016	NKY267B02	10	2.4	-	-	X
170111002	NKY284B2	10	2.4	X	300 W	X
170111200	NKY306B2	8	1.9	X	300 W	X
170111201	NKY304B2	12	2.6	X	300 W	X
170111202	14069	18	3.1	X	300 W	X

Possible applications of batteries



Capacity curve at different temperatures

We hope you thoroughly enjoy using your new Pedelec!

Copyright © 2013 Derby Cycle Werke GmbH

Reproduction in whole or in part is not permitted without the consent of Derby Cycle Werke GmbH. Subject to misprints, errors and technical modifications.

V

User Manual Pedelec Impulse

English





4 LED control panel



5a LCD control panel



5b LCD display



6 Charger



- 1 Battery
- 2 Battery lock
- 3 Motor unit
- 4 LED control panel
- 5a LCD control panel
- 5b LCD display
- 6 Charger

Dear Customer,

Thank you for choosing a Pedelec (pedal electric cycle) featuring the innovative Impulse drive from our company. This bike is equipped with an electric drive that assists you when you are cycling. This will make your trip much more enjoyable if you are riding up hills, carrying loads or riding into the wind. You can decide yourself how much you want to use it. Your Pedelec is the first in the world to feature a combination of centre motor and back-pedal brake. The purpose of this User Manual is to help you get the most out of your Pedelec and use it correctly.

Structure of User Manual

If you want to get started right away, refer to the brief introduction in ➡ *Chapter 1 “Quick start”*.

The individual steps are subsequently explained in detail, supplemented by illustrations and diagrams.

More detailed information on your Pedelec is provided in ➡ *Chapter 11 “Technical data”*.

The information in this User Manual specifically refers to your Pedelec only. For general information, on the bike technology that features in your Pedelec for example, refer to the General User Manual.



Even if you can't wait to go for your first ride, in the interest of your own safety you should read ➡ *Chapter 1 “Quick start”* carefully without fail before use.

In addition to texts and tables, the User Manual contains the following symbols that denote important information or dangers.



WARNING about possible physical injury, increased risk of falls or other injuries







IMPORTANT ADDITIONAL INFORMATION or special information on using the bike



NOTE regarding possible damage to property or the environment

Contents

EC Declaration of Conformity			
2012	6	5.1.4 Battery charge state indicator	16
2013	7	5.1.5 Troubleshooting	16
1 Quick start	9	5.2 LCD control panel with display	18
2 Legal principles	10		
2.1 Meaning for the rider	10	5.2.1 On/Off button	19
2.2 Pushing assistance	10	5.2.2 Buttons for power-assist level	19
3 Special features of the Pedelec with Impulse drive	10	5.2.3 Display of the power-assist mode	19
4 Charging the battery	12	5.2.4 Battery charge state indicator	19
		5.2.5 Remaining range indicator	20
4.1 Learning cycle	12	5.2.6 Troubleshooting	20
4.2 Charging operation	13	5.2.6.1 Condensation appearing on the LCD display	20
4.3 Fitting the battery	13	5.3 Setting and programming the LCD display	21
5 Control panels	14	5.3.1 Delete trip data / Delete overall data	21
5.1 LED control panel	14	5.3.2 Device settings	21
		5.3.2.1 Contrast	21
5.1.1 On/Off button	14	5.3.2.2 Brightness	21
5.1.2 Buttons for power-assist level	15	5.3.2.3 Language	21
5.1.3 Display of the power-assist mode	15	5.3.2.4 Wheel circumference	22
		5.3.2.5 Unit	22
		5.3.2.6 Name	22
		5.3.2.7 Factory settings	22
		5.3.2.8 Software	22

5.3.3	Cost specifications	23
5.3.3.1	Fuel price	23
5.3.3.2	Electricity costs	23
5.3.3.3	Fuel consumption	23
5.3.3.4	Fuel type	23
5.3.3.5	Back	23

6 Assistance by the electric motor



6.1	Operating principle of assistance	24
6.2	Distance	25
6.3	Riding your Pedelec efficiently	25

7 Battery

7.1	Straightforward charging	26
7.1.1	Learning cycle	26
7.2	High degree of safety due to battery management	26
7.3	Straightforward storage	26
7.4	Battery information system	28
7.4.1	Checking the battery charge state	28
7.4.2	Checking the battery capacity	28
7.5	Service life and warranty	29
7.5.1	of the drive	29
7.5.2	of the battery	29

8 Charger



9 Cleaning

10 Warnings

11 Technical data

EC Declaration of Conformity 2012

The manufacturer: Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany
Telephone: +49 (0) 4471 / 966-0

hereby declares that the following products:

Product description: Kalkhoff Pedelec Panasonic

Model designation: Agattu C8-36, Agattu C8-26, Agattu C7, Agattu C3, Sahel Pro C8 Disc, Sahel Comp C8, Sahel C8 HS, Sahel C8, Sahel C7, Pro Connect C11 Disc, Pro Connect C8, Pro Connect C8 Disc, Pro Connect C9

Product description: Kalkhoff Impulse

Model designation: Agattu C8 HS Impulse, Agattu XXL C8 Impulse, Agattu Premium C11 Impulse, Agattu C8 Impulse, Impulse XXL 8C, Impulse 8C HS, Impulse Premium 8C, Impulse 8C, Impulse Compact, Sahel Compact, Tasman Classic C8, Tasman Tour XXL C8, Tasman City 8C, Tasman Tour C8, Connect Lady C8, Connect Lady 8C

Product description: Kalkhoff Groove

Model designation: Groove F8, Groove F3

Product description: Kalkhoff BionX

Model designation: Image BX27, Image BX24

Product description: Kalkhoff Bosch

Model designation: Agattu B

Year of manufacture: 2012

comply with all of the relevant requirements of the **Machinery Directive (2006/42/EC)**.

Furthermore, the machine complies with all of the requirements of the **Electromagnetic Compatibility Directive (2004/108/EC)**.

The following harmonized standards have been applied:

DIN EN 15194 Cycles – Electrically power-assisted cycles – EPAC cycles

DIN EN 14764 City and trekking bikes – Safety requirements and test methods

Technical documentation filed at:

Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany



Olaf Flunkert
Production, Purchasing and
Technology Manager



Karl-Heinz Lange
Design and Development Manager

EC Declaration of Conformity 2013

The manufacturer: Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany
Telephone: +49 (0) 44 71 / 966 -111

hereby declares that the following products:

Product description: Kalkhoff Pedelec Panasonic

Model designation: Agattu P8-26V, Agattu P8-26V 8G, Pro Connect C8 Disc

Product description: Kalkhoff Impulse Pedelec

Model designation: Agattu i8, Agattu Premium i11, Agattu XXL i8R, Agattu i8 HS, Impulse i8R HS, Impulse XXL i8R, Impulse XXL i8, Impulse Premium i8R, Impulse i8R, Pro Connect i8 HS, Pro Connect i10, Pro Connect i27, Sahel i8 light, Sahel i8, Sahel i8R, Sahel Compact i8, Sahel Compact i8R, Sahel i11 Di2, Sahel i360 Harmony, Sahel i360, Tasman Classic i8, Tasman Classic i8R, Tasman Tour XXL i8, Tasman Tour XXL i8R, Tasman Tour i8, Tasman Tour i8R, Tasman City i8 Roller, Tasman City i7 Roller, Tasman City i8, Tasman City i8R

Product description: Kalkhoff Groove Pedelec

Model designation: Groove F8

Product description: Kalkhoff Xion Pedelec

Model designation: Pro Connect R30, Pro Connect R27

Product description: Kalkhoff Bosch Pedelec

Model designation: Pro Connect B8, Pro Connect B9

Year of manufacture: 2013

comply with all of the relevant requirements of the **Machinery Directive (2006 / 42 / EC)**.

Furthermore, the machine complies with all of the requirements of the **Electromagnetic Compatibility Directive (2004 / 108 / EC)**.

The following harmonized standards have been applied:

DIN EN 15194 Cycles – Electrically power-assisted cycles – EPAC cycles

DIN EN 14764 City and trekking bikes – Safety requirements and test methods

Technical documentation filed at:

Derby Cycle Werke GmbH
Siemensstraße 1 – 3
49661 Cloppenburg, Germany



Olaf Flunkert
Production, Purchasing and
Technology Manager



Karl-Heinz Lange
Design and Development Manager

1 Quick start

- › 1. Charge the battery completely before riding for the first time. Charge temperature: 0 – 45°C
- › 2. Swivel the round charging socket cover on the battery to one side.



Now insert the four-pole plug of the charger into the battery charging socket.



Charging the battery

- › 3. Insert the mains plug for the charger into the socket.
You must fully charge the battery before using it for the first time.
- › 4. Once all LEDs on the battery have gone out, pull the charger plug out of the battery socket. Swivel the cover back over the charging socket.

You can also remove the battery from your Pedelec and charge it in the docking station. For more information, refer to ► Chapter 4 “Charging the battery”.

- › 5. If you have charged the battery in the docking station, reinsert the battery into the holder on the Pedelec from the left-hand side. Tilt the battery outwards at an angle of roughly 45° as you do so, as you did when you took it out of the holder. Move the battery into the upright position until the locking mechanism engages. If the key is still in the lock, you will need to turn it clockwise and pull it out as otherwise the battery will not lock in place.
- › 6. Make sure that the battery is securely positioned and that the key is no longer in the lock.

If your Pedelec is equipped with an LCD control panel:

- › 7. Push the Power button on the control panel on the handlebar.
- › 8. The display panel now displays the medium power-assist mode *SPORT*. Press the arrow buttons to select the level of assistance: *STAND BY* (off), *ECO* (low), *SPORT* (medium) or *POWER* (high). Press this button once to change the level of assistance by one level. This works both ways, depending on which arrow button you press.

The following applies for bikes which are equipped with a back-pedal brake:

- › 9. The system will now perform a system check. “Please move the pedals” will appear on the screen. If you set off now the system will normally detect a pedal movement in the “drive” and “back-pedal brake” directions. This completes the safety check, and you can ride as normal with assistance.

If you cannot feel any assistance, simply back-pedal briefly and then pedal forwards again to trigger the system check. If there is still no assistance being delivered, the instruction “Please move the pedals” will continue to be displayed. In this case you should consult a specialist dealer.



You can now ride off just as you would if you were riding a normal bike. The motor starts providing assistance as soon as the rear wheel starts turning.

2 Legal principles

The essential idea behind the Pedelec is not only to be able to cover greater distances more quickly, but also more comfortably. You can choose to relax and let the bike do the work, exert yourself more physically, or simply get from A to B as fast as possible. You can decide this yourself by choosing an appropriate assist level.

This gives you more confidence on the road, as the powerful acceleration gives you more control and a greater degree of security. Your Pedelec assists you with an output that adapts to your pedalling force up to roughly 25 km/h.

In some EU countries, the Pedelec, like all other bikes, must comply with certain regulations, the Road Traffic Licensing Regulations (StVZO) in Germany for example. Please observe the relevant explanations and general information provided in the General User Manual.

These statutory requirements apply for a Pedelec:

- The motor is designed only to provide pedalling assistance, i.e. it can only “assist” the rider when he/she turns the pedals.
- The average motor output must not exceed 250 W.
- As the speed increases, the rate at which the motor output reduces must also increase more intensely.
- The motor must switch off once the bike reaches a speed of 25 km/h.

2.1 Meaning for the rider

- You do not legally have to wear a helmet. In the interest of your own safety, however, you should **never** ride without a helmet.
- You do not legally have to have a driving license (unless you own a model with pushing assistance, ➡ *Chapter 2.2 “Pushing assistance”*).
- You do not legally have to have insurance.
- No age restriction applies for a Pedelec.
- The regulations governing the use of cycle paths are the same as for normal bikes.

These regulations apply to you wherever you are in the European Union. It is possible that different regulations exist in other countries, also inside the EU in individual cases. Before using your Pedelec abroad, find out about the legal situation in the relevant country.

2.2 Pushing assistance

Your Pedelec is available in a version with or without pushing assistance. Your specialist cycle shop can retrofit a control panel with pushing assistance if required.



Button for pushing assistance

The pushing assistance moves the Pedelec slowly (at a maximum speed of 6 km/h) without you having to turn the pedals, e.g. if you are manoeuvring in a tight space or are pushing your Pedelec out of a basement garage.

If you were born after 01.04.1965, you will need a moped test certificate for the version with pushing assistance. If you already have another type of driving licence, this automatically includes the moped test certificate.

The pushing assistance is not suitable for use as starting assistance.

3 Special features of the Pedelec with Impulse drive

Your Pedelec has special features that are designed to enhance your safety and comfort, some of which are unique worldwide.

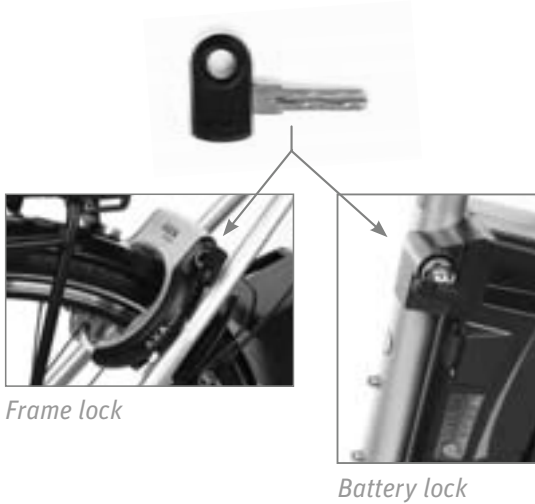
- The Impulse drive has been developed exclusively to allow a centre motor to be installed without having to dispense with the safety and convenience of a back-pedal function.

This means you can rely on three brakes; the familiar back-pedal brake and the powerful, modern rim brakes.

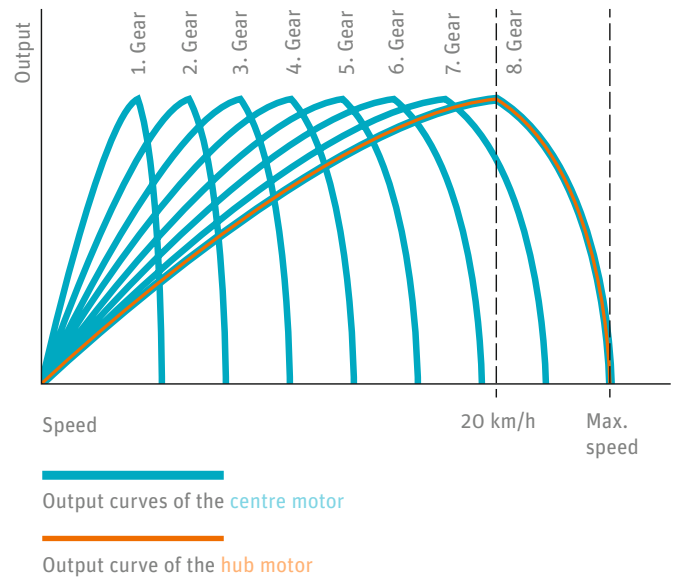


- 1 Rim brake, front
- 2 Back-pedal brake
- 3 Rim brake, rear

- › With the Impulse drive, the amount of assistance can be increased by selecting easier gears, when starting or riding uphill for example. The motor produces more power when your pedalling cadence is higher.
- › You can conveniently use the same key to lock/unlock your battery and, where present, your frame lock.



- › In contrast to a hub motor, the Impulse centre motor drive allows you to ride within the motor range that saves the most power or, if required, the range in which the highest output is available.



- › You can decide how you wish to put in your effort:

In the three highest gears, you can ride up to a maximum speed of 25 km/h assisted by the motor. You can, for example, go for a relaxed ride on the flat with a low pedalling cadence. However, you can also ride uphill using an easier gear and less energy, simply by making the most of the highest assisted speed. You should therefore either turn the pedals more slowly (low cadence) with more effort or turn them more quickly (high cadence) with less effort.

GEAR	OTHER CENTRE MOTOR			IMPULSE DRIVE		
	CRANK REVOLUTIONS/MIN.	SPEED (KM/H)	MOTOR SPEED	CRANK REVOLUTIONS/MIN.	SPEED (KM/H)	MOTOR SPEED
1	71	8	3,000	86	12	4,300
2	71	10	3,000	86	13	4,300
3	71	12	3,000	86	15	4,300
4	71	13	3,000	86	19	4,300
5	71	16	3,000	86	22	4,300
6	71	19	3,000	85	25	4,200
7	71	22	3,000	73	25	3,650
8	71	25	3,000	64	25	3,200

The data provided is an example for the assistance function. The data may vary depending on the model.

4 Charging the battery

- › You can charge the battery whilst it is on the Pedelec (as described in ► Chapter 1 “Quick start”).



- › You can also remove the battery from the holder and charge it in the docking station. This is recommended if it is cold outside, in order to charge the battery in a warm room. The battery can be charged at temperatures between 0 and 45°C.



- › 1. Grip the battery by the handle, insert the key into the lock and turn it anticlockwise.



Unlocking the battery

- › 2. Now the battery is unlocked and can be removed. To remove it, tilt the Pedelec to one side. In doing so, hold on tight to the battery to prevent it from being dropped.



Tilt when removing

- › 3. You should now remove the key and keep it in a safe place to prevent it from breaking off or being lost.

4.1 Learning cycle



After fully charging the battery for the first time and thereafter roughly once every six months, you must run the battery down until the system switches off. This procedure (a so-called “learning cycle”) is necessary so that the battery management recognises the changes in the capacity caused by age and wear and tear, in other words, the performance level of the battery. Afterwards, the capacity of the battery is calculated anew and correctly represented. With this procedure, you can prevent a sudden loss of electrical assistance during an extended trip.

4.2 Charging operation

Before charging the battery, read the information on the charger carefully.

- 1. Take the charger and docking station provided out of its packaging and plug the mains plug into a socket (230V, please observe type plate on the charger).



Type plates on charger and docking station

To charge the battery safely, the charger must be placed on a suitable surface resting on its four feet with the LED facing upwards. This is the only way to ensure that the hot air around the battery warmed during the charging operation can dissipate via the surrounding ventilation slots.

- 2. Connect the charger to the docking station. The LED in the docking station now lights up briefly in red and then permanently in green.
- 3. Put the battery in the holder of the docking station. The battery and charger are connected. The LED in the charger lights up in green.



Battery in the docking station

- 4. The charging operation starts. The LED in the charger now lights up green. The battery LEDs light up one by one to indicate the progress of the charging operation. The battery is charged in five stages. When charging of one stage is in progress, the cor-

responding LED flashes. If this stage has been fully charged, the LED will light up permanently. Now the next LED will begin to flash.

After all five LEDs have gone out, the battery is fully charged.

- 5. If the LED of the charger flashes red permanently, a charging fault has developed.



Take the battery out of the charger, then put it back in. The charger tests the battery and performs readjustments, if required. If the LED on the charger still flashes, take the charger and battery to your specialist dealer. He will test the devices and replace them, if required.

- 6. To save power, pull the charger plug out of the socket once the charging operation is complete.

4.3 Fitting the battery

- 1. Insert the battery into the battery holder of the Pedelec from the left by tilting it outwards at roughly 45°.



Reinstalling the battery

- 2. Make sure in doing so that the lateral guides at the bottom of the battery are also inserted into the guides in the holder.
- 3. Tilt the battery towards the bike until it engages in the locking mechanism. If the key is still in the lock, turn it clockwise then pull it out to lock the battery in place.
- 4. Make sure the battery is firmly in place.

5 Control panels

When buying your Impulse Pedelec, there are two different control panels to choose from: with an LED or LCD display. With the LED display, lit diodes display the information for you, while more information is displayed with the LCD element. In addition, text and digits are shown on the display.

5.1 LED control panel



- 1 Buttons for power assist level
- 2 On/Off switch
- 3 Battery charge state indicator
- 4 Power-assist mode indicator
- 5 Button for pushing assistance (optional)

The control panel on the handlebar has three or four buttons (depending on the model) and two rows of LED indicators. The buttons used to control the level of assistance are located on the left-hand side of the control panel.

Above and to the right you can see the row of LED indicators that shows which level of assistance has been activated and the current battery charge state.



Row of LED indicators for charge state and assistance

The “Power” button is located below the LEDs. Press this button to switch the control panel on and off.



On/Off button

If the model features pushing assistance, the switch for this will be on the underside of the control panel.



Button for pushing assistance

5.1.1 On/Off button

Press the “Power” button to switch the control panel on and off.

After it has been switched on, the system is always in the medium power-assist mode *SPORT*.

The following applies only to bikes which are equipped with a back-pedal brake:

The system will now perform a system check. At this time, the LED on the left will now come on for approx. two seconds, followed by all LEDs for approx. one second. If you set off now, the system will normally detect a pedal movement in the “drive” and “back-pedal brake” directions. This completes the system check, and you can ride as normal with assistance.



If you cannot feel any assistance, simply back-pedal briefly and then pedal forwards again to trigger the system check. In the event that the LEDs continue to flash in the pattern described above and the motor is not providing any assistance, then you should consult a specialist dealer.

5.1.2 Buttons for power-assist level

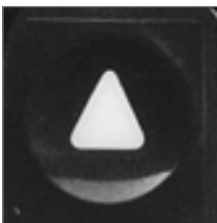
You can specify the power-assist level via the arrow buttons.



Buttons for power-assist level

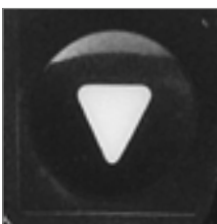
Each time you press an arrow button the power assist changes by one level.

Each time you press the button with the arrow pointing upwards, the assistance increases by one level from “no assistance/stand by” through to the highest level: **POWER**.



Increase power assist

Each time you press the button with the arrow pointing downwards, the assistance decreases by one level from **POWER** through to the no assistance level **STAND BY**.



Reduce power assist

5.1.3 Display of the power-assist mode

The bottom row of LEDs on the right of the display next to the buttons for selecting the power-assist level shows you how much assistance the motor is currently providing.



Display of power-assist mode

DISPLAY	ASSIST LEVEL
	POWER: The LED on the right of the display will light up. This means the assistance is working hard.
	SPORT: The LED in the middle of the display will light up. This means the assistance is working with a medium level of effort.
	ECO: The LED on the left of the display will light up. This means the assistance is working with a low level of effort.
	STANDBY: battery indicator still lights up ()

Assist level

- The LED on the right of the display lights up when the highest level of assistance (**POWER**) is activated. This means the assistance is working hard.
- The LED in the centre of the display lights up when the medium assist level (**SPORT**) is activated. This means the assistance is working with a medium level of effort.
- The LED on the left of the display lights up when the lowest assist level (**ECO**) is activated. This means the assistance is only working with a low level of effort.
- If the assistance is switched off (**STAND BY**), only the charge state indicator LEDs remain lit. You now receive no assistance at all from the motor.

5.1.4 Battery charge state indicator

The battery charge state indicator is located above the row of LEDs that displays the power-assist mode.



Battery charge state indicator

DISPLAY	BATTERY CHARGE STATE
	100% – 80%
	80% – 60%
	60% – 40%
	40% – 20%
	20% – 10%
	< 10%

LED lights up LED flashes LED off

Battery charge state

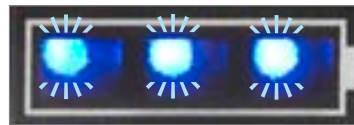
If the battery charge state falls below a minimum level, the system switches off. No LEDs light up on the control panel.



If you do not move your Pedelec for 10 minutes, the system switches off automatically. If you subsequently want to ride using the assistance, you will have to switch it back on via the control panel.

5.1.5 Troubleshooting

The control panel shows you when faults occur. In such a situation, the LEDs on the battery display will show a particular flash pattern:

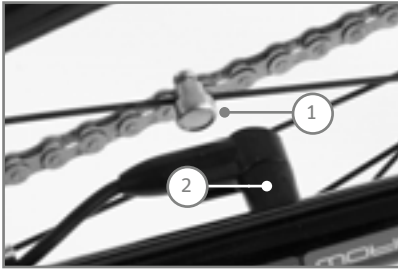


If all of the LEDs on the battery display flash simultaneously immediately after switching the system on, this means that there is a **problem with the battery communication**.

- › In that case, switch the system off and then back on again.
- › If the problem occurs again, put the battery in the charger, so that the battery management can eliminate an existing problem. You can also use another approved battery.
- › If the flashing signal persists, have the system checked by a specialist dealer.

If, shortly after setting off or during a journey, the left-hand LED blinks briefly and then all LEDs flash, this means that one of the problems described below is present:

CAUSE	SOLUTION
Spoke magnet has slipped out of position	Make sure the spoke magnet has not slipped. It should be as close as possible to the sensor on the chain stay (max. 5 mm clearance).
Speed sensor defective	Have your specialist cycle shop check and, if necessary, repair it.
Cable connection defective	Have your specialist cycle shop check and, if necessary, repair it.
No connection between motor unit and battery	<ul style="list-style-type: none"> › Connect the battery to the charger. › Use a different battery. › Have your specialist cycle shop check the control cable that runs from the battery plug to the motor unit.



- 1 Spoke magnet
- 2 Sensor on chain stay

Only for bikes which are equipped with a back-pedal brake:

If the left-hand LED begins to flash with a long flash, followed by short flashes from all LEDs, this means that you have still to carry out the **safety test for the “drive” or “back-pedal brake” pedal positions or that the **positions were not recognised correctly.****

- › In this case, move the pedals forward once and then back once, until you can feel some resistance. If the flashing signal disappears you can ride off normally. If the flashing signal continues, you can ride as if you were riding a bike without power assist. Have a specialist dealer check your error message and rectify the problem.



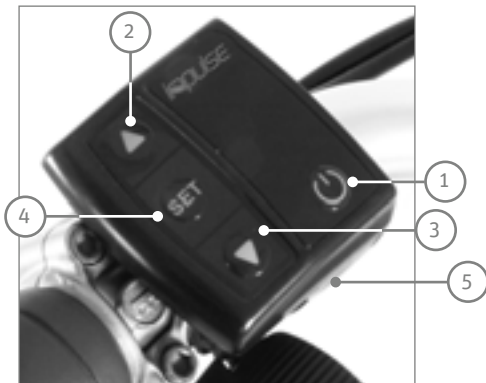
Have the electric drive inspected regularly by your specialist cycle shop. Do not carry out any work on the electric drive or battery yourself. Unless you have sufficient expertise this could lead to a serious accident. As a basic rule, always consult your specialist cycle shop if you have a problem with the electric drive or the battery.



You should only have the electrical components of your Pedelec replaced with genuine parts. This makes it safer for you and avoids problems when processing warranty claims.

5.2 LCD control panel with display

LCD control panel



- 1 Power
- 2 More powerful assistance
- 3 Less powerful assistance
- 4 Set
- 5 Pushing assistance

- (1) The “Power” button is located on the right-hand side. Press once to switch the system on and press a second time to switch it off.
- (2) (3) The arrow buttons used to control the level of assistance are located on the left-hand side of the control panel.
- (4) The “Set” button is located between the arrow buttons. Using this button, different displays can be called up. Program the system with your desired data.
- (5) If the model features pushing assistance, the switch for this will be on the underside of the control panel.

LCD display



- 1 Speed
- 2 Power-assist mode
- 3 Battery charge state
- 4 Remaining distance display
- 5 Information area

The LCD display in the middle of the handlebar is divided into five different display panels.

- (1) At the top on the left is your current speed.
- (2) Next to current speed on the right is a display showing the selected power-assist mode.
- (3) At the top on the right is the battery symbol which tells you the current charge state of your Pedelec’s battery.
- (4) Below this, you can see the remaining distance over which you will still receive assistance from the current battery charge.
- (5) Along the bottom section of the display is a long **information area** that can be used to display the following information:
 - How much of its potential output the motor is currently delivering.
 - The costs that have been incurred in the course of the current trip and during the Pedelec’s entire service life.
 - The savings achieved in both euros and CO₂ in comparison with the same journey by car.
 - The total number of kilometres covered by this system.
 - Display of kilometres covered during the day and overall.

- Display of journey time during the current trip and the top speed reached on this trip.
- The average speed during the current trip and the total distance covered.

5.2.1 On/Off button

Press the button to switch the LCD control panel on and off.

After switching on, the system is always in the display mode in which you switched it off.

The following applies for bikes which are equipped with a back-pedal brake:

The system will now perform a system check. “Please move the pedals” will appear on the screen. If you set off now the system will normally detect a pedal movement in the “drive” and “back-pedal brake” directions. This completes the safety check, and you can ride as normal with assistance.

If you cannot feel any assistance, simply back-pedal briefly and then pedal forwards again to trigger the system check. If there is still no assistance being delivered, the instruction “Please move the pedals” will continue to be displayed. In this case you should consult a specialist dealer.

5.2.2 Buttons for power-assist level

You can specify the power-assist level via the arrow buttons.














Each time you press an arrow button the power assist changes by one level.

Each time you press the button with the arrow pointing upwards, the assistance increases by one level from “no assistance/stand by” through to the highest level: *POWER*.

Each time you press the button with the arrow pointing downwards, the assistance decreases by one level from *POWER* through to the lowest assistance level “no assistance/stand by”.

5.2.3 Display of the power-assist mode







The LCD display shows you how much assistance the motor is currently providing.

DISPLAY	ASSIST LEVEL
  	<i>POWER</i> : This means the assistance is working hard.
  	<i>SPORT</i> : This means the assistance is working with a medium level of effort.
  	<i>ECO</i> : This means the assistance is only working with a low level of effort.
  	<i>STANDBY</i> : Battery indicator still lights up ()

Assist level

5.2.4 Battery charge state indicator

The battery charge state display is located in the top right-hand corner of the LCD display. Using a stylised battery divided into segments, it shows the charge remaining in the battery.

DISPLAY	BATTERY CHARGE STATE
	100 – 85.5%
	85.5 – 71.5%
	71.5 – 57.5%
	57.5 – 42.4%
	42.5 – 28.5%
	28.5 – 14.5%

If the battery charge state falls below a minimum level, the system switches off. Then the entire display fades and goes off.

If you do not move your Pedelec for 10 minutes, the system switches off automatically. If you subsequently want to ride using the assistance, you will have to switch it back on via the control panel.

5.2.5 Remaining range indicator

Below and to the right of the charge state indicator, the distance in km over which you can still travel with power assist is displayed.



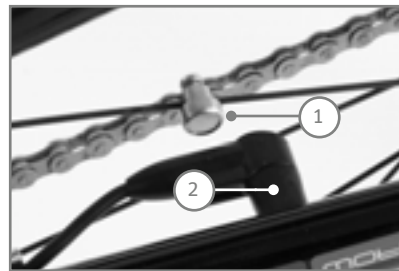
This “remaining range” is calculated using two measurements taken during the current journey. One short and one long measurement give a representative average value. If the conditions of the journey change, for example, by riding up an incline after a long, flat stretch, the value displayed can also change at short notice. Please consider this factor when planning your trips.

5.2.6 Troubleshooting

5.2.6.1 Condensation appearing on the LCD display



If your bike has been exposed to wet conditions for an extended period, e.g. after a trip in heavy rain, or if there have been large differences in temperature, the screen of the LCD display may steam up. This moisture does not impair the function of the display. It is comparable with the steam on a pair of glasses when you enter a warmer room having been outside. After a short time in drier and warmer conditions, this condensation will vanish leaving no trace.



- 1 Spoke magnet
- 2 Sensor on chain stay

If all three LEDs flash simultaneously when switching on or during a journey, the following fault is present:

TEXT	CAUSE	SOLUTION
Speed sensor signal missing	Spoke magnet has slipped out of position	➤ Make sure the spoke magnet has not slipped. It should be as close as possible to the sensor on the chain stay (max. 5 mm clearance).
	Speed sensor defective	➤ Have your specialist cycle shop check and, if necessary, repair it.
	Cable connection defective	➤ Have your specialist cycle shop check and, if necessary, repair it.
Battery communication error	No connection between motor unit and battery	<ul style="list-style-type: none"> ➤ Connect the battery to the charger. ➤ Use a different battery. ➤ Have your specialist cycle shop check the control cable that runs from the battery plug to the motor unit.
Motor temperature is too high	The motor has become too hot, e.g. as a result of a long, steep incline ridden in a high gear.	➤ Allow the motor to cool down for a while before resuming your journey.
Battery temperature is too high	The battery has become too hot.	➤ Allow the battery to cool down for a while by not riding or by riding without assist. If necessary place the battery in the charger for a minute.

5.3 Setting and programming the LCD display

By pressing the Set button, you can switch between the various displays within the information area (named “main menu” in the illustration). Pressing and holding the Set button will take you from any display in the information area/main menu to the menu sub-items

- Delete trip data
- Delete overall data
- Device settings
- Target cost
- Back

You can select the menu sub-items using the two arrow keys on the control panel. You can confirm your selection by pressing the Set button. The respective contents are then displayed for you. You can also make changes to the settings. In order to return to the information area/main menu display from the menu sub-items, you must select the menu item “Back” and confirm by pressing the Set button.

5.3.1 Delete trip data / Delete overall data

Under the menu sub-items “Delete trip data” and “Delete overall data”, you can delete the kilometres indicated for the current day trip and the total kilometres covered. If you wish to do so, select the option “Yes” using the arrow keys on the control panel and then press the Set button to confirm your selection. Then you will be taken back to the menu sub-item display once more. If you select and confirm the option “No”, the information remains in place and you are, likewise, taken back to the menu sub-item display.

5.3.2 Device settings

Under the menu sub-item “Device settings”, you can change the following display settings:

- Contrast (➡ 5.3.2.1)
- Brightness (➡ 5.3.2.2)
- Language (➡ 5.3.2.3)
- Wheel circumference (➡ 5.3.2.4)
- Unit (➡ 5.3.2.5)

- Name (➡ 5.3.2.6)
- Factory settings (➡ 5.3.2.7)
- Software (➡ 5.3.2.8)

Using the two arrow keys on the control panel, you can select the sub-items and confirm by pressing the Set button. The menu item “Back” will take you back to the main menu.

5.3.2.1 Contrast

You can leave the contrast of the display at its preset level or adjust it in 5% steps to between -35% to +20% by pressing the two arrow keys. The change in contrast is implemented immediately. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.3.2.2 Brightness

You can leave the brightness of the display at its preset level or adjust it in 5% steps to between 0% and 50% by pressing the two arrow keys. The change in brightness is implemented immediately. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.3.2.3 Language

You can choose to have the information shown on the display in the following languages:

- Deutsch
- English
- Francais
- Nederlands
- Espanol
- Italiano
- Suomi
- Dansk

You can select the relevant language using the two arrow keys. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.3.2.4 Wheel circumference

Pressing the Set button will take you to the section for adjusting the wheel circumference. This can be set to any value between 1510 mm and 2330 mm by pressing the two arrow keys. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.



A change to the setting becomes necessary, for example, when you have the tyres on your Pedelec exchanged for some of a different size. In order to continue to display the correct data, the new wheel circumference must be entered.

5.3.2.5 Unit

Under the sub-item “Unit”, you can choose whether information relating to distance travelled and speed is displayed in kilometres (km) or miles (mi). Using the arrow keys on the control panel, select the option “km” or “mi”. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.3.2.6 Name

Under the sub-item “Name”, you can enter a name or some text with a maximum of 21 characters which will be displayed when the LCD display is turned on or off.

- To **write**, select one letter at a time from the alphabet displayed using the arrow keys and confirm your selection by pressing the Set button. The letter then appears in the text line above the row of letters. At the end of the row of letters, you can select a hyphen or an underscore and confirm by pressing the Set button.
- **Errors** can be corrected by selecting the right-hand arrow and pressing the Set button. You can only delete one letter each time.

- You can switch between **lower case and capital letters** by selecting “abc ... / ABC ...” on the right of the display panel and pressing the Set button to confirm. The letters then immediately appear as lower case or capital letters.
- The **use of spaces is not possible** and **underscores** must be used in their place.
- By selecting “OK” using the two arrow keys on the control panel and confirming using the Set button, your entry is accepted and you are then taken back to the menu sub-item display.

5.3.2.7 Factory settings

Under the sub-item “Factory settings”, you are asked whether you want to restore the settings which were pre-set upon leaving the factory. If you wish to do so, select the option “Yes” using the arrow keys on the control panel and then press the Set button to confirm your selection. Then you will be taken back to the menu sub-item display once more. If you select and confirm the option “No”, the amended specifications remain in effect and you are, likewise, taken to the menu sub-item display once more.

5.3.2.8 Software

Via the sub-item “Software” you can access the sub-items “Version” and “Update”, which can be selected using the arrow keys on the control panel.

- Pressing the Set button takes you to the respective sub-item.
- By selecting the sub-item “Back” and pressing the Set button to confirm, you are taken to the menu sub-item display once more.
- The version of the motor software which is currently installed is displayed under the item “Version”. By pressing the Set button once again, you are taken back to the menu sub-item display.
- Under the sub-item “Update”, you can bring the software up to date. A memory card is essential for carrying out an update. If this is not present, a message will be displayed to say that you need a memory card. By pressing the Set button, you return to the menu sub-item display.

5.3.3 Cost specifications

Via the menu sub-item “Target cost”, you can access the sub-items:

- Fuel price (→ 5.3.3.1)
- Power cost (→ 5.3.3.2)
- Fuel consumption Ø (→ 5.3.3.3)
- Fuel type (→ 5.3.3.4)

You can select the sub-items using the two arrow keys on the control panel. Pressing the Set button takes you to the respective sub-item. By selecting the sub-item “Back” and pressing the Set button to confirm, you are taken to the menu sub-item display once more.

5.3.3.1 Fuel price

Under the sub-item “Fuel price”, you can specify the price of the fuels petrol or diesel in euros (Eur) and cents (ct). You can set this to a value in euros between 0 and 9 euros and a value in cents between 0 and 99 cents by using the two arrow keys on the control panel to move in 1 euro- and 1 cent-steps respectively. Once you have confirmed both values by pressing the Set button, you are taken back to the menu sub-item display.

The price information is necessary to enable calculation of the money and CO₂ saved in comparison with the use of a car. This is displayed in the main menu of the information area under “Overall system savings”.

5.3.3.2 Electricity costs

Under the sub-item “Power cost”, you can specify the price of electricity in cents (ct). You can set this to a value of between 0 and 99 cents by using the two arrow keys on the control panel to move in 1 cent steps. Pressing the Set button confirms your selection and then takes you back to the display of menu sub-items.

5.3.3.3 Fuel consumption

You can enter the average fuel consumption which would arise from the use of a car. You can set the consumption in half-litre steps to between 0 and 20 litres. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

The information regarding the average consumption is necessary to enable calculation of the money and CO₂ saved in comparison with the use of a car. This is displayed in the main menu of the information area under “Overall system savings”.

5.3.3.4 Fuel type

Under the sub-item “Fuel type”, you can choose between the options “Petrol” and “Diesel” by pressing the arrow keys on the control panel. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

The information regarding fuel type is necessary to enable calculation of the money and CO₂ saved in comparison with the use of a car. This is displayed in the main menu of the information area under “Overall system savings”.

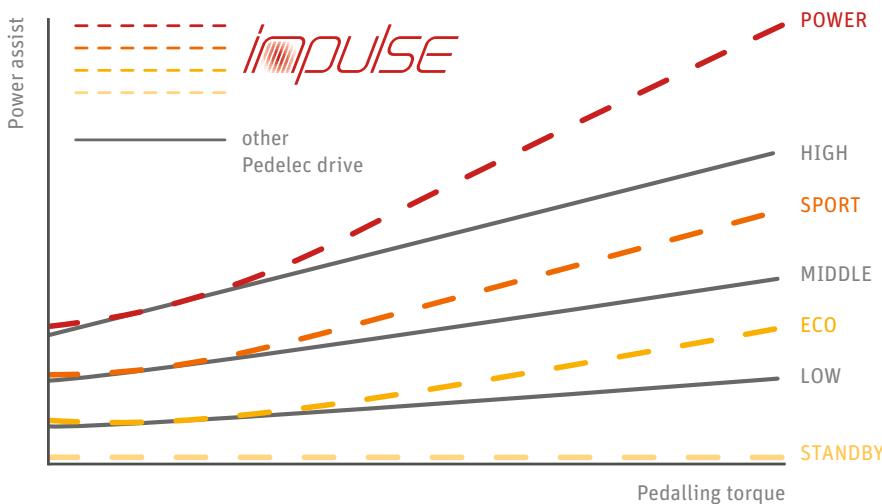
5.3.3.5 Back

In order to return to the information area/main menu display from the menu sub-items, you must select the menu item “Back” and confirm by pressing the Set button.

6 Assistance by the electric motor

6.1 Operating principle of assistance

If you switch on the assistance and start pedalling, the motor starts as soon as the rear wheel is turning.



- **The level of assistance you have selected**

With the *POWER* assist level, the motor assists you by producing its maximum output, which also consumes the most energy. With the *SPORT* assist level, the motor produces slightly less power. If you have selected *ECO*, you receive the least amount of assistance but have the battery's maximum range at your disposal.

The thrust produced by the motor depends on three factors:

- **Your own pedalling effort**

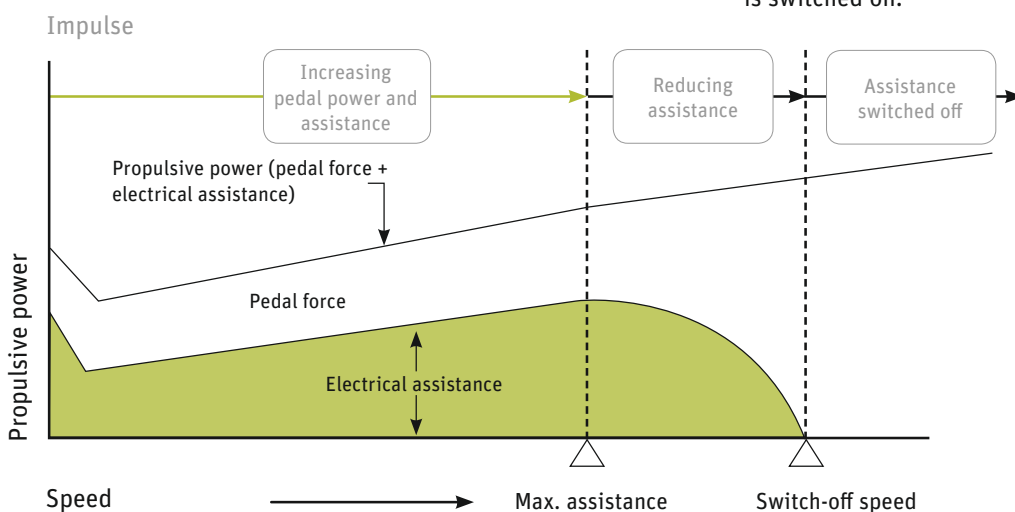
The motor adapts to the force you apply. If you pedal harder, e.g. uphill or when setting off, the power sensor detects this and delivers more power than if you were only pedalling gently.

The assistance increases disproportionately if you pedal harder. This increase is more pronounced in the *POWER* mode than in the *SPORT* and *ECO* modes.

The thrust is limited by the maximum motor output.

- **How fast you ride**

When you set off on your Pedelec, the assistance increases as you build up speed until it reaches its maximum, just before the highest assisted speed is achieved. The assistance then reduces automatically until you reach a speed of roughly 25 km/h when it switches off. This gradual reduction makes the transition to riding without power assist seem less abrupt. This applies for the three highest gears. In all other gears, the motor switches off earlier, depending on the gear ratio. ➔ Chapter 3 "Special features of the Pedelec with Impulse drive" contains a table which shows the speeds at which the motor is switched off.



6.2 Distance

The distance you can travel using the power assist with the battery fully charged depends on several factors:

- **Ambient temperature**

If it is colder, you will travel a shorter distance with the same battery charge.

To maximise the distance you can travel, keep the battery in a heated room so that it is at room temperature when you fit it on your Pedelec.

As the battery discharges when the motor is in use, it generates enough heat to not lose too much of its power at low ambient temperatures.

- **Selected assist level**

If you want to cover a large distance with power assist, select the smaller gears, i.e. the ones that are easier to pedal. Also select a low assist level (*ECO*).

- **Handling**

If you are riding in gears that are harder to pedal and select a high assist level, the motor will produce plenty of power to help you along. However, just as with driving a car at high speed, this leads to higher consumption. You will therefore have to recharge the battery sooner. You can conserve energy by keeping the load on the pedals even throughout the entire crank revolution.

- **Technical condition of your Pedelec** Make sure the tyre pressure is correct. If you ride your bike with too little air in the tyres, this can significantly increase the rolling resistance. This applies to smooth surfaces in particular, e. g. tarmac. If the ground is uneven, as on a country path or gravel track, rather low tyre pressure can lead to less rolling resistance. This also increases the risk of a puncture. Please consult your specialist cycle shop about this.

The distance you can travel also decreases if the brakes are rubbing.

- **Battery capacity**

The current battery capacity

➡ *Chapter 7.4.2 "Checking the battery capacity"*

- **Topography**

You pedal harder when riding uphill. This is detected by the power sensor which then allows the motor to work harder.

Under ideal conditions, the range may reach 130 km with the 11 Ah battery and 180 km with the 15 Ah battery.

These ranges have been achieved under the conditions listed below.

IMPULSE BATTERY	11 AH	15 AH
Range	130 km	180 km
Temperature	10 – 15°C	10 – 15°C
Wind speed	windless	windless
Average speed	22 km/h	22 km/h
Assist level	ECO	ECO
Weight	105 – 110 kg	105 – 110 kg

6.3 Riding your Pedelec efficiently

You can monitor and influence the cost of your journeys with the Pedelec yourself. You can reduce your consumption and therefore costs by following the tips for increasing the travel distance.

The operating costs for battery-operated power assist are calculated as follows:

- A new battery costs roughly 599 euros.
- You can cover 80 km on average with one battery charge.
- You can charge the battery roughly 1,100 times.
- 1,100 charging cycles x 80 km = 88,000 km
- 599 euros: 88,000 km = 0.68 euro cents/km
- You use roughly 0.565 kWh to fully charge the battery. Assuming a unit price of 20 euro cents/kWh, it costs you 11.3 euro cents to fully charge the battery.
- It costs you 0.14 euro cents/km to cover the average range of 80 km.
- This means that the maximum cost of consumption and the battery is 0.82 euro cents/km.

The sample calculation has been carried out based on German energy prices. The operating costs may therefore be different in locations where other energy prices apply.

7 Battery

Your battery is a lithium cobalt battery, the ideal type of lithium-ion (Li-ion) battery for this application. One of the main benefits of this type of battery is its low weight combined with a high capacity. Li-ion batteries only weigh half as much as comparable nickel metal hydride or nickel-cadmium batteries. This means you carry less battery weight and more battery power.

7.1 Straightforward charging

- › There is no memory effect. You can therefore fully recharge your battery after every trip.
- › Recharge the battery after every trip. This means you can set off immediately the next time you use your bike and you also increase the service life of the battery.
- › If you are not using the battery, you only have to recharge it after 6 months.

7.1.1 Learning cycle



Once you have fully charged the battery for the first time, you must run it down until the system switches off. This procedure (a so-called “learning cycle”) is necessary so that the battery management recognises the changes in the capacity caused by age and wear and tear, in other words, the performance level of the battery.

Afterwards, the capacity of the battery is calculated anew and correctly represented.

With this procedure, you can prevent a sudden loss of electrical assistance during an extended trip.

7.2 High degree of safety due to battery management

- › The battery cannot be damaged as a result of a short-circuit. If this were to happen, the battery management would switch off the battery.
- › You can simply leave the battery standing in the charger as it has in-built overcharging protection.

7.3 Straightforward storage

- › If you do not need your battery for a while, store it at a temperature of +10°C at three quarters of its full charge capacity.
- › The battery management switches the battery to sleep mode to prevent it from totally discharging. This can occur after different lengths of time without being used. Depending on the charge state of the battery, this can occur earlier with a lower charge and later with a higher charge. At the latest, the management system activates the sleep mode after 10 days without using the battery. The system exits sleep mode when you connect the battery to the charger or press the “Push” button on the battery.

These benefits are available due to highly effective battery management that has been adapted to this specific application and by tuning the battery for operation with a 250 watt motor.



Observe the following points to increase the service life of your Pedelec battery:

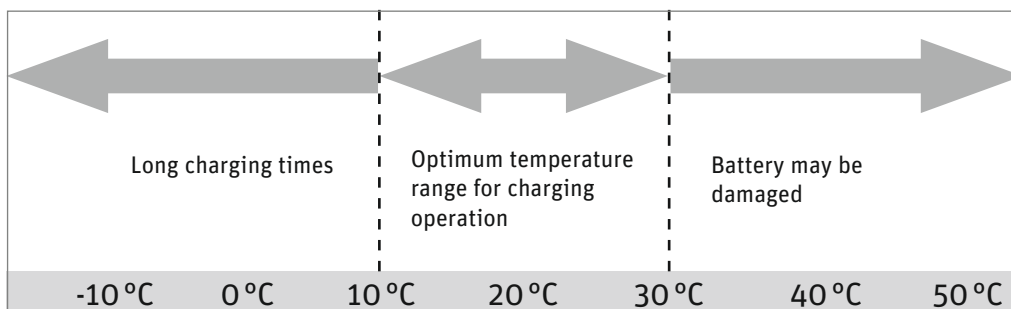
- Make sure that the battery is fully charged before you ride your bike for the first time or if you have not used it for a while.
- You should run the battery all the way down to empty for the first three charging cycles. This allows the battery to reach its maximum capacity.

If you continuously run the battery to empty during normal operation, this reduces its service life.

If you partially recharge the battery frequently during normal operation, this has a favourable effect on its service life.

- You should therefore partially recharge the battery whenever possible: Try not to run the battery all the way down to empty and recharge it even after a short period of operation.
- In the as-delivered condition, the battery is not fully charged and is in what is referred to as sleep mode. Sleep mode minimises the rate at which the battery discharges itself. If the battery is allowed to discharge unchecked for an extended period this can lead to total discharging which damages the battery. To “wake up” the battery, simply place it in the charger for one minute.

- If you are having problems with the battery, place it in the charger for one minute. A reset occurs, during which the battery management disables sleep mode for example. After this, the battery will work again.
- Ideally you should charge the battery at a temperature of between +10°C and +30°C. It takes longer to charge the battery at low temperatures, the battery will not charge up at temperatures higher than +30°C. Ideally, you should charge and store the battery inside your house or in a warm garage when the outside temperature is low. In this case you should only fit the battery on your bike just before using it.
- If you are transporting your Pedelec by car, take the battery out of its holder and transport it separately.
- The battery should ideally be stored for longer periods with a charge of between 50% and 75% at a temperature of +10°C.



Charging times at different temperatures

7.4 Battery information system

There is a display panel on the outer face of the battery which includes five LEDs and a button with an LED (*Push*). When you press the *Push* button, the LEDs light up. Information about the battery and its charge state is provided based on the number of LEDs that light up and the way in which they light up.



Charge state and battery capacity indicator

7.4.1 Checking the battery charge state

Press the *Push* button **briefly**; the LEDs light up and display the current **battery charge state**.

DISPLAY	BATTERY CHARGE STATE
••••• 5 LEDs light up	100 – 84%
•••• 4 LEDs light up	83 – 68%
••• 3 LEDs light up	67 – 51%
•• 2 LEDs light up	50 – 34%
• 1 LED lights up	33 – 17%
○ 1 LED flashes	16 – 0%
○○○○○ 5 LEDs flash quickly	0% or overloaded *
○ 1. LED flashes quickly	Charging fault **

* All 5 LEDs flash quickly: The battery is empty and is being switched off, or is overloaded.

- If the battery is overloaded, it will switch back on after a short idle period and can then be used normally.
- If the battery is empty, it will work once again briefly following a short period of rejuvenation and will then switch back off. It must now be charged.

** The 1st LED flashes quickly: A charging fault is present.

- If this occurs, put the battery in the docking station for a short period of time or insert the plug of the charger into the battery. The charger performs a readjustment. If the LED still flashes, take the battery to your specialist cycle shop and have it checked.

7.4.2 Checking the battery capacity

If you press the “Push” button for **five seconds**, the LEDs show the current **capacity** of the battery.

DISPLAY	CAPACITY
••••• 5 LEDs light up	100 – 97%
•••• 4 LEDs light up	96 – 80%
••• 3 LEDs light up	79 – 60%
•• 2 LEDs light up	59 – 40%
• 1 LED lights up	39 – 20%
○ 1 LED flashes	< 20%

- › The range of the battery is less in winter due to the lower temperatures. Only move the battery (from the warm room where you store it) and fit it on your Pedelec just before you set off. This will help to prevent the effect of the low temperature on the range of the battery. ➔ *Chapter 7.5.2 “Service life and warranty of the battery”*

7.5 Service life and warranty

7.5.1 of the drive

The Impulse centre motor is a durable maintenance-free drive. It is a wear part with a two-year warranty. As its power output is higher, wear parts such as the drive and brakes are subject to higher loads than they would be on a normal bike. Due to the greater force acting on these components, wear is more pronounced.

7.5.2 of the battery

Batteries are wear parts. Wear parts come with a two-year warranty.

If the battery develops a fault during this period, your specialist cycle shop will of course replace it. Normal ageing and battery wear do not constitute a fault.

The service life of the battery depends on different factors. The most important wear-relevant factors are

- the **number of charging processes**

After 1,100 charging cycles, your battery will still have 60% of its initial capacity, providing it has been well looked after. This means 6.6 Ah in an 11 Ah battery and 7.2 Ah in a 15 Ah battery. A charging cycle is defined as the sum of the individual charges until the charges reach the overall capacity of the battery.

For example: You charge the battery with 5 Ah on the first day, 2 Ah on the second day and 4 Ah on the third day; the sum is 11 Ah. The battery has thereby completed one charge cycle.

From the technical standpoint therefore, the battery is exhausted at this point. Providing you can still cover the journey distances with the remaining battery capacity, you can of course continue using it. If the capacity is no longer sufficient, you can take your battery to a specialist cycle shop who will dispose of your battery and sell you a new one.

- the **age** of the battery.

A battery also ages during storage.

A lithium-nickel-cobalt-manganese battery loses approx. 4-5% of its initial capacity per year and a lithium-nickel-cobalt-aluminium-oxygen battery approx 2-3%.

This means: Even if you do not use your battery, its capacity reduces. With everyday use, you can expect the battery to age by approximately 3-5% per year as a result of ageing and charging processes.

- You can extend the service life of the battery by fully recharging it after every journey, however short. The Impulse Li-ion battery has no memory effect.
- You can also extend the service life of the battery by using the assistance selectively.

8 Charger

Read the two type plates on the charger before using it for the first time.

You can charge your Pedelec with Impulse drive directly via a charging socket in the battery. The battery can remain on the Pedelec when the charging operation is in progress.



You can also take the battery out of the holder and charge it in the docking station. This is recommended if it is cold outside, in order to charge the battery in a warm room.



Battery in the docking station



Do not use other chargers. Only charge the battery using the charger provided, or a charger approved by us.

- › If a charging fault occurs, the LED in the charger flashes red. In this case, the charging current is too high.



- › Take the battery out of the charger, then put it back in again.
- › If the error message appears again, the battery and charger must be checked by a specialist dealer.



If used incorrectly, the device may be damaged or inflict injuries.

- › Before cleaning the charger, always pull the plug out of the socket to avoid a short-circuit and/or physical injury.
- › Only use the charger in dry rooms.
- › Only place the charger in a secure stable position on a suitable surface.
- › Do not cover the charger or place any objects on it as otherwise it could overheat and catch fire.

9 Cleaning



Remove the battery before you clean your Pedelec.

We recommend you clean your Pedelec with a damp cloth, a sponge or a brush. You can obtain suitable cleaning agents and additional information from your specialist cycle shop.

Make sure when cleaning that water does not enter the battery. Although the electrical components are sealed, it is not advisable to clean the bike by spraying it with a hose or a high-pressure cleaner. This could damage your bike.

When wiping down the battery, be careful not to touch and connect the contacts on the underside. This could cause the battery to switch off.

10 Warnings



- › Bear in mind that the Pedelec motor can heat up on long ascents. Be careful not to touch it with your hands, feet or legs. You could burn yourself.
- › If you are transporting your Pedelec by car, remove the battery beforehand. Transport the battery in a safe receptacle separately to the Pedelec.
- › The Pedelec operates using low voltage (36 volts). Never attempt to operate the Pedelec using power from a source other than a suitable genuine battery. The designations of approved batteries are listed in ➡ *Chapter 11 "Technical data"*.

- › Live parts may be exposed when you open covers or remove parts. Connection points may also be live. Maintenance or repairs on the device when it is open and connected to the power supply must only be carried out by the specialist cycle shop.
- › When carrying out adjustments and maintenance or when cleaning the Pedelec, avoid crushing cables or damaging them with sharp edges.
- › If risk-free operation of your Pedelec cannot be assumed, take it out of operation and make sure it cannot be used until you have it checked by a specialist cycle shop. Risk-free operation is no longer possible if live parts or the rechargeable battery show signs of damage.
- › Keep children away from electrical appliances. If children are present, keep a close eye on them, especially if there is a possibility they could insert objects into the appliance through apertures in the housing. This poses the danger of fatal electric shock.
- › When charging the battery, make absolutely sure the charger is correctly supported on its four feet. It must not be covered when in operation. It must be possible for the heat produced to dissipate via the surrounding ventilation slots on the top and bottom.

11 Technical data

MOTOR			
Brushless electric motor with gear unit and freewheel			
Output	250 watts		
Maximum torque at chainring	40 Nm		
Gross weight of electric drive, battery, control unit	Freewheel motor		Back-pedal motor
	11 Ah	15 Ah	11 Ah 15 Ah
	6.65 kg	6.75 kg	6.75 kg 6.85 kg
Control	via torque sensor and rotational speed sensor in motor and speed sensor (on rear wheel)		

IMPULSE LI-ION BATTERY		
Capacities	11 Ah	15 Ah
Voltage	36 V	36 V
Weight	2.85 kg	2.95 kg

**We hope you thoroughly enjoy using your new Pedelec
with Impulse drive.**

Copyright © 2013 Derby Cycle Werke GmbH

*Reproduction, in whole or in part, is not permitted without the consent
of Derby Cycle Werke GmbH. Subject to misprints, errors and technical
modifications.*

VI

User Manual Impulse Ergo Pedelec

English



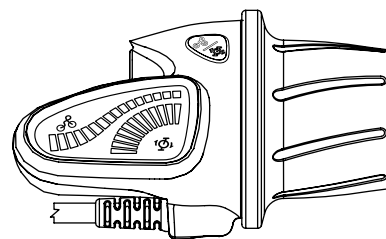


Control panel



2

Display



3

NuVinci Harmony gears



4a

4b

Charger and docking station



6

Chest belt

- 1 Control panel
- 2 Display
- 3 NuVinci Harmony gears
- 4a Charger
- 4b Docking station
- 5a Battery
- 5b Battery lock
- 6 Chest belt
- 7 Motor unit



Dear Customer,

Thank you for choosing the Impulse Ergo Pedelec from our company. This bike is equipped with an electric drive that assists you when you are cycling. This will make your trip much more enjoyable if you are riding up hills, carrying loads or riding into the wind. This bike has all of the functions of the Impulse Pedelec, but has one particularly innovative feature: The **Ergo System**.

With this bike, your heart rate controls the drive when you use the ERGO mode. If your heart rate falls below the preset value, the assistance provided by the drive is automatically reduced. If your heart rate rises above the set value, the assistance provided by the drive increases. This enables an optimal heart rate range to be maintained whilst riding, thus avoiding dangerous peaks in the heart rate and training your endurance.

This system is complemented by NuVinci Harmony gears. If your speed reduces or increases, the gears automatically adjust the gear ratio in automatic mode. This means that you always pedal with the same pedalling cadence irrespective of the speed.



The pedalling cadence describes how many times the pedal crank of your Pedelec revolves in one minute. Experts simply call it cadence.

The purpose of this User Manual is to help you get the most out of your Impulse Ergo Pedelec and use it correctly. Please read the User Manual carefully before riding your bike for the first time!

Structure of the User Manual

If you want to get started right away, refer to the brief introduction in **Chapter 1 “Quick start”**.

The individual steps are subsequently explained in detail, supplemented by illustrations and diagrams.

More detailed information on your Pedelec is provided in **Chapter 11 “Technical data”**.

The information in this User Manual specifically refers to your Pedelec only. For general information, on the bike technology that features in your Pedelec for example, refer to the General User Manual.



- Even if you can't wait to go for your first ride, in the interest of your own safety you should read **Chapter 1 “Quick start”** carefully without fail before use.
- We also strongly recommend reading this manual and the General User Manual in their entirety.

In addition to texts and tables, the User Manual contains the following symbols that denote important information or dangers.



WARNING
regarding possible physical injury, increased risk of falls or other injuries.



IMPORTANT ADDITIONAL INFORMATION
or special information regarding the use of the bike.



NOTE
regarding possible damage to property or the environment.

Warnings



- › Keep children away from electrical appliances. If children are present, keep a close eye on them, especially if there is a possibility they could insert objects into the appliance through apertures in the housing. This poses the danger of fatal electric shock.
- › Bear in mind that the Pedelec motor can heat up on long ascents. Be careful not to touch it with your hands, feet or legs. You could burn yourself.
- › If risk-free operation of your Pedelec cannot be assumed, take it out of operation and make sure it cannot be used until you have it checked by a specialist cycle shop. Risk-free operation is no longer possible if live parts or the rechargeable battery show signs of damage.
- › When carrying out adjustments and maintenance or when cleaning the Pedelec, avoid crushing cables or damaging them with sharp edges.
- › Live parts may be exposed when you open covers or remove parts. Connection points may also be live. Maintenance or repairs on the device when it is open must only be carried out by a professional bike workshop and with the power source removed.
- › If you are transporting your Pedelec by car, remove the battery beforehand. Transport the battery in a suitable transport container separately from the Pedelec. A suitable transport container can be obtained from your specialist cycle shop.
- › The Pedelec operates using low voltage (36 volts). Never attempt to operate the Pedelec using power from a source other than a suitable genuine battery. The designations of approved batteries are listed in ► *Chapter 11 “Technical data”*.
- › When charging the battery, make absolutely sure that the charger is correctly supported. It must not be covered when in operation.
- › When removing the battery from your Pedelec, ensure that it does not fall. This may cause irreparable damage to the battery housing. Information on how to deal with a damaged battery can be found in ► *Chapter 8.7 “Damaged batteries”*.
- › Damaged batteries may not be charged, and further use is not permitted.
- › During the charging process, the battery must be positioned on an even, non-flammable surface. The charger must not be covered.
- › The battery may heat up during charging. A maximum temperature of 45°C may be reached. If the battery becomes any warmer than this, suspend the charging process immediately.

Recommendations

Disclaimer

The contents described hereafter are merely recommendations. Liability claims relating to damage or injury caused by the use or disuse of the information presented therein are strictly excluded. It is imperative that illnesses and other physical disorders are brought to the attention of a physician for diagnosis and treatment. The following information in no way serves as a replacement for medical treatment.

Question: For whom is the Impulse Ergo Pedelec particularly suitable?

The Impulse Ergo Pedelec is particularly suitable for people

- with a low endurance capacity.
- who are unable to ride any faster than 25 km/h for an extended period on a flat stretch.
- with medical conditions who have undergone a medical examination and have been instructed by a physician as to the exercise parameters (heart rate ranges) according to which they should train.

Question: What are the possible goals in heart rate-controlled training?

Possible goals include

- improvement in endurance capacity.
- reduction in body fat.
- increased mobility.

Question: What is the intended field of application of the Impulse Ergo Pedelec?

The intended field of application is

- heart rate-controlled training within the range of a preset target heart rate irrespective of the profile of the route (► Chapter 11 “Technical data”).



If you are unsure, it is imperative that you ask your doctor whether you may use the Impulse Ergo Pedelec.

Question: For which field of application is the Impulse Ergo Pedelec not suitable?

The Impulse Ergo Pedelec is not intended for

- medical rehabilitation (rehab).

Question: When should I terminate training?

Terminate your ride if

- you begin to feel sick, dizzy or in any way unwell.

1 Quick start

1. Charge the battery completely before riding for the first time. Charge temperature: 0°C – 45°C.
2. Swivel the round charging socket cover on the battery to one side.



3. Now insert the four-pole plug of the charger into the battery charging socket.



Charging the battery

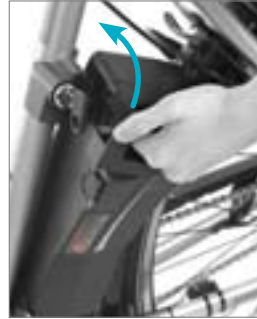
4. Insert the mains plug of the charger into the socket. **You must fully charge the battery before using it for the first time.**



You can also remove the battery from your Pedelec for charging or storage and charge it in the docking station. For more information on this subject, refer to [Chapter 4 “Charging the battery”](#).

5. The charge state of the battery is indicated by five LEDs. The battery LEDs light up or flash during charging. Once all of the LEDs on the battery have gone out, the charging process is complete. Pull the plug of the charger out of the charging socket. Swivel the cover back over the charging socket.

6. If you have charged the battery in the docking station, reinsert the battery into the holder on the Pedelec from the left-hand side. Tilt the battery outwards at an angle of roughly 45° as you do so, as you did when you took it out of the holder. Move the battery into the upright position until the locking mechanism engages.



Installing the battery

If the key is still in the lock, you will need to turn it clockwise and pull it out first as otherwise the battery will not lock in place.



Locking the battery

7. Make sure that the battery is securely positioned and that the key is no longer in the lock.
8. Press the Set button on the control panel. The display comes on.
9. Press the arrow buttons to select the level of assistance: STAND BY (off), ECO (low), SPORT (medium), POWER (high) or ERGO (heart rate-controlled). The assistance changes by one level each time you press the button. This works both ways, depending on which of the arrow buttons you press.
10. You can now ride off just as you would if you were riding a normal bike. The motor starts providing assistance as soon as you begin to pedal.



From the first moment on, you have full assistance. This is unfamiliar but comfortable. Practice starting up in a safe location before venturing into the road traffic.

1.1 Riding in the ERGO power-assist mode

1. Follow steps 1 to 9 in [Chapter 1 "Quick start"](#).
2. Put on the chest belt supplied. Ensure that it does not slip and that the electrodes are always in contact with the skin.



Chest belt



Moisten the reverse of the chest belt with electrode gel or water before putting it on.

3. Navigate to the ERGO power-assist mode using the arrow buttons. The notification "Determine heart rate ..." appears on the display.



As soon as the heart rate is displayed, you can adjust the settings further.



If the display does not detect the chest belt, the prompt "Please put on chest belt" appears.



In this case, please refer to [Chapter 1.2 "Troubleshooting for the ERGO power-assist mode"](#) to find out how to rectify this problem.

4. Now press the Set button for a minimum of four seconds. You are taken to the menu sub-items.
5. Navigate to the menu sub-item "ERGO settings" using the arrow buttons. Press the Set button.



Now you can set both **a. the target heart rate** and **b. the warning heart rate**. Navigate to the desired item using the arrow buttons and press the Set button.



a. Setting the target heart rate:

1. Select your optimal **target heart rate** using the arrow buttons.
2. Press the Set button.



Observe the following points to determine your optimal target heart rate:

- › If necessary, you should undergo a sports-medical exercise test on a bicycle ergometer in order to determine your performance level and physical condition (ask your health insurance provider whether they will bear the cost of such a test).
- › If no data from sports-medical tests is available, then you should use the following table as a guide:

AGE	TARGET HEART RATE	AGE	TARGET HEART RATE
20	125	55	110
25	123	60	107
30	121	65	105
35	119	70	103
40	116	75	100
45	114	80	98
50	112	85	96

Heart rates differ from person to person. Variations occur as a result of illness (such as functional disorders of the thyroid gland), for example, or the intake of bradycardia- or tachycardia-inducing medication (such as digitalis, calcium antagonists or beta blockers).

b. Setting the warning heart rate:

1. Select your optimal **warning heart rate** using the arrow buttons.
2. Press the Set button.



With a target heart rate in the range of the basic endurance, a warning heart rate of 10 beats (target heart rate + 10) is recommended. This means: If the target heart rate is exceeded by 10 beats, an acoustic warning signal sounds immediately, which repeats every six seconds. If the target heart rate is exceeded by 15 beats, two acoustic warning signals sound, which repeat every five seconds. If the target heart rate is exceeded by a minimum of 20 beats, three acoustic warning signals sound, which repeat every four seconds.

6. Once you have set the target and warning heart rates, you can navigate to the item “Back” using the arrow buttons.



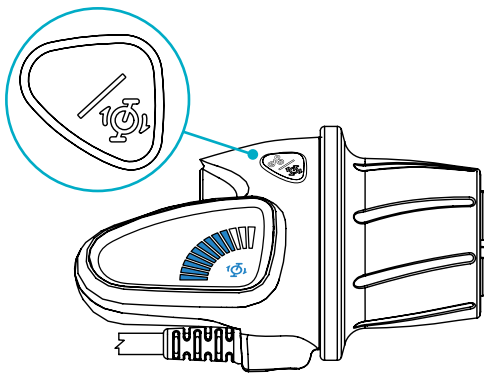
- Pressing the Set button will take you back to the menu sub-items.



- Now you can adjust the settings further under the other menu sub-items (see Chapter 5.2 “Setting and programming the display”) or navigate to the item “Back” using the arrow buttons.

Pressing the Set button takes you back to the main menu.

- Now switch your NuVinci Harmony gears to automatic mode. As soon as you move the twist-grip shifter, the gears switch on. Press the motor symbol on the mode button.



Automatic selection of the pedalling cadence



In order to effectively maintain a steady heart rate whilst riding, we recommend the automatic mode. Because as soon as you start to ride in manual mode, you have to shift gear manually to ensure that you do not exceed your target heart rate.

- Set the desired pedalling cadence using the twist-grip shifter. The further forward you move the twist-grip shifter, the faster the pedalling cadence becomes. The number of boxes lit up in blue increases. The further back you move the twist-grip shifter, the slower the pedalling cadence becomes. The number of boxes lit up in blue decreases. Once you have found your ideal pedalling cadence, you can ride without even having to change gear once. The automatic mode adapts the gear ratio to the pedalling cadence you have set.



When the bike is stationary, you cannot switch from minimum to maximum pedalling cadence, or vice versa. You can only do this whilst riding.

- You can now ride off just as you would if you were riding a normal bike. The motor starts providing assistance as soon as you begin to pedal.



From the first moment on, you have full assistance. This is unfamiliar but comfortable. Practice starting up in a safe location before venturing into the road traffic.



- As you begin your ride, it is highly probable that your actual heart rate is below your target heart rate. You receive very little assistance from the drive or none at all. You move your Pedelec either totally or almost exclusively by means of your own effort. As a result, your heart rate rises and you keep moving closer to your target heart rate. If you have reached your target heart rate or even exceeded it, the motor provides assistance according to the riding situation. You can call up the output delivered by your motor in the information area see Chapter 5.1 “Basic functions”.



- Riding steadily for extended periods allows the ERGO system to learn how you handle the bike and adapt better to your own personal handling style and the behaviour of your heart rate. It may take some time to do so and the system must “learn” these behaviours all over again if the ERGO settings are readjusted.
- If you have run the battery all the way down to empty, the system switches off completely. When this occurs, the NuVinci Harmony gears no longer function either. After five minutes, the battery will have recovered and you can switch the system back on again. The display functions once more. From now on, please only ride in the mode “no assistance/stand by”. At this point you can also operate the gears once more. In this way, you can ride for another hour until the battery finally switches off. Attention: The battery

switches off as soon as you begin to ride using the power-assist mode once more.

Observe the following points to avoid major short-term variations in your heart rate:

- Pedal evenly with a constant level of effort.
- If you come to a hill, do not try to maintain the same speed. But do try to maintain the same level of physical effort. Of course, your speed decreases as the incline becomes steeper
- Do not sprint when riding.

1.2 Troubleshooting for the ERGO power-assist mode

TEXT	CAUSE	SOLUTION
“Please put on chest belt” permanently shown on display	The chest belt is too loose	<ul style="list-style-type: none"> • Tighten the chest belt.
	The battery of the chest belt is empty	<ul style="list-style-type: none"> • Change the battery. To do so, unscrew the battery cover on the reverse of the chest belt using a coin and exchange the battery beneath the cover for an appropriate replacement battery ensuring that the polarity is not reversed.
	There is no layer of moisture between the skin and the electrodes.	<ul style="list-style-type: none"> • Moisten the chest belt with electrode gel or water before putting it on.
	The chest belt is dirty	<ul style="list-style-type: none"> • Clean the chest belt with lukewarm water and a mild soap solution.
“Determine heart rate ...” permanently shown on display	Electromagnetic disturbance (high-voltage power lines, traffic lights, MP3 players, overhead cables, mobile phones, other training devices)	<ul style="list-style-type: none"> • Stay away from possible sources of disturbance. • First switch the Impulse ERGO Pedelec off, and then on again.

2 Legal principles

The essential idea behind the Pedelec is not only to be able to cover greater distances more quickly, but also more comfortably. You can choose to relax and let the bike do the work, exert yourself more physically, or simply get from A to B as fast as possible. You can decide this yourself by choosing an appropriate power-assist mode.

This gives you more confidence on the road, as the powerful acceleration gives you more control and a greater degree of security. Your Pedelec assists you with an output that adapts to your pedalling force up to roughly 25 km/h.

The Pedelec, like all other bikes, must comply with the national regulations for road safety. Please observe the relevant explanations and general information provided in the General User Manual.

These statutory requirements apply for a Pedelec:

- The motor is designed only to provide pedalling assistance, i.e. it can only “assist” the rider when he/she turns the pedals.
- The average motor output must not exceed 250 W.
- As the speed increases, the rate at which the motor output reduces must also increase more intensely.
- The motor must switch off once the bike reaches a speed of 25 km/h.

2.1 Meaning for the rider

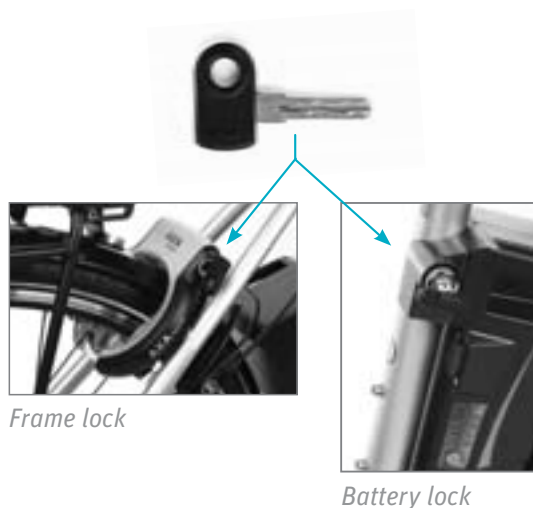
- You do not legally have to wear a helmet. In the interest of your own safety, however, you should never ride without a helmet.
- You do not legally have to have a driving licence.
- You do not legally have to have insurance.
- No age restriction applies for a Pedelec.
- The regulations governing the use of cycle paths are the same as for normal bikes.

These regulations apply to you wherever you are in the European Union. It is possible that different regulations exist in other countries, also inside the EU in individual cases. Before using your Pedelec abroad, find out about the legal situation in the relevant country.

3 Special features of the Pedelec with Impulse drive

Your Pedelec is equipped with special features that are designed to enhance your safety and comfort:

- A central display in the middle of the handlebar to facilitate easy reading.
- The control panel can be reached easily and safely. It can be mounted on the left-hand side.
- Charging the battery on the bike and separately.
- With the Impulse drive, the amount of assistance can be increased by selecting easier gears, when starting or riding uphill for example. The motor produces more power when your pedalling cadence is higher.
- You can conveniently use the same key to lock/unlock your battery and, where present, your frame lock.



- You can decide how you wish to put in your effort:

In the three highest gears, you can ride up to a maximum speed of 25 km/h assisted by the motor. You can, for example, go for a relaxed ride on flat land with a low pedalling cadence. However, you can also ride uphill using an easier gear and less energy, simply by making the most of the highest assisted speed. You should therefore either turn the pedals with a low pedalling cadence and more effort or turn them with a higher pedalling cadence and less effort.

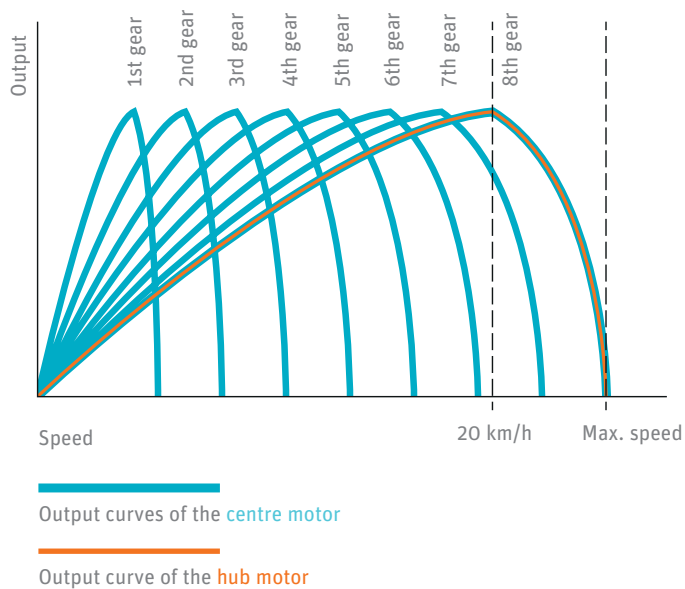
Of course, this only applies in the manual mode of the NuVinci Harmony hub and is not recommended in the ERGO mode.

GEAR	IMPULSE DRIVE			OTHER CENTRE MOTOR		
	CRANK REVOLUTIONS / MIN.	SPEED (KM/H)	MOTOR SPEED	CRANK REVOLUTIONS / MIN.	SPEED (KM/H)	MOTOR SPEED
1	86	12	4,300	71	8	3,000
2	86	13	4,300	71	10	3,000
3	86	15	4,300	71	12	3,000
4	86	19	4,300	71	13	3,000
5	86	22	4,300	71	16	3,000
6	85	25	4,200	71	19	3,000
7	73	25	3,650	71	22	3,000
8	64	25	3,200	71	25	3,000

The data provided is an example for the function of the assistance. The data may vary depending on the model.

Function of the assistance

- In contrast to a hub motor, the Impulse centre motor drive always allows you to ride within the motor range that saves the most power or, if required, the range in which the highest output is available.



Output curves

4 Charging the battery



- › You can charge the battery whilst it is on the Pedelec (→ Chapter 1 “Quick start”).



- › You can also take the battery out of the holder and charge it in the docking station. This is recommended if it is cold outside, in order to charge the battery in a warmer room. The battery can be charged at temperatures between 0°C and 45°C.



4.1 Removing the battery

1. Grip the battery by the handle, insert the key into the lock and turn it anticlockwise. Now the battery is unlocked.



Unlocking the battery

2. Tilt the battery sideways out of the Pedelec. Place the battery down on a suitable surface. This should be dry, even and non-flammable. In doing so, hold on tight to the battery to avoid dropping it.



Tilt when removing

3. You should now remove the key and keep it in a safe place to prevent it from breaking off or being lost.

4.2 Learning cycle



After fully charging the battery for the first time and thereafter roughly once every six months, you must run the battery down until the system switches off. This procedure (a so-called “learning cycle”) is necessary so that the battery management recognises the changes in the capacity caused by age and wear and tear, in other words, the performance level of the battery. Afterwards, the capacity of the battery is calculated anew and correctly represented. This also allows the remaining distance display to function with greater precision. With this procedure, you can prevent a sudden loss of electrical assistance during an extended trip.

4.3 Charging operation



Before charging the battery, read the information on the charger carefully.

1. Take the charger provided and the docking station out of their packaging and plug the mains plug into a socket (110-230 V, please observe the type plate on the charger).



Type plates on charger and docking station

2. To charge the battery safely, the charger must be placed on a dry, non-flammable surface resting on its four feet and with the LED facing upwards. Do not cover the charger. This is the only way to ensure that the

hot air around the battery warmed during the charging operation can dissipate via the surrounding ventilation slots.

3. Connect the plug of the charger to the docking station. The LED in the charger now lights up briefly in red and then permanently in green.
4. Put the battery in the charger. The battery and charger are connected. The LED in the charger lights up in green.



Battery in the docking station

5. The charging process begins. The LED of the charger lights up in green. The battery LEDs light up one by one to indicate the progress of the charging operation. The battery is charged in five stages. When charging of one stage is in progress, the corresponding LED flashes. If this stage has been fully charged, the LED will light up permanently. Now the next LED will begin to flash. After all five LEDs have gone out, the battery is fully charged.
6. If the LED on the charger flashes red permanently, a charging fault has developed. In that case, disconnect the battery from the charger, then connect it again. The charger tests the battery and performs readjustments, if required. If the LED on the charger still flashes, take the charger and battery to your specialist dealer who will test the device and replace it, if required.



Charging fault

7. To save power, pull the charger plug out of the socket once the charging operation is complete.



- › Damaged batteries may not be charged, and further use is not permitted.
- › The battery may heat up during charging. A maximum temperature of 45°C may be reached. If the battery becomes any warmer than this, suspend the charging process immediately.

4.4 Fitting the battery

1. Insert the battery into the battery holder of the Pedelec from the left by tilting it outwards at roughly 45°. In doing so, make sure that the lateral guides at the bottom of the battery are also inserted into the guides in the holder.



Reinstalling the battery

2. Tilt the battery towards the bike until it engages in the locking mechanism. If the key is still in the lock, turn it clockwise then pull it out to lock the battery in place.
3. Make sure the battery is firmly in place.

5 Control panel and display

5.1 Basic functions

Control panel



- 1 Upper arrow button
(more powerful assistance)
- 2 Set button
- 3 Lower arrow button
(less powerful assistance)
- 4 Pushing assistance
- 5 Power button

- On the left, you will find the **1** upper and **3** lower arrow buttons. The buttons have different functions depending on the item of the settings menu at which you are located.
- Between the arrow buttons is the **2** Set button. It can be used to request a variety of displays.
- The **4** pushing assistance is located at the top on the right. This moves the Pedelec slowly (at a maximum speed of 6 km/h) without you having to turn the pedals.
- The **5** power button is located at the bottom on the right. This can be used to turn the system on and off again.

Display



- 1 Speed
- 2 Power-assist mode
- 3 Battery charge state
- 4 Remaining range indicator
- 5 Information area

The display in the middle of the handlebar is divided into five different display panels:

- At the top on the left is your current **1** speed.
- To the right of the current speed is a display showing the selected **2** power-assist mode.
- At the top on the right is the **3** battery symbol which tells you the current charge status of your Pedelec's battery.
- Below this, in the **4** remaining range indicator, you can see the remaining distance over which you will still receive assistance from the current battery charge.
- Along the bottom section of the display is a long information area that can be used to display the following information:
 - How much of its potential output the motor is currently delivering.
 - The costs that have been incurred in the course of the current trip and during the Pedelec's entire service life.
 - The saving achieved in both euros and CO₂ in comparison with the same journey by car.
 - The total number of kilometres covered by this system.
 - Display of kilometres covered during the day and overall.
 - Display of journey time during the current trip and the top speed reached on this trip.
 - The average speed during the current trip and the total distance covered.

5.1.1 Switching on/off

Press the power button to switch the Impulse system on. After switching on, the system is always in the display mode in which you switched it off.



If you cannot feel any assistance, simply back-pedal briefly and then pedal forwards again to trigger the system check. If there is still no assistance being delivered, the instruction "Please move the pedals" will continue to be displayed. In this case you should consult a specialist dealer.

In order to switch your Pedelec off again, press the power button on the control panel.

5.1.2 Pushing assistance



The pushing assistance moves the Pedelec slowly (at a maximum speed of 6 km/h) without you having to turn the pedals, e.g. if you are manoeuvring in a tight space or are pushing your Pedelec out of a basement garage.



The pushing assistance is not suitable for use as starting assistance.

5.1.3 Buttons for power-assist level

- You can specify the power-assist level using the arrow buttons.
- Each time you press an arrow button, the power assist changes by one level.
- If you press the upper arrow button, the level of assistance increases by one level each time you press it.
- If you press the lower arrow button, the assistance becomes weaker each time you press it.

5.1.4 Display of the power-assist mode

The display shows you how much assistance the motor is currently providing:

DISPLAY	ASSIST LEVEL
<div style="background-color: black; color: white; padding: 2px; margin-bottom: 2px;">ERGO</div> <div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">POWER</div> <div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">SPORT</div> <div style="background-color: #ccc; padding: 2px;">ECO</div>	ERGO: The level of assistance depends on your heart rate.
<div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">ERGO</div> <div style="background-color: black; color: white; padding: 2px; margin-bottom: 2px;">POWER</div> <div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">SPORT</div> <div style="background-color: #ccc; padding: 2px;">ECO</div>	POWER: This means the assistance is working hard.
<div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">ERGO</div> <div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">POWER</div> <div style="background-color: black; color: white; padding: 2px; margin-bottom: 2px;">SPORT</div> <div style="background-color: #ccc; padding: 2px;">ECO</div>	SPORT: This means the assistance is working with a medium level of effort.
<div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">ERGO</div> <div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">POWER</div> <div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">SPORT</div> <div style="background-color: black; color: white; padding: 2px;">ECO</div>	ECO: This means the assistance is only working with a low level of effort.
<div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">ERGO</div> <div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">POWER</div> <div style="background-color: #ccc; padding: 2px; margin-bottom: 2px;">SPORT</div> <div style="background-color: #ccc; padding: 2px;">ECO</div>	STANDBY: Battery indicator still lights up (

Power-assist mode

5.1.5 Battery charge state indicator

The battery charge state indicator is located at the top on the right of the display. Using a stylised battery divided into segments, it shows the charge remaining in the battery. The lower the charge state of the battery is, the fewer segments are displayed:

DISPLAY	BATTERY CHARGE STATE
	100-85.5%
	85.5-71.5%
	71.5-57.5%
	57.5-42.4%
	42.5-28.5%
	28.5-14.5%

Charge state indicator

If the battery charge state falls below a minimum level, the assistance switches off via the motor.

If you do not move your Pedelec for 10 minutes, the system switches off automatically. If you subsequently want to ride using the assistance, you will have to switch it back on using the power button.

5.1.6 Remaining range indicator

Below and to the right of the battery charge state indicator, the distance in km over which you can still travel with power assist is displayed. This is the remaining range indicator.



This “remaining distance” is calculated using two measurements taken during the current journey. One short and one long measurement give a representative average value. If the conditions of the journey change, for example, by riding up an incline after a long, flat stretch, the value displayed can also change at short notice. Please consider this factor when planning your trips. You are probably familiar with this effect from the remaining range indicator of your car.

5.1.7 Troubleshooting



If your bike has been exposed to wet conditions for an extended period, e.g. after a trip in heavy rain, or if there have been large differences in temperature, the screen of the display may steam up. This moisture does not impair the function of the display. It is comparable with the steam on a pair of glasses when you enter a warmer room having been outside. After a short time in drier and warmer conditions, this condensation will vanish leaving no trace.

5.2 Setting and programming the display

You can switch between the various displays within the information area (also referred to as the “main menu”) by pressing the Set button.

Pressing and holding the Set button will take you from any display in the information area to the menu sub-items:

- Delete trip data
- Delete overall data
- Device settings
- Target cost
- ERGO settings
- Back

TEXT	CAUSE	SOLUTION
“Speed sensor signal missing”	Spoke magnet has slipped out of position	<ul style="list-style-type: none"> • Make sure the spoke magnet has not slipped. It should be as close as possible to the sensor on the chain stay (max. 5 mm clearance). <p>1 Spoke magnet 2 Sensor on chain stay</p>
	Speed sensor defective	<ul style="list-style-type: none"> • Please contact your specialist cycle shop.
	Cable connection defective	<ul style="list-style-type: none"> • Please contact your specialist cycle shop.
“Battery communication error”	No connection between motor unit and battery	<ol style="list-style-type: none"> Connect the battery to the charger. Use a different battery. Have your specialist cycle shop check the control cable that runs from the battery plug to the motor unit.
“Motor temperature is too high”	The motor has become too hot, e.g. as a result of a long, steep incline ridden in a high gear.	<ul style="list-style-type: none"> • Allow your system to cool down before resuming your journey.
“Battery temperature is too high”	The battery has become too hot.	<ul style="list-style-type: none"> • Allow the battery to cool down for a while by not riding or by riding without assistance. If necessary, place the battery in the charger for a minute.

You can select the menu sub-items using the two arrow buttons on the control panel. You can confirm your selection by pressing the Set button. The respective contents are then displayed for you. In order to return to the information area/main menu display from the menu sub-items, you must select the menu item “Back” and confirm by pressing the Set button.

5.2.1 Delete trip data / Delete overall data

Under the menu sub-items “Delete trip data” and “Delete overall data”, you can delete the kilometres indicated for the current day trip and the total kilometres covered. If you wish to do so, select the option “Yes” using the arrow buttons on the control panel and then press the Set button to confirm your selection. Then you will be taken back to the menu sub-item display once more. If you select and confirm the option “No”, the information remains in place and you are, likewise, taken back to the menu sub-item display.

5.2.2 Device settings

Under the menu sub-item “Device settings”, you can change the following settings:

- Contrast
- Brightness
- Language
- Wheel circumference
- Unit
- Name
- Factory settings
- Software
- Back

Using the two arrow buttons on the control panel, you can select the sub-items and confirm by pressing the Set button. The menu item “Back” will take you back to the information area/main menu.

5.2.2.1 Contrast

You can leave the contrast of the display at its preset level or adjust it in 5% steps to between -35% and +20% by pressing the two arrow buttons. The change in contrast is implemented immediately. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.2.2.2 Brightness

You can leave the brightness of the display at its preset level or adjust it in 5% steps to between 0% and 50% by pressing the two arrow buttons. The change in brightness is implemented immediately. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.2.2.3 Language

You can choose to have the information shown on the display in the following languages:

- Deutsch
- English
- Français
- Nederlands
- Español
- Italiano
- Suomi
- Dansk

You can select the relevant language using the two arrow buttons. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.2.2.4 Wheel circumference

Pressing the Set button will take you to the section for adjusting the wheel circumference. This can be set to any value between 1510 mm and 2330 mm by pressing the two arrow buttons on the control panel. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.



A change to the setting becomes necessary, for example, when you have the tyres on your Pedelec exchanged for some of a different size. In order to continue to display the correct data, the new wheel circumference must be entered.

5.2.2.5 Unit

Under the sub-item “Unit”, you can choose whether information relating to distance travelled and speed is displayed in kilometres (km) or miles (mi). Using the arrow buttons on the control panel, select the option “km” or “mi”. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.2.2.6 Name

Under the sub-item “Name”, you can enter a name or some text with a maximum of 21 characters which will be displayed when the display is turned on or off.

- To **write**, select one letter at a time from the alphabet displayed using the arrow buttons and confirm your selection by pressing the Set button. The letter then appears in the text line above the row of letters. At the end of the row of letters, you can select a hyphen or an underscore and confirm by pressing the Set button.
- **Errors** can be corrected by selecting the right-hand arrow and pressing the Set button. You can only delete one letter each time.
- You can switch between **lower case and capital letters** by selecting “abc ... / ABC ...” on the right of the display panel and pressing the Set button to confirm. The letters then immediately appear as lower case or capital letters.
- The **use of spaces is not possible** and **underscores** must be used in their place.
- By selecting “OK” using the two arrow buttons on the control panel and confirming using the Set button, your entry is accepted and you are then taken back to the menu sub-item display.

5.2.2.7 Factory settings

Under the sub-item “Factory settings”, you are asked whether you want to restore the settings which were pre-set upon leaving the factory. If you wish to do so, select the option “Yes” using the arrow buttons on the control panel and then press the Set button to confirm your selection. Then you will be taken back to the menu sub-item display once more. If you select and confirm the option “No”, the amended specifications remain in effect and you are, likewise, taken to the menu sub-item display once more.

5.2.2.8 Software

Via the sub-item “Software” you can access the sub-items “Version” and “Update”, which can be selected using the arrow buttons on the control panel.

- Pressing the Set button takes you to the respective sub-item.
- By selecting the sub-item “Back” and pressing the Set button to confirm, you are taken to the menu sub-item display once more.
- The version of the motor software which is currently installed is displayed under the item “Version”. By pressing the Set button once again, you are taken back to the menu sub-item display.

5.2.3 Target cost

Via the menu sub-item “Target cost”, you can access the sub-items:

- Fuel price
- Power cost
- Fuel consumption
- Fuel type

You can select the sub-items using the two arrow buttons on the control panel. Pressing the Set button takes you to the respective sub-item. By selecting the sub-item “Back” and pressing the Set button to confirm, you are taken to the menu sub-item display once more.

5.2.3.1 Fuel price

Under the sub-item “Fuel price”, you can specify the price of the fuels petrol or diesel in euros (EUR) and cents (ct). You can set this to a value in euros between 0 and 9 euros and a value in cents between 0 and 99 cents by using the two arrow buttons on the control panel to move in 1 euro- and 1 cent-steps respectively. Once you have confirmed both values by pressing the Set button, you are taken back to the menu sub-item display.

The price information is necessary to enable calculation of the money and CO₂ saved in comparison with the use of a car. This is displayed in the main menu of the information area under “Overall system savings”.

5.2.3.2 Electricity costs

Under the sub-item “Power cost”, you can specify the price of electricity in cents (ct). You can set this to a value of between 0 and 99 cents by using the two arrow buttons on the control panel to move in 1 cent steps. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

5.2.3.3 Fuel consumption

You can enter the average fuel consumption which would arise from the use of a car. You can set the consumption in half-litre steps to between 0 and 20 litres. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

The information regarding the average consumption is necessary to enable calculation of the money and CO₂ saved in comparison with the use of a car. This is displayed in the main menu of the information area under “Overall system savings”.

5.2.3.4 Fuel type

Under the sub-item “Fuel type”, you can choose between the options “Petrol” and “Diesel” by pressing the arrow buttons on the control panel. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.

The information regarding fuel type is necessary to enable calculation of the money and CO₂ saved in comparison with the use of a car. This is displayed in the main menu of the information area under “Overall system savings”.

5.2.4 ERGO settings

Via the menu sub-item “ERGO settings”, you can access the sub-items:

- Target heart rate
- Warning heart rate
- Back

You can select the sub-items using the arrow buttons on the control panel. Pressing the Set button takes you to the respective sub-item. By selecting the sub-item “Back” and pressing the Set button to confirm, you are taken to the menu sub-item display once more.

5.2.4.1 Target heart rate

Under the sub-item “Target heart rate”, you can set your optimal target heart rate. This can be set to a value of between 40 and 240 by pressing the two arrow buttons on the control panel. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.



Observe the following points to determine your optimal target heart rate:

- If necessary, you should undergo a sports-medical exercise test on a bicycle ergometer in order to determine your performance level and physical condition.
- If no data from sports-medical tests is available, you should use the following table as a guide:

AGE	TARGET HEART RATE	AGE	TARGET HEART RATE
20	125	55	110
25	123	60	107
30	121	65	105
35	119	70	103
40	116	75	100
45	114	80	98
50	112	85	96

Heart rates differ from person to person. Variations occur as a result of illness (such as functional disorders of the thyroid gland), for example, or the intake of bradycardia- or tachycardia-inducing medication (such as digitalis, calcium antagonists or beta blockers).

5.2.4.2 Warning heart rate

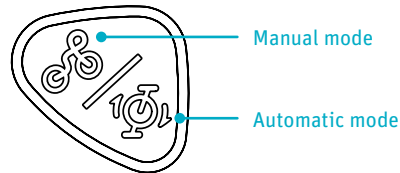
Under the sub-item “Warning heart rate”, you can set your optimal warning heart rate. You can set this to a value of between “Target heart rate + 5” and “Target heart rate + 20” by using the two arrow buttons on the control panel. Pressing the Set button confirms your selection and then takes you back to the menu sub-item display.



With a target heart rate in the range of the basic endurance, a warning heart rate of 10 beats (target heart rate + 10) is recommended. This means: If the target heart rate is exceeded by 10 beats, an acoustic warning signal sounds immediately, which repeats every six seconds. If the target heart rate is exceeded by 15 beats, two acoustic warning signals sound, which repeat every five seconds. If the target heart rate is exceeded by a minimum of 20 beats, three acoustic warning signals sound, which repeat every four seconds.

6 NuVinci Harmony gears

As soon as you operate the twist-grip shifter or start riding, the NuVinci Harmony gears switch on. Now decide whether you prefer manual or automatic operation of the NuVinci Harmony gears. Press the mode button to switch to the desired mode.



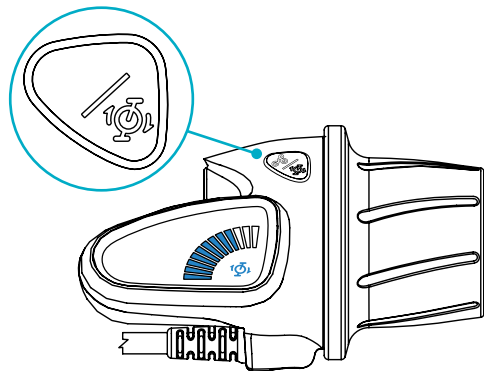
Mode buttons



We recommend the automatic mode for riding in the ERGO power-assist mode. Because as soon as you start to ride in manual mode, you have to shift gear manually to ensure that you do not exceed your target heart rate.

6.1 Automatic mode

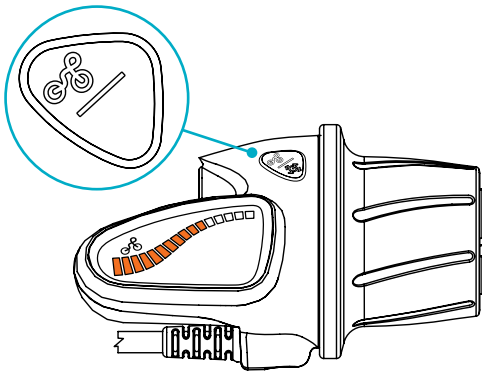
Set the desired pedalling cadence using the twist-grip shifter. You can choose between 12 different pedalling cadences. The further forward you move the twist-grip shifter, the faster the pedalling cadence becomes. The number of boxes lit up in blue increases. The further back you move the twist-grip shifter, the slower the pedalling cadence becomes. The number of boxes lit up in blue decreases. The blue LEDs indicate the exact setting. Once you have found your ideal pedalling cadence, you can ride without even having to change gear once. The automatic mode adapts the gear ratio to the rider's preferred pedalling cadence.



Automatic selection of the pedalling cadence

6.2 Manual mode

Set the desired pedalling cadence using the twist-grip shifter. You can choose between 12 different pedalling cadences. The further forward you move the twist-grip shifter, the faster the pedalling cadence becomes. The number of boxes lit up in orange increases. The further back you move the twist-grip shifter, the slower the pedalling cadence becomes. The number of boxes lit up in orange decreases. The orange LEDs indicate the exact setting.



Manual selection of the pedalling cadence



You cannot shift through the entire gear ratio range of the NuVinci Harmony gears when the bike is stationary. If you shift between gear ratios with a large differential when the bike is stationary, the Harmony system will wait for the pedals or the bike to move.

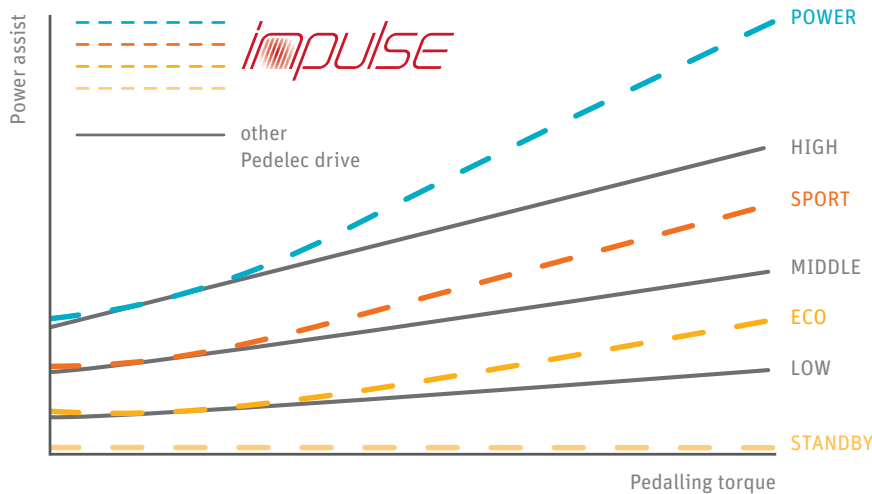
6.3 Troubleshooting

TEXT	CAUSE	SOLUTION
The pedalling cadence no longer adjusts itself correctly	Extraneous radiation or battery was not connected for an extended period of time	<ul style="list-style-type: none">Ride slowly and hold down the mode button on the NuVinci Harmony gears for between five and seven seconds.

7 Assistance by the electric motor

7.1 Operating principle of assistance

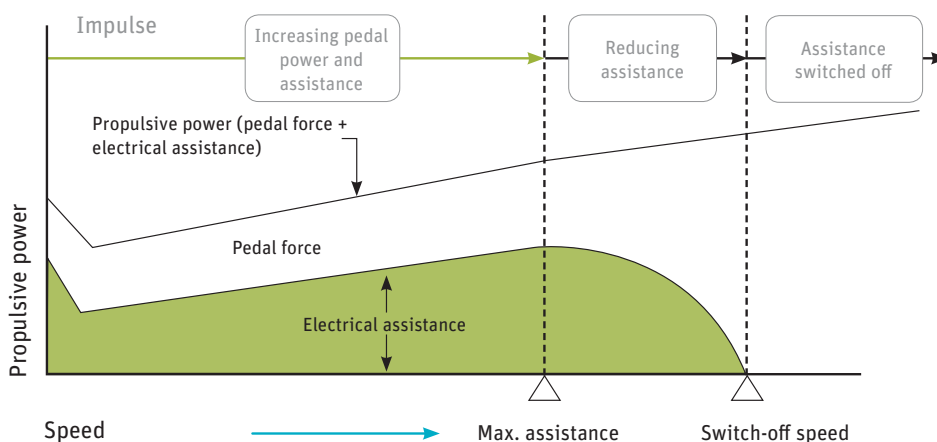
If you switch on the assistance and start pedalling, the motor starts as soon as the rear wheel is turning.



Assistance provided by the Impulse motor comparison

The thrust delivered by the motor depends on three factors:

- Your own pedalling effort.**
 The motor adapts to the force you apply. If you pedal harder, e.g. uphill or when setting off, the power sensor detects this and delivers more power than if you were only pedalling gently. The assistance increases proportionally if you pedal harder. This increase is more pronounced in the POWER mode than in the SPORT and ECO modes. The thrust is limited by the maximum motor output.



Relationship between pedal force and electrical assistance

- The level of assistance you have selected.**
 In the power-assist mode POWER, the motor assists you with the highest output and therefore also uses the most energy. If you ride in the SPORT mode, the motor produces slightly less power. If you have selected ECO, you receive the least amount of assistance but have the battery's maximum range at your disposal.

- How fast you ride.**
 When you set off on your Pedelec, the assistance increases as you build up speed until it reaches its maximum, just before the highest assisted speed is achieved. The assistance then reduces automatically and switches off at roughly 25 km/h, irrespective of the gear you are in. Depending on the power-assist mode you are riding in, the transition between riding with and without power assist may seem more or less abrupt. This applies for the three highest gears. In all other gears, the motor switches off earlier, depending on the gear ratio. **Chapter 3 "Special features of the Pedelec with Impulse drive"** contains a table which shows the speeds at which the motor is switched off.

7.2 Power-assist modes

You can choose between the power-assist modes ERGO, POWER, SPORT and ECO (➡ Chapter 5.1.4 “Display of the power-assist mode”).

In the power-assist mode ERGO, the assistance provided depends on your heart rate.

In the power-assist modes POWER and SPORT, the assistance works with a high or medium level of effort. Of course, the range is reduced as a consequence.

The ECO mode provides you with harmonic, gentle assistance and a long range. It is advisable for beginners or inexperienced riders to start with this mode.



If you wish to make any further adjustments to the ride characteristics of your bike, please consult your specialist cycle shop.

7.3 Range

The distance you can travel using the power assist with the battery fully charged depends on several factors:

- **Selected assist level**
If you want to cover a large distance with power assist, select the smaller gears, i.e. the ones that are easier to pedal. Also select a low assist level (ECO).
- **Handling**
If you are riding in gears that are harder to pedal and select a high assist level, the motor will produce plenty of power to help you along. However, just as with driving a car at high speed, this leads to higher consumption. You will therefore have to recharge the battery sooner. You can conserve energy by keeping the load on the pedals even throughout the entire crank revolution.
- **Ambient temperature**
If it is colder, you will travel a shorter distance with the same battery charge.

To maximise the distance you can travel, keep the battery in a heated room so that it is at room temperature when you fit it on your Pedelec.

As the battery discharges when the motor is in use, it generates enough heat to not lose too much of

its power at low ambient temperatures. The battery cells can discharge at temperatures of -15 to +60°C. This is also the temperature range within which you can use your battery.

- **Technical condition of your Pedelec**
Make sure the tyre pressure is correct. If you ride your bike with too little air in the tyres, this can significantly increase the rolling resistance. This applies to smooth surfaces in particular, e.g. tarmac. If the ground is uneven, as on a country path or gravel track, a somewhat reduced tyre pressure can lead to less rolling resistance. This also increases the risk of a puncture. Please consult your specialist cycle shop about this. The distance you can travel also decreases if the brakes are rubbing.
- **Battery capacity**
The current battery capacity (➡ Chapter 8.4.2 “Checking the battery capacity”).
- **Topography**
You pedal harder when riding uphill. This is detected by the power sensor which then allows the motor to work harder.

Under ideal conditions, the range may reach 120 km with the 11 Ah battery and 205 km with the 17 Ah battery. These ranges have been achieved under the conditions listed below.

IMPULSE BATTERY	11 Ah	15 Ah	17 Ah
Range	120 km	180 km	205 km
Temperature	10-15°C		
Wind speed	windless		
Average speed	22 km/h		
Assist level	ECO (lowest assist level)		
Weight	105-110 kg		

7.4 Riding your Pedelec efficiently

You can monitor and influence the cost of your journeys with the Pedelec yourself. You can reduce your consumption and therefore costs by following the tips for increasing the range.

The operating costs for power assist with an 11 Ah battery are calculated as follows:

- A new battery costs roughly 599 euros.
- Throughout the total service life of a battery, you can cover 80 kilometres with one charge cycle on average.
- You can charge the battery roughly 1,100 times.
- $1,100 \text{ charging cycles} \times 80 \text{ km} = 88,000 \text{ km}$
- $599 \text{ euros} : 88,000 \text{ km} = 0.68 \text{ euro cents per kilometre}$.
- You use roughly 0.565 kWh to fully charge the battery. Assuming a unit price of 23.5 euro cents per kWh, it costs you 13.27 euro cents to fully charge the battery.
- To cover the average range of 80 kilometres, it costs you 67.67 euro cents.
- This means the cost of consumption and the battery is a maximum of 0.85 euro cents/km.

The sample calculation has been carried out based on German energy prices. The operating costs may vary depending on the energy prices you pay.

8 Battery

Your battery is a lithium-ion battery, the ideal type of battery for this application.

One of the main benefits of this battery is its low weight combined with a high capacity.

8.1 Straightforward charging



- Damaged batteries can not be charged, and further use is not permitted.
 - The battery may heat up during charging. A maximum temperature of 45°C may be reached. If the battery becomes any warmer than this, suspend the charging process immediately.
 - During the charging process, the battery must be positioned on an even, non-flammable surface. The charger must not be covered.
-
- There is no memory effect. You can therefore fully recharge your battery after every trip.
 - Recharge the battery after every trip. This means you can set off immediately the next time you use your bike and you also increase the service life of the battery.
 - If you are not using the battery, you have to recharge it after 6 months.

8.1.1 Learning cycle



- › Once you have fully charged the battery for the first time, you must run it down until the system switches off. Repeat this process roughly every six months. This procedure (a so-called “learning cycle”) is necessary so that the battery management recognises the changes in the capacity caused by age and wear and tear, in other words, the performance level of the battery. This is the only way to enable adjustments to your remaining range indicator.
- › Afterwards, the capacity of the battery is calculated anew and correctly represented.
- › With this procedure, you can prevent a sudden loss of electrical assistance during an extended trip.

8.2 High degree of safety due to battery management



- › The battery cannot be damaged as a result of a short-circuit. If this were to happen, the battery management would switch off the battery.
- › You can simply leave the battery standing in the charger as it has in-built overcharging protection.
- › The battery management monitors the temperature of your battery and warns you of incorrect use.

8.3 Straightforward storage

If you do not need your battery for a while, store it at a temperature of +10°C at three quarters of its full charge capacity. To do so, please remove the battery from the bike, otherwise the battery may discharge and indicate that it is full at the beginning of a ride, only to switch off after a short distance. The battery management switches the battery to sleep mode to prevent a so-called total

discharge. This can occur after different lengths of time without being used. Depending on the charge state of the battery, this can occur earlier with a lower charge and later with a higher charge. At the latest, the management system activates the sleep mode after 10 days without using the battery. The system exits sleep mode when you connect the battery to the charger or press the Push button on the battery.

These benefits are available due to highly effective battery management that has been adapted to this specific application and by tuning the battery for operation with a 250 watt motor.



Observe the following points to increase the service life of your Pedelec battery:

- › Make sure that the battery is fully charged before you ride your bike for the first time or if you have not used it for a while.
- › If you continuously run the battery to empty during normal operation, this reduces its service life. If you partially recharge the battery frequently during normal operation, this has a favourable effect on its service life.
- › You should therefore partially recharge the battery whenever possible: Try not to run the battery all the way down to empty and recharge it even after a short period of operation.
- › In the as-delivered condition, the battery is not fully charged and is in what is referred to as sleep mode. Sleep mode minimises the rate at which the battery discharges itself. If the battery is allowed to discharge unchecked for an extended period this can lead to total discharging which damages the battery. To “wake up” the battery, simply place it in the charger for one minute.
- › If you are having problems with the battery, place it in the charger for one minute. A reset occurs, during which the battery management disables sleep mode, for example. After this, the battery will work again.
- › Ideally, you should charge the battery at a temperature of between +10°C and +30°C. It takes longer to charge the battery at low temperatures, while the battery will not charge up at temperatures higher than +30°C. Ideally, you should charge and store the battery inside your house or

in a warm garage when the outside temperature is low. In this case you should only fit the battery on your bike just before using it.

- If you are transporting your Pedelec by car, take the battery out of its holder and transport it separately.
- The battery should ideally be stored for longer periods with a charge state of 50% to 75% at a temperature of +10°C.



DISPLAY	BATTERY CHARGE STATE
•••••	5 LEDs light up 100-84%
••••	4 LEDs light up 83-68%
•••	3 LEDs light up 67-51%
••	2 LEDs light up 50-34%
•	1 LED lights up 33-17%
◦	1 LED flashes 16-0%
	No LED lights up 0%
◦◦◦◦◦	5 LEDs flash quickly 0% or overloaded *
◦	1st LED flashes quickly Charging fault **

8.4 Battery information system

There is a display panel on the outer face of the battery with five LEDs and a red Push button. If you press the red Push button, the LEDs light up. Information about the battery and its charge state is provided based on the number of LEDs that light up and the way in which they light up.



Charge state and battery capacity indicator

* All five LEDs flash quickly: The battery is empty and is being switched off, or is overloaded.

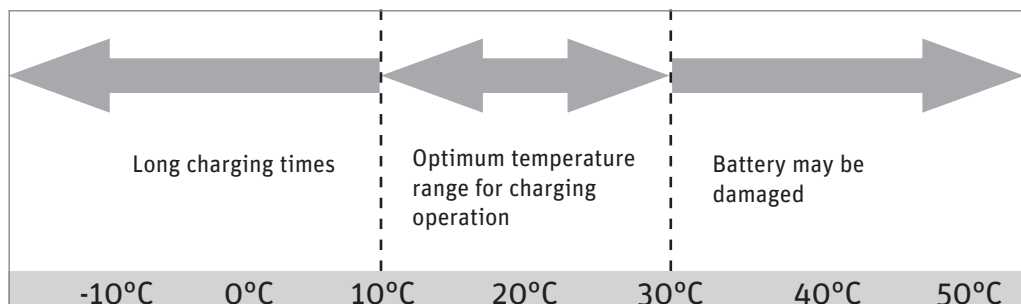
- If the battery is empty, it will work once again briefly following a short period of rejuvenation and will then switch back off. It must now be charged.
- If the battery is overloaded, it will switch back on after a short idle period and can then be used normally.

** The first LED flashes quickly: A charging fault is present.

- In that case, please remove the mains plug from the socket and then plug it in again after a short time. The charger performs a readjustment. In most cases, this rectifies the fault.
- If the LED continues to flash, overheating or undercooling of the battery may also be the cause. If, for example, you charge the battery in a cold environment at a temperature below 0°C, or the battery heats up to over 60°C during a long ascent, the management switches off to protect the battery. In such cases, the battery must be taken to a warmer environment or cooled down.
- If the LED still flashes, take the battery to your specialist cycle shop and have it checked.

8.4.1 Checking the battery charge state

If you press the red Push button, the LEDs light up and display the current **battery charge state**.



Charging times at different temperatures

8.4.2 Checking the battery capacity

If you press the red Push button for **five seconds**, the LEDs show the current **capacity** of the battery.

DISPLAY	CAPACITY
••••• 5 LEDs light up	100-97%
•••• 4 LEDs light up	96-80%
••• 3 LEDs light up	79-60%
•• 2 LEDs light up	59-40%
• 1 LED lights up	39-20%
◦ 1 LED flashes	< 20%



- › The range of the battery is less in winter due to the lower temperatures. Only move the battery (from the warm room where you store it) and fit it on your Pedelec just before you set off. This will help to prevent the effect of the low temperature on the range of the battery (► *Chapter 8.5.2 “Service life and warranty of the battery”*).
- › *If you have run the battery all the way down to empty, the system switches off completely. In this case, the NuVinci Harmony gears no longer function either. After five minutes, the battery will have recovered and you can switch the system back on again. The display functions once more. From now on, please only ride in the mode “no assistance/stand by”. At this point you can also operate the gears once more. In this way, you can ride for another hour until the battery finally switches off. Attention: The battery switches off as soon as you begin to ride using the power-assist mode once more.*

8.5 Service life and warranty

8.5.1 Service life and warranty of the drive

The Impulse centre motor is a durable maintenance-free drive. It is a wear part with a two-year warranty. As its power output is higher, wear parts such as the drive and brakes are subject to higher loads than they would be on a normal bike. Due to the greater force acting on the components, wear is more pronounced.

8.5.2 Service life and warranty of the battery

Batteries are wear parts. Wear parts come with a two-year warranty.

If the battery develops a fault during this period, your specialist cycle shop will of course replace it. Normal ageing and battery wear do not constitute a fault.

The service life of the battery depends on different factors. The most important wear-relevant factors are:

- **the number of charging processes**

After 1,100 charging cycles, your battery will still have 60% of its initial capacity, providing it has been well looked after. This means 6.6 Ah in an 11 Ah battery, 7.2 Ah in a 15.5 Ah battery and 10.2 Ah in a 17 Ah battery. A charging cycle is defined as the sum of the individual charges until the charges reach the overall capacity of the battery.

For example: You charge the battery with 5 Ah on the first day, 2 Ah on the second day and 4 Ah on the third day; the sum is 11 Ah. The battery has thereby completed one charge cycle.

From the technical standpoint therefore, the battery is exhausted at this point. Providing you can still cover the journey distances with the remaining battery capacity, you can of course continue using it. If the capacity is no longer sufficient, you can take your battery to a specialist cycle shop who will dispose of your battery and sell you a new one.

- **the age of the battery**

A battery also ages during storage.

An 11 Ah battery with lithium-ion cells loses around 4-5% of its initial capacity each year. A 15 Ah battery with lithium-nickel-cobalt-aluminium-oxygen cells around 2-3%.

This means: Even if you do not use your battery, its capacity reduces. With everyday use, you can expect the battery to age by approximately 3-5% per year as a result of ageing and charging processes.

- You can extend the service life of the battery by fully recharging it after every journey, however short. The Impulse Li-ion battery has no memory effect.
- You can also extend the service life of the battery by using the assistance selectively. Ideally, you should ride in low gears with a high pedalling cadence.

- If you always ride with maximum motor output, your motor will always require a higher current. Higher currents cause the battery to age more quickly.

8.6 Transportation and shipping of the battery

8.6.1 Transportation



- › Never transport damaged batteries. The safety of damaged batteries cannot be guaranteed. Scratches and small chips in the housing do not constitute serious damage.
- › Damaged batteries may not be charged, and further use is not permitted.



For the transportation of your Pedelec, we recommend removing the battery from the Pedelec and packaging it separately.

8.6.1.1 The E-Bike and your car

If you transport your E-Bike on a bike rack, ensure that it is designed for the higher weight of an E-Bike. In order to relieve the load on the rack and protect the battery from climatic conditions, it must be transported inside the car. In order to avoid a short-circuit, you can cover the plug contacts on the bike and the battery using the cover or adhesive tape.

8.6.1.2 The E-Bike on trains

In Germany, you can take your E-Bike with you on trains which are marked with the bike symbol. To do so on German Intercity (IC) and EuroCity (EC) trains, you must book a place for your bike in advance. As a rule, you may not take bikes with you on German Intercity Express (ICE) trains.

8.6.1.3 The E-Bike on aeroplanes

Your E-Bike is generally subject to the policies of the respective airline concerning bikes. Batteries are subject to dangerous goods legislation. Therefore, they must not be carried on passenger planes – neither in the cargo hold, nor the cabin. Please contact the relevant airline for detailed information.

8.6.2 Shipping



- › Do not ship batteries! A battery is a hazardous article which can overheat and catch fire in certain conditions.
- › The preparation and shipping of a battery may only be carried out by trained personnel.
- › If you would like to return your Pedelec battery for replacement, please always arrange this via your specialist cycle shop. Specialist cycle shops can have the battery picked up free of charge and in compliance with dangerous goods legislation.

8.7 Damaged batteries



- › Damaged batteries may not be charged, and further use is not permitted.
- › Never attempt to repair your battery. Specialists are responsible for performing such repairs. If your battery is damaged, contact your specialist cycle shop. The specialists here will discuss the next steps with you.

8.8 Disposal of batteries

Batteries are not to be disposed of with domestic waste. Consumers are legally bound to dispose of used or damaged batteries at the locations designated for the purpose (battery collection point or specialist cycle shop).

9 Charger

Read the type plates on the charger before using it for the first time.

You can charge your Pedelec with Impulse drive directly via a charging socket in the battery. The battery can remain on the Pedelec whilst the charging operation is in progress.



Recharging: Battery on the Pedelec

You can also take the battery out of the holder and charge it in the docking station. This is recommended if it is cold outside, in order to charge the battery in a warmer room. The battery can be charged at temperatures between 0°C and 45°C.



Recharging: Battery in the docking station



Do not use other chargers. Only charge the battery using the charger provided, or a charger approved by us.

- If a charging fault occurs, the LED in the charger flashes red. In this case, the charging current is too high.



Charging fault

- Disconnect the battery from the charger and then connect it again. If the error message still appears, the battery and charger must be checked by a specialist dealer.



If used incorrectly, the device may be damaged or inflict injuries.

- › Before cleaning the charger, always pull the plug out of the socket to avoid a short-circuit and/or physical injury.
- › Only use the charger in dry rooms.
- › Only place the charger in a secure stable position on a suitable surface.
- › Do not cover the charger or place any objects on it as otherwise it could overheat and catch fire.

10 Cleaning



- › Remove the battery before you clean your Pedelec.
- › Do not use benzine, thinner, acetone or similar agents in the cleaning procedures under any circumstances. Likewise, the use of abrasive cleaners and aggressive cleaning agents must also be avoided.
- › Only use commercially available, household cleaning agents and disinfectants (isopropyl alcohol) or water. You can obtain suitable cleaning agents and additional information from your specialist cycle shop.
- › We recommend you clean your Pedelec with a damp cloth, a sponge or a brush.

10.1 Cleaning the battery

Make sure when cleaning that water does not enter the battery. Although the electrical components are sealed, it is not advisable to clean the bike by spraying it with a hose or a high-pressure cleaner. This could damage your bike.

When wiping down the battery, be careful not to touch and connect the contacts on the underside. This could cause the battery to switch off.

10.2 Cleaning the motor

Dirt should be removed from the motor of your Pedelec regularly, ideally using a dry brush or a damp (not wet) cloth. Running water such as that from a hose pipe or even a high-pressure cleaner must not be used for cleaning.

The ingress of water can destroy the motor. Therefore, ensure that neither fluids nor moisture enter the motor at any time during cleaning.

10.3 Cleaning the display

The housing of the display may only be cleaned with a damp (not wet) cloth.

10.4 Cleaning the control panel

The control panel can be cleaned with a damp cloth where necessary.

10.5 Cleaning the chest belt

Clean the chest belt regularly with water or a mild soap solution.

11 Technical data

MOTOR			
Brushless electric motor with gear unit and freewheel			
Output	250 W rated output/ 650 W maximum output		
Maximum torque at chainring	12 Nm rated torque/ 40 Nm maximum torque		
Gross weight of electric drive, battery, control unit	Freewheel motor		
	11 Ah	15.5 Ah	17 Ah
	6.65 kg	6.75 kg	6.75 kg
Control	Via torque sensor and rotational speed sensor in motor and speed sensor (on rear wheel)		
POSSIBLE APPLICATIONS			
Maximum incline	10%		
Maximum bodyweight	130 kg		
IMPULSE LI-ION BATTERY			
Capacities	11 Ah	15.5 Ah	17 Ah
Voltage	36 V	36 V	36 V
Weight	2.85 kg	2.95 kg	2.95 kg

**We hope you thoroughly enjoy using your new Impulse
Ergo Pedelec.**

Copyright © 2013 Derby Cycle Werke GmbH

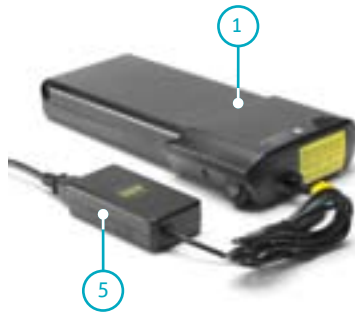
*Reproduction, in whole or in part, is not permitted without the consent
of Derby Cycle Werke GmbH. Subject to misprints, errors and technical
modifications.*

VII

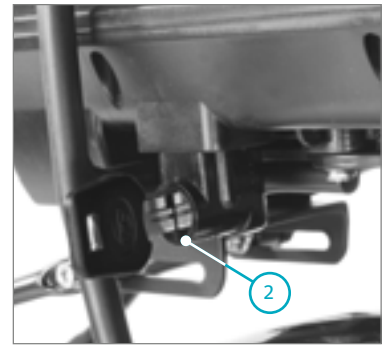
User Manual Groove Pedelec

English





Battery and charger



Battery lock



Control panel



Motor unit



- 1 Battery
- 2 Battery lock
- 3 Motor unit
- 4 Control panel
- 5 Charger

Dear Customer,

Thank you for choosing a Pedelec (pedal electric cycle) featuring the innovative Groove drive from our company. This bike is equipped with an electric drive that assists you when you are cycling. This will make your trip much more enjoyable if you are riding up hills, carrying loads or riding into the wind. You can decide yourself how much you want to use it. The purpose of this User Manual is to help you get the most out of your Pedelec and use it correctly.

Structure of User Manual

If you want to get started right away, refer to the brief introduction in ➡ **Chapter 1 “Quick start”**.

The individual steps are subsequently explained in detail, supplemented by illustrations and diagrams.

More detailed information on your Pedelec is provided in ➡ **Chapter 12 “Technical data”**.

The information in this User Manual specifically refers to your Pedelec only. For general information, on the bike technology that features in your Pedelec for example, refer to the General User Manual.



Even if you can't wait to go for your first ride, in the interest of your own safety you should read ➡ **Chapter 1 “Quick start”** carefully without fail before use.

In addition to texts and tables, the User Manual contains the following symbols that denote important information or dangers.



WARNING about possible physical injury, increased risk of falls or other injuries







IMPORTANT ADDITIONAL INFORMATION or special information on using the bike



NOTE about possible damage to property or the environment

Contents

1 Quick start	5	6.1 Operating principle of assistance	11
2 Legal principles	6	6.2 Distance	11
2.1 Meaning for the rider	6	6.3 Riding your Pedelec efficiently	12
2.2 Pushing assistance	6	7 Battery	12
3 Special features of Pedelec with Groove drive	6	7.1 Straightforward charging	12
4 Charging the battery	7	7.2 High degree of safety due to battery management	12
		7.3 Straightforward storage	12
4.1 Charging operation	8	7.4 Battery information system	13
4.2 Fitting the battery	8	7.5 Battery charge state	13
5 Control panel	9	7.6 Service life and warranty	14
		7.6.1 of the drive	14
5.1 On/Off button	9	8 Charger	14
5.2 Switches for power-assist level	9		
5.3 Display of power-assist mode	10	9 Removing the front wheel	15
5.4 Battery charge state indicator	10	10 Cleaning	16
6 Assistance by the electric motor	11	11 Warnings	16
		12 Technical data	17

1 Quick start

- › 1. Charge the battery completely before riding for the first time.
- › 2. Open the round charging socket cover on the back of the battery.



Charging socket

Now insert the plug of the charger into the battery charging socket.



Charging the battery

- › 3. Insert the mains plug for the charger into the socket.
You must fully charge the battery before using it for the first time.
- › 4. The battery is fully charged if all green LEDs on the back of the battery light up when you press the adjacent button.



Button on the battery

Pull the charger plug out of the battery socket.
Close the charging socket cover

You can also remove the battery from your Pedelec and charge it somewhere else. For more information, refer to **Chapter 4 "Charging the battery"**.

- › 5. If you have charged the battery somewhere other than on the Pedelec, place the battery back into the holder in the pannier rack by reinserting it from behind. Once you have inserted the battery, turn the key clockwise and then remove it, otherwise the battery will not lock into position.
- › 6. Make sure that the battery is securely positioned and that the key is no longer in the lock.
- › 7. Press the round switch on the side of the battery housing. The red LED inside it lights up.



Switch, battery housing

- › 8. Push the **POWER** button on the control panel on the handlebar.
- › 9. The display panel now displays the medium power-assist mode **SPORT**. Press the Mode button to select the level of assistance: **ECO** (low), **SPORT** (medium) or **POWER** (high). Press this button once to change the level of assistance by one level. Once the **POWER** assist level has been activated, the assistance jumps back to **ECO** the next time the button is pressed.



You can ride off just as you would if you were riding a normal bike. The power assist starts after roughly two complete crank revolutions.

- › 10. You can now ride off.

2 Legal principles

The essential idea behind the Pedelec is not only to be able to cover greater distances more quickly, but also more comfortably. You can choose to relax and let the bike do the work, exert yourself more physically, or simply get from A to B as fast as possible. You can decide this yourself by choosing an appropriate assist level.

This gives you more confidence on the road, as the powerful acceleration gives you more control and a greater degree of security. Your Pedelec provides you with power assistance, the level of which you can vary at the control panel.

In some EU countries, the Pedelec, like all other bikes, must comply with certain regulations, the Road Traffic Licensing Regulations (StVZO) in Germany for example. Please observe the relevant explanations and general information provided in the General User Manual.

These statutory requirements apply for a Pedelec:

- The motor is designed only to provide pedalling assistance, i.e. it can only "assist" the rider when he/she turns the pedals.
- The average motor output must not exceed 250 W.
- As the speed increases, the rate at which the motor output reduces must also increase more intensely.
- The motor must switch off once the bike reaches a speed of 25 km/h.

2.1 Meaning for the rider

- You do not legally have to wear a helmet. In the interest of your own safety, however, you should **never** ride without a helmet.
- You do not legally have to have a driving license (unless you own a model with pushing assistance, ➔ *Chapter 2.2 "Pushing assistance"*).
- You do not legally have to have insurance.
- No age restriction applies for a Pedelec.
- The regulations governing the use of cycle paths are the same as for normal bikes.

These regulations apply to you wherever you are in the European Union. It is possible that different regulations exist in other countries, also inside the EU in individual cases. Before using your Pedelec abroad, find out about the legal situation in the relevant country.

2.2 Pushing assistance

Your Pedelec is available in a version with or without pushing assistance.



Button for pushing assistance

The pushing assistance moves the Pedelec slowly (at a maximum speed of 6 km/h) without you having to turn the pedals, e.g. if you are manoeuvring in a tight space or are pushing your Pedelec out of a basement garage.

If you were born after 01.04.1965, you will need a moped test certificate for the version with pushing assistance. If you already have another type of driving licence, this automatically includes the moped test certificate.

The pushing assistance is not suitable for use as starting assistance.

3 Special features of Pedelec with Groove drive

Your Pedelec is equipped with special features that are designed to enhance your safety and comfort.

- With the Groove drive, you can ride your Pedelec, and also benefit from the convenience and safety of a back-pedal function.

This means that you can rely on three brakes; the familiar back-pedal brake and the powerful, modern rim brakes.



- 1 Rim brake, front
- 2 Back-pedal brake
- 3 Rim brake, rear

- › The Groove drive also makes it possible to ride with power assistance even if you are only gently turning the cranks.



If you decide to use the power assistance when only gently turning the cranks, you will use a much greater amount of power than if you were actively pedalling at the same time.

4 Charging the battery

- › You can charge the battery whilst it is on the Pedelec (as described in ➔ *Chapter 1 “Quick start”*).



- › You can also remove the battery from the holder and charge it in the docking station. This is recommended if it is cold outside, in order to charge the battery in a warm room.



- › Hold the battery by the recessed grip at the back of the battery and turn the key anticlockwise.
- › This unlocks the battery and you can now remove it by pulling it backwards out of the Pedelec. In doing so, hold on tight to the battery to prevent it from being dropped.



Unlocking the battery



Removing the battery

- › You should now remove the key and keep it in a safe place to prevent it from breaking off or being lost.

4.1 Charging operation

Before charging the battery, read the directions on the charger carefully.



Sticker on the underside of the charger

- › 1. Take the charger provided out of its packaging and plug the mains plug into a socket (230 V, please observe type plate on the charger).

To charge the battery safely, the charger must be placed on a suitable surface resting on its four feet with the LED facing upwards.

- › 2. The LED in the charger now lights up green.
- › 3. Insert the plug of the charger into the battery charging socket. The battery and charger are connected.



Battery with charging cable plugged in

- › 4. The charging process starts.
- › The LED in the charger now lights up red. You can check the battery's charge state by pressing the square button on the battery to the right of the LEDs. The greater the number of LEDs that light up the higher the charge state is.



LEDs on the battery

- › 5. If the LED on the charger lights up green, the battery is fully charged.
- › 6. To save power, pull the charger plug out of the socket once the charging operation is complete. You can also leave the charging cable plugged in once the charging operation is complete. However, the charger always draws some current if you leave it plugged in.

4.2 Fitting the battery

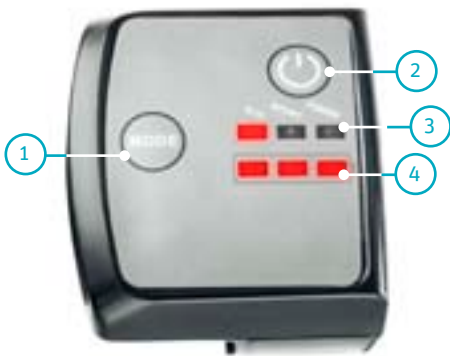
- › 1. Push the battery into the rear of the battery housing under the pannier rack. To do this, the battery key must be inserted and turned clockwise.



Reinstalling the battery

- › 2. Push the battery fully into the battery housing. Now turn the key anticlockwise and then remove it to lock the battery.
- › 3. Make sure the battery is firmly in place.
- › 4. Push down the round rocker switch on the left-hand side of the battery housing. A red LED lights up.
- › 5. The Pedelec is now ready for operation.

5 Control panel



- 1 Button for power assist level
- 2 On/Off switch
- 3 Power-assist mode display
- 4 Battery charge state indicator

The control panel on the handlebar has two or three buttons (depending on the model) and two rows of LED indicators. The button used to control the level of assistance is located on the left-hand side of the control panel.

To the right at the bottom you can see the LED display bar which indicates the level of assistance which has been activated and the current battery charge state.

The *POWER* button is located above the LEDs. Press this button to switch the control panel on and off.



On/Off button

If the model features pushing assistance, the switch for this will be on the underside of the control panel.



Button for pushing assistance

5.1 On/Off button

Press the *POWER* button to switch the control panel on and off.

After it has been switched on, the system is always in the medium power-assist mode *SPORT*.

5.2 Switches for power-assist level

You can specify the power assist level via the Mode button.



Buttons for power assist level

Each time you press the Mode button the power assist changes by one level.

Each time you press the Mode button, the assistance changes by one level from *ECO* through to the highest level *POWER*.

If you require less assistance, press the Mode button until the level of assistance moves from the highest back to the lowest level.

5.3 Display of power-assist mode

The upper row of LED indicators on the right next to the Mode button shows how much assistance the motor is currently providing.



Display of power-assist mode

DISPLAY	ASSIST LEVEL
	POWER
	SPORT
	ECO

Assist level

- The LED on the right of the display lights up when the highest level of assistance (*POWER*) is activated. This means the assistance is working hard.
- The LED in the centre of the display lights up when the medium assist level (*SPORT*) is activated. This means the assistance is working with a medium level of effort.
- The LED on the left of the display lights up when the lowest level (*ECO*) is activated and the assistance is working only with a low level of effort.



When using the eco mode and pedaling only lightly, an irregular noise from the motor may be heard.

5.4 Battery charge state indicator

The battery charge state indicator is located below the row of LED indicators that displays the power-assist mode.



Battery charge state indicator

- If all three battery charge state indicator LEDs are lit, the battery charge is between 100 and 65%.
- If two LEDs are lit, the battery charge is still between 65 and 35%.
- If only one LED is lit, the battery charge is between only 35 and 10%.
- If only one LED is flashing, the battery charge is less than 10%. At this point you will notice a slight loss of power.
- If the battery charge state falls below a minimum level, the system switches off. No LEDs light up on the control panel.

DISPLAY	BATTERY CHARGE STATE
	100% – 65%
	65% – 35%
	35% – 10%
	below 10%

LED lights up LED flashes LED off

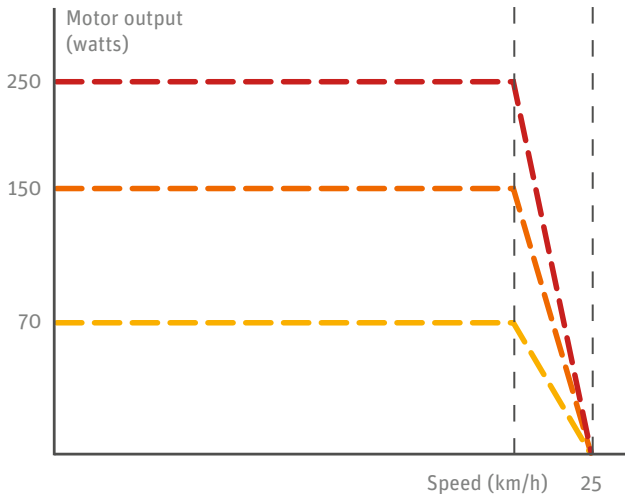
Battery charge state

6 Assistance by the electric motor

6.1 Operating principle of assistance

If you switch on the assistance and start pedalling, the motor starts up once the cranks have completed roughly two complete revolutions.

The amount of propulsion provided by the motor depends on which level of assistance you have selected.



The motor can operate with three different power output levels.

- The motor delivers a continuous output of 70 watts at the lowest level *ECO*, 150 watts at the medium level *SPORT*, and 250 watts at the highest level *POWER*.
- When the switch is in the *POWER* position, the motor assists you with the highest output and therefore also uses the most energy. If you select the *SPORT* assist level, the motor output is slightly lower. If you select *ECO*, you will receive the lowest level of assistance but will be able to use the maximum range of the battery.
- The motor provides assistance until the Pedelec reaches a speed of 25 km/h. It then switches off.

6.2 Distance

The distance you can travel using the power assist with the battery fully charged depends on several factors:

- **Ambient temperature**

If it is colder, you will travel a shorter distance with the same battery charge.

To maximise the distance you can travel, keep the battery in a heated room so that it is at room temperature when you fit it on your Pedelec.

As the battery discharges when the motor is in use, it generates enough heat to not lose too much of its power at low ambient temperatures.

- **Level of assistance selected**

If you wish to ride a long distance assisted by the motor, select a low level of assistance (*ECO*).

- **Riding approach**

You can ride assisted almost entirely by the motor by turning the pedals very gently. However, this uses more battery power. You can save power by putting in more effort when turning the pedals.

- **Technical condition of your Pedelec**

Make sure that the tyre pressure is correct. If you ride your bike with too little air in the tyres, this can significantly increase the rolling resistance. This applies to smooth surfaces in particular, e. g. tarmac. If the ground is uneven, as on a country path or gravel track, rather low tyre pressure can lead to less rolling resistance. This also increases the risk of a puncture. Please consult your specialist dealer about this.

The distance you can travel also decreases if the brakes are rubbing.

- **Topography**

The motor uses more power when riding in hilly rather than flat terrain.

6.3 Riding your Pedelec efficiently

You can monitor and influence the cost of your journeys with the Pedelec yourself. You can reduce your consumption and therefore costs by following the tips for achieving a long range.

The operating costs for battery-operated power assist are calculated as follows:

- A new battery costs roughly 359 euros.
- You can cover 45 km on average with one battery charge.
- You can charge the battery roughly 1,100 times.
- 1,100 charging cycles x 45 km = 49,500 km
- 359 euros: 49,500 km = 0.7 euro cents / km
- You use roughly 0.47 kWh to fully charge the battery. Assuming a unit price of 20 euro cents / kWh, it costs you 9.4 euro cents to fully charge the battery.
- It costs you 0.2 euro cents / km to cover the average range of 45 km.
- This means that the maximum cost of consumption and the battery is 0.9 euro cents/km.

The sample calculation has been carried out based on German energy prices. The operating costs may therefore be different in locations where other energy prices apply.

7 Battery

Your battery is a lithium cobalt battery, the ideal lithium-ion (Li-Ion) battery type for this application. One of the main benefits of this type of battery is its low weight combined with a high capacity. Li-Ion batteries only weigh half as much as comparable nickel metal hydride or nickel-cadmium batteries. This means you carry less battery weight and more battery power.

7.1 Straightforward charging

- › There is no memory effect. You can therefore fully recharge your battery after every trip.
- › Recharge the battery after every trip. This means you can set off immediately the next time you use your bike and you also increase the service life of the battery.
- › If you are not using the battery, you only have to recharge it after 6 months.

7.2 High degree of safety due to battery management

- › The battery cannot be damaged as a result of a short-circuit. If this were to happen, the battery management would switch off the battery.
- › You can simply leave the battery standing in the charger as the device has in-built overcharging protection.

7.3 Straightforward storage

- › If you do not need your battery for a while, store it at a temperature of +10°C when the battery charge is between 50 and 75%.

These benefits are available due to highly effective battery management that has been adapted to this specific application and by tuning the battery for operation with a 250 watt motor.



Observe the following points to increase the service life of your Pedelec battery:

- › Make sure that the battery is fully charged before you ride your bike for the first time or if you have not used it for a while.
- › You should run the battery all the way down to empty for the first three charging cycles. This allows the battery to reach its maximum capacity.

If you continuously run the battery to empty during normal operation, this reduces its service life.

If you partially recharge the battery frequently during normal operation, this has a favourable effect on its service life.

- › You should therefore partially recharge the battery whenever possible: Try not to run the battery all the way down to empty and recharge it even after short periods of operation.
- › If you are having problems with the battery, place it in the charger for one minute. This resets the battery. After this, the battery will work again.
- › Ideally you should charge the battery at a temperature of between +10°C and +30°C. It takes longer to charge the battery at low temperatures, the battery will not charge up at temperatures higher than +30°C. Ideally, you should charge and store the battery inside your house or in a warm garage when the outside temperature is low. In this case you should only fit the battery on your bike just before using it.
- › If you are transporting your Pedelec by car, take the battery out of its holder and transport it separately.
- › The battery should ideally be stored for longer periods with a charge of between 50% and 75% at a temperature of +10°C.

7.4 Battery information system

There is a display panel on the top of the battery which contains four LEDs and a button. The LEDs light up if you press the button. Information about the battery and its charge state is provided based on the number of LEDs that light up and the way in which they light up.

7.5 Battery charge state

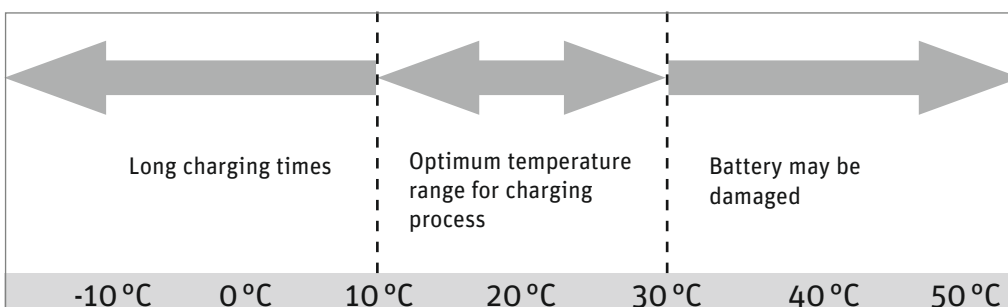
Press the switch on the battery **briefly** to activate the LEDs and see the current **battery charge state**.



Charge state indicator

DISPLAY	BATTERY CHARGE STATE	
....	4 LEDs light up	100 – 75%
...	3 LEDs light up	75 – 50%
..	2 LEDs light up	50 – 25%
.	1 LED lights up	25 – 0%

- › If the battery is empty, it will work once again briefly following a short period of rejuvenation and will then switch back off. It must now be charged.
- › Check the battery charge before every trip to make sure it is sufficient for the planned journey.



Charging times at different temperatures

- › The range of the battery is less in winter due to the lower temperatures. Only move the battery from the warm room where you store it and fit it on your Pedelec just before you set off. This will help reduce the effect of the low temperature on the range of the battery.
- › The distance you can cover can vary depending on the topography, the condition of the battery and the assist level you are using.

7.6 Service life and warranty

7.6.1 of the drive

The Groove hub motor is a durable maintenance-free drive. It is a wear part with a two-year warranty. As its power output is higher, wear parts such as the tyres and brakes are subject to higher loads than they would be on a normal bike. Due to the greater force acting on these components, wear is more pronounced.

7.6.2 of the battery

Batteries are wear parts. Wear parts come with a two-year warranty.

If the battery develops a fault during this period, your specialist cycle shop will of course replace it. Normal ageing and battery wear do not constitute a fault.

The service life of the battery depends on different factors. The most important wear-relevant factors are

- the **number of charging cycles** and
- the **age** of the battery.

According to the technical definition, the battery is used if its capacity is only 60% in the new condition.

The battery of course also ages over time. Even if you do not use your battery, its capacity reduces. In general, the battery is expected to age at a rate of 5% per year.

Providing you can still cover the journey distances with the remaining battery capacity, you can of course continue using it. If the capacity is no longer sufficient, you can take your battery to a specialist cycle shop who will dispose of your battery and sell you a new one.

- › You can extend the service life of the battery by fully recharging it after every journey, however short. The Groove Li-Ion battery has no memory effect.
- › You can also extend the service life of the battery by using the assist levels selectively. Avoid riding with a high assist level when you are only gently turning the pedals.

8 Charger

Read the two identification plates on the charger before using it for the first time.

You can charge your Pedelec with Groove drive directly by connecting the plug of the charger to the battery.



Charging the battery

The battery can remain on the Pedelec during the charging process.

You can also remove the battery from the holder on the Pedelec and charge it somewhere else. This is recommended if it is cold outside, in order to charge the battery in a warm room.



Battery with charging cable plugged in



Do not use other chargers. Only charge the battery using the charger provided, or a charger approved by us.

If a problem occurs, remove the battery from the Pedelec and place it briefly in the charger. The charger tests the battery and corrects any faults that may be present.



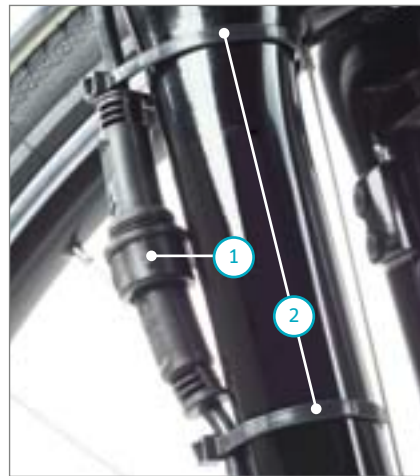
If used incorrectly, the device may be damaged or inflict injuries.

- › Before cleaning the charger, always pull the plug out of the socket to avoid a short-circuit and/or physical injury.
- › Only use the charger in dry rooms.
- › Only place the charger in an upright, secure and stable position on a suitable surface.
- › Do not cover the charger or place any objects on it as otherwise it could overheat and catch fire.

9 Removing the front wheel

If you need to remove the front wheel, to repair a puncture for example, this can be done in the same way as removing the front wheel of a normal bike, excluding one procedure.

- › The first thing you must do before releasing the front wheel is to open the connection to the front wheel motor.
- › Undo the locking nut for the electrical connector which is located on the back of the fork. Take the upper half of the connector in one hand and the lower half in the other and pull the two halves apart.



- 1 Locking nut
- 2 Cable tie

The lower half of the connector and the power cable are fastened to the fork with two cable ties.

- › Slide the cable ties down and off the fork. You can now remove the front wheel. You can find corresponding instructions in the section of this User Manual that deals with general bike technology. If you take the front wheel out of the fork, also pull the cable and cable tie off the fork.
- › To reinstall the front wheel, slide the cable tie with cable onto the fork leg before positioning the wheel in the fork. Install the front wheel as described in the general section of this User Manual.
- › Next, reattach the two halves of the connector and screw the lock nut firmly back on. Slide the two cable ties back up the fork until they remain in place of their own accord and cannot slip.

10 Cleaning



Remove the battery before you clean your Pedelec.

We recommend you clean your Pedelec with a damp cloth, a sponge or a brush. You can obtain suitable cleaning agents and additional information from your specialist cycle shop.

Make sure when cleaning that water does not enter the battery. Although the electrical components are sealed, it is not advisable to clean the bike by spraying it with a hose or a high-pressure cleaner. This could damage your bike.

When wiping down the battery, be careful not to touch and connect the contacts on the underside. This could cause the battery to switch off.

- › If risk free operation of your Pedelec cannot be assumed, take it out of operation and make sure it cannot be used until you have it checked by a specialist cycle shop. Risk-free operation is no longer possible if live parts or the rechargeable battery show signs of damage.
- › Keep children away from electrical appliances. If children are present, keep a close eye on them, especially if there is a possibility they could insert objects into the appliance through apertures in the housing. This poses the danger of fatal electric shock.
- › When charging the battery, make absolutely sure the charger is correctly supported on its four feet. It must not be covered when in operation. The heat produced by the battery must be able to dissipate.
- › Always engage the brake if you are at a traffic light. If you move the pedals by accident, this could start up the motor and cause the bike to set off.

11 Warnings



- › Bear in mind that the Pedelec motor can heat up on long ascents. Be careful not to touch it with your hands, feet or legs. You could burn yourself.
- › If you are transporting your Pedelec by car, remove the battery beforehand. Transport the battery in a safe receptacle, separately to the Pedelec.
- › The Pedelec operates using low voltage (36 volts). Never attempt to operate the Pedelec using power from a source other than a suitable genuine battery.
- › Live parts may be exposed when you open covers or remove parts. Connection points may also be live. Maintenance or repairs on the device when it is open and connected to the power supply must only be carried out by the specialist cycle shop.
- › When carrying out adjustments and maintenance or when cleaning the Pedelec, avoid crushing cables or damaging them with sharp edges.

12 Technical data

MOTOR	
Brushless electric motor with planetary gear unit and freewheel	
Output	250 watts
Maximum torque	35 Nm
Weight of motor	2.88 kg
Assist levels	70, 150, 250 watts
Switch-off speed	25 km/h at all assist levels
Control	via speed sensor

GROOVE LI-ION BATTERY	
Voltage	36 V
Capacities	9 Ah
Watt hours	324 Wh
Weight	2.4 kg

**We hope you thoroughly enjoy using
your new Pedelec with Groove drive.**

Copyright © 2013 Derby Cycle Werke GmbH

*Reproduction in whole or in part is not permitted without the consent
of Derby Cycle Werke GmbH. Subject to misprints, errors and technical
modifications.*

VIII

User Manual Pedelec Xion

English





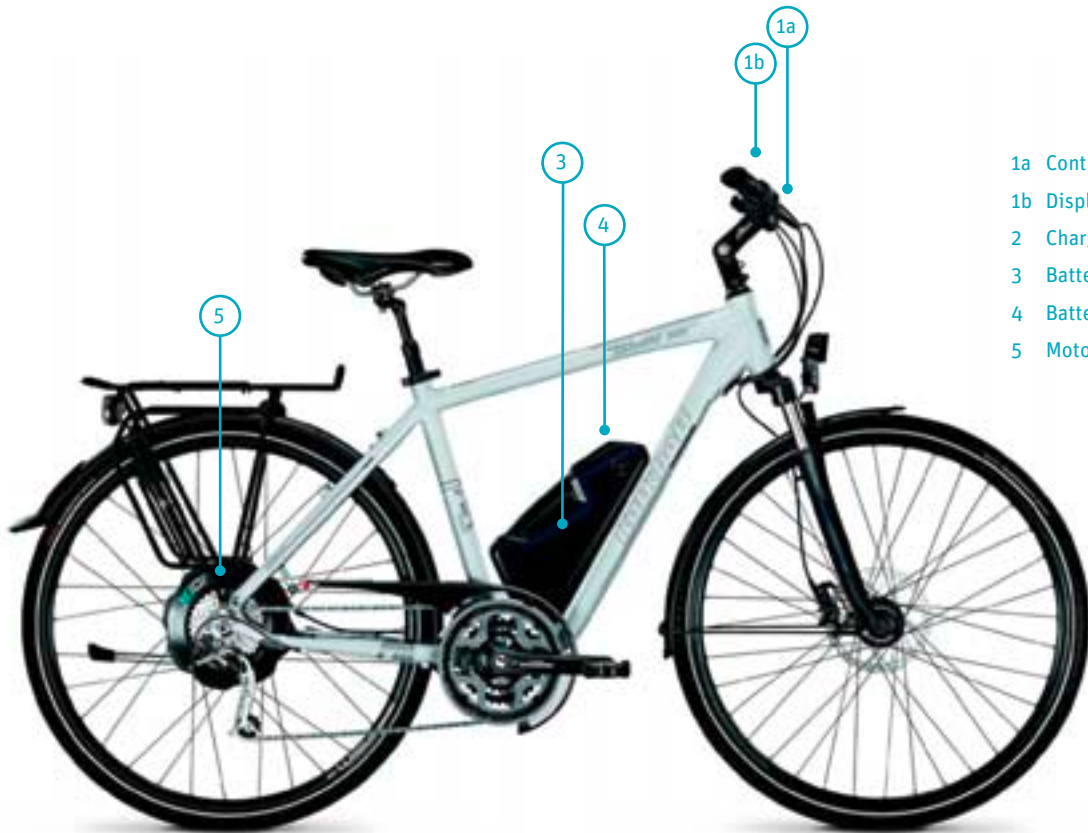
Control panel



Display



Charger



- 1a Control panel
- 1b Display
- 2 Charger
- 3 Battery
- 4 Battery lock
- 5 Motor unit

Dear Customer,

Thank you for choosing a Pedelec (pedal electric cycle) with Xion drive from our company. This bike is equipped with an innovative electric drive that assists you when you are cycling. This will make your trip much more enjoyable if you are riding up hills, carrying loads or riding into the wind. You can decide yourself how much you want to use it.

The purpose of this User Manual is to help you get the most out of your Pedelec and use it correctly.

Structure of the User Manual

If you want to get started right away, refer to the brief introduction in ► *Chapter 1 “Quick start”*.

The individual steps are subsequently explained in detail, supplemented by illustrations and diagrams.

More detailed information on your Pedelec is provided in ► *Chapter 11 “Technical data”*.

The information in this User Manual specifically refers to your Pedelec only. For general information, on the bike technology that features in your Pedelec, for example, refer to the General User Manual.



Even if you can't wait to go for your first ride, in the interest of your own safety you should at least read ► *Chapter 1 “Quick start”* before use.

We also strongly recommend reading this manual and the General User Manual in their entirety.

In addition to texts and tables, the User Manual contains the following symbols that denote important information or dangers.



WARNING
regarding possible physical injury, increased risk of falls or other injuries.



IMPORTANT ADDITIONAL INFORMATION
or special information regarding the use of the bike.





NOTE
regarding possible damage to property or the environment.

Warnings



- › Bear in mind that the Pedelec motor can heat up on long ascents. Be careful not to touch it with your hands, feet or legs. You could burn yourself.
- › If you are transporting your Pedelec by car, remove the battery beforehand. Transport the battery in a suitable transport container separately from the Pedelec. A suitable transport container can be obtained from your specialist cycle shop.
- › The Pedelec operates using low voltage (36 volts). Never attempt to operate the Pedelec using power from a source other than a suitable genuine battery. The designations of approved batteries are listed in ► *Chapter 11 “Technical data”*.
- › Live parts may be exposed when you open covers or remove parts. Connection points may also be live. Maintenance or repairs on the device when it is open and connected to the power supply must only be carried out by a professional bike workshop.
- › When carrying out adjustments and maintenance or when cleaning the Pedelec, avoid crushing cables or damaging them with sharp edges.
- › If risk-free operation of your Pedelec cannot be assumed, take it out of operation and make sure it cannot be used until you have it checked by a specialist cycle shop. Risk-free operation is no longer possible if live parts or the rechargeable battery show signs of damage.
- › Keep children away from electrical appliances. If children are present, keep a close eye on them, especially if there is a possibility they could insert objects into the appliance through apertures in the housing. This poses the danger of fatal electric shock.
- › When charging the battery, make absolutely sure the charger is correctly supported. It must not be covered when in operation.
- › When removing the battery from your Pedelec, ensure that it does not fall. This may cause irreparable damage to the battery housing. Information on how to deal with a damaged battery can be found in ► *Chapter 7.7 “Damaged batteries”*.
- › Damaged batteries may neither be recharged nor continue to be used.
- › During the charging process, the battery and charger must be placed on an even, non-flammable surface. Battery and charger must not be covered.
- › The battery may heat up during charging. A maximum temperature of 45°C may be reached. If the battery becomes any warmer than this, suspend the charging process immediately.
- › Bear in mind that the vehicle is only designed for a maximum speed of 70 km/h. Exceeding this speed causes damage to the electrical components.

Contents

1 Quick start	9	5.2 Display	14
2 Legal principles	10		
2.1 Meaning for the rider	10		
3 Special features of the Pedelec with Xion drive	11		
4 Charging the battery	11		
			
4.1 Removing the battery	11	5.2.1 Mounting and removal of the display	15
4.2 Learning cycle	12	5.2.2 Display of the power-assist mode and energy recovery	15
4.3 Charging operation	12	5.2.3 Battery charge state indicator	15
4.4 Fitting the battery	13	5.2.4 Remaining range indicator	16
5 Control panel and display	13	5.2.5 Pushing assistance	16
5.1 Control panel	13	5.3 Troubleshooting	16
			
5.1.1 Switching on/off	13	5.4 Programming and settings	17
5.1.2 Buttons for power-assist level	14	5.4.1 Tour Reset	17
		5.4.2 Assist mode	17
		5.4.3 Braking assistance	18
		5.4.4 Pushing assistance	18
		5.4.5 Settings	18
		5.4.5.1 Date	18
		5.4.5.2 Time	19
		5.4.5.3 Language	19
		5.4.5.4 Information	19



6 Assistance by the electric motor



6.1	Operating principle of assistance	20
6.2	Assist modes	20
6.2.1	Energy recovery	21
6.2.2	Braking assistance	21
6.3	Range	21
6.4	Riding your Pedelec efficiently	22
7	Battery	23
7.1	Straightforward charging	23
7.1.1	Learning cycle	23
7.2	High degree of safety due to battery management	23
7.3	Straightforward storage	24
7.4	Battery information system	25
7.4.1	Checking the battery charge state	25
7.4.2	Checking the battery capacity	25
7.5	Service life and warranty	26
7.5.1	Service life and warranty of the battery	26

7.6	Transportation and shipping of the battery	27
7.6.1	Transportation	27
7.6.1.1	<i>The E-Bike and your car</i>	27
7.6.1.2	<i>The E-Bike on trains</i>	27
7.6.1.3	<i>The E-Bike on aeroplanes</i>	27
7.6.2	Shipping	27
7.7	Damaged batteries	27
7.8	Disposal of batteries	27

8 Charger 28



9	Removing and installing the rear wheel	29
9.1	Removing the rear wheel	29
9.2	Installing the rear wheel	30
10	Cleaning	30
10.1	Cleaning the battery	30
10.2	Cleaning the motor	30
10.3	Cleaning the display	31
10.4	Cleaning the control panel	31
11	Technical data	31

1 Quick start

1. Charge the battery completely before riding for the first time. Charge temperature: 0°C to 45°C.
2. Remove the cover from the charging socket.
3. Connect the plug of the charger to the battery. When positioned correctly, the plug is held in the socket by magnets.



Charging the battery

4. Insert the mains plug for the charger into the socket.
You must fully charge the battery before using it for the first time.



You can also remove the battery from your Pedelec and charge it elsewhere. For more information on this subject, refer to ➡ Chapter 4 “Charging the battery”.

5. The charge state of the battery is indicated by five LEDs. The battery LEDs light up or flash during charging. Once all of the LEDs have gone out, the battery is fully charged.

6. If you removed the battery for charging, replace it in the holder from the front/above. At the same time, the key must be in the lock and must be turned anticlockwise. Press the battery down into the holder until the locking mechanism engages. Now turn the key clockwise and remove it. The battery is now locked in place.



Installing the battery



Locking the battery



Be sure to make a note of the number engraved on your key. In case you lose both keys, you have an opportunity to obtain an appropriate replacement key by quoting the correct number.

7. Make sure that the battery is securely positioned and that the key is no longer in the lock.
8. Press the diamond button on the control panel to switch on the drive system.
9. The display panel now displays the medium power-assist mode. The assist level is represented by a bar with a maximum of five light elements on the far left of the display panel. By pressing one of the two arrow buttons on the control panel, you can select the level of assistance. Pressing once changes the level of assistance by one level. This works both ways, depending on which arrow button you press.
10. You can also use the arrow button to set the assistance from the motor to zero and begin energy recovery (➡ Chapter 6.2.1 “Energy recovery”).
11. You can now ride off just as you would if you were riding a normal bike. The motor starts providing assistance as soon as you begin to pedal.



From the first moment on, you have full assistance. This is unfamiliar but comfortable. Practice starting up in a safe location before venturing into the road traffic.

2 Legal principles

The essential idea behind the Pedelec is not only to be able to cover greater distances more quickly, but also more comfortably. You can choose to relax and let the bike do the work, exert yourself more physically, or simply get from A to B as fast as possible. You can decide this yourself by choosing an appropriate power-assist mode.

This gives you more confidence on the road, as the powerful acceleration gives you more control and a greater degree of security. Your Pedelec assists you with an output that adapts to your pedalling force up to roughly 25 km/h.

The Pedelec, like all other bikes, must comply with the national regulations for road safety. Please observe the relevant explanations and general information provided in the General User Manual.

These statutory requirements apply for a Pedelec:

- The motor is designed only to provide pedalling assistance, i.e. it can only “assist” the rider when he/she turns the pedals.
- The average motor output must not exceed 250 W.
- As the speed increases, the rate at which the motor output reduces must also increase more intensely.
- The motor must switch off once the bike reaches a speed of 25 km/h.

2.1 Meaning for the rider

- You do not legally have to wear a helmet. In the interest of your own safety, however, you should **never** ride without a helmet.
- You do not legally have to have a driving licence.
- You do not legally have to have insurance.
- No age restriction applies for a Pedelec.
- The regulations governing the use of cycle paths are the same as for normal bikes.

These regulations apply to you wherever you are in the European Union. It is possible that different regulations exist in other countries, also inside the EU in individual cases. Before using your Pedelec abroad, find out about the legal situation in the relevant country.

3 Special features of the Pedelec with Xion drive

Your Pedelec has special features that are designed to enhance your safety and comfort, some of which are unique worldwide.

- The use of sprocket cassettes in combination with a durable free wheel design.
- A low or central centre of gravity thanks to the favourable position of the battery (down tube, seat tube battery). This ensures a pleasant ride.
- A central display in the middle of the handlebar to facilitate easy reading of data.
- The control panel can be reached easily and safely. It can be mounted on the left or right.
- 250 W rated output/650 W maximum output.
- Maximum torque of 41 Nm for powerful and safe acceleration.
- Quick-release device for simple, fast wheel changes.
- No gear unit – silent running.
- Braking assistant – maintains the maximum speed you previously selected when riding downhill and recovers energy. This allows the battery to be charged during downhill riding.
- Charging the battery on the bike and separately.
- The drive system is compatible with commercially available axle mounts for bike trailers. Please familiarise yourself with the legal requirements regarding the use of your Pedelec with a trailer.

4 Charging the battery

You can charge the battery whilst it is on the Pedelec (► Chapter 1 “Quick start”).



Charging the battery

Alternatively, you can take the battery out of its holder and charge it in a separate location.

This is recommended if it is cold outside, in order to charge the battery in a warmer room. The battery can be charged at temperatures between 0°C and 45°C.

4.1 Removing the battery

1. Insert the key into the lock and turn it anticlockwise. The battery is now unlocked.



Unlocking the battery

2. Grip the battery with both hands and lift it forwards/ upwards out of its holder. In doing so, hold on tight to the battery to prevent it from being dropped. Place the battery down on a suitable surface. This should be dry, even and non-flammable.



Removing the battery

3. You should now remove the key and keep it in a safe place to prevent it from breaking off or being lost.

4.2 Learning cycle



After fully charging the battery for the first time and thereafter roughly once every six months, you must run the battery down until the system switches off. This procedure (a so-called “learning cycle”) is necessary so that the battery management recognises the changes in the capacity caused by age and wear and tear, in other words, the performance level of the battery. Afterwards, the capacity of the battery is calculated anew and correctly represented. This also allows the remaining range display to function with greater precision. With this procedure, you can prevent a sudden loss of electrical assistance during an extended trip.

4.3 Charging operation



Before charging the battery, read the information on the charger carefully.

1. Take the charger provided out of its packaging and plug the mains plug into a socket (110 to 230 V, please observe type plate on the charger). To charge the battery safely, the charger must be placed on a suitable surface. This should be dry and non-flammable.
2. Connect the plug of the charger to the battery. When positioned correctly, the plug is held in the socket by a magnet.



Charging the battery

3. The charging process begins. The LED on the charger lights up red. The battery is charged in five stages. When charging of one stage is in progress, the corresponding LED flashes. If this stage has been fully charged, the LED will light up permanently. Now the next LED will begin to flash. After all five LEDs have gone out, the battery is fully charged.
4. If the LED on the charger flashes red permanently, a charging fault has developed. In that case, disconnect the battery from the charger, then connect it again. The charger tests the battery and performs readjustments, if required. If the LED on the charger still flashes, take the charger and battery to your specialist dealer who will test the device and replace it, if required.
5. To save power, pull the charger plug out of the socket once the charging operation is complete.



- Damaged batteries may neither be charged, nor continue to be used.
- The battery may heat up during charging. A maximum temperature of 45°C may be reached. If the battery becomes any warmer than this, suspend the charging process immediately.

4.4 Fitting the battery

1. Insert the battery into the battery holder of the Pedelec from the front/above. At the same time, the key must be in the lock and must be turned anticlockwise.



Installing the battery

2. Press the battery down into the holder until the locking mechanism engages. Now turn the key clockwise and remove it. The battery is now locked in place.



Locking the battery

3. Make sure the battery is firmly in place.

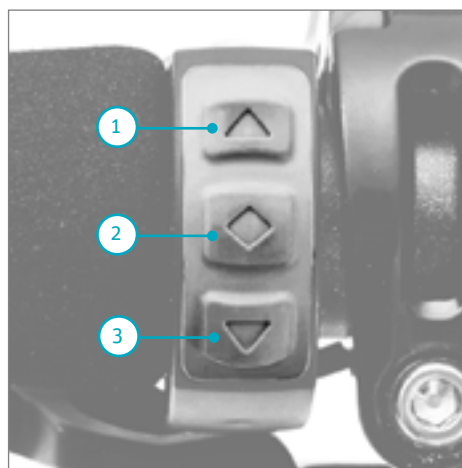
5 Control panel and display

The Xion Pedelec can be controlled via two elements. The display is located in the middle of the handlebar. The control panel can be found on the handlebar grip.



Control panel and display

5.1 Control panel



- 1 Upper arrow button
- 2 Diamond button
- 3 Lower arrow button

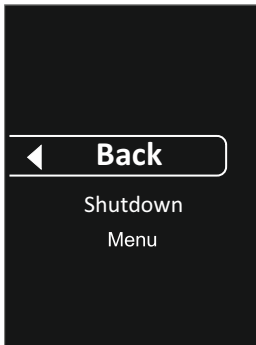
The three buttons each have different functions depending on the item of the settings menu in which you are located.

5.1.1 Switching on/off

Press the diamond button to switch the Xion system on. After a few seconds, the welcome screen appears, followed by the start menu.

From there you can carry out further settings (→ Chapter 5.4 “Programming and settings”).

To switch your Pedelec off, press the diamond button on the control panel for around two seconds whilst in the start menu. This will take you to the sub-menu. Navigate to the item “**Shutdown**” using the arrow buttons and confirm using the **diamond button**.



5.1.2 Buttons for power-assist level

- You can specify the power-assist level using the **arrow buttons**.
- Each time you press an arrow button, the power assist changes by one level.
- If you press the upper arrow button, the level of assistance increases by one level each time you press it.
- If you press the lower arrow button, the assistance becomes weaker each time you press it.

5.2 Display



- 1 Speed
- 2 Power-assist mode/energy recovery
- 3 Battery charge state
- 4 Remaining range
- 5 Variably adjustable display

The display in the middle of the handlebar is divided into five different display panels.

- At the top on the right is your current **1** speed.
- On the left is a display showing the **2** power-assist mode you have selected or the level of energy recovery.
- In the middle on the right hand-side is the **3** battery symbol, which tells you the current charge status of your Pedelec’s battery.
- The remaining **4** range is displayed to the right of the display for the **2** power-assist mode.
- Below this you will see **5** the date or the time, for example. In place of these, the following data can also be called up:
 - Distance covered during the day (in km).
 - The journey time taken to cover this distance.
 - The average speed (in km/h).
 - The maximum speed reached (in km).
 - The total mileage (in km).
 - The total journey time taken to cover this distance.
 - The average speed based on this data (in km/h).
 - Your personal contribution as the rider (in Wh).
 - The power consumption.

5.2.1 Mounting and removal of the display

Mounting:

Place the display on the display holder at an angle of approx. 30 degrees.

Using light pressure, turn the display through 30 degrees in a clockwise direction so that both components are aligned with one another. In the process, you can clearly feel the display lock into place.



Mounting the display

Removal:

Turn the display approx. 30 degrees anticlockwise on the display holder. In doing so, the electrical connections are undone and the display can be removed.



Removing the display



Please always turn the display off first before you remove it (⇒ Chapter 5.1.1 “Switching on/off”).

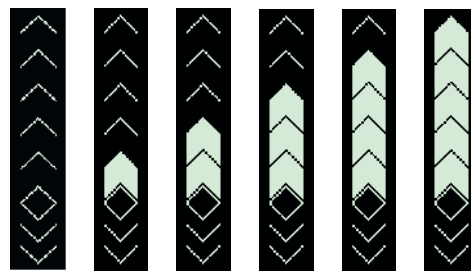


- In order to protect your Pedelec from undesirable use by third parties or theft, the display should always be removed from the handlebar when the Pedelec is not in use.
- You can protect the display from theft by means of a self-tapping countersunk screw for plastic. Contact your specialist cycle shop about this.

5.2.2 Display of the power-assist mode and energy recovery

You can also find information on the assist modes in ⇒ Chapter 6.2 “Assist modes”.

The **selected assist level** is displayed graphically on the far left of the display. Above the diamond you will see the assist levels 1 to 5. The higher the selected assist level, the more assistance the drive provides with constant pedal force.



Assist levels

Below the diamond, the **energy recovery** is displayed. You can set two different recuperation levels. The first level yields 50% energy recovery, while the second yields 100%. In the second level, the maximum possible energy recovery is achieved.

5.2.3 Battery charge state indicator

The battery charge state indicator is located to the right of the centre of the display. Using a stylised battery divided into four segments, it shows the charge remaining in the battery. The lower the **charge state** of the battery is, the fewer segments are displayed.



Charge state indicator

- 1 Battery full
- 2 Battery almost empty

If the battery charge state falls below a minimum level, the assistance switches off via the motor. The display remains active until the battery reaches the lowest possible charge state.

If you do not move your Pedelec for 10 minutes, the system switches off automatically. If you subsequently want to ride using the assistance, you will have to switch it back on using the diamond button.

5.2.4 Remaining range indicator

To the right of the display of the power-assist mode, the distance in km over which you can still travel with power assist is displayed. This is the remaining range indicator.



This “remaining range” is calculated using two measurements taken during the current journey. One short and one long measurement give a representative average value. If the conditions of the journey change, for example, by riding up an incline after a long, flat stretch, the value displayed can also change at short notice. Please consider this factor when planning your trips. You are probably familiar with this effect from the remaining range indicator of your car.

5.2.5 Pushing assistance

First of all, pushing assistance must be activated in programming mode (→ Chapter 5.4.4 “Pushing assistance”).

To activate the pushing assistance, press and hold the upper arrow button. To receive no further pushing assistance, release the button.

5.3 Troubleshooting



If your bike has been exposed to wet conditions for an extended period, e.g. after a trip in heavy rain, or if there have been large differences in temperature, the screen of the display may steam up. This moisture does not impair the function of the display. It is comparable with the steam on a pair of glasses when you enter a warmer room having been outside. After a short time in drier and warmer conditions, this condensation will vanish leaving no trace.

Error messages do not appear on the entire screen, but rather in place of the battery display on the right-hand side. All symbols remain permanently visible, with the exception of the “Inspection due” symbol.

SYMBOL	CAUSE	SOLUTION
	Battery almost empty.	<ul style="list-style-type: none"> Recharge your battery.
	Inspection due.	<ul style="list-style-type: none"> Consult your specialist cycle shop.
	Temperature is too high. The motor is too hot.	<ul style="list-style-type: none"> Allow your system to cool down.
	A fault has occurred in the system.	<ul style="list-style-type: none"> Please contact your specialist cycle shop.

5.4 Programming and settings

After switching on the Xion system, you can switch to the programming mode by pressing the diamond button. This only works when the Pedelec is at a standstill. It is always possible when the “M” is visible in the diamond of the power-assist mode.

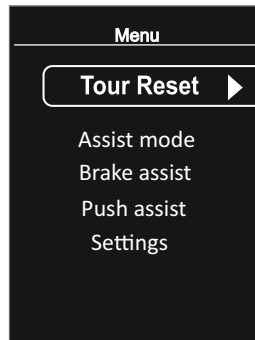
You are taken to the menu sub-items

- Back
- Tour Reset
- Assist mode
- Brake assist
- Push assist
- Settings

You can select the menu sub-items using the arrow buttons on the control panel. You can confirm your selection by pressing the diamond button. The respective contents are then displayed for you. In order to return to the start menu display from the menu sub-items, you must select the menu item “Back” and confirm by pressing the diamond button.

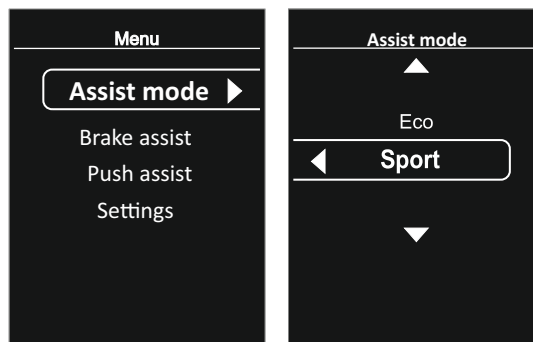
5.4.1 Tour Reset

Under the menu sub-item “Tour Reset” you can delete your tour data. As soon as you press the diamond button, the tour kilometres, the average speed and the journey time for the tour are deleted – and you are taken back to the start menu.



5.4.2 Assist mode

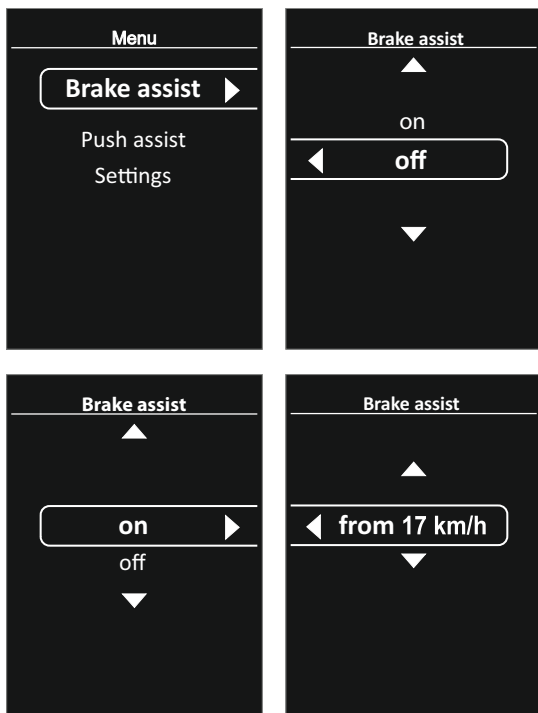
Under the menu sub-item “Assist mode” you can set the assist level of your motor. To do so, press the diamond button and navigate to the desired mode. You can choose between: ECO and Sport. Once you have decided, press the diamond button.



DISPLAY	ASSIST LEVEL
ECO	This means the assistance is only working with a low level of effort. Therefore, longer ranges can be achieved.
Sport	This means the assistance is working hard. As a result, power consumption is higher and the range shorter.

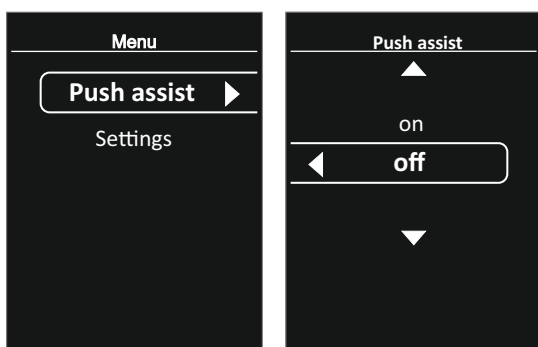
5.4.3 Braking assistance

Under the menu sub-item “Brake assist” you can stipulate whether you want to ride with or without braking assistance. Press the diamond button and navigate to the desired item using the arrow buttons. Once you have decided, press the diamond button.



5.4.4 Pushing assistance

The pushing assistance moves the Pedelec slowly (at a maximum speed of 6 km/h) without you having to turn the pedals, e.g. if you are manoeuvring in a tight space or are pushing your Pedelec out of a basement garage. Select the menu sub-item “Push assist” and press the diamond button. Under the menu sub-item “Push assist” you can stipulate whether you require pushing assistance to be “on” or “off”. Confirm using the diamond button.



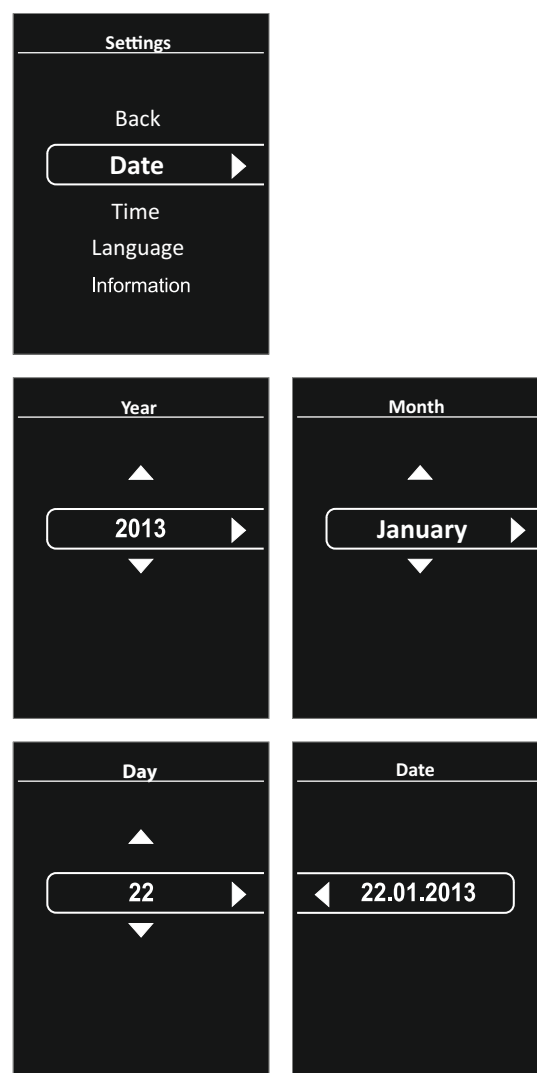
5.4.5 Settings

Under the menu sub-item “Settings”, you can set and review the following sub-items:

- Back
- Date
- Time
- Language
- Information

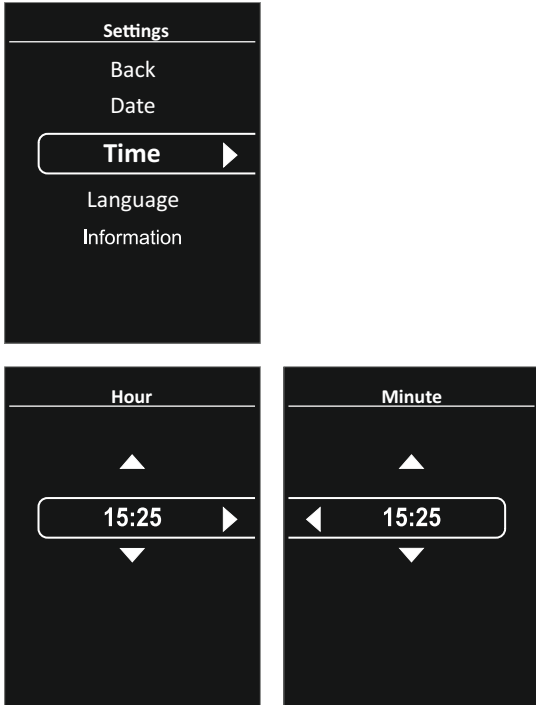
5.4.5.1 Date

Under the item “Date”, you can set the year, month and day. To do so, press the diamond button and navigate to the desired items using the arrow buttons. Confirm your respective selection using the diamond button. Once you have made selections relating to all items, you will see the desired date on the display in the following format: DD. Month YYYY. Pressing the diamond button takes you back to the settings.



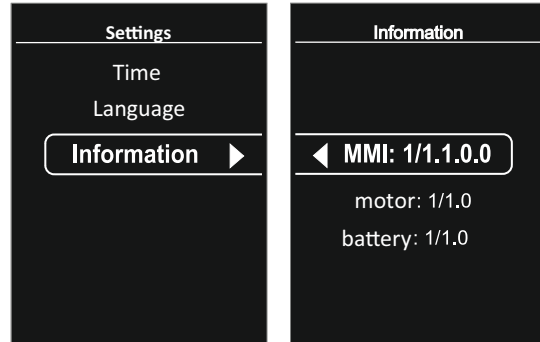
5.4.5.2 Time

Under the item “Time”, you can set the time. To do so, press the diamond button and set the desired time in the format hh:mm using the arrow buttons. Pressing the diamond button takes you back to the settings.



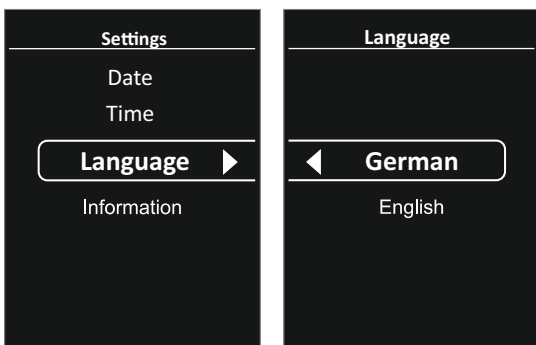
5.4.5.4 Information

Under the item “Information”, you can call up information about your software version, motor and battery. Navigate to the desired item using the arrow buttons and confirm using the diamond button. Pressing the diamond button once more takes you back to the settings.



5.4.5.3 Language

Under the item “Language”, you can choose whether you want to use the display in English or German. Navigate to the desired item using the arrow buttons and confirm using the diamond button. Pressing the diamond button once more takes you back to the settings.



6 Assistance by the electric motor

6.1 Operating principle of assistance

If you switch on the assistance and start pedalling, the motor provides assistance as soon as the rear wheel turns.

The thrust produced by the motor depends on three factors:

- **Your own pedalling effort.**
The motor adapts to the force you apply. If you pedal harder, e.g. uphill or when setting off, the power sensor detects this and delivers more power than if you were only pedalling gently. The assistance increases proportionally if you pedal harder. The higher the assist level you have set, the more distinct this assistance characteristic becomes (→ Chapter 5.1.2 “Buttons for power-assist level”).
- **The level of assistance you have selected.**
In the highest assist level, the motor assists you with the highest output and therefore also uses the most energy. If you have selected the lowest assist level, you receive the least amount of assistance but have the battery’s maximum range at your disposal.

- **How fast you ride**

When you set off on your Pedelec, the assistance increases as you build up speed until it reaches its maximum, just before the highest assisted speed is achieved. The assistance then reduces automatically and switches off at roughly 25 km/h, irrespective of the gear you are in. Depending on the power-assist mode you are riding in, the transition between riding with and without power assist may seem more or less abrupt.

6.2 Assist modes

You can choose between the assist modes ECO and Sport (→ Chapter 5.4.2 “Assist mode”).

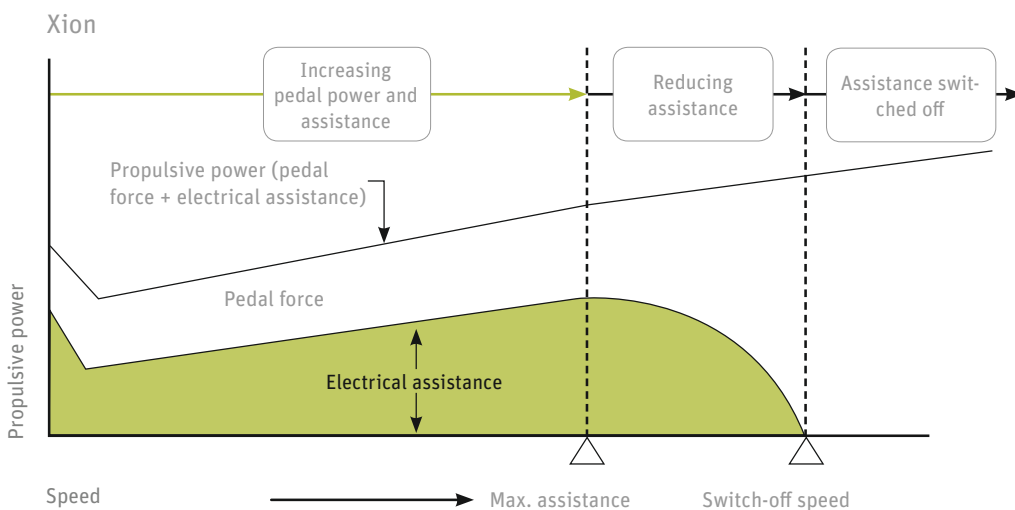
The ECO mode provides you with harmonic, gentle assistance and a long range. It is advisable for beginners or inexperienced riders to start with this mode.

In the Sport mode, the assistance is powerful. Of course, the range is reduced as a consequence.

Within the assist modes, you can adjust the assistance by choosing between five levels.



If you wish to make any further adjustments to the ride characteristics of your bike, please consult your specialist cycle shop.



Relationship between pedal force and electrical assistance

6.2.1 Energy recovery

In technology, “recovery” relates to the feeding of electricity back into the battery during downhill riding. This means that, if you have set the energy recovery or braking assistance, you can charge the battery whilst riding (► Chapter 6.2.2 “Braking assistance”).

The energy recovery can be set using the arrow buttons. The higher the energy recovery setting, the stronger the deceleration. This works in the speed range between 10 and 28 km/h and only while the battery has enough capacity to store the electricity. This means that, when the battery is fully charged, energy recovery does not work. Energy recovery can only be activated when the battery charge state falls below 90%.

If electricity is being fed back into the battery, you will see this symbol on the display:



Energy recovery

6.2.2 Braking assistance

If braking assistance is activated, you will see the following symbol on the display:



Braking assistance

The braking assistance should make riding downhill more comfortable and safer for you.

You can set a “limit speed” of up to 25 km/h. The drive system will then hold you at this speed when riding downhill. The output limit of the braking assistance is determined by the gradient of the route, the total weight of the vehicle and the battery charge state. The battery charge state must be no higher than 90%. The temperature range of the battery must be between 0°C and 45°C.

If the hill is too steep or the gross weight of the bike is too high, the braking assistance will switch itself off. If you want to maintain this speed, you must brake using the brakes on your bike.

As soon as you begin to pedal, the braking assistance deactivates automatically. It activates once more as soon as you stop pedalling and are riding at a speed below the limit speed set.



Always be ready to brake, as the braking assistance can switch off.

You can, of course, always use the brakes on the bike to bring the speed of the vehicle below the limit speed once more.

6.3 Range

The distance you can travel using the power assist with the battery fully charged depends on several factors:

- **Selected assist level**
If you want to cover a long distance with power assist, select the smaller gears, i.e. the ones that are easier to pedal. Also select a low assist level.
- **Handling**
If you are riding in gears that are harder to pedal and select a high assist level, the motor will produce plenty of power to help you along. However, just as with driving a car at high speed, this leads to higher consumption. You will therefore have to recharge the battery sooner. You can conserve energy by keeping the load on the pedals even throughout the entire crank revolution.
- **Ambient temperature**
If it is colder, you will travel a shorter distance with the same battery charge.
To maximise the distance you can travel, keep the battery in a heated room so that it is at room temperature when you fit it on your Pedelec.
As the battery discharges when the motor is in use, it generates enough heat to not lose too much of its power at low ambient temperatures. The battery cells can discharge at temperatures of -15 to +60°C.
This is also the temperature range within which you can use your battery.

- **Technical condition of your Pedelec**

Make sure the tyre pressure is correct. If you ride your bike with too little air in the tyres, this can significantly increase the rolling resistance. This applies to smooth surfaces in particular, e.g. tarmac. If the ground is uneven, as on a country path or gravel track, a somewhat reduced tyre pressure can lead to less rolling resistance. This also increases the risk of a puncture. Please consult your specialist cycle shop about this. The distance you can travel also decreases if the brakes are rubbing.

- **Battery capacity**

The current battery capacity (► Chapter 7.4.2 “Checking the battery capacity”).

- **Topography**

You pedal harder when riding uphill. This is detected by the power sensor which then allows the motor to work harder.

Under ideal conditions, the range may reach 120 km with the 11 Ah battery and 180 km with the 15.5 Ah battery. These ranges have been achieved under the conditions listed below.

XION BATTERY	11 AH	15.5 AH
Range	130 km	180 km
Temperature	10-15°C	10-15°C
Wind speed	windless	windless
Average speed	22 km/h	22 km/h
Assist level	ECO (lowest assist level)	ECO (lowest assist level)
Gross weight	105-110 kg	105-110 kg

6.4 Riding your Pedelec efficiently

You can monitor and influence the cost of your journeys with the Pedelec yourself. You can reduce your consumption and therefore costs by following the tips for increasing the range.

The operating costs for power assist with an 11 Ah battery are calculated as follows:

- A new battery costs roughly 599 euros.
- Throughout the total service life of a battery, you can cover roughly 80 kilometres with one charge cycle.
- You can charge the battery roughly 1,100 times.
- 1,100 charging cycles x 80 km = 88,000 km
- 599 euros: 88,000 km = 0.68 euro cents per kilometre.
- You use roughly 0.565 kWh to fully charge the battery. Assuming a unit price of 23.5 euro cents per kWh, it costs you 13.27 euro cents to fully charge the battery.
- To cover the average range of 80 kilometres, it costs you 67.67 euro cents.
- This means the cost of consumption and the battery is a maximum of 0.85 euro cents/km.

The sample calculation has been carried out based on German energy prices. The operating costs may vary depending on the energy prices you pay.

7 Battery

Your battery is a lithium-ion battery, the ideal type of battery for this application.

One of the main benefits of this battery is its low weight combined with a high capacity.

7.1 Straightforward charging



- › Damaged batteries can neither be charged, nor continue to be used.
 - › The battery may heat up during charging. A maximum temperature of 45°C may be reached. If the battery becomes any warmer than this, suspend the charging process immediately.
 - › During the charging process, the battery must be positioned on an even, non-flammable surface. The charger must not be covered.
-
- There is no memory effect. You can therefore fully recharge your battery after every trip.
 - Recharge the battery after every trip. This means you can set off immediately the next time you use your bike and you also increase the service life of the battery.
 - If you are not using the battery, you have to recharge it after 6 months.

7.1.1 Learning cycle



Once you have fully charged the battery for the first time, you must run it down until the system switches off. Repeat this process roughly every six months. This procedure (a so-called “learning cycle”) is necessary so that the battery management recognises the changes in the capacity caused by age and wear and tear, in other words, the performance level of the battery. This is the only way to enable adjustments to your remaining range indicator.

Afterwards, the capacity of the battery is calculated anew and correctly represented.

With this procedure, you can prevent a sudden loss of electrical assistance during an extended trip.

7.2 High degree of safety due to battery management

- The battery cannot be damaged as a result of a short-circuit. If this were to happen, the battery management would switch off the battery.
- You can simply leave the battery connected to the charger as it has in-built overcharging protection.
- The battery management monitors the temperature of your battery and warns you of incorrect use.

7.3 Straightforward storage

- If you do not need your battery for a while, store it at a temperature of +10°C at three quarters of its full charge capacity.
- The battery management switches the battery to sleep mode to prevent a so-called total discharge. This can occur after different lengths of time without being used. Depending on the charge state of the battery, this can occur earlier with a lower charge and later with a higher charge. The management system activates the sleep mode after 48 hours without using the battery. The system exits sleep mode when you press the button with LED on the battery.

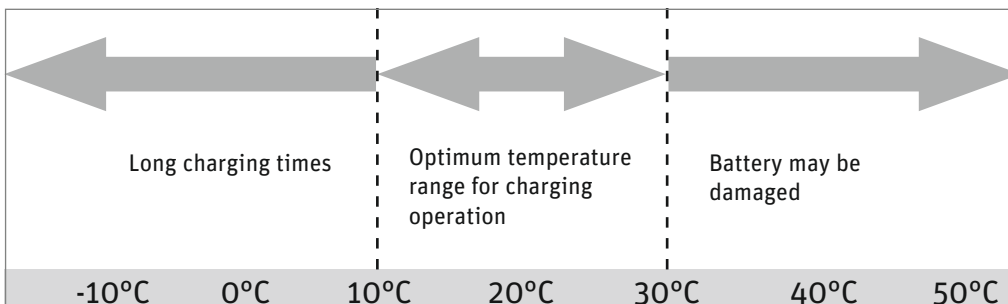
These benefits are available due to highly effective battery management that has been adapted to this specific application and by tuning the battery for operation with a 250 watt motor.



Observe the following points to increase the service life of your Pedelec battery:

- › Make sure that the battery is fully charged before you ride your bike for the first time or if you have not used it for a while.
- › If you continuously run the battery to empty during normal operation, this reduces its service life. If you partially recharge the battery frequently during normal operation, this has a favourable effect on its service life.
- › You should therefore partially recharge the battery whenever possible: Try not to run the battery all the way down to empty and recharge it even after a short period of operation.

- › In the as-delivered condition, the battery is not fully charged and is in what is referred to as sleep mode. Sleep mode minimises the rate at which the battery discharges itself. If the battery is allowed to discharge unchecked for an extended period this can lead to total discharging which damages the battery. To “wake up” the battery, simply charge it up again.
- › If you are having problems with the battery, charge it for one minute initially. A reset occurs, during which the battery management disables sleep mode, for example. After this, the battery will work again.
- › Ideally you should charge the battery at a temperature of between +10°C and +30°C. It takes longer to charge the battery at low temperatures, while the battery will not charge up at temperatures higher than +45°C. Ideally, you should charge and store the battery inside your house or in a warm garage when the outside temperature is low. In this case you should only fit the battery on your bike just before using it.
- › If you are transporting your Pedelec by car, take the battery out of its holder and transport it separately.
- › The battery should ideally be stored for longer periods with a charge state of 50% to 75% at a temperature of +10°C.



Charging times at different temperatures

7.4 Battery information system

There is a display panel on the outer face of the battery which includes five LEDs and a button with an LED. The LEDs light up if you press the button. Information about the battery and its charge state is provided based on the number of LEDs that light up and the way in which they light up.



Battery charge state

7.4.1 Checking the battery charge state

Press the button with the LED briefly; the LEDs light up and display the current battery charge state.

AFFICHAGE	ÉTAT DE CHARGE DE LA BATTERIE
••••• 5 LEDs light up	100 – 80 %
•••• 4 LEDs light up	80 – 60 %
••• 3 LEDs light up	60 – 40 %
•• 2 LEDs light up	40 – 20 %
• 1 LED lights up	20 – 10 %
○ 1 LED flashes	10 – 0 %
••••• 5 LEDs flash quickly	0 %, surcharge ou la batterie est en mode de démarrage*
○ 1 st LED flashes quickly	Erreur de chargement **

* All five LEDs flash quickly: The battery is empty and is being switched off, is overloaded or is going through the start mode.

- If the battery is empty, it will work once again briefly following a short period of rejuvenation and will then switch back off. It must now be recharged
- If the battery is overloaded, it will switch back on after a short idle period and can then be used normally.

** The first LED flashes quickly: A charging fault is present.

- In that case, please remove the mains plug from the socket and then plug it in again after a short time. The charger performs a readjustment. In most cases, this rectifies the fault.
- If the LED continues to flash, overheating or undercooling of the battery may also be the cause. If, for example, you charge the battery in a cold environment at a temperature below 0°C, or the battery heats up to over 60°C during a long ascent, the management switches off to protect the battery. In such cases, the battery must be taken to a warmer environment or cool down.
- If the LED still flashes, take the battery to your specialist cycle shop and have it checked.

7.4.2 Checking the battery capacity

When you press the button with the LED for approx. three seconds, the LEDs indicate the charge state first, and then, after a short pause, the current capacity of the battery. If the LED in the largest panel lights up, then the battery has a capacity of over 60%. If the capacity is below 60%, this is indicated via the smallest LED. Only one of the two LEDs can light up at any one time.



The range of the battery is less in winter due to the lower temperatures. Only move the battery (from the warm room where you store it) and fit it on your Pe-delec just before you set off. This will help to prevent the effect of the low temperature on the range of the battery (➔ Chapter 7.5.1 “Service life and warranty of the battery”).

7.5 Service life and warranty

Your Xion system is a high-quality drive system which was manufactured in Germany. All components come with a two-year warranty. The battery is a wear part (➔ *Chapter 7.5.1 “Service life and warranty of the battery”*). Bear in mind that, due to the higher average speed and greater distances that can be achieved with your Pedelec compared to a normal bike, all wear parts are subjected to greater wear.

7.5.1 Service life and warranty of the battery

Batteries are wear parts. Wear parts come with a two-year warranty.

If the battery develops a fault during this period, your specialist cycle shop will of course replace it. Normal ageing and battery wear do not constitute a fault.

The service life of the battery depends on different factors. The most important wear-relevant factors are:

- The **number of charging processes**

After 1,100 charging cycles, your battery will still have 60% of its initial capacity, providing it has been well looked after. This means 6.6 Ah in an 11 Ah battery and 7.2 Ah in a 15.5 Ah battery. A charging cycle is defined as the sum of the individual charges until the charges reach the overall capacity of the battery.

For example: You charge the battery with 5 Ah on the first day, 2 Ah on the second day and 4 Ah on the third day; the sum is 11 Ah. The battery has thereby completed one charge cycle.

From the technical standpoint therefore, the battery is exhausted at this point. Providing you can still cover the journey distances with the remaining battery capacity, you can of course continue using it. If the capacity is no longer sufficient, you can take your battery to a specialist cycle shop who will dispose of your battery and sell you a new one.

- The **age** of the battery.

A battery also ages during storage.

An 11 Ah battery with lithium-ion cells loses around 4-5% of its initial capacity each year. A 15 Ah battery with lithium-nickel-cobalt-aluminium-oxygen cells around 2-3%.

This means: Even if you do not use your battery, its capacity reduces. With everyday use, you can expect the battery to age by approximately 3-5% per year as a result of ageing and charging processes.

- You can extend the service life of the battery by fully recharging it after every journey, however short. The Xion Li-ion battery has no memory effect.
- You can also extend the service life of the battery by using the assistance selectively. Ideally, you should ride in low gears with a high pedalling cadence.
- If you always ride with maximum motor output, your motor will always require a higher current. Higher currents cause the battery to age more quickly.

7.6 Transportation and shipping of the battery

7.6.1 Transportation



- › Never transport damaged batteries. The safety of damaged batteries cannot be guaranteed. Scratches and small chips in the housing do not constitute serious damage.
- › Damaged batteries may neither be charged, nor continue to be used



- › For the transportation of your Pedelec, we recommend removing the battery from the Pedelec and packaging it separately.
- › Cover the contact socket in the battery holder of your bike with the round socket cover. In this way, no dirt can enter the contact socket.

7.6.1.1 The E-Bike and your car

If you transport your E-Bike on a bike rack, ensure that it is designed for the higher weight of an E-Bike. In order to relieve the load on the rack and protect the battery from climatic conditions, it must be transported inside the car.

7.6.1.2 The E-Bike on trains

In Germany, you can take your E-Bike with you on trains which are marked with the bike symbol. To do so on German Intercity (IC) and EuroCity (EC) trains, you must book a place for your bike in advance. As a rule, you may not take bikes with you on German Intercity Express (ICE) trains.

7.6.1.3 The E-Bike on aeroplanes

Your E-Bike is generally subject to the policies of the respective airline concerning bikes. Batteries are subject to dangerous goods legislation. Therefore, they must not be carried on passenger planes – neither in the cargo hold, nor the cabin. Please contact the relevant airline for detailed information.

7.6.2 Shipping



Do not ship batteries! A battery is a hazardous article which can overheat and catch fire in certain conditions.

The preparation and shipping of a battery may only be carried out by trained personnel.

If you would like to return your Pedelec battery for replacement, please always arrange this via your specialist cycle shop. Specialist cycle shops can have the battery picked up free of charge and in compliance with dangerous goods legislation.

7.7 Damaged batteries



- › Never attempt to repair your battery. Specialists are responsible for performing such repairs. If your battery is damaged, contact your specialist cycle shop. The specialists here will discuss the next steps with you.
- › Damaged batteries may neither be charged, nor continue to be used

7.8 Disposal of batteries

Batteries are not to be disposed of with domestic waste. Consumers are legally bound to dispose of used or damaged batteries at the locations designated for the purpose (battery collection point or specialist cycle shop).

8 Charger

Read the type plates on the charger before using it for the first time.

You can charge your Pedelec with Xion drive directly via a charging socket in the battery. The battery can remain on the Pedelec whilst the charging operation is in progress.



Charging the battery

Alternatively, you can take the battery out of its holder and charge it elsewhere.

This is recommended if it is cold outside, in order to charge the battery in a warmer room. The battery can be charged at temperatures between 0°C and 45°C.



Do not use other chargers. Only charge the battery using the charger provided, or a charger approved by us.

- If a charging fault occurs, the LED in the charger flashes red. In this case, the charging current is too high.
- Disconnect the battery from the charger and then connect it again. If the error message still appears, the battery and charger must be checked by a specialist dealer.



If used incorrectly, the device may be damaged or inflict injuries.

- › Before cleaning the charger, always pull the plug out of the socket to avoid a short-circuit and/or physical injury.
- › Only use the charger in dry rooms.
- › Only place the charger in a secure stable position on a suitable surface.
- › Do not cover the charger or place any objects on it as otherwise it could overheat and catch fire.

9 Removing and installing the rear wheel

9.1 Removing the rear wheel

1. First, shift the bike chain to the smallest sprocket.
2. Then disconnect the cable between the motor and the battery.



Disconnecting the cable

3. If your Pedelec is equipped with rim brakes, unhook the brake cable at the brake body (➔ *General User Manual*, Chapter 18.1 “Opening the brake”).
4. If your Pedelec is equipped with disc brakes, refer to the section of the User Manual concerning the technology featured in the bike for information on their handling (➔ *General User Manual*, Chapter 18.1 “Opening the brake”).
5. Release the quick-release device (➔ *General User Manual*, Chapter 9.2.2 “Operating the quick-release device”). Then remove the rear wheel from the frame by rotating the rear derailleur backwards slightly, so that the chainring can be fed past it more easily.



Remember that the motor carries additional weight and the rear wheel is therefore heavier than normal!

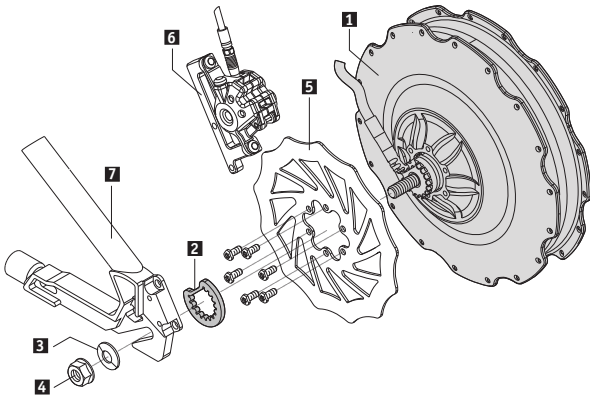


Never hold or carry the rear wheel by the cable. This poses the danger of the cable breaking.

6. On the left axle side of the motor, there is a detachable component for torque support. Place this to one side, so that it is not lost.

9.2 Installing the rear wheel

1. Place the torque support on the left axle side of the motor (see point 2 in the image below).



Placing the torque support

2. Then feed the rear wheel past the rear derailleur and into the dropout on the frame.
3. If your Pedelec has disc brakes, ensure that the brake disc is placed exactly in the centre between the brake blocks.
4. Insert the rear wheel in the dropout so that the torque support fits exactly and the ends of the axle sit entirely within the dropout.
5. Close the quick-release device (→ *General User Manual, Chapter 18.6.2 "Inserting the rear wheel"*).
6. Connect the cable between the motor and the battery.
7. Attach the plug to the chain stay once more using the rubber ring.
8. If your Pedelec has rim brakes, engage the brake cable once more.



For precise details regarding the handling of rim or disc brakes and quick-release devices, please refer to the section of the User Manual concerning the technology featured in the bike.

10 Cleaning



- Remove the battery before you clean your Pedelec.
- Do not use benzine, thinner, acetone or similar agents in the cleaning procedures under any circumstances. Likewise, the use of abrasive cleaners and aggressive cleaning agents must also be avoided.
- Only use commercially available, household cleaning agents and disinfectants (isopropyl alcohol) or water. You can obtain suitable cleaning agents and additional information from your specialist cycle shop.
- We recommend you clean your Pedelec with a damp cloth, a sponge or a brush.

10.1 Cleaning the battery

Make sure when cleaning that water does not enter the battery. Although the electrical components are sealed, it is not advisable to clean the bike by spraying it with a hose or a high-pressure cleaner. This could damage your bike.

When wiping down the battery, be careful not to touch and connect the contacts on the underside. This could cause the battery to switch off.

10.2 Cleaning the motor

Dirt should be removed from the motor of your Pedelec regularly, ideally using a dry brush or a damp (not wet) cloth. Running water such as that from a hose pipe or even a high-pressure cleaner must not be used for cleaning.

The ingress of water can destroy the motor. Therefore, ensure that neither fluids nor moisture enter the motor at any time during cleaning.

Do not clean the motor when it is warm, e.g. immediately after a trip. Wait until it has cooled down. Otherwise, the motor may be damaged.

If the motor is removed, e.g. for cleaning purposes, it must not be held or carried by the cables under any circumstances, as otherwise there is a risk that the cable will break.

If the motor has been removed from the frame of the Pedelec, the plug from the motor and the socket of the cable leading to the battery pack must be checked for possible contamination and, if necessary, cleaned carefully with a dry cloth before reconnecting.

10.3 Cleaning the display

The contacts of the base plate should be cleaned periodically using a contact spray in order to ensure their functionality.

The housing of the display may only be cleaned with a damp (not wet) cloth.

10.4 Cleaning the control panel

The control panel can be cleaned with a damp cloth where necessary.

11 Technical data

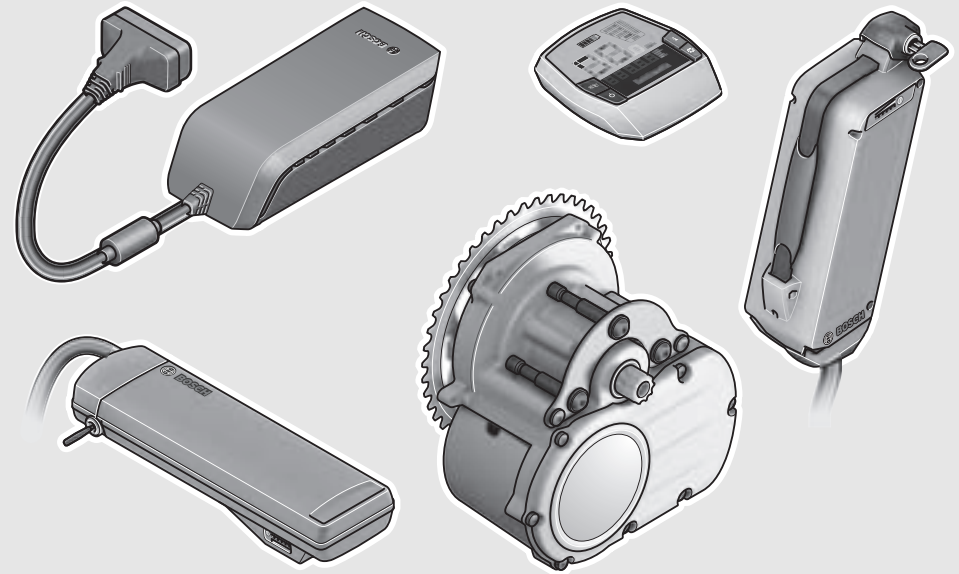
MOTOR		
Brushless electric motor		
Output	250 W rated output/ 650 W maximum output	
Maximum torque	12 Nm rated torque/40 Nm maximum torque	
Gross weight of electric drive, battery, control unit	11 Ah	15.5 Ah
	7.8 kg	7.8 kg
Control	Via torque sensor and speed sensor in the motor	

XION LI-ION BATTERY		
Capacities	11 Ah	15.5 Ah
Voltage	36 V	36 V
Gross weight	2.85 kg	2.85 kg

**We hope you thoroughly enjoy using your new Pedelec
with Xion drive.**

Copyright © 2013 Derby Cycle Werke GmbH

*Reproduction in whole or in part is not permitted without the consent
of Derby Cycle Werke GmbH. Subject to misprints, errors and technical
modifications..*



Robert Bosch GmbH
Bosch eBike Systems
72703 Reutlingen
Germany

www.bosch-ebike.com

0 276 001 Y45 (2012.10) T / 142

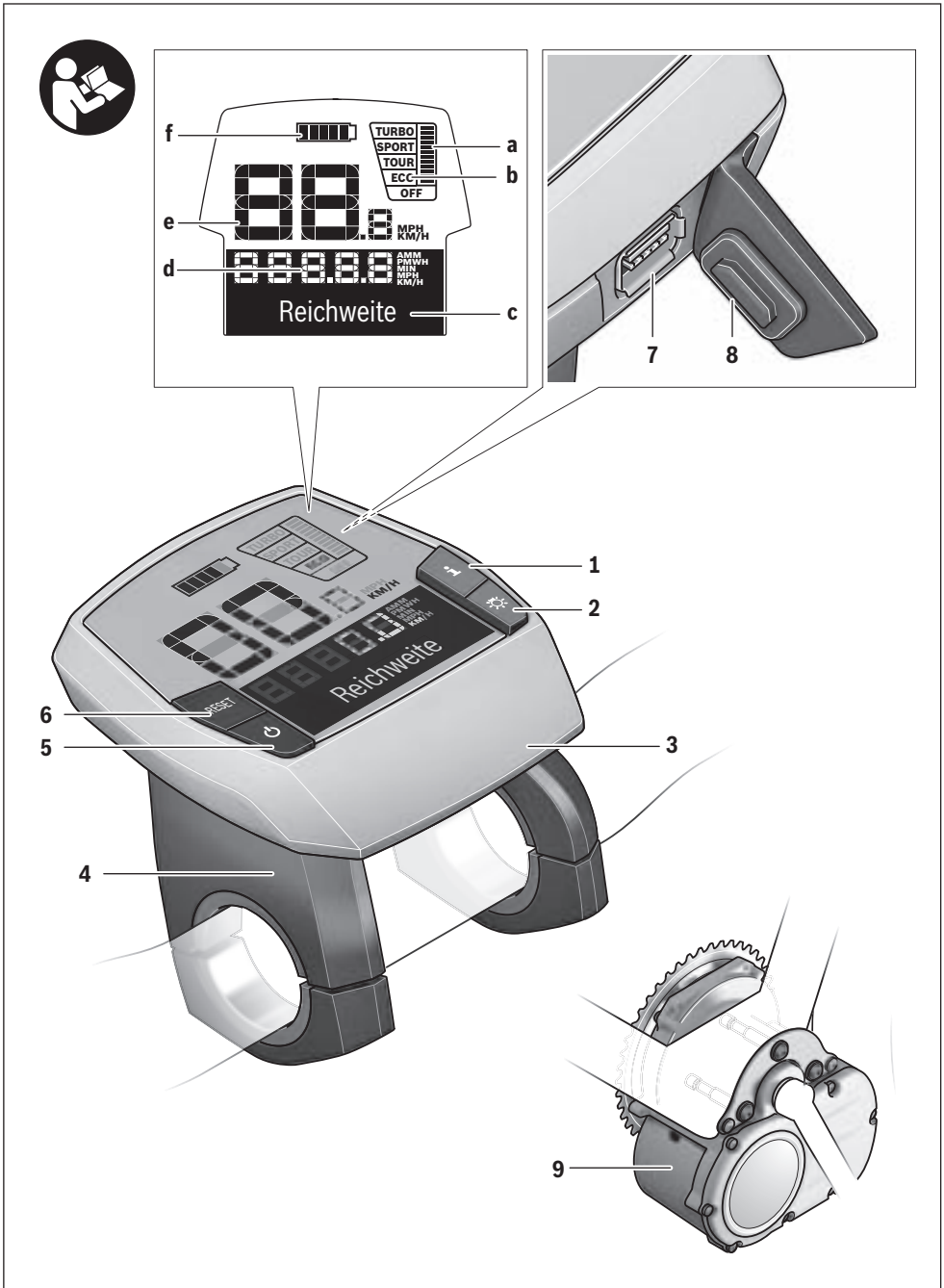
Drive Unit Speed | Intuvia | PowerPack 300 | PowerPack 400 | Charger

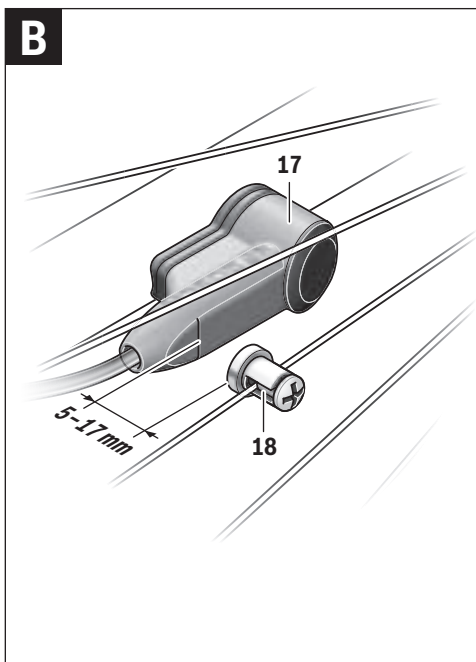
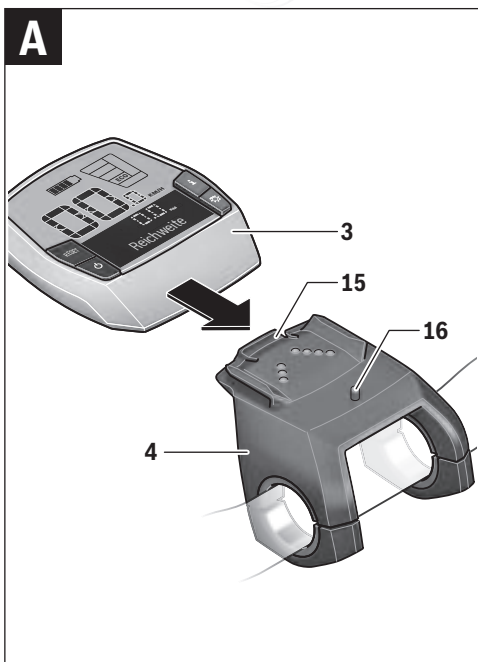
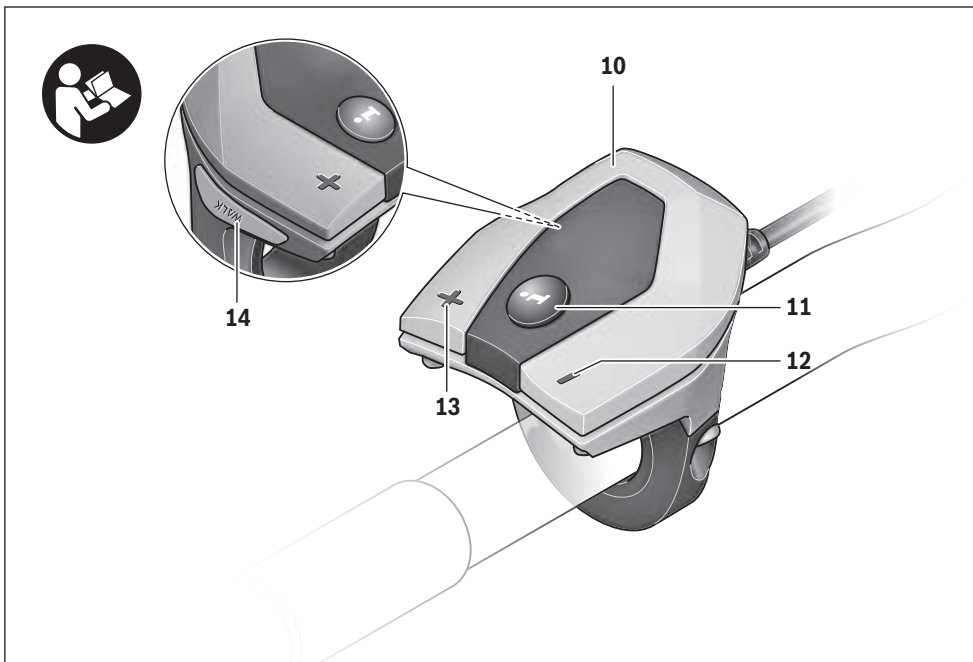
0 275 007 003 | 1 270 020 903 | 0 275 007 500 | 0 275 007 501 |
0 275 007 502 | 0 275 007 503 | 0 275 007 504 | 0 275 007 505 | 0 275 007 905

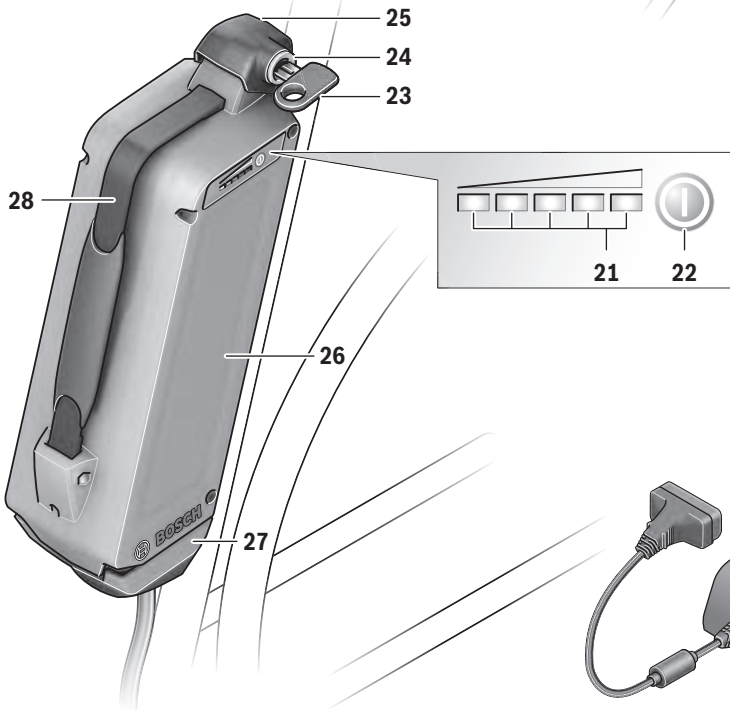
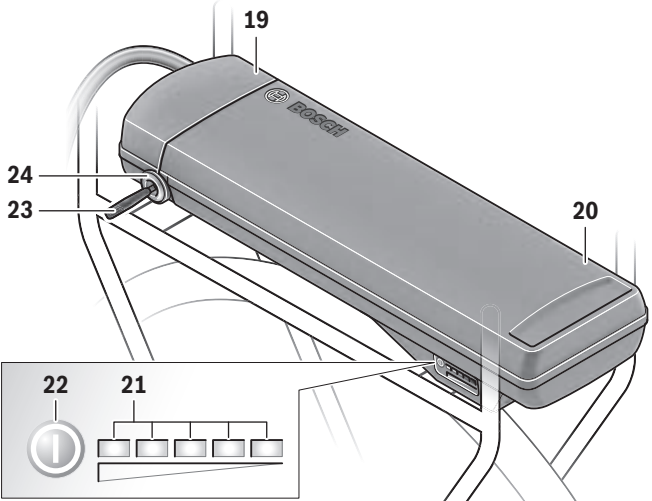


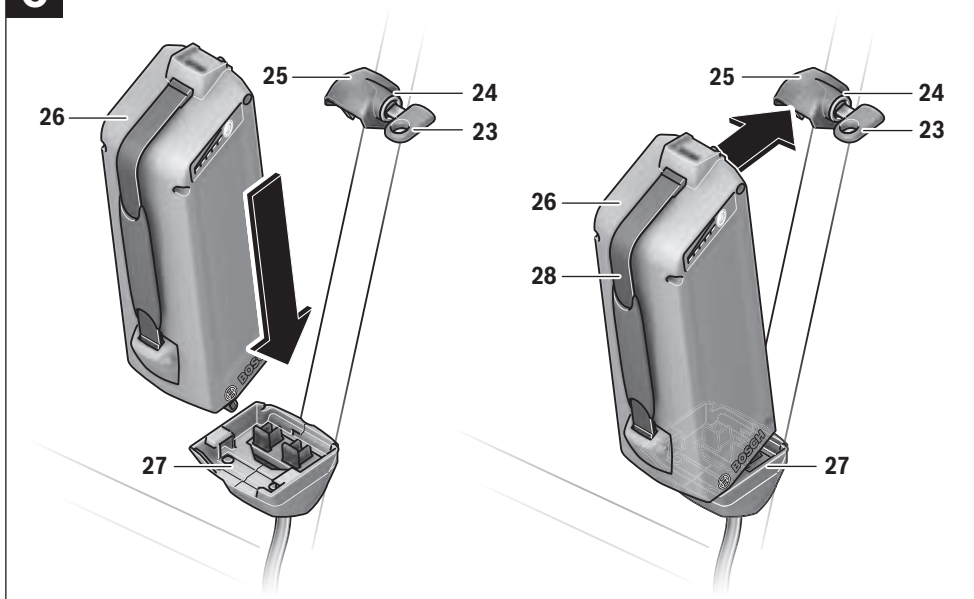
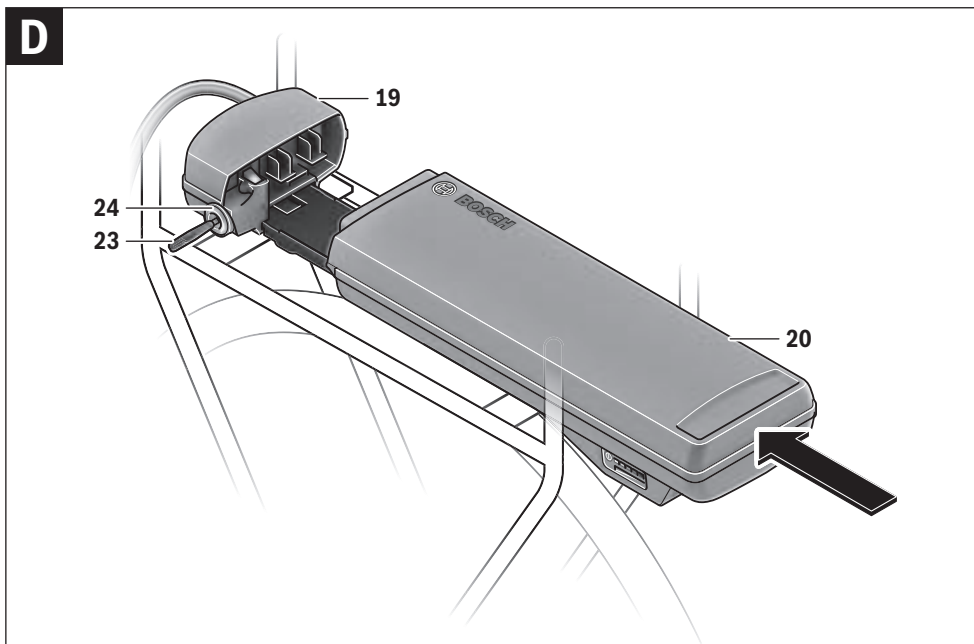
de Originalbetriebsanleitung
en Original instructions
fr Notice originale
es Manual original
it Istruzioni originali
nl Oorspronkelijke gebruiksaanwijzing
da Original brugsanvisning
sv Bruksanvisning i original
no Original driftsinstruks
fi Alkuperäiset ohjeet

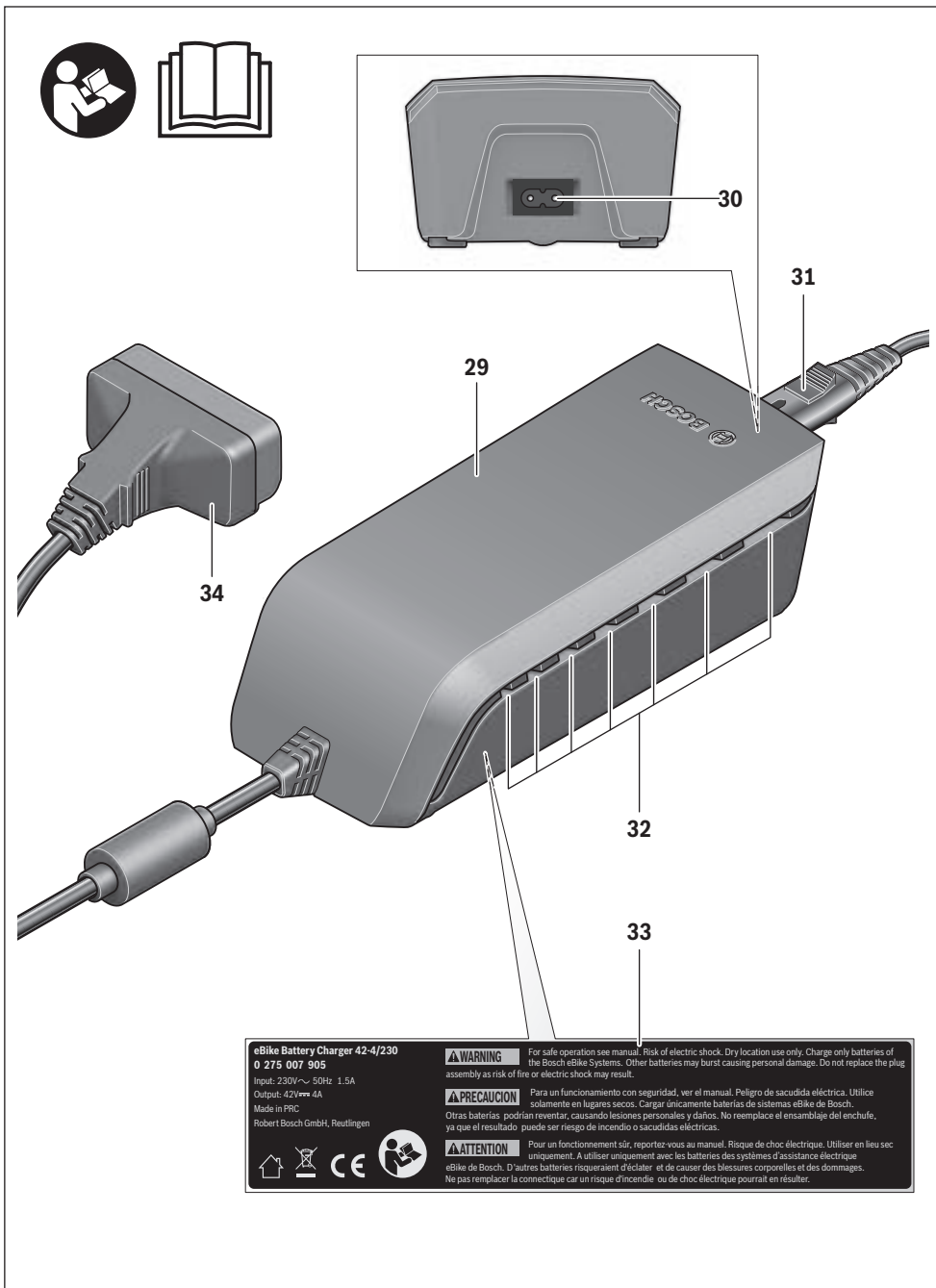


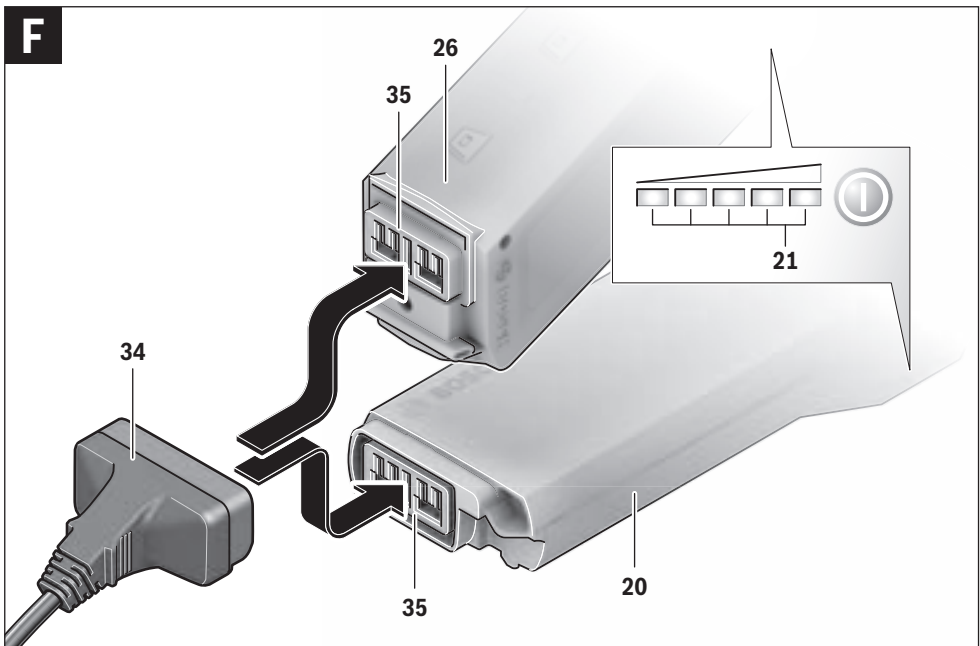
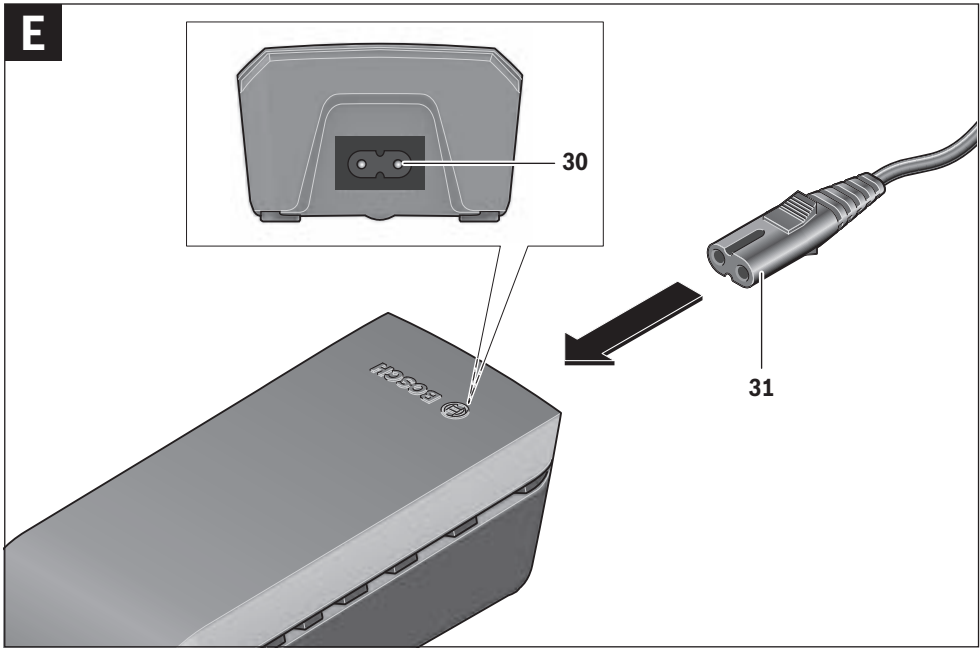






C**D**





Antriebseinheit Drive Unit Speed/ Bediencomputer Intuvia

Sicherheitshinweise



Lesen Sie alle Sicherheitshinweise und Anweisungen. Versäumnisse bei der Einhaltung der Sicherheitshinweise und Anweisungen können elektrischen Schlag, Brand und/oder schwere Verletzungen verursachen.

Bewahren Sie alle Sicherheitshinweise und Anweisungen für die Zukunft auf.

Der in dieser Betriebsanleitung verwendete Begriff „Akku“ bezieht sich gleichermaßen auf Standard-Akkus (Akkus mit Halterung am Fahrradrahmen) und Gepäckträger-Akkus (Akkus mit Halterung im Gepäckträger).

- ▶ **Öffnen Sie die Antriebseinheit nicht selbst. Die Antriebseinheit ist wartungsfrei und darf nur von qualifiziertem Fachpersonal und nur mit Original-Ersatzteilen repariert werden.** Damit wird sichergestellt, dass die Sicherheit der Antriebseinheit erhalten bleibt. Beim unberechtigten Öffnen der Antriebseinheit erlischt der Gewährleistungsanspruch.
- ▶ **Alle an der Antriebseinheit montierten Komponenten und alle anderen Komponenten des eBike-Antriebs (z. B. Kettenblatt, Aufnahme des Kettenblatts, Pedale) dürfen nur gegen baugleiche oder vom Fahrradhersteller speziell für Ihr eBike zugelassene Komponenten ausgetauscht werden.** Damit wird die Antriebseinheit vor Überlastung und Beschädigung geschützt.
- ▶ **Nehmen Sie den Akku aus dem eBike, bevor Sie Arbeiten (z. B. Montage, Wartung etc.) am eBike beginnen, es mit dem Auto oder dem Flugzeug transportieren oder es aufbewahren.** Bei unbeabsichtigtem Betätigen des Ein-/Ausschalters besteht Verletzungsgefahr.
- ▶ **Die Funktion Anfahrhilfe darf ausschließlich beim Anfahren des eBikes verwendet werden.** Haben die Räder des eBikes beim Benutzen der Anfahrhilfe keinen Bodenkontakt, besteht Verletzungsgefahr.
- ▶ **Verwenden Sie nur original Bosch Akkus, die vom Hersteller für Ihr eBike zugelassen wurden.** Der Gebrauch anderer Akkus kann zu Verletzungen und Brandgefahr führen. Bei Gebrauch anderer Akkus übernimmt Bosch keine Haftung und Gewährleistung.
- ▶ **Beachten Sie alle nationalen Vorschriften zur Zulassung und Verwendung von eBikes.**
- ▶ **Lesen und beachten Sie die Sicherheitshinweise und Anweisungen in der Betriebsanleitung des Akkus sowie in der Betriebsanleitung Ihres eBikes.**

Produkt- und Leistungsbeschreibung

Bestimmungsgemäßer Gebrauch

Die Antriebseinheit ist ausschließlich zum Antrieb Ihres eBikes bestimmt und darf nicht für andere Zwecke verwendet werden.

Das eBike ist zur Verwendung auf befestigten Wegen bestimmt. Es ist nicht für den Wettbewerbsbetrieb zugelassen.

Abgebildete Komponenten (siehe Seite 2 - 3)

Die Nummerierung der abgebildeten Komponenten bezieht sich auf die Darstellungen auf der Grafikkarte.

Alle Darstellungen von Fahrradteilen außer Antriebseinheit, Bediencomputer inkl. Bedieneinheit, Geschwindigkeitssensor und dazugehörigen Halterungen sind schematisch und können bei Ihrem eBike abweichen.

- 1 Taste Anzeigenfunktion „i“
- 2 Taste Beleuchtung
- 3 Bediencomputer
- 4 Halterung Bediencomputer
- 5 Ein-Aus-Taste Bediencomputer
- 6 Reset-Taste „RESET“
- 7 USB-Buchse
- 8 Schutzkappe der USB-Buchse
- 9 Antriebseinheit
- 10 Bedieneinheit
- 11 Taste Anzeigenfunktion „i“ an der Bedieneinheit
- 12 Taste Wert senken/nach unten blättern „-“
- 13 Taste Wert erhöhen/nach oben blättern „+“
- 14 Taste Anfahrhilfe „WALK“
- 15 Arretierung Bediencomputer
- 16 Blockierschraube Bediencomputer
- 17 Geschwindigkeitssensor
- 18 Speichenmagnet des Geschwindigkeitssensors

Anzeigenelemente Bediencomputer

- a Anzeige Motorleistung
- b Anzeige Unterstützungslevel
- c Textanzeige
- d Wertanzeige
- e Tachometeranzeige
- f Akku-Ladezustandsanzeige

Technische Daten

Antriebseinheit		Drive Unit Speed
Sachnummer		0 275 007 003
Leistung	W	350
Drehmoment am Abtrieb max.	Nm	50
Nennspannung	V _{DC}	36
Betriebstemperatur	°C	-5 ... +40
Lagertemperatur	°C	-10 ... +50
Schutzart		IP 54 (staub- und spritzwassergeschützt)
Gewicht, ca.	kg	4

Bediencomputer		Intuvia
Sachnummer		1 270 020 903
Ladestrom USB-Anschluss max.	mA	500
Ladespannung USB-Anschluss	V	5
Betriebstemperatur	°C	-5 ... +40
Lagertemperatur	°C	-10 ... +50
Schutzart		IP 54 (staub- und spritzwassergeschützt)
Gewicht, ca.	kg	0,15

Beleuchtung*		
Nennspannung	V _{DC}	6
Leistung		
- Vorderlicht	W	2,7
- Rücklicht	W	0,3

* abhängig von gesetzlichen Regelungen nicht in allen länderspezifischen Ausführungen über den eBike-Akku möglich

Montage

Akku einsetzen und entnehmen

Zum Einsetzen des Akkus in das eBike und zum Entnehmen lesen und beachten Sie die Betriebsanleitung des Akkus.

Bediencomputer einsetzen und entnehmen (siehe Bild A)

Zum **Einsetzen** des Bediencomputers **3** schieben Sie ihn von vorn in die Halterung **4**.

Zum **Entnehmen** des Bediencomputers **3** drücken Sie auf die Arretierung **15** und schieben ihn nach vorn aus der Halterung **4**.

► **Entnehmen Sie den Bediencomputer bei abgestelltem eBike, damit der Antrieb nicht durch unberechtigte Dritte benutzt werden kann.** Ohne Bediencomputer kann das eBike-System nicht eingeschaltet werden.

Es ist auch möglich, den Bediencomputer in der Halterung gegen Entnahme zu sichern. Demontieren Sie dazu die Halterung **4** vom Lenker. Setzen Sie den Bediencomputer in die Halterung. Schrauben Sie die Blockierschraube **16** von unten in das dafür vorgesehene Gewinde der Halterung. Montieren Sie die Halterung wieder auf dem Lenker.

Geschwindigkeitssensor überprüfen (siehe Bild B)

Der Geschwindigkeitssensor **17** und der dazugehörige Speichenmagnet **18** müssen so montiert sein, dass sich der Speichenmagnet bei einer Umdrehung des Rades in einem Abstand von mindestens 5 mm und höchstens 17 mm am Geschwindigkeitssensor vorbeibewegt.

Hinweis: Ist der Abstand zwischen Geschwindigkeitssensor **17** und Speichenmagnet **18** zu klein oder zu groß, oder ist der Geschwindigkeitssensor **17** nicht richtig angeschlossen, fällt die Tachometeranzeige **e** aus, und der eBike-Antrieb arbeitet im Notlaufprogramm.

Lösen Sie in diesem Fall die Schraube des Speichenmagnets **18** und befestigen Sie den Speichenmagnet so an der Speiche, dass er in der richtigen Entfernung an der Markierung des Geschwindigkeitssensors vorbeiläuft. Erscheint auch danach keine Geschwindigkeit in der Tachometeranzeige **e**, wenden Sie sich bitte an einen autorisierten Fahrradhändler.

Betrieb

Inbetriebnahme

Voraussetzungen

Das eBike-System kann nur aktiviert werden, wenn folgende Voraussetzungen erfüllt sind:

- Ein ausreichend geladener Akku ist eingesetzt (siehe Betriebsanleitung des Akkus).
- Der Bediencomputer ist richtig in die Halterung eingesetzt (siehe „Bediencomputer einsetzen und entnehmen“, Seite Deutsch – 2).
- Der Geschwindigkeitssensor ist richtig angeschlossen (siehe „Geschwindigkeitssensor überprüfen“, Seite Deutsch – 2).

eBike-System ein-/ausschalten

Zum **Ein**schalten des eBike-Systems haben Sie folgende Möglichkeiten:

- Ist der Bediencomputer bereits eingeschaltet, wenn er in die Halterung gesetzt wird, dann wird das eBike-System automatisch eingeschaltet.
- Drücken Sie bei eingesetztem Bediencomputer und eingesetztem Akku einmal kurz die Ein-Aus-Taste **5** des Bediencomputers.
- Drücken Sie bei eingesetztem Bediencomputer die Ein-Aus-Taste des Akkus (siehe Betriebsanleitung des Akkus).

Hinweis: Die Pedale des eBikes dürfen beim Einschalten des eBike-Systems nicht belastet sein, weil sonst die Motorleistung eingeschränkt wird. In der Textanzeige **c** erscheint die Fehlermeldung „**Pedal entlasten**“.

Wurde das eBike-System versehentlich mit belasteten Pedalen eingeschaltet, dann schalten Sie es aus und ohne Belastung erneut ein.

Der Antrieb wird aktiviert, sobald Sie in die Pedale treten (außer in der Funktion Anfahrhilfe, siehe „Anfahrhilfe ein-/ausschalten“, Seite Deutsch – 4). Die Motorleistung richtet sich nach den Einstellungen am Bediencomputer.

Sobald Sie im Normalbetrieb aufhören, in die Pedale zu treten, oder sobald Sie eine Geschwindigkeit von 45 km/h erreicht haben, wird die Unterstützung durch den eBike-Antrieb abgeschaltet. Der Antrieb wird automatisch wieder aktiviert, sobald Sie in die Pedale treten und die Geschwindigkeit unter 45 km/h liegt.

Zum **Ausschalten** des eBike-Systems haben Sie folgende Möglichkeiten:

- Drücken Sie die Ein-Aus-Taste **5** des Bediencomputers.
- Schalten Sie den Akku an dessen Ein-Aus-Taste aus (siehe Betriebsanleitung des Akkus).
- Entnehmen Sie den Bediencomputer aus der Halterung.

Wird etwa 10 min lang keine Leistung des Antriebs abgerufen (z. B., weil das eBike steht) und keine Taste am Bediencomputer oder Bedieneinheit gedrückt, schaltet sich das eBike-System aus Energiespargründen automatisch ab.

Anzeigen und Einstellungen des Bediencomputers

Energieversorgung des Bediencomputers

Sitzt der Bediencomputer in der Halterung **4**, ist ein ausreichend geladener Akku in das eBike eingesetzt und das eBike-System eingeschaltet, dann wird der Bediencomputer über den Akku des eBikes mit Energie versorgt.

Wird der Bediencomputer aus der Halterung **4** entnommen, erfolgt die Energieversorgung über einen internen Akku. Ist der interne Akku beim Einschalten des Bediencomputers schwach, erscheint für 3 s „**Mit Fahrrad verbind.**“ in der Textanzeige **c**. Danach schaltet sich der Bediencomputer wieder aus.

Zum Aufladen des internen Akkus setzen Sie den Bediencomputer wieder in die Halterung **4** (wenn ein Akku in das eBike eingesetzt ist). Schalten Sie den eBike-Akku an dessen Ein-Aus-Taste ein (siehe Betriebsanleitung des Akkus).

Sie können den Bediencomputer auch über den USB-Anschluss aufladen. Öffnen Sie dazu die Schutzkappe **8**. Verbinden Sie die USB-Buchse **7** des Bediencomputers über ein passendes USB-Kabel mit einem handelsüblichen USB-Ladegerät oder dem USB-Anschluss eines Computers (5 V Ladepannung; max. 500 mA Ladestrom). In der Textanzeige **c** des Bediencomputers erscheint „**USB verbunden**“.

Bediencomputer ein-/ausschalten

Zum **Einschalten** des Bediencomputers drücken Sie kurz die Ein-Aus-Taste **5**. Der Bediencomputer kann (bei ausreichend geladenem internen Akku) auch eingeschaltet werden, wenn er nicht in die Halterung eingesetzt ist.


Zum **Ausschalten** des Bediencomputers drücken Sie die Ein-Aus-Taste **5**.


Ist der Bediencomputer nicht in die Halterung eingesetzt, schaltet er sich nach 1 min ohne Tastendruck aus Energiespargründen automatisch ab.


Akku-Ladezustandsanzeige

Die Akku-Ladezustandsanzeige **f** zeigt den Ladezustand des eBike-Akkus an, nicht den des internen Akkus des Bediencomputers. Der Ladezustand des eBike-Akkus kann ebenfalls an den LEDs am Akku selbst abgelesen werden.

In der Anzeige **f** entspricht jeder Balken im Akkusymbol etwa 20 % Kapazität:

 100 % bis 80 % Kapazität

 20 % bis 5 % Kapazität, der Akku sollte nachgeladen werden.

 Weniger als 5 % Kapazität, die Unterstützung des Antriebs ist nicht mehr möglich. Die LEDs der Ladezustandsanzeige am Akku erlöschen.

Wenn die eBike-Beleuchtung über den Akku betrieben wird (länderspezifisch), dann reicht die Kapazität beim ersten Auftauchen des leeren Akkusymbols noch für etwa 2 Stunden Beleuchtung. Wenn das Symbol zu blinken beginnt, ist auch die Beleuchtung nur noch für kurze Zeit möglich.

Wird der Bediencomputer aus der Halterung **4** entnommen, bleibt der zuletzt angezeigte Akku-Ladezustand gespeichert.

Unterstützungslevel einstellen

Sie können am Bediencomputer einstellen, wie stark Sie der eBike-Antrieb beim Treten unterstützt. Der Unterstützungslevel kann jederzeit, auch während der Fahrt, geändert werden.

Hinweis: In einzelnen Ausführungen ist es möglich, dass der Unterstützungslevel voreingestellt ist und nicht geändert werden kann. Es ist auch möglich, dass weniger Unterstützungslevel zur Auswahl stehen als hier angegeben.

Folgende Unterstützungslevel stehen maximal zur Verfügung:

- „**OFF**“: Der Antrieb ist abgeschaltet, das eBike kann wie ein normales Fahrrad allein durch Treten fortbewegt werden.
- „**ECO**“: wirksame Unterstützung bei maximaler Effizienz, für maximale Reichweite
- „**TOUR**“: gleichmäßige Unterstützung, für Touren mit großer Reichweite
- „**SPORT**“: kraftvolle Unterstützung, für sportives Fahren auf bergigen Strecken sowie für Stadtverkehr
- „**TURBO**“: maximale Unterstützung bis in hohe Trittfrequenzen, für sportives Fahren

Zum **Erhöhen** des Unterstützungslevels drücken Sie die Taste „+“ **13** an der Bedieneinheit so oft, bis der gewünschte Unterstützungslevel in der Anzeige **b** erscheint, zum **Senken** die Taste „-“ **12**.

Die abgerufene Motorleistung erscheint in der Anzeige **a**. Die maximale Motorleistung hängt vom gewählten Unterstützungslevel ab.

Unterstützungslevel	Motorleistung* (Kettenschaltung)
„ECO“	30 %
„TOUR“	100 %
„SPORT“	180 %
„TURBO“	250 %

* Die Motorleistung kann bei einzelnen Ausführungen abweichen.

Wird der Bediencomputer aus der Halterung **4** entnommen, bleibt der zuletzt angezeigte Unterstützungslevel gespeichert, die Anzeige **a** der Motorleistung bleibt leer.

Anfahrhilfe ein-/ausschalten

Die Anfahrhilfe kann als zusätzliche Unterstützung auf den ersten Metern dienen, wenn das Anfahren erschwert ist (wie z. B. an der Ampel oder am Berg).

► **Die Funktion Anfahrhilfe darf ausschließlich beim Anfahren des eBikes verwendet werden.** Haben die Räder des eBikes beim Benutzen der Anfahrhilfe keinen Bodenkontakt, besteht Verletzungsgefahr.

Zum **Einschalten** der Anfahrhilfe drücken Sie die Taste „WALK“ **14** an der Bedieneinheit und halten sie gedrückt. Der Antrieb des eBikes wird eingeschaltet.

Die Anfahrhilfe wird **ausgeschaltet**, sobald eines der folgenden Ereignisse eintritt:

- Sie lassen die Taste „WALK“ **14** los,
- Sie drücken eine andere Taste am Bediencomputer,
- Sie treten vorwärts oder schnell rückwärts in die Pedale,
- die Räder des eBikes werden blockiert (z. B. durch Bremsen oder Anstoßen an ein Hindernis),
- die Geschwindigkeit überschreitet 18 km/h.

Beleuchtung ein-/ausschalten

Je nach länderspezifischen Vorschriften sind zwei Ausführungen der Beleuchtung möglich:

- Über den Bediencomputer können gleichzeitig Vorderlicht, Rücklicht und Display-Hintergrundbeleuchtung ein- und ausgeschaltet werden.
In dieser Ausführung erscheint beim Einschalten der Beleuchtung „Licht an“ und beim Ausschalten der Beleuchtung „Licht aus“ für ca. 1 s in der Textanzeige **c**.
- Es kann nur die Display-Hintergrundbeleuchtung ein- und ausgeschaltet werden, Vorder- und Rücklicht des eBikes sind unabhängig vom Bediencomputer.

Bei beiden Ausführungen drücken Sie zum **Ein- und Ausschalten der Beleuchtung** jeweils die Taste **2**.

Geschwindigkeits- und Entfernungsanzeigen

In der **Tachometeranzeige e** wird immer die aktuelle Geschwindigkeit angezeigt.

In der **Funktionsanzeige** (Kombination von Textanzeige **c** und Werteanzeige **d**) stehen folgende Funktionen zur Auswahl:

- „**Reichweite**“: voraussichtliche Reichweite der vorhandenen Akkuladung (bei gleichbleibenden Bedingungen wie Unterstützungslevel, Streckenprofil usw.)
- „**Strecke**“: seit dem letzten Reset zurückgelegte Entfernung
- „**Fahrzeit**“: Fahrzeit seit dem letzten Reset
- „**Durchschnitt**“: seit dem letzten Reset erreichte Durchschnittsgeschwindigkeit
- „**Maximal**“: seit dem letzten Reset erreichte Maximalgeschwindigkeit
- „**Uhrzeit**“: aktuelle Uhrzeit

Drücken Sie zum **Wechsel in der Anzeigefunktion** die Taste „i“ **1** am Bediencomputer oder die Taste „i“ **11** an der Bedieneinheit so oft, bis die gewünschte Funktion angezeigt wird.

Zum **Reset** von „**Strecke**“, „**Fahrzeit**“ und „**Durchschnitt**“ wechseln Sie zu einer dieser drei Funktionen und drücken dann die Taste „RESET“ **6** so lange, bis die Anzeige auf Null gesetzt ist. Damit sind auch die Werte der beiden anderen Funktionen zurückgesetzt.

Zum **Reset** von „**Maximal**“ wechseln Sie zu dieser Funktion und drücken dann die Taste „RESET“ **6** so lange, bis die Anzeige auf Null gesetzt ist.

Wird der Bediencomputer aus der Halterung **4** entnommen, bleiben alle Werte der Funktionen gespeichert und können weiterhin angezeigt werden.

Grundeinstellungen anzeigen/anpassen

Anzeigen und Ändern der Grundeinstellungen sind unabhängig davon möglich, ob der Bediencomputer in die Halterung **4** eingesetzt ist oder nicht.

Um in das Menü Grundeinstellungen zu gelangen, drücken Sie gleichzeitig so lange die Taste „RESET“ **6** und die Taste „i“ **1**, bis in der Textanzeige **c** „**Einstellungen**“ erscheint.

Drücken Sie zum **Wechsel zwischen den Grundeinstellungen** die Taste „i“ **1** am Bediencomputer so oft, bis die gewünschte Grundeinstellung angezeigt wird. Ist der Bediencomputer in die Halterung **4** eingesetzt, können Sie auch die Taste „i“ **11** an der Bedieneinheit drücken.

Um die **Grundeinstellungen zu ändern**, drücken Sie zum Verringern bzw. Blättern nach unten die Ein-Aus-Taste **5** neben der Anzeige „-“ oder zum Erhöhen bzw. Blättern nach oben die Taste Beleuchtung **2** neben der Anzeige „+“. Ist der Bediencomputer in die Halterung **4** eingesetzt, dann ist die Änderung auch mit den Tasten „-“ **12** bzw. „+“ **13** an der Bedieneinheit möglich.

Um die Funktion zu verlassen und eine geänderte Einstellung zu speichern, drücken die Taste „RESET“ **6** für 3 s.

Folgende Grundeinstellungen stehen zur Auswahl:

- „**Einheit km/mi**“: Sie können Geschwindigkeit und Entfernung in Kilometern oder Meilen anzeigen lassen.
- „**Zeitformat**“: Sie können die Uhrzeit im 12-Stunden- oder im 24-Stunden-Format anzeigen lassen.
- „**Uhrzeit**“: Sie können die aktuelle Uhrzeit einstellen. Längeres Drücken auf die Einstell Tasten beschleunigt die Änderung der Uhrzeit.

Anzeige Fehlercode

Die Komponenten des eBike-Systems werden ständig automatisch überprüft. Wird ein Fehler festgestellt, erscheint der entsprechende Fehlercode in der Textanzeige **c**.

Drücken Sie eine beliebige Taste am Bediencomputer **3** oder an der Bedieneinheit **10**, um zur Standardanzeige zurückzukehren.

Abhängig von der Art des Fehlers wird der Antrieb gegebenenfalls automatisch abgeschaltet. Die Weiterfahrt ohne Un-

- „**Deutsch**“: Sie können die Sprache der Textanzeigen ändern. Zur Auswahl stehen Deutsch, Englisch, Französisch, Spanisch, Italienisch und Niederländisch.
- „**Strecke gesamt**“: Anzeige der gesamten mit dem eBike zurückgelegten Entfernung (nicht änderbar)
- „**Betriebszeit gesamt**“: Anzeige der gesamten Fahrtdauer mit dem eBike (nicht änderbar)

terstützung durch den Antrieb ist aber jederzeit möglich. Vor weiteren Fahrten sollte das eBike überprüft werden.

- ▶ **Lassen Sie alle Überprüfungen und Reparaturen ausschließlich von einem autorisierten Fahrradhändler ausführen.** Wird ein Fehler trotz Ihrer Abhilfe weiterhin angezeigt, wenden Sie sich ebenfalls an einen autorisierten Fahrradhändler.

Code	Ursache	Abhilfe
100	interner Fehler der Antriebseinheit	Antriebseinheit überprüfen lassen
101	Verbindungsproblem der Antriebseinheit	Anschlüsse und Verbindungen überprüfen lassen
102	Fehler des Geschwindigkeitssensors	Geschwindigkeitssensor überprüfen lassen
103*	Verbindungsproblem der Beleuchtung	Anschlüsse und Verbindungen überprüfen lassen
104	Verbindungsproblem des Bediencomputers	Anschlüsse und Verbindungen überprüfen lassen
105	Temperatur der Antriebseinheit zu hoch (über 40 °C)	Lassen Sie die Antriebseinheit abkühlen. Die Weiterfahrt ohne eBike-Antrieb ist möglich und beschleunigt die Abkühlung der Antriebseinheit.
200	interner Elektronikfehler des Akkus	Akku überprüfen lassen
201	Temperatur des Akkus zu hoch (über 40 °C)	Lassen Sie den Akku abkühlen. Die Weiterfahrt ohne eBike-Antrieb ist möglich und beschleunigt die Abkühlung des Akkus.
202	Temperatur des Akkus zu niedrig (unter – 10 °C)	Lassen Sie den Akku in einem warmen Raum langsam aufwärmen.
203	Verbindungsproblem des Akkus	Anschlüsse und Verbindungen überprüfen lassen
204	falsche Akkupolung	Laden Sie den Akku mit dem original Bosch Ladegerät wie in dessen Betriebsanleitung beschrieben auf.
410	Eine oder mehrere Tasten des Bediencomputers sind blockiert.	Prüfen Sie, ob Tasten verklemmt sind, z. B. durch eingedrungenen Schmutz. Reinigen Sie die Tasten gegebenenfalls.
414	Verbindungsproblem der Bedieneinheit	Anschlüsse und Verbindungen überprüfen lassen
418	Eine oder mehrere Tasten der Bedieneinheit sind blockiert.	Prüfen Sie, ob Tasten verklemmt sind, z. B. durch eingedrungenen Schmutz. Reinigen Sie die Tasten gegebenenfalls.
422	Verbindungsproblem der Antriebseinheit	Anschlüsse und Verbindungen überprüfen lassen
423	Verbindungsproblem des Akkus	Anschlüsse und Verbindungen überprüfen lassen
424	Kommunikationsfehler der Komponenten untereinander	Anschlüsse und Verbindungen überprüfen lassen

* nur bei eBike-Beleuchtung über den Akku (länderspezifisch)

Code	Ursache	Abhilfe
430	interner Akku des Bediencomputers leer	Bediencomputer aufladen (in der Halterung oder über USB-Anschluss)
490	interner Fehler des Bediencomputers	Bediencomputer überprüfen lassen

* nur bei eBike-Beleuchtung über den Akku (länderspezifisch)

Energieversorgung externer Geräte über USB-Anschluss

Mithilfe des USB-Anschlusses können die meisten Geräte, deren Energieversorgung über USB möglich ist (z. B. diverse Mobiltelefone), betrieben bzw. aufgeladen werden.

Voraussetzung für das Laden ist, dass der Bediencomputer und ein ausreichend geladener Akku in das eBike eingesetzt sind.

Öffnen Sie die Schutzkappe **8** des USB-Anschluss am Bediencomputer. Verbinden Sie den USB-Anschluss des externen Geräts über ein passendes USB-Kabel mit der USB-Buchse **7** am Bediencomputer.

Hinweise zum Fahren mit dem eBike-System

Wann arbeitet der eBike-Antrieb?

Der eBike-Antrieb unterstützt Sie beim Fahren, solange Sie in die Pedale treten. Ohne Pedaltreten erfolgt keine Unterstützung. Die Motorleistung ist immer abhängig von der beim Treten eingesetzten Kraft.

Setzen Sie wenig Kraft ein, wird die Unterstützung geringer sein, als wenn Sie viel Kraft einsetzen. Das gilt unabhängig vom Unterstützungslevel.

Der eBike-Antrieb schaltet sich automatisch bei Geschwindigkeiten über 45 km/h ab. Fällt die Geschwindigkeit unter 45 km/h, steht der Antrieb automatisch wieder zur Verfügung.

Eine Ausnahme gilt für die Funktion Anfahrhilfe, in der das eBike ohne Pedaltreten mit geringer Geschwindigkeit gefahren werden kann.

Sie können das eBike jederzeit auch ohne Unterstützung wie ein normales Fahrrad fahren, indem Sie entweder das eBike-System ausschalten oder den Unterstützungslevel auf „OFF“ stellen. Das Gleiche gilt bei leerem Akku.

Zusammenspiel des eBike-Systems mit der Schaltung

Auch mit eBike-Antrieb sollten Sie die Schaltung wie bei einem normalen Fahrrad benutzen (beachten Sie dazu die Betriebsanleitung Ihres eBikes).

Unabhängig von der Art der Schaltung ist es ratsam, während des Schaltvorganges das Treten kurz zu unterbrechen. Dadurch wird das Schalten erleichtert und die Abnutzung des Antriebsstranges reduziert.

Durch die Wahl des richtigen Ganges können Sie bei gleichem Krafteinsatz die Geschwindigkeit und die Reichweite erhöhen.

Erste Erfahrungen sammeln

Es ist empfehlenswert, die ersten Erfahrungen mit dem eBike abseits vielbefahrener Straßen zu sammeln.

Probieren Sie unterschiedliche Unterstützungslevel aus. Sobald Sie sich sicher fühlen, können Sie mit dem eBike wie mit jedem Fahrrad am Verkehr teilnehmen.

Testen Sie die Reichweite Ihres eBikes unter unterschiedlichen Bedingungen, bevor Sie längere, anspruchsvolle Fahrten planen.

Einflüsse auf die Reichweite

Die Reichweite wird von vielen Faktoren beeinflusst, wie zum Beispiel:

- Unterstützungslevel,
- Schaltverhalten,
- Art der Reifen und Reifendruck,
- Alter und Pflegezustand des Akkus,
- Streckenprofil (Steigungen) und -beschaffenheit (Fahrbahnbelag),
- Gegenwind und Umgebungstemperatur,
- Gewicht von eBike, Fahrer und Gepäck.

Deshalb ist es nicht möglich, die Reichweite vor Antritt einer Fahrt konkret vorherzusagen. Allgemein gilt jedoch:

- Bei **gleicher** Motorleistung des eBike-Antriebs: Je weniger Kraft Sie einsetzen müssen, um eine bestimmte Geschwindigkeit zu erreichen (z. B. durch optimales Benutzen der Schaltung), umso weniger Energie wird der eBike-Antrieb verbrauchen und umso größer wird die Reichweite einer Akkuladung sein.
- Je **höher** der Unterstützungslevel bei ansonsten gleichen Bedingungen gewählt wird, umso geringer ist die Reichweite.

Pfleglicher Umgang mit dem eBike

Beachten Sie die Betriebs- und Lagertemperaturen der eBike-Komponenten. Schützen Sie Antriebseinheit, Bediencomputer und Akku vor extremen Temperaturen (z. B. durch intensive Sonneneinstrahlung ohne gleichzeitige Belüftung). Die Komponenten (besonders der Akku) können durch extreme Temperaturen beschädigt werden.

Wartung und Service

Wartung und Reinigung

Halten Sie alle Komponenten Ihres eBikes sauber, insbesondere die Kontakte von Akku und dazugehöriger Halterung. Reinigen Sie sie vorsichtig mit einem feuchten, weichen Tuch. Alle Komponenten inklusive der Antriebseinheit dürfen nicht ins Wasser getaucht oder mit einem Hochdruckreiniger gereinigt werden.

Für Service oder Reparaturen am eBike wenden Sie sich bitte an einen autorisierten Fahrradhändler.

Kundendienst und Kundenberatung

Bei allen Fragen zum eBike-System und seinen Komponenten wenden Sie sich an einen autorisierten Fahrradhändler.

Kontaktdaten autorisierter Fahrradhändler finden Sie auf der Internetseite www.bosch-ebike.com

Transport

Die Akkus unterliegen den Anforderungen des Gefahrgutrechts. Die Akkus können durch den privaten Benutzer ohne weitere Auflagen auf der Straße transportiert werden. Beim Transport durch gewerbliche Benutzer oder beim Transport durch Dritte (z. B. Lufttransport oder Spedition) sind besondere Anforderungen an Verpackung und Kennzeichnung zu beachten (z. B. Vorschriften des ADR). Bei Bedarf kann bei der Vorbereitung des Versandstückes ein Gefahrgut-Experte hinzugezogen werden.

Versenden Sie die Akkus nur, wenn das Gehäuse unbeschädigt ist. Kleben Sie offene Kontakte ab und verpacken Sie den Akku so, dass er sich nicht in der Verpackung bewegt. Bitte beachten Sie auch eventuelle weiterführende nationale Vorschriften.

Bei Fragen zum Transport der Akkus wenden Sie sich an einen autorisierten Fahrradhändler. Beim Händler können Sie auch eine geeignete Transportverpackung bestellen.

Entsorgung



Antriebseinheit, Bediencomputer inkl. Bedieneinheit, Akku, Geschwindigkeitssensor, Zubehör und Verpackungen sollen einer umweltgerechten Wiederverwertung zugeführt werden.

Werfen Sie eBikes und ihre Komponenten nicht in den Hausmüll!

Nur für EU-Länder:



Gemäß der europäischen Richtlinie 2002/96/EG müssen nicht mehr gebrauchsfähige Elektrogeräte und gemäß der europäischen Richtlinie 2006/66/EG müssen defekte oder verbrauchte Akkus/Batterien getrennt gesammelt und einer umweltgerechten Wiederverwertung zugeführt werden.

Der im Bediencomputer integrierte Akku darf nur zur Entsorgung entnommen werden. Durch das Öffnen der Gehäuseschale kann der Bediencomputer zerstört werden.

Geben Sie nicht mehr gebrauchsfähige Akkus und Bediencomputer bitte bei einem autorisierten Fahrradhändler ab.



Li-Ion:

Bitte beachten Sie die Hinweise im Abschnitt „Transport“, Seite Deutsch – 7.

Änderungen vorbehalten.

Li-Ionen-Akku PowerPack

Sicherheitshinweise



Lesen Sie alle Sicherheitshinweise und Anweisungen. Versäumnisse bei der Einhaltung der Sicherheitshinweise und Anweisungen können

elektrischen Schlag, Brand und/oder schwere Verletzungen verursachen.

Bewahren Sie alle Sicherheitshinweise und Anweisungen für die Zukunft auf.

Der in dieser Betriebsanleitung verwendete Begriff „Akku“ bezieht sich gleichermaßen auf Standard-Akkus (Akkus mit Halterung am Fahrradrahmen) und Gepäckträger-Akkus (Akkus mit Halterung im Gepäckträger), es sei denn, es wird ausdrücklich auf die Bauform Bezug genommen.

- ▶ **Nehmen Sie den Akku aus dem eBike, bevor Sie Arbeiten (z. B. Montage, Wartung etc.) am eBike beginnen, es mit dem Auto oder dem Flugzeug transportieren oder es aufbewahren.** Bei unbeabsichtigtem Betätigen des Ein-/Ausschalters besteht Verletzungsgefahr.
- ▶ **Öffnen Sie den Akku nicht.** Es besteht die Gefahr eines Kurzschlusses. Bei geöffnetem Akku entfällt jeglicher Garantieanspruch.



Schützen Sie den Akku vor Hitze (z. B. auch vor dauernder Sonneneinstrahlung), Feuer und dem Eintauchen in Wasser. Es besteht Explosionsgefahr.

- ▶ **Halten Sie den nicht benutzten Akku fern von Büroklammern, Münzen, Schlüsseln, Nägeln, Schrauben oder anderen kleinen Metallgegenständen, die eine Überbrückung der Kontakte verursachen könnten.** Ein Kurzschluss zwischen den Akkukontakten kann Verbrennungen oder Feuer zur Folge haben. Bei in diesem Zusammenhang entstandenen Kurzschlusschäden entfällt jeglicher Anspruch auf Garantie durch Bosch.
- ▶ **Bei falscher Anwendung kann Flüssigkeit aus dem Akku austreten. Vermeiden Sie den Kontakt damit. Bei zufälligem Kontakt mit Wasser abspülen. Wenn die Flüssigkeit in die Augen kommt, nehmen Sie zusätzlich ärztliche Hilfe in Anspruch.** Austretende Akkufflüssigkeit kann zu Hautreizungen oder Verbrennungen führen.
- ▶ **Bei Beschädigung und unsachgemäßem Gebrauch des Akkus können Dämpfe austreten. Führen Sie Frischluft zu und suchen Sie bei Beschwerden einen Arzt auf.** Die Dämpfe können die Atemwege reizen.
- ▶ **Laden Sie den Akku nur mit original Bosch Ladegeräten.** Bei Benutzung von nicht original Bosch Ladegeräten kann eine Brandgefahr nicht ausgeschlossen werden.

- ▶ **Verwenden Sie den Akku nur in Verbindung mit eBikes mit original Bosch eBike-Antriebssystem.** Nur so wird der Akku vor gefährlicher Überlastung geschützt.
- ▶ **Verwenden Sie nur original Bosch Akkus, die vom Hersteller für Ihr eBike zugelassen wurden.** Der Gebrauch anderer Akkus kann zu Verletzungen und Brandgefahr führen. Bei Gebrauch anderer Akkus übernimmt Bosch keine Haftung und Gewährleistung.
- ▶ **Lesen und beachten Sie die Sicherheitshinweise und Anweisungen in den Betriebsanleitungen von Ladegerät und Antriebseinheit/Bediencomputer sowie in der Betriebsanleitung Ihres eBikes.**

Produkt- und Leistungsbeschreibung

Abgebildete Komponenten (siehe Seite 4 – 5)

Die Nummerierung der abgebildeten Komponenten bezieht sich auf die Darstellungen auf den Grafikseiten. Alle Darstellungen von Fahrradteilen außer den Akkus und ihren Halterungen sind schematisch und können bei Ihrem eBike abweichen.

- 19 Halterung des Gepäckträger-Akkus
- 20 Gepäckträger-Akku
- 21 Betriebs- und Ladezustandsanzeige
- 22 Ein-Aus-Taste
- 23 Schlüssel des Akkuschlusses
- 24 Akkuschloss
- 25 Obere Halterung des Standard-Akkus
- 26 Standard-Akku
- 27 Untere Halterung des Standard-Akkus
- 28 Tragegurt
- 29 Ladegerät

Technische Daten

Li-Ionen-Akku		PowerPack 300	PowerPack 400
Sachnummer			
– Standard-Akku schwarz		0 275 007 500	0 275 007 503
– Standard-Akku weiß		0 275 007 501	0 275 007 504
– Gepäckträger-Akku		0 275 007 502	0 275 007 505
Nennspannung	V=	36	36
Nennkapazität	Ah	8,2	11
Energie	Wh	300	400
Betriebstemperatur	°C	–10 ... +40	–10 ... +40
Lagertemperatur	°C	–10 ... +60	–10 ... +60
Zulässiger Ladetemperaturbereich	°C	0 ... +40	0 ... +40
Gewicht, ca.	kg	2,5	2,5
Schutzart		IP 54 (staub- und spritzwassergeschützt)	IP 54 (staub- und spritzwassergeschützt)

Montage

- **Stellen Sie den Akku nur auf sauberen Flächen auf.** Vermeiden Sie insbesondere die Verschmutzung der Ladebuchse und der Kontakte, z. B. durch Sand oder Erde.

Akku vor der ersten Benutzung prüfen

Prüfen Sie den Akku, bevor Sie ihn das erste Mal aufladen oder mit Ihrem eBike benutzen.

Drücken Sie dazu die Ein-Aus-Taste **22** zum Einschalten des Akkus. Leuchtet keine LED der Ladezustandsanzeige **21** auf, dann ist der Akku möglicherweise beschädigt.

Leuchtet mindestens eine, aber nicht alle LEDs der Ladezustandsanzeige **21**, dann laden Sie den Akku vor der ersten Benutzung voll auf.

- **Laden Sie einen beschädigten Akku nicht auf und benutzen Sie ihn nicht.** Wenden Sie sich an einen autorisierten Fahrradhändler.

Akku laden

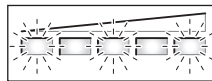
- **Benutzen Sie nur das im Lieferumfang Ihres eBikes enthaltene oder ein baugleiches original Bosch Ladegerät.** Nur dieses Ladegerät ist auf den bei Ihrem eBike verwendeten Li-Ionen-Akku abgestimmt.

Hinweis: Der Akku wird teilgeladen ausgeliefert. Um die volle Leistung des Akkus zu gewährleisten, laden Sie ihn vor dem ersten Einsatz vollständig mit dem Ladegerät auf.

Der Akku muss zum Laden aus dem eBike entnommen werden. Lesen und beachten Sie zum Laden des Akkus die Betriebsanleitung des Ladegerätes.

Der Akku kann jederzeit aufgeladen werden, ohne die Lebensdauer zu verkürzen. Eine Unterbrechung des Ladevorganges schädigt den Akku nicht.

Der Akku ist mit einer Temperaturüberwachung ausgestattet, welche ein Aufladen nur im Temperaturbereich zwischen 0 °C und 40 °C zulässt.



Befindet sich der Akku außerhalb des Ladetemperaturbereiches, blinken drei LEDs der Ladezustandsanzeige **21**. Trennen Sie den Akku vom Ladegerät und lassen Sie ihn auskühlen.

Schließen Sie den Akku erst wieder an das Ladegerät an, wenn er die zulässige Ladetemperatur erreicht hat.

Ladezustandsanzeige

Die fünf grünen LEDs der Ladezustandsanzeige **21** zeigen bei eingeschaltetem Akku den Ladezustand des Akkus an.

Dabei entspricht jede LED etwa 20 % Kapazität. Bei vollständig geladenem Akku leuchten alle fünf LEDs.

Der Ladezustand des eingeschalteten Akkus wird außerdem im Bediencomputer angezeigt. Lesen und beachten Sie dazu die Betriebsanleitung von Antriebseinheit und Bediencomputer.

Liegt die Kapazität des Akkus unter 5 %, erlöschen alle LEDs der Ladezustandsanzeige **21** am Akku, es gibt aber noch eine Anzeigefunktion des Bediencomputers.

Akku einsetzen und entnehmen (siehe Bilder C – D)

- **Schalten Sie den Akku immer aus, wenn Sie ihn in die Halterung einsetzen oder aus der Halterung entnehmen.**

Damit der Akku eingesetzt werden kann, muss der Schlüssel **23** im Schloss **24** stecken und das Schloss muss aufgeschlossen sein.

Zum **Einsetzen des Standard-Akkus 26** setzen Sie ihn mit den Kontakten auf die untere Halterung **27** am eBike. Kippen Sie ihn bis zum Anschlag in die obere Halterung **25**.

Zum **Einsetzen des Gepäckträger-Akkus 20** schieben Sie ihn mit den Kontakten voran bis zum Einrasten in die Halterung **19** im Gepäckträger.

Prüfen Sie, ob der Akku fest sitzt. Schließen Sie den Akku immer am Schloss **24** ab, weil sich sonst das Schloss öffnen und der Akku aus der Halterung fallen kann.

Ziehen Sie den Schlüssel **23** nach dem Abschließen immer aus dem Schloss **24**. Damit verhindern Sie, dass der Schlüssel herausfällt bzw. dass der Akku bei abgestelltem eBike durch unberechtigte Dritte entnommen wird.

Zum **Entnehmen des Standard-Akkus 26** schalten Sie ihn aus und schließen das Schloss mit dem Schlüssel **23** auf. Kippen Sie den Akku aus der oberen Halterung **25** und ziehen Sie ihn am Tragegurt **28** aus der unteren Halterung **27**.

Zum **Entnehmen des Gepäckträger-Akkus 20** schalten Sie ihn aus und schließen das Schloss mit dem Schlüssel **23** auf. Ziehen Sie den Akku aus der Halterung **19**.

Betrieb

Inbetriebnahme

► **Verwenden Sie nur original Bosch Akkus, die vom Hersteller für Ihr eBike zugelassen wurden.** Der Gebrauch anderer Akkus kann zu Verletzungen und Brandgefahr führen. Bei Gebrauch anderer Akkus übernimmt Bosch keine Haftung und Gewährleistung.

Ein-/Ausschalten

Das Einschalten des Akkus ist eine der Möglichkeiten, das eBike-System einzuschalten. Lesen und beachten Sie dazu die Betriebsanleitung von Antriebseinheit und Bediencomputer.

Überprüfen Sie vor dem Einschalten des Akkus bzw. des eBike-Systems, dass das Schloss **24** abgeschlossen ist.

Hinweis: Die Pedale des eBikes sollen beim Einschalten des eBike-Systems nicht belastet sein, weil sonst die Leistung des eBike-Antriebs eingeschränkt wird.

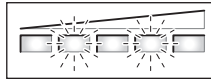
Zum **Einschalten** des Akkus drücken Sie die Ein-Aus-Taste **22**. Die LEDs der Anzeige **21** leuchten auf und zeigen gleichzeitig den Ladezustand an.

Hinweis: Liegt die Kapazität des Akkus unter 5 %, leuchtet am Akku keine LED der Ladezustandsanzeige **21**. Es ist nur am Bediencomputer erkennbar, ob das eBike-System eingeschaltet ist.

Zum **Ausschalten** des Akkus drücken Sie die Ein-Aus-Taste **22** erneut. Die LEDs der Anzeige **21** erlöschen. Das eBike-System wird damit ebenfalls ausgeschaltet.

Wird etwa 10 min lang keine Leistung des eBike-Antriebs abgerufen (z. B., weil das eBike steht) und keine Taste an Bediencomputer oder Bedieneinheit des eBikes gedrückt, schalten sich das eBike-System und damit auch der Akku aus Energiespargründen automatisch ab.

Der Akku ist durch die „Electronic Cell Protection (ECP)“ gegen Tiefentladung, Überladung, Überhitzung und Kurzschluss geschützt. Bei Gefährdung schaltet sich der Akku durch eine Schutzschaltung automatisch ab.



Wird ein Defekt des Akkus erkannt, blinken zwei LEDs der Ladezustandsanzeige **21**. Wenn Sie sich in diesem Fall an

einen autorisierten Fahrradhändler.

Hinweise für den optimalen Umgang mit dem Akku

Die Lebensdauer des Akkus kann verlängert werden, wenn er gut gepflegt und vor allem bei den richtigen Temperaturen gelagert wird.

Mit zunehmender Alterung wird sich die Kapazität des Akkus aber auch bei guter Pflege verringern.

Eine wesentlich verkürzte Betriebszeit nach der Aufladung zeigt an, dass der Akku verbraucht ist. Sie können den Akku ersetzen.

Sollte der Tragegurt **28** des Standard-Akkus defekt sein, dann lassen Sie ihn von einem Fahrradhändler austauschen.

Akku vor und während der Lagerung nachladen

Laden Sie den Akku vor längerer Nichtbenutzung auf etwa 60 % auf (3 bis 4 LEDs der Ladezustandsanzeige **21** leuchten).

Prüfen Sie nach 6 Monaten den Ladezustand. Leuchtet nur noch eine LED der Ladezustandsanzeige **21**, dann laden Sie den Akku wieder auf etwa 60 % auf.

Hinweis: Wird der Akku längere Zeit in leerem Zustand aufbewahrt, kann er trotz der geringen Selbstentladung beschädigt und die Speicherkapazität stark verringert werden.

Es ist nicht empfehlenswert, den Akku dauerhaft am Ladegerät angeschlossen zu lassen.

Lagerungsbedingungen

Lagern Sie den Akku möglichst an einem trockenen, gut belüfteten Platz. Schützen Sie ihn vor Feuchtigkeit und Wasser. Bei ungünstigen Witterungsbedingungen ist es z. B. empfehlenswert, den Akku vom eBike abzunehmen und bis zum nächsten Einsatz in geschlossenen Räumen aufzubewahren.

Der Akku kann bei Temperaturen von -10 °C bis $+60\text{ °C}$ gelagert werden. Für eine lange Lebensdauer ist jedoch eine Lagerung bei ca. 20 °C Raumtemperatur vorteilhaft.

Achten Sie darauf, dass die maximale Lagertemperatur nicht überschritten wird. Lassen Sie den Akku z. B. im Sommer nicht im Auto liegen und lagern Sie ihn außerhalb direkter Sonneneinstrahlung.

Wartung und Service

Wartung und Reinigung

Halten Sie den Akku sauber. Reinigen Sie ihn vorsichtig mit einem feuchten, weichen Tuch. Der Akku darf nicht ins Wasser getaucht oder mit Wasserstrahl gereinigt werden.

Ist der Akku nicht mehr funktionsfähig, wenden Sie sich bitte an einen autorisierten Fahrradhändler.

Kundendienst und Kundenberatung

Bei allen Fragen zu den Akkus wenden Sie sich an einen autorisierten Fahrradhändler.

- **Notieren Sie Hersteller und Nummer des Schlüssels 23.** Bei Verlust der Schlüssel wenden Sie sich an einen autorisierten Fahrradhändler. Geben Sie dabei Schlüsselhersteller und -nummer an.

Kontaktdaten autorisierter Fahrradhändler finden Sie auf der Internetseite www.bosch-ebike.com

Transport

Die Akkus unterliegen den Anforderungen des Gefahrgutrechts. Die Akkus können durch den privaten Benutzer ohne weitere Auflagen auf der Straße transportiert werden.

Beim Transport durch gewerbliche Benutzer oder beim Transport durch Dritte (z. B. Lufttransport oder Spedition) sind besondere Anforderungen an Verpackung und Kennzeichnung zu beachten (z. B. Vorschriften des ADR). Bei Bedarf kann bei der Vorbereitung des Versandstückes ein Gefahrgut-Experte hinzugezogen werden.

Versenden Sie die Akkus nur, wenn das Gehäuse unbeschädigt ist. Kleben Sie offene Kontakte ab und verpacken Sie den Akku so, dass er sich nicht in der Verpackung bewegt. Bitte beachten Sie auch eventuelle weiterführende nationale Vorschriften.

Bei Fragen zum Transport der Akkus wenden Sie sich an einen autorisierten Fahrradhändler. Beim Händler können Sie auch eine geeignete Transportverpackung bestellen.

Entsorgung



Akkus, Zubehör und Verpackungen sollen einer umweltgerechten Wiederverwertung zugeführt werden.

Werfen Sie die Akkus nicht in den Hausmüll!

Nur für EU-Länder:



Gemäß der europäischen Richtlinie 2002/96/EG müssen nicht mehr gebrauchsfähige Elektrogeräte und gemäß der europäischen Richtlinie 2006/66/EG müssen defekte oder verbrauchte Akkus/Batterien getrennt gesammelt und einer umweltgerechten Wiederverwendung zugeführt werden.

Geben Sie nicht mehr gebrauchsfähige Akkus bitte bei einem autorisierten Fahrradhändler ab.



Li-ion:

Bitte beachten Sie die Hinweise im Abschnitt „Transport“, Seite Deutsch – 11.

Änderungen vorbehalten.

Ladegerät Charger

Sicherheitshinweise



Lesen Sie alle Sicherheitshinweise und Anweisungen. Versäumnisse bei der Einhaltung der Sicherheitshinweise und Anweisungen können

elektrischen Schlag, Brand und/oder schwere Verletzungen verursachen.

Bewahren Sie alle Sicherheitshinweise und Anweisungen für die Zukunft auf.

Der in dieser Betriebsanleitung verwendete Begriff „Akku“ bezieht sich gleichermaßen auf Standard-Akkus (Akkus mit Halterung am Fahrradrahmen) und Gepäckträger-Akkus (Akkus mit Halterung im Gepäckträger).



Halten Sie das Ladegerät von Regen oder Nässe fern. Beim Eindringen von Wasser in ein Ladegerät besteht das Risiko eines elektrischen Schlages.

- ▶ **Laden Sie nur für eBikes zugelassene Bosch Li-Ionen-Akkus. Die Akkuspannung muss zur Akku-Ladespannung des Ladegerätes passen.** Ansonsten besteht Brand- und Explosionsgefahr.
- ▶ **Halten Sie das Ladegerät sauber.** Durch Verschmutzung besteht die Gefahr eines elektrischen Schlages.
- ▶ **Überprüfen Sie vor jeder Benutzung Ladegerät, Kabel und Stecker. Benutzen Sie das Ladegerät nicht, sofern Sie Schäden feststellen. Öffnen Sie das Ladegerät nicht selbst und lassen Sie es nur von qualifiziertem Fachpersonal und nur mit Original-Ersatzteilen reparieren.** Beschädigte Ladegeräte, Kabel und Stecker erhöhen das Risiko eines elektrischen Schlages.
- ▶ **Betreiben Sie das Ladegerät nicht auf leicht brennbarem Untergrund (z. B. Papier, Textilien etc.) bzw. in brennbarer Umgebung.** Wegen der beim Laden auftretenden Erwärmung des Ladegerätes besteht Brandgefahr.
- ▶ **Bei Beschädigung und unsachgemäßem Gebrauch des Akkus können Dämpfe austreten. Führen Sie Frischluft zu und suchen Sie bei Beschwerden einen Arzt auf.** Die Dämpfe können die Atemwege reizen.
- ▶ **Beaufsichtigen Sie Kinder.** Damit wird sichergestellt, dass Kinder nicht mit dem Ladegerät spielen.
- ▶ **Kinder und Personen, die aufgrund ihrer physischen, sensorischen oder geistigen Fähigkeiten oder ihrer Unfähigkeit oder Unkenntnis nicht in der Lage sind, das Ladegerät sicher zu bedienen, dürfen dieses Ladegerät nicht ohne Aufsicht oder Anweisung durch eine verantwortliche Person benutzen.** Andernfalls besteht die Gefahr von Fehlbedienung und Verletzungen.

- ▶ **Lesen und beachten Sie die Sicherheitshinweise und Anweisungen in den Betriebsanleitungen von Akku und Antriebseinheit/Bediencomputer sowie in der Betriebsanleitung Ihres eBikes.**
- ▶ Auf der Unterseite des Ladegerätes befindet sich eine Kurzfassung wichtiger Sicherheitshinweise in englischer, französischer und spanischer Sprache (in der Darstellung auf der Grafikkarte mit Nummer **33** gekennzeichnet) und mit folgendem Inhalt:
 - Für eine sichere Benutzung beachten Sie die Betriebsanleitung. Risiko eines elektrischen Schocks.
 - Nur in trockener Umgebung benutzen.
 - Laden Sie nur Akkus des Bosch eBike-Systems. Andere Akkus können explodieren und Verletzungen verursachen.
 - Ersetzen Sie das Netzkabel nicht. Es besteht Brand- und Explosionsgefahr.

Produkt- und Leistungsbeschreibung

Abgebildete Komponenten (siehe Seite 6 – 7)

Die Nummerierung der abgebildeten Komponenten bezieht sich auf die Darstellung des Ladegerätes auf der Grafikkarte.

- 20 Gepäckträger-Akku
- 21 Akku-Ladezustandsanzeige
- 26 Standard-Akku
- 29 Ladegerät
- 30 Gerätebuchse
- 31 Geräterstecker
- 32 Lüftungsöffnungen
- 33 Sicherheitshinweise Ladegerät
- 34 Ladestecker
- 35 Buchse für Ladestecker

Technische Daten

Ladegerät	Charger	
Sachnummer		0 275 007 905
Nennspannung	V~	207 – 264
Frequenz	Hz	47 – 63
Akku-Ladespannung	V---	42
Ladestrom	A	4
Zulässiger Ladetemperaturbereich	°C	0 ... +40

Die Angaben gelten für eine Nennspannung [U] von 230 V. Bei abweichenden Spannungen und in länderspezifischen Ausführungen können diese Angaben variieren.

Ladegerät	Charger	
Ladezeit		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Anzahl der Akkuzellen		10 – 80
Betriebstemperatur	°C	– 10 ... + 75
Lagertemperatur	°C	– 20 ... + 70
Gewicht entsprechend EPTA-Procedure 01/2003	kg	0,8
Schutzart		IP 40

Die Angaben gelten für eine Nennspannung [U] von 230 V. Bei abweichenden Spannungen und in länderspezifischen Ausführungen können diese Angaben variieren.

Betrieb

► **Stellen Sie den Akku nur auf sauberen Flächen auf.** Vermeiden Sie insbesondere die Verschmutzung der Ladebuchse und der Kontakte, z. B. durch Sand oder Erde.

Inbetriebnahme

Ladegerät anschließen (siehe Bilder E – F)

► **Beachten Sie die Netzspannung!** Die Spannung der Stromquelle muss mit den Angaben auf dem Typenschild des Ladegerätes übereinstimmen. Mit 230 V gekennzeichnete Ladegeräte können auch an 220 V betrieben werden.

Stecken Sie den Gerätestecker **31** des Netzkabels in die Gerätebuchse **30** am Ladegerät.

Schließen Sie das Netzkabel (länderspezifisch) an das Stromnetz an.

Schalten Sie den Akku aus und entnehmen Sie ihn aus der Halterung am eBike. Lesen und beachten Sie dazu die Betriebsanleitung des Akkus.

Stecken Sie den Ladestecker **34** des Ladegerätes in die Buchse **35** am Akku.

Ladevorgang

Der Ladevorgang beginnt, sobald das Ladegerät mit dem Akku und dem Stromnetz verbunden ist.

Hinweis: Der Ladevorgang ist nur möglich, wenn sich die Temperatur des Akkus im zulässigen Ladetemperaturbereich befindet.

Während des Ladevorgangs leuchten die LEDs der Ladezustandsanzeige **21** am Akku. Jede dauerhaft leuchtende LED entspricht etwa 20 % Kapazität Aufladung. Die blinkende LED zeigt die Aufladung der nächsten 20 % an.

► **Seien Sie vorsichtig, wenn Sie das Ladegerät während des Ladevorgangs berühren. Tragen Sie Schutzhandschuhe.** Das Ladegerät kann sich insbesondere bei hohen Umgebungstemperaturen stark erhitzen.

Hinweis: Achten Sie darauf, dass das Ladegerät während des Ladevorgangs gut belüftet ist und die Lüftungsöffnungen **32** auf beiden Seiten nicht verdeckt sind.

Der Akku ist vollständig geladen, wenn alle fünf LEDs der Anzeige **21** dauerhaft leuchten. Der Ladevorgang wird automatisch unterbrochen.

Trennen Sie das Ladegerät vom Stromnetz und den Akku vom Ladegerät.

Beim Trennen des Akkus vom Ladegerät wird der Akku automatisch abgeschaltet.

Sie können den Akku jetzt in das eBike einsetzen.

Fehler – Ursachen und Abhilfe

Ursache	Abhilfe
	Zwei LEDs am Akku blinken
Akku defekt	an autorisierten Fahrradhändler wenden
	Drei LEDs am Akku blinken
Akku zu warm oder zu kalt	Akku vom Ladegerät trennen und austemperieren lassen, bis der Ladetemperaturbereich erreicht ist Schließen Sie den Akku erst wieder an das Ladegerät an, wenn er die zulässige Ladetemperatur erreicht hat.
Kein Ladevorgang möglich (keine Anzeige am Akku)	
Stecker nicht richtig eingesteckt	alle Steckverbindungen überprüfen
Kontakte am Akku verschmutzt	Kontakte am Akku vorsichtig reinigen
Lüftungsöffnungen 32 des Ladegerätes verstopft oder verdeckt	Lüftungsöffnungen 32 reinigen und Ladegerät gut belüftet aufstellen
Steckdose, Kabel oder Ladegerät defekt	Netzspannung überprüfen, Ladegerät vom Fahrradhändler überprüfen lassen
Akku defekt	an autorisierten Fahrradhändler wenden

Wartung und Service

Wartung und Reinigung

Sollte das Ladegerät ausfallen, wenden Sie sich bitte an einen autorisierten Fahrradhändler.

Kundendienst und Kundenberatung

Bei allen Fragen zum Ladegerät wenden Sie sich an einen autorisierten Fahrradhändler.

Kontaktdaten autorisierter Fahrradhändler finden Sie auf der Internetseite www.bosch-ebike.com

Entsorgung

Ladegeräte, Zubehör und Verpackungen sollen einer umweltgerechten Wiederverwertung zugeführt werden.

Werfen Sie Ladegeräte nicht in den Hausmüll!

Nur für EU-Länder:



Gemäß der Europäischen Richtlinie 2002/96/EG über Elektro- und Elektronik-Altgeräte und ihrer Umsetzung in nationales Recht müssen nicht mehr gebrauchsfähige Ladegeräte getrennt gesammelt und einer umweltgerechten Wiederverwertung zugeführt werden.

Änderungen vorbehalten.

Drive Unit Speed/ Drive HMI Intuvia

Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier).

- ▶ **Do not open the drive unit yourself. The drive unit is maintenance-free and may be repaired only through a qualified repair person and only using original spare parts.** This will ensure that the safety of the drive unit is maintained. Unauthorised opening of the drive unit will void any and all warranty claims.
- ▶ **All components mounted to the drive unit and all other components of the eBike drive (e.g., the chainwheel, chainwheel seat, pedals) may be replaced only against identical components or components specifically approved for your eBike by the bicycle manufacturer.** This protects the drive unit against overload and damage.
- ▶ **Remove the battery pack from the eBike before working on the eBike (e.g., assembling, maintenance, etc.), transporting it via car or plane, or storing it.** Danger of injury when accidentally actuating the On/Off switch.
- ▶ **The start-assistance function may only be used when starting (driving off) the eBike.** Danger of injury when the wheels of the eBike do not have ground contact while using the start-assistance function.
- ▶ **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.
- ▶ **Please observe all national regulations on registering and using eBikes.**
- ▶ **Please read and observe the safety warnings and instructions enclosed in the operating instructions of the battery pack as well as in the operating instructions of your eBike.**

Product Description and Specifications

Intended Use

The drive unit is intended exclusively for your eBike and may not be used for other purposes. The eBike is intended for use on paved paths. It is not permitted for use in competition.

Product Features (see page 2 – 3)

The numbering of the product features refers to the illustrations on the graphics page.

All representations of bike components, with exception of the drive unit, drive HMI incl. operating unit, speed sensor and corresponding holders, are schematic and can deviate from your eBike.

- 1 Display-function button “i”
- 2 Illumination button
- 3 Drive HMI
- 4 Holder for drive HMI
- 5 Drive HMI On/Off button
- 6 “RESET” button
- 7 USB port
- 8 Protective cap of USB port
- 9 Drive unit
- 10 Operating unit
- 11 Display-function button “i” on the operating unit
- 12 Reduce value/scroll down button “-”
- 13 Increase value/scroll up button “+”
- 14 Start-assistance button “WALK”
- 15 Lock latch for drive HMI
- 16 Locking screw for drive HMI
- 17 Speed sensor
- 18 Spoke magnet of the speed sensor

Indication Elements, Drive HMI

- a Motor-output indicator
- b Assistance-level indicator
- c Text indication
- d Value indication
- e Speed indication
- f Battery charge-control indicator

Technical Data

Drive Unit		Drive Unit Speed
Article number		0 275 007 003
Power output	W	350
Output torque, max.	Nm	50
Rated voltage	V $\overline{--}$	36
Operating temperature	°C	-5 ... +40
Storage temperature	°C	-10 ... +50
Degree of protection		IP 54 (dust and splash water protected)
Weight, approx.	kg	4
Drive HMI		Intuvia
Article number		1 270 020 903
Max. charging current, USB connection.	mA	500
Charging voltage, USB connection	V	5
Operating temperature	°C	-5 ... +40
Storage temperature	°C	-10 ... +50
Degree of protection		IP 54 (dust and splash water protected)
Weight, approx.	kg	0.15
Lighting*		
Rated voltage	V $\overline{--}$	6
Power output		
– Front light	W	2.7
– Rear light	W	0.3

* Not possible via the eBike battery pack in all country-specific versions, depending on the statutory regulations

Assembly

Inserting and Removing the Battery Pack

For inserting and removing the battery pack in/from the eBike, please read and observe the battery pack operating instructions.

Inserting and Removing the Drive HMI (see figure A)

To **insert** the drive HMI **3**, slide it from the front into the holder **4**.

To **remove** the drive HMI **3**, press the lock latch **15** and slide the drive HMI toward the front out of the holder **4**.

► **Remove the drive HMI when parking the eBike, so that the drive cannot be used by unauthorised persons.**

Without the drive HMI, the eBike system cannot be switched on.

The drive HMI can also be secured in the holder against removing. For this, remove the holder **4** from the handlebar. Insert the drive HMI into the holder. Screw the locking screw **16** from below into the corresponding thread in the holder. Mount the holder onto the handlebar again.

Checking the Speed Sensor (see figure B)

The speed sensor **17** and its spoke magnet **18** must be mounted in such a manner that the spoke magnet, after a turn of the wheel, moves past the speed sensor with a clearance of at least 5 mm, yet no more than 17 mm.

Note: If the clearance between speed sensor **17** and spoke magnet **18** is too small or too large, or if the speed sensor **17** is not properly connected, the speed indication **e** will fail, and the eBike drive will operate in emergency mode.

In this case, loosen the screw of the spoke magnet **18** and fasten the spoke magnet to the spoke in such a manner that it runs past the mark of the speed sensor at the correct clearance. When the speed is still not being indicated in the speed indication **e** after this, please refer to an authorised bicycle dealer.

Operation

Initial Operation

Requirements

The eBike system can only be activated when the following requirements are met:

- A sufficiently charged battery pack is inserted (see operating instructions of the battery pack).
- The drive HMI is properly inserted in the holder (see “Inserting and Removing the Drive HMI”, page English – 2).
- The drive HMI is properly connected (see “Checking the Speed Sensor”, page English – 2).

Switching the eBike System On/Off

Options for **switching on** the eBike system:

- If the drive HMI is already switched on when inserting it in the holder, the eBike system is automatically switched on.
- When the drive HMI and the battery pack are inserted, briefly press the On/Off button **5** of the drive HMI once.
- When the drive HMI is inserted, press the On/Off button of the battery pack (see battery pack operating instructions).

Note: When switching on the eBike system, the pedals of the eBike must not be subject to load, as otherwise the motor output capacity will be limited. The error message “**Release pedal**” is displayed in text indication **c**.

If the eBike system was inadvertently switched on with load applied to the pedals, then switch it off and then on again without load.

The drive is activated as soon as you step into the pedals (except when in start-assistance mode, see “Switching Start-assistance On/Off”, page English – 4). The motor output depends on the settings of the drive HMI.

As soon as you stop pedaling when in normal operation, or as soon as you have reached a speed of 45 km/h, the assistance from the eBike drive is switched off. The drive is automatically re-activated as soon you start pedaling again and the speed is below 45 km/h.

Options for **switching off** the eBike system:

- Press the On/Off button **5** of the drive HMI.
- Switch the battery pack off by its On/Off button (see battery pack operating instructions.)
- Remove the drive HMI out of its holder.

When no power output of the drive is requested for approx. 10 minutes (e. g., because the eBike is parked) and no button of the drive HMI or operating unit is pressed, the battery pack automatically switches off to save energy.

Indications and Settings of the Drive HMI

Power Supply of the Drive HMI

When the drive HMI is inserted in holder **4**, a sufficiently charged battery pack is inserted in the eBike and the eBike system is switched on, power is supplied to the drive HMI via the eBike's battery pack.

When the drive HMI is removed from holder **4**, it is supplied with power via an internal battery pack. If the internal battery pack is low when switching on the drive HMI, “**Attach to bike**” is displayed for 3 s in text indication **c**. Afterwards, the drive HMI switches off again.

To recharge the internal battery pack, insert the drive HMI into the holder **4** (a battery pack must be inserted in the eBike). Switch the eBike battery pack off by its On/Off button (see battery pack operating instructions).

The drive HMI can also be charged via USB connection. Open protective cap **8** for this. Using a matching USB cable, connect the USB port **7** of the drive HMI to a commercially available USB charger or to the USB port of a computer; (5 V charging voltage; max. 500 mA charging current). “**USB connected**” is displayed in text indication **c** of the drive HMI.

Switching the drive HMI On/Off

To **switch on** the drive HMI, briefly press the On/Off button **5**. When the internal battery pack is sufficiently charged, the drive HMI can also be switched on when not inserted in the holder.

To **switch off** the drive HMI, press the On/Off button **5**.

When the drive HMI is not inserted in the holder and no button is pressed, it automatically switches off after 1 min to save energy.

Battery Charge-control Indicator

The battery-pack charge-control indicator **f** indicates the charge condition of the eBike's battery pack, and not the charge condition of the drive HMI's internal battery pack. The charge condition of the eBike's battery pack can also be read from the battery pack's LEDs.

On indicator **f**, each bar of the battery pack symbol is equivalent to a capacity of approx. 20 %:



100 % to 80 % capacity



20 % to 5 % capacity; the battery pack should be recharged.



Less than 5 % capacity; drive assistance is no longer possible. The LEDs of the charge-control indicator on the battery pack go out.

When the eBike lighting is powered via the battery pack (country-specific), the capacity upon first indication of the empty battery pack symbol will be sufficient for approx. 2 hours of lighting. When the symbol begins to flash, the lighting will continue to operate only for a short period.

When the drive HMI is removed from holder **4**, the last indicated battery pack charge condition is stored.

Setting the Assistance Level

The level of assistance of the eBike drive when pedaling can be adjusted via the drive HMI. The assistance level can be changed anytime, even during riding.

Note: For individual versions, it is possible that the assistance level is pre-set and cannot be changed. It is also possible that less assistance levels are available for selection than listed here.

The following assistance levels (max.) are available:

- “**OFF**”: The drive is switched off, the eBike can be operated as a normal bicycle through pedaling.
- “**ECO**”: Effective assistance at maximum efficiency for maximum cruising range
- “**TOUR**”: Uniform assistance, for touring with long cruising range
- “**SPORT**”: Powerful assistance for sportive riding off road as well as for urban traffic
- “**TURBO**”: Maximum assistance, supporting highest cadence for sportive riding

To **increase** the assistance level, press the “+” button **13** on the operating unit until the desired assistance level is displayed in indicator **b**; to **decrease** the assistance level, press the “-” button **12**.

The requested motor output is displayed in indicator **a**. The maximum motor output depends on the selected assistance level.

Assistance Level	Motor Output* (Derailleur)
“ECO”	30 %
“TOUR”	100 %
“SPORT”	180 %
“TURBO”	250 %

* The motor output can vary for individual versions.

When the drive HMI is removed from holder **4**, the last indicated assistance level is stored; the motor-output indicator **a** remains empty.

Switching Start-assistance On/Off

The start-assistance function can be used for additional support on the first meters when starting is difficult (e. g., at a traffic light or when starting uphill).

► **The start-assistance function may only be used when starting (driving off) the eBike.** Danger of injury when the wheels of the eBike do not have ground contact while using the start-assistance function.

To **activate** the start-assistance function, press and hold the “WALK” button **14** on the operating unit. The eBike’s drive is activated.

The start-assistance function is **switched off** as soon as any of the following incidents occur:

- You release “WALK” button **14**,
- You press another button on the drive HMI,
- You pedal in forward or quickly in backward direction,
- The wheels of the eBike are blocked (e. g., through braking or running against an obstruction),
- Your speed exceeds 18 km/h.

Switching the Lighting On/Off

Depending on country-specific regulations, two lighting versions are possible:

- The front light, rear light and display backlight can be switched on and off at the same time via the drive HMI. In this version, “**Lights on**” is displayed for approx. 1 s in text indication **c** when switching on, and “**Lights off**” when switching off.
- Only the display backlight can be switched on and off; the front and rear light of the eBike are independent of the drive HMI.

For both versions, the **lighting is switched on and off** by pressing button **2**.

Speed and Distance Indication

The **speed indication e** always displays the current speed.

The following functions are available in the **function indication** (combination of text indication **c** and value indication **d**):

- “**Range**”: Estimated range of the available battery-pack charge (for constant conditions such as assistance level, route profile, etc.)
- “**Distance**”: Distance covered since the last reset
- “**Trip time**”: Trip time since the last reset

- “**Avg. Speed**”: Average speed achieved since the last reset
- “**Max. Speed**”: Maximum speed achieved since the last reset
- “**Clock**”: Current time

To **switch between the indication functions**, press the “**i**” button **1** on the drive HMI or the “**i**” button **11** on the operating unit until the desired function is displayed.

To **reset “Distance”, “Trip time” and “Avg. Speed”**, switch to any of the three functions and then press and hold the “**RESET**” button **6** until the indication is set to zero. This also resets the values of the other two functions.

To **reset the “Max. Speed”**, switch to this function and then press and hold the “**RESET**” button **6** until the indication is set to zero.

When the drive HMI is removed from the holder **4**, all function values remain stored and can be viewed.

Displaying/Adapting Basic Settings

The basic settings can be displayed and changed no matter if the drive HMI is in the holder **4** or not.

To access the basic settings menu, press and hold the “**RESET**” button **6** and the “**i**” button **1** until “**Configuration**” is displayed in text indication **c**.

To **switch between the basic settings**, press the “**i**” button **1** on the drive HMI until the desired basic setting is displayed. When the drive HMI is inserted in holder **4**, you can also press the “**i**” button **11** on the operating unit.

To **change the basic settings**, press the On/Off button **5** next to the “–” indication to decrease the value or scroll down, or the illumination button **2** next to the “+” indication to increase the value or scroll up.

When the drive HMI is inserted in holder **4**, you can also change the values with the “–” button **12** or the “+” button **13** on the operating unit.

To exit the function and store a changed setting, press the “**RESET**” button **6** for 3 s.

The following basic settings are available:

- “**unit km/mi**”: The speed and distance can be displayed either in kilometres or miles.
- “**time format**”: The time can be displayed either in the 12 hour or 24 hour format.
- “**clock**”: The current time can be set here. Pressing and holding the setting buttons fast-forwards the setting speed.
- “**English**”: The language for text indication can be changed. The available languages are German, English, French, Spanish, Italian and Dutch.
- “**odometer**”: Indicates the total distance travelled with the eBike (not changeable).
- “**power-on hours**”: Indicates the total travel duration with the eBike (not changeable).

Error Code Indication

The components of the eBike system are continuously and automatically monitored. When an error is detected, the respective error code is indicated in text indication **c**.

To return to the standard indication, press any button on the drive HMI **3** or on the operating unit **10**.

Depending on the type of error, the drive is automatically shut off if required. Continued travel without assistance from the

drive is possible at any time. However, have the eBike checked before attempting new trips.

- **Have all inspections and repairs carried out only by an authorised bicycle dealer.** When an error is still displayed despite corrective measures, please also refer to an authorised bicycle dealer.

Code	Cause	Corrective Measure
100	Internal error of the drive unit	Have the drive unit checked
101	Connection problem of the drive unit	Have connections and contacts checked
102	Error of the speed sensor	Have the speed sensor checked
103*	Connection problem of the lighting system	Have connections and contacts checked
104	Connection problem of the drive HMI	Have connections and contacts checked
105	Temperature of the drive unit too high (above 40 °C)	Allow the drive unit to cool down. Continued travel without assistance from the eBike drive is possible and speeds up the cooling of the drive unit.
200	Internal electronic error of battery pack	Have battery pack checked
201	Temperature of the battery pack too high (above 40 °C)	Allow the battery pack to cool down. Continued travel without eBike drive is possible and speeds up the cooling of the battery pack.
202	Temperature of the battery pack too low (below – 10 °C)	Allow the battery pack to warm up slowly in a warm location.
203	Connection problem of battery pack	Have connections and contacts checked
204	Incorrect polarity of battery pack	Charge the battery pack with the original Bosch charger as described in the operating instructions.
410	One or more buttons of the drive HMI are blocked.	Check if any buttons are blocked, e. g. from dirt or debris. Clean the buttons, if required.
414	Connection problem of the operating unit	Have connections and contacts checked
418	One or more buttons of the operating unit are blocked.	Check if any buttons are blocked, e. g. from dirt or debris. Clean the buttons, if required.
422	Connection problem of the drive unit	Have connections and contacts checked
423	Connection problem of battery pack	Have connections and contacts checked
424	Communication error among the components	Have connections and contacts checked
430	Internal battery pack of drive HMI empty	Charge drive HMI (in holder or via USB port)
490	Internal error of the drive HMI	Have the drive HMI checked

* only for eBike lighting via battery pack (country-specific)

Power Supply of External Devices via USB Connection

With the USB connection, it is possible to operate and charge most devices whose power supply is possible via USB (e. g., various mobile phones).

Prerequisite for the charging is that the drive HMI and a sufficiently charged battery pack are inserted in the eBike.

Open the protective cap **8** of the USB port on the drive HMI. Using a matching USB cable, connect the USB port of the external device to the USB port **7** of the drive HMI.

Notes on Riding with the eBike System

When does the eBike Drive Operate?

The eBike drive supports you when riding, as long as you step into the pedals. Without pedaling, there is no assistance. The motor output always depends on the amount of your pedaling power.

When applying less pedaling power, the assistance or support will be lower than when applying a lot of pedaling power. This applies independent of the assistance Level.

The eBike drive automatically switches off at speeds in excess of 45 km/h. When the speed falls below 45 km/h, the drive is automatically available again.

An exception applies for the start-assistance function, in which the eBike can be driven at low speed without pedaling.

The eBike can also be ridden as a normal bicycle without assistance at any time, by either switching off the eBike system or setting the assistance level to **"OFF"**. The same applies when the battery pack is empty.

Interaction of the eBike System with the Bicycle Gears

The bicycle gears should be used as with a normal bicycle, even with eBike drive (please observe the operating instructions of your eBike).

Independent of the type of gearing, it is recommended to briefly interrupt the pedaling while changing gears. This makes changing gears easier and reduces the wear of the drive train.

By selecting the right gear, you can increase the speed and range with the same pedaling effort.

Gathering First Experience

It is recommended to gather first experience with the eBike away from roads with heavy traffic.

Try out the different assistance levels. As soon as you feel safe, you can participate in traffic with the eBike as with any other bicycle.

Test the operating range of your eBike under different conditions before planning longer and more challenging rides.

Influences on the Operating Range

The operating range depends on many factors, such as:

- Assistance level,
- Gear-switching behaviour,
- Bicycle tyres and tyre pressure,
- Age and condition of the battery pack,
- Route profile (inclines) and road or path conditions (road or path surface),
- Head wind and ambient temperature,
- Weight of the eBike, rider and equipment/luggage

For these reasons, it is not possible to predict an accurate operating range before starting your ride. General rules:

- For **the same** motor output of the eBike drive: The less power or force that you have to bring about to reach a certain speed (e.g. through optimal use of the gears), the less energy the eBike drive will consume, and the greater the range for a battery-pack charge.
- **The higher** the assistance level under otherwise same conditions, the lower the range.

Careful Handling of the eBike

Please observe the operating and storage temperatures of the eBike components. Protect the drive unit, drive HMI and battery pack against extreme temperatures (e.g. from intense sunlight without adequate ventilation). The components (especially the battery pack) can become damaged through extreme temperatures.

Maintenance and Service

Maintenance and Cleaning

Keep all components of your eBike clean, especially the battery-pack contacts and corresponding holder contacts. Clean them carefully with a soft, damp cloth.

All components including the drive unit may not be immersed in water or cleaned with a high-pressure cleaner.

For service or repairs on the eBike, please refer to an authorised bicycle dealer.

After-sales Service and Customer Assistance

In case of questions concerning the eBike system and its components, please refer to an authorised bicycle dealer.

For contact data of authorised bicycle dealers, please refer to www.bosch-ebike.com

Transport

The battery packs are subject to the Dangerous Goods Legislation requirements. Private users can transport battery packs by road without further requirements.

When being transported by commercial users or third parties (e.g. via air transport or forwarding agency), special requirements on packaging and labelling must be observed (e.g. ADR Regulations). For preparation of the item being shipped, an expert for hazardous material can be consulted as required.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery pack in such a manner that it cannot move around in the packaging. Please also observe possibly more detailed national regulations.

In case of questions concerning transport of the battery packs, please refer to an authorised bicycle dealer. Bicycle dealers can also provide suitable transport packaging.

Disposal



The drive unit, drive HMI (incl. operating unit), battery pack, speed sensor, accessories and packaging should be sorted for environmental-friendly recycling.

Do not dispose of eBikes and their components into household waste!

Only for EC countries:



According to the European Guideline 2002/96/EC, electrical devices/tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

The integrated battery pack in the drive HMI may only be removed for disposal. Opening the housing shell can damage or destroy the drive HMI.

Please return battery packs that are no longer usable to an authorised bicycle dealer.



Li-ion:

Please observe the instructions in section "Transport", page English – 6.

Subject to change without notice.

Lithium ion battery pack PowerPack

Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier), except when explicitly referring to the design type.

▶ **Remove the battery pack from the eBike before working on the eBike (e.g., assembling, maintenance, etc.), transporting it via car or plane, or storing it.** Danger of injury when accidentally actuating the On/Off switch.

▶ **Do not open the battery pack.** Danger of short-circuiting. Opening the battery pack voids any and all warranty claims.



Protect the battery pack against heat (e.g., also against continuous intense sunlight), fire and immersing into water. Danger of explosion.

▶ **Keep the battery pack not being used away from paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery-pack terminals together may cause burns or a fire. For short-circuiting damage caused in this manner, any and all warranty claims through Bosch shall be invalid.

▶ **Under abusive conditions, liquid may be ejected from the battery pack. Avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery pack may cause skin irritations or burns.

▶ **Vapours can escape in case of damage and improper use of the battery pack. Provide for fresh air and seek medical attention in case of complaints.** The vapours can irritate the respiratory system.

▶ **Charge the battery pack only with original Bosch battery chargers.** When using non-original Bosch chargers, the danger of fire cannot be excluded.

▶ **Use the battery pack only together with eBikes that have an original Bosch eBike drive system.** This is the only way to protect the battery pack against dangerous overload.

▶ **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.

▶ **Please read and observe the safety warnings and instructions enclosed in the operating instructions of the charger and drive unit/drive HMI (Human Machine Interface), as well as in the operating instructions of your eBike.**

Product Description and Specifications

Product Features (see page 4 – 5)

The numbering of the product features refers to the illustrations on the graphics pages.

All representations of bike components, with exception of the battery packs and their holders, are schematic and can deviate from your eBike.

- 19 Holder of the rack-type battery pack
- 20 Rack-type battery pack
- 21 Operation and charge-control indicator
- 22 On/Off button
- 23 Key of the battery pack lock
- 24 Battery-pack lock
- 25 Upper holder of the standard battery pack
- 26 Standard battery pack
- 27 Bottom holder of the standard battery pack
- 28 Carrying strap
- 29 Battery charger

Technical Data

Lithium ion battery pack		PowerPack 300	PowerPack 400
Article number			
– Standard battery pack, black		0 275 007 500	0 275 007 503
– Standard battery pack, white		0 275 007 501	0 275 007 504
– Rack-type battery pack		0 275 007 502	0 275 007 505
Rated voltage	V=	36	36
Rated capacity	Ah	8.2	11
Energy	Wh	300	400
Operating temperature	°C	– 10 ... + 40	– 10 ... + 40
Storage temperature	°C	– 10 ... + 60	– 10 ... + 60
Allowable charging temperature range	°C	0 ... + 40	0 ... + 40
Weight, approx.	kg	2.5	2.5
Degree of protection		IP 54 (dust and splash water protected)	IP 54 (dust and splash water protected)

Assembly

- ▶ **Place down the battery pack only on clean surfaces.** In particular, avoid soiling the charge socket and the contacts, e. g. by means of sand or ground.

Checking the Battery Pack Before Using for the First Time

Check the battery pack before charging it or using it with your eBike for the first time.

For this, press the On/Off button **22** to switch on the battery pack. When no LED of the charge-control indicator **21** lights up, the battery pack may be damaged.

When at least one, but not all LEDs of the charge-control indicator **21** is lit, then fully charge the battery pack before using for the first time.

- ▶ **Do not charge a damaged battery pack and do not use it.** Please refer to an authorised bicycle dealer.

Charging the Battery Pack

- ▶ **Use only the charger provided with your eBike or an identical original Bosch charger.** Only this charger is matched to the lithium-ion battery pack used in your eBike.

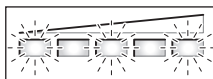
Note: The battery pack is supplied partially charged. To ensure full battery pack capacity, completely charge the battery pack in the charger before using for the first time.

The battery pack must be removed from the eBike for charging.

For charging the battery pack, read and observe the operating instructions of the charger.

The battery pack can be charged any time without reducing the service life. Interrupting the charging procedure does not cause damage to the battery pack.

The battery pack is equipped with a temperature control indicator, which enables charging only within a temperature range between 0 °C and 40 °C.



When the battery pack is not within the charging-temperature range, three LEDs of the charge-control indicator **21**

flash. Disconnect the battery pack from the charger until its temperature has adjusted.

Do not connect the battery pack to the charger until it has reached the allowable charging temperature.

Charge-control Indicator

When the battery pack is switched on, the five green LEDs of the charge-control indicator **21** indicate the charge condition of the battery pack.

In this, each LED indicates approx. 20 % capacity. When the battery pack is completely charged, all five LEDs light up.

Additionally, the charge condition of the switched on battery pack is indicated on the drive HMI. Read and observe the operating instructions of the drive unit and the drive HMI.

When the capacity of the battery pack is below 5 %, all LEDs of charge-control indicator **21** on the battery pack go out; however, the drive HMI does provide an additional indication function.

Inserting and Removing the Battery Pack (see figures C – D)

- ▶ **Always switch the battery pack off when inserting or removing it from the holder.**

In order for the battery pack to be inserted, the key **23** must be inserted into the lock **24** and the lock must be unlocked.

To **insert the standard battery pack 26**, place it via the contacts onto the bottom holder **27** on the eBike. Pivot the battery pack to the stop into the upper holder **25**.

To **insert the rack-type battery pack 20**, slide it with the contacts facing ahead until it engages in the holder **19** of the rear rack/carrier.

Check if the battery pack is tightly seated. Always lock the battery pack with lock **24**, as otherwise the lock can open and the battery pack could fall out of the holder.

After locking, always remove the key **23** from the lock **24**. This prevents the key from falling out and the battery pack from being removed from unauthorised persons when the eBike is parked.

To **remove the standard battery pack 26**, switch it off and unlock the lock with the key **23**. Pivot the battery pack out of the upper holder **25** and pull it by the carrying strap **28** out of the bottom holder **27**.

To **remove the rack-type battery pack 20**, switch it off and unlock the lock with the key **23**. Pull the battery pack out of the holder **19**.

Operation

Initial Operation

► **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.

Switching On and Off

Switching the battery pack on is one of the possibilities to start the eBike system. Read and observe the operating instructions of the drive unit and the drive HMI.

Before switching on the battery pack or the eBike system, check that the lock **24** is locked.

Note: When switching on the eBike system, the pedals of the eBike may not be subject to load, as otherwise the output capacity of the drive will be limited.

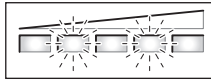
To **switch on** the battery pack, press the On/Off button **22**. The LEDs of indicator **21** light up and at the same time indicate the charge condition.

Note: When the battery-pack capacity is below 5 %, none of the LEDs of charge-control indicator **21** will light up. Only the drive HMI will indicate if the eBike system is switched on.

To **switch off** the battery pack, press the On/Off button **22** again. The LEDs of indicator **21** go out. This also switches off the eBike system.

When no power output of the eBike drive is requested for approx. 10 minutes (e. g., because the eBike is parked) and no button of the drive HMI or operating unit is pressed, the eBike system and thus the battery pack automatically switch off to save energy.

The battery pack is protected against deep discharging, overcharging, overheating and short-circuiting through the “Electronic Cell Protection (ECP)”. In case of hazardous situations, a protective circuit automatically switches off the battery pack.



When a defect of the battery pack is detected, two LEDs of the charge-control indicator **21** flash. In this case, please refer

to an authorised bicycle dealer.

Notes for Optimum Handling of the Battery Pack

The battery-pack life can be prolonged when being properly maintained and especially when being operated and stored at the right temperatures.

With increasing age, however, the battery-pack capacity will diminish, even when properly maintained.

A significantly reduced operating period after charging indicates that the battery pack is worn out and must be replaced. You can replace the battery pack yourself.

In case the carrying strap **28** of the standard battery pack should be defective, please have it replaced by a bicycle dealer.

Recharging the Battery Pack prior to and during Storage

When not using the battery pack for a longer period, charge it to approx. 60 % (3 to 4 LEDs lit on the charge-control indicator **21**).

Check the charge condition after 6 months. When only one LED of the charge-control indicator **21** lights up, recharge the battery pack again approx. 60 %.

Note: When the battery pack is stored discharged (empty) for longer periods, it can become damaged despite the low self-discharging and the battery-pack capacity may be strongly reduced.

It is not recommended to have the battery pack connected permanently to the charger.

Storage Conditions

Store the battery pack in a dry, well-ventilated location. Protect the battery pack against moisture and water. Under unfavourable weather conditions, it is recommended e. g. to remove the battery pack from the eBike and store it in an enclosed location until being used again.

The battery pack can be stored at temperatures between $-10\text{ }^{\circ}\text{C}$ and $+60\text{ }^{\circ}\text{C}$. For a long battery-pack life, however, storing the battery pack at a room temperature of approx. $20\text{ }^{\circ}\text{C}$ is of advantage.

Take care that the maximal storage temperature is not exceeded. As an example, do not leave the battery pack in a vehicle in summer and store it out of direct sunlight.

Maintenance and Service

Maintenance and Cleaning

Keep the battery pack clean. Clean the battery pack carefully with a soft, damp cloth. The battery pack may not be immersed in water or cleaned with a water jet.

When the battery pack is no longer operative, please refer to an authorised bicycle dealer.

After-sales Service and Customer Assistance

In case of questions concerning the battery packs, please refer to an authorised bicycle dealer.

- **Note down the manufacturer and the number of the key 23.** In case of loss of the keys, please refer to an authorised bicycle dealer. Please provide the name of the manufacturer and the number of the key.

For contact data of authorised bicycle dealers, please refer to www.bosch-ebike.com

Transport

The battery packs are subject to the Dangerous Goods Legislation requirements. Private users can transport battery packs by road without further requirements.

When being transported by commercial users or third parties (e. g. via air transport or forwarding agency), special requirements on packaging and labelling must be observed (e. g. ADR Regulations). For preparation of the item being shipped, an expert for hazardous material can be consulted as required.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery pack in such a manner that it cannot move around in the packaging. Please also observe possibly more detailed national regulations.

In case of questions concerning transport of the battery packs, please refer to an authorised bicycle dealer. Bicycle dealers can also provide suitable transport packaging.

Disposal



Battery packs, accessories and packaging should be sorted for environmental-friendly recycling.

Do not dispose of the battery packs into household waste!

Only for EC countries:



According to the European Guideline 2002/96/EC, electrical devices/tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in

an environmentally correct manner.

Please return battery packs that are no longer usable to an authorised bicycle dealer.



Li-ion:

Please observe the instructions in section "Transport", page English – 11.

Subject to change without notice.

Charger

Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier).



Keep the charger away from rain or moisture. The penetration of water into a battery charger increases the risk of an electric shock.

- ▶ **Only charge eBike-approved Bosch lithium-ion battery packs. The battery-pack voltage must match the battery-pack charging voltage of the charger.** Otherwise there is danger of fire and explosion.
- ▶ **Keep the battery charger clean.** Contamination can lead to danger of an electric shock.
- ▶ **Before each use, check the battery charger, cable and plug. If damage is detected, do not use the battery charger. Never open the battery charger yourself. Have repairs performed only by a qualified technician and only using original spare parts.** Damaged battery chargers, cables and plugs increase the risk of an electric shock.
- ▶ **Do not operate the battery charger on easily inflammable surfaces (e. g., paper, textiles, etc.) or surroundings.** The heating of the battery charger during the charging process can pose a fire hazard.
- ▶ **Vapours can escape in case of damage and improper use of the battery pack. Provide for fresh air and seek medical attention in case of complaints.** The vapours can irritate the respiratory system.
- ▶ **Supervise children.** This will ensure that children do not play with the charger.
- ▶ **Children or persons that owing to their physical, sensory or mental limitations or to their lack of experience or knowledge, are not capable of securely operating the charger, may only use this charger under supervision or after having been instructed by a responsible person.** Otherwise, there is danger of operating errors and injuries.

- ▶ **Please read and observe the safety warnings and instructions enclosed in the operating instructions of the battery pack and drive unit/drive HMI, as well as in the operating instructions of your eBike.**
- ▶ A short version of important safety warnings in English, French and Spanish with the following content can be found on the bottom side of the charger (marked with number **33** in the representation on the graphics page):
 - For safe operation see manual. Risk of electric shock.
 - Dry location use only.
 - Charge only batteries of the Bosch eBike Systems. Other batteries may burst causing personal damage.
 - Do not replace the plug assembly as risk of fire or electric shock may result.

Product Description and Specifications

Product Features (see page 6 – 7)

The numbering of the product features refers to the illustration of the battery charger on the graphics page.

- 20** Rack-type battery pack
- 21** Battery charge-control indicator
- 26** Standard battery pack
- 29** Battery charger
- 30** Charger socket
- 31** Plug-in connector
- 32** Ventilation openings
- 33** Safety warnings, charger
- 34** Charge connector
- 35** Socket for charge connector

Technical Data

Battery Charger	Charger	
Article number		0 275 007 905
Rated voltage	V~	207 – 264
Frequency	Hz	47 – 63
Output voltage	V=	42
Charging current	A	4
Allowable charging temperature range	°C	0 ... +40

The values given are valid for a nominal voltage [U] of 230 V. For different voltages and models for specific countries, these values can vary.

Battery Charger		Charger
Charging time		
– PowerPack 300	h	2.5
– PowerPack 400	h	3.5
Number of battery cells		10 – 80
Operating temperature		°C – 10... + 75
Storage temperature		°C – 20... + 70
Weight according to EPTA-Procedure 01/2003		kg 0.8
Degree of protection		IP 40
The values given are valid for a nominal voltage [U] of 230 V. For different voltages and models for specific countries, these values can vary.		

Operation

- **Place down the battery pack only on clean surfaces.** In particular, avoid soiling the charge socket and the contacts, e. g. by means of sand or ground.

Initial Operation

Connecting the Charger (see figures E – F)

- **Observe the mains voltage!** The voltage of the power supply must correspond with the data given on the nameplate of the battery charger. Battery chargers marked with 230 V can also be operated with 220 V.

Plug the charger plug **31** of the power cord into the charger socket **30** of the charger.

Connect the mains cable (country-specific) to the mains supply.

Switch the battery pack off and remove it from the holder of the eBike. For this, read and observe the operating instructions of the battery pack.

Insert the charger plug **34** of the battery charger into the socket **35** on the battery pack.

Charging Procedure

The charging procedure begins as soon as the charger is connected with the battery pack and the mains supply.

Note: The charging procedure is only possible when the temperature of the battery pack is within the allowable charging-temperature range.

During the charging procedure, the LEDs of charge-control indicator **21** on the battery pack light up. Each continuously lit LED is equivalent to a charge capacity of approx. 20 %. The flashing LED indicates the charging of the next 20 %.

- **Use caution when touching the charger during the charging procedure. Wear protective gloves.** Especially in high ambient temperatures, the charger can heat up considerably.

Note: Pay attention that the charger is well ventilated during the charging procedure and that the ventilation openings **32** on both sides are not clogged or contaminated.

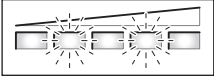
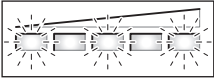
The battery pack is completely charged when all five LEDs of indicator **21** light up continuously. The charge procedure is automatically ended.

Disconnect the charger from the mains supply and the battery pack from the charger.

When disconnecting the battery pack from the charger, the battery pack is automatically switched off.

The battery pack can now be inserted into the eBike.

Troubleshooting – Causes and Corrective Measures

Cause	Corrective Measure
	Two LEDs of the battery pack flashing
Battery pack defective	Refer to an authorised bicycle dealer
	Three LEDs of the battery pack flashing
Battery pack too warm or too cold	Disconnect the battery pack from the charger and allow to adjust to the ambient temperature until the charging-temperature range is reached. Do not connect the battery pack to the charger until it has reached the allowable charging temperature.
No charging procedure possible (no indication on battery pack)	
Plug not inserted correctly	Check all plug connections
Contacts of battery pack soiled	Carefully clean the contacts of the battery pack
Ventilation openings 32 of the charger clogged or contaminated	Clean ventilation openings 32 and set up charger well ventilated
Socket outlet, cable or charger defective	Check mains voltage, have charger checked through bicycle dealer
Battery pack defective	Refer to an authorised bicycle dealer

Maintenance and Service

Maintenance and Cleaning

If the charger should fail, please refer to an authorised bicycle dealer.

After-sales Service and Customer Assistance

In case of questions concerning the charger, please refer to an authorised bicycle dealer.

For contact data of authorised bicycle dealers, please refer to **www.bosch-ebike.com**

Disposal

Battery chargers, accessories and packaging should be sorted for environmental-friendly recycling.

Do not dispose of battery chargers into household waste!

Only for EC countries:



According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national right, battery chargers that are no longer usable must be collected separately and disposed of in an environmental correct manner.

Subject to change without notice.

Unité d'entraînement Drive Unit Speed/ Ordinateur de commande Intuvia

Avertissements de sécurité



Lire tous les avertissements de sécurité et toutes les instructions. Ne pas suivre les avertissements et instructions peut donner lieu à un choc électrique, un incendie et/ou une blessure sérieuse.

Conserver tous les avertissements et toutes les instructions pour pouvoir s'y reporter ultérieurement.

Le terme « accu » utilisé dans cette notice d'utilisation se réfère aussi bien aux accus standards (accus avec fixation sur le cadre du vélo) qu'aux accus du porte-bagages (accus avec fixation dans le porte-bagages).

- ▶ **N'ouvrez pas l'unité d'entraînement vous-même. L'unité d'entraînement ne nécessite pas d'entretien ne doit être réparée que par une personne qualifiée et seulement avec des pièces de rechange d'origine.** Ceci permet d'assurer la sécurité de l'unité d'entraînement. Une ouverture non autorisée de l'unité d'entraînement annule tous droits de garantie.
- ▶ **Tous les éléments montés sur l'unité d'entraînement et tous les autres éléments de l'entraînement du vélo électrique (par ex. plateau, fixation du plateau, pédales) ne doivent être remplacés que par des éléments d'un type similaire ou spécialement autorisés par le fabricant de vélo pour votre vélo électrique.** Ceci permet de protéger l'unité d'entraînement d'une surcharge et de dommages.
- ▶ **Retirez l'accu du vélo électrique avant d'effectuer des travaux (par ex. montage, entretien etc.) sur le vélo électrique, avant de le transporter en voiture ou en avion ou de le stocker.** Risques de blessures en cas d'activation accidentelle de l'interrupteur Marche/Arrêt.
- ▶ **La fonction d'aide au démarrage ne doit être utilisée que quand vous démarrez le vélo électrique.** Les roues du vélo électrique doivent être en contact avec le sol lorsque l'aide au démarrage est utilisée, sinon il y a danger de blessures.
- ▶ **N'utilisez que les accus d'origine Bosch autorisés par le fabricant pour votre vélo électrique.** L'utilisation de tout autre accumulateur peut entraîner des blessures et des risques d'incendie. Bosch décline toute responsabilité et garantie dans le cas d'utilisation d'autres accus.
- ▶ **Respectez tous les réglementations nationales spécifiques à l'autorisation et l'utilisation de vélos électriques.**

- ▶ **Lisez et respectez les consignes de sécurité et les instructions de la notice d'utilisation de l'accu ainsi que celles de la notice d'utilisation de votre vélo électrique.**

Description et performances du produit

Utilisation conforme

L'unité d'entraînement est conçue exclusivement pour l'entraînement de votre vélo électrique et ne doit pas être utilisée à d'autres fins.

Le vélo électrique est conçu pour une utilisation sur des chemins à sol stabilisé. Il n'est pas agréé pour être utilisé dans des compétitions.

Éléments de l'appareil (voir page 2 – 3)

La numérotation des éléments se réfère à la représentation sur la page graphique.

Toutes les représentations d'éléments de vélo à l'exception de l'unité d'entraînement, de l'ordinateur de commande y compris l'unité de commande, du capteur de vitesse et de leurs fixations sont schématiques et peuvent différer des éléments réellement installés sur votre vélo électrique.

- 1 Touche pour la fonction d'affichage « i »
- 2 Touche pour l'éclairage
- 3 Ordinateur de commande
- 4 Fixation de l'ordinateur de commande
- 5 Touche Marche/Arrêt pour l'ordinateur de commande
- 6 Touche de remise à zéro « RESET »
- 7 Douille USB
- 8 Capuchon de protection de la douille USB
- 9 Unité d'entraînement
- 10 Unité de commande
- 11 Touche pour la fonction d'affichage « i » sur l'unité de commande
- 12 Touche pour baisser la valeur/feuilleter vers le bas « - »
- 13 Touche pour augmenter la valeur/feuilleter vers le haut « + »
- 14 Touche pour l'aide au démarrage « WALK »
- 15 Blocage de l'ordinateur de commande
- 16 Vis de blocage de l'ordinateur de commande
- 17 Capteur de vitesse
- 18 Aimant de rayon du capteur de vitesse

Éléments d'affichage de l'ordinateur de commande

- a Puissance du moteur
- b Affichage du niveau d'assistance
- c Texte affiché
- d Affichage des valeurs
- e Indicateur tachymétrique
- f Voyant lumineux indiquant l'état de charge de l'accu

Caractéristiques techniques

Unité d'entraînement	Drive Unit Speed	
N° d'article		0 275 007 003
Puissance	W	350
Couple max. de l'entraînement	Nm	50
Tension nominale	V $\overline{=}$	36
Température de fonctionnement	°C	-5 ... +40
Température de stockage	°C	-10 ... +50
Type de protection		IP 54 (étanche à la poussière et aux projections d'eau)
Poids, env.	kg	4

Ordinateur de commande	Intuvia	
N° d'article		1 270 020 903
Courant de charge max. de la connexion USB	mA	500
Tension de charge de la connexion USB	V	5
Température de fonctionnement	°C	-5 ... +40
Température de stockage	°C	-10 ... +50
Type de protection		IP 54 (étanche à la poussière et aux projections d'eau)
Poids, env.	kg	0,15

Éclairage*		
Tension nominale	V $\overline{=}$	6
Puissance		
– Lampe avant	W	2,7
– Lampe arrière	W	0,3

* en fonction des prescriptions légales, pas possible dans toutes les versions nationales via l'accu du vélo électrique

Montage

Montage et démontage de l'accu

Pour monter l'accu dans le vélo électrique, lisez et respectez la notice d'utilisation de l'accu.

Insérer et retirer l'ordinateur de commande (voir figure A)

Pour **monter** l'ordinateur de commande **3** poussez-le de devant dans sa fixation **4**.

Pour **retirer** l'ordinateur de commande **3** appuyez sur le dispositif de blocage **15** et poussez-le vers l'avant pour le sortir de sa fixation **4**.

► **Retirez l'ordinateur de commande lorsque le vélo électrique est garé pour éviter que des tiers non autorisés n'utilisent l'entraînement.** Le système eBike ne peut pas être mis en marche sans ordinateur de commande.

Il est également possible de sécuriser l'ordinateur de commande dans sa fixation pour empêcher qu'il n'en soit enlevé. Pour ce faire, démontez la fixation **4** du guidon. Montez l'ordinateur de commande dans sa fixation. Vissez la vis de blocage **16** par le bas dans le filet prévu de la fixation. Remontez la fixation sur le guidon.

Contrôle du capteur de vitesse (voir figure B)

Le capteur de vitesse **17** et l'aimant de rayon **18** doivent être montés de sorte à ce que l'aimant du rayon dépasse le capteur de vitesse à une distance de 5 mm min. et de 17 mm max. lorsque la roue tourne.

Note : Si la distance entre le capteur de vitesse **17** et l'aimant de rayon **18** est trop faible ou trop élevée ou si le capteur de vitesse **17** n'est pas correctement branché, l'indicateur tachymétrique **e** ne fonctionne pas, et l'entraînement du vélo électrique travaille en mode d'urgence.

Dans un tel cas, desserrez la vis de l'aimant de rayon **18** et fixez l'aimant de rayon sur le rayon de sorte à ce qu'il dépasse le marquage du capteur de vitesse à la distance correcte. Si l'indicateur tachymétrique **e** n'affiche toujours pas de vitesse, adressez-vous à un vélociste autorisé.

Fonctionnement

Mise en service

Conditions préalables

Le système eBike ne peut être activé que si les conditions suivantes sont remplies :

- Un accu suffisamment chargé est inséré (voir notice d'utilisation de l'accu).
- L'ordinateur de commande est correctement monté dans sa fixation (voir « Insérer et retirer l'ordinateur de commande », page Français – 2).
- Le capteur de vitesse est correctement connecté (voir « Contrôle du capteur de vitesse », page Français – 2).

Mise marche/Arrêt du système eBike

Pour mettre le système eBike **en marche**, vous avez les possibilités suivantes :

- Si l'ordinateur de commande est déjà allumé quand il est monté dans sa fixation, le système eBike sera automatiquement mis en marche.
- Une fois l'ordinateur de commande monté et l'accu en place, appuyez une fois brièvement sur la touche Marche/Arrêt **5** de l'ordinateur de commande.
- Une fois l'ordinateur de commande monté, appuyez sur la touche Marche/Arrêt de l'accu (voir notice d'utilisation de l'accu).

Note : Les pédales du vélo électrique ne doivent pas être sollicitées lorsque le système eBike est mis en marche, sinon la puissance du moteur serait réduite. Dans le texte affiché **c** apparaît le message d'erreur « **Relâcher la pédale** ».

Si le système eBike est mis en marche par mégarde alors que les pédales sont sollicitées, éteignez-le et remettez-le en marche sans sollicitation.

L'entraînement est activé dès que l'on pédale (sauf si vous êtes en fonction aide au démarrage, voir « Mise en marche/arrêt de l'aide au démarrage », page Français–4). La puissance du moteur dépend des réglages de l'ordinateur de commande.

Dès que vous arrêtez de pédaler en mode normal ou dès que vous avez atteint une vitesse de 45 km/h, l'entraînement du vélo électrique éteint l'assistance. L'entraînement est automatiquement activé à nouveau dès que vous pédalez et que la vitesse est inférieure à 45 km/h.

Pour **arrêter** le système eBike, vous avez les possibilités suivantes :

- Appuyez sur la touche Marche/Arrêt **5** de l'ordinateur de commande.
- Éteignez l'accu avec sa propre touche Marche/Arrêt (voir la notice d'utilisation de l'accu)
- Enlevez l'ordinateur de commande de sa fixation.

Si l'entraînement n'est pas sollicité pendant 10 min. (par ex. parce que le vélo électrique est arrêté) et qu'aucune touche de l'ordinateur de commande ou de l'unité de commande n'a été activée, le système eBike s'éteint automatiquement pour économiser l'énergie.

Affichages et réglages de l'ordinateur de commande

Alimentation en énergie de l'ordinateur de commande

Si l'ordinateur de commande se trouve dans la fixation **4** et qu'un accu suffisamment chargé est monté dans le vélo électrique, l'ordinateur de commande est alimenté au moyen de l'accumulateur du vélo électrique.

Si l'on retire l'ordinateur de commande de la fixation **4**, l'alimentation en énergie se fait au moyen d'un accu interne. Si l'accu interne est trop faible lorsqu'on met en marche l'ordinateur de commande, « **Connecter au vélo** » est affiché pen-

dant 3 sec sur l'écran **c**. Ensuite, l'ordinateur de commande s'arrête à nouveau.

Pour recharger l'accu interne, montez l'ordinateur de commande à nouveau dans la fixation **4** (si un accu est monté dans le vélo électrique). Éteignez l'accu du vélo électrique avec sa propre touche Marche/Arrêt (voir la notice d'utilisation de l'accu).

Vous pouvez également recharger l'ordinateur de commande via la connexion USB. Pour ce faire, ouvrez le capuchon de protection **8**. Connectez la douille USB **7** de l'ordinateur de commande au moyen d'un câble USB approprié avec un chargeur USB disponible dans le commerce ou la douille USB d'un ordinateur (5 V tension de charge ; max. 500 mA courant de charge). Dans le texte affiché **c** de l'ordinateur de commande « **USB connectée** » est affiché.

Allumer/éteindre l'ordinateur de commande

Pour mettre l'ordinateur de commande **en marche**, appuyez une fois brièvement sur l'interrupteur Marche/Arrêt **5**. L'ordinateur de commande peut (si son accu interne est suffisamment rechargé) être également mis en marche alors qu'il n'est pas encore monté dans sa fixation.

Pour **arrêter** l'ordinateur de commande, appuyez sur la touche Marche/Arrêt **5**.

Si l'ordinateur de commande n'est pas monté dans sa fixation, il s'éteint automatiquement au bout de 1 min sans activation de touche pour économiser l'énergie.

Voyant lumineux indiquant l'état de charge de l'accu

L'affichage de l'état de charge de l'accu **f** Indique l'état de charge de l'accu du vélo électrique, pas de l'accu interne de l'ordinateur de commande. L'état de charge de l'accu du vélo électrique peut également être contrôlé au moyen des LED sur l'accu même.

Sur l'affichage **f** chaque barre du symbole d'accu représente environ 20 % de capacité :



100 % à 80 % de capacité



20 % à 5 % de capacité, il faut recharger l'accu.



Moins de 5 % de capacité, l'assistance de l'entraînement n'est plus possible. Les LED de l'affichage de l'état de charge de l'accu s'éteignent.

Si l'éclairage du vélo électrique se fait au moyen de l'accu (suivant les versions dans les différents pays), la capacité sera suffisante pour 2 heures d'éclairage environ après la première apparition du symbole d'accu vide. Quand le symbole commence à clignoter, l'éclairage n'est plus possible que pendant une courte durée.

Si l'ordinateur de commande est retiré de sa fixation **4** l'état de charge de l'accu affiché en dernier reste mémorisé.

Réglage du niveau d'assistance

Vous pouvez régler sur l'ordinateur de commande la puissance de l'entraînement du vélo électrique selon vos besoins. Le niveau d'assistance peut être modifié à tout moment même pendant que vous roulez.

Note : Dans certaines versions, il est possible que le niveau d'assistance soit préréglé et ne puisse pas être modifié. Il est également possible que moins de niveaux d'assistance soient disponibles qu'indiqués ici.

Les niveaux d'assistance suivants sont disponibles :

- « **OFF** » : L'entraînement est hors-service, le vélo électrique peut être utilisé comme un vélo normal en pédalant.
- « **ECO** » : assistance effective avec efficacité maximale, pour portée maximale
- « **TOUR** » : assistance régulière, pour des tours de grande portée
- « **SPORT** » : assistance puissante, pour parcours sportifs sur des chemins montagneux ainsi que pour la circulation urbaine
- « **TURBO** » : assistance maximale jusqu'à des fréquences de pédalage élevées, pour parcours sportifs

Pour passer à un niveau d'assistance **plus élevé**, appuyez plusieurs fois sur la touche « + » **13** de l'unité de commande jusqu'à ce que le niveau d'assistance apparaisse sur l'écran **b**, pour passer à un niveau d'assistance **plus bas**, sur la touche « - » **12**.

La puissance du moteur lue apparaît sur l'écran **a**. La puissance maximale du moteur dépend du niveau d'assistance sélectionné.

Niveau d'assistance	Puissance du moteur* (dérailleur)
« ECO »	30 %
« TOUR »	100 %
« SPORT »	180 %
« TURBO »	250 %

* La puissance du moteur peut différer pour certaines versions.

Si l'on retire l'ordinateur de commande de la fixation **4**, le niveau d'assistance reste mémorisé, l'affichage **a** de la puissance de moteur reste vide.

Mise en marche/arrêt de l'aide au démarrage

L'aide au démarrage peut servir d'assistance supplémentaire sur les premiers mètres si le démarrage est difficile (tel que par ex. aux feux de circulation ou en montagne).

► **La fonction d'aide au démarrage ne doit être utilisée que quand vous démarrez le vélo électrique.** Les roues du vélo électrique doivent être en contact avec le sol lorsque l'aide au démarrage est utilisée, sinon il y a danger de blessures.

Pour **mettre en marche** l'aide au démarrage, appuyez sur la touche « **WALK** » **14** de l'unité de commande et maintenez-la appuyée. L'entraînement du vélo électrique sera mis en marche.

L'aide au démarrage sera **arrêtée** dès que surviendra l'un des événements suivants :

- vous relâchez la touche « **WALK** » **14**,
- vous appuyez sur une autre touche de l'ordinateur de commande,
- vous pédalez en avant ou rapidement en arrière,
- les roues du vélo électrique sont bloquées (par ex. par les freins ou si vous heurtez un obstacle),
- la vitesse dépasse 18 km/h.

Allumer/éteindre l'éclairage

En fonction des réglementations nationales, deux versions d'éclairage sont possibles :

- L'ordinateur de commande permet de mettre en marche ou d'éteindre simultanément la lampe avant, la lampe arrière et l'éclairage d'arrière plan de l'écran. Dans cette version, « **Feux allumés** » est affiché sur l'écran **c** pendant 1 sec. environ lorsqu'on allume la lampe et « **Feux éteints** » lorsqu'on éteint la lampe.
- Seul l'éclairage d'arrière plan de l'écran peut être allumé ou éteint, la lampe avant et la lampe arrière du vélo électrique sont indépendantes de l'ordinateur de commande.

Dans les deux modèles, pour **allumer ou éteindre l'éclairage**, appuyez sur la touche **2**.

Affichages de vitesse et de distance

L'**indicateur tachymétrique e** affiche toujours la vitesse actuelle.

Dans l'**affichage du fonctionnement** (combinaison entre affichage du texte **c** et des valeurs **d**), les fonctions suivantes sont à disposition :

- « **Autonomie** » : autonomie prévisible vu la charge actuelle de l'accu (dans des conditions telles que niveau d'assistance, profil du parcours etc. restant constantes)
- « **Distance parcourue** » : distance parcourue depuis la dernière remise à zéro
- « **temps de trajet** » : temps de trajet depuis la dernière remise à zéro
- « **Vitesse Moyenne** » : la vitesse moyenne atteinte depuis la dernière remise à zéro
- « **Vitesse Maximale** » : la vitesse maximale atteinte depuis la dernière remise à zéro
- « **Heure** » : heure actuelle

Pour passer de l'**affichage d'une valeur à une autre**, appuyez plusieurs fois sur la touche « **i** » **1** de l'ordinateur de commande ou sur la touche « **i** » **11** de l'unité de commande jusqu'à ce que la fonction souhaitée soit affichée.

Pour **remettre à zéro** la « **Distance parcourue** », le « **temps de trajet** » ou la « **Vitesse moyenne** », faites afficher l'une de ces trois fonctions et appuyez ensuite sur la touche « **RESET** » **6** jusqu'à ce que l'affichage soit revenu à zéro. Les valeurs des deux autres fonctions seront ainsi également remises à zéro.

Pour **remettre à zéro** la « **Vitesse maximale** », passez à l'affichage de cette fonction et appuyez sur la touche « **RESET** » **6** jusqu'à ce que l'affichage soit revenu à zéro.

Si l'ordinateur de commande est retiré de sa fixation **4** toutes les valeurs des différentes fonctions restent sauvegardées et peuvent être réaffichées ultérieurement.

Afficher/personnaliser la configuration de base

L'affichage ou la personnalisation de la configuration de base peuvent être effectués indépendamment de si l'ordinateur de commande est monté dans sa fixation **4** ou non.

Pour passer au menu Configuration de base, appuyez simultanément plusieurs fois sur la touche « **RESET** » **6** et la touche « **i** » **1** jusqu'à ce que « **Configuration** » apparaisse sur le texte affiché **c**.

Pour passer de l'affichage d'une configuration de base à une autre, appuyez sur la touche « **i** » **1** de l'ordinateur de commande jusqu'à ce que la configuration de base souhaitée soit affichée. Si l'ordinateur de commande est monté dans la fixation **4**, vous pouvez également appuyer sur la touche « **i** » **11** de l'unité de commande.

Pour modifier la configuration de base, appuyez pour une réduction ou feuilletter vers le bas sur la touche Marche/Arrêt **5** à côté de l'affichage « - » ou pour une augmentation ou feuilletter vers le haut la touche Eclairage **2** à côté de l'affichage « + ».

Affichage code d'erreur

Les éléments du système eBike sont contrôlés automatiquement en permanence. Si un défaut est détecté, le code défaut correspondant est affiché dans l'affichage de texte **c**.

Appuyez sur une touche quelconque de l'ordinateur de commande **3** ou de l'unité de commande **10** pour revenir à l'affichage standard.

En fonction du type d'erreur, l'entraînement est éventuellement automatiquement arrêté. Il est cependant à tout temps

Si l'ordinateur de commande est dans sa fixation **4**, vous pouvez également effectuer les modifications avec les touches « - » **12** ou « + » **13** de l'unité de commande.

Pour quitter la fonction et sauvegarder la configuration effectuée, appuyez sur la touche « **RESET** » **6** pendant 3 sec.

Les configurations de base suivantes sont à disposition :

- « **unité km/mi** » : vous pouvez afficher la vitesse et la distance parcourue en kilomètres ou en miles.
- « **format de l'heure** » : vous pouvez afficher l'heure au format 12 heures ou 24 heures.
- « **heure** » : vous pouvez régler l'heure actuelle. Maintenir appuyée la touche de réglage accélère la course de l'horloge.
- « **Français** » : vous pouvez modifier la langue du texte affiché. À disposition sont l'allemand, l'anglais, le français, l'espagnol, l'italien et le néerlandais.
- « **distance cumulée** » : affichage de la distance totale parcourue par le vélo électrique (non modifiable)
- « **Temps de fonctionn.** » : affichage de la durée totale de fonctionnement du vélo électrique (non modifiable)

possible de continuer à rouler sans être assisté par l'entraînement. Il est recommandé de faire contrôler le vélo électrique avant d'autres parcours.

► **Ne faites effectuer tous les travaux de contrôle et de réparation que par un vélociste autorisé.** Si une erreur est toujours affichée malgré vos soins pour remédier au problème, adressez-vous alors à un vélociste autorisé.

Code	Cause	Remède
100	Erreur interne de l'unité d'entraînement	Faire contrôler l'unité d'entraînement
101	Problème de connexion de l'unité d'entraînement	Faire contrôler les raccords et connexions
102	Erreur du capteur de vitesse	Faire contrôler le capteur de vitesse
103*	Problème de connexion de l'éclairage	Faire contrôler les raccords et connexions
104	Problème de connexion de l'ordinateur de commande	Faire contrôler les raccords et connexions
105	Température de l'unité d'entraînement trop élevée (supérieure à 40 °C)	Laissez refroidir l'unité d'entraînement. La continuation de la course sans entraînement du vélo électrique est possible et accélère le refroidissement de l'unité d'entraînement.
200	Défaut électronique interne de l'accu	Faire contrôler l'accu
201	Température de l'accu trop élevée (plus de 40 °C)	Laissez refroidir l'accu. La continuation de la course sans entraînement du vélo électrique est possible et accélère le refroidissement de l'accu.
202	Température de l'accu trop basse (moins de -10 °C)	Laissez l'accu se réchauffer lentement dans un endroit chaud.

* seulement pour éclairage par accu du vélo électrique (suivant les versions dans les différents pays)

Code	Cause	Remède
203	Problème de connexion de l'accu	Faire contrôler les raccords et connexions
204	Mauvaise polarité de l'accu	Rechargez l'accu au moyen du chargeur d'origine Bosch suivant les informations données dans la notice d'utilisation de ce dernier.
410	Une ou plusieurs touches de l'ordinateur de commande sont bloquées.	Contrôlez si les touches sont coincées, par ex. par des encrassements profonds. Le cas échéant, nettoyez les touches.
414	Problème de connexion de l'unité de commande	Faire contrôler les raccords et connexions
418	Une ou plusieurs touches de l'unité de commande sont bloquées.	Contrôlez si les touches sont coincées, par ex. par des encrassements profonds. Le cas échéant, nettoyez les touches.
422	Problème de connexion de l'unité d'entraînement	Faire contrôler les raccords et connexions
423	Problème de connexion de l'accu	Faire contrôler les raccords et connexions
424	Erreur de communication des composants entre eux	Faire contrôler les raccords et connexions
430	Accu interne de l'ordinateur de commande vide	Recharger l'ordinateur de commande (dans sa fixation ou par la connexion USB)
490	Erreur interne de l'ordinateur de commande	Faire contrôler l'ordinateur de commande

* seulement pour éclairage par accu du vélo électrique (suivant les versions dans les différents pays)

Alimentation en énergie d'appareils externes par la connexion USB

Au moyen du douille USB, il est possible de faire fonctionner ou de charger la plupart des appareils pouvant être alimentés par USB (p. ex. téléphones portables).

Condition préalable au chargement est que l'ordinateur de commande et un accu suffisamment chargé soient montés sur le vélo électrique.

Ouvrez le capuchon de protection **8** de la douille USB de l'ordinateur de commande. Connectez la prise USB de l'appareil externe au moyen d'un câble USB à la douille USB **7** de l'ordinateur de commande.

Instructions pour utiliser le système eBike

Quand est-ce que l'entraînement du vélo électrique travaille ?

L'entraînement du vélo électrique vous aide pendant votre course tant que vous pédalez. Sans pédaler, aucune assistance. La puissance du moteur dépend toujours de la force appliquée lorsque vous pédalez.

Si vous appliquez peu de force, l'assistance est moins forte que lorsque vous appliquez plus de force. Et cela indépendamment du niveau d'assistance.

L'entraînement du vélo électrique s'arrête automatiquement à une vitesse supérieure à 45 km/h. Si la vitesse tombe au-dessous de 45 km/h, l'entraînement est automatiquement à nouveau disponible.

La fonction aide au démarrage est une exception ; dans cette fonction, le vélo électrique peut être utilisé sans pédaler en faible vitesse.

Vous pouvez à tout moment utiliser le vélo électrique comme un vélo normal sans assistance, si vous éteignez le système eBike ou si vous mettez le niveau d'assistance sur « **OFF** ». Il en va de même si l'accu est vide.

Interaction entre le système eBike et la vitesse

Même avec entraînement de vélo électrique vous devriez utiliser la vitesse comme pour un vélo normal (respectez la notice d'utilisation de votre vélo électrique).

Indépendamment du type de vitesse, il est recommandé d'arrêter brièvement de pédaler pendant que vous changez de vitesse. Ceci facilite le changement de vitesse et réduit l'usure de l'arbre d'entraînement.

En choisissant la vitesse appropriée, vous pouvez augmenter la vitesse et la portée en appliquant la même force.

Faire les premières expériences

Il est recommandé de faire les premières expériences avec le vélo électrique à l'écart de rues fortement fréquentées.

Essayez les différents niveaux d'assistance à disposition. Dès que vous vous sentez sûr de vous, vous pouvez circuler avec le vélo électrique comme avec tout autre vélo.

Essayez la portée de votre vélo électrique dans différentes conditions avant de planifier un parcours long et exigeant.

Influences sur la portée

L'autonomie est influencée par beaucoup de facteurs, tels que par exemple :

- le niveau d'assistance,
- la manière de changer les vitesses,
- le type et la pression des pneus,
- l'âge et l'état de l'accu,
- le profil (montées) et les caractéristiques (surface de la route) du parcours,
- le vent de face et les températures ambiantes,
- le poids du vélo électrique, du conducteur et des bagages.

Pour cette raison il n'est pas possible de prédire concrètement la portée avant un parcours. Mais en général vaut :

- Pour une **même** puissance de moteur de l'entraînement du vélo électrique : Plus la force que vous devez appliquer pour atteindre une certaine vitesse sera faible (par ex. par une utilisation optimale des vitesses), plus l'énergie consommée par l'entraînement sera faible et plus grande sera l'autonomie d'une charge d'accu.
- Plus le niveau d'assistance sélectionné sera **élevé**, même dans des conditions constantes, moins l'autonomie sera grande.

Maniement soigneux du vélo électrique

Respectez les températures de fonctionnement et de stockage des éléments du vélo électrique. Protégez l'unité d'entraînement, l'ordinateur de commande et l'accu de températures extrêmes (par ex. exposition intensive au soleil sans aération). Les éléments (surtout l'accu) peuvent être endommagés par des températures extrêmes.

Entretien et Service Après-Vente

Nettoyage et entretien

Maintenez tous les éléments de votre vélo électrique propres, surtout les contacts de l'accu et les fixations. Nettoyez-les avec précaution à l'aide d'un chiffon humidifié et doux.

Ne plongez pas dans l'eau les éléments, y compris l'unité de l'entraînement et ne les nettoyez pas à l'aide d'un nettoyeur haute pression.

Pour le Service Après-Vente ou des réparations sur votre vélo électrique, adressez-vous à un vélociste autorisé.

Service Après-Vente et Assistance Des Clients

Pour toutes les questions concernant le système eBike et ses éléments, adressez-vous à un vélociste autorisé.

Vous trouverez les données de contact de vélocistes autorisés sur le site internet www.bosch-ebike.com

Transport

Les accus sont soumis aux règlements de transport des matières dangereuses. L'utilisateur privé peut transporter les accus par la route sans conditions supplémentaires.

Lors d'un transport par des utilisateurs commerciaux ou par des tiers (par ex. transport aérien ou entreprise de transport), les prescriptions particulières pour l'emballage et le marquage doivent être respectées (par ex. prescriptions de l'ADR). Au besoin, faire appel à un expert en transport de matières dangereuses pour la préparation de l'envoi.

N'expédiez pas l'accu si le boîtier est endommagé. Recouvrez les contacts à l'air libre et emballez l'accu de manière à ce qu'il ne se déplace pas dans l'emballage. Veuillez également respecter des réglementations supplémentaires nationales éventuellement en vigueur.

Pour toute question concernant le transport de l'accu, adressez-vous à un vélociste autorisé. Vous pouvez également commander un emballage de transport approprié auprès d'un commerçant spécialisé.

Élimination des déchets



L'unité d'entraînement, l'ordinateur de commande y compris l'unité de commande, l'accu, le capteur de vitesse, ainsi que leurs accessoires et emballages, doivent pouvoir suivre chacun une voie de recyclage appropriée.

Ne jetez pas les vélos électriques et leurs éléments dans les ordures ménagères !

Seulement pour les pays de l'Union Européenne :



Conformément à la directive européenne 2002/96/CE, les équipements électriques dont on ne peut plus se servir, et conformément à la directive européenne 2006/66/CE, les accus/piles usés ou défectueux doivent être isolés et suivre une voie de recyclage appropriée.

L'accu intégré à l'ordinateur de commande ne doit en être retiré que pour son élimination. Ouvrir la coque du boîtier peut détruire l'ordinateur de commande.

Déposez les accus et l'ordinateur de commande dont on ne peut plus se servir auprès d'un vélociste autorisé.



Lithium ion :

Respectez les indications données dans le chapitre « Transport », page Français – 7.

Sous réserve de modifications.

Accu Li-ions PowerPack

Avertissements de sécurité



Lire tous les avertissements de sécurité et toutes les instructions. Ne pas suivre les avertissements et instructions peut donner lieu à un choc

électrique, un incendie et/ou une blessure sérieuse.

Conserver tous les avertissements et toutes les instructions pour pouvoir s'y reporter ultérieurement.

Le terme « accu » utilisé dans cette notice d'utilisation se réfère également aux accus standards (accus avec fixation sur le cadre de vélo) et accus de porte-bagages (accus avec fixation dans le porte-bagages), à moins que référence ne soit faite au modèle.

► **Retirez l'accu du vélo électrique avant d'effectuer des travaux (par ex. montage, entretien etc.) sur le vélo électrique, avant de le transporter en voiture ou en avion ou de le stocker.** Risques de blessures en cas d'activation accidentelle de l'interrupteur Marche/Arrêt.

► **Ne pas ouvrir l'accu.** Risque de court-circuit. L'ouverture de l'accu entraîne l'annulation de la garantie.



Protégez l'accu de toute source de chaleur (par ex. d'une exposition permanente au soleil) de feu, et ne le plongez pas dans l'eau. Il peut y avoir risque d'explosion.

► **Tenez l'accu non-utilisé à l'écart de toutes sortes d'objets métalliques tels qu'agrafes, pièces de monnaie, clés, clous, vis ou autres, car un pontage pourrait provoquer un court-circuit.** Un court-circuit entre les contacts d'accu peut provoquer des brûlures ou un incendie. La garantie de Bosch est annulée dans en cas de dommages provoqués par un court-circuit survenant dans ce contexte.

► **En cas d'une utilisation erronée, du liquide peut s'échapper de l'accumulateur. Évitez tout contact. En cas de contact accidentel, nettoyez à l'eau. Si le liquide entre en contact avec les yeux, veuillez alors consulter un médecin.** La substance liquide qui s'échappe de l'accumulateur peut entraîner des irritations de la peau ou causer des brûlures.

► **En cas d'endommagement et d'utilisation non conforme de l'accumulateur, des vapeurs peuvent s'échapper. Ventilez le lieu de travail et, en cas de maux, consultez un médecin.** Les vapeurs peuvent irriter les voies respiratoires.

► **Ne recharger l'accu qu'avec un chargeur d'origine Bosch.** En cas d'utilisation d'un chargeur autre qu'en chargeur d'origine Bosch, un risque d'incendie ne peut être exclu.

► **N'utilisez l'accu qu'avec des vélos électriques équipés d'un entraînement de vélo électrique d'origine Bosch.** Ceci protège l'accu contre une surcharge dangereuse.

► **N'utilisez que les accus d'origine Bosch autorisés par le fabricant pour votre vélo électrique.** L'utilisation de tout autre accumulateur peut entraîner des blessures et des risques d'incendie. Bosch décline toute responsabilité et garantie dans le cas d'utilisation d'autres accus.

► **Lisez et respectez les consignes de sécurité et les instructions se trouvant dans les notices d'utilisation du chargeur et de l'unité d'entraînement/de l'ordinateur de commande ainsi que dans la notice d'utilisation de votre vélo électrique.**

Description et performances du produit

Éléments de l'appareil (voir page 4 – 5)

La numérotation des éléments se réfère à la représentation sur les pages graphiques.

Toutes les représentations d'éléments de vélo à l'exception des accus et des fixations sont schématiques et peuvent différer pour votre vélo électrique.

- 19 Fixation de l'accu de porte-bagages
- 20 Accu de porte-bagages
- 21 Voyant de fonctionnement et d'état de charge
- 22 Touche Marche/Arrêt
- 23 Clé de la serrure de l'accu
- 24 Serrure de l'accu
- 25 Fixation supérieure de l'accu standard
- 26 Accu standard
- 27 Fixation inférieure de l'accu standard
- 28 Sangle
- 29 Chargeur

Caractéristiques techniques

Accu Lithium-ion		PowerPack 300	PowerPack 400
N° d'article			
– Accu standard noir		0 275 007 500	0 275 007 503
– Accu standard blanc		0 275 007 501	0 275 007 504
– Accu de porte-bagages		0 275 007 502	0 275 007 505
Tension nominale	V=	36	36
Capacité nominale	Ah	8,2	11
Énergie	Wh	300	400
Température de fonctionnement	°C	– 10 ... + 40	– 10 ... + 40
Température de stockage	°C	– 10 ... + 60	– 10 ... + 60
Plage de température de charge admissible	°C	0 ... + 40	0 ... + 40
Poids, env.	kg	2,5	2,5
Type de protection		IP 54 (étanche à la poussière et aux projections d'eau)	IP 54 (étanche à la poussière et aux projections d'eau)

Montage

► **Ne placez l'accu que sur des surfaces propres.** Évitez tout encrassement de la douille de charge et des contacts, par ex. par du sable ou de la terre.

Contrôler l'accu avant la première utilisation

Contrôlez l'accu avant de le recharger ou de l'utiliser avec votre vélo électrique la première fois.

Pour ce faire, appuyez sur la touche Marche/Arrêt **22** pour mettre l'accu en marche. Si aucune des LED de l'affichage de l'état de charge **21** ne s'allume, l'accu pourrait être endommagé.

Si au moins une des LED s'allume mais pas la totalité des LED de l'affichage de l'état de charge **21**, alors rechargez l'accu à fond avant la première utilisation.

► **Ne chargez pas un accu endommagé et ne l'utilisez pas.** Adressez-vous à un vélociste autorisé.

Charge de l'accu

► **N'utiliser que le chargeur d'origine Bosch fourni avec le vélo électrique ou un chargeur identique.** Seul ce chargeur est adapté à l'accu à ions lithium utilisé dans votre vélo électrique.

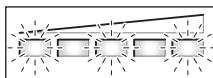
Note : L'accu est fourni en état de charge faible. Afin de garantir la puissance complète de l'accu, rechargez-le complètement dans le chargeur avant la première mise en service.

Pour recharger l'accu, il faut le retirer du vélo électrique.

Pour charger l'accu, lisez et respectez la notice d'utilisation du chargeur.

L'accu à ions lithium peut être rechargé à tout moment, sans que sa durée de vie n'en soit réduite. Le fait d'interrompre le processus de charge n'endommage pas l'accu.

L'accu est équipé d'un contrôle de température qui ne permet de charger l'accu que dans une plage de température entre 0 °C et 40 °C.



Si l'accu se trouve à l'extérieur de la plage de température prévue, trois LED de l'affichage de l'état de charge **21** clignotent.

Débranchez l'accu du chargeur et laissez-le reprendre une température adéquate.

Ne rebranchez l'accu au chargeur que quand il a repris une température de charge admissible.

Voyant lumineux indiquant l'état de charge

Les cinq LED de l'affichage de l'état de charge **21** indiquent, quand l'accu est allumé, dans quel état de charge il se trouve. Chaque LED correspond à environ 20 % de capacité. Si l'accu est complètement rechargé, les cinq LED s'allument.

L'état de charge de l'accu allumé est également indiqué par l'ordinateur de commande. Lisez et respectez la notice d'utilisation de l'unité d'entraînement et de l'ordinateur de commande.

Si la capacité de l'accu est inférieure à 5 %, toutes les LED du voyant lumineux indiquant l'état de charge de l'accu **21** s'éteignent, mais il y a toujours la fonction d'affichage de l'ordinateur de commande.

Montage et démontage de l'accu (voir figures C–D)

► **Eteignez toujours l'accu pour le monter ou pour le retirer de la fixation.**

Pour pouvoir monter l'accu, la clé **23** doit se trouver dans la serrure **24** et la serrure doit être ouverte.

Pour **monter l'accu standard 26**, mettez-le en place avec les contacts sur la fixation du bas **27** sur le vélo électrique. Basculez-le à fond dans la fixation du haut **25**.

Pour **mettre en place l'accu du porte-bagages 20**, enfoncez-le, côté contact, dans la fixation **19** du porte-bagages jusqu'à ce qu'il s'encliquette.

Contrôlez le bon positionnement de l'accu. Fermez toujours l'accu à l'aide de la serrure **24** car sinon, la serrure pourrait s'ouvrir et l'accu tomber de la fixation.

Après avoir fermé la serrure à clé, retirer toujours la clé **23** de la serrure **24**. Ceci permet d'éviter que la clé ne tombe ou que l'accu ne soit retiré par une tierce personne non autorisée, lorsque le vélo électrique est garé.

Pour **enlever l'accu standard 26**, éteignez-le puis ouvrez la serrure avec la clé **23**. Faites basculer l'accu de la fixation supérieure **25** et tirez sur la sangle **28** pour le faire sortir de la fixation inférieure **27**.

Pour **enlever l'accu du porte-bagages 20**, éteignez-le puis ouvrez la serrure avec la clé **23**. Faites basculer l'accu pour le sortir de sa fixation **19**.

Fonctionnement

Mise en service

► **N'utilisez que les accus d'origine Bosch autorisés par le fabricant pour votre vélo électrique.** L'utilisation de tout autre accumulateur peut entraîner des blessures et des risques d'incendie. Bosch décline toute responsabilité et garantie dans le cas d'utilisation d'autres accus.

Mise en marche/arrêt

Allumer l'accu est une des possibilités permettant de mettre le système eBike en marche. Lisez et respectez la notice d'utilisation de l'unité d'entraînement et de l'ordinateur de commande.

Avant d'allumer l'accu ou de mettre le système eBike en marche, vérifiez que la serrure **24** est fermée à clé.

Note : Les pédales du vélo électrique ne doivent pas être sollicitées lorsque le système eBike est mis en marche, sinon la puissance de l'entraînement du vélo électrique serait réduite.

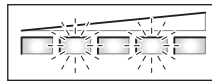
Pour **allumer** l'accu, appuyez sur la touche Marche/Arrêt **22**. Les LED de l'affichage **21** s'allument et indiquent en même temps l'état de charge.

Note : Si la capacité de l'accu baisse à moins de 5 %, la totalité des LED de l'affichage de l'état de charge **21** est éteinte. Seul l'ordinateur de commande indique si le système eBike est mis en marche.

Pour **éteindre** l'accu, appuyez à nouveau sur la touche Marche/Arrêt **22**. Les LED de l'affichage **21** s'éteignent. Le système eBike est en même temps également éteint.

Si l'entraînement du vélo électrique n'est pas sollicité pendant 10 min. (par ex. parce que le vélo électrique est arrêté) et qu'aucune touche de l'ordinateur de commande ou de l'unité de commande n'a été activée, le système eBike s'éteint automatiquement pour économiser l'énergie.

L'accu est protégé par le « Electronic Cell Protection (ECP) » contre décharge profonde, surcharge, surchauffe et court-circuit. En cas de danger, l'accu s'éteint automatiquement grâce à un dispositif d'arrêt de protection.



Si un défaut de l'accu est détecté, deux LED de l'affichage de l'état de charge **21** clignotent. Dans ce cas, veuillez consulter

un vélociste autorisé.

Indications pour le maniement optimal de l'accumulateur

La durée de vie de l'accu peut être prolongée s'il est bien entretenu et surtout s'il est utilisé et stocké à des températures appropriées.

Toutefois, en dépit d'un bon entretien, la capacité de l'accu se réduira avec l'âge.

Si l'autonomie de l'accu diminue considérablement après qu'une recharge a été effectuée, c'est que l'accu est usagé. Vous pouvez remplacer l'accu.

Si la sangle **28** de l'accu standard était défectueuse, faites-la remplacer par un vélociste.

Recharger l'accu avant et pendant le stockage

Quand vous n'utilisez pas le vélo électrique pendant une période prolongée, rechargez l'accu à environ 60 % (3 à 4 LED de l'affichage de l'état de charge **21** sont allumés).

Contrôlez après 6 mois l'état de charge. Si aucune des LED de l'affichage de l'état de charge **21** n'est allumée, rechargez l'accu à nouveau à environ 60 %.

Note : Si l'accu est stocké vide pendant une durée prolongée, il peut être endommagé malgré la faible autodécharge et sa capacité peut être considérablement réduite.

Il n'est pas recommandé de laisser l'accu raccordé en permanence au chargeur.

Conditions de stockage

Si possible, stockez l'accu dans un endroit sec et bien aéré. Protégez-le de l'humidité et de l'eau. Dans des conditions météorologiques défavorables, il est par ex. recommandé de retirer l'accu du vélo électrique et de le stocker jusqu'à la prochaine utilisation dans des locaux fermés.

L'accu peut être stocké à des températures comprises entre -10 °C et +60 °C. Pour une longue durée de vie, un stockage à une température ambiante d'env. 20 °C est recommandé.

Veuillez à ne pas dépasser la température maximale de stockage. Ne laissez pas l'accu trop longtemps dans une voiture surtout en été et maintenez-le à l'abri d'une exposition directe au soleil.

Entretien et Service Après-Vente

Nettoyage et entretien

Maintenez l'accu propre. Nettoyez-le avec précaution à l'aide d'un chiffon doux humidifié. Ne plongez pas l'accu dans l'eau et ne le nettoyez pas au jet d'eau.

Si l'accu ne peut plus fonctionner, veuillez vous adresser à un vélociste autorisé.

Service Après-Vente et Assistance Des Clients

Pour toute question concernant les accus, consultez un vélociste autorisé.

► **Notez le fabricant et le numéro de la clé 23.** Au cas où vous perdriez la clé, adressez-vous à un vélociste autorisé. Indiquez-lui le fabricant et le numéro de la clé.

Vous trouverez les données de contact de vélocistes autorisés sur le site internet www.bosch-ebike.com

Transport

Les accus sont soumis aux règlements de transport des matières dangereuses. L'utilisateur privé peut transporter les accus par la route sans conditions supplémentaires.

Lors d'un transport par des utilisateurs commerciaux ou par des tiers (par ex. transport aérien ou entreprise de transport), les prescriptions particulières pour l'emballage et le marquage doivent être respectées (par ex. prescriptions de l'ADR). Au besoin, faire appel à un expert en transport de matières dangereuses pour la préparation de l'envoi.

N'expédiez pas l'accu si le boîtier est endommagé. Recouvrez les contacts à l'air libre et emballez l'accu de manière à ce qu'il ne se déplace pas dans l'emballage. Veuillez également respecter des réglementations supplémentaires nationales éventuellement en vigueur.

Pour toute question concernant le transport de l'accu, adressez-vous à un vélociste autorisé. Vous pouvez également commander un emballage de transport approprié auprès d'un commerçant spécialisé.

Élimination des déchets



Les accus ainsi que leurs accessoires et emballages doivent pouvoir suivre chacun une voie de recyclage appropriée.

Ne jetez pas les accus dans les ordures ménagères !

Seulement pour les pays de l'Union Européenne :



Conformément à la directive européenne 2002/96/CE, les équipements électriques dont on ne peut plus se servir, et conformément à la directive européenne 2006/66/CE, les accus/piles usés ou défectueux doivent être isolés et suivre une voie de recyclage appropriée.

Déposez les accus dont on ne peut plus se servir auprès d'un vélociste autorisé.



Lithium ion :

Respectez les indications données dans le chapitre « Transport », page Français – 11.

Sous réserve de modifications.

Chargeur Charger

Avertissements de sécurité



Lire tous les avertissements de sécurité et toutes les instructions. Ne pas suivre les avertissements et instructions peut donner lieu à un choc

électrique, un incendie et/ou une blessure sérieuse.

Conserver tous les avertissements et toutes les instructions pour pouvoir s'y reporter ultérieurement.

Le terme « accu » utilisé dans cette notice d'utilisation se réfère aussi bien aux accus standards (accus avec fixation sur le cadre du vélo) qu'aux accus du porte-bagages (accus avec fixation dans le porte-bagages).



N'exposez pas le chargeur à la pluie ou à des conditions humides. Dans le cas de pénétration d'eau dans un chargeur il y a le risque d'un choc électrique.

- ▶ **Ne charger que des accus Li-ion autorisés par Bosch pour les vélos électriques. La tension d'accumulateurs doit correspondre à la tension de charge de l'accumulateur du chargeur.** Sinon, il y a risque d'incendie et d'explosion.
- ▶ **Maintenir le chargeur propre.** Un encrassement augmente le risque de choc électrique.
- ▶ **Avant toute utilisation, contrôler le chargeur, la fiche et le câble. Ne pas utiliser le chargeur si des défauts sont constatés. Ne pas démonter le chargeur soi-même et ne le faire réparer que par une personne qualifiée et seulement avec des pièces de rechange d'origine.** Des chargeurs, câbles et fiches endommagés augmentent le risque d'un choc électrique.
- ▶ **Ne pas utiliser le chargeur sur un support facilement inflammable (tel que papier, textiles etc.) ou dans un environnement inflammable.** L'échauffement du chargeur lors du processus de charge augmente le risque d'incendie.
- ▶ **En cas d'endommagement et d'utilisation non conforme de l'accumulateur, des vapeurs peuvent s'échapper. Ventilez le lieu de travail et, en cas de maux, consultez un médecin.** Les vapeurs peuvent irriter les voies respiratoires.
- ▶ **Ne laissez pas les enfants sans surveillance.** Veillez à ce que les enfants ne jouent pas avec le chargeur.
- ▶ **Les enfants et les personnes souffrant d'un handicap physique, sensoriel ou mental ou n'ayant pas l'expérience et/ou les connaissances nécessaires, ne doivent pas utiliser le chargeur à moins qu'elles ne soient surveillées par une personne responsable de leur sécurité ou qu'elles aient été instruites quant au maniement du chargeur.** Sinon, il y a un risque de mauvaise utilisation et de blessures.

- ▶ **Lisez et respectez les consignes de sécurité et les instructions se trouvant dans les notices d'utilisation des accus et de l'unité d'entraînement/de l'ordinateur de commande ainsi que dans la notice d'utilisation de votre vélo électrique.**
- ▶ En dessous du chargeur se trouve un abrégé des consignes de sécurité les plus importantes en anglais, français et espagnol (marqué du numéro 33 sur la figure de la page graphique) avec le contenu suivant :
 - Pour un fonctionnement sûr, reportez-vous au manuel. Risque de choc électrique.
 - Utiliser en lieu sec uniquement.
 - A utiliser uniquement avec les batteries des systèmes d'assistance électrique eBike de Bosch. D'autres batteries risqueraient d'éclater et de causer des blessures corporelles et des dommages.
 - Ne pas remplacer la connectique car un risque d'incendie ou de choc électrique pourrait en résulter.

Description et performances du produit

Éléments de l'appareil (voir page 6 – 7)

La numérotation des éléments de l'appareil se réfère à la représentation du chargeur sur la page graphique.

- 20 Accu de porte-bagages
- 21 Voyant lumineux indiquant l'état de charge de l'accu
- 26 Accu standard
- 29 Chargeur
- 30 Prise d'appareil
- 31 Fiche de l'appareil
- 32 Orifices d'aération
- 33 Consignes de sécurité du chargeur
- 34 Fiche de charge
- 35 Prise pour fiche de charge

Caractéristiques techniques

Chargeur	Charger	
N° d'article		0 275 007 905
Tension nominale	V~	207 – 264
Fréquence	Hz	47 – 63
Tension de charge de l'accu	V---	42
Courant de charge	A	4
Ces indications sont valables pour une tension nominale de [U] 230 V.		
Ces indications peuvent varier pour des tensions plus basses ainsi que pour des versions spécifiques à certains pays.		

Chargeur		Charger
Plage de température de charge admissible	°C	0 ... + 40
Durée de charge		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Nombre cellules de batteries rechargeables		10 – 80
Température de fonctionnement	°C	– 10 ... + 75
Température de stockage	°C	– 20 ... + 70
Poids suivant EPTA-Procedure 01/2003	kg	0,8
Type de protection		IP 40
Ces indications sont valables pour une tension nominale de [U] 230 V. Ces indications peuvent varier pour des tensions plus basses ainsi que pour des versions spécifiques à certains pays.		

Fonctionnement

► **Ne placez l'accu que sur des surfaces propres.** Évitez tout encrassement de la douille de charge et des contacts, par ex. par du sable ou de la terre.

Mise en service

Raccordement du chargeur (voir figures E – F)

► **Tenez compte de la tension du réseau !** La tension de la source de courant doit correspondre aux indications se trouvant sur la plaque signalétique du chargeur. Les chargeurs marqués 230 V peuvent également fonctionner sous 220 V.

Branchez la fiche **31** du câble secteur à la douille de l'appareil **30** sur le chargeur.

Branchez le câble de secteur (différent selon le pays) sur le réseau d'alimentation électrique.

Éteignez l'accu et retirez-le de la fixation sur le vélo électrique. Lisez et respectez la notice d'utilisation de l'accu.

Branchez la fiche de charge **34** du chargeur à la douille **35** sur l'accu.

Processus de charge

Le processus de charge commence dès que le chargeur est raccordé à l'accu et au réseau électrique.

Note : Le processus de charge n'est possible que si la température de l'accu se trouve dans la plage de température de charge admissible.

Pendant le processus de charge, les voyants de l'affichage de l'état de charge **21** s'allument en rouge sur l'accu. Chaque LED allumée en permanence correspond à environ 20 % de capacité de charge. La LED clignotante indique le processus de charge des 20 % suivants.

► **Soyez prudent lorsque vous touchez le chargeur pendant le processus de charge. Porter des gants de protection.** Le chargeur peut s'échauffer fortement surtout en cas de température ambiante élevée.

Note : Veillez à ce que le chargeur soit bien aéré pendant le processus de charge et que les orifices d'aération **32** des deux côtés ne soient pas couverts.

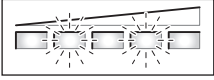
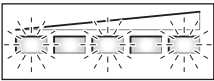
L'accu est complètement rechargé quand les cinq LED de l'affichage **21** sont allumés en permanence. Le processus de charge est automatiquement interrompu.

Déconnectez le chargeur du réseau électrique et l'accu du chargeur.

Lorsque l'accu est déconnecté du chargeur, il est automatiquement éteint.

Vous pouvez maintenant monter l'accu sur le vélo électrique.

Défaut – Causes et remèdes

Cause	Remède
 <p>Accu défectueux</p>	<p>Deux LED de l'accu clignotent</p> <p>Consulter un vélociste autorisé</p>
 <p>L'accumulateur est trop chaud ou trop froid</p>	<p>Trois LED de l'accu clignotent</p> <p>Débrancher l'accu du chargeur et le laisser reprendre une température adéquate comprise dans la plage de températures indiquée. Ne rebranchez l'accu au chargeur que quand il a repris une température de charge admissible.</p>
<p>Recharge impossible (pas d'affichage sur l'accu)</p>	
La fiche n'est pas correctement enfichée	Contrôler toutes les connexions
Contacts de l'accu encrassés	Nettoyer prudemment les contacts de l'accu
Les orifices d'aération 32 du chargeur sont obturés ou couverts	Nettoyer les orifices d'aération 32 et positionner le chargeur de sorte à ce qu'il soit bien aéré
Prise de courant, câble ou chargeur défectueux	Vérifier la tension du secteur, faire contrôler le chargeur par un vélociste
Accu défectueux	Consulter un vélociste autorisé

Entretien et Service Après-Vente

Nettoyage et entretien

Au cas où le chargeur tomberait en panne, adressez-vous à un vélociste autorisé.

Service Après-Vente et Assistance Des Clients

Pour toute question concernant le chargeur, adressez-vous à un vélociste autorisé.

Vous trouverez les données de contact de vélocistes autorisés sur le site internet **www.bosch-ebike.com**

Elimination des déchets

Les chargeurs ainsi que leurs accessoires et emballages, doivent pouvoir suivre chacun une voie de recyclage appropriée.

Ne jetez pas les chargeurs avec les ordures ménagères !

Seulement pour les pays de l'Union Européenne :



Conformément à la directive européenne 2002/96/CE relative aux déchets d'équipements électriques et électroniques et la mise en vigueur conformément aux législations nationales, les chargeurs dont on ne peut plus se servir doivent être isolés et

suivre une voie de recyclage appropriée.

Sous réserve de modifications.

Unidad motriz Drive Unit Speed/ Ordenador de control Intuvia

Instrucciones de seguridad



Lea íntegramente todas las indicaciones de seguridad e instrucciones. En caso de no atenderse a las indicaciones de seguridad e instrucciones siguientes, puede ocasionarse una descarga eléctrica, un incendio y/o lesión grave.

Guarde todas las indicaciones de seguridad e instrucciones para posibles consultas futuras.

El término “acumulador” empleado en estas instrucciones de uso se refiere indistintamente tanto a los acumuladores estándar (acumuladores de fijación al cuadro de la bicicleta) como a los acumuladores para portaequipajes (acumuladores de fijación al portaequipajes).

- ▶ **No abra la unidad motriz por su propia cuenta, y solamente déjela reparar por un profesional, empleando para ello piezas de recambio originales.** Solamente así se mantiene la seguridad de la unidad motriz. La apertura no autorizada de la unidad motriz anula el derecho de garantía.
- ▶ **Todos los componentes montados en la unidad motriz, así como todos los demás componentes del accionamiento de la eBike (p. ej., el plato, portaplatos, pedales) solamente deberán sustituirse por componentes de iguales dimensiones o por componentes especialmente homologados por el fabricante de su eBike.** Con ello se evita una sobrecarga o deterioro de la unidad motriz.
- ▶ **Desmonte el acumulador de la eBike antes de realizar trabajos en esta última (p. ej. montaje, mantenimiento, etc.) al transportarla en el coche o avión, o al guardarla.** En caso contrario podría accidentarse al accionar fortuitamente el interruptor de conexión/desconexión.
- ▶ **La función de asistencia al arrancar deberá usarse exclusivamente para poner a rodar la eBike.** Puede llegar a lesionarse si las ruedas de la eBike no están tocando el firme en el momento de utilizar la asistencia al arrancar.
- ▶ **Únicamente utilice acumuladores originales Bosch homologados por el fabricante de su eBike.** El uso de otro tipo de acumuladores puede acarrear lesiones e incluso un incendio. Si se aplican acumuladores de otro tipo Bosch declina cualquier responsabilidad y el derecho a garantía.
- ▶ **Observe las prescripciones nacionales en cuanto al permiso de circulación y uso de la eBike.**
- ▶ **Lea y atégase a las indicaciones de seguridad e instrucciones que figuran en las instrucciones de uso del acumulador y de la eBike.**

Descripción y prestaciones del producto

Utilización reglamentaria

La unidad motriz ha sido diseñada exclusivamente para accionar su eBike y no deberá utilizarse con otro fin.

La eBike ha sido diseñada para circular en caminos afirmados. No es apta para participar en competiciones.

Componentes principales (ver página 2 – 3)

La numeración de los componentes está referida a las imágenes en la página ilustrada.

A excepción de la unidad motriz, ordenador de control incl. cuadro de mandos, captador de velocidad y de los soportes pertinentes, las piezas de la bicicleta solamente se representan de forma esquemática y pueden ser diferentes en su eBike.

- 1 Tecla Función de indicación “i”
- 2 Botón de iluminación
- 3 Ordenador de control
- 4 Soporte del ordenador de control
- 5 Tecla Conexión/desconexión del ordenador de control
- 6 Tecla Reset “RESET”
- 7 Puerto USB
- 8 Capuchón del puerto USB
- 9 Unidad motriz
- 10 Cuadro de mandos
- 11 Tecla Función de indicación “i” en cuadro de mandos
- 12 Tecla Reducir valor/Hojear hacia abajo “-”
- 13 Tecla Aumentar valor/Hojear hacia arriba “+”
- 14 Tecla Asistencia al arrancar “WALK”
- 15 Bloqueo del ordenador de control
- 16 Tornillo de bloqueo del ordenador de control
- 17 Captador de velocidad
- 18 Imán de fijación a los radios para el captador de velocidad

Elementos de indicación del ordenador de control

- a Indicador de potencia del motor
- b Indicador del modo de asistencia
- c Indicador de textos
- d Indicador numérico
- e Velocímetro
- f Indicador de estado de carga del acumulador

Datos técnicos

Unidad motriz		Drive Unit Speed
Nº de artículo		0 275 007 003
Potencia	W	350
Par de giro en eje de salida, máx.	Nm	50
Tensión nominal	V [~]	36
Temperatura de operación	°C	-5 ... +40
Temperatura de almacenamiento	°C	-10 ... +50
Grado de protección		IP 54 (protección contra polvo y salpicaduras de agua)
Peso, aprox.	kg	4

Ordenador de control		Intuvia
Nº de artículo		1 270 020 903
Corriente de carga USB, máx.	mA	500
Tensión de carga en puerto USB	V	5
Temperatura de operación	°C	-5 ... +40
Temperatura de almacenamiento	°C	-10 ... +50
Grado de protección		IP 54 (protección contra polvo y salpicaduras de agua)
Peso, aprox.	kg	0,15

Iluminación*		
Tensión nominal	V [~]	6
Potencia		
– Luz delantera	W	2,7
– Luz trasera	W	0,3

* dependiente de la regulación legal, por lo que la alimentación a través del acumulador de la eBike no está disponible en la ejecución para ciertos países

Montaje

Montaje y desmontaje del acumulador

Para montar y desmontar el acumulador de la eBike lea y atégase a las instrucciones de uso del mismo.

Montaje y desmontaje del ordenador de control (ver figura A)

Para **montar** el ordenador de control **3** empújelo hacia delante en el soporte **4**.

Para **desmontar** el ordenador de control **3** presione la pestaña del bloqueo **15** y sáquelo hacia atrás del soporte **4**.

► **Desmunte el ordenador de control al estacionar la eBike para evitar que el accionamiento sea utilizado por terceros.** Sin el ordenador de control no es posible conectar el sistema de la eBike.

También es posible evitar que el ordenador de control pueda sacarse del soporte. Para ello, desmunte el soporte **4** del manillar. Monte el ordenador de control en el soporte. Enrosque el tornillo de bloqueo **16** desde abajo en la rosca prevista para tal fin en el soporte. Vuelva a fijar el soporte al manillar.

Comprobación del captador de velocidad (ver figura B)

El captador de velocidad **17** y el imán de fijación a los radios **18** deberán montarse de forma que éste se encuentre a una distancia entre 5 mm y máximo 17 mm al quedar encarado con el captador de velocidad.

Observación: Si la separación entre el captador de velocidad **17** y el imán **18** fuese demasiado pequeña o demasiado grande, o si el captador de velocidad **17** no estuviese correctamente conectado, el velocímetro **e** no funciona y el accionamiento de la eBike trabaja entonces con el programa de emergencia.

En ese caso afloje el tornillo del imán **18** y sujete este último al radio de manera que mantenga la distancia correcta respecto a la marca que lleva el captador de velocidad. Si tras este ajuste el velocímetro **e** sigue sin indicar la velocidad, diríjase a una tienda de bicicletas autorizada.

Operación

Puesta en marcha

Requisitos

El sistema de la eBike solamente puede activarse si se cumplen los siguientes requisitos:

- El acumulador empleado está suficientemente cargado (ver instrucciones de uso del acumulador).
- Ordenador de control correctamente fijado a su soporte (ver “Montaje y desmontaje del ordenador de control”, página Español – 2).
- Captador de velocidad correctamente conectado y ajustado (ver “Comprobación del captador de velocidad”, página Español – 2).

Conexión y desconexión del sistema de la eBike

El sistema de la eBike se puede **conectar** de las siguientes formas:

- Si el ordenador de control ya está conectado al montarlo en el soporte, el sistema de la eBike es conectado automáticamente.
- Estando montados el ordenador de control y el acumulador, pulse brevemente la tecla de Conexión/desconexión **5** del ordenador de control.
- Estando montado el ordenador de control pulse brevemente la tecla de Conexión/desconexión del acumulador (ver instrucciones de uso del acumulador).

Observación: Al conectar el sistema de la eBike no deberán presionarse los pedales de la eBike ya que ello reduciría la potencia del motor. En el indicador de textos **c** aparece el aviso de fallo **“No pisar pedal”**.

Si el sistema de la eBike se conectó en el momento de presionar los pedales, desconéctelo y vuélvalo a conectar sin ejercer ahora ninguna presión.

El accionamiento se activa en el momento en que Ud. comienza a pedalear (excepto en la función de Asistencia al arrancar, ver “Conexión/desconexión de la Asistencia al arrancar”, página Español – 4). La potencia a la que opera el motor depende de los ajustes realizados en su ordenador de control.

Durante el funcionamiento normal de la eBike el accionamiento de la misma se desactiva en el momento de que Ud. deje de pedalear o alcance una velocidad de 45 km/h. El accionamiento vuelve a reactivarse automáticamente al volver a pedalear, siempre que la velocidad de marcha sea inferior a 45 km/h.

El sistema de la eBike se puede **desconectar** de las siguientes formas:

- Pulse la tecla de conexión/desconexión **5** del ordenador de control.
- Desconecte el acumulador con la tecla de Conexión/desconexión del mismo (ver instrucciones de uso del acumulador).
- Retire el ordenador de control del soporte.

Si en el transcurso de 10 min el accionamiento sigue inactivo (p.ej., al estar detenida la eBike) y no se ha pulsado ninguna tecla del ordenador de control o cuadro de mandos, el sistema de la eBike se desconecta automáticamente con el fin de ahorrar energía.

Indicadores y ajuste del ordenador de control

Alimentación del ordenador de control

Una vez montado el ordenador de control en el soporte **4** y conectado el sistema de la eBike, el acumulador de la eBike, siempre que esté suficientemente cargado, se ocupa de alimentar el ordenador de control.

Si el ordenador de control se saca del soporte **4** éste es alimentado entonces por el acumulador que incorpora. Si la tensión de éste es muy baja al conectar el ordenador de control, durante 3 s aparece **“Conectar a bicicleta”** en el indicador de textos **c**. Seguidamente se desconecta el ordenador de control.

Para recargar el acumulador interno del ordenador de control vuelva a montarlo en el soporte **4** (siempre que tenga montado un acumulador en la eBike). Conecte el acumulador con la tecla de Conexión/desconexión del mismo (ver instrucciones de uso del acumulador).

Ud. también puede recargar el ordenador de control a través del puerto USB. Para ello, abra el capuchón **8**. Conecte al puerto USB **7** del ordenador de control un cable USB apropiado y su otro extremo a un cargador USB de tipo comercial o al puerto USB de un ordenador (tensión de carga 5 V; corriente de carga máx. 500 mA). En el indicador de textos **c** del ordenador de control aparece **“USB conectado”**.

Conexión/desconexión del ordenador de control

Para **conectar** el ordenador de control pulse brevemente la tecla de Conexión/desconexión **5**. El ordenador de control puede conectarse también sin tenerlo montado en el soporte (siempre que su acumulador integrado esté suficientemente cargado).

Para **desconectar** el ordenador de control pulse brevemente la tecla de Conexión/desconexión **5**.

Si el ordenador de control no está montado en el soporte, éste se desconecta si no se ha pulsado una tecla durante 1 min, para ahorrar energía.

Indicador de estado de carga del acumulador

El indicador del estado de carga del acumulador **f** sólo muestra el nivel de carga del acumulador de la eBike y no el del que incorpora el ordenador de control. El nivel de carga del acumulador de la eBike puede determinarse asimismo en los LED de éste.

En el indicador **f** cada segmento del símbolo del acumulador corresponde aprox. a un 20 % de capacidad:



80 % a 100 % de capacidad



5 % a 20 % de capacidad; el acumulador debe recargarse.



Capacidad menor a un 5 %, no es posible utilizar el accionamiento. Los LED del indicador de estado de carga del acumulador se apagan.

Si la iluminación de la eBike es alimentada por el acumulador (según país), desde el momento en que se presenta por primera vez el símbolo en blanco del acumulador, la autonomía de iluminación es de aprox. 2 horas. Si el símbolo comienza a parpadear, la iluminación solamente puede utilizarse solamente corto tiempo.

Si el ordenador de control se saca del soporte **4** se memoriza el actual nivel de carga del acumulador mostrado en el display.

Ajuste del modo de asistencia

Ud. puede fijar en el ordenador de control en que medida desea ser asistido por el accionamiento de la eBike al pedalear. El modo de asistencia puede modificarse en todo momento, incluso durante la marcha.

Observación: En ciertas ejecuciones puede que venga preajustado fijo el modo de asistencia y no sea posible modificarlo. También es posible que no exista una diversidad de modos de asistencia tan amplia como la aquí indicada.

A lo sumo están disponibles los siguientes modos de asistencia:

- **“OFF”**: Accionamiento desconectado; desplazamiento de la eBike con los pedales como una bicicleta convencional.
- **“ECO”**: eficaz asistencia de gran rendimiento para una autonomía máxima
- **“TOUR”**: asistencia uniforme para recorridos de gran alcance
- **“SPORT”**: energética asistencia para una conducción deportiva en trayectos montañosos o para circular en ciudad
- **“TURBO”**: Asistencia máxima, incluso al pedalear velozmente, para una conducción deportiva

Para **augmentar** el nivel de asistencia pulse la tecla **“+” 13** en el cuadro de mandos tantas veces como sea necesario hasta visualizar el nivel de asistencia deseado en el indicador **b**, y para **reducirlo**, pulse la tecla **“-” 12**.

La potencia del motor demandada se representa en la pantalla **a**. La potencia máxima del motor depende del nivel de asistencia seleccionado.

Modo de asistencia	Potencia del motor* (Cambio externo)
“ECO”	30 %
“TOUR”	100 %
“SPORT”	180 %
“TURBO”	250 %

* La potencia del motor puede variar según la ejecución.

Si el ordenador de control se saca del soporte **4** se memoriza el actual nivel de asistencia y el indicador **a** de la potencia del motor queda en blanco.

Conexión/desconexión de la Asistencia al arrancar

La Asistencia al arrancar puede emplearse como ayuda adicional en los primeros metros de recorrido en situaciones de salida más difíciles (p. ej. en un semáforo o en una subida).

► **La función de asistencia al arrancar deberá usarse exclusivamente para poner a rodar la eBike.** Puede llegar a lesionarse si las ruedas de la eBike no están tocando el firme en el momento de utilizar la asistencia al arrancar.

Para **conectar** la Asistencia al arrancar mantenga pulsada la tecla **“WALK” 14** del cuadro de mandos. Se conecta el accionamiento de la eBike.

La Asistencia al arrancar se **desconecta** al presentarse una de las siguientes situaciones:

- Si suelta la tecla **“WALK” 14**.
- Si pulsa otra tecla en el ordenador de control.
- Si pedalea hacia delante o si pedalea rápidamente hacia atrás.
- Si se bloquean las ruedas de la eBike (p. ej. al frenar o al chocar contra un obstáculo).
- Si la velocidad es superior a 18 km/h.

Conexión/desconexión de la iluminación

Para satisfacer las prescripciones vigentes en los respectivos países existen dos ejecuciones para la iluminación:

- Con el ordenador de control pueden conectarse y desconectarse simultáneamente la luz delantera y trasera y la retroiluminación de la pantalla.
En esta ejecución, al conectar la iluminación aparece en el indicador de textos **c** durante aprox. 1 s **“Luz encendida”** y al desconectarla **“Luz apagada”**.
- Solamente puede conectarse y desconectarse la retroiluminación de la pantalla; las luces delantera y trasera de la eBike se conectan independientemente del ordenador de control.

En ambas ejecuciones pulse la tecla **2** para **conectar y desconectar la iluminación**.

Indicadores de velocidad y distancia

En el **velocímetro e** se indica siempre la velocidad actual.

En el **indicador de función** (combinación de indicador de textos **c** e indicador numérico **d**) puede elegirse entre las siguientes funciones:

- **“Autonomía restante”**: autonomía previsible con la carga actual del acumulador (manteniendo las mismas condiciones del modo de asistencia, características del terreno, etc.)
- **“Recorrido”**: recorrido cubierto desde la última puesta a cero (reset)
- **“Tiempo de marcha”**: Tiempo de marcha desde el último reset
- **“Velocidad media”**: velocidad promedio alcanzada desde la última puesta a cero (reset)
- **“Velocidad máxima”**: velocidad máxima alcanzada desde la última puesta a cero (reset)
- **“Hora”**: hora actual

Para **acceder al indicador de función** pulse la tecla **“i” 1** del ordenador de control, o la tecla **“i” 11** del cuadro de mandos tantas veces como sea necesario hasta visualizar la función deseada.

Para efectuar el **Reset** (puesta cero) de la **“Recorrido”**, **“Tiempo de marcha”** y **“Velocidad media”** cambie a una de estas tres funciones y mantenga pulsada la tecla **“RESET” 6** hasta poner a cero el indicador. Con ello se ponen a cero también las otras dos funciones.

Para efectuar el **Reset** de la **“Velocidad máxima”** acceda a esta función y mantenga pulsada la tecla **“RESET” 6** hasta poner a cero el valor indicado.

Si el ordenador de control se saca del soporte **4** quedan memorizados y pueden seguirse visualizando todos los valores de las funciones.

Visualización/adaptación de los ajustes básicos

La visualización y modificación de los ajustes básicos puede llevarse a cabo teniendo montado o no el ordenador de control en el soporte **4**.

Para acceder al menú Ajustes básicos mantenga simultáneamente pulsadas la tecla “**RESET**” **6** y la tecla “**I**” **1** hasta representarse “**Configuración**” en el indicador de textos **c**.

Para **seleccionar los parámetros en los ajustes básicos** pulse la tecla “**I**” **1** tantas veces como sea necesario hasta visualizar el parámetro deseado. Si el ordenador de control está montado en el soporte **4**, Ud. puede pulsar también la tecla “**I**” **11** del cuadro de mandos.

Para **modificar los parámetros de los ajustes básicos** pulse la tecla de conexión/desconexión **5** junto al indicador “**-**” si desea reducir su valor u hojear hacia abajo, o bien, la tecla de iluminación **2** junto al indicador “**+**”, si lo que desea es aumentar el valor u hojear hacia arriba.

Si el ordenador de control está montado en el soporte **4** es po-

sible realizar el cambio también con las teclas “**-**” **12** o “**+**” **13** del cuadro de mandos.

Para abandonar la función y memorizar el cambio realizado pulse la tecla “**RESET**” **6** **3** s.

Puede elegir entre los siguientes ajustes básicos:

- “**Unidad km/mi**”: Representación de la velocidad y distancia en kilómetros o millas.
- “**Formato de hora**”: Representación de la hora en formato de 12 ó 24 horas.
- “**Hora**”: Permite ajustar la hora. Al mantener pulsadas las teclas de ajuste el cambio de la hora es más rápido.
- “**Español**”: Permite ajustar el idioma mostrado en el display. Puede elegirse entre español, alemán, inglés, francés, italiano y holandés.
- “**Recorrido total**”: Indicación del recorrido total (no modificable) realizado con la eBike
- “**Total horas funcion.**”: Indicación de tiempo de marcha total (no modificable) realizado con la eBike

Indicador de código de fallos

Los componentes del sistema de la eBike son permanentemente controlados de forma automática. En caso de detectar-se un fallo aparece el respectivo código de fallos en el indicador de textos **c**.

Pulse una tecla cualquiera del ordenador de control **3** o del cuadro de mandos **10** para regresar a la indicación estándar.

Según el tipo de fallo puede que se desactive automáticamente el accionamiento. Sin embargo, es posible continuar la

marcha en todo momento sin recurrir al accionamiento. Antes de volver a circular con ella deberá hacerse controlar la eBike.

► **Deje que todas las comprobaciones y reparaciones sean realizadas exclusivamente en una tienda de bicicletas autorizada.** Si a pesar de que Ud. haya subsanado el fallo éste se sigue visualizando, diríjase asimismo a una tienda de bicicletas autorizada.

Código	Causa	Solución
100	Fallo interno de la unidad motriz	Haga verificar la unidad motriz
101	Problema de conexión en la unidad motriz	Deje verificar las conexiones y las uniones
102	Fallo en captador de velocidad	Haga verificar el captador de velocidad
103*	Problema de conexión en la iluminación	Deje verificar las conexiones y las uniones
104	Problema de conexión del ordenador de control	Deje verificar las conexiones y las uniones
105	Temperatura excesiva en la unidad motriz (más de 40 °C)	Deje que se enfríe la unidad motriz. Es posible continuar circulando sin el accionamiento de la eBike lo cual además agiliza el enfriamiento de la unidad motriz.
200	Fallo interno en el sistema electrónico del acumulador	Deje verificar el acumulador
201	Temperatura excesiva del acumulador (más de 40 °C)	Deje que se enfríe el acumulador. Es posible continuar circulando sin el accionamiento de la eBike lo cual además agiliza el enfriamiento del acumulador.
202	Temperatura demasiado baja en el acumulador (inferior a -10 °C)	Mantenga el acumulador en un cuarto caliente para permitir que se caliente lentamente.
203	Problema de conexión del acumulador	Deje verificar las conexiones y las uniones

* solamente si la iluminación de la eBike funciona con el acumulador (según ejecución país)

Código	Causa	Solución
204	Polaridad incorrecta del acumulador	Cargue el acumulador con el cargador original Bosch según se describe en sus instrucciones de uso.
410	Bloqueo de una o varias teclas del ordenador de control	Verifique si las teclas están atascadas, p. ej., al haber penetrado suciedad. Si procede, limpie las teclas.
414	Problema de conexión en el cuadro de mandos	Deje verificar las conexiones y las uniones
418	Bloqueo de una o varias teclas del cuadro de mandos.	Verifique si las teclas están atascadas, p. ej., al haber penetrado suciedad. Si procede, limpie las teclas.
422	Problema de conexión en la unidad motriz	Deje verificar las conexiones y las uniones
423	Problema de conexión del acumulador	Deje verificar las conexiones y las uniones
424	Error de comunicación entre los componentes	Deje verificar las conexiones y las uniones
430	El acumulador interno del ordenador de control está descargado	Recargar el ordenador de control (en el soporte o vía puerto USB)
490	Fallo interno del ordenador de control	Haga verificar el ordenador de control

* solamente si la iluminación de la eBike funciona con el acumulador (según ejecución país)

Alimentación de aparatos externos vía puerto USB

A través del puerto USB pueden funcionar o recargarse la mayoría de los aparatos previstos para ser alimentados vía USB (p. ej. diversos móviles).

Para poder efectuar la carga es necesario que estén montados en la eBike el ordenador de control y un acumulador suficientemente cargado.

Abra el capuchón **8** del puerto USB del ordenador de control. Conecte el puerto USB del aparato externo a través de un cable USB apropiado con el puerto USB **7** del ordenador de control.

Instrucciones para la conducción con el sistema de la eBike

¿Cuándo trabaja el accionamiento de la eBike?

El accionamiento de la eBike le asiste siempre que Ud. vaya pedaleando. La asistencia cesa cuando deja de pedalear. La potencia del motor depende siempre de la fuerza aplicada al pedalear.

Si la fuerza aplicada es baja la asistencia es menor que al aplicar gran fuerza. Ello es independiente del modo de asistencia seleccionado.

El accionamiento de la eBike se desactiva automáticamente a velocidades superiores a 45 km/h. Si la velocidad queda por debajo de 45 km/h el accionamiento se activa nuevamente de forma automática.

Queda exceptuado de ello la función de Asistencia al arrancar en la que la eBike puede circular a baja velocidad sin pedalear.

Siempre que Ud. lo desee puede circular también sin la asistencia motorizada con la eBike, igual que con una bicicleta convencional, ya sea desconectando el sistema de la eBike o ajustando el nivel de asistencia a **"OFF"**. Lo mismo es válido con un acumulador vacío.

Interacción entre el sistema de la eBike y el cambio

También con el accionamiento de la eBike el cambio deberá utilizarse igual que en una bicicleta convencional (consulte al respecto las instrucciones de uso de su eBike).

Independientemente del tipo de cambio empleado es recomendable dejar de pedalear brevemente antes de efectuar un cambio de marcha. Ello no sólo facilita el cambio de marcha sino que también reduce el desgaste del mecanismo de accionamiento.

Seleccionando el cambio de marcha correcto Ud. puede aumentar la velocidad y el alcance aplicando la misma fuerza muscular.

Acumulación de experiencia

Se recomienda ir adquiriendo experiencia con la eBike en lugares alejados de carreteras con mucho tráfico.

Pruebe diferentes modos de asistencia. Cuando se sienta seguro Ud. podrá circular con su eBike en el tráfico igual que con cualquier otra bicicleta.

Compruebe la autonomía de eBike bajo condiciones diferentes antes de realizar unos recorridos más largos y difíciles.

Influencias sobre la autonomía

La autonomía se ve afectada por múltiples factores como, por ejemplo:

- Modo de asistencia.
- Uso del cambio.
- Tipo y presión del neumático.
- Antigüedad y estado del acumulador.
- Características del terreno (pendientes) y del firme (tipo de pavimento).
- Viento de frente y temperatura ambiente.
- Peso de la eBike, del ciclista y del equipaje.

Por ello es imposible predecir con certeza la autonomía para un recorrido específico. Sin embargo, en términos generales puede decirse:

- A **igual** potencia del motor en el accionamiento de la eBike: Cuanto menor sea el esfuerzo que Ud. tenga que realizar para alcanzar una velocidad concreta (p. ej. utilizando de forma óptima el cambio de marchas) tanto menor será la energía consumida por el accionamiento de la eBike y tanto mayor la autonomía con una carga del acumulador.
- Cuanto **mayor** sea el nivel de asistencia, manteniendo iguales las demás condiciones, tanto menor será la autonomía obtenida.

Trato cuidadoso de la eBike

Tenga en cuenta las temperaturas de servicio y almacenaje de los componentes de la eBike. No exponga la unidad motriz, el ordenador de control, y el acumulador a temperaturas extremas (p. ej. sol intenso sin circulación de aire). Los componentes (especialmente el acumulador) pueden dañarse si se exponen a temperaturas extremas.

Mantenimiento y servicio

Mantenimiento y limpieza

Mantenga limpios los componentes de su eBike, especialmente los contactos del acumulador y del respectivo soporte. Límpielos con cuidado con un paño húmedo y suave.

Todos los componentes inclusive la unidad motriz no deberán sumergirse en agua ni tratarse con una limpiadora de alta presión.

Para el servicio técnico o la reparación de la eBike diríjase a una tienda de bicicletas autorizada.

Servicio técnico y atención al cliente

En todas las consultas sobre el sistema de la eBike y sus componentes diríjase a una tienda de bicicletas autorizada.

Las direcciones de tiendas de bicicletas autorizadas las encuentra en la página de internet www.bosch-ebike.com

Transporte

Los acumuladores están sujetos a los requerimientos fijados en la legislación sobre mercancías peligrosas. Los acumuladores pueden ser transportados por carretera por el usuario particular sin más imposiciones.

En caso de transporte por usuarios comerciales o envío por terceros (p. ej., transporte aéreo o agencia de transportes) deberán considerarse las exigencias especiales en cuanto a su embalaje e identificación (p. ej. prescripciones ADR). Si fuese preciso, puede recurrirse a un experto en mercancías peligrosas al preparar la pieza para su envío.

Únicamente envíe acumuladores si su carcasa no está dañada. Si los contactos no van protegidos cúbralos con cinta adhesiva y embale el acumulador de manera que éste no se pueda mover dentro del embalaje. Observe también las prescripciones adicionales que pudieran existir al respecto en su país.

En todas las consultas referentes al transporte de los acumuladores diríjase a una tienda de bicicletas autorizada. En dichas tiendas puede Ud. adquirir también un embalaje de transporte apropiado.

Eliminación



La unidad motriz, el ordenador de control incl. cuadro de mandos, el acumulador, el captador de velocidad, los accesorios y embalajes deberán someterse a un proceso de recuperación que respete el medio ambiente.

¡No arroje las eBike ni sus componentes a la basura!

Sólo para los países de la UE:



Los aparatos eléctricos inservibles, así como los acumuladores/pilas defectuosos o agotados deberán acumularse por separado para ser sometidos a un reciclaje ecológico tal como lo marcan las Directivas Europeas 2002/96/CE y 2006/66/CE, respectivamente.

El acumulador integrado en el ordenador de control solamente deberá desmontarse para ser desechado. Al abrir la semicarcasa puede que se dañe el ordenador de control.

Entregue los acumuladores y ordenadores de control inservibles en una tienda de bicicletas autorizada.



Baterías de Litio:

Observe las indicaciones comprendidas en el apartado "Transporte", página Español – 7.

Reservado el derecho de modificación.

PowerPack con acumuladores de Iones de Litio

Instrucciones de seguridad



Lea íntegramente todas las indicaciones de seguridad e instrucciones. En caso de no atenerse a las indicaciones de seguridad e instrucciones si-

guientes, puede ocasionarse una descarga eléctrica, un incendio y/o lesión grave.

Guarde todas las indicaciones de seguridad e instrucciones para posibles consultas futuras.

El término “acumulador” empleado en estas instrucciones de uso se refiere indistintamente tanto a los acumuladores estándar (acumuladores de fijación al cuadro de la bicicleta) como a los acumuladores para portaequipajes (acumuladores de fijación al portaequipajes), excepto en aquellos casos en los que se haga referencia expresa a la forma constructiva.

► **Desmonte el acumulador de la eBike antes de realizar trabajos en esta última (p. ej. montaje, mantenimiento, etc.) al transportarla en el coche o avión, o al guardarla.**

En caso contrario podría accidentarse al accionar fortuitamente el interruptor de conexión/desconexión.

► **No abra el acumulador.** De lo contrario, podría producirse un cortocircuito. Si se abre el acumulador se denegará la garantía.



Proteja el acumulador del calor excesivo (p. ej. también de una exposición prolongada al sol), del fuego y de una inmersión en agua. Existe el riesgo de explosión.

► **Si no utiliza el acumulador, guárdelo separado de clips, monedas, llaves, clavos, tornillos o demás objetos metálicos que pudieran puentear sus contactos.** El cortocircuito de los contactos del acumulador puede causar quemaduras o un incendio. En los daños derivados de un cortocircuito por los motivos antedichos Bosch anula cualquier derecho a garantía.

► **La utilización inadecuada del acumulador puede provocar fugas de líquido. Evite el contacto con él. En caso de un contacto accidental enjuagar el área afectada con abundante agua. Si ha penetrado líquido en los ojos recurra además inmediatamente a un médico.** El líquido del acumulador puede irritar la piel o producir quemaduras.

► **Si el acumulador se daña o usa de forma inapropiada puede que éste emane vapores. Ventile con aire fresco el recinto y acuda a un médico si nota alguna molestia.** Los vapores pueden irritar las vías respiratorias.

► **Únicamente cargue el acumulador con cargadores originales Bosch.** Al utilizar cargadores que no sean originales Bosch no puede excluirse un peligro de incendio.

► **Únicamente utilice el acumulador en eBikes equipadas con el sistema motriz para eBikes original Bosch.** Solamente así queda protegido el acumulador contra una sobrecarga peligrosa.

► **Únicamente utilice acumuladores originales Bosch homologados por el fabricante de su eBike.** El uso de otro tipo de acumuladores puede acarrear lesiones e incluso un incendio. Si se aplican acumuladores de otro tipo Bosch declina cualquier responsabilidad y el derecho a garantía.

► **Lea y atégase a las indicaciones de seguridad e instrucciones que figuran en las instrucciones de uso del cargador y de la unidad motriz/ordenador de control, así como en las instrucciones de uso de su eBike.**

Descripción y prestaciones del producto

Componentes principales (ver página 4 – 5)

La numeración de los componentes está referida a las imágenes en las páginas ilustradas.

A excepción de los acumuladores y sus soportes, las piezas de la bicicleta solamente se representan de forma esquemática y pueden ser diferentes en su eBike.

- 19 Soporte del acumulador para portaequipajes
- 20 Acumulador para portaequipajes
- 21 Indicador de funcionamiento y estado de carga
- 22 Tecla de conexión/desconexión
- 23 Llave de la cerradura del acumulador
- 24 Cerradura del acumulador
- 25 Soporte superior del acumulador estándar
- 26 Acumulador estándar
- 27 Soporte inferior del acumulador estándar
- 28 Correa de transporte
- 29 Cargador

Datos técnicos

Acumulador de Iones de Litio		PowerPack 300	PowerPack 400
Nº de artículo			
– Acumulador estándar negro		0 275 007 500	0 275 007 503
– Acumulador estándar blanco		0 275 007 501	0 275 007 504
– Acumulador para portaequipajes		0 275 007 502	0 275 007 505
Tensión nominal	V=	36	36
Capacidad nominal	Ah	8,2	11
Energía	Wh	300	400
Temperatura de operación	°C	– 10 ... + 40	– 10 ... + 40
Temperatura de almacenamiento	°C	– 10 ... + 60	– 10 ... + 60
Margen admisible de la temperatura de carga	°C	0 ... + 40	0 ... + 40
Peso, aprox.	kg	2,5	2,5
Grado de protección		IP 54 (protección contra polvo y salpicaduras de agua)	IP 54 (protección contra polvo y salpicaduras de agua)

Montaje

- **Únicamente deposite el acumulador sobre superficies limpias.** Ponga especial cuidado de no ensuciar el conector hembra para carga ni los contactos con arena o tierra, p. ej.

Control del acumulador antes del primer uso

Compruebe el acumulador antes de cargarlo o utilizarlo por primera vez en su eBike.

Para ello conecte el acumulador pulsando la tecla de Conexión/desconexión **22**. Si no se enciende ningún LED del indicador de estado de carga **21**, es probable que el acumulador esté dañado.

Si se enciende uno o algunos de los LED (pero no todos ellos) del indicador de estado de carga **21** recargue completamente el acumulador antes de su primer uso.

- **No recargue ni utilice un acumulador dañado.** Diríjase a una tienda de bicicletas autorizada.

Recarga del acumulador

- **Únicamente use el cargador que se suministra con su eBike u otro original Bosch del mismo tipo.** Solamente este cargador ha sido especialmente adaptado al acumulador de iones de litio empleado en su eBike.

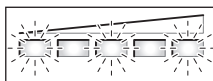
Observación: El acumulador se suministra parcialmente cargado. Con el fin de obtener la plena potencia del acumulador, antes de su primer uso, cárguelo completamente con el cargador.

Para recargar el acumulador es necesario desmontarlo de la eBike.

Lea y atégase a las instrucciones de uso del cargador al cargar el acumulador.

El acumulador puede recargarse siempre que se quiera, sin que ello merme su vida útil. Una interrupción del proceso de carga no afecta al acumulador.

El acumulador viene equipado con un control de temperatura que únicamente permite su recarga dentro de un margen de temperatura entre 0 °C y 40 °C.



Si el acumulador se encuentra fuera del margen de la temperatura de carga parpadean tres LED del indicador de estado de carga **21**. Desconecte el acumulador del cargador y permita que alcance la temperatura correcta.

No conecte de nuevo el acumulador al cargador hasta que haya alcanzado la temperatura de carga correcta.

Indicador de estado de carga

El nivel de carga del acumulador se señala mediante los cinco LED verdes del indicador de carga **21**.

Cada uno de los LED corresponde por lo tanto a una capacidad aprox. de 20 %. Si el acumulador está completamente cargado se encienden los cinco LED.

Una vez conectado el acumulador el nivel de carga se muestra además en el ordenador de control. Lea y considere al respecto las instrucciones de uso de la unidad motriz y del ordenador de control.

Si la capacidad del acumulador es inferior a un 5 % se apagan todos los LED del indicador de estado de carga **21**, pero queda encendida la pantalla del ordenador de control.

Montaje y desmontaje del acumulador (ver figuras C – D)

► Siempre desconecte el acumulador al montarlo o desmontarlo del soporte.

Para poder montar el acumulador es necesario que la llave **23** esté metida en la cerradura **24** y que ésta esté abierta.

Para **montar el acumulador estándar 26** colóquelo con los contactos orientados hacia el soporte inferior **27** en la eBike. Abátalo hasta el tope hacia el soporte superior **25**.

Para **montar el acumulador para portaequipajes 20** empújelo con los contactos mirando hacia el frente hasta enclavarlo en el soporte **19** del portaequipajes.

Controle si ha quedado firmemente sujeto el acumulador. Siempre cierre el acumulador con la cerradura **24** para evitar que el acumulador se salga del soporte.

Saque siempre la llave **23** de la cerradura **24** después de cerrarla. Así evitará que se pierda la llave, o que al tener estacionada la eBike le sea sustraído el acumulador.

Para **desmontar el acumulador estándar 26** desconéctelo primero y abra entonces la cerradura con la llave **23**. Abata hacia atrás el acumulador para desprenderlo del soporte superior **25** y sáquelo del soporte inferior **27** agarrándolo de la correa de transporte **28**.

Para **desmontar el acumulador para portaequipajes 20** desconéctelo primero y abra entonces la cerradura con la llave **23**. Tire del acumulador para sacarlo del soporte **19**.

Operación

Puesta en marcha

► **Únicamente utilice acumuladores originales Bosch homologados por el fabricante de su eBike.** El uso de otro tipo de acumuladores puede acarrear lesiones e incluso un incendio. Si se aplican acumuladores de otro tipo Bosch declina cualquier responsabilidad y el derecho a garantía.

Conexión/desconexión

La conexión del acumulador es una de las posibilidades que existen para conectar el sistema de la eBike. Lea y considere al respecto las instrucciones de uso de la unidad motriz y del ordenador de control.

Antes de conectar el acumulador o el sistema de la eBike asegúrese de que la cerradura **24** esté cerrada.

Observación: Al conectar el sistema de la eBike no deberán presionarse los pedales de la eBike ya que ello reduciría la potencia del accionamiento de la eBike.

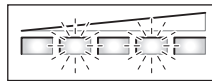
Para **conectar** el acumulador pulse la tecla de Conexión/desconexión **22**. Los LED de la pantalla **21** se iluminan e indican seguidamente el nivel de carga.

Observación: Si la capacidad del acumulador fuese inferior a un 5 %, en el indicador de estado de carga **21** del acumulador no se enciende ningún LED. Solamente en el ordenador de control es posible apreciar en ese caso si el sistema de la eBike está conectado.

Para **desconectar** el acumulador pulse nuevamente la tecla de Conexión/desconexión **22**. Los LED de la pantalla **21** se apagan. Con ello se desconecta asimismo el sistema de la eBike.

Si en el transcurso de 10 min el accionamiento sigue inactivo (p. ej., al estar detenida la eBike) y no se ha pulsado ninguna tecla del ordenador de control o cuadro de mandos de la eBike, el sistema de la eBike, y con ello también el acumulador, se desconectan automáticamente con el fin de ahorrar energía.

El acumulador va protegido contra alta descarga, sobrecarga, sobretemperatura y cortocircuito por "Electronic Cell Protection (ECP) (Protección Electrónica de Celdas)". En esos casos, un circuito de protección se encarga de desconectar automáticamente el acumulador.



Si se detecta un daño en el acumulador parpadean los dos LED del indicador de estado de carga **21**. Diríjase en ese caso a una tienda de bicicletas autorizada.

Indicaciones para el trato óptimo del acumulador

La vida útil del acumulador puede prolongarse si éste se trata apropiadamente y ante todo si se almacena respetando el margen de temperatura prescrito.

Aún así, a medida que va envejeciendo el acumulador, su capacidad irá mermando.

Si después de haberlo recargado, el tiempo de funcionamiento del acumulador fuese muy corto, ello es síntoma de que está agotado. Puede sustituir entonces el acumulador.

Si está dañada la correa de transporte **28** del acumulador estándar deje sustituirla en una tienda de bicicletas.

Recarga del acumulador antes y durante su almacenaje

Si pretende no utilizar el acumulador durante largo tiempo, recárguelo a aprox. un 60 % (deberán estar encendidos 3 a 4 LED del indicador de estado de carga **21**).

Controle el nivel de carga pasados 6 meses. Si sólo se enciende un LED del indicador de estado de carga **21** vuelva a recargar el acumulador un 60 %, aprox.

Observación: Si el acumulador se guarda durante largo tiempo estando descargado, a pesar de su baja autodescarga, éste puede llegar a dañarse y reducirse considerablemente su capacidad.

No se recomienda dejar permanentemente conectado el acumulador al cargador.

Condiciones para el almacenaje

Se aconseja guardar el acumulador en un lugar seco y bien ventilado. Protéjalo de la humedad y del agua. Si las condiciones atmosféricas son adversas se recomienda, p. ej., desmontar el acumulador de la eBike y guardarlo hasta su próxima utilización en un recinto cerrado.

El acumulador puede almacenarse dentro de un margen de temperatura de $-10\text{ }^{\circ}\text{C}$ a $+60\text{ }^{\circ}\text{C}$. Sin embargo, para lograr un larga vida útil es recomendable almacenarlo a una temperatura ambiente aprox. de $20\text{ }^{\circ}\text{C}$.

Preste atención a no rebasar la temperatura de almacenaje máxima. P. ej., no deje el acumulador en el coche en verano y guárdelo de manera que no quede directamente expuesto al sol.

Mantenimiento y servicio

Mantenimiento y limpieza

Mantenga limpio el acumulador. Límpielo con cuidado con un paño húmedo y suave. El acumulador no deberá sumergirse en agua ni limpiarse con un chorro de agua.

Si su acumulador ya no funciona acuda por favor a una tienda de bicicletas autorizada.

Servicio técnico y atención al cliente

En todas las consultas sobre acumuladores diríjase a una tienda de bicicletas autorizada.

► **Anote el fabricante y el número de la llave 23.** En caso de pérdida de la llave diríjase a una tienda de bicicletas autorizada. Deberá indicar entonces el fabricante y el número de la llave.

Las direcciones de tiendas de bicicletas autorizadas las encuentra en la página de internet www.bosch-ebike.com

Transporte

Los acumuladores están sujetos a los requerimientos fijados en la legislación sobre mercancías peligrosas. Los acumuladores pueden ser transportados por carretera por el usuario particular sin más imposiciones.

En caso de transporte por usuarios comerciales o envío por terceros (p. ej., transporte aéreo o agencia de transportes) deberán considerarse las exigencias especiales en cuanto a su embalaje e identificación (p. ej. prescripciones ADR). Si fuese preciso, puede recurrirse a un experto en mercancías peligrosas al preparar la pieza para su envío.

Únicamente envíe acumuladores si su carcasa no está dañada. Si los contactos no van protegidos cúbralos con cinta adhesiva y embale el acumulador de manera que éste no se pueda mover dentro del embalaje. Observe también las prescripciones adicionales que pudieran existir al respecto en su país.

En todas las consultas referentes al transporte de los acumuladores diríjase a una tienda de bicicletas autorizada. En dichas tiendas puede Ud. adquirir también un embalaje de transporte apropiado.

Eliminación



Los acumuladores, accesorios y embalajes deberán someterse a un proceso de recuperación que respete el medio ambiente.

¡No arroje los acumuladores a la basura!

Sólo para los países de la UE:



Los aparatos eléctricos inservibles, así como los acumuladores/pilas defectuosos o agotados deberán acumularse por separado para ser sometidos a un reciclaje ecológico tal como lo marcan las Directivas Europeas 2002/96/CE y 2006/66/CE, respectivamente.

Entregue los acumuladores inservibles en una tienda de bicicletas autorizada.



Iones de Litio:

Observe las indicaciones comprendidas en el apartado "Transporte", página Español – 11.

Reservado el derecho de modificación.

Cargador Charger

Instrucciones de seguridad



Lea íntegramente todas las indicaciones de seguridad e instrucciones. En caso de no atenerse a las indicaciones de seguridad e instrucciones si-

guientes, puede ocasionarse una descarga eléctrica, un incendio y/o lesión grave.

Guarde todas las indicaciones de seguridad e instrucciones para posibles consultas futuras.

El término "acumulador" empleado en estas instrucciones de uso se refiere indistintamente tanto a los acumuladores estándar (acumuladores de fijación al cuadro de la bicicleta) como a los acumuladores para portaequipajes (acumuladores de fijación al portaequipajes).



No exponga el cargador a la lluvia y evite que penetren líquidos en su interior. La penetración de agua en el cargador comporta un mayor riesgo de electrocución.

- ▶ **Solamente cargue acumuladores de iones de litio Bosch homologados para eBikes. La tensión del acumulador deberá corresponder a la tensión de carga del cargador.** En caso de no atenerse a ello podría originarse un incendio o explosión.
- ▶ **Siempre mantenga limpio el cargador.** La suciedad puede comportar un riesgo de electrocución.
- ▶ **Antes de cada utilización verificar el estado del cargador, cable y enchufe. No utilice el cargador en caso de detectar algún desperfecto. Jamás intente abrir el cargador por su propia cuenta, y solamente hágalo reparar por personal técnico cualificado empleando exclusivamente piezas de repuesto originales.** Un cargador, cable y enchufe deteriorados comportan un mayor riesgo de electrocución.
- ▶ **No utilice el cargador sobre una base fácilmente inflamable (p. ej. papel, tela, etc.) ni en un entorno inflamable.** Puesto que el cargador se calienta durante el proceso de carga existe un peligro de incendio.
- ▶ **Si el acumulador se daña o usa de forma inapropiada puede que éste emane vapores. Ventile con aire fresco el recinto y acuda a un médico si nota alguna molestia.** Los vapores pueden irritar las vías respiratorias.
- ▶ **Vigile a los niños.** Con ello se evita que los niños jueguen con el cargador.
- ▶ **Los niños y personas que por sus condiciones físicas, sensoriales o mentales, o por su falta de experiencia o conocimientos no estén en disposición de manejar el cargador de forma segura, no deberán utilizar este cargador sin ser supervisados o instruidos por una perso-**

na responsable. En caso contrario existe el riesgo de un manejo incorrecto y de lesión.

- ▶ **Lea y atégase a las indicaciones de seguridad e instrucciones que figuran en las instrucciones de uso del acumulador y de la unidad motriz/ordenador de control, así como en las instrucciones de uso de su eBike.**
- ▶ En la parte inferior del cargador figuran de forma abreviada importantes instrucciones de seguridad en español, inglés y francés (ver posición **33** en la ilustración) con el siguiente contenido:
 - Para un funcionamiento con seguridad, ver el manual. Peligro de sacudida eléctrica.
 - Utilice solamente en lugares secos.
 - Cargar únicamente baterías de sistemas eBike de Bosch. Otras baterías podrían reventar, causando lesiones personales y daños.
 - No reemplace el ensamblaje del enchufe, ya que el resultado puede ser riesgo de incendio o sacudidas eléctricas.

Descripción y prestaciones del producto

Componentes principales (ver página 6 – 7)

La numeración de los componentes está referida a la imagen del cargador en la página ilustrada.

- 20** Acumulador para portaequipajes
- 21** Indicador del estado de carga del acumulador
- 26** Acumulador estándar
- 29** Cargador
- 30** Conector hembra del aparato
- 31** Enchufe del aparato
- 32** Rejillas de refrigeración
- 33** Instrucciones de seguridad del cargador
- 34** Conector del cargador
- 35** Conector hembra para el cargador

Datos técnicos

Cargador	Charger	
Nº de artículo		0 275 007 905
Tensión nominal	V~	207 – 264
Frecuencia	Hz	47 – 63
Tensión de carga del acumulador	V---	42
Corriente de carga	A	4

Estos datos son válidos para una tensión nominal de [U] 230 V. Los valores pueden variar para otras tensiones y en ejecuciones específicas para ciertos países.

Cargador	Charger	
Margen admisible de la temperatura de carga	°C	0 ... + 40
Tiempo de carga		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Nº de celdas		10 – 80
Temperatura de operación	°C	– 10 ... + 75
Temperatura de almacenamiento	°C	– 20 ... + 70
Peso según EPTA-Procedure 01/2003	kg	0,8
Grado de protección		IP 40

Estos datos son válidos para una tensión nominal de [U] 230 V. Los valores pueden variar para otras tensiones y en ejecuciones específicas para ciertos países.

Operación

► **Únicamente deposite el acumulador sobre superficies limpias.** Ponga especial cuidado de no ensuciar el conector hembra para carga ni los contactos con arena o tierra, p. ej.

Puesta en marcha

Conexión del cargador (ver figuras E – F)

► **¡Preste atención a la tensión de red!** La tensión de alimentación deberá coincidir con aquella indicada en la placa de características del cargador. Los cargadores para 230 V pueden funcionar también a 220 V.

Introduzca el enchufe **31** del cable de red en el conector hembra **30** del cargador.

Conecte el enchufe (específico de cada país) a la red.

Desconecte el acumulador y desmóntelo del soporte de la eBike. Para ello lea y atégase a las instrucciones de uso del acumulador.

Conecte el conector macho **34** del cargador al conector hembra **35** del acumulador.

Proceso de carga

El proceso de carga comienza nada más conectar al acumulador el cargador teniendo éste conectado a la red.

Observación: La carga solamente puede llevarse a cabo si la temperatura del acumulador se encuentra dentro del campo admisible.

Durante la carga se encienden los LED del indicador de estado de carga **21** del acumulador. Cada LED permanentemente encendido supone un incremento de capacidad aprox. de un 20 %. El LED parpadeante señala la carga del 20 % siguiente.

► **Tenga cuidado al tocar el cargador durante el proceso de carga. Utilice guantes de protección.** El cargador puede llegar a calentarse fuertemente, especialmente si la temperatura ambiente es alta.

Observación: Preste atención a que el cargador esté bien ventilado durante el proceso de carga y que no estén obstruidas las rejillas de refrigeración **32** en ambos lados.

El acumulador se encuentra completamente cargado al encenderse permanentemente los cinco LED del indicador **21**. El proceso de carga es interrumpido automáticamente.

Desconecte el cargador de la red y el acumulador del cargador.

Al desconectar del cargador el acumulador éste último se desconecta automáticamente.

Acto seguido puede Ud. montar el acumulador en la eBike.

Fallos – causas y soluciones

Causa	Solución
 <p>Acumulador defectuoso</p>	<p>Parpadeo de dos LED del acumulador</p> <p>Acuda a una tienda de bicicletas autorizada</p>
 <p>Acumulador demasiado caliente o frío</p>	<p>Parpadeo de tres LED del acumulador</p> <p>Desconecte del cargador el acumulador y deje que se atempere a la temperatura de carga admisible.</p> <p>No conecte de nuevo el acumulador al cargador hasta que haya alcanzado la temperatura de carga correcta.</p>
<p>No es posible cargar (ninguna indicación en el acumulador)</p>	
Enchufe incorrectamente introducido	Verificar todas las conexiones por enchufe
Contactos del acumulador, sucios	Limpiar con cuidado los contactos del acumulador
Rejillas de refrigeración 32 obstruidas o cubiertas	Limpiar las rejillas de refrigeración 32 y colocar el cargador de manera pueda ventilarse bien
Toma de corriente, cable o cargador defectuoso	Verificar la tensión de red, dejar comprobar el cargador en la tienda de bicicletas
Acumulador defectuoso	Acuda a una tienda de bicicletas autorizada

Mantenimiento y servicio

Mantenimiento y limpieza

Si el cargador llegase a averiarse diríjase a una tienda de bicicletas autorizada.

Servicio técnico y atención al cliente

En todas las consultas sobre el cargador diríjase a una tienda de bicicletas autorizada.

Las direcciones de tiendas de bicicletas autorizadas las encuentra en la página de internet **www.bosch-ebike.com**

Eliminación

Los cargadores, accesorios y embalajes deberán someterse a un proceso de recuperación que respete el medio ambiente.
¡No arroje los cargadores a la basura!

Sólo para los países de la UE:



Conforme a la Directiva Europea 2002/96/CE sobre aparatos eléctricos y electrónicos inservibles, tras su transposición en ley nacional, deberán acumularse por separado los cargadores para ser sometidos a un reciclaje ecológico.

Reservado el derecho de modificación.

Unità di azionamento Drive Unit Speed/ Computer di controllo Intuvia

Norme di sicurezza



Leggere tutte le indicazioni di sicurezza e le istruzioni operative. In caso di mancato rispetto delle indicazioni di sicurezza e delle istruzioni operative possono verificarsi scosse elettriche, incendi e/o lesioni gravi.

Conservare tutte le indicazioni di sicurezza e le istruzioni operative per ogni esigenza futura.

Il termine utilizzato nelle presenti istruzioni per l'uso «batteria ricaricabile» si riferisce allo stesso modo a batterie ricaricabili standard (batterie ricaricabili con supporto sul telaio della bicicletta) e a batterie ricaricabili per montaggio al portapacchi (batterie ricaricabili con supporto nel portapacchi).

- ▶ **Non aprire da soli l'unità di azionamento. L'unità di azionamento non necessita di manutenzione e può essere riparata esclusivamente da personale specializzato ed impiegando solo pezzi di ricambio originali.** In questo modo viene garantita la salvaguardia della sicurezza dell'unità di azionamento. In caso di apertura non autorizzata dell'unità di azionamento decadrà qualsiasi pretesa di garanzia.
- ▶ **Tutti i componenti montati sull'unità di azionamento e tutti gli altri componenti dell'azionamento dell'eBike (p. es. ingranaggio catena, supporto dell'ingranaggio catena, pedali) possono essere sostituiti esclusivamente da componenti uguali strutturalmente oppure omologati dal produttore della bicicletta specificatamente per la Vostra eBike.** In questo modo l'unità di azionamento viene protetta da sovraccarico e danneggiamento.
- ▶ **Rimuovere la batteria ricaricabile dalla eBike prima di iniziare interventi (p. es. montaggio, manutenzione ecc.) alla eBike, prima di trasportarla con l'auto o l'aereo oppure prima di conservarla.** In caso di azionamento accidentale dell'interruttore di avvio/arresto esiste pericolo di lesioni.
- ▶ **La funzione aiuto all'avviamento deve essere utilizzata esclusivamente all'avviamento dell'eBike.** Se durante l'impiego dell'aiuto all'avviamento le ruote dell'eBike non hanno alcun contatto con il terreno esiste il pericolo di lesioni.
- ▶ **Utilizzare esclusivamente batterie ricaricabili originali Bosch che sono state omologate dal produttore per l'eBike.** L'impiego di batterie ricaricabili diverse da quelle consigliate potrà comportare il pericolo di lesioni e d'incendio. In caso di impiego di batterie ricaricabili diverse, Bosch non si assumerà alcuna responsabilità civile e garanzia.

- ▶ **Osservare tutte le norme nazionali relative all'immatricolazione ed impiego di eBike.**
- ▶ **Leggere ed osservare le indicazioni di sicurezza e le istruzioni operative indicate nelle istruzioni per l'uso della batteria ricaricabile e nelle istruzioni per l'uso dell'eBike.**

Descrizione del prodotto e caratteristiche

Uso conforme alle norme

L'unità di azionamento è destinata esclusivamente all'azionamento della Vostra eBike e non deve essere utilizzata per altri scopi.

L'eBike è prevista per impiego su percorsi pavimentati. La stessa non è omologata per gare.

Componenti illustrati (vedi pagina 2 – 3)

La numerazione dei componenti si riferisce alle illustrazioni riportate sulla pagina con la rappresentazione grafica.

Tutte le illustrazioni delle parti della bicicletta ad eccezione dell'unità di azionamento, del computer di controllo inclusa unità di comando, del sensore della velocità ed i rispettivi supporti sono riportate in modo schematico e possono essere differenti dalla Vostra eBike.

- 1 Tasto funzione di visualizzazione «i»
- 2 Tasto illuminazione
- 3 Computer di controllo
- 4 Supporto del computer di controllo
- 5 Tasto di accensione/spegnimento computer di controllo
- 6 Tasto reset «RESET»
- 7 Presa USB
- 8 Copertura di protezione della presa USB
- 9 Unità di azionamento
- 10 Unità di comando
- 11 Tasto funzione di visualizzazione «i» sull'unità di comando
- 12 Tasto ridurre valore/sfogliare verso il basso «-»
- 13 Tasto aumentare valore/sfogliare verso l'alto «+»
- 14 Tasto aiuto all'avviamento «WALK»
- 15 Bloccaggio computer di controllo
- 16 Vite di bloccaggio computer di controllo
- 17 Sensore di velocità
- 18 Magnete per raggi del sensore di velocità

Elementi di visualizzazione computer di controllo

- a Visualizzazione potenza del motore
- b Visualizzazione livello di assistenza
- c Visualizzazione testo
- d Visualizzazione valori
- e Visualizzazione tachimetro
- f Visualizzazione dello stato di carica della batteria

Dati tecnici

Unità di azionamento	Drive Unit Speed	
Codice prodotto		0 275 007 003
Potenza	W	350
Coppia sull'azionamento max.	Nm	50
Tensione nominale	V _{DC}	36
Temperatura di esercizio	°C	-5 ... +40
Temperatura di magazzino	°C	-10 ... +50
Tipo di protezione		IP 54 (protezione contro la polvere e contro gli spruzzi dell'acqua)
Peso ca.	kg	4

Computer di controllo	Intuvia	
Codice prodotto		1 270 020 903
Corrente di ricarica collegamento USB max.	mA	500
Tensione di ricarica collegamento USB	V	5
Temperatura di esercizio	°C	-5 ... +40
Temperatura di magazzino	°C	-10 ... +50
Tipo di protezione		IP 54 (protezione contro la polvere e contro gli spruzzi dell'acqua)
Peso ca.	kg	0,15

Illuminazione*		
Tensione nominale	V _{DC}	6
Potenza		
- Luce anteriore	W	2,7
- Luce posteriore	W	0,3

* in funzione delle norme di legge, non è possibile in tutti i modelli specifici dei paesi di impiego tramite la batteria ricaricabile eBike

Montaggio

Inserimento e rimozione della batteria ricaricabile

Per l'inserimento e la rimozione della batteria ricaricabile nell'eBike leggere ed osservare le istruzioni per l'uso della batteria ricaricabile stessa.

Inserimento e rimozione del computer di controllo (vedi figura A)

Per l'**inserimento** del computer di controllo **3** spingerlo dal davanti nel supporto **4**.

Per la **rimozione** del computer di controllo **3** premere sul bloccaggio **15** e spingerlo in avanti fuori dal supporto **4**.

► **Togliere il computer di controllo quando l'eBike è parcheggiata affinché l'azionamento non possa essere utilizzato da terzi non autorizzati.** Senza il computer di controllo il sistema eBike non può essere attivato.

È anche possibile assicurare contro rimozione il computer di controllo nel supporto. Per effettuare questa operazione smontare il supporto **4** dal manubrio. Inserire il computer di controllo nel supporto. Avvitare dal basso la vite di bloccaggio **16** nella filettatura prevista allo scopo del supporto. Montare di nuovo il supporto sul manubrio.

Controllo del sensore di velocità (vedi figura B)

Il sensore di velocità **17** ed il relativo magnete per raggi **18** devono essere montati in modo tale che durante un giro della ruota il magnete per raggi si muova davanti al sensore di velocità ad una distanza minima di 5 mm e massima di 17 mm.

Nota bene: Se la distanza tra il sensore di velocità **17** ed il magnete per raggi **18** è troppo piccola o troppo grande oppure se il sensore di velocità **17** non è collegato correttamente, non avviene alcuna visualizzazione tachimetro **e** e l'azionamento dell'eBike lavora nel programma funzionamento d'emergenza. In questo caso allentare la vite del magnete per raggi **18** e fissare il magnete ai raggi in modo tale che lo stesso passi davanti alla marcatura del sensore di velocità alla distanza corretta. Se anche dopo queste operazioni non compare alcuna velocità sulla visualizzazione tachimetro **e**, rivolgersi ad un rivenditore autorizzato per biciclette.

Uso

Messa in funzione

Presupposti

Il sistema eBike può essere attivato solamente se sono soddisfatti i seguenti presupposti:

- È inserita una batteria ricaricabile sufficientemente carica (vedi istruzioni per l'uso della batteria ricaricabile).
- Il computer di controllo è inserito correttamente nel supporto (vedi «Inserimento e rimozione del computer di controllo», pagina Italiano – 2).
- Il sensore di velocità è collegato correttamente (vedi «Controllo del sensore di velocità», pagina Italiano – 2).

Attivazione/disattivazione del sistema eBike

Per l'**attivazione** del sistema eBike vi sono le seguenti possibilità:

- Se il computer di controllo è già acceso quando viene inserito nel supporto, il sistema eBike viene attivato automaticamente.
- Con computer di controllo inserito e batteria ricaricabile inserita premere una volta brevemente il tasto di accensione/spengimento **5** del computer di controllo.
- Con computer di controllo inserito premere il tasto di accensione/spengimento della batteria ricaricabile (vedi istruzioni per l'uso della batteria ricaricabile).

Nota bene: All'attivazione del sistema eBike i pedali dell'eBike non devono essere caricati poiché altrimenti la potenza del motore verrebbe limitata. Nella visualizzazione testo **c** compare la segnalazione di errore «**Scaricare il pedale**».

Se il sistema eBike è stata attivato accidentalmente con pedali caricati, disattivarlo ed inserirlo di nuovo senza carico.

L'azionamento viene attivato non appena si inizia a pedalare (ad eccezione che nella funzione aiuto all'avviamento, vedi «Attivazione/disattivazione dell'aiuto all'avviamento», pagina Italiano – 4). La potenza del motore dipende dalle regolazioni sul computer di controllo.

Nel funzionamento normale non appena si smette di pedalare oppure non appena viene raggiunta una velocità di 45 km/h, l'assistenza tramite l'azionamento eBike viene disattivata.

L'azionamento viene attivato di nuovo automaticamente non appena si ricomincia a pedalare e la velocità è inferiore a 45 km/h.

Per la **disattivazione** del sistema eBike vi sono le seguenti possibilità:

- Premere il tasto di accensione e spegnimento **5** del computer di controllo:
- Disattivare la batteria ricaricabile al suo tasto di accensione/spengimento (vedi istruzioni per l'uso della batteria ricaricabile).
- Rimuovere il computer di controllo dal supporto.

Se per ca. 10 min non viene richiesto alcun intervento dell'azionamento (p. es. poiché l'eBike è ferma) e non viene premuto alcun tasto sul computer di controllo o sull'unità di comando, il sistema eBike si disattiva automaticamente per ragioni di risparmio energetico.

Visualizzazioni e regolazioni del computer di controllo

Alimentazione di corrente del computer di controllo

Se il computer di controllo è posizionato nel supporto **4** e nell'eBike è inserita una batteria ricaricabile sufficientemente carica ed il sistema eBike è attivato, il computer di controllo viene alimentato di corrente tramite la batteria ricaricabile dell'eBike.

Se il computer di controllo viene rimosso dal supporto **4** l'alimentazione di corrente avviene tramite una batteria ricaricabile interna. Se all'accensione del computer di controllo la batteria ricaricabile interna è quasi scarica, compare per 3 s «**Collegare a bicic.**» nella visualizzazione testo **c**. Successivamente il computer di controllo si spegne di nuovo.

Per la ricarica della batteria ricaricabile interna inserire di nuovo il computer di controllo nel supporto **4** (se è inserita una batteria ricaricabile nell'eBike). Attivare la batteria ricaricabile eBike al suo tasto di accensione/spengimento (vedi istruzioni per l'uso della batteria ricaricabile).

È possibile ricaricare il computer di controllo anche tramite il collegamento USB. Per effettuare questo aprire la copertura di protezione **8**. Collegare la presa USB **7** del computer di controllo, tramite un cavo USB adatto, ad una stazione di ricarica USB comunemente in commercio oppure al collegamento USB di un computer (5 V tensione di ricarica; max. 500 mA corrente di ricarica). Nella visualizzazione testo **c** del computer di controllo compare «**USB connessa**».

Accensione/spengimento del computer di controllo

Per l'**accensione** del computer di controllo premere brevemente il tasto di accensione/spengimento **5**. Il computer di controllo può essere acceso anche (con batteria ricaricabile interna sufficientemente carica) se lo stesso non è inserito nel supporto.


Per lo **spegnimento** del computer di controllo premere il tasto di accensione/spengimento **5**.


Se il computer di controllo non è inserito nel supporto, dopo 1 min in cui non viene premuto alcun tasto lo stesso si spegne automaticamente per ragioni di risparmio energetico.


Visualizzazione dello stato di carica della batteria

L'indicatore dello stato di carica della batteria **f** visualizza lo stato di carica della batteria ricaricabile dell'eBike e non della batteria ricaricabile interna del computer di controllo. Lo stato di carica della batteria ricaricabile dell'eBike può essere rilevato anche ai LED sulla batteria ricaricabile stessa.

Nella visualizzazione **f** ogni barretta nel simbolo della batteria ricaricabile corrisponde a circa il 20 % della capacità.

 da 100 % a 80 % della capacità

 da 20 % a 5 % dell'autonomia, la batteria ricaricabile dovrebbe essere ricaricata.

 Inferiore al 5 % dell'autonomia, non è più possibile l'assistenza dell'azionamento. I LED dell'indicatore dello stato di carica sulla batteria ricaricabile si spengono.

Se l'illuminazione dell'eBike viene fatta funzionare tramite la batteria ricaricabile (specifico del paese di impiego), l'autonomia è sufficiente poi, a partire dalla prima comparsa del simbolo vuoto della batteria ricaricabile, per ancora circa 2 ore di illuminazione. Quando il simbolo inizia a lampeggiare, anche l'illuminazione è possibile ancora solo per un breve lasso di tempo.

Se il computer di controllo viene rimosso dal supporto **4**, rimane memorizzato lo stato di carica della batteria ricaricabile visualizzato per ultimo.

Regolazione del livello di assistenza

È possibile regolare al computer di controllo, quanto intensa dovrà essere l'assistenza dell'azionamento eBike durante la pedalata. Il livello di assistenza può essere modificato in qualsiasi momento, anche durante la guida.

Nota bene: In singoli modelli è possibile che il livello di assistenza sia preimpostato e che non possa essere cambiato. È anche possibile che vi siano a disposizione per la selezione meno livelli di assistenza di quelli indicati nelle presenti istruzioni.

Sono a disposizione al massimo i seguenti livelli di assistenza:

- **«OFF»:** L'azionamento è disinserito, l'eBike può essere mossa come una bicicletta normale semplicemente pedalando.
- **«ECO»:** assistenza efficace alla massima efficienza, per massima autonomia
- **«TOUR»:** assistenza regolare, per percorsi con grande autonomia
- **«SPORT»:** assistenza energica, per guida sportiva su percorsi di montagna nonché per traffico cittadino
- **«TURBO»:** Assistenza massima fino alle massime frequenze di pedalata, per guida sportiva

Per **augmentare** il livello di assistenza premere il tasto **«+» 13** sull'unità di comando fino a quando compare nella visualizzazione **b** il livello di assistenza desiderato, per **ridurre** premere il tasto **«-» 12**.

La potenza del motore richiamata compare nella visualizzazione **a**. La potenza del motore massima dipende dal livello di assistenza selezionato.

Livello di assistenza	Potenza del motore* (Cambio a catena)
«ECO»	30 %
«TOUR»	100 %
«SPORT»	180 %
«TURBO»	250 %

* In singoli modelli la potenza del motore può differire.

Se il computer di controllo viene rimosso dal supporto **4**, rimane memorizzato il livello di assistenza visualizzato per ultimo, la visualizzazione **a** della potenza del motore rimane vuota.

Attivazione/disattivazione dell'aiuto all'avviamento

L'aiuto all'avviamento può servire quale ulteriore assistenza per i primi metri quando l'avviamento è più difficoltoso (come ad. es. al semaforo oppure in salita).

► **La funzione aiuto all'avviamento deve essere utilizzata esclusivamente all'avviamento dell'eBike.** Se durante l'impiego dell'aiuto all'avviamento le ruote dell'eBike non hanno alcun contatto con il terreno esiste il pericolo di lesioni.

Per l'**attivazione** dell'aiuto all'avviamento premere il tasto **«WALK» 14** sull'unità di comando e tenerlo premuto. L'azionamento dell'eBike viene inserito.

L'aiuto all'avviamento viene **disattivato** non appena si verifica uno dei seguenti avvenimenti:

- Viene rilasciato il tasto **«WALK» 14**,
- Viene premuto un altro tasto sul computer di controllo,
- Si pedala in avanti oppure velocemente indietro,
- Le ruote dell'eBike vengono bloccate (ad es. frenando oppure urtando contro un ostacolo),
- La velocità supera 18 km/h.

Accensione/spengimento dell'illuminazione

A seconda delle norme specifiche del paese di impiego sono possibili due tipi di illuminazione:

- Tramite il computer di controllo possono essere accese e spente contemporaneamente la luce anteriore, la luce posteriore e l'illuminazione di fondo del display. In questo tipo di illuminazione compare all'accensione dell'illuminazione **«Luce accesa»** e allo spegnimento dell'illuminazione **«Luce spenta»** per ca. 1 s nella visualizzazione testo **c**.
- È possibile accendere e spegnere solamente l'illuminazione di fondo del display, la luce anteriore e la luce posteriore dell'eBike sono indipendenti dal computer di controllo.

In entrambe le versioni per l'**accensione e lo spegnimento dell'illuminazione** premere ogni volta il tasto **2**.

Visualizzazioni della velocità e della distanza

Nella **visualizzazione tachimetro** e viene sempre visualizzata la velocità attuale.

Nella **visualizzazione funzioni** (combinazione della visualizzazione testo **c** e visualizzazione valori **d**) sono disponibili per la selezione le seguenti funzioni:

- «**Distanza rimasta**»: probabile autonomia della carica presente della batteria ricaricabile (a condizioni, come livello di assistenza, profilo del percorso ecc., immutate)
- «**Distanza**»: distanza percorsa dall'ultimo reset
- «**Tempo percorso**»: tempo percorso dall'ultimo reset
- «**Velocità media**»: velocità media raggiunta dall'ultimo reset
- «**Velocità massima**»: velocità massima raggiunta dall'ultimo reset
- «**Ora**»: ora attuale

Per **cambiare nella funzione di visualizzazione** premere il tasto **«i» 1** sul computer di controllo oppure il tasto **«ib» 11** sull'unità di comando fino a quando viene visualizzata la funzione desiderata.

Per il **reset di «Distanza», «Tempo percorso» e «Velocità media»** cambiare in una di queste tre funzioni e premere poi il tasto **«RESET» 6** fino a quando la visualizzazione viene azzerata. In questo modo sono ripristinati anche i valori delle altre due funzioni.

Per il **reset di «Velocità massima»** cambiare in questa funzione e premere poi il tasto **«RESET» 6** fino a quando la visualizzazione viene azzerata.

Se il computer di controllo viene rimosso dal supporto **4** tutti i valori delle funzioni rimangono memorizzati e possono essere ancora visualizzati.

Visualizzazione codice errore

I componenti del sistema eBike vengono costantemente controllati automaticamente. Se viene individuato un errore, compare nella visualizzazione testo **c** il relativo codice di errore.

Premere un tasto a scelta sul computer di controllo **3** o sull'unità di comando **10** per ritornare alla visualizzazione standard.

In funzione del tipo di errore, l'azionamento viene eventualmente disattivato automaticamente. Il proseguimento della

Visualizzazione/adattamento delle regolazioni di base

Visualizzazione e modifiche delle regolazioni di base sono possibili indipendentemente dal fatto che il computer di controllo sia o meno inserito nel supporto **4**.

Per arrivare nel menu regolazioni di base premere contemporaneamente il tasto **«RESET» 6** ed il tasto **«i» 1** fino a quando nella visualizzazione testo compare **c «Configurazione»**.

Per **commutare tra le regolazioni di base** premere il tasto **«i» 1** sul computer di controllo fino a quando viene visualizzata la regolazione di base desiderata. Se il computer di controllo è inserito nel supporto **4** è possibile premere anche il tasto **«ib» 11** sull'unità di comando.

Per **modificare le regolazioni di base** premere il tasto di accensione/spegnimento **5** vicino alla visualizzazione **«-»** per ridurre e sfogliare verso il basso oppure per aumentare e sfogliare verso l'alto premere il tasto illuminazione **2** vicino alla visualizzazione **«+»**.

Se il computer di controllo è inserito nel supporto **4** allora la modifica è possibile anche con i tasti **«-» 12** e **«+» 13** sull'unità di comando.

Per abbandonare la funzione e memorizzare una regolazione modificata premere il tasto **«RESET» 6** per 3 s.

Possono essere selezionate le seguenti regolazioni di base:

- «**Unità km/mi**»: È possibile visualizzare la velocità e la distanza in chilometri oppure in miglia.
- «**Formato ora**»: È possibile visualizzare l'ora nel formato 12 ore oppure 24 ore.
- «**Ora**»: È possibile regolare l'ora attuale. Una pressione prolungata sui tasti di regolazione accelera la modifica dell'ora.
- «**Italiano**»: È possibile modificare la lingua delle visualizzazioni testo. È possibile selezionare tra tedesco, inglese, francese, spagnolo, italiano ed olandese.
- «**Distanza totale**»: Visualizzazione della distanza totale percorsa fino ad ora con l'eBike (non modificabile)
- «**Tempo totale**»: Visualizzazione della durata totale percorsa con l'eBike (non modificabile)

corsa senza assistenza tramite l'azionamento è tuttavia possibile in ogni momento. Prima di ulteriori corse l'eBike dovrebbe essere controllata.

► **Lasciare effettuare tutti i controlli e le riparazioni esclusivamente da un rivenditore autorizzato di biciclette.** Se nonostante il rimedio continua ad essere visualizzato un errore, anche in questo caso rivolgersi ad un rivenditore autorizzato di biciclette.

Codice	Causa	Rimedi
100	Errore interno dell'unità di azionamento	Fare controllare l'unità di azionamento
101	Problema di collegamento dell'unità di azionamento	Fare controllare raccordi e collegamenti

* solo per l'illuminazione dell'eBike tramite la batteria ricaricabile (specifico del paese di impiego)

Codice	Causa	Rimedi
102	Errore del sensore di velocità	Fare controllare il sensore di velocità
103*	Problema di collegamento dell'illuminazione	Fare controllare raccordi e collegamenti
104	Problemi di collegamento del computer di controllo	Fare controllare raccordi e collegamenti
105	Temperatura dell'unità di azionamento troppo alta (superiore a 40 °C)	Lasciare raffreddare l'unità di azionamento. Il proseguimento della corsa senza azionamento dell'eBike è possibile ed accelera il raffreddamento dell'unità di azionamento.
200	Errore interno dell'elettronica della batteria ricaricabile	Fare controllare la batteria ricaricabile
201	Temperatura della batteria ricaricabile troppo alta (superiore a 40 °C)	Lasciare raffreddare la batteria ricaricabile. Il proseguimento della corsa senza azionamento dell'eBike è possibile ed accelera il raffreddamento della batteria ricaricabile.
202	Temperatura della batteria ricaricabile troppo bassa (inferiore a -10 °C)	Lasciare riscaldare lentamente la batteria ricaricabile in un ambiente caldo.
203	Problema di collegamento della batteria ricaricabile	Fare controllare raccordi e collegamenti
204	Polarizzazione della batteria ricaricabile errata	Ricaricare la batteria ricaricabile con la stazione di ricarica originale Bosch come descritto nelle sue istruzioni per l'uso.
410	Uno o più tasti del computer di controllo sono bloccati.	Controllare se i tasti sono incastrati ad es. a causa di sporcizia che è penetrata. Se necessario, pulire i tasti.
414	Problema di collegamento dell'unità di comando	Fare controllare raccordi e collegamenti
418	Uno o più tasti dell'unità di comando sono bloccati.	Controllare se i tasti sono incastrati ad es. a causa di sporcizia che è penetrata. Se necessario, pulire i tasti.
422	Problema di collegamento dell'unità di azionamento	Fare controllare raccordi e collegamenti
423	Problema di collegamento della batteria ricaricabile	Fare controllare raccordi e collegamenti
424	Errore di comunicazione dei componenti uno con l'altro	Fare controllare raccordi e collegamenti
430	Batteria ricaricabile interna del computer di controllo scarica	Ricaricare il computer di controllo (nel supporto oppure tramite collegamento USB)
490	Errore interno del computer di controllo	Fare controllare il computer di controllo

* solo per l'illuminazione dell'eBike tramite la batteria ricaricabile (specifico del paese di impiego)

Alimentazione di energia di apparecchi esterni tramite il collegamento USB

Con l'ausilio del collegamento USB possono essere fatti funzionare o ricaricati la maggior parte degli apparecchi la cui alimentazione di energia è possibile tramite USB (p. es. diversi cellulari).

Presupposto per la ricarica è che nell'eBike siano inseriti il computer di controllo ed una batteria ricaricabile sufficientemente carica.

Aprire la copertura di protezione **8** del collegamento USB sul computer di controllo. Collegare il collegamento USB dell'apparecchio esterno, tramite un cavo USB adatto, alla presa USB **7** sul computer di controllo.

Indicazioni per la guida con il sistema eBike

Quando lavora l'azionamento eBike?

L'azionamento dell'eBike assiste durante la guida fintanto che si pedala. Senza pedalata non avviene alcuna assistenza. La potenza del motore dipende sempre dalla forza impiegata durante la pedalata.

Impiegando poca forza, l'assistenza sarà inferiore rispetto all'impiego di molta forza. Questo vale indipendentemente dal livello di assistenza.

L'azionamento eBike si disattiva automaticamente in caso di velocità superiori a 45 km/h. Se la velocità si abbassa sotto 45 km/h, l'azionamento è di nuovo disponibile automaticamente.

Vi è un'eccezione per la funzione aiuto all'avviamento ovvero quella in cui l'eBike può muoversi a bassa velocità senza azionamento dei pedali.

È possibile utilizzare in qualsiasi momento l'eBike come una bicicletta normale anche senza l'assistenza disattivando il sistema eBike oppure posizionando il livello di assistenza su «OFF». La stessa cosa vale in caso di batteria ricaricabile scarica.

Interazione del sistema eBike con il cambio

Anche con l'azionamento eBike il cambio dovrebbe essere utilizzato come in una bicicletta normale (osservare a riguardo le istruzioni per l'uso dell'eBike).

Indipendentemente dal tipo del cambio è consigliabile durante il cambio di marcia interrompere brevemente di pedalare. In questo modo il cambio di marcia diventa più facile e si riduce l'usura degli organi di azionamento.

Grazie alla selezione della marcia corretta è possibile con lo stesso impiego di forza aumentare la velocità e l'autonomia.

Prime corse di prova

Si consiglia di effettuare le prime esperienze con l'eBike lontano da strade con molto traffico.

Provare differenti livelli di assistenza. Non appena Vi sentirete sicuri potrete guidare con l'eBike nel traffico come con ogni bicicletta.

Provare l'autonomia dell'eBike con differenti condizioni prima di organizzare corse più lunghe ed impegnative.

Influssi sull'autonomia

L'autonomia viene influenzata da molti fattori, come ad esempio:

- Livello di assistenza,
- Comportamento nel cambio di marcia,
- Tipo di pneumatici e pressione dei pneumatici.
- Invecchiamento e condizioni della batteria ricaricabile,
- Profilo del percorso (salite) e condizione del percorso (rivestimento della carreggiata),
- Vento contrario e temperatura ambientale.
- Peso dell'eBike, ciclista e bagaglio.

Per questa ragione non è possibile prevedere concretamente l'autonomia prima della presenza di un fattore. In linea di massima vale tuttavia:

- Alla **stessa** potenza del motore dell'azionamento eBike: tanto inferiore sarà la forza da impiegare per raggiungere una determinata velocità (p. es. tramite l'uso ottimale del cambio marcia), tanto inferiore sarà l'energia che l'azionamento dell'eBike consumerà e tanto maggiore sarà l'autonomia di una carica della batteria ricaricabile.
- Tanto **maggiore** sarà selezionato il livello di assistenza, a condizioni altrimenti uguali, tanto più limitata sarà l'autonomia.

Trattamento e cura dell'eBike

Osservare le temperature di funzionamento e di magazzino dei componenti dell'eBike. Proteggere l'unità di azionamento, il computer di controllo e la batteria ricaricabile da temperature estreme (p. es. tramite irradiazione solare intensiva senza contemporanea aerazione). I componenti (in modo particolare la batteria ricaricabile) possono venire danneggiati da temperature estreme.

Manutenzione ed assistenza

Manutenzione e pulizia

Mantenere puliti tutti i componenti dell'eBike, in modo particolare i contatti della batteria ricaricabile ed il relativo supporto. Pulirli con cautela con uno straccio umido e morbido.

Tutti i componenti, inclusa l'unità di azionamento non devono essere immersi in acqua oppure puliti con un'idropulitrice.

Per Service e riparazioni all'eBike rivolgersi ad un rivenditore autorizzato di biciclette.

Servizio di assistenza ed assistenza clienti

Per tutte le domande relative al sistema eBike ed ai suoi componenti rivolgersi ad un rivenditore autorizzato di biciclette.

Le informazioni per contattare rivenditori autorizzati di biciclette sono riportate sulla pagina web

www.bosch-ebike.com

Trasporto


Le batterie ricaricabili sono soggette ai requisiti di legge relativi a merci pericolose. Le batterie ricaricabili possono essere trasportate su strada tramite l'utente privato senza ulteriori precauzioni.

In caso di trasporto tramite utente commerciale oppure in caso di trasporto tramite terzi (p. es. trasporto aereo oppure spedizioniere) devono essere osservati particolari requisiti relativi ad imballo e marcatura (ad es. norme dell'ADR). In caso di necessità per la preparazione del pezzo da spedire si può ricorrere ad un esperto per merce pericolosa.

Spedire le batterie ricaricabili solamente se la carcassa non è danneggiata. Coprire con nastro adesivo i contatti scoperti ed imballare la batteria ricaricabile in modo tale che non si muova nell'imballo. Vi preghiamo di osservare anche eventuali, ulteriori norme nazionali.


In caso di domande relative al trasporto delle batterie ricaricabili rivolgersi ad un rivenditore autorizzato di biciclette. Presso il rivenditore è possibile ordinare anche un imballo per il trasporto adatto.

Smaltimento

 Avviare ad un riciclaggio rispettoso dell'ambiente l'unità di azionamento, il computer di controllo inclusa unità di comando, la batteria ricaricabile, il sensore di velocità, accessori ed imballaggi non più impiegabili.

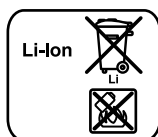
Non gettare l'eBike ed i suoi componenti tra i rifiuti domestici!

Solo per i Paesi della CE:

 Conformemente alla direttiva europea 2002/96/CE gli apparecchi elettrici diventati inservibili e, in base alla direttiva europea 2006/66/CE, le batterie ricaricabili/batterie difettose o consumate devono essere raccolte separatamente ed essere inviate ad una riutilizzazione ecologica.

La batteria ricaricabile integrata nel computer di controllo può essere rimossa solamente per lo smaltimento. Aprendo la copertura della carcassa il computer di controllo può essere danneggiato irreparabilmente.

Vi preghiamo di consegnare batterie ricaricabili e computer di controllo non più utilizzabili ad un rivenditore autorizzato di biciclette.



Li-Ion:

Si prega di tener presente le indicazioni riportate nel paragrafo «Trasporto», pagina Italiano – 7.

Con ogni riserva di modifiche tecniche.

Batteria ricaricabile agli ioni di litio PowerPack

Norme di sicurezza



Leggere tutte le indicazioni di sicurezza e le istruzioni operative. In caso di mancato rispetto delle indicazioni di sicurezza e delle istruzioni operative

possono verificarsi scosse elettriche, incendi e/o lesioni gravi.

Conservare tutte le indicazioni di sicurezza e le istruzioni operative per ogni esigenza futura.

Il termine utilizzato nelle presenti istruzioni per l'uso «batteria ricaricabile» si riferisce allo stesso modo a batterie ricaricabili standard (batterie ricaricabili con supporto sul telaio della bicicletta) e a batterie ricaricabili per montaggio al portapacchi (batterie ricaricabili con supporto nel portapacchi) ad eccezione se viene fatto espressamente riferimento al tipo di costruzione.

► **Rimuovere la batteria ricaricabile dalla eBike prima di iniziare interventi (p. es. montaggio, manutenzione ecc.) alla eBike, prima di trasportarla con l'auto o l'aereo oppure prima di conservarla.** In caso di azionamento accidentale dell'interruttore di avvio/arresto esiste pericolo di lesioni.

► **Non aprire la batteria ricaricabile.** Esiste il pericolo di un cortocircuito. In caso di batteria ricaricabile aperta decadrà qualsiasi pretesa di garanzia.



Proteggere la batteria ricaricabile dal calore (p. es. anche dall'irradiazione solare continuo), dal fuoco e dall'immersione in acqua. Esiste pericolo di esplosione.

► **Tenere lontano la batteria ricaricabile non utilizzata da graffette, monete, chiavi, viti oppure altri piccoli oggetti metallici che potrebbero causare un'esclusione dei contatti.** Un corto circuito tra i contatti della batteria ricaricabile può causare incendi oppure fuoco. In caso di cortocircuiti verificatisi in relazione a queste condizioni decadrà qualsiasi pretesa di garanzia tramite Bosch.

► **In caso di impiego errato può fuoriuscire liquido dalla batteria ricaricabile. Evitare il contatto con il liquido stesso. In caso di contatto accidentale sciagquare con acqua. Se il liquido dovesse venire a contatto con gli occhi richiedere anche l'intervento di un medico.** Il liquido della batteria ricaricabile che fuoriesce può causare irritazioni della pelle o ustioni.

► **In caso di danneggiamento ed un uso non corretto della batteria ricaricabile possono fuoriuscire vapori. Aeraire con aria fresca ed in caso di disturbi rivolgersi ad un medico.** I vapori possono irritare le vie respiratorie.

► **Ricaricare la batteria ricaricabile esclusivamente con stazioni di ricarica originali Bosch.** In caso di impiego di stazioni di ricarica non originali Bosch non può essere escluso il pericolo di incendio.

► **Utilizzare la batteria ricaricabile esclusivamente insieme all'eBike con sistema di azionamento eBike originale Bosch.** Solo in questo modo la batteria ricaricabile viene protetta da sovraccarico pericoloso.

► **Utilizzare esclusivamente batterie ricaricabili originali Bosch che sono state omologate dal produttore per l'eBike.** L'impiego di batterie ricaricabili diverse da quelle consigliate potrà comportare il pericolo di lesioni e d'incendio. In caso di impiego di batterie ricaricabili diverse, Bosch non si assumerà alcuna responsabilità civile e garanzia.

► **Leggere ed osservare le indicazioni di sicurezza e le istruzioni operative riportate nelle istruzioni per l'uso della stazione di ricarica ed unità di azionamento/computer di controllo nonché nelle istruzioni per l'uso dell'eBike.**

Descrizione del prodotto e caratteristiche

Componenti illustrati (vedi pagina 4 – 5)

La numerazione dei componenti si riferisce alle illustrazioni riportate sulle pagine con la rappresentazione grafica.

Tutte le illustrazioni delle parti della bicicletta, ad eccezione delle batterie ricaricabili e dei loro supporti, sono riportate in modo schematico e possono essere differenti dalla Vostra eBike.

- 19 Supporto della batteria ricaricabile per montaggio al portapacchi
- 20 Batteria ricaricabile per montaggio al portapacchi
- 21 Indicatore funzionamento e stato di carica
- 22 Tasto di accensione/spengimento
- 23 Chiave del dispositivo di chiusura della batteria ricaricabile
- 24 Dispositivo di chiusura della batteria ricaricabile
- 25 Supporto superiore della batteria ricaricabile standard
- 26 Batteria ricaricabile standard
- 27 Supporto inferiore della batteria ricaricabile standard
- 28 Cinghia portante
- 29 Stazione di ricarica

Dati tecnici

Batteria ricaricabile agli ioni di litio		PowerPack 300	PowerPack 400
Codice prodotto			
– Batteria ricaricabile standard nera		0 275 007 500	0 275 007 503
– Batteria ricaricabile standard bianca		0 275 007 501	0 275 007 504
– Batteria ricaricabile per montaggio al portapacchi		0 275 007 502	0 275 007 505
Tensione nominale	V=	36	36
Capacità nominale	Ah	8,2	11
Energia	Wh	300	400
Temperatura di esercizio	°C	– 10 ... + 40	– 10 ... + 40
Temperatura di magazzino	°C	– 10 ... + 60	– 10 ... + 60
Campo ammesso di temperatura di ricarica	°C	0 ... + 40	0 ... + 40
Peso ca.	kg	2,5	2,5
Tipo di protezione		IP 54 (protezione contro la polvere e contro gli spruzzi dell'acqua)	IP 54 (protezione contro la polvere e contro gli spruzzi dell'acqua)

Montaggio

► **Applicare la batteria ricaricabile esclusivamente su superfici pulite.** Evitare in modo particolare l'imbrattamento della presa di carica e dei contatti, p. es. tramite sabbia o terra.

Controllo della batteria ricaricabile prima del primo utilizzo

Controllare la batteria ricaricabile prima di effettuare la prima ricarica oppure prima dell'impiego con l'eBike.

Per effettuare questo controllo premere il tasto di accensione/spengimento **22** per l'attivazione della batteria ricaricabile. Se nessun LED dell'indicatore dello stato di carica **21** è acceso esiste la possibilità che la batteria ricaricabile sia danneggiata.

Se almeno un LED di tutti i LED dell'indicatore dello stato di carica **21** è illuminato, ricaricare completamente la batteria ricaricabile prima del primo utilizzo.

► **Non ricaricare una batteria ricaricabile danneggiata e non utilizzarla.** Rivolgersi ad un rivenditore di biciclette autorizzato.

Ricarica della batteria

► **Utilizzare esclusivamente la stazione di ricarica originale Bosch contenuta nel volume di fornitura dell'eBike oppure una uguale strutturalmente.** Solo questa stazione di ricarica è idonea per la batteria ricaricabile agli ioni di litio utilizzata nell'eBike.

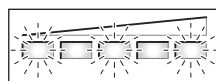
Nota bene: La batteria ricaricabile viene fornita parzialmente carica. Per garantire tutta la potenza della batteria ricaricabile, prima del primo impiego ricaricarla completamente con la stazione di ricarica.

Per la ricarica la batteria ricaricabile deve essere rimossa dall'eBike.

Per la ricarica della batteria ricaricabile leggere ed osservare le istruzioni per l'uso della stazione di ricarica.

La batteria ricaricabile può essere ricaricata in qualsiasi momento senza ridurne la durata. Un'interruzione dell'operazione di ricarica non danneggia la batteria ricaricabile.

La batteria ricaricabile è dotata di un controllo della temperatura che consente una ricarica esclusivamente nel campo di temperatura tra 0 °C e 40 °C.



Se la batteria ricaricabile si trova al di fuori del campo di temperatura di ricarica, i tre LED dell'indicatore dello stato di carica **21** lampeggiano. Staccare la batteria ricaricabile dalla stazione di ricarica e lasciarla adattare alla temperatura ambientale.

Collegare di nuovo la batteria ricaricabile alla stazione di ricarica solamente quando la stessa avrà raggiunto la temperatura di ricarica ammissibile.

Indicatore dello stato di carica

I cinque LED verdi dell'indicatore dello stato di carica **21** indicano, con batteria ricaricabile attivata, lo stato di carica della batteria ricaricabile stessa.

Ogni LED corrisponde a circa il 20 % della capacità. Quando la batteria ricaricabile è completamente carica sono illuminati tutti i cinque LED.

Lo stato di carica della batteria ricaricabile attivata viene inoltre visualizzato sul computer di controllo. A riguardo leggere ed osservare le istruzioni per l'uso dell'unità di azionamento e del computer di controllo.

Se l'autonomia della batteria ricaricabile è inferiore al 5 %, tutti i LED dell'indicatore dello stato di carica **21** sulla batteria ricaricabile si spengono, rimane tuttavia ancora una funzione di visualizzazione del computer di controllo.

Inserimento e rimozione della batteria ricaricabile (vedere figure C – D)

- **Disattivare sempre la batteria ricaricabile quando la stessa viene inserita nel supporto oppure viene rimossa dal supporto stesso.**

Affinché la batteria ricaricabile possa essere inserita, la chiave **23** deve essere inserita nel dispositivo di chiusura **24** ed il dispositivo di chiusura deve essere aperto.

Per l'**inserimento della batteria ricaricabile standard 26** applicare la stessa con i contatti sul supporto inferiore **27** sull'eBike. Ribaltarla fino all'arresto nel supporto superiore **25**.

Per l'**inserimento della batteria ricaricabile per montaggio al portapacchi 20** spingerla con i contatti in avanti fino allo scatto in posizione nel supporto **19** nel portapacchi.

Controllare che la batteria ricaricabile sia posizionata in modo fisso. Chiudere sempre a chiave la batteria ricaricabile sul dispositivo di chiusura **24** poiché in caso contrario il dispositivo di chiusura può aprirsi e la batteria ricaricabile può cadere dal supporto.

Togliere sempre la chiave **23** dal dispositivo di chiusura **24** dopo la chiusura. In questo modo viene evitata la caduta della chiave ovvero che la batteria ricaricabile venga rimossa da parte di terzi non autorizzati in caso di eBike parcheggiata.

Per la **rimozione della batteria ricaricabile standard 26** disinserirla ed aprire il dispositivo di chiusura con la chiave **23**. Inclinare la batteria ricaricabile dal supporto superiore **25** e tirandola alla cinghia portante **28** estrarla dal supporto inferiore **27**.

Per la **rimozione della batteria ricaricabile per montaggio al portapacchi 20** disinserirla ed aprire il dispositivo di chiusura con la chiave **23**. Rimuovere la batteria ricaricabile dal supporto **19**.

Uso

Messa in funzione

- **Utilizzare esclusivamente batterie ricaricabili originali Bosch che sono state omologate dal produttore per l'eBike.** L'impiego di batterie ricaricabili diverse da quelle consigliate potrà comportare il pericolo di lesioni e d'incendio. In caso di impiego di batterie ricaricabili diverse, Bosch non si assumerà alcuna responsabilità civile e garanzia.

Accensione/spengimento

L'attivazione della batteria ricaricabile è una delle possibilità per inserire il sistema eBike. A riguardo leggere ed osservare le istruzioni per l'uso dell'unità di azionamento e del computer di controllo.

Controllare prima dell'attivazione della batteria ricaricabile e del sistema eBike che il dispositivo di chiusura **24** sia chiuso.

Nota bene: All'attivazione del sistema eBike i pedali dell'eBike non devono essere caricati poiché altrimenti la potenza dell'azionamento dell'eBike verrebbe limitata.

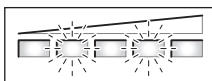
Per l'**attivazione** della batteria ricaricabile premere il tasto di accensione/spengimento **22**. I LED dell'indicatore **21** si accendono e indicano contemporaneamente lo stato di carica.

Nota bene: Se l'autonomia della batteria ricaricabile è inferiore al 5%, sulla batteria ricaricabile non è acceso alcun LED dell'indicatore dello stato di carica **21**. L'attivazione del sistema eBike è visibile solamente sul computer di controllo.

Per lo **spengimento** della batteria ricaricabile premere di nuovo il tasto di accensione/spengimento **22**. I LED dell'indicatore **21** si spengono. In questo modo il sistema eBike viene spento anch'esso.

Se per ca. 10 min non viene richiesto alcun intervento dell'azionamento eBike (p. es. poiché l'eBike è ferma) e non viene premuto alcun tasto sul computer di controllo o sull'unità di comando dell'eBike, il sistema eBike e di conseguenza anche la batteria ricaricabile si disattivano automaticamente per ragioni di risparmio energetico.

La batteria ricaricabile è protetta tramite l'«Electronic Cell Protection (ECP)» contro lo scaricamento totale, il sovraccarico, il surriscaldamento ed il cortocircuito. In caso di pericolo la batteria ricaricabile si spegne automaticamente tramite un interruttore automatico.



Se viene individuato un difetto della batteria ricaricabile, lampeggiano due LED dell'indicatore dello stato di carica **21**. In questo caso rivolgersi ad un rivenditore autorizzato di biciclette.

Indicazioni per l'uso ottimale della batteria ricaricabile

La durata della batteria ricaricabile può essere prolungata se la stessa viene sottoposta ad attenta cura e soprattutto se viene conservata a temperature corrette.

Con l'aumento dell'invecchiamento tuttavia anche in caso di attenta cura, l'autonomia della batteria ricaricabile si ridurrà.

Un tempo di funzionamento notevolmente ridotto dopo la ricarica indica che la batteria ricaricabile è consumata. È possibile sostituire la batteria ricaricabile.

Se la cinghia portante **28** della batteria ricaricabile standard dovesse essere difettosa, farla sostituire da un rivenditore di biciclette.

Ricarica della batteria ricaricabile prima e durante la conservazione

Prima di un lungo periodo di non impiego ricaricare la batteria ricaricabile per circa il 60 % (da 3 a 4 LED dell'indicatore dello stato di carica **21** sono illuminati).

Dopo 6 mesi controllare lo stato di carica. Se è illuminato ancora solo un LED dell'indicatore dello stato di carica **21**, ricaricare di nuovo la batteria ricaricabile a circa il 60 %.

Nota bene: Se la batteria ricaricabile viene conservata scarica per un periodo più lungo, è possibile che, nonostante l'autoscarica limitata, la stessa si danneggi e che la capacità di carica venga notevolmente ridotta.

Non è consigliabile lasciare collegata permanentemente la batteria ricaricabile alla stazione di ricarica.

Condizioni di magazzino

Conservare la batteria ricaricabile possibilmente in un posto asciutto e ben areato. Proteggerla da umidità ed acqua. In caso di condizioni atmosferiche sfavorevoli è ad es. consigliabile togliere la batteria ricaricabile dall'eBike e conservarla in ambienti chiusi fino all'impiego successivo.

La batteria ricaricabile può essere immagazzinata a temperatura da -10 °C fino a +60 °C. Per una lunga durata è tuttavia favorevole un magazzino a ca. 20 °C temperatura ambiente.

Prestare attenzione affinché la temperatura massima di magazzino non venga superata. Non lasciare la batteria ricaricabile p. es. in estate nell'automobile ed immagazzinarla in un luogo non soggetto a irradiazione solare diretto.

Manutenzione ed assistenza

Manutenzione e pulizia

Mantenere pulita la batteria ricaricabile. Pulirla con cautela con uno straccio umido e morbido. La batteria ricaricabile non deve essere immersa nell'acqua oppure pulita con un getto d'acqua.

Se la batteria ricaricabile non è più funzionante rivolgersi ad un rivenditore autorizzato di biciclette.

Servizio di assistenza ed assistenza clienti

Per tutte le domande relative alle batterie ricaricabili rivolgersi ad un rivenditore autorizzato di biciclette.

► **Annottarsi il produttore ed il numero della chiave 23.** In caso di perdita della chiave rivolgersi presso un rivenditore autorizzato di biciclette. Indicare al rivenditore il produttore ed il numero della chiave.

Le informazioni per contattare rivenditori autorizzati di biciclette sono riportate sulla pagina web

www.bosch-ebike.com

Trasporto

Le batterie ricaricabili sono soggette ai requisiti di legge relativi a merci pericolose. Le batterie ricaricabili possono essere trasportate su strada tramite l'utente privato senza ulteriori precauzioni.

In caso di trasporto tramite utente commerciale oppure in caso di trasporto tramite terzi (p. es. trasporto aereo oppure spedizioniere) devono essere osservati particolari requisiti relativi ad imballo e marcatura (ad es. norme dell'ADR). In caso di necessità per la preparazione del pezzo da spedire si può ricorrere ad un esperto per merce pericolosa.

Spedire le batterie ricaricabili solamente se la carcassa non è danneggiata. Coprire con nastro adesivo i contatti scoperti ed imballare la batteria ricaricabile in modo tale che non si muova nell'imballo. Vi preghiamo di osservare anche eventuali, ulteriori norme nazionali.

In caso di domande relative al trasporto delle batterie ricaricabili rivolgersi ad un rivenditore autorizzato di biciclette. Presso il rivenditore è possibile ordinare anche un imballo per il trasporto adatto.

Smaltimento



Avviare ad un riciclaggio rispettoso dell'ambiente batterie ricaricabili, accessori ed imballaggi inutilizzabili. Non gettare le batterie ricaricabili tra i rifiuti domestici!

Solo per i Paesi della CE:



Conformemente alla direttiva europea 2002/96/CE gli apparecchi elettrici diventati inservibili e, in base alla direttiva europea 2006/66/CE, le batterie ricaricabili/batterie difettose o consumate devono essere raccolte separatamente ed essere inviate ad una riutilizzazione ecologica.

Vi preghiamo di consegnare batterie ricaricabili non più utilizzabili ad un rivenditore autorizzato di biciclette.



Li-Ion:

Si prega di tener presente le indicazioni riportate nel paragrafo «Trasporto», pagina Italiano – 12.

Con ogni riserva di modifiche tecniche.

Stazione di ricarica – Charger

Norme di sicurezza



Leggere tutte le indicazioni di sicurezza e le istruzioni operative. In caso di mancato rispetto delle indicazioni di sicurezza e delle istruzioni operative

possono verificarsi scosse elettriche, incendi e/o lesioni gravi.

Conservare tutte le indicazioni di sicurezza e le istruzioni operative per ogni esigenza futura.

Il termine utilizzato nelle presenti istruzioni per l'uso «batteria ricaricabile» si riferisce allo stesso modo a batterie ricaricabili standard (batterie ricaricabili con supporto sul telaio della bicicletta) e a batterie ricaricabili per montaggio al portapacchi (batterie ricaricabili con supporto nel portapacchi).



Tenere la stazione di ricarica lontana da pioggia o umidità. In caso di infiltrazione di acqua in una stazione di ricarica esiste il rischio di una scossa elettrica.

- ▶ **Ricaricare esclusivamente batterie ricaricabili agli ioni di litio Bosch omologate per eBike. La tensione della batteria ricaricabile deve essere adatta alla tensione di ricarica batteria della stazione di ricarica.** In caso contrario esiste pericolo di incendio ed esplosione.
- ▶ **Avere cura di mantenere il caricabatteria sempre pulito.** Attraverso accumuli di sporcizia si crea il pericolo di una scossa elettrica.
- ▶ **Prima di ogni impiego controllare il caricabatteria, il cavo e la spina. Non utilizzare il caricabatteria in caso dovreste riscontrare dei danni. Non aprire mai personalmente il caricabatteria e farlo riparare soltanto da personale qualificato e soltanto con pezzi di ricambio originali.** In caso di caricabatterie per batterie, cavi e spine danneggiate si aumenta il pericolo di una scossa elettrica.
- ▶ **Non utilizzare il caricabatteria su basi facilmente infiammabili (p. es. carta, tessuti ecc.) oppure in ambienti infiammabili.** Per via del riscaldamento del caricabatteria che si ha durante la fase di ricarica si viene a creare il pericolo di incendio.
- ▶ **In caso di danneggiamento ed un uso non corretto della batteria ricaricabile possono fuoriuscire vapori. Aere con aria fresca ed in caso di disturbi rivolgersi ad un medico.** I vapori possono irritare le vie respiratorie.
- ▶ **Sorvegliare i bambini.** In questo modo viene assicurato che i bambini non giocano con la stazione di ricarica.
- ▶ **Bambini e persone che a causa delle loro capacità fisiche, sensoriali o mentali oppure a cui manchi esperienza o conoscenza non sono in grado di utilizzare la stazione di ricarica in modo sicuro, non devono utilizzare questa stazione di ricarica senza la sorveglianza oppure l'istru-**

zione da parte di una persona responsabile. In caso contrario esiste il pericolo di impiego errato e di lesioni.

- ▶ **Leggere ed osservare le indicazioni di sicurezza e le istruzioni operative riportate nelle istruzioni per l'uso della batteria ricaricabile ed unità di azionamento/computer di controllo nonché nelle istruzioni per l'uso dell'eBike.**
- ▶ Sul lato inferiore della stazione di ricarica è riportato un riassunto delle indicazioni di sicurezza più importanti in lingua inglese, francese e spagnolo (contrassegnate nell'illustrazione sulla pagina grafica con il numero **33**) e con il seguente contenuto:
 - Per un impiego sicuro osservare le istruzioni per l'uso. Rischio di una scossa elettrica.
 - Utilizzare esclusivamente in ambiente asciutto.
 - Ricaricare esclusivamente batterie ricaricabili del sistema eBike Bosch. Altre batterie ricaricabili possono esplodere e causare lesioni.
 - Non sostituire il cavo elettrico. Esiste pericolo di incendio ed esplosione.

Descrizione del prodotto e caratteristiche

Componenti illustrati (vedi pagina 6 – 7)

La numerazione dei componenti illustrati si riferisce all'illustrazione della stazione di ricarica sulla pagina con la rappresentazione grafica.

- 20** Batteria ricaricabile per montaggio al portapacchi
- 21** Indicatore dello stato di carica della batteria
- 26** Batteria ricaricabile standard
- 29** Stazione di ricarica
- 30** Presa dell'apparecchio
- 31** Spina dell'apparecchio
- 32** Aperture di ventilazione
- 33** Indicazioni di sicurezza stazione di ricarica
- 34** Spina di ricarica
- 35** Presa per la spina di ricarica

Dati tecnici

Stazione di ricarica		Charger
Codice prodotto		0 275 007 905
Tensione nominale	V~	207 – 264
Frequenza	Hz	47 – 63
Tensione di ricarica della batteria	V=	42
Corrente di carica	A	4
Campo ammesso di temperatura di ricarica	°C	0 ... + 40
Tempo di ricarica		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Numero degli elementi della batteria ricaricabile		10 – 80
Temperatura di esercizio	°C	– 10 ... + 75
Temperatura di magazzino	°C	– 20 ... + 70
Peso in funzione della EPTA-Procedure 01/2003	kg	0,8
Tipo di protezione		IP 40

I dati sono validi per una tensione nominale [U] di 230 V. In caso di tensioni differenti e di modelli specifici dei paesi di impiego, questi dati possono variare.

Uso

► **Applicare la batteria ricaricabile esclusivamente su superfici pulite.** Evitare in modo particolare l'imbrattamento della presa di carica e dei contatti, p. es. tramite sabbia o terra.

Messa in funzione

Collegamento della stazione di ricarica (vedi figure E - F)

► **Osservare la tensione di rete!** La tensione della rete deve corrispondere a quella indicata sulla stazione di ricarica. Stazioni di ricarica previste per l'uso con 230 V possono essere azionate anche a 220 V.

Inserire la spina dell'apparecchio **31** del cavo elettrico nella presa dell'apparecchio **30** sulla stazione di ricarica.

Collegare il cavo elettrico (specifico del paese di impiego) alla rete elettrica.

Disattivare la batteria ricaricabile e toglierla dal supporto sull'eBike. A tal fine leggere ed osservare le istruzioni per l'uso della batteria ricaricabile.

Inserire la spina di ricarica **34** del dispositivo di carica nella presa **35** sulla batteria ricaricabile.

Operazione di ricarica

L'operazione di ricarica inizia non appena la stazione di ricarica è collegata alla batteria ricaricabile ed alla rete elettrica.

Nota bene: L'operazione di ricarica è possibile solamente se la temperatura della batteria ricaricabile si trova nel campo di temperatura di ricarica ammissibile.

Durante l'operazione di ricarica sono illuminati i LED dell'indicatore e dello stato di carica **21** sulla batteria ricaricabile. Ogni LED illuminato permanentemente corrisponde a ca. 20 % della capacità di ricarica. Il LED lampeggiante indica la ricarica del prossimo 20 %.

► **Procedere con cautela in caso di contatto con la stazione di ricarica durante l'operazione di ricarica. Mettere i guanti di protezione.** In modo particolare in caso di elevate temperature ambientali la stazione di ricarica può riscaldarsi notevolmente.

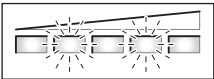
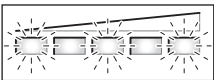
Nota bene: Prestare attenzione affinché la stazione di ricarica durante l'operazione di ricarica sia ben arieggiata e le aperture di ventilazione **32** su entrambi i lati non siano coperte.

La batteria ricaricabile è completamente carica quando sono illuminati permanentemente tutti i cinque LED dell'indicatore **21**. L'operazione di ricarica viene interrotta automaticamente. Staccare la stazione di ricarica dalla rete elettrica e la batteria ricaricabile dalla stazione di ricarica.

Staccando la batteria ricaricabile dalla stazione di ricarica la batteria ricaricabile viene disattivata automaticamente.

Adesso è possibile inserire la batteria ricaricabile nell'eBike.

Anomalie – cause e rimedi

Causa	Rimedi
 <p>Batteria ricaricabile difettosa</p>	<p>Due LED sulla batteria ricaricabile lampeggiano</p> <p>Rivolgersi ad un rivenditore autorizzato di biciclette</p>
 <p>Batteria ricaricabile troppo calda o troppo fredda</p>	<p>Tre LED sulla batteria ricaricabile lampeggiano</p> <p>Staccare la batteria ricaricabile dalla stazione di ricarica e lasciarla adattare alla temperatura ambientale fino a quando è raggiunto il campo di temperatura di ricarica</p> <p>Collegare di nuovo la batteria ricaricabile alla stazione di ricarica solamente quando la stessa avrà raggiunto la temperatura di ricarica ammissibile.</p>

Causa	Rimedi
Operazione di ricarica impossibile (nessuna indicazione sulla batteria ricaricabile)	
Spina non inserita correttamente	Controllare tutti i collegamenti a spina
Contatti sulla batteria ricaricabile sporchi	Pulire con cautela i contatti sulla batteria ricaricabile
Aperture di ventilazione 32 della stazione di ricarica intasate oppure coperte	Pulire le aperture di ventilazione 32 e posizionare la stazione di ricarica in modo che sia ben arieggiata
Presca, cavo o stazione di ricarica difettosi	Controllare la tensione di rete, fare controllare la stazione di ricarica da un rivenditore di biciclette
Batteria ricaricabile difettosa	Rivolgersi ad un rivenditore autorizzato di biciclette

Manutenzione ed assistenza

Manutenzione e pulizia

Qualora la stazione di ricarica dovesse guastarsi rivolgersi ad un rivenditore autorizzato di biciclette.

Servizio di assistenza ed assistenza clienti

Per tutte le domande relative alla stazione di ricarica rivolgersi ad un rivenditore autorizzato di biciclette.

Le informazioni per contattare rivenditori autorizzati di biciclette sono riportate sulla pagina web

www.bosch-ebike.com

Smaltimento

Avviare ad un riciclaggio rispettoso dell'ambiente la stazione di ricarica, gli accessori dismessi e gli imballaggi.

Non gettare tra i rifiuti domestici le stazioni di ricarica dismesse!

Solo per i Paesi della CE:



Conformemente alla norma della direttiva 2002/96/CE sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE) ed all'attuazione del recepimento nel diritto nazionale, le stazioni di ricarica diventeranno inservibili e dovranno essere raccolte separatamente ed essere inviate ad una riutilizzazione ecologica.

Con ogni riserva di modifiche tecniche.

Aandrijfeenheid Drive Unit Speed/ Bedieningscomputer Intuvia

Veiligheidsvoorschriften



Lees alle veiligheidsvoorschriften en aanwijzingen. Als de veiligheidsvoorschriften en aanwijzingen niet in acht worden genomen, kan dit een elektrische schok, brand en/of ernstig letsel tot gevolg hebben.

Bewaar alle veiligheidsvoorschriften en aanwijzingen voor toekomstig gebruik.

Het in deze gebruiksaanwijzing gebruikte begrip „accu” heeft zowel betrekking op standaardaccu's (accu's bevestigd aan het fietsframe) als op bagagedrageraccu's (accu bevestigd in de bagagedrager).

- ▶ **Open de aandrijfeenheid niet zelf. De aandrijfeenheid is onderhoudsvrij en mag alleen door gekwalificeerd personeel en alleen met originele vervangingsonderdelen worden gerepareerd.** Daarmee wordt gewaarborgd dat de veiligheid van de aandrijfeenheid in stand blijft. Als de aandrijfeenheid door onbevoegden wordt geopend, vervalt de aanspraak op garantie.
- ▶ **Alle op de aandrijfeenheid gemonteerde componenten en alle andere componenten van de aandrijving van de eBike (bijv. kettingblad, opname van kettingblad, pedalen) mogen alleen worden vervangen door componenten met een identieke constructie of door componenten die door de fietsfabrikant speciaal voor uw eBike zijn toegestaan.** Daardoor wordt de aandrijfeenheid beschermd tegen overbelasting en beschadiging.
- ▶ **Neem de accu uit de eBike voordat u begint met werkzaamheden (zoals montage, onderhoud, enz.) aan de eBike, voordat u deze per auto of vliegtuig vervoert en voordat u deze opbergt.** Bij per ongeluk bedienen van de aan/uit-schakelaar bestaat verwondingsgevaar.
- ▶ **De functie starthulp mag uitsluitend bij het wegrijden met de eBike worden gebruikt.** Als de wielen van de eBike bij het gebruik van de starthulp geen contact met de grond maken, bestaat gevaar voor letsel.
- ▶ **Gebruik alleen originele Bosch accu's die door de fabrikant voor uw eBike zijn toegestaan.** Het gebruik van andere accu's kan tot letsel en brandgevaar leiden. Bij gebruik van andere accu's wordt door Bosch geen aansprakelijkheid aanvaard en geen garantie geboden.
- ▶ **Neem alle nationale voorschriften voor de toelating en het gebruik van eBikes in acht.**
- ▶ **Lees de veiligheids- en overige voorschriften in de gebruiksaanwijzing van de accu en in de gebruiksaanwijzing van de eBike en neem deze in acht.**

Product- en vermogensbeschrijving

Gebruik volgens bestemming

De aandrijfeenheid is uitsluitend bestemd voor de aandrijving van uw eBike en mag niet voor andere doeleinden worden gebruikt.

De eBike is bestemd voor gebruik op verharde wegen. De eBike is niet goedgekeurd voor wedstrijdgebruik.

Afgebeelde componenten (zie pagina 2 – 3)

De componenten zijn genummerd zoals op de pagina met afbeeldingen.

Alle afbeeldingen van fietsonderdelen behalve aandrijfeenheid, bedieningscomputer incl. bedieningseenheid, snelheidssensor en bijbehorende houders zijn schematisch en kunnen afwijken van de onderdelen van uw eBike.

- 1 Toets indicatiefunctie „i”
- 2 Toets verlichting
- 3 Bedieningscomputer
- 4 Houder bedieningscomputer
- 5 Aan-uit-toets bedieningscomputer
- 6 Reset-toets „RESET”
- 7 USB-aansluitopening
- 8 Beschermkapje van USB-aansluiting
- 9 Aandrijfeenheid
- 10 Bedieningseenheid
- 11 Toets indicatiefunctie „i” op bedieningseenheid
- 12 Toets waarde verlagen/omlaag „-”
- 13 Toets waarde verhogen/omhoog „+”
- 14 Toets starthulp „WALK”
- 15 Vergrendeling bedieningscomputer
- 16 Blokkeerschroef bedieningscomputer
- 17 Snelheidssensor
- 18 Spaakmagneet van snelheidssensor

Indicatie-elementen bedieningscomputer

- a Indicatie motorvermogen
- b Indicatie ondersteuningsniveau
- c Tekstdisplay
- d Waarde-indicatie
- e Snelheidsmeterindicatie
- f Accuopladingindicatie

Technische gegevens

Aandrijfeenheid		Drive Unit Speed
Zaaknummer		0 275 007 003
Capaciteit	W	350
Draaimoment aan uitgaande as max.	Nm	50
Nominale spanning	V ⁻⁻⁻	36
Bedrijfstemperatuur	°C	- 5 ... + 40
Bewaartemperatuur	°C	- 10 ... + 50
Beschermingsklasse		IP 54 (stof- en spatwaterbescherming)
Gewicht, ca.	kg	4

Bedieningscomputer		Intuvia
Zaaknummer		1 270 020 903
Laadstroom		
USB-aansluiting max.	mA	500
Laadspanning		
USB-aansluiting	V	5
Bedrijfstemperatuur	°C	- 5 ... + 40
Bewaartemperatuur	°C	- 10 ... + 50
Beschermingsklasse		IP 54 (stof- en spatwaterbescherming)
Gewicht, ca.	kg	0,15

Verlichting*		
Nominale spanning	V ⁻⁻⁻	6
Capaciteit		
– Voorlicht	W	2,7
– Achterlicht	W	0,3

* Afhankelijk van wettelijke regelingen niet in alle, per land verschillende uitvoeringen via accu van eBike mogelijk

Montage

Accu inzetten of verwijderen

Lees de gebruiksaanwijzing voor het in de eBike plaatsen en het eruit verwijderen van de accu en neem de voorschriften in acht.

Bedieningscomputer aanbrengen en verwijderen (zie afbeelding A)

Voor het **inzetten** van de bedieningscomputer **3** duwt u deze van voren in de houder **4**.

Voor het **verwijderen** van de bedieningscomputer **3** drukt u op de vergrendeling **15** en duwt u deze naar voren uit de houder **4**.

► **Verwijder de bedieningscomputer als u de eBike parkeert, zodat de aandrijving niet door anderen kan worden gebruikt.** Zonder bedieningscomputer kan het eBike-systeem niet ingeschakeld worden.

De bedieningscomputer kan ook zo in de houder worden geborgd dat deze niet worden verwijderd. Demonteer daarvoor de houder **4** van het stuur. Zet de bedieningscomputer in de houder. Draai de blokkeerschroef **16** van onderen in de daarvoor voorziene schroefdraad van de houder. Monteer de houder weer op het stuur.

Snelheidssensor controleren (zie afbeelding B)

De snelheidssensor **17** en de bijbehorende spaakmagneet **18** moeten zodanig gemonteerd zijn dat de spaakmagneet bij een omwenteling van het wiel op een afstand van minimaal 5 mm en maximaal 17 mm langs de snelheidssensor beweegt.

Opmerking: Als de afstand tussen snelheidssensor **17** en spaakmagneet **18** te groot is of de snelheidssensor **17** niet juist is aangesloten, valt de snelheidsmeterindicatie **e** uit en werkt de aandrijving van de eBike in het noodprogramma. Draai in dit geval de schroef van de spaakmagneet **18** los en bevestig de spaakmagneet zodanig op de spaak dat deze op de juiste afstand langs de markering van de snelheidssensor loopt. Als er ook daarna geen snelheid op de snelheidsmeterindicatie **e** verschijnt, dient u contact op te nemen met een erkende rijwielvakhandel.

Gebruik

Ingebruikneming

Voorwaarden

Het eBike-systeem kan alleen worden geactiveerd als aan de volgende voorwaarden is voldaan:

- Er is een voldoende opgeladen accu geplaatst (zie gebruiksaanwijzing van de accu).
- De bedieningscomputer is correct in de houder geplaatst (zie „Bedieningscomputer aanbrengen en verwijderen”, pagina Nederlands – 2).
- De snelheidssensor is correct aangesloten (zie „Snelheidssensor controleren”, pagina Nederlands – 2).

eBike-systeem in- en uitschakelen

Als u het eBike-systeem wilt **inschakelen**, heeft u de volgende mogelijkheden:

- Is de bedieningscomputer al ingeschakeld wanneer deze in de houder geplaatst wordt, wordt het eBike-systeem automatisch ingeschakeld.
- Druk bij ingezette bedieningscomputer en ingezette accu eenmaal kort op de aan-uit-toets **5** van de bedieningscomputer.
- Druk bij ingezette bedieningscomputer op de aan-uit-toets van de accu (zie gebruiksaanwijzing van de accu).

Opmerking: De pedalen van de eBike mogen bij het inschakelen van het eBike-systeem niet belast zijn. Anders wordt het vermogen van de aandrijving beperkt. In de tekstindicatie **c** verschijnt de foutmelding „**Pedaal ontlasten**”.

Als het eBike-systeem bij vergissing met belaste pedalen is ingeschakeld, dient u deze uit te schakelen en zonder belasting opnieuw in te schakelen.

De aandrijving wordt geactiveerd zodra u op de pedalen trapt (behalve in de functie starthulp, zie „Starthulp in- en uitschakelen”, pagina Nederlands – 4). Het motorvermogen is afhankelijk van de instellingen op de bedieningscomputer.

Zodra u bij normaal gebruik niet meer op de pedalen trapt of zodra u een snelheid van 45 km per uur heeft bereikt, wordt de ondersteuning door de aandrijving van de eBike uitgeschakeld. De aandrijving wordt automatisch weer geactiveerd zodra u op de pedalen trapt of de snelheid onder 45 km per uur daalt.

Als u het eBike-systeem wilt **uitschakelen**, heeft u de volgende mogelijkheden:

- Druk op de aan/uit-toets **5** van de bedieningscomputer.
- Schakel de accu met de aan-uit-toets van de accu uit (zie gebruiksaanwijzing van de accu.)
- Verwijder de bedieningscomputer uit de houder.

Als er ca. 10 minuten geen vermogen van de aandrijving wordt opgevraagd (bijv. omdat de eBike stilstaat) en er geen toets op de bedieningscomputer of bedieningseenheid wordt ingedrukt, wordt het eBike-systeem automatisch uitgeschakeld om energie te besparen.

Indicaties en instellingen van de bedieningscomputer

Energievoorziening van de bedieningscomputer

Als de bedieningscomputer in de houder **4** zit, een voldoende opgeladen accu in de eBike geplaatst is en het eBike-systeem ingeschakeld is, wordt de bedieningscomputer door de accu van de eBike van energie voorzien.

Als de bedieningscomputer uit de houder **4** wordt genomen, vindt de energievoorziening plaats via een interne accu. Als de interne accu bij het inschakelen van de bedieningscomputer zwak is, verschijnt gedurende 3 seconden „**Met fiets verbinden**” in het tekstdisplay **c**. Daarna wordt de bedieningscomputer uitgeschakeld.

Als u de interne accu wilt opladen, plaatst u de bedieningscomputer weer in de houder **4** (als een accu in de eBike geplaatst is). Schakel de accu van de eBike met de aan-uit-toets van de accu uit (zie gebruiksaanwijzing van de accu).

U kunt de bedieningscomputer ook via de USB-aansluiting opladen. Open daarvoor het beschermkapje **8**. Verbind de USB-aansluiting **7** van de bedieningscomputer via een geschikte USB-kabel met een in de handel verkrijgbaar USB-oplaadparaat of de USB-aansluiting van een computer (laadspanning 5 V, laadstroom max. 500 mA). In de tekstindicatie **c** van de bedieningscomputer verschijnt „**USB aangesloten**”.

Bedieningscomputer in- en uitschakelen

Als u de bedieningscomputer wilt **inschakelen**, drukt u kort op de aan-uit-toets **5**. De bedieningscomputer kan (als de interne accu voldoende is opgeladen) ook worden ingeschakeld als deze niet in de houder is geplaatst.

Als u de bedieningscomputer wilt **uitschakelen**, drukt u op de aan/uit-toets **5**.

Als de bedieningscomputer niet in de houder is geplaatst, wordt deze om energie te besparen uitgeschakeld zodra er 1 minuten lang geen toets is ingedrukt.

Accuoplaadindicatie

De accuoplaadindicatie **f** geeft de oplaadtoestand van de eBike-accu aan, niet die van de interne accu van de bedieningscomputer. De oplaadtoestand van de eBike-accu kan eveneens op de leds van de accu worden afgelezen.

In de indicatie **f** komt elk streepje in het accusymbool overeen met ongeveer 20 % van de capaciteit:



100 tot 80 % capaciteit



20 tot 5 % capaciteit. De accu moet worden opgeladen.



Minder dan 5 % capaciteit. De ondersteuning van de aandrijving is niet meer mogelijk. De leds van de oplaadindicatie van de accu gaan uit.

Als de verlichting van de eBike via de accu werkt (per land verschillend), is de capaciteit wanneer het lege accusymbool voor het eerst verschijnt nog voldoende voor ca. 2 uur verlichting. Als het symbool begint te knipperen, is ook de verlichting nog gedurende korte tijd mogelijk.

Als de bedieningscomputer uit de houder **4** wordt genomen, blijft de laatst weergegeven accuoplaadtoestand opgeslagen.

Ondersteuningsniveau instellen

U kunt op de bedieningscomputer instellen in welke mate de aandrijving van de eBike tijdens het trappen ondersteuning biedt. Het ondersteuningsniveau kan op elk moment gewijzigd worden, ook tijdens het rijden.

Opmerking: In sommige uitvoeringen is het ondersteuningsniveau mogelijk vooraf ingesteld en kan dit niet worden gewijzigd. Het is ook mogelijk dat er uit minder ondersteuningsniveaus dan hier vermeld kan worden gekozen.

De volgende ondersteuningsniveaus staan maximaal ter beschikking:

- „**OFF**”: De aandrijving is uitgeschakeld. De eBike kan net als een normale fiets alleen door trappen worden voortbewogen.
- „**ECO**”: effectieve ondersteuning met maximale efficiëntie voor maximaal bereik
- „**TOUR**”: gelijkmatige ondersteuning voor tochten met groot bereik
- „**SPORT**”: krachtige ondersteuning voor sportief rijden op heuvelachtige stukken en voor rijden in de stad
- „**TURBO**”: maximale ondersteuning bij flink doortrappen, voor sportief rijden

Als u het ondersteuningsniveau wilt **verhogen**, drukt u de toets „**+**” **13** op de bedieningseenheid zo vaak in tot het gewenste ondersteuningsniveau in de indicatie **b** verschijnt. Als u het ondersteuningsniveau wilt **verlagen**, drukt u op de toets „**-**” **12**.

Het opgevraagde motorvermogen verschijnt in de indicatie **a**. Het maximale motorvermogen is afhankelijk van het gekozen ondersteuningsniveau.

Ondersteuningsniveau	Motorvermogen* (Kettingschakeling)
„ECO”	30 %
„TOUR”	100 %
„SPORT”	180 %
„TURBO”	250 %

* Het motorvermogen kan bij sommige uitvoeringen afwijken.

Als de bedieningscomputer uit de houder **4** wordt genomen, blijft het laatst weergegeven ondersteuningsniveau opgeslagen. De indicatie **a** van het motorvermogen blijft leeg.

Starthulp in- en uitschakelen

De starthulp kan als extra ondersteuning tijdens de eerste meters dienen, als wegrijden lastig is (bijv. bij een verkeerslicht of op een helling).

► **De functie starthulp mag uitsluitend bij het wegrijden met de eBike worden gebruikt.** Als de wielen van de eBike bij het gebruik van de starthulp geen contact met de grond maken, bestaat gevaar voor letsel.

Als u de starthulp wilt **inschakelen**, drukt u op de toets „WALK” **14** van de bedieningseenheid en houdt u deze ingedrukt. De aandrijving van de eBike wordt ingeschakeld.

De starthulp wordt **uitgeschakeld** zodra zich een van de volgende gebeurtenissen voordoet:

- U laat de toets „WALK” **14** los.
- U drukt op een andere toets van de bedieningscomputer.
- U trapt snel vooruit of achteruit op de pedalen.
- De wielen van de eBike worden geblokkeerd (bijv. door remmen of stoten tegen een obstakel).
- De snelheid komt boven 18 km per uur.

Verlichting in- en uitschakelen

Afhankelijk van per land verschillende voorschriften zijn twee uitvoeringen van de verlichting mogelijk.

- Met de bedieningscomputer kunnen tegelijkertijd voorlicht, achterlicht en display-achtergrondverlichting in- of uitgeschakeld worden.
- In deze uitvoering verschijnt bij het inschakelen van de verlichting „Licht aan” en bij het uitschakelen van de verlichting „Licht uit” gedurende ca. 1 seconde in de tekstindicatie **c**.
- Alleen de display-achtergrondverlichting kan in- of uitgeschakeld worden. Voor- en achterlicht van de eBike zijn onafhankelijk van de bedieningscomputer.

Bij beide uitvoeringen drukt u voor het **in- en uitschakelen van de verlichting** op de toets **2**.

Snelheids- en afstandsindicaties

In de **snelheidsmeterindicatie e** wordt altijd de actuele snelheid weergegeven.

In de **functie-indicatie** (combinatie van tekstindicatie **c** en waarde-indicatie **d**) kunt u kiezen uit de volgende functies:

- „**Bereik**”: te verwachten bereik met de aanwezige acculading (bij gelijkblijvende voorwaarden zoals ondersteuningsniveau, routeprofiel, enz.)
- „**Afstand**”: sinds de laatste reset afgelegde afstand
- „**Rijtijd**”: Rijtijd sinds de laatste reset
- „**Gemiddelde**”: sinds de laatste reset bereikte gemiddelde snelheid
- „**Maximum**”: sinds de laatste reset bereikte maximale snelheid
- „**Tijd**”: actuele tijd

Druk voor de **overgang naar de indicatiefunctie** de toets „i” **1** van de bedieningscomputer of de toets „i” **11** van de bedieningseenheid zo vaak in tot de gewenste functie wordt weergegeven.

Voor een **reset** van „**Afstand**”, „**Rijtijd**” en „**Gemiddelde**” gaat u naar een van deze drie functies en drukt u vervolgens zo lang op de toets „**RESET**” **6** tot de indicatie op nul wordt gezet. Daarmee heeft ook een reset plaatsgevonden van de waarden van de beide andere functies.

Voor een **reset** van „**Maximum**” gaat u naar deze functie en drukt u vervolgens zo lang op de toets „**RESET**” **6** tot de indicatie op nul wordt gezet.

Wordt de bedieningscomputer uit de houder **4** genomen, blijven alle waarden van de functies opgeslagen en kunnen deze verder worden weergegeven.

Basisinstellingen weergeven en aanpassen

Weergeven en wijzigen van de basisinstellingen is mogelijk, of de bedieningscomputer nu in de houder **4** is gezet of niet.

Als u naar het menu Basisinstellingen wilt gaan, drukt u tegelijkertijd zo lang op de toets „**RESET**” **6** en de toets „i” **1** tot in de tekstindicatie **c**, „**Instellingen**” verschijnt.

Druk voor het **wisselen tussen de basisinstellingen** zo vaak op de toets „i” **1** op de bedieningscomputer tot de gewenste basisinstelling wordt weergegeven. Is de bedieningscomputer in de houder **4** geplaatst, kunt u ook op de toets „i” **11** van de afstandsbediening drukken.

Bij het **wijzigen van de basisinstellingen** drukt u voor het verlagen resp. omlaag bewegen op de aan-uit-toets **5** naast de indicatie „-” of voor het verhogen resp. omhoog bewegen op de toets Verlichting **2** naast de indicatie „+”.

Als de bedieningscomputer in de houder **4** is geplaatst, is wijzigen ook met de toetsen „-” **12** resp. „+” **13** van de bedieningseenheid mogelijk.

Als u de functie wilt verlaten en een gewijzigde instelling wilt opslaan, drukt u gedurende 3 seconden op de toets „**RESET**” **6**.

U kunt kiezen uit de volgende basisinstellingen:

- „**Eenheid km/mi**“: U kunt snelheid en afstand in kilometers of mijlen laten weergeven.
- „**Tijdformaat**“: U kunt de tijd in de 12-uur- of 24-uur-indeling laten weergeven.
- „**Tijd**“: U kunt de actuele tijd instellen. Als u de insteltoetsen langer indrukt, verandert de tijdsaanduiding sneller.

- „**Nederlands**“: U kunt de taal van de tekstindicaties wijzigen. U kunt kiezen uit Duits, Engels, Frans, Spaans, Italiaans en Nederlands.
- „**Afstand totaal**“: Weergave van de totale met de eBike afgelegde afstand (kan niet gewijzigd worden).
- „**Gebruiksduur totaal**“: Weergave van de totale tijdsduur waarmee met de eBike is gereden (kan niet gewijzigd worden).

Indicatie foutcode

De componenten van het eBike-systeem worden voortdurend automatisch gecontroleerd. Als een fout wordt vastgesteld, verschijnt de desbetreffende foutcode in de tekstindicatie c.

Druk op een willekeurige toets van bedieningscomputer **3** of bedieningseenheid **10** om naar de standaardindicatie terug te keren.

Afhankelijk van de aard van de fout wordt de aandrijving indien nodig automatisch uitgeschakeld. Verder rijden zonder

ondersteuning door de aandrijving is echter altijd mogelijk. Laat de eBike controleren voordat u er opnieuw mee gaat rijden.

- **Laat alle controles en reparaties uitsluitend door een erkende rijwielhandel uitvoeren.** Als een fout nog steeds wordt weergegeven ondanks uw poging om deze op te lossen, dient u eveneens contact met een erkende rijwielhandel op te nemen.

Code	Oorzaak	Oplossing
100	Interne fout van aandrijfseenheid	Aandrijfseenheid laten controleren
101	Verbindingsprobleem van aandrijfseenheid	Aansluitingen en verbindingen laten controleren
102	Fout van snelheidssensor	Snelheidssensor laten controleren
103*	Verbindingsprobleem van verlichting	Aansluitingen en verbindingen laten controleren
104	Verbindingsprobleem van bedieningscomputer	Aansluitingen en verbindingen laten controleren
105	Temperatuur van aandrijfseenheid te hoog (boven 40 °C)	Laat de aandrijfseenheid afkoelen. Verder rijden zonder eBike-aandrijving is mogelijk en versnelt de afkoeling van de aandrijfseenheid.
200	Interne elektronicafout van de accu	Accu later controleren
201	Temperatuur van accu te hoog (boven 40 °C)	Laat de accu afkoelen. Verder rijden zonder eBike-aandrijving is mogelijk en versnelt de afkoeling van de accu.
202	Temperatuur van de accu te laag (minder dan – 10 °C)	Laat de accu in een warme ruimte langzaam warm worden.
203	Verbindingsprobleem van de accu	Aansluitingen en verbindingen laten controleren
204	Verkeerde accupoolrichting	Laad de accu alleen op met met het originele Bosch oplaadapparaat zoals in de bijbehorende gebruiksaanwijzing beschreven.
410	Een of meer toetsen van de bedieningscomputer zijn geblokkeerd.	Controleer of er toetsen zijn vastgeklemd, bijv. door binnengedrongen vuil. Reinig de toetsen indien nodig.
414	Verbindingsprobleem van bedieningseenheid	Aansluitingen en verbindingen laten controleren
418	Een of meer toetsen van de bedieningseenheid zijn geblokkeerd.	Controleer of er toetsen zijn vastgeklemd, bijv. door binnengedrongen vuil. Reinig de toetsen indien nodig.
422	Verbindingsprobleem van aandrijfseenheid	Aansluitingen en verbindingen laten controleren
423	Verbindingsprobleem van de accu	Aansluitingen en verbindingen laten controleren
424	Communicatiefout van de componenten onderling	Aansluitingen en verbindingen laten controleren

* Alleen bij verlichting van de eBike via de accu (per land verschillend)

Code	Oorzaak	Oplossing
430	Interne accu van de bedieningscomputer leeg	Bedieningscomputer opladen (in de houder of via USB-aansluiting)
490	Interne fout van de bedieningscomputer	Bedieningscomputer laten controleren.

* Alleen bij verlichting van de eBike via de accu (per land verschillend)

Energievoorziening van extern apparaten via USB-aansluiting

Met de USB-aansluiting kunnen de meeste apparaten die via USB van stroom kunnen voorzien (bijvoorbeeld diverse mobiele telefoons) gebruikt en opgeladen worden.

Voorwaarde voor het laden is dat de bedieningscomputer en een voldoende opgeladen accu in de eBike zijn geplaatst.

Open het beschermkapje **8** van de USB-aansluiting van de bedieningscomputer. Verbind de USB-aansluiting van het externe apparaat via een passende USB-kabel met de USB-aansluiting **7** van de bedieningscomputer.

Aanwijzingen voor het rijden met het eBike-systeem

Wanneer werkt de eBike-aandrijving?

De eBike-aandrijving ondersteunt u tijdens het rijden zolang u op de pedalen trapt. Als u niet op de pedalen trapt, vindt geen ondersteuning plaats. Het motorvermogen is altijd afhankelijk van de kracht die u tijdens het trappen uitoefent.

Als u weinig kracht uitoefent, is de ondersteuning geringer dan wanneer u veel kracht uitoefent. Dat geldt onafhankelijk van het ondersteuningsniveau.

De eBike-aandrijving wordt automatisch uitgeschakeld bij snelheden boven 45 km per uur. Als de snelheid onder 45 km per uur daalt, staat de aandrijving automatisch weer ter beschikking.

Een uitzondering geldt voor de functie starthulp, waarin met de eBike langzaam kan worden gereden zonder op de pedalen te trappen.

U kunt met de eBike altijd ook zonder ondersteuning net als met een normale fiets rijden, als u het eBike-systeem uitschakelt of het ondersteuningsniveau op „OFF” instelt. Hetzelfde geldt als de accu leeg is.

Samenspel van eBike-systeem en versnellingen

Ook met de eBike-aandrijving kunt u de versnellingen net als bij een normale fiets gebruiken (zie daarvoor de gebruiksaanwijzing van uw eBike).

Onafhankelijk van de aard van de versnelling is het raadzaam om tijdens het schakelen het trappen kort te onderbreken. Daardoor wordt het schakelen vergemakkelijkt en de slijtage van de aandrijflijn beperkt.

Door de keuze van de juiste versnelling kunt u bij gelijke krachtsinspanning de snelheid en het bereik vergroten.

Eerste ervaringen opdoen

Geadviseerd wordt om de eerste ervaringen met de eBike op te doen op een weg zonder druk verkeer.

Probeer verschillende ondersteuningsniveaus uit. Zodra u zich zeker voelt, kunt u met de eBike net als met elke andere fiets aan het verkeer deelnemen.

Test het bereik van uw eBike onder verschillende omstandigheden voordat u een langere tocht plant die meer van u eist.

Invloeden op het bereik

Het bereik wordt door vele factoren beïnvloed, zoals:

- ondersteuningsniveau,
- schakelgedrag,
- bandentype en bandendruk,
- ouderdom en onderhoudstoestand van de accu,
- profiel (hellingen) en aard (wegverharding) van de route,
- tegenwind en omgevingstemperatuur,
- gewicht van eBike, fietser en bagage.

Daarom is een concrete voorspelling van het bereik voor het begin van een tocht niet mogelijk. In het algemeen geldt echter:

- Bij **gelijk** motorvermogen van eBike-aandrijving: hoe minder kracht u hoeft te benutten om een bepaalde snelheid te bereiken (bijv. door optimaal gebruik van de versnellingen), des te minder energie de eBike-aandrijving zal verbruiken en des te groter het bereik van een acculading zal zijn.
- Hoe **hoger** het ondersteuningsniveau bij verder gelijke omstandigheden wordt gekozen, des te geringer het bereik.

Verzorging en onderhoud van de eBike

Houd rekening met de bedrijfs- en bewaartemperaturen van de componenten van de eBike. Bescherm aandrijfleenheid, bedieningscomputer en accu tegen extreme temperaturen (bijv. bij fel zonlicht zonder voldoende ventilatie). De componenten (in het bijzonder de accu) kunnen door extreme temperaturen beschadigd worden.

Onderhoud en service

Onderhoud en reiniging

Houd alle componenten van de eBike schoon, in het bijzonder de contacten van de accu en de bijbehorende houder. Reinig deze voorzichtig met een zachte, vochtige doek.

Geen van de componenten, ook de aandrijfeenheid niet, mogen in water worden ondergedompeld of met een hogedrukreiniger worden gereinigd.

Neem voor service of reparaties aan de eBike contact op met een erkende rijwielhandel.

Klantenservice en advies

Neem bij alle vragen over het eBike-systeem en zijn componenten contact op met een erkende rijwielhandel.

Contactgegevens van de erkende rijwielhandel vindt u op de internetpagina www.bosch-ebike.com

Vervoer

Voor de accu's gelden de eisen ten aanzien van gevaarlijke stoffen. De accu's kunnen door particuliere gebruikers zonder verdere voorwaarden over de weg worden vervoerd.

Bij vervoer door zakelijke gebruikers of bij vervoer door derden (bijv. luchtvervoer of vervoersbedrijf) moeten bijzondere eisen ten aanzien van verpakking en markering in acht worden genomen (bijv. ADR-voorschriften). Indien gewenst kan bij de voorbereiding van de verzending een deskundige voor gevaarlijke stoffen worden geraadpleegd.

Verzend de accu's alleen als de behuizing onbeschadigd is. Plak blootliggende contacten af en verpak de accu zodanig dat deze niet in de verpakking beweegt. Neem ook eventuele overige nationale voorschriften in acht.

Neem bij alle vragen over het vervoer van de accu's contact op met een erkende rijwielhandel. Bij de rijwielhandel kunt u ook een geschikte transportverpakking bestellen.

Afvalverwijdering



Aandrijfeenheid, bedieningscomputer incl. bedieningsseenheid, accu, snelheidssensor, toebehoren en verpakkingen moeten op een voor het milieu verantwoorde wijze worden gerecycled.

Gooi een eBike of componenten daarvan niet bij het huisvuil!

Alleen voor landen van de EU:



Volgens de Europese richtlijn 2002/96/EG moeten niet meer bruikbare elektrische apparaten en volgens de Europese richtlijn 2006/66/EG moeten defecte of lege accu's en batterijen apart worden ingezameld en op een voor het milieu verantwoorde wijze worden gerecycled.

De in de bedieningscomputer geïntegreerde accu mag alleen worden verwijderd als deze moet worden afgevoerd. Door het openen van de behuizing kan de bedieningscomputer onherstelbaar beschadigd worden.

Geef niet meer te gebruiken accu's en bedieningscomputers af bij een erkende rijwielhandel.



Li-ion:

Lees de aanwijzingen in het gedeelte „Vervoer”, pagina Nederlands – 7 en neem deze in acht.

Wijzigingen voorbehouden.

Lithiumionaccu PowerPack

Veiligheidsvoorschriften



Lees alle veiligheidsvoorschriften en aanwijzingen.

Als de veiligheidsvoorschriften en aanwijzingen niet in acht worden genomen, kan dit

een elektrische schok, brand en/of ernstig letsel tot gevolg hebben.

Bewaar alle veiligheidsvoorschriften en aanwijzingen voor toekomstig gebruik.

Het in deze gebruiksaanwijzing gebruikte begrip „accu” heeft zowel betrekking op standaardaccu's (accu's bevestigd aan het fietsframe) als op bagagedrageraccu's (accu bevestigd in de bagagedrager) tenzij het type uitdrukkelijk genoemd wordt.

- ▶ **Neem de accu uit de eBike voordat u begint met werkzaamheden (zoals montage, onderhoud, enz.) aan de eBike, voordat u deze per auto of vliegtuig vervoert en voordat u deze opbergt.** Bij per ongeluk bedienen van de aan/uit-schakelaar bestaat verwondingsgevaar.
- ▶ **Open de accu niet.** Er bestaat gevaar voor kortsluiting. Als de accu geopend wordt, vervalt elke aanspraak op garantie.



Bescherm de accu tegen hitte (bijv. ook tegen langdurig fel zonlicht), vuur en onderdompeling in water. Er bestaat explosiegevaar.

- ▶ **Voorkom aanraking van de niet-gebruikte accu met paperclips, munten, sleutels, spijkers, schroeven en andere kleine metalen voorwerpen die overbrugging van de contacten kunnen veroorzaken.** Kortsluiting tussen de accucontacten kan brandwonden of brand tot gevolg hebben. Bij in dit verband ontstane schade door kortsluiting vervalt elke aanspraak op garantie door Bosch.
- ▶ **Bij verkeerd gebruik kan vloeistof uit de accu lekken. Voorkom contact daarmee. Bij onvoorzien contact met water afspoelen. Als de vloeistof in de ogen komt, dient u bovendien een arts te raadplegen.** Gelekte accuvloeistof kan tot huidirritaties en brandwonden leiden.
- ▶ **Bij beschadiging en onjuist gebruik van de accu kunnen er dampen vrijkomen. Zorg voor frisse lucht en raadpleeg bij klachten een arts.** De dampen kunnen de luchtwegen irriteren.
- ▶ **Laad de accu alleen met originele Bosch-oplaadapparaten op.** Bij gebruik van niet-originele Bosch-oplaadapparaten kan brandgevaar niet worden uitgesloten.
- ▶ **Gebruik de accu alleen in combinatie met een eBike met origineel Bosch eBike-aandrijfsysteem.** Alleen zo wordt de accu tegen gevaarlijke overbelasting beschermd.

- ▶ **Gebruik alleen originele Bosch accu's die door de fabrikant voor uw eBike zijn toegestaan.** Het gebruik van andere accu's kan tot letsel en brandgevaar leiden. Bij gebruik van andere accu's wordt door Bosch geen aansprakelijkheid aanvaard en geen garantie geboden.
- ▶ **Lees de veiligheids- en overige voorschriften in de gebruiksaanwijzing van het oplaadapparaat, de gebruiksaanwijzing van aandrijfeenheid en bedieningscomputer en de gebruiksaanwijzing van de eBike en neem deze in acht.**

Product- en vermogensbeschrijving

Afgebeelde componenten (zie pagina 4 – 5)

De componenten zijn genummerd zoals op de pagina's met afbeeldingen.

Alle afbeeldingen van fietsonderdelen behalve de accu's en hun houders zijn schematisch en kunnen afwijken van de onderdelen van uw eBike.

- 19 Houder van bagagedrageraccu
- 20 Bagagedrageraccu
- 21 Bedrijfs- en oplaadindicatie
- 22 Aan/uit-toets
- 23 Sleutel van accuslot
- 24 Accuslot
- 25 Bovenste houder van standaardaccu
- 26 Standaardaccu
- 27 Onderste houder van standaardaccu
- 28 Draagriem
- 29 Oplaadapparaat

Technische gegevens

Lithiumionaccu		PowerPack 300	PowerPack 400
Zaaknummer			
– Standaardaccu zwart		0 275 007 500	0 275 007 503
– Standaardaccu wit		0 275 007 501	0 275 007 504
– Bagagedrageraccu		0 275 007 502	0 275 007 505
Nominale spanning	V=	36	36
Nominale capaciteit	Ah	8,2	11
Energie	Wh	300	400
Bedrijfstemperatuur	°C	– 10 ... + 40	– 10 ... + 40
Bewaartemperatuur	°C	– 10 ... + 60	– 10 ... + 60
Toegestaan oplaadtemperatuurbereik	°C	0 ... + 40	0 ... + 40
Gewicht, ca.	kg	2,5	2,5
Beschermingsklasse		IP 54 (stof- en spatwaterbescherming)	IP 54 (stof- en spatwaterbescherming)

Montage

- **Plaats de accu alleen op een schone ondergrond.** Voor kom in het bijzonder het vuil worden van de oplaadaansluiting en de contacten, bijv. door zand of aarde.

Accu voor het eerste gebruik controleren

Controleer de accu voordat u deze voor de eerste keer op laadt of met uw eBike gebruikt.

Druk daarvoor op de aan-uit-toets **22** voor het inschakelen van de accu. Als er geen led van de oplaadindicatie **21** brandt, is de accu mogelijk beschadigd.

Als er minstens een led brandt, maar niet alle leds van de oplaadindicatie **21** branden, dient u de accu voor het eerste gebruik volledig op te laden.

- **Laad een beschadigde accu niet op en gebruik deze niet.** Neem contact op met een erkende rijwielhandel.

Accu opladen

- **Gebruik alleen het met uw eBike meegeleverde originele Bosch-oplaadapparaat of een origineel Bosch-oplaadapparaat van hetzelfde type.** Alleen dit oplaadapparaat is afgestemd op de bij de eBike gebruikte lithiumionaccu.

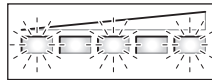
Opmerking: De accu wordt gedeeltelijk opgeladen geleverd. Om de volledige capaciteit van de accu te verkrijgen, laadt u voor het eerste gebruik de accu volledig met het oplaadapparaat op.

De accu moet voor het opladen uit de eBike worden genomen.

Lees voor het opladen van de accu de gebruiksaanwijzing van het oplaadapparaat en neem de voorschriften in acht.

De accu kan op elk moment worden opgeladen zonder de levensduur te verkorten. Een onderbreking van het opladen schaadt de accu niet.

De accu is voorzien van een temperatuurbewaking die ervoor zorgt dat de accu alleen in het temperatuurbereik tussen 0 °C en 40 °C kan worden opgeladen.



Bevindt de accu zich buiten het oplaadtemperatuurbereik, knipperen drie leds van de oplaadindicatie **21**. Maak de accu

los van het oplaadapparaat en laat deze op temperatuur komen.

Sluit de accu pas weer aan op het oplaadapparaat als deze de toegestane oplaadtemperatuur heeft bereikt.

Oplaadindicatie

De vijf groene leds van de oplaadindicatie **21** geven de oplaadtoestand van de accu aan als de accu ingeschakeld is.

Daarbij komt elke led overeen met ca. 20 % van de capaciteit. Als de accu volledig is opgeladen, branden alle vijf leds.

De oplaadtoestand van de ingeschakelde accu wordt bovendien in de bedieningscomputer aangegeven. Lees daarvoor de gebruiksaanwijzing van aandrijfeenheid en bedieningscomputer en neem de voorschriften in acht.

Als de capaciteit van de accu daalt beneden 5 %, gaan alle leds van de oplaadindicatie **21** van de accu uit. Er is echter nog een indicatiefunctie van de bedieningscomputer.

Accu inzetten of verwijderen (zie afbeeldingen C – D)

- **Schakel de accu altijd uit als u deze in de houder plaatst of uit de houder neemt.**

Om de accu te kunnen plaatsen, moet de sleutel **23** in het slot **24** steken en het slot moet geopend zijn.

Voor het **plaatsen van de standaardaccu 26** zet u deze met de contacten op de onderste houder **27** van de eBike. Kantel de accu tot deze niet meer verder kan in de bovenste houder **25**.

Voor het **plaatsen van de bagagedrageraccu 20** duwt u deze met de contacten naar voren in de houder **19** in de bagagedrager tot de accu vastklikt.

Controleer of de accu stevig vast zit. Sluit de accu altijd met het slot **24** af. Anders kan het slot opengaan en kan de accu uit de houder vallen.

Trek de sleutel **23** na het afsluiten altijd uit het slot **24**. Daarmee voorkomt u dat de sleutel eruit valt of de accu van een geparkeerde eBike door anderen wordt meegenomen.

Voor het **verwijderen van de standaardaccu 26** schakelt u deze uit en opent u het slot met de sleutel **23**. Kantel de accu uit de bovenste houder **25** en trek deze aan de draagriem **28** uit de onderste houder **27**.

Voor het **verwijderen van de bagagedrageraccu 20** schakelt u deze uit en opent u het slot met de sleutel **23**. Trek de accu uit de houder **19**.

Gebruik

Ingebruikneming

► **Gebruik alleen originele Bosch accu's die door de fabrikant voor uw eBike zijn toegestaan.** Het gebruik van andere accu's kan tot letsel en brandgevaar leiden. Bij gebruik van andere accu's wordt door Bosch geen aansprakelijkheid aanvaard en geen garantie geboden.

In- en uitschakelen

Het inschakelen van de accu is een van de mogelijkheden om het eBike-systeem in te schakelen. Lees daarvoor de gebruiksaanwijzing van aandrijvingseenheid en bedieningscomputer en neem de voorschriften in acht.

Controleer voor het inschakelen van de accu of het eBike-systeem dat het slot **24** afgesloten is.

Opmerking: De pedalen van de eBike dienen bij het inschakelen van het eBike-systeem niet belast te zijn. Anders wordt het vermogen van de eBike-aandrijving beperkt.

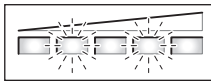
Als u de accu wilt **inschakelen**, drukt u op de aan-uit-toets **22**. De leds van de indicatie **21** gaan branden en geven tegelijkertijd de oplaadtoestand aan.

Opmerking: Als de capaciteit van de accu onder 5 % daalt, brandt er geen led van de oplaadindicatie **21**. Alleen op de bedieningscomputer is herkenbaar of het eBike-systeem is ingeschakeld.

Als u de accu wilt **uitschakelen**, drukt u opnieuw op de aan-uit-toets **22**. De leds van de indicatie **21** gaan uit. Het eBike-systeem wordt daarmee eveneens uitgeschakeld.

Als er ca. 10 minuten geen vermogen van de eBike-aandrijving wordt opgevraagd (bijv. omdat de eBike stilstaat) en er geen toets op de bedieningscomputer of bedieningseenheid van de eBike wordt ingedrukt, worden het eBike-systeem en daardoor ook de accu automatisch uitgeschakeld om energie te besparen.

De accu is door „Electronic Cell Protection (ECP)” beschermd tegen overmatig ontladen, overmatig opladen, oververhitting en kortsluiting. Bij gevaar wordt de accu door een veiligheidschakeling automatisch uitgeschakeld.



Wordt een defect van de accu herkend, knippen twee leds van de oplaadindicatie **21**. Neem in dit geval contact op met een erkende rijwielhandel.

Aanwijzingen voor de optimale omgang met de accu

De levensduur van de accu kan worden verlengd als deze goed wordt behandeld en met name bij de juiste temperatuur wordt bewaard.

Met toenemende ouderdom zal de capaciteit van de accu echter ook bij goede verzorging afnemen.

Een duidelijk kortere gebruiksduur na het opladen geeft aan dat de accu versleten is. U kunt de accu vervangen.

Mocht de draagriem **28** van de standaardaccu defect zijn, dient u deze door een rijwielhandel te laten vervangen.

Accu voor en tijdens het bewaren opladen

Laad de accu op tot ongeveer 60 % (3 tot 4 leds van de oplaadindicatie **21** branden) voordat u deze voor lange tijd opbergt.

Controleer de oplaadtoestand na 6 maanden. Als er nog maar één led van de oplaadindicatie **21** brandt, dient u de accu weer tot ca 60 % op te laden.

Opmerking: Als de accu lange tijd in lege toestand wordt bewaard, kan deze ondanks de geringe zelfontlading worden beschadigd en kan de opslagcapaciteit sterk worden verminderd.

Het is niet aan te raden de accu langdurig aan het oplaadapparaat aangesloten te laten.

Bewaaromstandigheden

Bewaar de accu bij voorkeur op een droge en goed geventileerde plaats. Bescherm deze tegen vocht en water. Bij ongunstige weersomstandigheden is het bijv. aan te raden om de accu van de eBike te nemen en tot het volgende gebruik in een gesloten ruimte te bewaren.

De accu kan bij temperaturen van $-10\text{ }^{\circ}\text{C}$ tot $+60\text{ }^{\circ}\text{C}$ worden bewaard. Voor een lange levensduur is echter bewaren bij een temperatuur van ca. $20\text{ }^{\circ}\text{C}$ gunstig.

Let erop dat de maximale bewaartemperatuur niet wordt overschreden. Laat de accu bijv. in de zomer niet in de auto liggen en bewaar deze niet in fel zonlicht.

Onderhoud en service

Onderhoud en reiniging

Houd de accu schoon. Reinig deze voorzichtig met een zachte, vochtige doek. De accu mag niet in water worden ondergedompeld of met een waterstraal worden gereinigd.

Als de accu niet meer werkt, dient u contact op te nemen met een erkende rijwielhandel.

Klantenservice en advies

Neem bij alle vragen over het vervoer van de accu's contact op met een erkende rijwielhandel.

► **Noteer fabrikant en nummer van de sleutel 23.** Neem bij verlies van de sleutels contact op met een erkende rijwielhandel. Vermeld daarbij fabrikant en nummers van de sleutels.

Contactgegevens van de erkende rijwielhandel vindt u op de internetpagina www.bosch-ebike.com

Vervoer

Voor de accu's gelden de eisen ten aanzien van gevaarlijke stoffen. De accu's kunnen door particuliere gebruikers zonder verdere voorwaarden over de weg worden vervoerd.

Bij vervoer door zakelijke gebruikers of bij vervoer door derden (bijv. luchtvervoer of vervoersbedrijf) moeten bijzondere eisen ten aanzien van verpakking en markering in acht worden genomen (bijv. ADR-voorschriften). Indien gewenst kan bij de voorbereiding van de verzending een deskundige voor gevaarlijke stoffen worden geraadpleegd.

Verzend de accu's alleen als de behuizing onbeschadigd is. Plak blootliggende contacten af en verpak de accu zodanig dat deze niet in de verpakking beweegt. Neem ook eventuele overige nationale voorschriften in acht.

Neem bij alle vragen over het vervoer van de accu's contact op met een erkende rijwielhandel. Bij de rijwielhandel kunt u ook een geschikte transportverpakking bestellen.

Afvalverwijdering



Accu's, toebehoren en verpakkingen dienen op een voor het milieu verantwoorde manier te worden hergebruikt.

Gooi de accu's niet bij het huisvuil.

Alleen voor landen van de EU:



Volgens de Europese richtlijn 2002/96/EG moeten niet meer bruikbare elektrische apparaten en volgens de Europese richtlijn 2006/66/EG moeten defecte of lege accu's en batterijen apart worden ingezameld en op een voor het milieu verantwoorde wijze worden gerecycled.

Geef niet meer te gebruiken accu's af bij een erkende rijwielhandel.



Li-ion:

Lees de aanwijzingen in het gedeelte „Vervoer”, pagina Nederlands – 11 en neem deze in acht.

Wijzigingen voorbehouden.

Oplaadapparaat Charger

Veiligheidsvoorschriften



Lees alle veiligheidsvoorschriften en aanwijzingen.

Als de veiligheidsvoorschriften en aanwijzingen niet in acht worden genomen, kan dit

een elektrische schok, brand en/of ernstig letsel tot gevolg hebben.

Bewaar alle veiligheidsvoorschriften en aanwijzingen voor toekomstig gebruik.

Het in deze gebruiksaanwijzing gebruikte begrip „accu” heeft zowel betrekking op standaardaccu's (accu's bevestigd aan het fietsframe) als op bagagedrageraccu's (accu bevestigd in de bagagedrager).



Houd het oplaadapparaat uit de buurt van regen en vocht. Bij het binnendringen van water in een oplaadapparaat bestaat het risico van een elektrische schok.

► **Laad alleen voor eBikes toegestane Bosch-lithiumion-accu's op. De accuspanning moet bij de oplaadspanning van het oplaadapparaat passen.** Anders bestaat er brand- en explosiegevaar.

► **Houd het oplaadapparaat schoon.** Door vervuiling bestaat gevaar voor een elektrische schok.

► **Controleer voor elk gebruik oplaadapparaat, kabel en stekker. Gebruik het oplaadapparaat niet als u een beschadiging hebt vastgesteld. Open het oplaadapparaat niet zelf en laat het alleen door gekwalificeerd personeel en alleen met originele vervangingsonderdelen repareren.** Beschadigde oplaadapparaten, kabels en stekkers vergroten het risico van een elektrische schok.

► **Gebruik het oplaadapparaat niet op een gemakkelijk brandbare ondergrond (zoals papier of textiel) of in een brandbare omgeving.** Vanwege de bij het opladen optredende verwarming van het oplaadapparaat bestaat brandgevaar.

► **Bij beschadiging en onjuist gebruik van de accu kunnen er dampen vrijkomen. Zorg voor frisse lucht en raadpleeg bij klachten een arts.** De dampen kunnen de luchtwegen irriteren.

► **Houd toezicht op kinderen.** Daarmee wordt gewaarborgd dat kinderen niet met het oplaadapparaat spelen.

► **Kinderen en personen die op grond van hun fysieke, zintuiglijke of geestelijke vermogens, hun onervarenheid of hun gebrek aan kennis niet in staat zijn het oplaadapparaat veilig te bedienen, mogen dit oplaadapparaat niet zonder toezicht of instructie door een verantwoordelijke persoon gebruiken.** Anders bestaat het gevaar van verkeerde bediening en lichamelijk letsel.

► **Lees de veiligheids- en overige voorschriften in de gebruiksaanwijzing van de accu, de gebruiksaanwijzing van aandrijf eenheid en bedieningscomputer en de gebruiksaanwijzing van de eBike en neem deze in acht.**

► Aan de onderzijde van het oplaadapparaat bevindt zich een kort overzicht van belangrijke veiligheidsvoorschriften in het Engels, Frans en Spaans (in de afbeelding op de pagina met afbeeldingen met nummer **33** aangeduid) met de volgende inhoud:

- Neem voor een veilig gebruik de gebruiksaanwijzing in acht. Risico van een elektrische schok.
- Alleen in droge omgeving gebruiken.
- Laad alleen accu's van het Bosch eBike-System op. Andere accu's kunnen exploderen en letsel veroorzaken.
- Vervang het netsnoer niet. Er bestaat brand- en explosiegevaar.

Product- en vermogensbeschrijving

Afgebeelde componenten (zie pagina 6 – 7)

De componenten zijn genummerd zoals op de afbeelding van het oplaadapparaat op de pagina met afbeeldingen.

- 20 Bagagedrageraccu
- 21 Accu-oplaadindicatie
- 26 Standaardaccu
- 29 Oplaadapparaat
- 30 Apparaataansluiting
- 31 Apparaatstekker
- 32 Ventilatieopeningen
- 33 Veiligheidsvoorschriften oplaadapparaat
- 34 Oplaadstekker
- 35 Contactbus voor oplaadstekker

Technische gegevens

Oplaadapparaat	Charger	
Zaaknummer		0 275 007 905
Nominale spanning	V~	207 – 264
Frequentie	Hz	47 – 63
Oplaadspanning accu	V ⁻⁻⁻	42
Laadstroom	A	4

Toegestaan oplaadtemperatuurbereik °C 0 ... + 40

De gegevens gelden voor nominale spanningen [U] 230 V. Bij afwijkende spanningen en bij per land verschillende uitvoeringen kunnen deze gegevens afwijken.

Oplaadapparaat	Charger	
Oplaadtijd		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Aantal accucellen		10 – 80
Bedrijfstemperatuur	°C	– 10 ... + 75
Bewaartemperatuur	°C	– 20 ... + 70
Gewicht volgens EPTA-Procedure 01/2003	kg	0,8
Beschermingsklasse		IP 40
De gegevens gelden voor nominale spanningen [U] 230 V. Bij afwijkende spanningen en bij per land verschillende uitvoeringen kunnen deze gegevens afwijken.		

Gebruik

- **Plaats de accu alleen op een schone ondergrond.** Voorkom in het bijzonder het vuil worden van de oplaadaansluiting en de contacten, bijv. door zand of aarde.

Ingebruikneming

Oplaadapparaat aansluiten (zie afbeeldingen E – F)

- **Let op de netspanning!** De spanning van de stroombron moet overeenkomen met de gegevens op het typeplaatje van het oplaadapparaat. Met 230 V aangeduide oplaadapparaten kunnen ook met 220 V worden gebruikt.

Steek de apparaatstekker **31** van het netsnoer in de apparaataansluiting **30** op het oplaadapparaat.

Sluit het netsnoer (verschilt per land) op het stroomnet aan.

Schakel de accu uit en verwijder deze uit de houder op de eBike. Lees daarvoor de gebruiksaanwijzing van de accu en neem de voorschriften in acht.

Steek de oplaadstekker **34** van het oplaadapparaat in de aansluiting **35** van de accu.

Opladen

Het opladen begint zodra het oplaadapparaat met de accu en het stroomnet verbonden is.

Opmerking: Het opladen is alleen mogelijk als de temperatuur van de accu binnen het toegestane oplaadtemperatuurbereik ligt.

Tijdens het opladen branden de leds van de oplaadindicatie **21** op de accu. Elke continu brandende led komt overeen met ca. 20 % van de capaciteit van de lading. De knipperende led geeft het opladen van de volgende 20 % aan.

- **Wees voorzichtig als u het oplaadapparaat tijdens het opladen aanraakt. Draag werkhandschoenen.** Het oplaadapparaat kan in het bijzonder bij hoge omgevingstemperaturen zeer heet worden.

Opmerking: Let erop dat het oplaadapparaat tijdens het opladen goed van lucht wordt voorzien en de ventilatieopeningen **32** aan beide zijden niet zijn afgedekt.

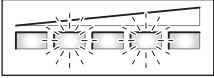
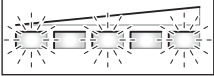
De accu is volledig opgeladen als alle vijf leds van de indicatie **21** continu branden. Het opladen wordt automatisch onderbroken.

Koppel het oplaadapparaat los van het stroomnet en de accu van het oplaadapparaat.

Als de accu van het oplaadapparaat wordt losgekoppeld, wordt de accu automatisch uitgeschakeld.

U kunt de accu nu in de eBike plaatsen.

Oorzaken en oplossingen van fouten

Oorzaak	Oplossing
	Twee leds op de accu knipperen
Accu defect	Contact opnemen met erkende rijwielhandel
	Drie leds op de accu knipperen
Accu te warm of te koud	Accu van oplaadapparaat losmaken en op temperatuur laten komen tot het oplaadtemperatuurbereik wordt bereikt. Sluit de accu pas weer aan op het oplaadapparaat als deze de toegestane oplaadtemperatuur heeft bereikt.
Geen opladen mogelijk (geen indicatie op accu)	
Stekker niet goed ingestoken.	Alle insteekverbindingen controleren
Contacten van accu vuil	Contacten van accu voorzichtig reinigen
Ventilatieopeningen 32 van oplaadapparaat verstopt of afgedekt	Ventilatieopeningen 32 reinigen en oplaadapparaat neerzetten op een plaats met voldoende luchttoevoer
Stopcontact, kabel of oplaadapparaat defect	Netspanning controleren, oplaadapparaat door rijwielhandel laten controleren
Accu defect	Contact opnemen met erkende rijwielhandel

Onderhoud en service

Onderhoud en reiniging

Mocht het oplaadapparaat niet meer werken, neem dan contact op met een erkende rijwielhandel.

Klantenservice en advies

Neem bij alle vragen over het oplaadapparaat contact op met een erkende rijwielhandel.

Contactgegevens van de erkende rijwielhandel vindt u op de internetpagina **www.bosch-ebike.com**

Afvalverwijdering

Oplaadapparaten, toebehoren en verpakkingen moeten op een voor het milieu verantwoorde wijze worden hergebruikt.

Gooi oplaadapparaten niet bij het huisvuil!

Alleen voor landen van de EU:



Volgens de Europese richtlijn 2002/96/EG over elektrische en elektronische oude apparaten en de omzetting van de richtlijn in nationaal recht moeten niet meer bruikbare oplaadapparaten apart worden ingezameld en op een voor het milieu verantwoorde wijze worden hergebruikt.

Wijzigingen voorbehouden.

Drivenhed Drive Unit Speed/ Cykelcomputer Intuvia

Sikkerhedsinstrukser



Læs alle sikkerhedsinstrukser og anvisninger. Overholdes sikkerhedsinstrukserne og anvisningerne ikke, er der risiko for elektrisk stød, brand og/eller alvorlige kvæstelser.

Opbevar alle sikkerhedsinstrukser og anvisninger til senere brug.

Begrebet „akku“, der anvendes i nærværende brugsanvisning, gælder både for standard-akkuer (akkuer med holder på cykelstel) og bagagebærer-akkuer (akkuer med holder i bagagebærer).

- ▶ **Forsøg ikke selv at åbne drivenheden. Drivenheden er vedligeholdelsesfri og må kun repareres af kvalificeret, specialiseret personale og kun med originale reservedele.** Dermed sikres størst mulig sikkerhed af drivenheden. Åbnes drivenheden uberettiget, bortfalder garantikravet.
- ▶ **Alle komponenter, der er monteret på drivenheden, og alle andre komponenter til eBike-drevet (f. eks. kædeblad, kædebladets holder, pedaler) må kun erstattes af komponenter, der er bygget på samme måde, eller af komponenter, der er godkendt af cykelproducenten specielt til din eBike.** Dermed beskyttes drivenheden mod overbelastning og beskadigelse.
- ▶ **Tag akkuen ud af eBike, før du begynder at arbejde (f. eks. montere, vedligeholde osv.) på eBike, før du transporterer den med bilen eller flyveren eller opbevarer den.** Utilsigtet betjening af start-stop-kontakten er forbundet med kvæstelsesfare.
- ▶ **Funktionen starthjælp må udelukkende bruges til at starte eBiken.** Har eBikens hjul ikke nogen kontakt med jorden, når starthjælpen bruges, kan man komme til skade.
- ▶ **Brug kun originale Bosch akkuer, der er blevet godkendt til din eBike af producenten.** Brug af andre akkuer kan føre til kvæstelser og er forbundet med brandfare. Bosch fraskriver sig ansvaret, og garantien bortfalder, hvis der bruges andre akkuer.
- ▶ **Følg alle nationale forskrifter vedr. registrering/godkendelse og brug af eBikes.**
- ▶ **Læs og følg sikkerhedsinstrukserne og anvisningerne i akkuens brugsanvisning samt i brugsanvisningen til din eBike.**

Beskrivelse af produkt og ydelse

Beregnet anvendelse

Drivenheden er udelukkende beregnet til at trække din eBike og må ikke bruges til andre formål.

eBike er beregnet til gader og veje med fast undergrund. Den er ikke godkendt til konkurrenceformål.

Illustrerede komponenter (se side 2 – 3)

Nummereringen af de illustrerede komponenter refererer til illustrationerne på den grafiske side.

Alle illustrationer af cykeldele undtagen drivenhed, cykelcomputer inkl. betjeningsenhed, hastighedssensor og tilhørende holdere er skematisk og kan afvige fra din eBike.

- 1 Taste indikatorfunktion „i“
- 2 Taste til belysning
- 3 Cykelcomputer
- 4 Holder cykelcomputer
- 5 Tænd-sluk-taste cykelcomputer
- 6 Reset-taste „RESET“
- 7 USB-bøsning
- 8 Beskyttelsesklapper til USB-bøsning
- 9 Drivenhed
- 10 Betjeningsenhed
- 11 Taste visefunktion „i“ på betjeningsenheden
- 12 Taste værdi sænkes/blade nedad „–“
- 13 Taste værdi øges/blade opad „+“
- 14 Taste starthjælp „WALK“
- 15 Fastlåsning cykelcomputer
- 16 Blokeringskrue cykelcomputer
- 17 Hastighedssensor
- 18 Egemagnet for hastighedssensor

Indikatorelementer cykelcomputer

- a Visning motoreffekt
- b Indikator understøtningsniveau
- c Tekstvisning
- d Værdivisning
- e Indikator fartmåler
- f Indikator for akkuens opladningstilstand

Tekniske data

Drivenhed		Drive Unit Speed
Typenummer		0 275 007 003
Effekt	W	350
Omdrejningsmoment på udgang maks.	Nm	50
Nominel spænding	V _{DC}	36
Driftstemperatur	°C	-5 ... +40
Opbevaringstemperatur	°C	-10 ... +50
Tæthedegrad		IP 54 (støv- og sprøjtevangsbeskyttet)
Vægt, ca.	kg	4

Cykelcomputer		Intuvia
Typenummer		1 270 020 903
Ladestrøm		
USB-tilslutning maks.	mA	500
Ladespænding		
USB-tilslutning	V	5
Driftstemperatur	°C	-5 ... +40
Opbevaringstemperatur	°C	-10 ... +50
Tæthedegrad		IP 54 (støv- og sprøjtevangsbeskyttet)
Vægt, ca.	kg	0,15

Belysning*		
Nominel spænding	V _{DC}	6
Effekt		
– forlyst	W	2,7
– baglyst	W	0,3

* afhængigt af de lovmæssige regler og bestemmelser ikke mulig i alle landespecifikke udførelser via eBike-akkuen

Montering

Isætning og udtagning af akkuen

Læs og følg akkuens brugsanvisning mht. hvordan akkuen sættes i og tages ud af eBike.

Isætning og udtagning af cykelcomputeren (se Fig. A)

Cykelcomputeren **3 sættes** i ved at skubbe den ind i holderen forfra **4**.

Cykelcomputeren **3 tages af** ved at trykke på låsen **15** og skubbe den ud af holderen fremad **4**.

► **Fjern altid cykelcomputeren, før eBike stilles fra et sted, så drevet ikke kan bruges af uberettiget tredje-mand.** eBike-systemet kan ikke tændes uden cykelcomputeren.

Det er også muligt at sikre cykelcomputeren i holderen, så den ikke kan tages ud. Demonter hertil holderen **4** fra styret. Anbring cykelcomputeren i holderen. Skru blokeringsskruen **16** nedefra ind i gevindet på holderen. Monter holderen på styret igen.

Kontrol af hastighedssensoren (se Fig. B)

Hastighedssensoren **17** og den tilhørende egemagnet **18** skal være monteret på en sådan måde, at egemagneten bevæger sig forbi hastighedssensoren i en afstand på mindst 5 mm og maks. 17 mm, når hjulet drejer en omdrejning.

Bemærk: Er afstanden mellem hastighedssensor **17** og egemagnet **18** for lille eller for stor, eller er hastighedssensoren **17** ikke tilsluttet rigtigt, fungerer fartmålerindikatoren ikke **e**, og eBike-drevet arbejder i nødkørselsprogrammet.

Løsn i dette tilfælde skruen i egemagneten **18** fastgør egemagneten på egen på en sådan måde, at den løber forbi hastighedssensorens markering i den rigtige afstand. Fremkommer der heller ikke herefter nogen hastighed i fartmålerindikatoren **e**, bedes du kontakte en autoriseret cykelforhandler.

Brug

Ibrugtagning

Forudsætninger

eBike-systemet kan kun aktiveres, hvis følgende forudsætninger er opfyldt:

- En tilstrækkeligt opladt akku er sat i (se akkuens brugsanvisning).
- Cykelcomputeren er sat rigtigt ind i holderen (se „Isætning og udtagning af cykelcomputeren“, side Dansk – 2).
- Hastighedssensoren er tilsluttet rigtigt (se „Kontrol af hastighedssensoren“, side Dansk – 2).

eBike-system tændes/slukkes

eBike-systemet **tændes** på følgende måder:

- Er cykelcomputeren allerede tændt, når den sættes ind i holderen, tændes eBike-systemet automatisk.
- Tryk kort en gang på tænd-sluk-tasten **5** på cykelcomputeren, når cykelcomputeren og akkuen er sat i.
- Tryk på akkuens tænd-sluk-tasten, når cykelcomputeren er sat i (se akkuens brugsanvisning).

Bemærk: Pedalerne på eBike må ikke være belastet, når eBike-systemet tændes, da motoreffekten ellers begrænses. I tekstvisningen **c** fremkommer fejlmeldingen „**Release pedal**“ (aflast pedal).

Er eBike-systemet ved et tilfælde blevet tændt med belastede pedaler, skal du slukke for det og så tænde for det igen uden belastning.

Drevet aktiveres, så snart du træder i pedalerne (undtagen i funktionen starthjælp, se „Tænd/sluk for starthjælpen“, side Dansk – 4). Motoreffekten retter sig efter indstillingerne på cykelcomputeren.

Så snart du holder op med at træde i pedalerne i normal funktion, eller så snart du har nået en hastighed på 45 km/h, slukkes understøtningen af drevet på eBike. Drevet aktiveres automatisk igen, så snart du træder på pedalerne, og hastigheden er under 45 km/h.

eBike-systemet **slukkes** på følgende måder:

- Tryk på tænd-sluk-tasten **5** på cykelcomputeren.
- Sluk for akkuen med dens tænd-sluk-taste (se akkuens brugsanvisning.)
- Tag cykelcomputeren ud af holderen.

Påvirkes drevet ikke i ca. 10 min (f.eks. fordi eBike står stille), og der ikke trykkes på nogen taste på cykelcomputer eller betjeningsenhed, slukker eBike-systemet automatisk for at spare på energien.

Visning og indstillinger på cykelcomputeren

Energiforsyning til cykelcomputeren

Sidder cykelcomputeren i holderen **4**, er en tilstrækkeligt ladet akku sat i eBike og er eBike-systemet tændt, forsynes cykelcomputeren med energi via eBikens akku.

Tages cykelcomputeren ud af holderen **4**, sikres energiforsyningen via en intern akku. Er den interne akku svag, når cykelcomputeren tændes, fremkommer „**Attach to bike**“ (forbind med cykel) i tekstvisningen **c** i 3 s. Herefter slukker cykelcomputeren igen.

Den interne akku oplades ved at sætte cykelcomputeren ind i holderen **4** igen (hvis en akku er sat ind i eBiken). Tænd for eBike-akkuen med dens tænd-sluk-taste (se akkuens brugsanvisning).

Du kan også oplade cykelcomputeren via USB-tilslutningen. Åbn hertil beskyttelseskappen **8**. Forbind USB-bøsningen **7** på cykelcomputeren via et passende USB-kabel med et almindeligt USB-ladeaggregat eller USB-tilslutningen på en computer (5 V ladespænding; maks. 500 mA ladestrøm). I tekstvisningen **c** på cykelcomputeren fremkommer „**USB connected**“ (USB forbundet).

Cykelcomputer tændes/slukkes

Cykelcomputeren **tændes** ved at trykke på tænd-sluk-tasten **5**. Cykelcomputeren kan (hvis den interne akku er tilstrækket ladet) også tændes, selv om den ikke sidder i holderen.

Cykelcomputeren **slukkes** ved at trykke på tænd-sluk-tasten **5**. Er cykelcomputeren ikke sat ind i holderen, slukker den automatisk, hvis tasten ikke er blevet trykket ind i 1 min for at spare på energien.

Indikator for akkuens opladningsstand

Akku-ladetilstandsindikatoren **f** viser ladetilstanden på eBike-akkuen og ikke på cykelcomputerens interne akku. eBike-akkuens ladetilstand kan ligeledes aflæses på LED-lamperne på akkuen.

I indikatoren **f** svarer hver bjælke i akkusymbolet til ca. 20 % kapacitet:



100 % til 80 % kapacitet



20 % til 5 % kapacitet, akkuen bør efterlades.



Mindre end 5 % kapacitet, det er ikke mere muligt at understøtte drevet. Ladetilstandsindikatorens LED-lamper på akkuen slukker.

Hvis eBike-belysningen kører via akkuen (landespecifikt), er der kapacitet til endnu ca. 2 timer belysning, når det tomme akkusymbol fremkommer første gang. Når symbolet begynder at blinke, fungerer belysningen herefter kun i meget kort tid.

Tages cykelcomputeren ud af holderen **4**, gemmes den sidste viste akku-ladetilstand.

Understøtningsniveau indstilles

På cykelcomputeren kan du indstille, hvor meget eBike-drevet skal understøtte dig, når du træder på pedalerne. Understøtningsniveauet kan ændres til enhver tid, også under kørslen.

Bemærk: I enkelte udførelser er det muligt, at understøtningsniveauet er forindstillet og ikke kan ændres. Det er også muligt, at færre understøtningsniveauer står til rådighed end det er angivet her.

Følgende understøtningsniveauer står maks. til rådighed:

- „**OFF**“: Drevet er slukket, eBike kan bevæges fremad ved at træde på pedalerne lige som på en normal cykel.
- „**ECO**“: Effektiv understøtning ved maks. effektivitet, til maks. rækkevidde
- „**TOUR**“: Jævn understøtning, til ture med stor rækkevidde
- „**SPORT**“: Kraftfuld understøtning, til sporty kørsel på bjergede strækninger samt til bytrafik
- „**TURBO**“: Maks. understøtning indtil høje trædefrekvenser, til sportiv kørsel

Understøtningsniveauet **øges** ved at trykke på tasten „**+**“ **13** på betjeningsenheden igen og igen, til det ønskede understøtningsniveau fremkommer i indikatoren **b**, og **sænkes** ved at trykke på tasten „**-**“ **12**.

Den fremhævede motoreffekt fremkommer i indikatoren **a**. Den maks. motoreffekt afhænger af det valgte understøtningsniveau.

Understøtningsniveau	Motoreffekt* (Kædekobling)
„ ECO “	30 %
„ TOUR “	100 %
„ SPORT “	180 %
„ TURBO “	250 %

* Motoreffekten kan afvige ved enkelte udførelser.

Tages cykelcomputeren ud af holderen **4**, gemmes det sidste viste understøtningsniveau, indikatoren **a** til motoreffekten forbliver tom.

Tænd/sluk for starthjælpen

Starthjælpen kan bruges som ekstra understøtning de første meter, hvis det er besværligt at komme i gang (som f.eks. ved lyskrydset eller oppe på bjerget).

► **Funktionen starthjælp må udelukkende bruges til at starte eBiken.** Har eBikens hjul ikke nogen kontakt med jorden, når starthjælpen bruges, kan man komme til skade.

Starthjælpen **tændes** ved at trykke på tasten „**WALK**“ **14** på betjeningsenheden og holde den nede. Drevet på eBiken tændes.

Starthjælpen **slukkes**, så snart en af følgende hændelser opstår:

- du slipper tasten „**WALK**“ **14**,
- du trykker på en anden taste på cykelcomputeren,
- du træder fremad eller hurtigt tilbage på pedalerne,
- eBikens hjul blokeres (f.eks. fordi du bremser eller støder imod en forhindring),
- hastigheden overskrider 18 km/timen.

Tænding/slukning af belysningen

To belysningsudførelser er mulige afhængigt af de landespecifikke forskrifter:

- Med cykelcomputeren kan forlys, baglys og displaybaggrundsbelysning tændes og slukkes. I denne udførelse fremkommer „**Lights on**“ (lys tændt), når der tændes for lyset, og „**Lights off**“ (lys slukket), når der slukkes for lyset, i ca. 1 s i tekstindikatoren c.
- Kun display-baggrundsbelysningen kan tændes og slukkes, for- og baglyset på eBike er uafhængige af cykelcomputeren.

På begge udførelser trykkes på tasten **2** for at **tænde og slukke for belysningen**.

Hastigheds- og afstandsvisninger

I **fartmålerindikatoren e** vises altid den aktuelle hastighed.

I **funktionsindikatoren** (kombination af tekstvisning **c** og værdvisning **d**) kan der vælges mellem følgende funktioner:

- „**Range**“ (**rækkevidde**): Forventet rækkevidde for den eksisterende akkuladning (ved ensblivende betingelser som f.eks. understøtningsniveau, strækingsprofil osv.)
- „**Distance**“ (**strækning**): Afstand, der er tilbagelagt siden sidste reset
- „**Trip time**“ (**køretid**): Køretid siden sidste reset
- „**Avg. Speed**“ (**gennemsnit**): Gennemsnitlig hastighed, der er nået siden sidste reset
- „**Max. Speed**“ (**maks.**): Maksimal hastighed, der er nået siden sidste reset
- „**Clock**“ (**klokkeslæt**): Aktuelt klokkeslæt

Tryk for at **skifte i indikatorfunktionen** på tasten „**i**“ **1** på cykelcomputeren eller på tasten „**i**“ **11** på betjeningsenheden igen og igen, til den ønskede funktion vises.

Til **reset af „Distance“** (strækning), „**Trip time**“ (køretid) og „**Avg. Speed**“ (gennemsnit) skift da til en af disse tre funktioner og tryk så på tasten „**RESET**“ **6**, indtil indikatoren står på nul (0). Dermed er også værdierne for de to andre funktioner nulstillet.

Til **reset af „Max. Speed**“ (maksimal) skift da til denne funktion og tryk så på tasten „**RESET**“ **6**, til indikatoren står på nul (0).

Tages cykelcomputeren ud af holderen **4**, er alle funktionernes værdier gemt og kan stadigvæk vises.

Grundindstillinger vises/tilpasses

Indikatorer og ændringer af grundindstillingerne er mulige uafhængigt af, om cykelcomputeren er sat ind i holderend **4** eller ej.

Der springes til menuen Grundindstillinger ved at trykke på tasten „**RESET**“ **6** og tasten „**i**“ **1** samtidigt, til **c** „**Configurati-on**“ (indstillinger) fremkommer i tekstvisningen.

Tryk for at **skifte mellem grundindstillingerne** på tasten „**i**“ **1** på cykelcomputeren igen og igen, til den ønskede grundindstilling vises. Er cykelcomputeren sat ind i holderen **4**, kan du også trykke på tasten „**i**“ **11** på betjeningsenheden.

Grundindstillingerne ændres (forringe eller blade nedad) ved at trykke på tænd-sluk-tasten **5** ved siden af indikatoren „–“ eller (øge eller blade opad) ved at trykke på tasten belysning **2** ved siden af indikatoren „+“.

Er cykelcomputeren sat ind i holderen **4**, kan ændringen også gennemføres med tasterne „–“ **12** eller „+“ **13** på betjeningsenheden.

Funktionen forlades og en ændret indstilling gemmes ved at trykke på tasten „**RESET**“ **6** i 3 s.

Der kan vælges mellem følgende grundindstillinger:

- „**unit km/mi**“ (**enhed km/mi**): Du kan få vist hastighed og afstand i kilometer eller miles.
- „**time format**“ (**tidsformat**): Du kan få vist klokkeslættet i et 12-timers- eller i 24-timers-format.
- „**clock**“ (**klokkeslæt**): Det aktuelle klokkeslæt kan indstilles. Et længere tryk på indstillingstasterne fremskynder ændringen af klokkeslættet.
- „**English**“ (**engelsk**): Sproget i tekstvisningerne kan ændres. Der kan vælges mellem følgende sprog: tysk, engelsk, fransk, spansk, italiensk og nederlandsk.
- „**odometer**“ (**strækning total**): Visning af den samlede strækning, der er tilbagelagt med eBiken (kan ikke ændres)
- „**power-on hours**“ (**driftstid total**): Visning af den samlede køretid med eBiken (kan ikke ændres)

Visning af fejlkode

eBike-systemets komponenter kontrolleres automatisk hele tiden. Konstateres en fejl, fremkommer den pågældende fejlkode i tekstvisningen **c**.

Tryk på en vilkårlig taste på cykelcomputeren **3** eller på betjeningsenheden **10** for at vende tilbage til standardvisningen.

Drevet slukkes i givet fald automatisk afhængigt af fejltypen. En viderekørsel uden understøtning er dog til enhver tid mulig. Før yderligere kørsler bør eBike kontrolleres.

► **Lad alt kontrol- og reparationsarbejde udelukkende udføre af en autoriseret cykelforhandler.** Vises en fejl, selv om den er blevet afhjulpet, bedes du ligeledes kontakte en autoriseret cykelforhandler.

Code	Årsag	Afhjælpning
100	Intern fejl på drivenheden	Få drivenheden kontrolleret
101	Forbindelsesproblem for drivenheden	Få tilslutninger og forbindelser kontrolleret
102	Fejl på hastighedssensoren	Få hastighedssensoren kontrolleret
103*	Forbindelsesproblem for belysningen	Få tilslutninger og forbindelser kontrolleret
104	Forbindelsesproblem for cykelcomputeren	Få tilslutninger og forbindelser kontrolleret
105	Drivenhedens temperatur er for høj (over 40 °C)	Lad drivenheden afkøle. En viderekørsel uden eBike-drevet er mulig og fremskynder afkølingen af drivenheden.
200	Intern elektronisk fejl på akkuen	Få akkuen kontrolleret
201	Akkuens temperatur er for høj (over 40 °C)	Lad akkuen afkøle. En viderekørsel uden eBike-drevet er mulig og fremskynder afkølingen af akkuen.
202	Akkuens temperatur er for lav (under -10 °C)	Lad akkuen opvarme langsomt i et varmt rum.
203	Forbindelsesproblem for akkuen	Få tilslutninger og forbindelser kontrolleret
204	Forkert akkupoling	Oplad akkuen med det originale Bosch ladeaggregat som beskrevet i dets brugsanvisning.
410	En eller flere taster på cykelcomputeren er blokeret.	Kontroller, om taster er klemt fast f. eks. på grund af indtrængt snavs. Rengør i givet fald tasterne.
414	Forbindelsesproblem med betjeningsenheden	Få tilslutninger og forbindelser kontrolleret
418	En eller flere taster på betjeningsenheden er blokerede.	Kontroller, om taster er klemt fast f. eks. på grund af indtrængt snavs. Rengør i givet fald tasterne.
422	Forbindelsesproblem for drivenheden	Få tilslutninger og forbindelser kontrolleret
423	Forbindelsesproblem for akkuen	Få tilslutninger og forbindelser kontrolleret
424	Kommunikationsfejl blandt komponenterne	Få tilslutninger og forbindelser kontrolleret
430	Cykelcomputerens interne akku er tom	Oplad cykelcomputeren (i holderen eller via USB-tilslutningen)
490	Intern fejl på betjeningscomputeren	Få cykelcomputeren kontrolleret

* Kun til eBike-belysning via akkuen (landespecifik)

Energiforsyning af eksterne apparater via USB-tilslutning

Ved hjælp af USB-tilslutningen kan de fleste apparater, hvis energiforsyning er mulig via USB (f. eks. diverse mobiltelefoner), drives og oplades.

En opladning forudsætter, at cykelcomputeren og en tilstrækkeligt opladet akku er anbragt i eBike.

Åbn beskyttelseskappen **8** på USB-tilslutningen på cykelcomputeren. Forbind USB-tilslutningen på det eksterne apparat med USB-bøsningen **7** på cykelcomputeren via et passende USB-kabel.

Henvisninger vedr. kørsel med eBike-systemet

Hvornår arbejder eBike-drevet?

eBike-drevet understøtter dig under kørslen, så længe du træder i pedalerne. Understøtningen fungerer kun, så længe der trædes i pedalerne. Motoreffekten afhænger altid af den kraft, der investeres, når der trædes i pedalerne.

Investerer du lidt kraft, er understøtningen ikke så stor, som hvis du investerer meget kraft. Det gælder uafhængigt af understøtningsniveauet.

eBike-drevet slukker automatisk ved hastigheder over 45 km/h. Underskriver hastigheden 45 km/h, står drevet igen automatisk til rådighed.

En undtagelse gælder for funktionen starthjælp, hvor du kan køre på eBike uden at træde på pedalerne ved lav hastighed.

Du kan til enhver tid bruge eBike som en almindelig cykel, og så uden understøtning; dette gøres ved at slukke for eBike-systemet eller ved at stille understøtningsniveauet på „OFF“.

Det samme gælder, hvis akkuen er tom.

Samspil mellem eBike-systemet og gearet

Også med eBike-drevet bør du bruge gearsystemet som på en normal cykel (læs brugsanvisningen til din eBike).

Uafhængigt af gearsystemets type tilrådes det af afbryde trædningen kort under gearskiftet. Derved gøres det nemmere at skifte gear og drivstrengen slides ikke så hurtigt.

Vælges det rigtige gear, kan du ved ensblivende kraftforbrug øge hastigheden og rækkevidden.

De første erfaringer

Det anbefales at samle de første anbefalinger med eBike på gader og veje med lidt trafik.

Prøv forskellige understøtningsniveauer. Så snart du føler dig sikker, kan du også køre med eBike lige som en almindelig cykel på gader og veje med almindelig trafik.

Test rækkevidden for din eBike under forskellige betingelser, før du planlægger længere og mere krævende ture.

Påvirkninger af rækkevidden

Rækkevidden påvirkes af mange faktorer som f.eks.:

- Understøtningsniveau,
- Gearskifteadfærd,
- Dækkenes og dæktrykkets art,
- Akkuens alder og pasningstilstand,
- Strækingsprofil (stigninger) og -beskaffenhed (kørebanens belægning),
- Modvind og omgivelsestemperatur,
- Vægt for eBike, cyklist og bagage.

Derfor er det ikke muligt at forudsige rækkevidden konkret, før du starter en cykeltur med din eBike. Generelt gælder dog følgende:

- Ved **samme** motoreffekt fra eBike-drevet: Jo mindre kraft du skal bruge for at nå en bestemt hastighed (f.eks. fordi gearsystemet bruges optimalt), jo mindre energi har eBikens drev brug for og jo større er rækkevidden, som en akkueladning kan klare.
- Jo **højere** understøtningsniveauet vælges ved ellers ens betingelser, desto kortere er rækkevidden.

Omhyggelig pasning af din eBike

Følg drifts- og opbevaringstemperaturerne for eBike-komponenterne. Beskyt drivenhed, cykelcomputer og akku mod ekstreme temperaturer (f.eks. fra intensive solstråler uden samtidig udluftning). Komponenterne (især akkuen) kan blive beskadiget som følge af ekstreme temperaturer.

Vedligeholdelse og service

Vedligeholdelse og rengøring

Hold alle komponenter rene på din eBike, især kontakterne til akku og tilhørende holder. Rengør den forsigtigt med en fugtig, blød klud.

Alle komponenter inkl. drivenhed må hverken dyppes i vand eller rengøres med en højtryksrenser.

Til service eller reparation af eBike bedes du kontakte en autoriseret cykelforhandler.

Kundeservice og kunderådgivning

Ved alle spørgsmål vedr. eBike-systemet og dets komponenter bedes du kontakte en autoriseret cykelforhandler.

Kontaktdata for autoriserede cykelforhandlere findes på internetsiden www.bosch-ebike.com

Transport


Akkuerne skal overholde kravene i retten om farligt gods. Akkuerne kan transporteres af den private bruger på gader og veje uden yderligere pålæg.

Transporteres de af erhvervsmæssige brugere eller af tredjemand (f.eks. lufttransport eller spedition), skal særlige krav til emballage og mærkning overholdes (f.eks. forskrifter fra ADR). Her skal man efter behov kontakte en faregodsekspert, før forsendelsesstykket forberedes.

Send kun akkuerne, hvis huset er ubeskadiget. Tilklæb åbne kontakter og indpak akkuen på en sådan måde, at den ikke kan bevæge sig i emballagen. Følg også eventuelle yderligere nationale forskrifter.


Spørgsmål vedr. transport af akkuerne bedes stillet til en autoriseret cykelforhandler. Hos forhandleren kan du også bestille en egnet transportemballage.

Bortskaffelse

 Drivenhed, cykelcomputer inkl. betjeningsenhed, akku, hastighedssensor, tilbehør og emballage skal genbruges på en miljøvenlig måde.

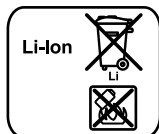
Smid ikke eBikes og deres komponenter ud sammen med det almindelige husholdningsaffald!

Gælder kun i EU-lande:

 Iht. det europæiske direktiv 2002/96/EF skal kasseret elektriværktøj og iht. det europæiske direktiv 2006/66/EF skal defekte eller opbrugte akkuer/batterier indsamles separat og genbruges iht. gældende miljøforskrifter.

Akkuen, der er integreret i cykelcomputeren, må kun tages ud, når den skal bortskaffes. Cykelcomputeren kan blive ødelagt, hvis husets skal åbnes.

Aflever gamle akkuer og cykelcomputere til en autoriseret cykelforhandler.



Li-Ion:

Læs og overhold henvisningerne i afsnit „Transport“, side Dansk – 6.

Ret til ændringer forbeholdes.

Li-ion-akku PowerPack

Sikkerhedsinstrukser



Læs alle sikkerhedsinstrukser og anvisninger. Overholdes sikkerhedsinstrukserne og anvisningerne ikke, er der risiko for elektrisk stød, brand og/eller alvorlige kvæstelser.

Opbevar alle sikkerhedsinstrukser og anvisninger til senere brug.

Begrebet „akku“, der anvendes i nærværende brugsanvisning, gælder både for standard-akkuer (akkuer med holder på cykelstel) og bagagebærer-akkuer (akkuer med holder i bagagebærer), medmindre der refereres udtrykkeligt til konstruktionen.

- ▶ **Tag akkuen ud af eBike, før du begynder at arbejde (f. eks. montere, vedligeholde osv.) på eBike, før du transporterer den med bilen eller flyveren eller opbevarer den.** Utilslaget betjening af start-stop-kontakten er forbundet med kvæstelsesfare.
- ▶ **Åbn ikke akkuen.** Fare for kortslutning. Garantien bortfalder, hvis akkuen åbnes.



Beskyt akkuen mod varme (f. eks. også mod varme solstråler), brand og dypning i vand. Fare for eksplosion.

- ▶ **Ikke benyttede akkuer må ikke komme i berøring med kontorclips, mønter, nøgler, søm, skruer eller andre små metalgenstande, da disse kan kortslutte kontakterne.** En kortslutning mellem akku-kontakterne øger risikoen for kvæstelser i form af forbrændinger eller brand. Opstår der i denne sammenhæng kortslutningsskader, bortfalder ethvert garantikrav over for Bosch.
- ▶ **Hvis akkuen anvendes forkert, kan der slippe væske ud af akkuen. Undgå at komme i kontakt med denne væske. Hvis det alligevel skulle ske, skylles med vand. Søg læge, hvis væsken kommer i øjnene.** Udstrømmende akku-væske kan give hudirritation eller forbrændinger.
- ▶ **Beskadiges akkuen eller bruges den forkert, kan der sive dampe ud. Tilfør frisk luft og søg læge, hvis du føler dig utilpas.** Dampene kan irritere luftvejene.
- ▶ **Lad kun akkuen med originale ladeaggregater fra Bosch.** Bruges ikke originale Bosch ladeaggregater, kan fare for brand ikke udelukkes.
- ▶ **Brug kun akkuen i forbindelse med eBikes med originalt Bosch eBike-drivsystem.** Kun på denne måde beskyttes akkuen mod farlig overbelastning.

- ▶ **Brug kun originale Bosch akkuer, der er blevet godkendt til din eBike af producenten.** Brug af andre akkuer kan føre til kvæstelser og er forbundet med brandfare. Bosch fraskriver sig ansvaret, og garantien bortfalder, hvis der bruges andre akkuer.
- ▶ **Læs og følg sikkerhedsinstrukserne og anvisningerne i brugsanvisningerne til ladeaggregat og drivenhed/cykelcomputer samt i brugsanvisningen til din eBike.**

Beskrivelse af produkt og ydelse

Illustrerede komponenter (se side 4 – 5)

Nummereringen af de illustrerede komponenter refererer til illustrationerne på de grafiske side. Alle illustrationer af cykeldele undtagen akkuerne og de tilhørende holdere er skematiske og kan afvige fra din eBike.

- 19 Holder til bagagebærer-akku
- 20 Bagagebærer-akku
- 21 Drifts- og ladetilstandsvisning
- 22 Start-stop-tasten
- 23 Nøgle til akku-lås
- 24 Akku-lås
- 25 Øverste holder til standard-akku
- 26 Standard-akku
- 27 Nederste holder til standard-akku
- 28 Bærerem
- 29 Ladeaggregat

Tekniske data

Li-ion-akku		PowerPack 300	PowerPack 400
Typenummer			
– Standard-akku sort		0 275 007 500	0 275 007 503
– Standard-akku hvid		0 275 007 501	0 275 007 504
– Bagagebærer-akku		0 275 007 502	0 275 007 505
Nominel spænding	V=	36	36
Nominel kapacitet	Ah	8,2	11
Energi	Wh	300	400
Driftstemperatur	°C	–10... +40	–10... +40
Opbevaringstemperatur	°C	–10... +60	–10... +60
Tilladt temperaturområde for opladning	°C	0... +40	0... +40
Vægt, ca.	kg	2,5	2,5
Tæthedegrad		IP 54 (støv- og sprøjtevandsbeskyttet)	IP 54 (støv- og sprøjtevandsbeskyttet)

Montering

► **Stil kun akkuen på rene overflader.** Undgå især en tilsmudsning af ladebøsningen og kontakterne (f.eks. fra sand eller jord).

Kontrol af akku før første brug

Kontroller akkuen, før den oplades første gang eller før du bruger den sammen med din eBike.

Tryk hertil på tænd-sluk-tasten **22** for at tænde for akkuen. Lyser der ikke nogen LED-lampe i ladetilstandsindikatoren **21**, er akkuen evt. beskadiget.

Lyser mindst en LED-lampe, men ikke alle LED-lamper i ladetilstandsindikatoren **21**, oplades akkuen helt, før den tages i brug første gang.

► **Oplad ikke en beskadiget akku og tag den ikke i brug.**
Kontakt en autoriseret cykelforhandler.

Akku lades

► **Brug kun det originale ladeaggregat fra Bosch, der følger med din eBike, eller et ladeaggregat, der er bygget på samme måde.** Kun dette ladeaggregat er afstemt i forhold til den Li-ion-akku, der bruges på din eBike.

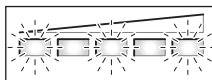
Bemærk: Akkuen er til dels opladet ved udleveringen. For at sikre at akkuen fungerer 100 %, oplades den fuldstændigt i ladeaggregatet, før den tages i brug første gang.

Akkuen skal tages ud af eBiken for at blive opladt.

Læs og følg ladeaggregatets brugsanvisning vedr. opladning af akkuen.

Akkuen kan oplades til enhver tid, uden at levetiden forkortes. En afbrydelse af opladningen beskadiger ikke akkuen.

Akkuen er udstyret med en temperatuervåkning, som kun tillader en opladning i et temperaturområde mellem 0 °C og 40 °C.



Findes akkuen uden for ladetemperaturområdet, blinker tre LED-lamper på ladetilstandsindikatoren **21**. Afbryd akkuen

fra ladeaggregatet og lad den temperere.

Tilslut først akkuen til ladeaggregatet, når den har nået den tilføjede ladetemperatur.

Ladetilstandsindikator

De fem grønne LED-lamper i ladetilstandsindikatoren **21** viser akkuens ladetilstand, når akkuen er tændt.

Hver LED-lampe svarer til ca. 20 % af kapaciteten. Når akkuen er helt opladt, lyser alle fem LED-lamper.

Ladetilstanden for den tændte akku vises desuden i cykelcomputeren. Læs og følg hertil brugsanvisningen for driftenheden og cykelcomputeren.

Er akkuens kapacitet under 5 %, slukker alle LED-lamper i ladetilstandsindikatoren **21** på akkuen, dog er der endnu en indikatorfunktion i cykelcomputeren.

Isætning og udtagning af akkuen (se Fig. C – D)

► **Sluk altid for akkuen, før du sætter den ind i holderen eller tager den ud af holderen.**

For at akkuen kan sættes i, skal nøglen **23** sidde i låsen **24**, og låsen være låst op.

Til **isætning af standard-akkuen 26** sættes dens kontakter på den nederste holder **27** på eBiken. Vip den helt ind i den øverste holderen **25**.

Til **isætning af bagagebærer-akkuen 20** skubbes dens kontakter frem, til den falder i hak i holderen **19** i bagagebæreren. Kontroller, at akkuen sidder fast. Aflås altid akkuen med låsen **24**, da låsen ellers kan åbne, og akkuen kan falde ud af holderen.

Fjern altid nøglen **23** fra låsen **24** efter aflåsningen. Dermed forhindrer du, at nøglen falder ud, og at akkuen fjernes af en uberettiget tredjemand, når eBiken stilles fra.

Til **udtagning af standard-akkuen 26** slukkes den, og låsen åbnes med nøglen **23**. Vip akkuen ud af den øverste holder **25** og træk den vha. bæreremmen **28** ud af den nederste holder **27**.

Til **udtagning af bagagebærer-akkuen 20** slukkes den, og låsen åbnes med nøglen **23**. Træk akkuen ud af holderen **19**.

Brug

Ibrugtagning

► **Brug kun originale Bosch akkuer, der er blevet godkendt til din eBike af producenten.** Brug af andre akkuer kan føre til kvæstelser og er forbundet med brandfare. Bosch fraskriver sig ansvar, og garantien bortfalder, hvis der bruges andre akkuer.

Tænd/sluk

eBike-systemet kan bl.a. tændes ved at tænde for akkuen. Læs og følg hertil brugsanvisningen for drivenheden og cykelcomputeren.

Kontroller for akkuen eller eBike-systemet tændes, at låsen **24** er aflåst.

Bemærk: Pedalerne på eBike må ikke være belastet, når eBike-systemet tændes, da eBike-drevets ydelse ellers begrænses.

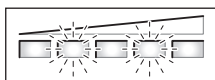
Akkuen **tændes** ved at trykke på tænd-sluk-tasten **22**. LED-lamperne i indikatoren **21** lyser og viser samtidigt ladetilstanden.

Bemærk: Ligger akkuens kapacitet under 5 %, lyser ingen LED-lampe i ladetilstandsindikatoren på akkuen **21**. Kun på cykelcomputeren kan det ses, om eBike-systemet er tændt.

Akkuen **slukkes** ved at trykke på tænd-sluk-tasten **22** en gang til. LED-lamperne i indikatoren **21** slukker. eBike-systemet slukkes dermed ligeledes.

Påvirkes eBike-drevet ikke i ca. 10 min (f.eks. fordi eBike står stille), og trykkes der ikke på nogen taste på eBikens cykelcomputer eller betjeningsenhed, slukker eBike-systemet og dermed også akkuen automatisk for at spare på energien.

Akkuen er beskyttet mod afladning, overladning, overophedning og kortslutning vha. „Electronic Cell Protection (ECP)“. I tilfælde af fare slukker akkuen automatisk vha. en beskyttelseskobling.



Registreres en defekt på akkuen, blinker to LED-lamper på ladetilstandsindikatoren **21**. Kontakt i dette tilfælde en autoriseret forhandler.

Henvisninger til optimal håndtering af akkuen

Akkuens levetid kan forlænges, hvis den passes godt, og især hvis den opbevares ved de rigtige temperaturer.

Akkuens kapacitet forringes, jo ældre den bliver, også selv om den plejes godt.

Når driftstiden efter opladningen forkortes væsentligt, er det tegn på, at akkuen er slidt op. Du kan erstatte akkuen.

Skulle bæreremmen **28** til standard-akkuen være defekt, skal den udskiftes af en cykelforhandler.

Akkue efterlades før og under opbevaringen

Oplad akkuen til ca. 60 % (3 til 4 LED-lamper i ladetilstandsindikatoren **21** lyser), før den tages ud af brug i længere tid.

Kontroller ladetilstanden efter 6 måneder. Lyser kun en LED-lampe i ladetilstandsindikatoren **21**, oplades akkuen igen til ca. 60 %.

Bemærk: Opbevares akkuen i tom tilstand i længere tid, kan den blive beskadiget på trods af den lille selvafledning, og lagerkapaciteten forringes betydeligt.

Det kan ikke anbefales at lade akkuen være tilsluttet varigt til ladeaggregatet.

Opbevaringsbetingelser

Opbevar helst akkuen et tørt og godt ventileret sted. Beskyt den mod fugtighed og vand. Ved ugunstige vejrforhold kan det f.eks. anbefales at fjerne akkuen fra eBiken og opbevare den i lukkede rum, indtil den tages i brug igen.

Akkuen kan opbevares ved temperaturer fra $-10\text{ }^{\circ}\text{C}$ til $+60\text{ }^{\circ}\text{C}$. Til en længere levetid skal de helst opbevares ved en stuetemperatur på ca. $20\text{ }^{\circ}\text{C}$.

Sørg for, at den maksimale opbevaringstemperatur ikke overskrides. Sørg for, at akkuen f.eks. om sommeren ikke opbevares i bilen, og opbevar den sådan, at den ikke udsættes for direkte solstråler.

Vedligeholdelse og service

Vedligeholdelse og rengøring

Renhold akkuen. Rengør den forsigtigt med en fugtig, blød klud. Akkuen må hverken dyppes i vand eller rengøres med en vandstråle.

Fungerer akkuen ikke mere, bedes du kontakte en autoriseret cykelforhandler.

Kundeservice og kunderådgivning

Spørgsmål vedr. akkuer bedes stillet til en autoriseret cykelforhandler.

► **Noter producent og nummer på nøglen 23.** Hvis nøglen tabes, bedes du henvende dig til en autoriseret cykelforhandler. Husk at angive nøgleproducent og nøglenummer.

Kontaktdata for autoriserede cykelforhandlere findes på internetsiden www.bosch-ebike.com

Transport


Akkuerne skal overholde kravene i retten om farligt gods. Akkuerne kan transporteres af den private bruger på gader og veje uden yderligere pålæg.

Transporteres de af erhvervmæssige brugere eller af tredjemand (f.eks. lufttransport eller spedition), skal særlige krav til emballage og mærkning overholdes (f.eks. forskrifter fra ADR). Her skal man efter behov kontakte en faregodsekspert, før forsendelsesstykket forberedes.

Send kun akkuerne, hvis huset er ubeskadiget. Tilklæb åbne kontakter og indpak akkuen på en sådan måde, at den ikke kan bevæge sig i emballagen. Følg også eventuelle yderligere nationale forskrifter.

Spørgsmål vedr. transport af akkuerne bedes stillet til en autoriseret cykelforhandler. Hos forhandleren kan du også bestille en egnet transportemballage.

Bortskaffelse

 Akku, tilbehør og emballage skal genbruges på en miljøvenlig måde.

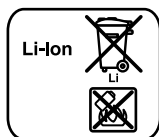
Smid ikke akkuen ud sammen med det almindelige husholdningsaffald!

Gælder kun i EU-lande:



Iht. det europæiske direktiv 2002/96/EF skal kasseret elektrværktøj og iht. det europæiske direktiv 2006/66/EF skal defekte eller opbrugte akkuer/batterier indsamles separat og genbruges iht. gældende miljøforskrifter.

Aflever gamle akkuer til en autoriseret cykelforhandler.



Li-ion:

Læs og overhold henvisningerne i afsnit „Transport“, side Dansk - 11.

Ret til ændringer forbeholdes.

Ladeaggregat Charger


Sikkerhedsinstrukser



Læs alle sikkerhedsinstrukser og anvisninger. Overholdes sikkerhedsinstrukserne og anvisningerne ikke, er der risiko for elektrisk stød, brand og/eller alvorlige kvæstelser.

Opbevar alle sikkerhedsinstrukser og anvisninger til senere brug.

Begrebet „akku“, der anvendes i nærværende brugsanvisning, gælder både for standard-akkuer (akkuer med holder på cykelstel) og bagagebærer-akkuer (akkuer med holder i bagagebærer).

 **Ladeaggregatet må ikke udsættes for regn eller fugtighed.** Indtrængning af vand i et ladeaggregat er forbundet med risiko for elektrisk stød.

► **Lad kun Bosch li-ion-akkuer, der er godkendt til eBikes. Akkuspændingen skal passe til ladeaggregatets akkuladespænding.** Ellers er der fare for brand og eksplosion.

► **Renhold ladeaggregatet.** Snavs øger faren for elektrisk stød.

► **Kontrollér ladeaggregat, kabel og stik før brug. Anvend ikke ladeaggregatet, hvis det er beskadiget. Forsøg ikke at åbne ladeaggregatet og sørg for at det repareres af kvalificerede fagfolk, og at der kun benyttes originale reservedele.** Beskadigede ladeaggregater, kabler og stik øger risikoen for elektrisk stød.

► **Anvend ikke ladeaggregatet på let brændbar undergrund (f. eks. papir, tekstiler osv.) eller i brændbare omgivelser.** Pas på! Ladeaggregatet bliver varmt under opladningen. Brandfare!

► **Beskadiges akkuen eller bruges den forkert, kan der sive dampe ud. Tilfør frisk luft og søg læge, hvis du føler dig utilpas.** Dampene kan irritere luftvejene.

► **Sørg for, at børn er under opsyn.** Dermed sikres det, at børn ikke leger med ladeaggregatet.

► **Børn og personer, der på grund af deres fysiske, sensoriske eller psykiske evner eller uerfarenhed eller ukendskab ikke er i stand til at betjene ladeaggregatet, må ikke bruge dette ladeaggregat uden opsyn eller instruktion fra en ansvarlig person.** Ellers er der fare for fejlbetjening og kvæstelser.

► **Læs og følg sikkerhedsinstrukserne og anvisningerne i brugsanvisningerne til akku og drivenhed/cykelcomputer samt i brugsanvisningen til din eBike.**

► På undersiden af ladeaggregatet findes en kort vejledning om vigtige sikkerhedsinstrukser på engelsk, fransk og

spansk (i illustrationen på grafiksiden er den kendetegnet med nummer **33**) og med følgende indhold:

- Følg brugsanvisningen for at sikre en rigtig brug. Risiko for elektrisk chock.
- Må kun bruges i tørre omgivelser.
- Lad kun akkuer, der er beregnet til Bosch eBike-systemet. Andre akkuer kan eksplodere og føre til kvæstelser.
- Erstat ikke netkablet. Fare for brand og eksplosion.

Beskrivelse af produkt og ydelse

Illustrerede komponenter (se side 6 – 7)

Nummereringen af de illustrerede komponenter refererer til illustrationen af ladeaggregatet på illustrationssiden.

- 20** Bagagebærer-akku
- 21** Akku-ladetilstandsindikator
- 26** Standard-akku
- 29** Ladeaggregat
- 30** Bøsning
- 31** Stik
- 32** Ventilationsåbninger
- 33** Sikkerhedsforskrifter ladeaggregat
- 34** Ladestik
- 35** Bøsning til ladestik

Tekniske data

Ladeaggregat	Charger	
Typenummer		0 275 007 905
Nominal spænding	V~	207 – 264
Frekvens	Hz	47 – 63
Akku-opladingsspænding	V $\overline{\text{---}}$	42
Ladestrøm	A	4
Tilladt temperaturområde for opladning	°C	0 ... +40
Ladetid		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Antal akkuceller		10 – 80
Driftstemperatur	°C	–10 ... +75
Opbevaringstemperatur	°C	–20 ... +70
Vægt svarer til EPTA-Procedure 01/2003	kg	0,8
Tæthedsgrad		IP 40
Angivelserne gælder for en nominal spænding [U] på 230 V. Disse angivelser kan variere ved afvigende spændinger og i landespecifikke udførelser.		

Brug

- **Stil kun akkuen på rene overflader.** Undgå især en tilsmudsning af ladebøsningen og kontakterne (f.eks. fra sand eller jord).

Ibrugtagning

Tilslutning af ladeaggregatet (se Fig. E - F)

- **Kontrollér netspændingen!** Strømkildens spænding skal stemme overens med angivelserne på ladeaggregatets typeskilt. Ladeaggregater til 230 V kan også tilsluttes 220 V.

Sæt netkablets stik **31** ind i bøsningen **30** på ladeaggregatet.

Tilslut netkablet (landespecifik) til strømnettet.

Sluk for akkuen og tag den ud af holderen på eBiken. Læs og overhold akkuens brugsanvisning.

Sæt ladeaggregatets ladestik **34** i bøsningen **35** på akkuen.

Opladning

Opladningen starter, så snart ladeaggregatet er forbundet med akkuen og strømnettet.

Bemærk: Opladningen er kun mulig, hvis akkuens temperatur befinder sig i det tilladte ladetemperaturområdet.

Under opladningen lyser LED-lamperne i ladetilstandsindikatoren **21** på akkuen. Hver konstant lysende LED-lampe svarer ca. til 20 % kapacitet opladning. Den blinkende LED-lampe viser opladningen af de næste 20 %.

- **Vær forsigtig, hvis du berører ladeaggregatet under opladningen. Brug beskyttelseshandsker.** Ladeaggregatet kan blive meget varmt især ved høje omgivelsestemperaturer.

Bemærk: Vær opmærksom på, at ladeaggregatet er godt ventileret under opladningen og at ventilationsåbningerne **32** ikke er tildækket på begge sider.

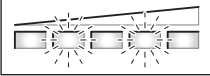
Akkuen er helt opladt, når alle fem LED-lamper i indikatoren **21** lyser hele tiden. Opladningen afbrydes automatisk.

Afbryd ladeaggregatet fra strømnettet og akkuen fra ladeaggregatet.

Når akkuen afbrydes fra ladeaggregatet, slukkes akkuen automatisk.

Nu kan du sætte akkuen ind i eBiken.

Fejl – Årsager og afhjælpning

Årsag	Afhjælpning
	To LED-lamper blinker på akkuen
Akkue defekt	Kontakt en autoriseret cykelforhandler

Årsag	Afhjælpning
	Tre LED-lamper blinker på akkuen
Akkue for varm eller for kold	Afbryd akkuen fra ladeaggregatet og lad den afkøle, til ladetemperaturområdet er nået Tilslut først akkuen til ladeaggregatet, når den har nået den tilladte ladetemperatur.
Opladning er ikke mulig (ingen visning på akkuen)	
Stik er ikke sat rigtigt i	Kontroller alle stikforbindelser
Kontakter er snavsede på akku	Rengør forsigtigt kontakter på akku
Ladeaggregatets ventilationsåbninger 32 er tilstoppet eller tildækket	Rengør ventilationsåbninger 32 og opstil ladeaggregat godt ventileret
Stikdåse, kabel eller ladeaggregat er defekt	Kontroller netspænding, få ladeaggregat kontrolleret af cykelforhandler
Akkue defekt	Kontakt en autoriseret cykelforhandler

Vedligeholdelse og service

Vedligeholdelse og rengøring

Skulle ladeaggregatet svigte, bedes du kontakte en autoriseret cykelforhandler.

Kundeservice og kunderådgivning

Spørgsmål vedr. ladeaggregatet bedes stillet til en autoriseret cykelforhandler.

Kontaktdata for autoriserede cykelforhandlere findes på internetsiden www.bosch-ebike.com

Bortskaffelse

Ladeaggregater, tilbehør og emballage skal genbruges på en miljøvenlig måde.

Smid ikke ladeaggregater ud sammen med det almindelige husholdningsaffald!

Gælder kun i EU-lande:



Iht. det europæiske direktiv 2002/96/EF om affald af elektrisk og elektronisk udstyr skal kasserede ladeaggregater indsamles separat og genbruges iht. gældende miljøforskrifter.

Ret til ændringer forbeholdes.

Drivenhet Drive Unit Speed/ Manöverdator Intuvia

Säkerhetsanvisningar



Läs noga igenom alla säkerhetsanvisningar och instruktioner. Fel som uppstår till följd av att säkerhetsanvisningarna och instruktionerna inte följts kan orsaka elstöt, brand och/eller allvarliga personskador.

Ta väl vara på säkerhetsanvisningarna och instruktionerna för framtida behov.

Begreppet ”batteri” som används i denna bruksanvisning hänför sig till både standardbatterier (batterier med fäste på cykelramen) och pakethållarbatterier (batterier med fäste i pakethållaren).

- ▶ **Öppna inte själv drivenheten. Drivenheten är underhållsfri och får endast repareras med originalreservdelar av kvalificerad yrkespersonal.** Detta garanterar att drivenhetens säkerhet upprätthålls. Om drivenheten öppnas utan berättigande gäller inte längre garantin.
- ▶ **Alla komponenter som monterats på drivenheten och alla andra komponenter på elcykelns drivning (t.ex. kedjehjul, kedjehjulets stöd och pedaler) får endast ersättas med komponenter av samma slag eller med av cykeltillverkaren speciellt för din elcykel godkända komponenter.** Detta skyddar drivenheten mot överbelastning och skada.
- ▶ **Ta bort batteriet från elcykeln innan arbeten (t. ex. montering, underhåll m.m.) startas på elcykeln, före den transporteras i bil och flygplan eller lagras.** Vid oavsiktligt aktivering av strömställaren finns risk för personskada.
- ▶ **Funktionen för starthjälp får endast användas när elcykeln startas.** Om elcykelns hjul inte har kontakt med marken när starthjälpen används finns risk för personskada.
- ▶ **Använd endast originalbatterier från Bosch som tillverkaren rekommenderat för din elcykel.** Om andra batterier används, finns risk för kroppsskada och brand. Om andra batterier används fritar sig Bosch från allt ansvar och garantiåtagande.
- ▶ **Beakta alla nationella föreskrifter för registrering och användning av elcykeln.**
- ▶ **Läs och beakta säkerhetsanvisningarna och instruktionerna i batteriets bruksanvisning samt bruksanvisningen för din elcykel.**

Produkt- och kapacitetsbeskrivning

Ändamålsenlig användning

Drivenheten är uteslutande avsedd för drivning av din elcykel och får inte användas för andra ändamål.

Elcykeln är avsedd för belagda vägar. Elcykeln är inte godkänd för tävlingar.

Illustrerade komponenter (se sidan 2 – 3)

Numreringen av avbildade komponenter hänvisar till illustrationerna på grafiksidan.

Förutom drivenhet, manöverdator inkl. manöverenhet, hastighetssensor och tillhörande fästen är cykeldelarnas alla illustrationer schematiska och kan därför avvika från din elcykel.

- 1 Knapp indikeringsfunktion ”i”
 - 2 Knapp för belysning
 - 3 Manöverdator
 - 4 Manöverdatorns fäste
 - 5 På-Av-knapp manöverdator
 - 6 Återställningsknapp ”RESET”
 - 7 USB-kontaktdon
 - 8 USB-kontaktdonets skyddskåpa
 - 9 Drivenhet
 - 10 Manöverenhet
 - 11 Knapp för indikeringsfunktion ”i” på manöverenheten
 - 12 Knapp för sänk värdet/bläddra nedåt ”–”
 - 13 Knapp för öka värdet/bläddra uppåt ”+”
 - 14 Knapp för starthjälp ”WALK”
 - 15 Låsning av manöverdatorn
 - 16 Blockeringskruv på manöverdatorn
 - 17 Hastighetssensor
 - 18 Hastighetssensorns ekeromagnet
- Indikeringslement på manöverdatorn**
- a Indikering av motoreffekt
 - b Indikering av assistansnivå
 - c Textindikering
 - d Värdesindikering
 - e Hastighetsmätarens display
 - f Indikering av batteriets laddningstillstånd

Tekniska data

Drivenhet		Drive Unit Speed	
Produktnummer			0 275 007 003
Effekt	W		350
Vridmoment vid kraftuttag max.	Nm		50
Märkspänning	V _{DC}		36
Driftstemperatur	°C		-5 ... +40
Lagringstemperatur	°C		-10 ... +50
Kapslingsklass			IP 54 (damm- och spolsäker)
Vikt, ca.	kg		4
Manöverdator		Intuvia	
Produktnummer			1 270 020 903
Laddström USB-kontaktidon max.	mA		500
Laddspänning USB-kontaktidon	V		5
Driftstemperatur	°C		-5 ... +40
Lagringstemperatur	°C		-10 ... +50
Kapslingsklass			IP 54 (damm- och spolsäker)
Vikt, ca.	kg		0,15
Belysning*			
Märkspänning	V _{DC}		6
Effekt			
- Framljus	W		2,7
- Bakljus	W		0,3

* beroende på lagliga bestämmelser kan elcykelns batteri inte användas för alla landspecifika utföranden

Montage

Insättning och uttagning av batteriet

För insättning av batteriet på elcykeln och för borttagning se batteriets bruksanvisning.

Insättning och borttagning av manöverdatorn (se bild A)

För **insättning** av manöverdatorn **3** skjut framifrån in den i fästet **4**.

För **uttagning** av manöverdatorn **3** tryck på spärren **15** och skjut ut den framåt ur fästet **4**.

► Ta bort manöverdatorn från parkerad elcykel för att obefogad person inte ska kunna använda drivenheten.

Utän manöverdator kan elcykelssystemet inte kopplas på. Det är även möjligt att som skydd mot stöld låsa manöverdatorn i fästet. Demontera fästet **4** från styret. Placera manöverdatorn i fästet. Skruva in blockeringskruven **16** underifrån i avsedd gänga på fästet. Återmontera fästet på styret.

Kontroll av hastighetssensorn (se bild B)

Hastighetssensorn **17** och tillhörande ekermagnet **18** måste monteras så att ekermagneten vid ett hjulvarv passerar hastighetssensorn på ett avstånd om minst 5 mm och högst 17 mm.

Anvisning: Om avståndet mellan hastighetssensorn **17** och ekermagneten **18** är för litet eller för stort eller är hastighetssensorn **17** inte korrekt ansluten, fungerar inte indikeringen på hastighetsmätaren **e** och elcykelns drivenhet fungerar i nödkörningsprogram.

Lossa i detta fall ekermagnetens **18** skruv och fäst ekermagneten så att den på korrekt avstånd passerar markeringen på hastighetssensorn. Om hastighetsmätaren **e** fortfarande saknar indikering, kontakta en auktoriserad cykelhandlare.

Drift

Driftstart

Förutsättningar

Elykel-systemet kan aktiveras endast under följande förutsättningar:

- Ett fulladdat batteri har satts in (se batteriets bruksanvisning).
- Manöverdatorn sitter korrekt i fästet (se "Insättning och borttagning av manöverdatorn", sida Svenska – 2).
- Hastighetssensorn är korrekt ansluten (se "Kontroll av hastighetssensorn", sida Svenska – 2).

In-/urkoppling av elcykelssystemet

För **inkoppling** av elcykelssystemet finns följande alternativ.

- Om manöverdatorn redan är påkopplad när den placeras i fästet slås elcykelssystemet automatiskt på.
- Tryck vid insatt manöverdator och insatt batteri helt kort på manöverdatorns På-Av-knapp **5**.
- Tryck vid insatt manöverdatorn batteriets På-Av-knapp (se batteriets bruksanvisning).

Anvisning: Elykelns pedaler får inte belastas när elcykelssystemet kopplas på, i annat fall begränsas motoreffekten. I textindikeringen **c** visas felmeddelandet "**Release pedal**" (avlata pedalen).

Om elcykelssystemet oavsiktligt påkopplats med belastade pedaler, koppla i detta fall från och åter på utan belastning. Drivenheten aktiveras så fort du trampar pedalerna (förutom vid starthjälpfunktionen), se "Till-/frånkoppling av starthjälp", sida Svenska – 3). Motoreffekten är relaterad till inställningarna på manöverdatorn.

Så fort du slutat trampa pedalerna i normaldrift eller en hastighet på 45 km/h uppnåtts, frånkopplar elcykeldriften assistansen. Drivningen aktiveras åter automatiskt när pedalerna trampas och en hastighet på 45 km/h underskrids.

För **urkoppling** av elcykelsystemet finns följande alternativ:

- Tryck manöverdatorns På-Av-knapp **5**.
- Koppla från batteriet med På-Av-knappen (se batteriets bruksanvisning.)
- Ta manöverdatorn ur fästet.

Om cykelns drivenhet under ca 10 minuter inte upptar ström (t. ex. när elcykeln står stilla) och ingen knapp tryckts på manöverdatorn eller manöverenheten kopplas elcykelsystemet automatiskt från för att spara energi.

Manöverdatorns indikeringar och inställningar

Manöverdatorns energiförsörjning

När manöverdatorn sitter i fästet **4** och ett fulladdat batteri placerats i elcykeln och elcykelsystemet kopplats på försörjs manöverdatorn via elcykelns batteri med energi.

Om manöverdatorn tas ur fästet **4** får den energi från ett internt batteri. Om det interna batteriet vid inkoppling av manöverdatorn har låg kapacitet, visas för 3 s **"Attach to bike"** (anslut till cykeln) på textdisplayen **c**. Därefter kopplar manöverdatorn åter från.

För uppladdning av det interna batteriet placera åter manöverdatorn i fästet **4** (när ett batteri sitter på elcykeln). Koppla från elcykelns batteri med På-Av-knappen (se batteriets bruksanvisning.)

Manöverdatorn kan också laddas upp via USB-kontaktdonet. Öppna dammskyddet **8**. Anslut manöverdatorns USB-kontaktdon **7** med en lämplig USB-kabel till en gängse USB-laddare eller till USB-kontaktdonet på en dator (5 V laddspänning; max. 500 mA laddström). På manöverdatorns textdisplay **c** visas **"USB connected"** (USB kopplad).

Manöverdatorns in-/urkoppling

För **Inkoppling** av manöverdatorn tryck På-/Av-knappen **5**. Manöverdatorn kan även kopplas på (vid tillräckligt laddat batteri) när den inte sitter i fästet.

För **frånkoppling** av manöverdatorn tryck På-Av-knappen **5**.

För att spara energi när manöverdatorn inte sitter i fästet, kopplas den automatiskt från om knappen inte trycks under 1 minuter.

Indikering av batteriets laddningstillstånd

Batteriladdningsindikatorn **f** indikerar elcykelbatteriets laddningstillstånd, men inte tillståndet för manöverdatorns interna batteri. Elcykelbatteriets laddningstillstånd kan avläsas med hjälp av LED på själva batteriet.

På displayen **f** motsvarar varje stapel i batterisymbolen en kapacitet på ungefär 20 %:



100 % till 80 % kapacitet



Kapacitet mellan 20 % och 5 %, batteriet måste laddas upp.



När kapaciteten underskrider 5 % ger drivenheten inte längre stöd. Laddningsdisplayens LED på batteriet slocknar.

När batteriet försörjer elcykelns belysning (landsspecifikt) räcker kapaciteten när första tomma batterisymbolen dyker upp ännu till för ca 2 timmars belysning. När symbolen börjar blinka, slocknar belysningen efter en liten stund.

Om manöverdatorn tas ur fästet **4**, kvarstår senast sparad batteriladdningstillstånd.

Inställning av assistansgrad

På manöverdatorn kan elcykelns drivenhetens hjälp för pedaltramp ställas in. Assistansgraden kan när som helst ändras även under körning.

Anvisning: På vissa utföranden kan den förinställda assistansen inte ändras. Det kan även hända att endast färre assistansfunktioner finns att tillgå än vad som här anges.

Maximalt följande assistansgrader finns att tillgå:

- **"OFF"**: (Från) Drivenheten är nu frånkopplad och elcykeln kan med pedalerna drivas som en vanlig cykel.
- **"ECO"**: aktiv hjälp vid maximal effektivitet, för maximal räckvidd
- **"TOUR"**: konstant hjälp, för långdistansturer
- **"SPORT"**: kraftig hjälp, för sportig cykling på bergig sträcka samt för stadstrafik
- **"TURBO"**: maximal assistans upp till hög pedalfrekvens, för sportig cykling

För **ökning** av assistansgraden tryck knappen **"+" 13** på manöverenheten tills önskad assistansgrad visas på displayen **b**, för **sänkning** tryck knappen **"-" 12**.

Upptagen motoreffekt visas på displayen **a**. Den maximala motoreffekten är beroende av vald assistansgrad.

Assistansnivå	Motoreffekt* (Kedjevåxel)
"ECO"	30 %
"TOUR"	100 %
"SPORT"	180 %
"TURBO"	250 %

* Motoreffekten kan avvika på enskilda utföranden.

Om manöverdatorn tas ur fästet **4** kvarstår senast visad assistansgrad sparad, på displayen **a** indikeras ingen motoreffekt.

Till-/frånkoppling av starthjälpen

Starthjälpen kan hjälpa till ett par meter om cykeln startar trögt (som t. ex. vid trafikljus eller uppförsbacke).

► **Funktionen för starthjälp får endast användas när elcykeln startas.** Om elcykelns hjul inte har kontakt med marken när starthjälpen används finns risk för personskada.

För **inkoppling** av starthjälpen tryck knappen **"WALK" 14** på manöverenheten och håll den nedtryckt. Elcykelns drivenhet kopplas in.

Starthjälpen **slås från** så fort ett av följande moment inträffar:

- när du släpper knappen **”WALK” 14**,
- trycker en annan knapp på manöverdatorn,
- trampar pedalerna framåt eller snabbt bakåt,
- när elcykelns hjul blockeras (t. ex. vid bromsning eller om cykeln stöter mot ett hinder),
- hastigheten överskrider 18 km/h.

Slå på och av belysningen

Alltefter landsspecifika föreskrifter finns cykellyse i två utföranden:

- Via manöverdatorn kan samtidigt framlyse, baklyse och displayens bakgrundsbelysning tändas och släckas. I detta utförande visas vid påkoppling av lyset **”Lights on”** (tänt lyse) och vid frånkoppling av lyset **”Lights off”** (släckt lyse) för ca 1 s på textdisplayen **c**.
- Endast displayens bakgrundsbelysning kan slås på och av, fram- och baklyset på elcykeln är oberoende av manöverdatorn.

För båda utförandena trycker du för **På och Av för belysningen** knappen **2**.

Hastighets- och avståndsindikeringar

På **hastighetsmätaren e** indikeras alltid aktuell hastighet.

I **funktionsindikeringen** (kombination av textindikering **c** och värdeindikering **d**) kan följande funktioner väljas:

- **”Range” (körsträcka)**: sannolik körsträcka med aktuell batteriladdning (vid oföränderliga villkor som hjälpnivå, linjeprofil m.m.)
- **”Distance” (sträcka)**: åkt distans från senaste återställning
- **”Trip time” (tripptid)**: Tripptid från senaste nollställning
- **”Avg. Speed” (medelhastighet)**: medelhastighet från senaste nollställning
- **”Max. Speed” (max. hastighet)**: max. hastighet från senaste nollställning
- **”Clock” (klocka)**: aktuellt klockslag

Tryck för **omkoppling av indikeringsfunktionen** knappen **”i” 1** på manöverdatorn eller knappen **”i” 11** på manöverenheten tills önskad funktion visas.

För **Reset** av **”Distance”** (sträcka), **”Trip time”** (tripptid) och **”Avg. Speed”** (medelhastighet) koppla om till en av dess tre funktioner och tryck sedan knappen **”RESET” 6** tills indikeringen nollställs. Härvid nollställs även de båda andra funktionerna.

För **Reset** av **”Max. Speed”** (max. hastighet) koppla om till denna funktion och tryck sedan knappen **”RESET” 6** tills indikeringen nollställs.

När manöverdatorn tas ur fästet **4** kvarstår och sparas funktionernas alla värden och kan i fortsättningen visas.

Visning/anpassning av grundinställningarna

Indikeringar och ändringar av grundinställningar kan göras oberoende av om manöverdatorn är i fästet **4** eller inte.

För att hämta menyn för grundinställningar tryck samtidigt knappen **”RESET” 6** och knappen **”i” 1** tills textdisplayen visar **c”Configuration”** (inställningar).

Tryck för **omkoppling mellan grundinställningarna** knappen **”i” 1** på manöverdatorn tills önskad grundinställning visas. När manöverdatorn är insatt i fästet **4** kan även knappen **”i” 11** på manöverenheten tryckas.

För **ändring av grundinställningar**, tryck för minskning resp. bläddring nedåt **På-Av**-knappen **5** bredvid displayen **”-”** eller för ökning resp. bläddring uppåt knappen för belysning **2** bredvid displayen **”+”**.

År manöverdatorn insatt i fästet **4** kan ändringen även ske med knapparna **”-” 12** resp. **”+” 13** på manöverenheten. För att gå ur funktionen och spara ändrad inställning, tryck knappen **”RESET” 6** för 3 s.

Följande grundinställningar står till buds:

- **”unit km/mi” (enhet km/mi)**: Hastigheten och avståndet kan visas i km eller engelsk mil.
- **”time format” (tidsformat)**: Klockslaget kan visas i formatet 12 timmar eller 24 timmar.
- **”clock” (klocka)**: Aktuell tid kan ställas in. Håll inställningsknapparna längre tid nedtryckta för snabbare ändring av tiden.
- **”English” (Engelska)**: Du kan ändra textindikeringens språk. Du kan välja mellan tyska, engelska, franska, spanska, italienska och nederländska.
- **”odometer” (total sträcka)**: Indikering av total körsträcka med elcykeln (kan inte ändras)
- **”power-on hours” (total drifttid)**: Indikering av total körtid med elcykeln (kan inte ändras)

Indikering av felkod

Komponenterna på elcykelsystemet kontrolleras ständigt och automatiskt. Om ett fel konstateras visas respektive felkod på textdisplayen **c**.

Tryck en valfri knapp på manöverdatorn **3** eller på manöverenheten **10** för återgång till standardindikering.

Beroende på felets typ kopplas drivningen eventuellt automatiskt från. Fortsatt åkning utan hjälpmotor är alltid möjlig. Före långa turer ska elcykeln kontrolleras.

► **Låt alltid en auktoriserad cykelhandlare kontrollera och reparera cykeln.** Om ett åtgärdat fel fortfarande indikeras, kontakta en auktoriserad cykelhandlare.

Kod	Orsak	Åtgärd
100	Internt fel i drivenheten	Kontrollera drivenheten
101	Drivenheten med anknypningsproblem	Kontrollera anslutningarna och förbindelserna
102	Fel i hastighetssensorn	Låt hastighetssensorn kontrolleras
103*	Belysningen med anknypningsproblem	Kontrollera anslutningarna och förbindelserna
104	Manöverdatorn med anknypningsproblem	Kontrollera anslutningarna och förbindelserna
105	Drivenhetens temperatur är för hög (över 40 °C)	Låt drivenheten svalna. Åkning utan elcykelns hjälpmotor är möjlig och dessutom kyls drivenheten snabbare.
200	internt elektronikfel i batteriet	Låt batteriet kontrolleras
201	Batteriets temperatur är för hög (över 40 °C)	Låt batteriet svalna. Elcykeln kan köras vidare utan hjälpmotor och samtidigt kyls batteriet snabbare.
202	Batteriets temperatur är för låg (under -10 °C)	Låt batteriet långsamt värmas upp i ett varmt rum.
203	Batteriet har kopplingsproblem	Kontrollera anslutningarna och förbindelserna
204	felaktig batteripolning	Ladda batteriet med Bosch originalladdaren enligt beskrivning i bruksanvisningen.
410	En eller flera knappar på manöverdatorn är blockerade.	Kontrollera att knapparna inte råkat i kläm t. ex. till följd av smuts. Rengör i så fall knapparna.
414	Manöverenhetens kopplingsproblem	Kontrollera anslutningarna och förbindelserna
418	En eller flera knappar är blockerade på manöverenheten.	Kontrollera att knapparna inte råkat i kläm t. ex. till följd av smuts. Rengör i så fall knapparna.
422	Drivenheten med anknypningsproblem	Kontrollera anslutningarna och förbindelserna
423	Batteriet har kopplingsproblem	Kontrollera anslutningarna och förbindelserna
424	Komponenterna har inbördes kommunikationsfel	Kontrollera anslutningarna och förbindelserna
430	Manöverdatorns interna batteri är tomt	Ladda upp manöverdatorn (i fästet eller via USB-kontaktdonet)
490	Internt fel på manöverdatorn	Låt manöverdatorn kontrolleras

* Endast med elcykelbelysning från batteriet (landsspecifikt)

Energiförsörjning av externa enheter via USB-kontaktdonet

Med hjälp av USB-anslutningen kan de flesta apparaterna drivas och laddas upp när såvida elförsörjningen sker via USB (t. ex. diverse mobiltelefoner).

Förutsättningen för laddning är att manöverdatorn och ett tillräckligt laddat batteri satts in i elcykeln.

Öppna USB-kontaktdonets dammskydd **8** på manöverdatorn. Anslut den externa enhetens USB-kontaktdon med en lämplig USB-kabel till USB-hylsdonet **7** på manöverdatorn.

Anvisningar för åkning med elcykelssystemet

Hur fungerar elcykelns hjälpmotor?

Elcykelns drivenhet ger hjälp under den tid pedalerna trampas. Utan pedaltramp ger drivenheten ingen hjälp. Motoreffekten är alltid beroende av den kraft du använder vid tramp. Är kraften låg kommer även hjälpen att bli mindre än vid högre kraft. Detta gäller beroende av assistansnivån.

Elcykelns hjälpmotor kopplas automatiskt från när hastigheten överskrider 45 km/h. När hastigheten sjunker under 45 km/h kopplas hjälpmotorn åter till.

Ett undantag gäller för starthjälpfunktionen; elcykeln kan utan pedaltramp köras med låg hastighet.

Elcykeln kan när som helst utan assistans köras som en vanlig cykel genom att koppla från elcykelssystemet eller genom att ställa assistansgraden i läge **"OFF"**. Samma sak gäller för tomt batteri.

Elcykelssystemets samspel med växeln

Växeln ska även med elcykelns hjälpmotor användas som på en vanlig cykel (beakta elcykelns bruksanvisning).

Oberoende av växels typ rekommenderar vi att under växling avbryta pedaltrampet. Härvid underlättas växlingen varvid kraftöverföringens slitage minskar.

Genom att välja rätt växelläge kan med en och samma kraft hastigheten och räckvidden ökas.

Lär av erfarenhet

Vi rekommenderar att du lär dig hantera elcykeln avsidet trafikerade vägar.

Jämför olika assistansnivåer. När du är säker på din sak, kan du med elcykeln delta i trafiken som med en vanlig cykel.

Testa elcykelns räckvidd under olika villkor innan du startar för längre turer.

Räckvidden påverkas av

Körsträckan påverkas dock av många fler faktorer som exempelvis:

- assistansnivå,
- växlingssätt,
- däckens typ och lufttryck,
- batteriets ålder och tillstånd,
- vägprofil (motlut) och -beskaffenhet (vägens beläggning),
- motvind och omgivningstemperatur,
- elcykelns, cyklistens och bagagets vikt.

Därför är det inte möjligt att konkret före en tripp förutsäga räckvidden. Allmänt gäller:

- Vid drivenhetens **samma** motoreffekt: Ju mindre kraft du måste använda för att uppnå en viss hastighet (t. ex. vid optimal växling), desto mindre energi förbrukar elcykelns drivenhet och desto längre blir körsträckan med en batteriladdning.
- Ju **högre** assistansgraden är under samma villkor, desto kortare blir körsträckan.

Sköt elcykeln väl

Beakta elcykelkomponenternas drifts- och lagringstemperatur. Skydda drivenheten, manöverdatorn och batteriet mot extrem temperatur (t. ex. vid intensiv solbestrålning utan ventilation). Komponenterna (speciellt batteriet) kan skadas vid extrema temperaturer.

Underhåll och service

Underhåll och rengöring

Håll elcykelns alla komponenter rena, detta gäller speciellt batteriets kontakter och tillhörande fäste. Rengör försiktigt med en fuktig, mjuk trasa.

Komponenterna och drivenheten får inte doppas i vatten och inte heller rengöras med högtrycksaggregat.

För underhåll och reparation av elcykeln kontakta en auktoriserad cykelhandlare.

Kundservice och kundkonsulter

Vid frågor beträffande elcykelssystemet och dess komponenter kontakta en auktoriserad cykelhandlare.

För auktoriserade cykelhandlare kan du hitta kontaktadresser på internetsidan www.bosch-ebike.com

Transport

Batterierna är underkastade kraven för farligt gods. En privat person kan utan ytterligare förpliktelser transportera batterierna på allmän väg.

Vid transport genom rörelsedrivande person eller tredje person (t. ex. flygfrakt eller spedition) ska speciella villkor för förpackning och märkning beaktas (t. ex. föreskrifterna i ADR). I detta fall måste vid förberedelse av transport en expert för farligt gods konsulteras.

Batterier får försändas endast om höljet är oskadat. Tejpa öppna kontakter och förpacka batteriet så att det inte kan röras i förpackningen. Ta även hänsyn till eventuella nationella föreskrifter.

Vid alla frågor beträffande transport av batterier kontakta en auktoriserad cykelhandlare. Hos handlaren kan du även beställa en lämplig transportförpackning.

Avfallshantering



Drivenheten, manöverdatorn inkl. manöverenheten, batteriet, hastighetssensorn, tillbehör och förpackning skall omhändertas på miljövänligt sätt för återvinning.

Släng inte elcykeln eller tillhörande komponenter i hushållsavfall!

Endast för EU-länder:



Enligt europeiska direktivet 2002/96/EG måste obrukbara elapparater och enligt europeiska direktivet 2006/66/EG felaktiga eller förbrukade batterier separat omhändertas och på miljövänligt sätt lämnas in för återvinning.

I manöverdatorn inbyggt batteri får demonteras endast för avfallshantering. Om kåpan öppnas finns risk för att manöverdatorn förstörs.

Lämna in obrukbara batterier och manöverdatorer till en auktoriserad cykelhandlare.



Li-jon:

Beakta anvisningarna i avsnittet "Transport", sida Svenska – 6.

Ändringar förbehålles.

Litiumjonbatteri PowerPack

Säkerhetsanvisningar



Läs noga igenom alla säkerhetsanvisningar och instruktioner. Fel som uppstår till följd av att säkerhetsanvisningarna och instruktionerna

inte följts kan orsaka elstöt, brand och/eller allvarliga personskador.

Ta väl vara på säkerhetsanvisningarna och instruktionerna för framtida behov.

Begreppet "batteri" som används i denna bruksanvisning hänför sig till både standardbatterier (batterier med fäste på cykelramen) och pakethållarbatterier (batterier med fäste i pakethållaren) om inte hänvisning uttryckligen görs till byggform.

► **Ta bort batteriet från elcykeln innan arbeten (t. ex. montering, underhåll m.m.) startas på elcykeln, före den transporteras i bil och flygplan eller lagras.** Vid oavsiktligt aktivering av strömställaren finns risk för personskada.

► **Öppna inte batteriet.** Detta kan leda till kortslutning. Om batteriet öppnats lämnas ingen garanti.



Skydda batteriet mot hög värme (t. ex. längre solbestrålning), eld och neddopning i vatten. Explosionsrisk föreligger.

► **Håll gem, mynt, nycklar, spikar, skruvar och andra små metallföremål på avstånd från reservbatteriet för att undvika en bygling av kontakterna.** En kortslutning mellan batterikontakterna kan leda till brännskador eller brand. För skada som uppstår genom kortslutning fritar sig Bosch från allt ansvar och ingen garanti lämnas.

► **Om batteriet används på fel sätt finns risk för att vätska rinner ur batteriet. Undvik all kontakt med vätskan. Vid oavsiktlig kontakt spola med vatten. Om vätska kommer i kontakt med ögonen uppsök dessutom läkare.** Batterivätskan kan medföra hudirritation och brännskada.

► **Ur skadat eller felanvänt batteri kan ångor avgå. Tillför friskluft och uppsök läkare vid åkomor.** Ångorna kan leda till irritation i andningsvägarna.

► **Ladda batteriet endast med Bosch originalladdare.** Om inte Bosch originalladdare används, kan brandrisk inte uteslutas.

► **Använd batteriet endast i kombination med elcyklar; med original Bosch elcykeldrivsystem.** På så sätt skyddas batteriet mot farlig överbelastning.

► **Använd endast originalbatterier från Bosch som tillverkaren rekommenderat för din elcykel.** Om andra batterier används, finns risk för kroppsskada och brand. Om andra batterier används fritar sig Bosch från allt ansvar och garantiåtagande.

► **Läs noga säkerhetsanvisningarna och instruktionerna i bruksanvisningarna för laddare och drivenhet/manöverdator samt elcykelns bruksanvisning.**

Produkt- och kapacitetsbeskrivning

Illustrerade komponenter (se sidan 4 – 5)

Numreringen av avbildade komponenter hänvisar till illustrationerna på grafiksidiorna.

Förutom batterierna och tillhörande fästen är alla illustrationer av cykeldelarna schematiska och kan därför avvika från din elcykel.

- 19 Fäste för pakethållarbatteriet
- 20 Pakethållarbatteri
- 21 Indikering av drift och laddningstillstånd
- 22 På-/Av-knapp
- 23 Batterilåsets nyckel
- 24 Batterilås
- 25 Standardbatteriets övre fäste
- 26 Standardbatteri
- 27 Standardbatteriets undre fäste
- 28 Bärrem
- 29 Laddare

Tekniska data

Litiumjonbatteri		PowerPack 300	PowerPack 400
Produktnummer			
– Standardbatteri svart		0 275 007 500	0 275 007 503
– Standardbatteri vitt		0 275 007 501	0 275 007 504
– Pakethållarbatteri		0 275 007 502	0 275 007 505
Märkspänning	V=	36	36
Nominell kapacitet	Ah	8,2	11
Energi	Wh	300	400
Driftstemperatur	°C	-10 ... +40	-10 ... +40
Lagringstemperatur	°C	-10 ... +60	-10 ... +60
Tillåtet temperaturområde för laddning	°C	0 ... +40	0 ... +40
Vikt, ca.	kg	2,5	2,5
Kapslingsklass		IP 54 (dam- och spolsäker)	IP 54 (dam- och spolsäker)

Montage

► **Ställ upp batteriet på en ren yta.** Se till att laddningshysan och kontaktarna inte nedsmutsas med t. ex. sand eller jord.

Kontroll av batteriet före första användningen

Kontrollera batteriet innan det för första gången laddas upp eller används på elcykeln.

Tryck på På/Av-knappen **22** för inkoppling av batteriet. Om ingen LED tänds på laddningsdisplayen **21** är batteriet eventuellt skadat.

Om minst en, men inte alla LED tänds på laddningsdisplayen **21**, ladda fullständigt upp batteriet innan det används för första gången.

► **Ett skadat batteri får inte laddas upp och inte heller användas.** Kontakta en auktoriserad cykelaffär.

Ladda batteriet

► **Använd endast med din elcykel levererad Bosch originalladdare eller laddare i samma konstruktion.** Endast denna typ av laddare är anpassad till litiumjonbatteriet för elcykeln.

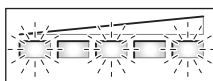
Anvisning: Batteriet levereras delladdat. För full effekt ska batteriet före första användningen med laddaren laddas upp fullständigt.

Batteriet måste för laddning tas bort från elcykeln.

För laddning av batteriet läs och beakta laddarens bruksanvisning.

Batteriet kan när som helst laddas upp eftersom detta inte påverkar livslängden. Batteriet skadas inte om laddning avbryts.

Batteriet är försett med en temperaturövervakning som endast tillåter laddning inom ett temperaturområde mellan 0 °C och 40 °C.



Om batteriet ligger utanför temperaturområdet för laddning blinkar tre LED på laddningsindikatorn **21**. Ta bort batteriet från laddaren och låt det tempereras.

Anslut batteriet till laddaren först sedan tillåten laddningstemperatur uppnåtts.

Laddningsdisplay

De fem gröna LED på laddningsdisplayen **21** visar laddningstillståndet för påkopplat batteri.

Härvid motsvarar varje LED en kapacitet på ungefär 20 %. På ett fullständigt laddat batteri lyser alla fem LED.

Det påkopplade batteriets laddningstillstånd indikeras dessutom i manöverdatorn. Läs och beakta bruksanvisningen för drivenheten och manöverdatorn.

Om batteriets kapacitet underskrider 5 % slocknar alla LED på batteriets laddningsdisplay **21** men i manöverdatorn kvarstår ännu en indikering.

Insättning och uttagning av batteriet (se bilder C – D)

► **Frånkoppla batteriet när det sätts in i eller tas ur fästet.**

För att batteriet ska kunna sättas in måste nyckeln **23** sitta i låset **24** och låset vara upplåst.

Vid **insättning av standardbatteriet 26** lägg kontaktarna mot elcykelns undre fäste **27**. Fäll sedan ned batteriet mot anslag i övre fästet **25**.

Vid **insättning av pakethållarbatteriet 20** skjut upp batteriet med kontaktarna framåt tills det snäpper fast i fästet **19** på pakethållaren.

Kontrollera att batteriet sitter stadigt. Lås alltid batteriets lås **24**, i annat fall kan låset gå upp och batteriet falla ur fästet.

Efter låsning dra alltid nyckeln **23** ur låset **24**. Härvid undviks att nyckeln faller ur låset eller att en olovlig person tillgriper batteriet vid parkerad elcykel.

Vid **borttagning av standardbatteriet 26** frånkoppla batteriet och öppna låset med nyckeln **23**. Tippa batteriet ur övre fästet **25** och dra batteriet med bärremmen **28** ur undre fästet **27**.

Vid **borttagning av standardbatteriet 20** frånkoppla batteriet och öppna låset med nyckeln **23**. Dra batteriet ur fästet **19**.

Drift

Driftstart

► **Använd endast originalbatterier från Bosch som tillverkaren rekommenderat för din elcykel.** Om andra batterier används, finns risk för kroppsskada och brand. Om andra batterier används fritar sig Bosch från allt ansvar och garantiåtagande.

In- och urkoppling

En möjlighet är att efter inkoppling av batteriet slå på elcykel-systemet. Läs och beakta bruksanvisningen för drivenheten och manöverdatorn.

Kontrollera innan batteriet resp. elcykelsystemet kopplas på att låset **24** är låst.

Anvisning: Elcykelns pedaler får inte belastas när elcykelsystemet kopplas på, i annat fall begränsas elcykeldrivningens effekt.

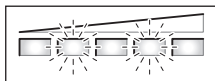
För **Inkoppling** av batteriet tryck På-/Av-knappen **22**. Lysdi-oderna på displayen **21** tänds och visar samtidigt batteriets laddningstillstånd.

Anvisning: Om batteriets kapacitet underskrider 5 % tänds ingen LED på batteriets laddningsdisplay **21**. Endast manöverdatorn indikerar att elcykelsystemet är inkopplat.

För **frånkoppling** av batteriet tryck åter på På-/Av knappen **22**. Lysdi-oderna på displayen **21** slocknar. Nu frånkopplas även elcykelsystemet.

För att spara energi när cykelns drivenhet under ca 10 minuter inte upptar ström (t. ex. när elcykeln står stilla) och ingen knapp trycks på manöverdatorn eller manöverenheten kopplas elcykelsystemet automatiskt från och sålunda även batteriet.

Batteriet är genom "Electronic Cell Protection (ECP)" skyddat mot djupurladdning, överladdning, överhettning och kortslutning. Vid risk för fara kopplar en skyddskoppling automatiskt från batteriet.



Om ett fel i batteriet konstateras, blinkar två LED på laddningsindikatorn **21**. Kontakta i detta fall en auktoriserad cykelaffär.

Anvisningar för optimal hantering av batteriet

Batteriets livslängd kan förlängas om det sköts väl och drivs samt lagras vid korrekt temperatur.

Vid åldring försämras batteriets kapacitet även om det sköts väl.

Är brukstiden efter uppladdning onormalt kort tyder det på att batteriet är förbrukat. Batteriet kan bytas.

Om standardbatteriets bärrem **28** är defekt låt en cykelhandlare byta ut den.

Efterladda batteriet före och under lagring

Om batteriet inte används under en längre tid ska det laddas upp till ungefär 60 % (3 eller 4 LED tänds på laddningsdisplayen **21**).

Kontrollera laddningstillståndet efter 6 månader. Är nu endast en LED tänd på laddningsdisplayen **21**, ladda upp batteriet igen till ca 60 %.

Anvisning: Om batteriet under en längre tid lagras utan laddning kan det även om självurladdningen är låg skadas varvid ackumulatorkapaciteten kraftigt reduceras.

Låt inte batteriet permanent vara anslutet till laddaren.

Lagringsvillkor

Lagra batteriet på en möjligast torr och välventilerad plats. Skydda batteriet mot fukt och vatten. Vid ogynnsam väderlek rekommenderar vi att ta bort batteriet från elcykeln och att förvara det inomhus för nästa användning.

Batteriet kan lagras vid temperaturer mellan $-10\text{ }^{\circ}\text{C}$ och $+60\text{ }^{\circ}\text{C}$. För en lång livslängd rekommenderas en lagring vid en rumstemperatur på ca $20\text{ }^{\circ}\text{C}$.

Kontrollera att högsta lagringstemperaturen inte överskrids. Låt därför inte batteriet t. ex. under sommaren ligga kvar i bilen och lagra det inte heller i direkt solsken.

Underhåll och service

Underhåll och rengöring

Håll batteriet rent. Rengör försiktigt med en fuktig, mjuk trasa. Batteriet får inte doppas i vatten och inte heller rengöras med vattenstråle.

Om batteriet inte längre fungerar, kontakta en auktoriserad cykelhandlare.

Kundservice och kundkonsulter

Vid alla frågor beträffande transport av batterier kontakta en auktoriserad cykelhandlare.

► **Anteckna nyckelns tillverkare och nummer 23.** Om nyckeln går förlorad kontakta en auktoriserad cykelhandlare. ange härvid nyckelns tillverkare och nummer.

För auktoriserade cykelhandlare kan du hitta kontaktadresser på internetsidan www.bosch-ebike.com

Transport

Batterierna är underkastade kraven för farligt gods. En privat person kan utan ytterligare förpliktelser transportera batterierna på allmän väg.

Vid transport genom rörelsedrivande person eller tredje person (t. ex. flygfrakt eller spedition) ska speciella villkor för förpackning och märkning beaktas (t. ex. föreskrifterna i ADR). I detta fall måste vid förberedelse av transport en expert för farligt gods konsulteras.

Batterier får försändas endast om höljet är oskadat. Tejpa öppna kontakter och förpacka batteriet så att det inte kan röras i förpackningen. Ta även hänsyn till eventuella nationella föreskrifter.

Vid alla frågor beträffande transport av batterier kontakta en auktoriserad cykelhandlare. Hos handlaren kan du även beställa en lämplig transportförpackning.

Avfallshantering



Batteri, tillbehör och förpackning ska omhändertas på miljövänligt sätt för återvinning.

Släng inte batterier i hushållsavfall!

Endast för EU-länder:



Enligt europeiska direktivet 2002/96/EG måste obrukbara elapparater och enligt europeiska direktivet 2006/66/EG felaktiga eller förbrukade batterier separat omhändertas och på miljövänligt sätt lämnas in för återvinning.

Lämna in obrukbara batterier till en auktoriserad cykelhandlare.



Li-jon:

Beakta anvisningarna i avsnittet "Transport", sida Svenska - 10.

Ändringar förbehålles.

Laddare Charger

Säkerhetsanvisningar



Läs noga igenom alla säkerhetsanvisningar och instruktioner. Fel som uppstår till följd av att säkerhetsanvisningarna och instruktionerna

inte följts kan orsaka elstöt, brand och/eller allvarliga personskador.

Ta väl vara på säkerhetsanvisningarna och instruktionerna för framtida behov.

Begreppet "batteri" som används i denna bruksanvisning hänför sig till både standardbatterier (batterier med fäste på cykelramen) och pakethållarbatterier (batterier med fäste i pakethållaren).



Skydda laddaren mot regn och väta. Tränger vatten in i laddaren ökar risken för elstöt.

- ▶ **Ladda endast för elcyklar godkända Bosch litiumjonbatterier. Batteriets spänning måste passa till laddarens laddspänning.** I annat fall finns risk för brand och explosion.
- ▶ **Håll laddaren ren.** Förorening kan leda till elektrisk stöt.
- ▶ **Kontrollera laddare, kabel och stickkontakt före varje användning. En skadad laddare får inte användas. Du får själv aldrig öppna laddaren, låt den repareras av kvalificerad fackman och endast med originalreservdelar.** Skadade laddare, ledningar eller stickkontakter ökar risken för elektrisk stöt.
- ▶ **Använd inte laddaren på lättantändligt underlag (t. ex. papper, textilier mm) resp. i brännbar omgivning.** Vid laddningen värms laddaren upp vilket kan medföra brandrisk.
- ▶ **Ur skadat eller felanvänt batteri kan ångor avgå. Tillför friskluft och uppsök läkare vid åkomor.** Ångorna kan leda till irritation i andningsvägarna.
- ▶ **Håll barn under uppsikt.** Barn får inte leka med laddaren.
- ▶ **Laddaren får inte användas av barn eller personer med begränsad fysisk, sensorisk eller psykisk förmåga eller som saknar den erfarenhet och kunskap som krävs för säker hantering. Undantag görs om personen övervakas av en ansvarig person som även kan undervisa i laddarens användning.** I annat fall finns risk för felhantering och personskada.
- ▶ **Läs noga säkerhetsanvisningarna och instruktionerna i bruksanvisningarna för laddare och drivenhet/manöverdator samt elcykelns bruksanvisning.**
- ▶ På laddarens undre sida finns ett sammandrag av viktiga säkerhetsanvisningar på engelska, franska och spanska

(märkta i illustrationen på grafiksidan med nummer **33**) med följande innehåll:

- För säker användning ska bruksanvisningen beaktas. Risk för elstöt.
- Använd endast i torr omgivning.
- Ladda endast batterier för Bosch elcykelsystemet. Risk finns att andra batterier exploderar och orsakar personskada.
- Byt inte ut nätsladden. I annat fall finns risk för brand och explosion.

Produkt- och kapacitetsbeskrivning

Illustrerade komponenter (se sidan 6 – 7)

Numreringen av komponenterna hänvisar till illustration av laddaren på grafiksidan.

- 20** Pakethållarbatteri
- 21** Indikering av batteriets laddningstillstånd
- 26** Standardbatteri
- 29** Laddare
- 30** Apparathylsdon
- 31** Apparatkontakt
- 32** Ventilationsöppningar
- 33** Säkerhetsanvisningar för laddaren
- 34** Laddstickkontakt
- 35** Hylsdon för laddkontakt

Tekniska data

Laddare	Charger	
Produktnummer		0 275 007 905
Märkspänning	V~	207 – 264
Frekvens	Hz	47 – 63
Batteriladdningsspänning	V=	42
Laddningsström	A	4
Tillåtet temperaturområde för laddning	°C	0 ... +40
Laddningstid		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Antal battericeller		10 – 80
Drifttemperatur	°C	–10 ... +75
Lagringstemperatur	°C	–20 ... +70
Vikt enligt EPTA-Procedure 01/2003	kg	0,8
Kapslingsklass		IP 40
Uppgifterna gäller för en märkspänning på [U] 230 V. Vid avvikande spänning och för utföranden i vissa länder kan uppgifterna variera.		

Drift

► **Ställ upp batteriet på en ren yta.** Se till att laddningshylsan och kontaktarna inte nedsmutsas med t. ex. sand eller jord.

Driftstart

Anslutning av laddaren (se bilder E - F)

► **Beakta nätspänningen!** Kontrollera att strömkällans spänning överensstämmer med uppgifterna på laddarens typskylt. Laddare märkta med 230 V kan även anslutas till 220 V.

Anslut sedan nätkabelns stickkontakt **31** till apparathylsdonet **30** på laddaren.

Anslut (landsspecifik) nätkabel till strömnätet.

Frånkoppla batteriet och ta bort det ur fästet på elcykeln. Läs och följ batteriets bruksanvisning.

Anslut laddarens stickkontakt **34** till hylsan **35** på batteriet.

Laddning

Laddningen startar genast när laddaren med insatt batteri kopplats till strömnätet.

Anvisning: Laddning är endast möjlig om batteriets temperatur ligger inom tillåtet temperaturområde för laddning.

Under laddning lyser laddningsdisplayens **21** LED på batteriet. Varje kontinuerligt tänd LED motsvarar en laddad kapacitet på ungefär 20 %. En blinkande LED indikerar att nästa laddning till 20 % pågår.

► **Var försiktig om du under laddning berör laddaren. Bär skyddshandskar.** Laddaren kan bli mycket het speciellt vid hög omgivningstemperatur.

Anvisning: Kontrollera att laddaren under laddning är välventilerad och att ventilationsöppningarna **32** på båda sidorna inte är övertäckta.

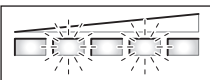
Batteriet är fullständigt laddat när de fem lysdioderna lyser kontinuerligt på displayen **21**. Laddningen avbryts automatiskt.

Bryt strömmen till laddaren och koppla bort batteriet från laddaren.

Batteriet frånkopplas automatiskt när det tas ur laddaren.

Batteriet kan nu anslutas till elcykeln.

Fel – Orsak och åtgärd

Orsak	Åtgärd
	Två LED blinkar på batteriet
Batteriet är defekt	kontakta en auktoriserad cykelhandlare

Orsak	Åtgärd
	Tre LED blinkar på batteriet
Batteriet är för varmt eller kallt	Ta bort batteriet från laddaren och låt batteriets temperatur utjämnas tills temperaturområdet uppnås Anslut batteriet till laddaren först sedan tillåten laddningstemperatur uppnåtts.
Laddning kan inte ske (ingen indikering på batteriet)	
Stickkontakten sitter inte korrekt	kontrollera alla stickanslutningar
Batteriets kontakter är nedsmutsade	rengör försiktigt batteriets kontakter
Laddarens ventilationsöppningar 32 är tilltäppta eller övertäckta	rengör ventilationsöppningarna 32 och ställ upp laddaren så att den ventileras väl
Nätuttaget, nätsladden eller laddaren är defekt	kontrollera nätspänningen och låt en cykelhandlare kontrollera laddaren
Batteriet är defekt	kontakta en auktoriserad cykelhandlare

Underhåll och service

Underhåll och rengöring

Om laddaren fallerar, ta kontakt med en auktoriserad cykelhandlare.

Kundservice och kundkonsulter

Vid alla frågor beträffande laddaren kontakta en auktoriserad cykelhandlare.

För auktoriserade cykelhandlare kan du hitta kontaktadresser på internetsidan www.bosch-ebike.com

Avfallshantering

Laddare, tillbehör och förpackning ska omhändertas på miljövänligt sätt för återvinning.

Släng inte laddare i hushållsavfall!

Endast för EU-länder:



Enligt europeiska direktivet 2002/96/EG för kasserade elektriska och elektroniska apparater och dess modifiering till nationell rätt måste obrukbara laddare omhändertas separat och på miljövänligt sätt lämnas in för återvinning.

Ändringar förbehålles.

Drivenhet Drive Unit Speed/ Styreenhet Intuvia

Sikkerhetsinformasjon



Les alle sikkerhetsinformasjoner og instruksjoner. Feil ved overholdelsen av sikkerhetsinformasjonene og instruksene kan forårsake elektrisk støt, brann og/eller alvorlige skader.

Ta vare på alle sikkerhetsinformasjoner og instruksjoner for fremtidig bruk.

I driftsinstruksen brukes uttrykket «Batteri» som gjelder både for standard-batterier (batterier med holder på sykkelrammen) og bagasjebrett-batterier (batterier med holder på bagasjebrettet).

- ▶ **Du må ikke åpne drivenheten på egen hånd. Drivenheten trenger ikke vedlikehold og må kun åpnes av kvalifisert fagpersonale og kun repareres med original-reservedeler.** Slik opprettholdes drivenhetens sikkerhet. Hvis drivenheten åpnes uten tillatelse, mister garantien sin gyldighet.
- ▶ **Alle komponenter som er montert på drivenheten og alle andre komponenter til el-sykkeldriften (f. eks. kjedekive, feste for kjedekive, pedaler) må kun skiftes ut mot samme type komponenter eller komponenter som er godkjent av sykkelprodusenten spesielt for denne el-sykkelen.** Slik beskyttes drivenheten mot overbelastning og skader.
- ▶ **Ta batteriet ut av el-sykkelen før du begynner å arbeide (f. eks. montering, vedlikehold etc.) på el-sykkelen, transporterer den med bil eller fly eller oppbevarer den.** Ved utilsiktet betjening av på-/av-bryteren er det fare for skader.
- ▶ **Funksjonen starthjelp må utelukkende benyttes når el-sykkelen startes.** Dersom hjulene til el-sykkelen ikke har bakkekontakt når starthjelpen benyttes, er det fare for skader.
- ▶ **Benytt bare original Bosch batterier som er godkjent av produsenten for el-sykkelen.** Bruken av andre batterier kan føre til skader og brannfare. Ved bruk av andre batterier overtar Bosch intet ansvar og ingen garanti.
- ▶ **Følg alle nasjonale forskrifter om godkjenning og bruk av el-sykkelen.**
- ▶ **Les og følg sikkerhetsinformasjonene og instruksene i driftsinstruksen for batteriet og i driftsinstruksen for el-sykkelen.**

Produkt- og ytelsesbeskrivelse

Formålsmessig bruk

Drivenheten skal utelukkende brukes til drift av el-sykkelen og må ikke brukes til andre formål.

El-sykkelen er beregnet til bruk på veier med fast veidekke. Den er ikke tillatt til konkurranseformål.

Illustrerte komponenter (se side 2 – 3)

Nummereringen av de illustrerte komponentene gjelder for bildene på illustrasjonssidene.

Alle illustrasjoner av sykkeldeleer unntatt drivenheten, styreenheten inkl. betjeningsenhet, hastighetssensoren og de tilhørende holderne er skjematisk og kan avvike fra el-sykkelen din.

- 1 Tast indikatorfunksjon «i»
- 2 Tast for belysning
- 3 Styreenhet
- 4 Holder for styreenheten
- 5 På/av-tast styreenhet
- 6 Reset-tast «RESET»
- 7 USB-kontakt
- 8 Beskyttelseshette for USB-kontakten
- 9 Drivenhet
- 10 Betjeningsenhet
- 11 Tast indikatorfunksjon «i» på betjeningsenheten
- 12 Tast redusere verdi/bla nedover «-»
- 13 Tast øke verdi/bla oppover «+»
- 14 Tast starthjelp «WALK»
- 15 Låsing styreenhet
- 16 Sperreskrue styreenhet
- 17 Hastighetssensor
- 18 Ekemagnet til hastighetssensoren

Indikatorelementer på styreenheten

- a Indikator motoreffekt
- b Indikator støtetrinn
- c Tekstindikator
- d Verdiindikator
- e Tachometerindikator
- f Batteri-ladetilstandsindikator

Tekniske data

Drivenhet		Drive Unit Speed
Produktnummer		0 275 007 003
Ytelse	W	350
Utgående dreiemoment max.	Nm	50
Nominell spenning	V _{DC}	36
Driftstemperatur	°C	-5 ... +40
Lagertemperatur	°C	-10 ... +50
Beskyttelsestype		IP 54 (støv- og sprutvannbeskyttet)
Vekt, ca.	kg	4

Styreenhet		Intuvia
Produktnummer		1 270 020 903
Ladestrøm USB-kontakt max.	mA	500
Ladespenning USB-kontakt	V	5
Driftstemperatur	°C	-5 ... +40
Lagertemperatur	°C	-10 ... +50
Beskyttelsestype		IP 54 (støv- og sprutvannbeskyttet)
Vekt, ca.	kg	0,15

Belysning*		
Nominell spenning	V _{DC}	6
Ytelse		
– Frontlykt	W	2,7
– Baklykt	W	0,3

* avhengig av lovbestemmelser ikke mulig på alle nasjonale modeller med el-sykel-batteri

Montering

Innsetting og fjerning av batteriet

For innsetting og for fjerning av batteriet i el-sykkelen må du lese og følge driftsinstruksen for batteriet.

Innsetting og fjerning av styreenheten (se bilde A)

For **innsetting** av styreenheten **3** skyver du den forfra inn i holderen **4**.

For **fjerning** av styreenheten **3** trykker du på låsingen **15** og skyver den fremover ut av holderen **4**.

► **Fjern styreenheten når du har satt fra deg el-sykkelen slik at drivverket ikke kan brukes av uberettigede tredjepersoner.** Uten styreenhet kan el-sykel-systemet ikke innkoples.

Det er også mulig å sikre styreenheten i holderen mot at den fjernes. Demonter til dette holderen **4** fra styret. Sett styreenheten inn i holderen. Skru sperreskruen **16** nedenfra inn i gjengene på holderen. Monter holderen igjen på styret.

Kontroll av hastighetssensoren (se bilde B)

Hastighetssensoren **17** og den tilhørende ekemagneten **18** må være montert slik at ekemagneten ved omdreining av hjulet beveger seg i en avstand på minst 5 mm og maksimalt 17 mm fra hastighetssensoren.

Merk: Hvis avstanden mellom hastighetssensor **17** og eke-magnet **18** er for liten eller for stor eller hastighetssensoren **17** ikke er riktig tilkople, svikter tachometerindikatoren **e**, og el-sykel-driften arbeider i nødprogrammet.

Du må da løse skruen på ekemagneten **18** og feste ekemagneten slik på eken, at den går forbi markeringen til hastighetssensoren i en så liten avstand som mulig. Hvis det deretter fortsatt ikke vises en hastighet på tachometerindikatoren **e**, må du henvende deg til en autorisert sykkel-forhandler.

Bruk

Igangsetting

Forutsetninger

Systemet til el-sykkelen kan kun aktiveres når følgende forutsetninger er oppfylt:

- Et tilstrekkelig ladet batteri er satt inn (se driftsinstruks for batteriet).
- Styreenheten er satt riktig inn i holderen (se «Innsetting og fjerning av styreenheten», side Norsk – 2).
- Hastighetssensoren er tilkople, riktig (se «Kontroll av hastighetssensoren», side Norsk – 2).

Inn-/utkopling av el-sykel-systemet

For **innkopling** av el-sykel-systemet har du følgende muligheter:

- Hvis styreenheten allerede er innkople, når den settes inn i holderen, koples el-sykel-systemet automatisk inn.
- Trykk ved innsatt styreenhet og innsatt batteri en gang kort på på-av-tasten **5** til styreenheten.
- Trykk ved innsatt styreenhet på på-av-tasten til batteriet (se batteriets driftsinstruks).

Merk: Pedalene til el-sykkelen må ikke være belastet ved innkopling av el-sykel-systemet, ellers innskrenkes motoreffekten. I tekstindikatoren **c** vises feilmeldingen «**Release pedal**» (avløst pedal).

Dersom el-sykel-systemet ved en feiltagelse ble innkople, med belastede pedaler, kople, du det ut og inn igjen uten belastning.

Drivverket blir aktivert så snart du trør på pedalene (unntatt ved funksjonen starthjelp, se «Inn-/utkopling av starthjelpen», side Norsk – 3). Motoreffekten retter seg etter innstillingene på styreenheten.

Når du i normaldrift slutter å trør på pedalene eller når du har nådd en hastighet på 45 km/h, koples støtten fra el-sykel-drivverket ut. Drivverket aktiveres automatisk igjen når du trør på pedalene og hastigheten er under 45 km/h.

For **utkopling** av el-sykkel-systemet har du følgende muligheter:

- Trykk på på-av-tasten **5** til styreenheten.
- Kople ut batteriet på på-/av-tasten (se driftsinstruks for batteriet.)
- Ta styreenheten ut av holderen.

Hvis det ikke aktiveres en driveffekt i løpet av ca. 10 min (f.eks. fordi el-sykkelen står stille) og det ikke trykkes på noen tast på styreenheten eller betjeningsenheten, koples el-sykkel-systemet automatisk ut for å spare energi.

Anvisninger og innstillinger på styreenheten

Energitilførsel for styreenheten

Når styreenheten sitter i holderen **4**, et tilstrekkelig ladet batteri er satt inn i el-sykkelen og el-sykkel-systemet blir koplet inn, så forsynes styreenheten med energi fra batteriet til el-sykkelen.

Når styreenheten tas ut av holderen **4** skjer energitilførselen via et internt batteri. Dersom det interne batteriet er for svakt når styreenheten koples inn, vises i 3 s «**Attach to bike**» (kople til sykkel) i tekstindikatoren **c**. Deretter koples styreenheten ut igjen.

For opplading av det interne batteriet setter du styreenheten igjen inn i holderen **4** (når et batteri er satt inn i el-sykkelen). Kople inn batteriet til el-sykkelen på på-/av-tasten (se driftsinstruks for batteriet.)

Du kan også lade opp styreenheten via USB-porten. Åpne til dette beskyttelseshetten **8**. Kople USB-kontakten **7** til styreenheten via en passende USB-kabel til et vanlig USB-ladeapparat eller til USB-porten på en datamaskin (5 V ladespenning, max. 500 mA ladestrøm). I tekstindikatoren **c** til styreenheten vises «**USB connected**» (USB tilkoplet).

Innkopling/utkopling av styreenheten


For **innkopling** av styreenheten trykker du kort på på-av-tasten **5**. Styreenheten kan (ved tilstrekkelig ladet internt batteri) også koples inn når den ikke er satt inn i holderen.


For **utkopling** av styreenheten trykker du på på-av-tasten **5**. Hvis styreenheten ikke er satt inn i holderen, utkoples den automatisk uten tastetrykk etter 1 min for å spare energi.


Batteri-ladetilstandsindikator

Batteri-ladeindikatoren **f** viser ladetilstanden til el-sykkelen, ikke til det interne batteriet til styreenheten. Ladetilstanden til el-sykkelen kan likeledes avleses på LEDene på batteriet.

I indikatoren **f** tilsvare hver strek på batterisymbolet ca. 20 % kapasitet:

 100 % til 80 % kapasitet

 20 % til 5 % kapasitet, batteriet bør opplades.

 Mindre enn 5 % kapasitet, driftsstøtte er ikke lenger mulig. LEDene på batteri-ladeindikatoren slukner.

Når belysningen for el-sykkelen brukes via batteriet (avhengig av landet hvor du bor i), er kapasiteten tilstrekkelig for belysning i ca. 2 timer etter at symbolet tomt batteri vises for første gang. Når symbolet begynner å blinke, kan belysningen kun fortsatt brukes i kort tid.

Når styreenheten tas ut av holderen **4**, blir den sist viste ladetilstand til batteriet lagret.

Innstilling av støttrinn

På styreenheten kan du stille inn hvor sterkt el-sykkelenes drivverk skal støtte deg når du trør. Støttrinnene kan endres når som helst, også under syklingen.

Merk: På enkelte modeller er det mulig å stille inn på forhånd og ikke kan endres. Det er også mulig at det står færre trinn til disposisjon enn de som er angitt her.

Følgende støttrinn står maksimalt til disposisjon:

- «**OFF**»: Drivverket er utkoplet, el-sykkelen kan brukes som en normal sykkel, kun ved å trø.
- «**ECO**»: virksom støtte ved maksimal effektivitet, for maksimal rekkevidde
- «**TOUR**»: jevn støtte, for turer med stor rekkevidde
- «**SPORT**»: kraftig støtte, for sportslig sykling i bratte områder og byer
- «**TURBO**»: maksimal støtte opptil høye trørefrekvenser, for sportslig sykling

For **øking** av støttrinnene trykker du på tasten «**+**» **13** på betjeningsenheten så ofte til det ønskede støttrinn vises på indikatoren **b**, for **senking** tasten «**-**» **12**.

Den valgte motoreffekten vises i indikatoren **a**. Den maksimale motoreffekten er avhengig av det valgte støttrinnene.

Støttrinn	Motoreffekt* (Kjedegir)
« ECO »	30 %
« TOUR »	100 %
« SPORT »	180 %
« TURBO »	250 %

* Motoreffekten kan avvike ved enkelte utførelser.

Når styreenheten tas ut av holderen, **4** blir det sist viste støttrinn lagret, indikatoren **a** til motoreffekten blir tom.

Inn-/utkopling av starthjelpen

Starthjelpen kan tjene som ekstra støtte på de første meterne, når starten er vanskelig (som f.eks. ved trafikklys eller i bakke).

► **Funksjonen starthjelp må utelukkende benyttes når el-sykkelen startes.** Dersom hjulene til el-sykkelen ikke har bakkekontakt når starthjelpen benyttes, er det fare for skader.

For **innkopling** av starthjelpen trykker du på tasten «**WALK**» **14** på betjeningsenheten og hold den trykt inne. Drivverket til el-sykkelen innkoples.

Starthjelpen **utkoples**, så snart en av de følgende hendelsene inntreffer:

- Du slipper tasten **«WALK» 14**,
- du trykker en annen tast på styreenheten,
- du trør fremover eller raskt bakover på pedalene,
- hjulene til el-sykkelen blokkeres (f.eks. ved bremsing eller støt mot et hinder).
- hastigheten overskrider 18 km/h.

Inn-/utkopling av belysningen

Alt etter nasjonale bestemmelser er to utførelser for belysningen mulig:

- Via styreenheten kan samtidig frontlys, baklys og displayets bakgrunnsbelysning slås på og av. I denne utførelsen vises ved innkoplingen av belysningen **«Lights on»** (lys på) og ved utkopling av belysningen **«Lights off»** (lys av) i ca. 1 s i tekstindikatoren **c**.
- Det kan kun displayets bakgrunnsbelysning slås på og av, frontlys og baklys til el-sykkelen er uavhengige av styreenheten.

På begge modellene trykker du for **inn- og utkopling av belysningen** henholdsvis på tasten **2**.

Hastighets- og avstandsindikatorer

På **tachometerindikatoren e** vises alltid aktuell hastighet.

På **funksjonsindikatoren** (kombinasjon av tekstindikator **c** og verdiindikator **d**) står følgende funksjoner til disposisjon:

- **«Range» (rekkevidde):** forventet rekkevidde for eksisterende batterilading (ved konstante betingelser som støtte-trinn, strekningsprofil osv.)
- **«Distance» (strekning):** tilbakelagt avstand siden siste reset
- **«Trip time» (kjøretid):** kjøretid siden siste reset
- **«Avg. Speed» (gjennomsnitt):** oppnådd gjennomsnittshastighet siden siste reset
- **«Max. Speed» (maksimal):** oppnådd maksimalhastighet siden siste reset
- **«Clock» (klokkeslett):** aktuelt klokkeslett

Trykk til **skifting i indikatorfunksjonen** på tasten **«i» 1** på styreenheten eller på tasten **«i» 11** på betjeningsenheten så ofte til den ønskede funksjonen vises på indikatoren.

For **reset av «Distance»** (strekning), **«Trip time»** (kjøretid) og **«Avg. Speed»** (gjennomsnitt) skifter du til en av disse tre funksjonene og trykker så på tasten **«RESET» 6** helt til indikatoren er nullstilt. Ved dette er også verdiene til de to andre funksjonene nullstilt.

For **reset av «Max. Speed»** (maksimal) skifter du til denne funksjonen og trykker så på tasten **«RESET» 6** helt til indikatoren er nullstilt.

Når styreenheten tas ut av holderen **4**, blir alle verdiene til funksjonene lagret og kan fortsatt vises.

Visning/tilpasning av grunninnstillingene

Visning og endringer av grunninnstillingene er mulig uavhengig av om styreenheten er satt inn i holderen **4** eller ikke.

For å skifte til menyen grunninnstillinger, trykker du samtidig så lenge på tastene **«RESET» 6** og på tasten **«i» 1**, helt til **c «Configuration»** (innstillinger) vises på tekstindikatoren.

Trykk til **skifting mellom grunninnstillingene** på tasten **«i» 1** på styreenheten helt til ønsket grunninnstilling vises. Er styreenheten satt inn i holderen **4**, kan du også trykke på tasten **«i» 11** på betjeningsenheten.

For **å endre grunninnstillingene** trykker du for redusering/bla nedover på av-tasten **5** ved siden av indikatoren **«-»** eller for øking eller bla oppover på tasten belysning **2** ved siden av indikatoren **«+»**.

Er styreenheten satt inn i holderen **4**, er endringen også mulig med tastene **«-» 12** hhv. **«+» 13** på betjeningsenheten.

For å forlate funksjonen og lagre en endret innstilling, trykk på tasten **«RESET» 6** i 3 s.

Følgende grunninnstillinger står til disposisjon:

- **«unit km/mi» (enhet km/mi):** Slik kan du la deg vise hastigheten og tilbakelagt avstand i kilometer eller engelske mil.
- **«time format» (tidsformat):** Du kan la deg vise klokkeslettet i 12-timers- eller i 24-timers-format.
- **«clock» (klokkeslett):** Du kan stille inn det aktuelle klokkeslettet. Ved å trykke lenger på innstillingstastene endrer du klokkeslettet raskere.
- **«English» (engelsk):** Du kan endre språket på tekstindikatoren. Du kan velge mellom tysk, engelsk, fransk, spansk, italiensk og nederlandsk.
- **«odometer» (total strekning):** Anvisning av den totale strekningen tilbakelagt med el-sykkelen (kan ikke endres)
- **«power-on hours» (total drifttid):** Anvisning av den totale kjøretiden med el-sykkelen (kan ikke endres)

Feilkode-indikator

Komponentene til el-sykel-systemet kontrolleres kontinuerlig automatisk. Hvis det registreres en feil, vises den tilsvarende feilkoden i tekstindikatoren **c**.

Trykk på en annen tast på styreenheten **3** eller på betjeningsenheten **10** for å vende tilbake til standardindikatoren.

Avhengig av feiltypen koples drivverket eventuelt også automatisk ut. Videre sykling uten støtte fra drivverket er alltid mulig. el-sykkelen bør sjekkes før videre turer.

► **La alle kontroller og reparasjoner utelukkende utføres av en autorisert sykkel-forhandler.** Hvis en feil fortsatt anvises, til tross for at den er utbedret, må du også henvende deg til en autorisert sykkel-forhandler.

Kode	Årsak	Utbedring
100	Intern feil på drivenheten	La drivenheten sjekkes
101	Forbindelsesproblem for drivenheten	La kontakter og forbindelser sjekkes
102	Feil på hastighetssensoren	La hastighetssensoren sjekkes
103*	Forbindelsesproblem på belysningen	La kontakter og forbindelser sjekkes
104	Forbindelsesproblem på styreenheten	La kontakter og forbindelser sjekkes
105	For høy temperatur på drivenheten (over 40 °C)	La drivenheten avkjøle. Videresykling uten el-sykkel-drift er mulig og kjøler drivenheten hurtigere.
200	Intern elektronisk feil på batteriet	La batteri kontrolleres
201	Batteriets temperatur for høy (over 40°C)	La batteriet avkjøles. Det er mulig å sykle videre uten el-sykkel-drivverk og det fremskynder avkjølingen av batteriet.
202	Batteriets temperatur for lav (under –10 °C)	La batteriet langsomt varmes opp i et varmt rom.
203	Forbindelsesproblem på batteriet	La kontakter og forbindelser sjekkes
204	Feil poling på batteriet	Lad opp batteriet med original Bosch ladeapparatet som beskrevet i dets driftsinstruks.
410	En eller flere taster på styreenheten er blokkert.	Sjekk om tastene er klemt fast, f.eks. fordi det er kommet inn smuss. Rengjør tastene eventuelt.
414	Forbindelsesproblem på betjenings-enheten	La kontakter og forbindelser sjekkes
418	En eller flere taster på betjeningsenheten er blokkert.	Sjekk om tastene er klemt fast, f.eks. fordi det er kommet inn smuss. Rengjør tastene eventuelt.
422	Forbindelsesproblem for drivenheten	La kontakter og forbindelser sjekkes
423	Forbindelsesproblem på batteriet	La kontakter og forbindelser sjekkes
424	Kommunikasjonsfeil av komponentene med hverandre	La kontakter og forbindelser sjekkes
430	Internt batteri i styreenheten tomt	Lad opp styreenheten (i holderen eller via USB-porten)
490	Intern feil på styreenheten	La styreenheten kontrolleres

* kun med el-sykkel-belysning via batteriet (nasjonal innstilling)

Energitiførsel til eksterne apparater via USB-port

Ved hjelp av USB-porten kan de fleste apparatene med mulig energitiførsel via USB (f. eks. diverse mobiltelefoner) brukes hhv. lades opp.

Forutsetning for oppladingen er at styreenheten og et tilstrekkelig ladet batteri er satt inn i el-sykkelen.

Åpne beskyttelseshetten **8** til USB-porten på styreenheten. Forbind USB-porten til det eksterne apparatet via en passende USB-kabel med USB-kontakten **7** på styreenheten.

Henvisninger til sykling med el-sykkel-systemet

Når virker el-sykkel-drivverket?

El-sykkel-drivverket støtter deg ved syklingen, så lenge du trør på pedalene. Uten pedaltråkking kommer ingen støtte. Motoreffekten er alltid avhengig av kreftene du bruker til tråkking.

Hvis du bruker lite krefter, vil støtten bli mindre enn hvis du bruker mange krefter. Dette gjelder uavhengig av støttettrinnet.

El-sykkel-drivverket koples automatisk ut ved hastigheter over 45 km/h. Når hastigheten synker til under 45 km/h, står drivverket automatisk til disposisjon igjen.

Med unntak av starthjelp-funksjonen, der kan el-sykkelen brukes i lav hastighet uten å trø på pedalene.

Du kan alltid bruke el-sykkelen uten støtte og sykle som med en vanlig sykkel, enten ved å kople ut el-sykkel-systemet eller sette støttettrinnet på «OFF». Det samme gjelder hvis batteriet er tomt.

Samspill av el-sykel-systemet med giret

Også med el-sykel-drivverk skal du bruke giret som på en vanlig sykkel (følg da driftsinstruksen for el-sykkelen).

Uavhengig av giretypen, anbefales det å avbryte tråkningen et øyeblikk mens du girer. Slik forenkles giringen og slitasjonen på drivstrengen reduseres.

Med valg av riktig gir kan du øke hastigheten og rekkevidden med samme mengde krefter.

Samle første erfaringer

Det anbefales å samle første erfaringer med el-sykkelen litt avsides fra trafikkerte veier.

Prøv forskjellige støttettrinn. Med en gang du føler deg sikker, kan du med el-sykkelen sykle i trafikken som med en vanlig sykkel.

Test rekkevidden til el-sykkelen under forskjellige vilkår før du planlegger lengre, krevende turer.

Innflytelser på rekkevidden

Rekkevidden påvirkes av mange faktorer som for eksempel:

- støttettrinn
- giring,
- type dekk og dekktrykk,
- batteriets alder og pleietilstand,
- strekningsprofil (bakker) og -tilstand (veibelegg),
- motvind og omgivelsestemperatur,
- vekt til el-sykel, syklist og bagasje.

Derfor er det ikke mulig å beregne rekkevidden helt konkret før en tur påbegynnes. Men generelt gjelder:

- Ved **den samme** motoreffekten til el-sykel-drivverket: Jo mindre krefter du må bruke for å oppnå en viss hastighet (f.eks. med optimal bruk av giret), desto mindre energi forbruker el-sykel-drivverket og desto større er rekkevidden for en batteri-opplading.
- Jo **høyere** støttenivået velges ved ellers like vilkår, desto mindre er rekkevidden.

God bruk av el-sykkelen

Ta hensyn til drifts- og lagringstemperaturene for el-sykel-komponentene. Beskytt drivenheten, styreenheten og batteriet mot ekstreme temperaturer (f.eks. fra intensiv solinnstråling uten samtidig ventilasjon). Komponentene (spesielt batteriet) kan skades av ekstreme temperaturer.

Service og vedlikehold

Vedlikehold og rengjøring

Hold alle komponentene på el-sykkelen rene, spesielt kontaktene på batteri og den tilhørende holderen. Rengjør dem forsiktig med en fuktig, myk klut.

Alle komponentene inklusiv drivenheten må ikke dyppes i vann eller rengjøres med en høytrykkspyler.

Til service og reparasjon av el-sykkelen henvender du deg til en autorisert sykkel-forhandler.

Kundeservice og kundefrådgivning

Ved alle spørsmål til el-sykel-systemet og dets komponenter, ta kontakt med en autorisert sykkelforhandler.

Kontaktinformasjoner til autoriserte sykkelforhandlere finner du på internettsiden www.bosch-ebike.com

Transport

For batteriene gjelder kravene i loven om farlig gods. En privat bruker kan transportere batteriene uten ytterligere pålegg på vanlige veier.

Ved transport som utføres av yrkesmessige brukere eller ved transport av tredjepersoner (f.eks. lufttransport eller spedisjon) må det oppfylles spesielle krav til emballasje og merking (f.eks. de tyske forskriftene ADR). Ved behov kan du konsultere en ekspert for farlig gods ved forberedelse av forsendelsen.

Send batteriene kun hvis huset ikke er skadet. Lim igjen de åpne kontaktene og pakk batteriet slik at det ikke beveger seg i emballasjen. Ta også hensyn til eventuelle videregående nasjonale bestemmelser.

Henvend deg til en autorisert sykkelforhandler ved spørsmål om transport av batteriene. Hos forhandleren kan du også bestille en egnet sportsemballasje.

Deponering



Drivenhet, styreenhet inkl. betjeningsenhet, batteri, hastighetssensor, tilbehør og emballasje må leveres inn til en miljøvennlig gjenvinning.

El-sykkelen og deres komponenter må ikke kastes i vanlig søppel!

Kun for EU-land:



Iht. det europeiske direktivet 2002/96/EF om gamle elektriske apparater og iht. det europeiske direktivet 2006/66/EF må defekte eller oppbrukte batterier/oppladbare batterier samles inn adskilt og leveres inn til en miljøvennlig resirkulering.

Batteriet som er integrert i styreenheten må kun fjernes for deponering. Styreenheten kan bli ødelagt når huset åpnes.

Lever ubrukelige batterier og styreenheter til en autorisert sykkelforhandler.

Li-ion:

Ta hensyn til informasjonene i avsnittet «Transport», side Norsk – 6.



Retten til endringer forbeholdes.

Li-ion-batteri PowerPack

Sikkerhetsinformasjon



Les alle sikkerhetsinformasjoner og instruksjoner. Feil ved overholdelsen av sikkerhetsinformasjonene og instruksene kan forårsake elektrisk støt,

brann og/eller alvorlige skader.

Ta vare på alle sikkerhetsinformasjoner og instruksjoner for fremtidig bruk.

I driftsinstruksen brukes uttrykket «Batteri» som gjelder både for standard-batterier (batterier med holder på sykkelrammen) og bagasjebrett-batterier (batterier med holder på bagasjebrettet), dersom det ikke uttrykkelig refereres til byggeformen.

► **Ta batteriet ut av el-sykkelen før du begynner å arbeide (f. eks. montering, vedlikehold etc.) på el-sykkelen, transporterer den med bil eller fly eller oppbevarer den.** Ved utilsiktet betjening av på-/av-bryteren er det fare for skader.

► **Åpne ikke batteriet.** Det er fare for en kortslutning. Ved åpent batteri bortfaller ethvert garantikrav.



Beskytt batteriet mot varme (f. eks. også mot varig solinnstråling), ild og nedsenking i vann. Det er eksplosjonsfare.

► **Hold batterier som ikke benyttes borte fra binderser, mynter, nøkler, spiker, skruer eller andre mindre metallgjenstander som kan forårsake en brokling av kontaktene.** En kortslutning mellom batterikontaktene kan føre til forbrenninger eller til brann. Ved kortslutninger som er oppstått i denne sammenheng bortfaller ethvert garantikrav ved Bosch.

► **Ved feil bruk kan væske lekke ut av batteriet. Unngå kontakt. Skyll med vann ved tilfeldig kontakt. Dersom væske er kommet i øynene, konsulter lege i tillegg.** Batterivæske som lekker ut kan føre til hudirritasjoner eller forbrenninger.

► **Ved skader på og usakkyndig bruk av batteriet kan damper slippe ut. Tilfør friskluft og oppsøk lege ved plager.** Damper kan irritere luftveiene.

► **Lad batteriet kun med originale Bosch ladeapparater.** Ved bruk av ikke originale Bosch ladeapparater kan en brannfare ikke utelukkes.

► **Bruk batteriet kun i forbindelse med el-sykler med original Bosch el-sykel-drivsystem.** Bare slik beskyttes batteriet mot farlig overlast.

► **Benytt bare original Bosch batterier som er godkjent av produsenten for el-sykkelen.** Bruken av andre batterier kan føre til skader og brannfare. Ved bruk av andre batterier overtar Bosch intet ansvar og ingen garanti.

► Les og følg sikkerhetsinformasjonene og anvisningene i driftsinstruksene for ladeapparat og drivenhet/styreenhet og i driftsinstruksen for el-sykkelen.

Produkt- og ytelsesbeskrivelse

Illustrerte komponenter (se side 4 – 5)

Nummereringen av de illustrerte komponentene gjelder for bildene på illustrasjonssiden. Alle illustrasjoner av sykkeldeler unntatt batteriene og holderne er skjematisk og kan avvike fra el-sykkelen din.

19 Holder for bagasjebrett-batteriet

20 Bagasjebrett-batteri

21 Drifts- og ladetilstandsindikator

22 På-/av-tast

23 Nøkkel til batterilåsen

24 Batterilås

25 Øvre holder til standard-batteriet

26 Standard-batteri

27 Nedre holder til standard-batteriet

28 Bærere

29 Ladeapparat

Tekniske data

Li-ion-batteri		PowerPack 300	PowerPack 400
Produktnummer			
– Standard-batteri svart		0 275 007 500	0 275 007 503
– Standard-batteri hvitt		0 275 007 501	0 275 007 504
– Bagasjebrett-batteri		0 275 007 502	0 275 007 505
Nominell spenning	V=	36	36
Nominell kapasitet	Ah	8,2	11
Energi	Wh	300	400
Driftstemperatur	°C	-10... +40	-10... +40
Lagertemperatur	°C	-10... +60	-10... +60
Godkjent ladetemperaturområde	°C	0... +40	0... +40
Vekt, ca.	kg	2,5	2,5
Beskyttelsestype		IP 54 (støv- og sprutvannbeskyttet)	IP 54 (støv- og sprutvannbeskyttet)

Montering

► **Plasser batteriet kun på rene flater.** Unngå spesielt at ladekontakten og andre kontakter tilsmusses, f. eks. av sand eller jord.

Sjekk batteriet før førstegangs bruk

Sjekk batteriet før du lader det opp for første gang eller bruker det med el-sykkelen.

Trykk da på på-av-tasten **22** til innkopling av batteriet. Hvis det ikke lyser en LED på ladeindikatoren **21**, er batteriet eventuelt skadet.

Hvis minst en, men ikke alle LEDene på ladeindikatoren lyser **21**, må du lade batteriet helt opp før førstegangs bruk.

► **Ikke lad opp eller bruk et skadet batteri.** Henvend deg til en autorisert sykkelforhandler.

Lading av batteriet

► **Bruk kun Bosch ladeapparatet som er med i leveranseprogrammet til din el-sykkel eller et original Bosch ladeapparat av identisk type.** Kun dette ladeapparatet er tilpasset til Li-ion batteriet som brukes på el-sykkelen.

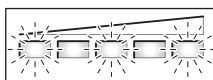
Merk: Batteriet leveres delvis oppladet. For å sikre full effekt fra batteriet må du lade det fullstendig opp i ladeapparatet før førstegangs bruk.

Batteriet må tas ut av el-sykkelen til opplading.

Les og følg driftsinstruksen for ladeapparatet til opplading av batteriet.

Batteriet kan lades opp til enhver tid uten at levetiden forkortes. Det skader ikke batteriet å avbryte oppladingen.

Batteriet er utstyrt med en temperatuvervåking som muliggjør en opplading kun i temperaturområdet mellom 0 °C og 40 °C.



Hvis batteriet befinner seg utenfor ladetemperaturområdet, blinker de tre LEDene på ladeindikatoren **21**. Kople batteriet fra ladeapparatet og la det tempereres.

Kople batteriet først til ladeapparatet når det har oppnådd den tillatte ladetemperaturen.

Kople batteriet først til ladeapparatet når det har oppnådd den tillatte ladetemperaturen.

Ladetilstandsindikator

De fem grønne LEDene på ladetilstandsindikatoren **21** viser batteriets ladetilstand ved innkoplet batteri.

Hver LED tilsvarer ca. 20 % kapasitet. Ved et helt oppladet batteri lyser alle fem LEDene.

Ladetilstanden til det innkoplede batteriet anvises dessuten på styreenheten. Les og følg driftsinstruksen for drivenhet og styreenhet.

Hvis batterikapasiteten er under 5 %, slukner alle LEDene på ladetilstandsindikatoren **21** på batteriet, men det finnes fremdeles en visning på styreenheten.

Innsetting og fjerning av batteriet (se bildene C – D)

► **Slå batteriet alltid av når du setter det inn eller tar det ut av holderen.**

For at batteriet kan settes inn, må nøkkelen **23** stå i låsen **24** og låsen må være låst opp.

For **innsetting av standard-batteriet 26** setter du det med kontaktene på den nedre holderen **27** på el-sykkelen. Vipp det helt inn i øvre holder **25**.

For **innsetting av bagasjebrett-batteriet 20** skyver du det med kontaktene foran til det smekker inn i holderen **19** på bagasjebrettet.

Sjekk om batteriet sitter godt fast. Lås batteriet alltid med låsen **24**, fordi låsen ellers kan åpne og batteriet kan da falle ut av holderen.

Trekk nøkkelen **23** etter låsingen alltid ut av låsen **24**. Slik forhindrer du at nøkkelen faller ut hhv. at batteriet tas ut av uberegtigede tredjepersoner når el-sykkelen er parkert.

For **fjerning av standard-batteriet 26** slår du det av og låser opp låsen med nøkkelen **23**. Vipp batteriet ut av den øvre holderen **25** og trekk det i bæreremmen **28** ut av den nedre holderen **27**.

For **fjerning av bagasjebrett-batteriet 20** slår du det av og låser opp låsen med nøkkelen **23**. Trekk batteriet ut av holderen **19**.

Bruk

Igangsetting

► **Benytt bare original Bosch batterier som er godkjent av produsenten for el-sykkelen.** Bruken av andre batterier kan føre til skader og brannfare. Ved bruk av andre batterier overtar Bosch intet ansvar og ingen garanti.

Inn-/utkobling

Å kople inn batteriet er en mulighet for å kople inn el-sykkelsystemet. Les og følg driftsinstruks for drivenhet og styreenhet.

Før batteriet hhv. el-syssel-systemet koples inn, må du sjekke om låsen **24** er låst.

Merk: Pedalene til el-sykkelen må ikke være belastet ved innkopling av el-syssel-systemet, ellers innskrenkes el-syssel-drivverkets effekt.

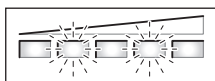
For **innkopling** av batteriet trykker du på på-av-tasten **22**. LEDene på indikatoren **21** lyser og anviser samtidig ladetilstanden.

Merk: Hvis batterikapasiteten er under 5 %, lyser det ikke en LED på batteriets ladetilstandsindikator **21**. Det vises kun på styreenheten om el-syssel-systemet er innkoplet.

For **utkopling** av batteriet trykker du på på-av-tasten **22** på nytt. LEDene på indikatoren **21** slukner. El-syssel-systemet koples ved dette likeledes ut.

Hvis det ikke aktiveres en effekt fra el-syssel-drivverket i løpet av ca. 10 min (f.eks. fordi el-sykkelen står stille) og det ikke trykkes på noen tast på styreenheten eller betjeningsenheten til el-sykkelen, koples el-syssel-systemet og dermed også batteriet automatisk ut for å spare energi.

Batteriet er ved «Electronic Cell Protection (ECP)» beskyttet mot total utladning, overoppheting og kortslutning. Ved fare utkoples batteriet automatisk med en beskyttelseskopling.



Hvis det oppdages en defekt på batteriet, blinker to LEDer på ladetilstandsindikatoren **21**. Henvend deg i dette tilfelle til en autorisert sykkelhandler.

Henvisninger til optimal håndtering av batteriet

Levetiden til batteriet kan forlenges hvis det vedlikeholdes godt, og fremfor alt lagres ved korrekt temperatur.

Med økende alder reduseres batteriets kapasitet også ved bra vedlikehold.

En vesentlig kortere driftstid etter opplading er et tegn på at batteriet er oppbrukt. Du kan skifte ut batteriet.

Hvis bæreremmen **28** til standard-batteriet skulle være defekt, la den skiftes ut av en sykkel-forhandler.

Etteropplading av batteriet før og under lagring

Lad batteriet opp til ca. 60 % før det tas ut av drift i lengre tid (3 til 4 LEDer på ladetilstandsindikatoren **21** lyser).

Sjekk ladetilstanden etter 6 måneder. Hvis kun en LED på ladetilstandsindikatoren **21** lyser, må batteriet lades opp til ca. 60 % igjen.

Merk: Hvis batteriet oppbevares i tom tilstand over lengre tid, kan det til tross for lav selvutlading skades og lagringskapasiteten kan reduseres sterkt.

Det anbefales ikke å la batteriet stå konstant tilkoppelt til ladeapparatet.

Lagringsvilkår

Batteriet må helst lagres på et tørt, godt ventilert sted. Beskytt det mot fuktighet og vann. Ved ugunstige værforhold anbefales det f. eks. å fjerne batteriet fra el-sykkelen og oppbevare det i et lukket rom til neste bruk.

Batteriet kan lagres ved temperaturer fra –10 °C opptil +60 °C. For å oppnå en lang levetid er det fordelaktig med ca. 20 °C romtemperatur.

Pass på at den maksimale lagertemperaturen ikke overskrides. La ikke batteriet f. eks. ligge i bilen om sommeren og oppbevar det utenfor direkte solinnstråling.

Service og vedlikehold

Vedlikehold og rengjøring

Hold batteriet rent. Rengjør det forsiktig med en fuktig, myk klut. Batteriet må ikke dyppes i vann eller rengjøres med en vannstråle.

Hvis batteriet ikke lenger er funksjonsdyktig, henvend deg til en autorisert sykkelhandler.

Kundeservice og kundefrådgivning

Henvend deg til en autorisert sykkelhandler ved spørsmål til batteriene.

► **Skriv opp produsenten og nummeret på nøkkelen 23.**

Hvis du mister nøkkelen må du henvende deg til en autorisert sykkelhandler. Oppgi da nøkkelprodusent og -nummer.

Kontaktinformasjoner til autoriserte sykkelhandlere finner du på nettsiden www.bosch-ebike.com

Transport


For batteriene gjelder kravene i loven om farlig gods. En privat bruker kan transportere batteriene uten ytterligere pålegg på vanlige veier.

Ved transport som utføres av yrkesmessige brukere eller ved transport av tredjepersoner (f. eks. lufttransport eller spedisjon) må det oppfylles spesielle krav til emballasje og merking (f. eks. de tyske forskriftene ADR). Ved behov kan du konsultere en ekspert for farlig gods ved forberedelse av forsendelsen.

Send batteriene kun hvis huset ikke er skadet. Lim igjen de åpne kontaktene og pakk batteriet slik at det ikke beveger seg i emballasjen. Ta også hensyn til eventuelle videregående nasjonale bestemmelser.

Henvend deg til en autorisert sykkelforhandler ved spørsmål om transport av batteriene. Hos forhandleren kan du også bestille en egnet transportemballasje.

Deponering

 Batterier, tilbehør og emballasje skal tilføres en miljøvennlig gjenvinning.

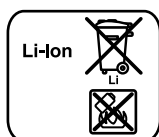
Batteriene må ikke kastes i husholdningsavfallet!

Kun for EU-land:



Iht. det europeiske direktivet 2002/96/EF om gamle elektriske apparater og iht. det europeiske direktivet 2006/66/EF må defekte eller oppbrukte batterier/oppladbare batterier samles inn adskilt og leveres inn til en miljøvennlig resirkulering.

Lever ubrukelige batterier til en autorisert sykkelforhandler.



Li-ion:

Ta hensyn til informasjonene i avsnittet «Transport», side Norsk - 10.

Rett til endringer forbeholdes.

Ladeapparat Charger

Sikkerhetsinformasjon



Les alle sikkerhetsinformasjoner og instruksjer. Feil ved overholdelsen av sikkerhetsinformasjonene og instruksene kan forårsake elektrisk støt,

brann og/eller alvorlige skader.

Ta vare på alle sikkerhetsinformasjoner og instruksjer fremtidig bruk.

I driftsinstruksen brukes uttrykket «Batteri» som gjelder både for standard-batterier (batterier med holder på sykkelrammen) og bagasjebrett-batterier (batterier med holder på bagasjebrettet).



Hold ladeapparatet unna regn eller fuktighet. Der som det kommer vann i et ladeapparat, øker risikoen for elektriske støt.

- ▶ **Lad kun opp Bosch Li-ion batterier som er godkjent for el-sykler. Batterispenningen må passe til ladeapparatets batteri-ladespenning.** Ellers er det fare for brann og eksplosjon.
- ▶ **Hold ladeapparatet rent.** Smuss fører til fare for elektriske støt.
- ▶ **Før hver bruk må du kontrollere ladeapparatet, ledningen og støpselet. Ikke bruk ladeapparatet hvis du registrerer skader. Du må ikke åpne ladeapparatet selv og la det alltid kun repareres av kvalifisert fagpersonale og kun med originale reservedeler.** Skadet ladeapparat, ledning og støpsel øker risikoen for elektriske støt.
- ▶ **Ikke bruk ladeapparatet på lett brennbar undergrunn (f. eks. papir, tekstiler etc.) eller i brennbare omgivelser.** Ladeapparatet oppvarmes under oppladingen og det er derfor fare for brann.
- ▶ **Ved skader på og usakkyndig bruk av batteriet kan damper slippe ut. Tilfør friskluft og oppsøk lege ved plager.** Damper kan irritere luftveiene.
- ▶ **Barn må være under oppsyn.** Slik kan du sørge for at barn ikke leker med ladeapparatet.
- ▶ **Barn og personer, som på grunn av sine fysiske, sensoriske eller åndelige evner eller sin uerfarenhet eller manglende kunnskaper ikke er i stand til å betjene ladeapparatet sikkert, må ikke bruke dette ladeapparatet uten oppsyn eller anvisning av en ansvarlig person.** Ellers er det fare for feil betjening og skader.
- ▶ **Les og følg sikkerhetsinformasjon og instruksene i driftsinstruksene til batteri og drivenhet/styreenhet samt i driftsinstruksen for din el-sykkel.**
- ▶ På undersiden av ladeapparatet befinner det seg en kort versjon av viktige sikkerhetsinstruksjer på engelsk, fransk

og spansk (merket med nummer **33** på bildet på illustrasjonssiden) og med følgende innhold:

- Ta hensyn til bruksanvisningen for sikker bruk. Fare for elektrisk støt.
- Må kun brukes i tørre omgivelser.
- Lad kun batterier til Bosch el-sykkel-systemet. Andre batterier kan eksplodere og forårsake skader.
- Skift ikke ut nettleddningen. Det er fare for brann og eksplosjon.

Produkt- og ytelsesbeskrivelse

Illustrerte komponenter (se side 6 – 7)

Nummereringen av de illustrerte komponentene gjelder for bildet av ladeapparatet på illustrasjonssiden.

- 20** Bagasjebrett-batteri
- 21** Batteri-ladeindikator
- 26** Standard-batteri
- 29** Ladeapparat
- 30** Apparatkontakt
- 31** Apparatstøpsel
- 32** Ventilasjonsåpninger
- 33** Sikkerhetsinformasjoner ladeapparat
- 34** Ladestøpsel
- 35** Kontakt for ladestøpsel

Tekniske data

Ladeapparat	Charger	
Produktnummer		0 275 007 905
Nominell spenning	V~	207 – 264
Frekvens	Hz	47 – 63
Batteri-ladespenning	V=	42
Ladestrøm	A	4
Godkjent ladetemperaturområde	°C	0 ... +40
Oppladingstid		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Antall battericeller		10 – 80
Driftstemperatur	°C	– 10 ... + 75
Lagertemperatur	°C	– 20 ... + 70
Vekt tilsvarende EPTA-Procedure 01/2003	kg	0,8
Beskyttelsestype		IP 40
Informasjonene gjelder for nominell spenning [U] på 230 V. Ved avvikende spenning og på visse nasjonale modeller kan disse informasjonene variere noe.		

Bruk

- **Plasser batteriet kun på rene flater.** Unngå spesielt at ladekontakten og andre kontakter tilsmusses, f. eks. av sand eller jord.

Igangsetting

Tilkopling av ladeapparat (se bildene E – F)

- **Ta hensyn til strømspenningen!** Spenningen til strømkilden må stemme overens med angivelsene på ladeapparatets typeskilt. Ladeapparater som er merket med 230 V kan også brukes med 220 V.

Sett apparatstøpselet **31** til nettleidingen i apparatkontakten **30** på ladeapparatet.

Koble nettleidingen (avhengig av landet) til strømmettet.

Slå av batteriet og ta det ut av holderen på el-sykkelen. Les og følg til dette driftsinstruksen for batteriet.

Sett ladestøpselet **34** til ladeapparatet inn i kontakten **35** på batteriet.

Opplading

Oppladingen begynner så snart ladeapparatet er forbundet med batteriet og strømmettet.

Merk: Oppladingen er kun mulig når temperaturen på batteriet befinner seg i tillatt ladetemperaturområde.

Under oppladingen lyser LEDene på ladetilstandsindikatoren **21** på batteriet. Hver varig lysende LED tilsvarer ca. 20 % kapasitet på oppladingen. Den blinkende LEDen anviser oppladingen til de neste 20 %.

- **Vær forsiktig hvis du berører ladeapparatet i løpet av oppladingen. Bruk vernehansker.** Ladeapparatet kan varmes sterkt opp, spesielt ved høye omgivelsestemperaturer.

Merk: Pass på at ladeapparatet er godt ventilert i løpet av oppladingen og at ladeåpningene **32** på begge sider ikke er tildekket.

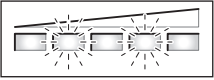
Batteriet er fullstendig oppladet når alle fem LEDene på indikatoren **21** lyser kontinuerlig. Oppladingen avbrytes automatisk.

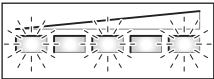
Kople ladeapparatet fra strømmettet og batteriet fra ladeapparatet.

Når batteries koples fra ladeapparatet slås batteriet automatisk av.

Du kan nå sette batteriet inn i el-sykkelen.

Feil – Årsaker og utbedring

Årsak	Utbedring
	To LEDer på batteriet blinker
Batteriet er defekt	Henvend deg til autorisert sykkelforhandler

Årsak	Utbedring
	Tre LEDer på batteriet blinker
Batteriet er for varmt eller for kaldt	Kople ladeapparatet fra batteriet og la det tempereres til ladetemperaturområdet er oppnådd Kople batteriet først til ladeapparatet når det har oppnådd den tillatte ladetemperaturen.
Ingen opplading mulig (ingen visning på batteriet)	
Støpselet er ikke satt riktig inn	Sjekk alle stikkforbindelsene
Kontaktene på batteriet er tilsmusset	Rengjør kontaktene på batteriet forsiktig
Ventilasjonsåpningene 32 på ladeapparatet er tett eller tildekket	Rengjør ventilasjonsåpningene 32 og plasser ladeapparatet slik at det er godt ventilert
Stikkontakt, ledning eller ladeapparat er defekt	Sjekk nettspenningen, la ladeapparatet kontrolleres av en sykkel-forhandler
Batteriet er defekt	Henvend deg til autorisert sykkelforhandler

Service og vedlikehold

Vedlikehold og rengjøring

Hvis ladeapparatet skulle svikte, må du henvende deg til en autorisert sykkel-forhandler.

Kundeservice og kundefråging

Hvis du har spørsmål om ladeapparatet, må du henvende deg til en autorisert sykkel-forhandler.

Kontaktinformasjoner til autoriserte sykkelforhandlere finner du på internetsiden www.bosch-ebike.com

Deponering

Ladeapparater, tilbehør og emballasje må leveres inn til miljøvennlig gjenvinning.

Ikke kast ladeapparater i vanlig søppel!

Kun for EU-land:



Jf. det europeiske direktivet 2002/96/EF vedr. gamle elektriske og elektroniske apparater og tilpassingen til nasjonale lover må gamle ladeapparater som ikke lenger kan brukes samles inn og leveres inn til en miljøvennlig resirkulering.

Retten til endringer forbeholdes.

Käyttövoimayksikkö Drive Unit Speed/ Käyttötietokone Intuvia

Turvallisuusohjeita



Lue kaikki turvallisuus- ja käyttöohjeet. Turvallisuus- ja käyttöohjeiden noudattamisen laiminlyönti saattaa johtaa sähköiskuun, tulipaloon ja/tai vakavaan loukkaantumiseen.

Säilytä kaikki turvallisuus- ja käyttöohjeet myöhempää käyttöä varten.

Tässä käyttöohjeessa käytetty käsite ”akku” viittaa sekä vakioakkuihin (akut, joiden pidike on polkupyörän rungossa), että tavaratelineakkuihin (akut, joiden pidike on tavaratelineessä).

- ▶ **Älä avaa käyttövoimayksikköä itse. Käyttövoimayksikkö on huoltovapaa, sen saa korjata ainoastaan ammattitaitoiset henkilöt, alkuperäisiä varaosia käyttäen.** Täten varmistat, että käyttövoimayksikkö säilyy turvallisena. Takuun voimassaolo loppuu jos käyttövoimayksikkö avataan luvatta.
- ▶ **Kaikkia käyttövoimayksikköön asennettuja osia ja kaikkia muita eBike:n käyttövoiman osia (esim. ketjupyörä, ketjupyörän kiinnitin, polkimet) saa vaihtaa ainoastaan rakenteeltaan samanlaisiin tai polkupyörän valmistajan erityisesti sinun eBike:si sallittuihin osiin.** Täten käyttövoimayksikkö suojataan ylikuormalta ja vaurioitumiselta.
- ▶ **Irrota akku eBike:sta ennen kaikkia siihen kohdistuvia töitä (esim. asennus, huolto jne.) sekä kun kuljetat eBike:a autolla, lentokoneessa tai säilytät sitä.** Käynnistyskytkimen tahaton painallus aikaansaa loukkaantumisvaaran.
- ▶ **Toimintoa liikkeellelähtöapu saa käyttää ainoastaan eBike:n liikkeellelähdössä.** Jos eBike:n pyörät eivät kosketa maata liikkeellelähtöapua käytettäessä, on olemassa loukkaantumisvaara.
- ▶ **Käytä ainoastaan alkuperäisiä Bosch-akkuja, joita valmistaja sallii sinun eBike:ssa.** Muiden akkujen käyttö saattaa johtaa loukkaantumiseen ja tulipaloon. Muita akkuja käytettäessä takuu raukeaa eikä Bosch ota mitään vastuuta.
- ▶ **Noudata kaikkia kansallisia eBike:n hyväksyntään ja käyttöön liittyviä määräyksiä.**
- ▶ **Lue ja noudata akun ja eBike:si käyttöohjeiden turvallisuus- ja muita ohjeita.**

Tuotekuvaus

Määräyksenmukainen käyttö

Käyttövoimayksikkö on tarkoitettu ainoastaan polkupyöräsi käyttövoimaksi, eikä sitä saa käyttää muihin tarkoituksiin. eBike on tarkoitettu käytettäväksi päällystetyillä teillä. Sitä ei saa käyttää kilpailuissa.

Kuvassa olevat osat (katso sivu 2–3)

Kuvassa olevien osien numerointi viittaa grafiikkasivussa oleviin kuviin.

Kaikki polkupyörän osien kuvat, käyttövoimayksikköä, käyttötietokonetta käyttöyksikköineen, nopeustunnistinta ja niihin kuuluvia pidikkeitä lukuun ottamatta, ovat kaavamaisia ja ne voivat poiketa sinun eBike:ssa.

- 1 Näyttötoiminnon painike ”I”
 - 2 Valaistuksen painike
 - 3 Käyttötietokone
 - 4 Käyttötietokoneen pidike
 - 5 Käyttötietokoneen käynnistyspainike
 - 6 Nollauspainike ”RESET”
 - 7 USB-liitäntä
 - 8 USB-liitännän suojakansi
 - 9 Käyttövoimayksikkö
 - 10 Käyttöyksikkö
 - 11 Näyttötoiminnon painike ”II” käyttöyksikössä
 - 12 Arvon alennus/alaspäin selailun painike ”–”
 - 13 Arvon korotus/ylöspäin selailun painike ”+”
 - 14 Liikkeellelähtöavun painike ”WALK”
 - 15 Käyttötietokoneen lukitus
 - 16 Käyttötietokoneen lukitusruuvi
 - 17 Nopeusanturi
 - 18 Nopeusanturin puolamagneetti
- Käyttötietokoneen näyttöelimet**
- a Moottoritehon näyttö
 - b Tehostustason näyttö
 - c Tekstinäyttö
 - d Arvonnäyttö
 - e Nopeusmittarin näyttö
 - f Akun lataustilan näyttö

Tekniset tiedot

Käyttövoimayksikkö	Drive Unit Speed	
Tuotenumero		0 275 007 003
Teho	W	350
Vääntömomentti voiman ulosotossa maks.	Nm	50
Nimellisjännite	V _{DC}	36
Käyttölämpötila	°C	- 5 ... + 40
Varastointilämpötila	°C	- 10 ... + 50
Suojaus		IP 54 (pöly- ja roiskevesisuojaattu)
Paino n.	kg	4

Käyttötietokone	Intuvia	
Tuotenumero		1 270 020 903
USB-liitännän maks. latausvirta	mA	500
USB-liitännän latausjännite	V	5
Käyttölämpötila	°C	- 5 ... + 40
Varastointilämpötila	°C	- 10 ... + 50
Suojaus		IP 54 (pöly- ja roiskevesisuojaattu)
Paino n.	kg	0,15

Valaistus*		
Nimellisjännite	V _{DC}	6
Teho		
- Etuvalo	W	2,7
- Takavalon	W	0,3

* Iainsäädöstä riippuen ei eBike:n akun kautta toimiva valaistus ole mahdollinen kaikissa maakohtaisissa malleissa

Asennus

Akun asennus ja irrotus

Lue ja noudata akun käyttöohjetta koskien akun asentamista ja irrotusta eBike:sta.

Käyttötietokoneen asennus ja irrotus (katso kuva A)

Asenna käyttötietokone 3 työntämällä se edestäpäin pidikkeeseen 4.

Irrota käyttötietokone 3 painamalla lukitusta 15 ja työntämällä se eteenpäin irti pidikkeestä 4.

► **Poista käyttötietokone pysäköidystä eBike:sta, jotta sivullinen ei luvattomasti voi käyttää käyttölaitetta.** Ilman käyttötietokonetta eBike-järjestelmää ei voida käynnistää.

On myös mahdollista estää käyttötietokoneen irrotus pidikkeestä. Irrota sitä varten pidike 4 ohjaustangosta. Aseta käyttötietokone pidikkeeseen. Kierrä lukitusruuvi 16 alhaaltapäin sitä varten olevaan pidikkeen kierteeseen. Asenna pidike takaisin ohjaustankoon.

Nopeusanturin tarkistus (katso kuva B)

Nopeusanturin 17 ja siihen kuuluvan puolamagneetin 18 tulee olla niin asennettuja, että pyörän pyöriessä yhden kierroksen puolamagneetti liikkuu nopeusanturin ohi vähintään 5 mm ja korkeintaan 17 mm etäisyydellä.

Huomio: Jos etäisyys nopeusanturista 17 puolamagneettiin 18 on liian pieni tai liian suuri tahi, jos nopeusanturi 17 on liitetty väärin, jää nopeusmittarin näyttö e puuttumaan ja eBike-käyttölaite toimii hätäkäyntiohjelmassa.

Avaa tässä tapauksessa puolamagneetin 18 ruuvi ja kiinnitä puolamagneetti puolaan (pinnaan) niin, että se ohittaa nopeusanturin merkintää oikealla etäisyydellä. Jos nopeusmittarin näyttö e ei vielä tämänkään jälkeen näytä nopeutta, käänny valtuutetun polkupyöräkaupiaan puoleen.

Käyttö

Käyttöönotto

Edellytykset

eBike-järjestelmä voidaan aktivoida vain, jos seuraavat edellytykset täyttyvät:

- riittävästi ladattu akku on asennettuna (katso akun käyttöohje).
- Käyttötietokone on asennettu pidikkeeseen oikealla tavalla (katso "Käyttötietokoneen asennus ja irrotus", sivu Suomi – 2).
- Nopeusanturi on liitetty oikein (katso "Nopeusanturin tarkistus", sivu Suomi – 2).

eBike-järjestelmän käynnistyksen ja pysäytys

eBike-järjestelmän käynnistykseen sinulla on seuraavat mahdollisuudet:

- eBike-järjestelmä käynnistyy automaattisesti, jos käyttötietokone jo on kytkettynä, kun se asennetaan pidikkeeseen.
- Paina asennettuna käyttötietokoneella ja asennettuna akulla keran lyhyesti käyttötietokoneen käynnistyspainiketta 5.
- Paina asennettuna käyttötietokoneella akun käynnistyspainiketta (katso akun käyttöohje).

Huomio: eBike:n polkimia ei saa kuormittaa kun eBike-järjestelmä käynnistetään, muuten se rajoittaa moottoritehoa.

Tekstinäyttöön c ilmestyy vikailmoitus "Release pedal" (vapauta poljin).

Jos eBike-järjestelmä vahingossa käynnistetään kun polkimia kuormitetaan, se kytkeytyy pois päältä ja sitten uudelleen päälle, kun kuormitus poistuu.

Käyttölaite aktivoituu heti kun painat poljinta (paitsi liikkeellelähtöaputoiminnassa, katso ”Liikkeellelähtöavun käynnistys ja pysäytys”, sivu Suomi – 3). Moottorin teho riippuu käyttötietokoneeseen tehdyistä asetuksista.

Heti kun normaalkäytössä lopetat paineen polkimelta tai heti, kun olet saavuttanut nopeuden 45 km/h, eBike-käyttölaite kytkee tehostuksen pois päältä. Käyttölaite aktivoituu uudelleen heti, kun painat poljinta ja nopeus on alle 45 km/h.

eBike-järjestelmän **pysäyttämiseen** sinulla on seuraavat mahdollisuudet:

- paina käyttötietokoneen käynnistyspainiketta **5**;
- Kytke akku pois sen käynnistyspainikkeella (katso akun käyttöohje).
- Ota käyttötietokone ulos pidikkeestä.

Jos 10 minuutin aikana ei käyttövoimaa käytetä (esim. koska eBike on paikallaan), eikä mitään käyttötietokoneen tai käyttöyksikön painiketta paineta, akku kytkeytyy automaattisesti pois päältä energian säästämiseksi.

Käyttötietokoneen näytöt ja asetukset

Käyttötietokoneen energiahuolto

Jos käyttötietokone on pidikkeessä **4** ja eBike:en on asetettu riittävästi ladattu akku, eBike-järjestelmä saa energiansa eBike:n akusta.

Jos käyttötietokone poistetaan pidikkeestä **4**, sen energiahuolto tapahtuu sisäisestä akusta. Jos sisäinen akku on heikko kun käyttötietokone käynnistetään, tekstinäyttöön **c** ilmestyy kolmeksi sekunniksi teksti ”**Attach to bike**” (yhdistä polkupyörään). Tämän jälkeen käyttötietokone taas pysähtyy.

Sisäisen akun lataat asettamalla käyttötietokone takaisin pidikkeeseen **4** (kun eBike:ssa on akku). Kytke akku päälle sen käynnistyspainikkeella (katso akun käyttöohje).

Voit ladata käyttötietokoneen myös USB-liitännän kautta. Avaa suojakansi **8**. Liitä käyttötietokoneen USB-liitin **7** sopivalla USB-johdolla yleismalliseen USB-latauslaitteeseen tai tietokoneen USB-liitäntään (5 V latausjännite; maks. 500 mA latausvirta). Käyttötietokoneen tekstinäyttöön **c** ilmestyy ”**USB connected**” (liitetty USB-liitäntään).

Käyttötietokoneen käynnistys/pysäytys

Käynnistä käyttötietokone painamalla lyhyesti käynnistyspainiketta **5**. Käyttötietokoneen voi (riittävästi ladatulla sisäisellä akulla) käynnistää myös, kun se ei ole pidikkeessä.

Pysäytä käyttötietokone painamalla käynnistyspainiketta **5**.

Jos käyttötietokone ei ole pidikkeessä, kytkeytyy se ilman painikkeiden painallusta automaattisesti pois päältä 1:n minuutin kuluttua energian säästämiseksi.

Akun lataustilan näyttö

Akun lataustilan näyttö **f** osoittaa eBike:n akun varaustilan, ei käyttötietokoneen sisäisen akun varausta. eBike-akun varaustilanne voidaan myös nähdä itse akun LED:eistä.

Näytössä **f** jokainen akkutunnuksen palkki vastaa noin 20 % kapasiteetista:



100 % ... 80 % kapasiteetti



20 % ... 5 % kapasiteetti, lataa akku.



Alle 5 % kapasiteetti, käyttölaitteen tehostus ei enää toimi. Akun lataustilan näytön LED:it sammuvat.

Jos eBike-valaistus käyttää akkua (maakohtainen), kapasiteetti riittää vielä 2 tunnin valaistukseen, kun tyhjän akun tunnus ilmestyy ensimmäisen kerran. Kun tunnus alkaa vilkkua, toimii valaistus enää vähän aikaa.

Jos käyttötietokone poistetaan pidikkeestä **4**, akun viimeisin osoitettu varaustilanne säilyy muistissa.

Tehostustason asetus

Käyttötietokoneen avulla voit säätää kuinka paljon eBike-käyttölaite tehostaa polkemista. Tehostustasoa voi milloin vain, myös ajon aikana, muuttaa.

Huomio: Yksittäisissä malleissa on mahdollista, että tehostustaso on valmiiksi asetettu, jolloin sitä ei voi muuttaa. On myös mahdollista, että valittavissa on tässä esitettyä vähemmän tehostustasoa.

Käytettävissä on korkeintaan seuraavat tehostustasot:

- ”**OFF**”: Käyttölaite on poiskytkettyä, Bike:a voidaan polkea tavallisen pyörän tavoin ilman tehostusta.
- ”**ECO**”: aktiivinen tehostus suurimmalla tehokkuudella suurinta mahdollista toimintamatkaa varten
- ”**TOUR**”: tasainen tehostus pitkiä toimintamatkoja varten
- ”**SPORT**”: voimakas tehostus urheilulliseen ajoon mäkisillä osuuksilla sekä kaupunkiliikenteeseen
- ”**TURBO**”: suurin tehostus suurella poljinnopeudella urheilulliseen ajoon

Nosta tehostustasoa painamalla käyttöyksikön painiketta ”+” **13** niin monta kertaa, että haluttu tehostustaso ilmestyy näyttöön **b**. **Alenna** tehostustasoa painamalla painiketta ”-” **12**.

Moottorin kyseinen teho ilmestyy näyttöön **a**. Moottorin suurin mahdollinen teho riippuu valitusta tehostustasosta.

Tehostustaso	Moottorin teho* (Ketjukytkentä)
”ECO”	30 %
”TOUR”	100 %
”SPORT”	180 %
”TURBO”	250 %

* Moottorin teho saattaa poiketa yksittäisissä malleissa.

Jos käyttötietokone poistetaan pidikkeestä **4**, viimeisin osoitettu tehostustaso säilyy muistissa, moottoritehon näyttö **a** pysyy tyhjänä.

Liikkeellelähtöavun käynnistys ja pysäytys

Liikkeellelähtöapu voi toimia lisätehostuksena ensimmäisillä metreillä, jos liikkeellelähtö on vaikeutunut (kuten esim, liikennevaloissa tai ylämäessä).

► **Toimintoa liikkeellelähtöapu saa käyttää ainoastaan eBike:n liikkeellelähdössä.** Jos eBike:n pyörät eivät kosketa maata liikkeellelähtöapua käytettäessä, on olemassa loukkaantumisvaara.

Käynnistä liikkeellelähtöapu painamalla käyttöyksikön painiketta **”WALK” 14**, ja pitämällä se painettuna. eBike:n käyttölaite käynnistyy.

Liikkeellelähtöapu **kytketty pois päältä** heti, kun jokin seuraavista tapahtuu:

- päästät painikkeen **”WALK” 14** vapaaksi,
- painat käyttötietokoneen jotain muuta painiketta,
- poljet eteenpäin tai nopeasti taaksepäin,
- eBike:n pyörät lukkiutuvat (esim. jarruttamalla tai törmäimällä esteeseen),
- nopeus ylittää 18 km/h.

Valaistuksen kytkentä päälle ja pois päältä

Riippuen maakohtaisista määräyksistä on olemassa kaksi mahdollista toteutusta valaistukselle:

- Käyttötietokoneen kautta voidaan etuvalo, takavallo ja näytön taustavalaisuus samanaikaisesti kytkeä päälle ja pois päältä.
- Tässä toteutuksessa tekstinäyttöön **c** ilmestyy n. 1 s ajaksi **”Lights on”** (valot sytytetty), kun valaistus kytketään päälle ja **”Lights off”** (valot sammutettu), kun valaistus kytketään pois päältä.
- Vain näytön taustavalaisuus voidaan kytkeä päälle ja pois päältä. eBike:n etu- ja takavallo ovat riippumattomia käyttötietokoneesta.

Paina kummassakin versiossa painiketta **2 Valaistuksen kytkeminen päälle ja pois päältä**.

Nopeus- ja etäisyysnäyttö

Nopeusmittarin näytössä e näkyy aina senhetkinen nopeus.

Toiminnon näytössä c ja arvonäytön **d** yhdistelmä) voidaan valita seuraavista toiminnoista:

- **”Range” (toimintamatka):** todennäköinen toimintamatka akun senhetkisellä varauksella (olosuhteiden kuten tehostason, matkan profiilin jne. säilyessä samanlaisina)
- **”Distance” (matka):** viimeisestä nollauksesta kuljettu matka
- **”Trip time” (ajoaika):** ajoaika edellisestä nollauksesta
- **”Avg. Speed” (keskinopeus):** viimeisimmän nollauksen jälkeen saavutettu keskinopeus
- **”Max. Speed” (suurin nopeus):** viimeisimmän nollauksen jälkeen saavutettu suurin nopeus
- **”Clock” (kelloaika):** kyseinen kelloaika

Paina **näyttötoiminnon vaihtamiseksi** käyttötietokoneen painiketta **”i” 1** tai käyttöyksikön painiketta **”i” 11** niin monta kertaa, että haluttu toiminto näkyy näytössä.

Nollaa **Reset ”Distance”** (matka), **”Trip time”** (ajoaika) ja **”Avg. Speed”** (keskinopeus) vaihtamalla johonkin näistä kolmesta toiminnoista ja painamalla sitten painiketta **”RESET” 6** kunnes näytössä on nolla. Tällöin myös kahden muun toiminnon arvot nollantuvat.

Nollaa ”Max. Speed” (suurin nopeus) vaihtamalla tähän toimintoon ja painamalla sitten painiketta **”RESET” 6** kunnes näytössä on nolla.

Jos käyttötietokone poistetaan pidikkeestä **4**, säilyy kaikkien toimintojen arvot muistissa ja ovat edelleen näytettävissä.

Perussäätöjen näyttö/sovitus

Perussäätöjen näyttö ja muutokset ovat mahdollisia siitä riippumatta, onko käyttötietokone pidikkeessä **4** tai ei.

Pääset perussäätöjen valikkoon painamalla samanaikaisesti painiketta **”RESET” 6** ja painiketta **”i” 1**, kunnes tekstinäyttöön **c** ilmestyy **”Configuration”** (asetukset).

Paina **perussäätöjen vaihtamiseksi** käyttötietokoneen painiketta **”i” 1**, niin monta kertaa, että haluttu perussäätö näkyy näytössä. Jos käyttötietokone on pidikkeessä **4**, voit painaa myös käyttöyksikön painiketta **”i” 11**.

Paina **perussäätöjen muuttamiseksi** pienemmiksi tai alaspäin selataksesi käynnistyspainiketta **5** näytön **–** vieressä, suuremmiksi tai ylöspäin selataksesi valaistuksen painiketta **2** näytön **”+”** vieressä.

Jos käyttötietokone on pidikkeessä **4**, on muutos mahdollinen myös käyttöyksikön painikkeilla **– ”12** tai **”+” 13**.

Poistu toiminnoista ja tallenna muutettu säätö painamalla painiketta **”RESET” 6** 3 s ajan.

Seuraavista perussäädöistä voit valita:

- **”unit km/mi” (yksikkö km/mi):** voit valita näytön nopeus- ja matkayksiköksi kilometrin tai mailin.
- **”time format” (aikamuoto):** voit valita kelloajan muodoksi 12-tunnin tai 24-tunnin näytön.
- **”clock” (kelloaika):** voit asettaa oikean kelloajan. Säätöpainikkeiden pitempi painallus nopeuttaa kelloajan muutoksen.
- **”English” (englanti):** voit muuttaa tekstinäytön kielen. Vaihtoehtoiset kielet ovat saksa, englanti, ranska, espanja, italia ja hollanti.
- **”odometer” (matka yhteensä):** eBike:lla toistaiseksi kuljettu kokonaismatka (ei muutettavissa)
- **”power-on hours” (käyttöaika yhteensä):** eBike:lla toistaiseksi käytetty kokonaisajoaika (ei muutettavissa)

Vikakoodin näyttö

eBike:n osat tarkistetaan koko ajan automaattisesti. Jos vika todetaan, tekstinäyttöön **c** ilmestyy vastaava vikakoodi.

Paina mielivaltaista käyttötietokoneen **3** tai käyttöyksikön **10** painiketta palataksesi vakionäyttöön.

Riippuen vian laadusta käyttölaite kytketty tarvittaessa automaattisesti pois päältä. Matkan jatkaminen ilman käyttölaitteen tehostusta on kuitenkin aina mahdollista. Anna tarkista eBike ennen seuraavia matkoja.

► **Jätä kaikki tarkistukset ja korjaukset ainoastaan valtuutetun polkupyöräkaupiaan suoritettaviksi.** Jos vika esiintyy edelleen korjauksistasi huolimatta, käänny valtuutetun polkupyöräkaupiaan puoleen.

Koodi	Syy	Korjaus
100	käyttövoimayksikön sisäinen vika	anna tarkistaa käyttövoimayksikkö
101	ongelmia käyttövoimayksikön liitännöissä	anna tarkistaa liitokset ja kytkennät
102	vika nopeusanturissa	anna tarkistaa nopeusanturi
103*	ongelmia valaistuksessa	anna tarkistaa liitokset ja kytkennät
104	ongelmia käyttötietokoneen liitännöissä	anna tarkistaa liitokset ja kytkennät
105	käyttövoimayksikön lämpötila on liian korkea (yli 40 °C)	Anna käyttövoimayksikön jäähtyä. Matkan jatkaminen ilman eBike-käyttölaitetta on mahdollista ja se nopeuttaa käyttövoimayksikön jäähtymistä.
200	Akun sisäinen elektroniikkavika	anna tarkistaa akku
201	Akun lämpötila on liian korkea (yli 40 °C)	anna akun jäähtyä. Matkan jatkaminen ilman eBike-käyttölaitetta on mahdollista ja se nopeuttaa akun jäähtymistä.
202	Akun lämpötila on liian alhainen (alle -10 °C)	anna akun lämmitä hitaasti lämpimässä huoneessa.
203	Ongelmia akun liitännöissä	anna tarkistaa liitokset ja kytkennät
204	akun väärä napaisuus	Lataa akku alkuperäisellä Bosch-latauslaitteella sen käyttöohjeessa selostetulla tavalla.
410	Yksi tai useampi käyttötietokoneen painike on lukkiutunut.	Tarkista ovatko painikkeet jumissa esim. sisään päässeen lian takia. Puhdista painikkeet tarvittaessa.
414	Käyttöyksikön yhteydessä ongelma	anna tarkistaa liitokset ja kytkennät
418	Käyttöyksikön yksi tai useampi painike on lukkiutunut.	Tarkista ovatko painikkeet jumissa esim. sisään päässeen lian takia. Puhdista painikkeet tarvittaessa.
422	ongelmia käyttövoimayksikön liitännöissä	anna tarkistaa liitokset ja kytkennät
423	Ongelmia akun liitännöissä	anna tarkistaa liitokset ja kytkennät
424	Komponenttien välinen kommunikatiivovika	anna tarkistaa liitokset ja kytkennät
430	Käyttötietokoneen sisäinen akku on tyhjä	lataa käyttötietokone (pidikkeessä tai USB-liitännän kautta)
490	käyttötietokoneen sisäinen vika	anna tarkistaa käyttötietokone

* vain jos eBike-valaistus tulee akusta (maakohtainen)

Ulkoisten laitteiden energiahuolto USB-liitännän kautta

USB-liitännän avulla voidaan käyttää tai ladata useimmat laitteet, joiden energiahuolto USB:n kautta on mahdollinen (esim. eräät matkapuhelimet).

Latauksen edellytyksenä on, että käyttötietokone ja riittävästi ladattu akku on asennettu eBike:en.

Avaa käyttötietokoneen USB-liitännän suojakansi **8**. Liitä ulkoisen laitteen USB-liitäntä sopivan USB-johdon avulla käyttötietokoneen USB-liitäntään **7**.

Ajovihjeitä eBike-järjestelmän käyttöön

Milloin eBike-käyttölaite toimii?

eBike-käyttölaite tehostaa ajoa aina, kun poljet. Polkematta tehostus ei toimi. Moottorin teho riippuu aina siitä voimasta, jolla poljet.

Kun käytät vähän voimaa, tehostus on pienempi kuin paljon voimaa käytettäessä. Tämä pätee riippumatta tehostustasosta.

eBike-käyttölaite kytkeytyy automaattisesti pois yli 45 km/h nopeudessa. Kun nopeus putoaa alle 45 km/h, käyttölaite on automaattisesti taas käytettävissä.

Liikkeellelähtöaputoiminnon poikkeuksena on eBike:n ajamisen pienellä nopeudella polkematta.

Voit myös milloin vain ajaa eBike:a ilman tehostusta kuten tavallista polkupyörää, joko kytkemällä eBike-järjestelmä pois päältä tai asettamalla tehostustaso asentoon **"OFF"**. Sama koskee tilannetta, jolloin akku on tyhjä.

eBike-järjestelmän yhteispeli vaihteiden kanssa

Käytä vaihteita kuten tavallisessa polkupyörässä myös eBike-käyttölaiteen kanssa (noudata eBike:n käyttöohjetta).

Kaikessa vaihtamisessa on suositeltavaa hetkeksi keskeyttää polkeminen vaihtamisen ajaksi. Tällöin vaihtaminen on helpompaa ja voimansiirron kuluminen on pienempi.

Valitsemalla vaihde oikein voit nostaa nopeutta ja pidentää toimintamatkaa käyttövoimaa lisäämättä.

Ensimmäisten kokemusten hankkiminen

On suositeltavaa hankkia ensimmäiset kokemukset eBike:n kanssa muualla kuin vilkkaasti liikennöidyillä kaduilla.

Kokeile erilaisia tehostustasoja. Kun olet saavuttanut varmuuden, voit käyttää eBike:a liikenteessä, kuten mitä tahansa polkupyörää.

Kokeile eBike:si toimintamatkaa erilaisissa olosuhteissa, ennen kuin suunnittelet pitkiä, vaativia matkoja.

Toimintamatkaan vaikuttavat tekijät

Toimintamatkaan vaikuttavat kuitenkin monet tekijät, kuten esimerkiksi:

- tehostustaso
- vaihteiden valinta,
- rengasmalli ja renkaiden ilmanpaine,
- akun ikä ja hoitotila,
- matkan profiili (nousut) ja tien ominaisuus (päällystys),
- vastatuuli ja ympäristön lämpötila,
- eBike:n, pyöräilijän ja matkatavaran paino.

Tämän takia ei ole mahdollista ennustaa toimintamatkaa konkreettisesti ennen liikkeellelähtöä. Yleisesti pätee kuitenkin:

- eBike:n käyttölaiteen **samalla** moottoriteholla: mitä vähemmän voimaa käytät määrätyn nopeuden saavuttamiseksi (esim. vaihtamalla optimaalisesti), sitä vähemmän energiaa eBike:n käyttölaite kuluttaa, ja sitä pidemmälle pääset yhdellä akun latauksella.
- Mitä **suuremman** tehostustaseen valitset muuten samantyyppisissä olosuhteissa, sitä lyhyemmäksi muodostuu toimintamatka.

eBike:n hoito ja käsittely

Ota huomioon eBike-osien käyttö- ja varastointilämpötilat. Suojaa käyttövoimayksikkö, käyttötietokone ja akku äärimmäiseltä lämpötilalta (esim. suoralta auringonpaisteelta ilman samanaikaista tuuletusta). Osat (erityisesti akku) voivat vaurioitua äärimmäisestä lämpötilasta.

Hoito ja huolto

Huolto ja puhdistus

Pidä eBike:si osat puhtaana, etenkin akun liittimet ja pidike. Puhdista niitä varovasti kostealla, pehmeällä liinalla.

Mitä osaa (käyttövoimayksikkö mukaan luettuna) ei saa upottaa veteen tai puhdistaa painepesurilla.

Käännä valtuutetun polkupyöräkaupiaan puoleen eBike:n huoltoja ja korjauksia varten.

Huolto ja asiakasneuvonta

Käännä valtuutetun polkupyöräkaupiaan puoleen kaikissa eBike-järjestelmään ja sen osiin liittyvissä kysymyksissä.

Valtuutettujen polkupyöräkauppioiden yhteystiedot löydät internetsivulta www.bosch-ebike.com

Kuljetus

Akut ovat vaara-ainelain määräysten alaisia. Yksityinen käyttäjä saa kuljettaa akkuja kadulla ilman erikoistoimenpiteitä. Ammattimaisessa kuljetuksessa tai toimitettaessa sivullisen kautta (esim.: lentorahti tai huolinta) on noudatettava pakkausta ja merkintää koskevia erikoisvaatimuksia (esim. ADR:n määräyksiä). Tällöin voi tarvittaessa käyttää vaara-aineasian-tuntijaa lähetysten valmistelussa.

Lähetä akkuja ainoastaan, jos kotelo on vaurioitumaton. Teippaa avoimet liittimet ja pakkaa akku niin, että se ei pääse liikkumaan pakkauksessa. Ota myös huomioon mahdolliset tarkeimmat kansalliset määräykset.

Käännä valtuutetun polkupyöräkaupiaan puoleen akun kuljetukseen liittyvissä kysymyksissä. Kauppialta voit myös tilata sopivan kuljetuspakkauksen.

Hävitys



Käyttövoimayksikkö, käyttötietokone käyttöyksikköineen, akku, nopeusanturi, lisätarvikkeet ja pakkaukset tulee toimittaa ympäristöystävälliseen uusiokäyttöön.

Älä heitä eBike:a tai sen osia talousjätteisiin!

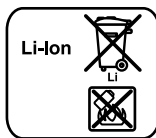
Vain EU-maita varten:



Eurooppalaisen direktiivin 2002/96/EY mukaan käytökelvottomat sähkölaitteet ja eurooppalaisen direktiivin 2006/66/EY mukaan vialliset tai loppuun käytetyt akut/paristot täytyy kerätä erikseen ja toimittaa ympäristöystävälliseen kierrätykseen.

Käyttötietokoneen sisännrakennetun akun saa irrottaa ainoastaan hävitystä varten. Kotelon avaaminen saattaa tuhota käyttötietokoneen.

Luovuta käytöstä poistetut akut ja käyttötietokoneet valtuutetulle polkupyöräkauppiaille.



Litiumioni:

Katso ohjeita kappaleessa ”Kuljetus”, sivu Suomi – 6.

Oikeus teknisiin muutoksiin pidätetään.

Litiumioniakku Powerpack

Turvallisuusohjeita



Lue kaikki turvallisuus- ja käyttöohjeet. Turvallisuus- ja käyttöohjeiden noudattamisen laiminlyönti saattaa johtaa sähköiskuun, tulipaloon ja/tai

vakavaan loukkaantumiseen.

Säilytä kaikki turvallisuusohjeet ja käyttöohjeet myöhempää käyttöä varten.

Tässä käyttöohjeessa käytetty käsite ”akku” viittaa sekä vakioakkuihin (akut, joiden pidike on polkupyörän rungossa), että tavaratelineakkuihin (akut, joiden pidike on tavaratelineen alla) paitsi, jos nimenomaan viitataan rakenteeseen.

► **Irrota akku eBike:sta ennen kaikkia siihen kohdistuvia töitä (esim. asennus, huolto jne.) sekä kun kuljetat eBike:a autolla, lentokoneessa tai säilytät sitä.** Käynnistyskytkimen tahaton painallus aikaansaa loukkaantumisvaaran.

► **Älä avaa akkua.** On olemassa oikosulun vaara. Jos akku on avattu, takuu raukeaa.



Suojaa akku kuumuudelta (esim. myös pitkäaikaiselta auringonpaisteelta), tulelta ja veteen upotukselta. On olemassa räjähdysvaara.

► **Pidä irrallista akkua loitolla paperinliittimistä, kolikoista, avaimista, nauloista, ruuveista tai muista pienistä metalliesineistä, jotka voivat oikosulkea akun koskettimet.** Akkukoskettimien välinen oikosulku saattaa aiheuttaa palovammoja tai johtaa tulipaloon. Bosch hylkää aina tässä yhteydessä syntyneiden oikosulkuvahinkojen takuuvaatimukset.

► **Väärästä käytöstä johtuen saattaa akusta vuotaa nestettä. Vältä koskettamasta nestettä. Huuhtelee vedellä, jos vahingossa kosketat nestettä. Jos nestettä pääsee silmiin, tarvitaan tämän lisäksi lääkärin apua.** Akusta vuotava neste saattaa aiheuttaa ärsytystä ja palovammoja.

► **Jos akku vaurioituu tai sitä käytetään asiaankuulumattomalla tavalla, saattaa siitä purkautua höyryjä. Tuuleta raikkaalla ilmalla ja hakeudu lääkärin luo, jos haittoja ilmenee.** Höyryt voivat ärsyttää hengitysteitä.

► **Lataa akku ainoastaan alkuperäisillä Bosch-latauslaitteilla.** Käytettäessä muita kuin Boschin alkuperäisiä latauslaitteita ei tulipalovaaraa voi sulkea pois.

► **Käytä akkua ainoastaan yhdessä eBike:n ja alkuperäisten Boschin eBike käyttölaitteiden kanssa.** Vain täten suojaat akkua vaaralliselta ylikuormitukselta.

► **Käytä ainoastaan alkuperäisiä Bosch-akkuja, joita valmistaja sallii sinun eBike:ssa.** Muiden akkujen käyttö saattaa johtaa loukkaantumiseen ja tulipaloon. Muita akkuja käytettäessä takuu raukeaa eikä Bosch ota mitään vastuuta.

► **Lue ja noudata latauslaitteen ja käyttövoimayksikön/käyttötietokoneen sekä eBike:si käyttöohjeiden turvallisuusohjeita.**

Tuotekuvas

Kuvassa olevat osat (katso sivu 4 – 5)

Kuvassa olevien osien numerointi viittaa grafiikkasivuissa oleviin kuviin.

Kaikki polkupyörän osien kuvat, akkuja ja niiden pidikkeitä lukuun ottamatta, ovat kaavamaisia ja ne voivat poiketa sinun eBike:ssa.

- 19 Tavaratelineakun pidike
- 20 Tavaratelineakku
- 21 Käyttö- ja lataustilanäyttö
- 22 Käynnistyspainike
- 23 Akkulukon avain
- 24 Akkulukko
- 25 Vakioakun yläpidike
- 26 Vakioakku
- 27 Vakioakun alapidike
- 28 Kantohihna
- 29 Latauslaite

Tekniset tiedot

Litiumioniakku		PowerPack 300	PowerPack 400
Tuotenumero			
– Musta vakioakku		0 275 007 500	0 275 007 503
– Valkoinen vakioakku		0 275 007 501	0 275 007 504
– Tavaratelineakku		0 275 007 502	0 275 007 505
Nimellisjännite	V=	36	36
Nimellinen kapasiteetti	Ah	8,2	11
Energia	Wh	300	400
Käyttölämpötila	°C	–10... +40	–10... +40
Varastointilämpötila	°C	–10... +60	–10... +60
Sallittu latauslämpötila-alue	°C	0... +40	0... +40
Paino n.	kg	2,5	2,5
Suojaus		IP 54 (pöly- ja roiskevesisuojattu)	IP 54 (pöly- ja roiskevesisuojattu)

Asennus

► **Aseta akku vain puhtaalle pinnalle.** Vältä etenkin lataushylsyn ja koskettimien likaantumista esim. hiekasta tai mullasta.

Akun tarkistus ennen ensimmäistä käyttöä

Tarkista akku, ennen kuin lataat sitä ensimmäistä kertaa tai käytät sitä eBike:ssasi.

Paina käynnistuspainiketta **22** akun kytkemiseksi. Jos lataustilan näytössä **21** ei syty yhtään LED:iä, akku on mahdollisesti viallinen.

Jos vähintään yksi lataustilan näytön **21** LED syttyy, mutta eivät kaikki, lataa akku täyteen ennen ensimmäistä käyttöä.

► **Älä lataa viallista akkua äläkä käytä sitä.** Käännä valtuutetun polkupyöräkaupiaan puoleen.

Akun lataus

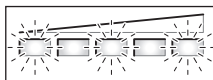
► **Käytä eBike:n toimitukseen kuuluvaa tai saman rakenteen omaavaa alkuperäistä Bosch latauslaitetta.** Vain tämä latauslaite on sovitettu eBike:ssasi olevalle litiumioniakulle.

Huomio: Akku toimitetaan osittain ladattuna. Jotta akun täysi teho olisi taattu, lataa akku täyteen latauslaitteessa ennen ensimmäistä käyttöä.

Akku on poistettava eBike:sta latausta varten.

Lue ja noudata akkua ladattaessa latauslaitteen käyttöohjetta. Akkua voidaan ladata milloin vain, lyhentämättä sen elinikää. Latauksen keskeytys ei vaurioita akkua.

Akku on varustettu lämpötilanvalvonnalla, joka sallii lataamisen vain akun lämpötilan ollessa välillä 0 °C ja 40 °C.



Jos akku on latauslämpötila-alueen ulkopuolella, varaustilan näytön **21** kolme LED:iä vilkkuvat. Irrota akku latauslaitteesta ja anna sen temperoida.

Liitä akku uudelleen latauslaitteeseen vasta, kun se on saavuttanut sallitun latauslämpötilan.

Lataustilan merkivalo

Akun lataustilan **21** viisi vihreää LED:iä osoittaa akun varaustilan sen ollessa kytkettynä.

Tällöin jokainen LED vastaa n. 20 % akun kapasiteetista. Akun ollessa täysin ladattu kaikki viisi LED:iä palaa.

Kytkeyden akun varaustilan näkee lisäksi käyttötietokoneesta. Lue ja noudata tätä varten käyttövoimayksikön ja käyttötietokoneen käyttöohjeita.

Jos akun kapasiteetti on alle 5 %, akussa sijaitsevan lataustilan näytön **21** kaikki LED:it sammuvat, käyttötietokoneessa on kuitenkin vielä näyttötoiminto.

Akun asennus ja irrotus (katso kuvat C – D)

► **Kytke aina akku pois päältä ennen kuin asetat sen pidikkeeseen tai otat sen pidikkeestä.**

Jotta akku voidaan asentaa, on avaimen **23** oltava lukossa **24** ja lukon oltava avattuna.

Asenna vakioakku 26 asettamalla sen koskettimet eBike:n alapidikkeeseen **27**. Käännä se vasteeseen asti yläpidikkeeseen **25**.

Asenna tavaratelineakku 20 työntämällä se koskettimet edellä vasteeseen asti tavaratelineen pidikkeeseen **19**.

Tarkista, että akku on tiukasti paikallaan. Lukitse aina akku lukolla **24**, koska lukko muuten saattaa aueta ja akku voi pudota pidikkeestä.

Poista aina avain **23** lukosta **24** lukitsemisen jälkeen. Täten estät avaimen putoamasta ja sen, että sivullinen luvattomasti irrottaa akun pysäköidystä polkupyörästä.

Irrota vakioakku 26 kytkemällä se pois päältä ja avaamalla lukko avaimella **23**. Käännä akku ulos yläpidikkeestä **25** ja vedä se kantohihnaa **28** käyttäen ulos alapidikkeestä **27**.

Irrota tavaratelineakku 20 kytkemällä se pois päältä ja avaamalla lukko avaimella **23**. Vedä akku ulos pidikkeestä **19**.

Käyttö

Käyttöönotto

► **Käytä ainoastaan alkuperäisiä Bosch-akkuja, joita valmistaja sallii sinun eBike:ssa.** Muiden akkujen käyttö saattaa johtaa loukkaantumiseen ja tulipaloon. Muita akkuja käytettäessä takuu raukeaa eikä Bosch ota mitään vastuuta.

Käynnistys ja pysäytys

Akun kytkentä on yksi eBike-järjestelmän käynnistykseen mahdollisuuksista. Lue ja noudata tätä varten käyttövoimayksikön ja käyttötietokoneen käyttöohjeita.

Tarkista ennen akun tai eBike-järjestelmän käynnistämistä, että lukko **24** on lukittuna.

Huomio: eBike:n polkimia ei saa kuormittaa kun eBike-järjestelmä käynnistetään, muuten se rajoittaa eBike:n käyttölaitteen tehoa.

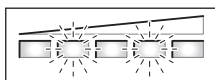
Kytke akku painamalla käynnistyspainiketta **22**. Näytön **21** LED:it syttyvät ja näyttävät samalla varaustilan.

Huomio: Jos akun kapasiteetti on alle 5 %, ei akun lataustilan näytössä **21** syty yhtään LED-merkkivaloa. Ainoastaan käyttötietokoneesta voi päätellä onko eBike-järjestelmä kytkettyä.

Kytke pois akku painamalla käynnistyspainiketta **22** uudelleen. Näytön **21** LED:it sammuvat. Myös eBike-järjestelmä on tällöin poiskytkettyä.

Jos 10 minuutin aikana ei eBiken-käyttölaitteen tehoa käytetä (esim. koska eBike on paikallaan), eikä mitään käyttötietokoneen tai käyttöyksikön painiketta paineta, eBike-järjestelmä ja siten myös akku kytkeytyvät automaattisesti pois päältä energian säästämiseksi.

”Elektroninen kennojen suojaus (ECP)” suojaaa akkua syväpurkaukselta, yllilataukselta, ylikuumenemiselta ja oikosululta. Vaaratilanteessa akku kytkeytyy automaattisesti pois suojakytken avulla.



Jos akussa todetaan vika, varaustilan näytön **21** kaksi LED:iä vilkkuu. Käännä tällöin valtuutetun polkupyöräkauppiaan puoleen.

Ohjeita akun optimaaliseen käsittelyyn

Akun elinikää voidaan pidentää, jos se hoidetaan hyvin ja etenkin, jos se varastoidaan oikeassa lämpötilassa.

Ikääntymisen myötä akun kapasiteetti pienenee kuitenkin myös oikein hoidettuna.

Huomattavasti lyhentynyt käyttöaika latauksen jälkeen osoittaa, että akku on loppuun käytetty. Voit vaihtaa akku.

Jos vakioakun kantohihna **28** on viallinen, anna polkupyöräkauppiaan vaihtaa se uuteen.

Akun lataus ennen varastointia ja sen aikana

Lataa akku ennen pitkää käyttötaukoa noin 60 % kapasiteettiin (3 ... 4 LED:iä palaa lataustilan näytössä **21**).

Tarkista varaustilanne 6 kuukauden jälkeen. Jos lataustilan näytössä **21** palaa enää yksi LED, lataa akku uudelleen n. 60 % kapasiteettiin.

Huomio: Jos akku säilytetään kauan tyhjänä, saattaa se pienestä itsepurkauksesta huolimatta vaurioitua, jolloin varauskyky pienenee huomattavasti.

Ei ole suositeltavaa pitää akku jatkuvasti kytkettynä latauslaitteeseen.

Varastointivaatimukset

Säilytä akku mahdollisuuksien mukaan kuivassa, hyvin tuuletetussa tilassa. Suojaa akku kosteudelta ja vedeltä. Epäsuotuisissa sääolosuhteissa on esim. suositeltavaa irrottaa akku eBike:sta ja säilyttää se suljetussa tilassa seuraavaan käyttökertaan asti.

Akku voidaan varastoida lämpötilassa –10 °C ... +60 °C. Pitkää elinikää varten on kuitenkin varastointi n. 20 °C huoneämpötilassa eduksi.

Varmista, ettei suurinta sallittua varastointilämpötilaa ylitetä. Älä esim. jätä akku kesällä autoon ja säilytä se poissa suorasta auringonvalosta.

Hoito ja huolto

Huolto ja puhdistus

Pidä akku puhtaana. Puhdista sitä varovasti kostealla, pehmeällä liinalla. Akkua ei saa upottaa veteen tai puhdistaa vesisuihkussa.

Jos akku ei enää toimi, käänny valtuutetun polkupyöräkauppiaan puoleen.

Huolto ja asiakasneuvonta

Käänny valtuutetun polkupyöräkauppiaan puoleen kaikissa akkuun liittyvissä kysymyksissä.

► **Merkitse muistiin avaimen 23 valmistaja ja numero.**

Käänny valtuutetun polkupyöräkauppiaan puoleen, jos avain häviää. Ilmoita tällöin avaimen valmistaja ja numero. Valtuutettujen polkupyöräkauppioiden yhteystiedot löydät internetsivulta www.bosch-ebike.com

Kuljetus

Akut ovat vaara-ainelain määräysten alaisia. Yksityinen käyttäjä saa kuljettaa akkuja kadulla ilman erikoistoimenpiteitä. Ammattimaisessa kuljetuksessa tai toimitettaessa sivullisen kautta (esim.: lentorahti tai huolinta) on noudatettava pakkausta ja merkintää koskevia erikoisvaatimuksia (esim. ADR:n määräyksiä). Tällöin voi tarvittaessa käyttää vaara-aineasian-tuntijaa lähetyksen valmistelussa.

Lähetä akkuja ainoastaan, jos kotelo on vaurioitumaton. Teippaa avoimet liittimet ja pakkaa akku niin, että se ei pääse liikkumaan pakkauksessa. Ota myös huomioon mahdolliset tarkemmat kansalliset määräykset.

Käänny valtuutetun polkupyöräkauppiaan puoleen akun kuljetukseen liittyvissä kysymyksissä. Kauppiaalta voit myös tilata sopivan kuljetuspakkauksen.

Hävitys



Toimita akut, lisätarvikkeet ja pakkausmateriaali ympäristöystävälliseen jätteiden kierrätykseen.

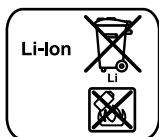
Älä heitä akkuja talousjätteisiin!

Vain EU-maita varten:



Eurooppalaisen direktiivin 2002/96/EY mukaan käyttökeltommat sähkölaitteet ja eurooppalaisen direktiivin 2006/66/EY mukaan vialliset tai loppuun käytetyt akut/paristot täytyy kerätä erikseen ja toimittaa ympäristöystävälliseen kierrätykseen.

Luovuta käytöstä poistetut akut valtuutetulle polkupyöräkauppiaille.



Li-Ion

Litiumioni:

Katso ohjeita kappaleessa ”Kuljetus”, sivu Suomi - 10.

Oikeus teknisiin muutoksiin pidätetään.

Latauslaite Charger

Turvallisuusohjeita



Lue kaikki turvallisuus- ja käyttöohjeet. Turvallisuus- ja käyttöohjeiden noudattamisen laiminlyönti saattaa johtaa sähköiskuun, tulipaloon ja/tai

vakavaan loukkaantumiseen.

Säilytä kaikki turvallisuusohjeet ja käyttöohjeet myöhemmää käyttöä varten.

Tässä käyttöohjeessa käytetty käsite ”akku” viittaa sekä vakioakkuihin (akut, joiden pidike on polkupyörän rungossa), että tavaratelineakkuihin (akut, joiden pidike on tavaratelineessä).



Pidä latauslaite poissa sateesta ja kosteudesta.

Jos vettä tunkeutuu latauslaitteen sisään on sähköiskun riski olemassa.

- ▶ **Lataa ainoastaan eBike:lle sallittuja litiumioniakkuja.** Akun jännitteen tulee vastata latauslaitteen latausjännitettä. Muussa tapauksessa syntyy tulipalo- ja räjähdysvaara.
- ▶ **Pidä latauslaite puhtaana.** Likaantuminen lisää sähköiskun vaaraa.
- ▶ **Tarkista latauslaite, johto ja pistoke, ennen jokaista käyttöä. Älä käytä latauslaitetta jos huomaat siinä olevan vaurioita. Älä avaa latauslaitetta itse. Anna ainoastaan ammattitaitoisten henkilöiden korjata se alkupe räisii varaosia käyttäen.** Vahingoittuneet latauslaitteet, johdot tai pistokkeet kasvattavat sähköiskun vaaraa.
- ▶ **Älä käytä latauslaitetta helposti palavalla alustalla (esim. paperi, kangas jne.) tai palavassa ympäristössä.** Latauslaitteen kuumentuminen latauksen aikana synnyttää tulipalovaaran.
- ▶ **Jos akku vaurioituu tai sitä käytetään asiaankuulumattomalla tavalla, saattaa siitä purkautua höyryjä. Tuuleta raikkaalla ilmalla ja hakeudu lääkärin luo, jos haittoja ilmenee.** Höyryt voivat ärsyttää hengitysteitä.
- ▶ **Pidä lapsia silmällä.** Täten varmistat, että lapset eivät leiki latauslaitteen kanssa.
- ▶ **Lapset ja henkilöt, jotka fyysisten, aistillisten tai henkisten kykyjensä, kokemattomuutensa tai puuttuvan tietonsa takia eivät turvallisesti voi käyttää latauslaitetta, eivät saa käyttää sitä ilman vastuullisen henkilön valvontaa tai neuvontaa.** Muussa tapauksessa on olemassa vääriinkäytön ja loukkaantumisen vaara.
- ▶ **Lue ja noudata akun ja käyttövoimayksikön/käyttötietokoneen sekä eBike:si käyttöohjeiden turvallisuus- ja muita ohjeita.**

- ▶ Latauslaitteen pohjassa on lyhennelmä tärkeistä turvallisuusohjeista englanniksi, ranskaksi ja espanjaksi (graafiikkasivun kuvassa merkitty numerolla **33**), sisältö on seuraava:
 - Noudata käyttöohjetta turvallista käyttöä varten. Sähköiskun vaara.
 - Käytä vain kuivassa ympäristössä.
 - Lataa ainoastaan Bosch-eBike-järjestelmän akkuja. Muut akut voivat räjähtää ja aiheuttaa loukkaantumisia.
 - Älä vaihda verkkojohtoa. On olemassa tulipalo- ja räjähdysvaara.

Tuotekuvaus

Kuvassa olevat osat (katso sivu 6–7)

Kuvassa olevien osien numerointi viittaa grafiikkasivussa olevaan latauslaitteen kuvaan.

- 20** Tavaratelineakku
- 21** Akun latausvalvontanäyttö
- 26** Vakioakku
- 29** Latauslaite
- 30** Laitehylsy
- 31** Laitepistoke
- 32** Tuuletusaukko
- 33** Latauslaitteen turvallisuusohjeet
- 34** Latauspistoke
- 35** Latauspistokkeen liitin

Tekniset tiedot

Latauslaite	Charger	
Tuotenumero		0 275 007 905
Nimellisjännite	V~	207 – 264
Taajuus	Hz	47 – 63
Акun latausjännite	V---	42
Latausvirta	A	4
Sallittu latauslämpötila-alue	°C	0 ... +40
Latausaika		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Akkukennojen lukumäärä		10 – 80
Käyttölämpötila	°C	–10 ... +75
Varastointilämpötila	°C	–20 ... +70
Paino vastaa EPTA-Procedure 01/2003	kg	0,8
Suojaus		IP 40
Tiedot koskevat 230 V nimellisjännitettä [U]. Poikkeavilla jännitteillä ja maakohtaisissa malleissa nämä tiedot voivat vaihdella.		

Käyttö

- ▶ **Aseta akku vain puhtaalle pinnalle.** Vältä etenkin lataushylsyn ja koskettimien likaantumista esim. hiekasta tai mullasta.

Käyttöönotto

Latauslaitteen liitäntä (katso kuvat E - F)

- ▶ **Ota huomioon verkkojännite!** Virtalähteen jännitteen tulee vastata laitteen tyyppikilvessä olevia tietoja. 230 V merkittyjä laitteita voidaan käyttää myös 220 V verkoissa.

Työnnä sitten verkkojohdon laitepiste **31** latauslaitteen laitehylsyyn **30**.

Liitä verkkojohto (maakohtainen) sähköverkkoon.

Kytke akku pois päältä ja poista se eBike:n pidikkeestä. Lue ja noudata akun käyttöohjetta.

Työnnä latauslaitteen latauspiste **34** akun hylsyyn **35**.

Lataustapahtuma

Lataustapahtuma alkaa heti kun latauslaite on kytketty akkuun ja sähköverkkoon.

Huomio: Lataustapahtuma on mahdollinen vain, jos akun lämpötila on sallitulla latauslämpötila-alueella.

Lataustapahtuman aikana akussa olevat lataustilan näytön **21** LED:it palavat. Jokainen pysyvästi palaava LED vastaa latauksessa n. 20 % akun kapasiteetista. Vilkkuva LED näyttää seuraavan 20 % latauksen.

- ▶ **Ole varovainen, jos kosketat latauslaitetta latauksen aikana. Käytä suojakäsineitä.** Latauslaite saattaa tulla hyvin kuumaksi, etenkin korkeassa ympäristön lämpötilassa.

Huomio: Varmista, että latauslaite on hyvin tuuletettu latauksen aikana ja että tuuletusaukot **32** kummallakin puolella ovat vapaat.

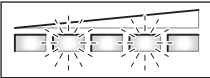
Akku on täysin ladattu, kun lataustilan näytön **21** kaikki viisi LED:iä palaa pysyvästi. Lataus keskeytyy automaattisesti.

Irrota latauslaite sähköverkosta ja akku latauslaitteesta.

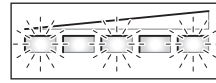
Kun akku poistetaan latauslaitteesta se kytketty automaattisesti pois päältä.

Voit nyt asettaa akun eBike:iin.

Viat - Syyt ja korjaus

Syy	Korjaus
	Kaksi LED:iä vilkkuu akussa
Akku on viallinen	käännä valtuutetun polkupyöräkaupiaan puoleen

Syy



Akku on liian kuuma tai liian kylmä

Korjaus

Kolme LED:iä vilkkuu akussa

Irrota akku latauslaitteesta ja anna akun lämpötilan asettua, kunnes latauslämpötila-alue on saavutettu.

Liitä akku uudelleen latauslaitteeseen vasta, kun se on saavuttanut sallitun latauslämpötilan.

Lataaminen ei ole mahdollista (akussa ei näy mitään merkkivaloa)

pistoke on asennettu väärin tarkista kaikki pistokeliitännät

Akun koskettimet likaantuneet puhdista akun koskettimet varovasti

latauslaitteen tuuletusaukot **32** ovat tukossa tai peitetyt puhdista tuuletusaukot **32** ja aseta latauslaite hyvin tuuletettuun paikkaan

pistorasia, verkkojohto tai latauslaite on viallinen tarkista verkkojännite, anna polkupyöräkaupiaan tarkistaa latauslaite

Akku on viallinen käännä valtuutetun polkupyöräkaupiaan puoleen

Hoito ja huolto

Huolto ja puhdistus

Käännä valtuutetun polkupyöräkaupiaan puoleen, jos latauslaite menee rikki.

Huolto ja asiakasneuvonta

Käännä valtuutetun polkupyöräkaupiaan puoleen kaikissa latauslaitteeseen liittyvissä kysymyksissä.

Valtuutettujen polkupyöräkauppioiden yhteystiedot löydät internetsivulta www.bosch-ebike.com

Hävitys

Latauslaitteet, lisätarvikkeet ja pakkaukset tulee toimittaa ympäristöystävälliseen uusiokäyttöön.

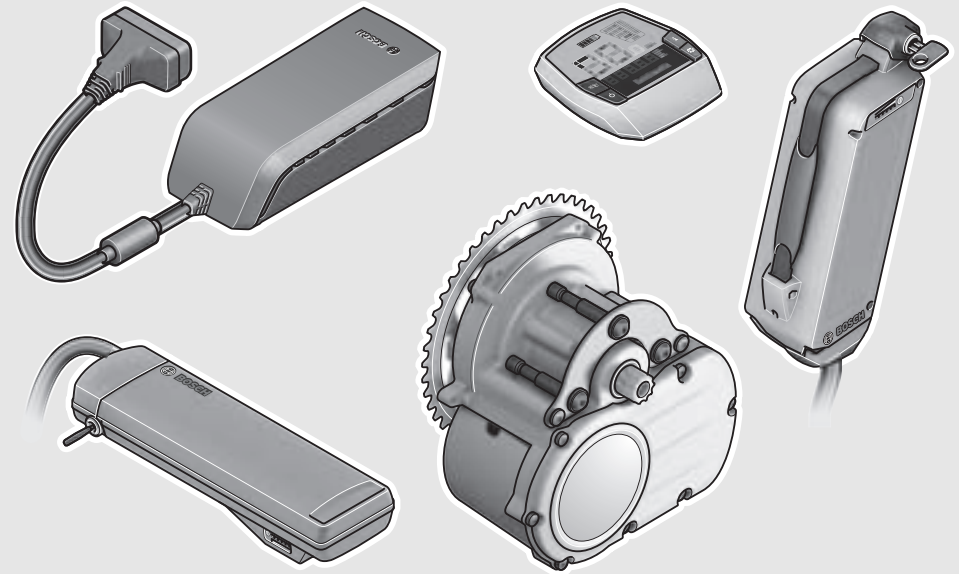
Älä heitä latauslaitteita talousjätteisiin!

Vain EU-maita varten:



Eurooppalaisen vanhoja sähkö- ja elektroniikkalaitteita koskevan direktiivin 2002/96/EY ja sen kansallisten lakien muunnosten mukaan, tulee käyttökelpottomat sähkötyökälyt kerätä erikseen ja toimittaa ympäristöystävälliseen uusiokäyttöön.

Oikeus teknisiin muutoksiin pidätetään.



Robert Bosch GmbH
Bosch eBike Systems
72703 Reutlingen
Germany

www.bosch-ebike.com

0 276 001 YYY (2012.10) T / 142

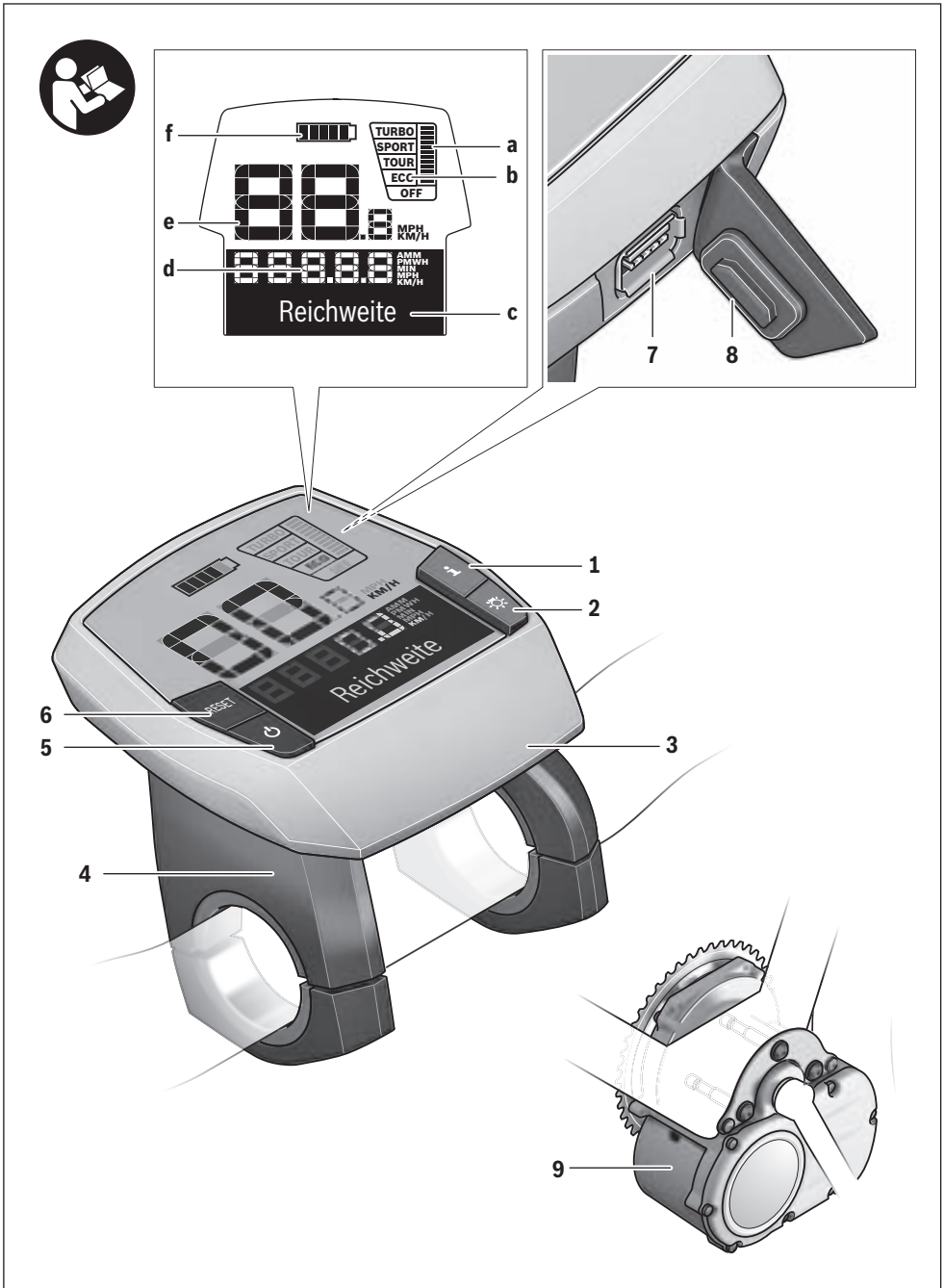
Drive Unit Cruise | Intuvia | PowerPack 300 | PowerPack 400 | Charger

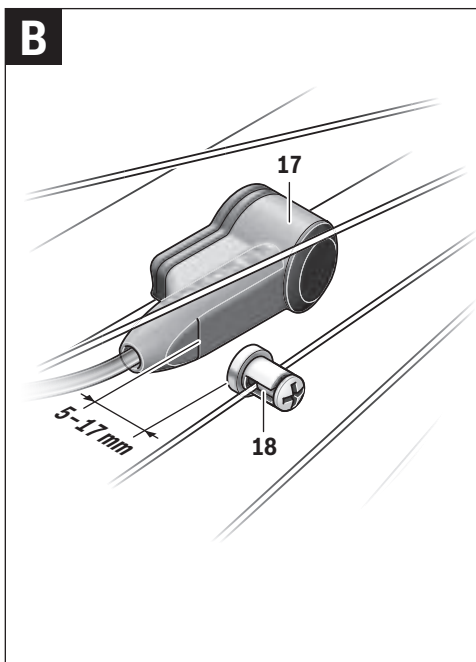
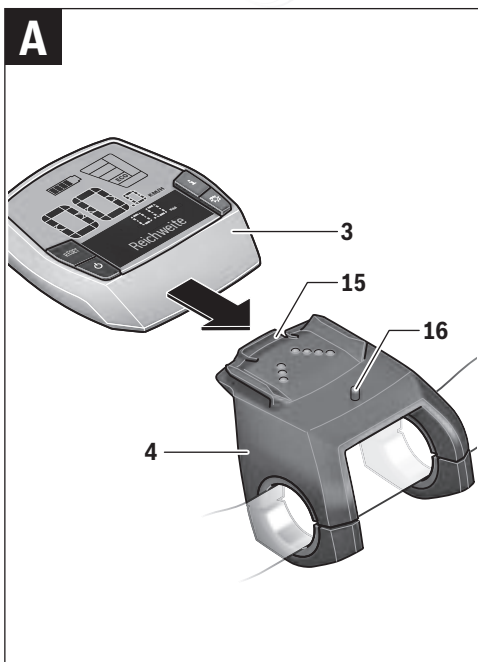
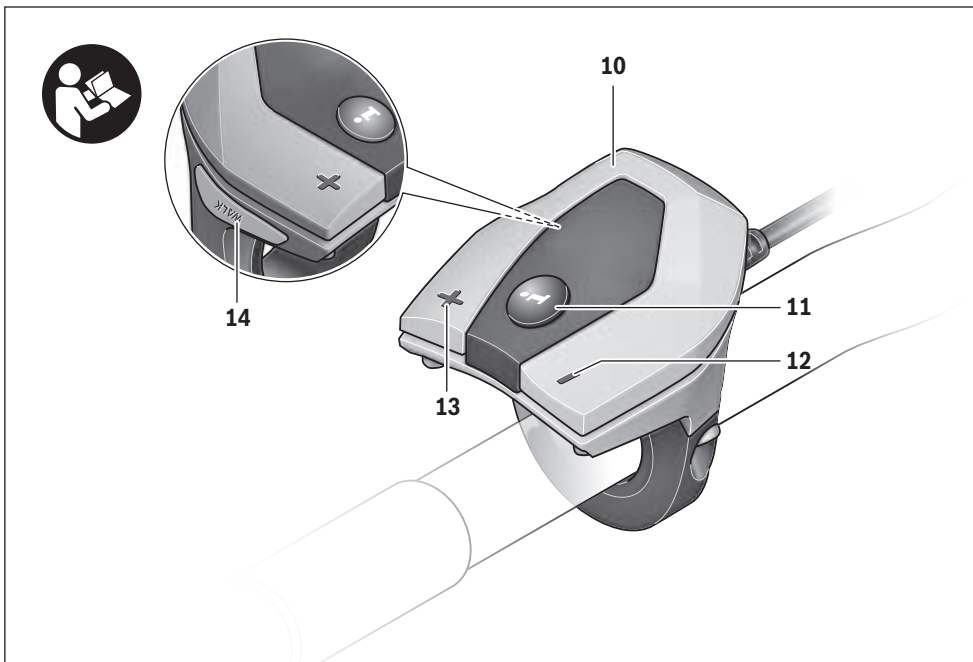
0 275 007 006 | 0 275 007 007 | 1 270 020 903 | 0 275 007 500 | 0 275 007 501 |
0 275 007 502 | 0 275 007 503 | 0 275 007 504 | 0 275 007 505 | 0 275 007 905

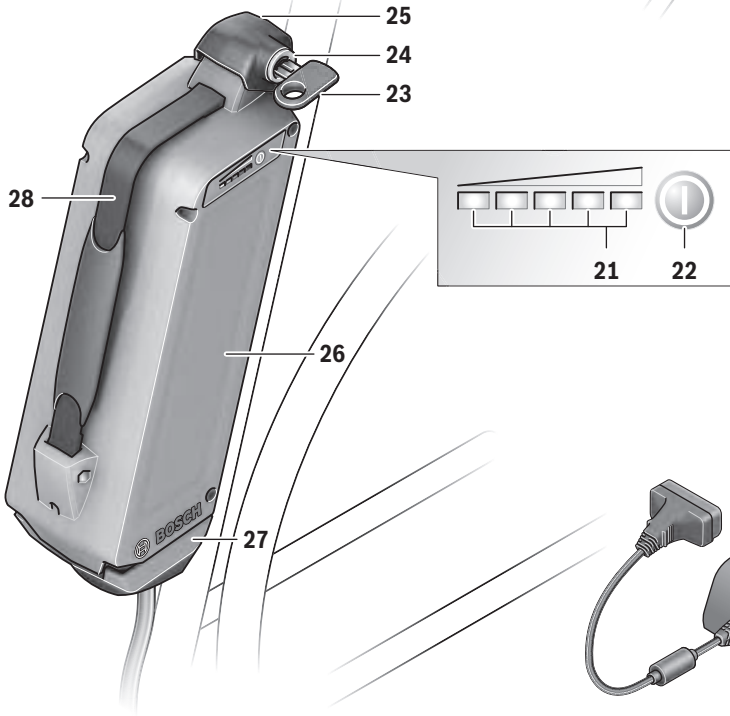
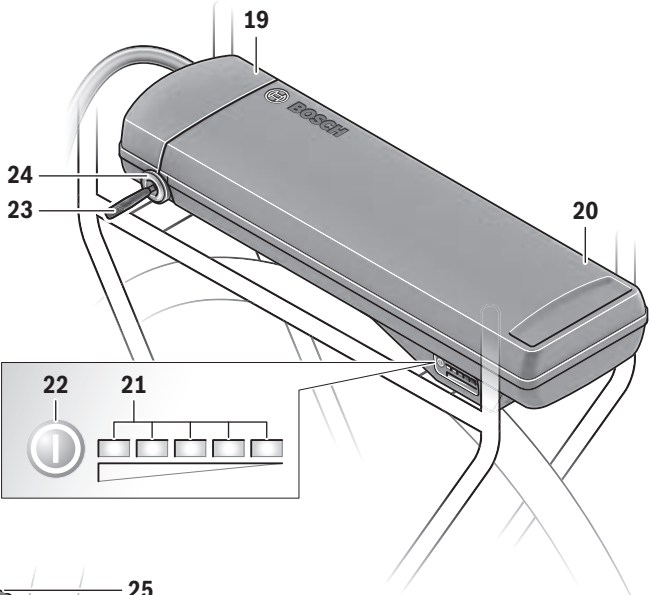


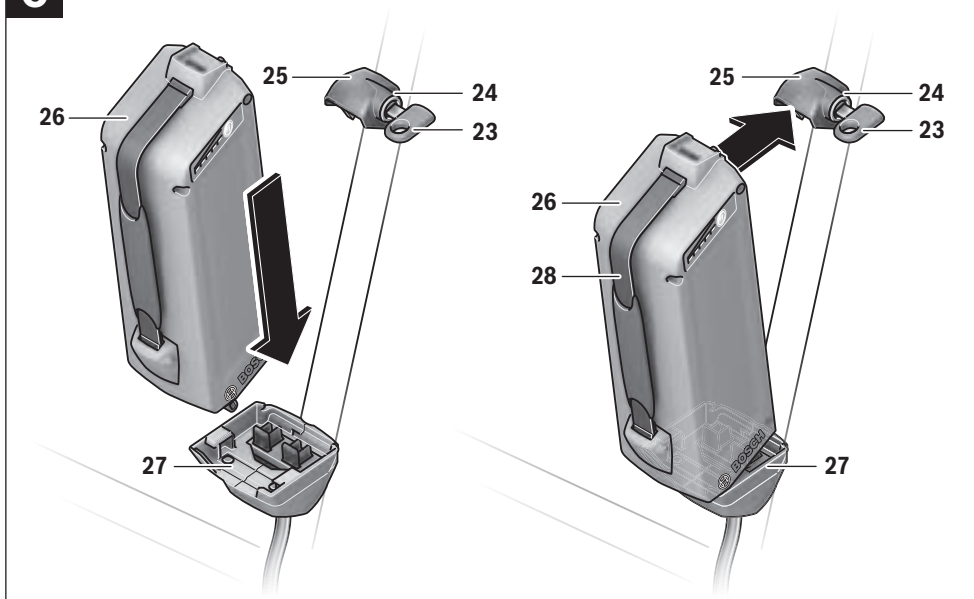
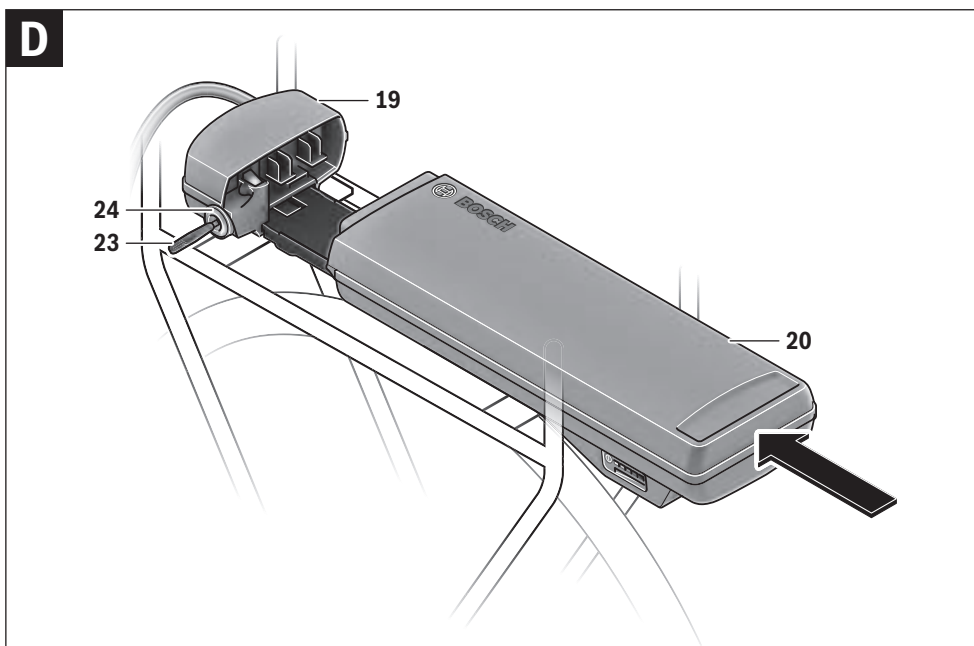
de Originalbetriebsanleitung
en Original instructions
fr Notice originale
es Manual original
it Istruzioni originali
nl Oorspronkelijke gebruiksaanwijzing
da Original brugsanvisning
sv Bruksanvisning i original
no Original driftsinstruks
fi Alkuperäiset ohjeet

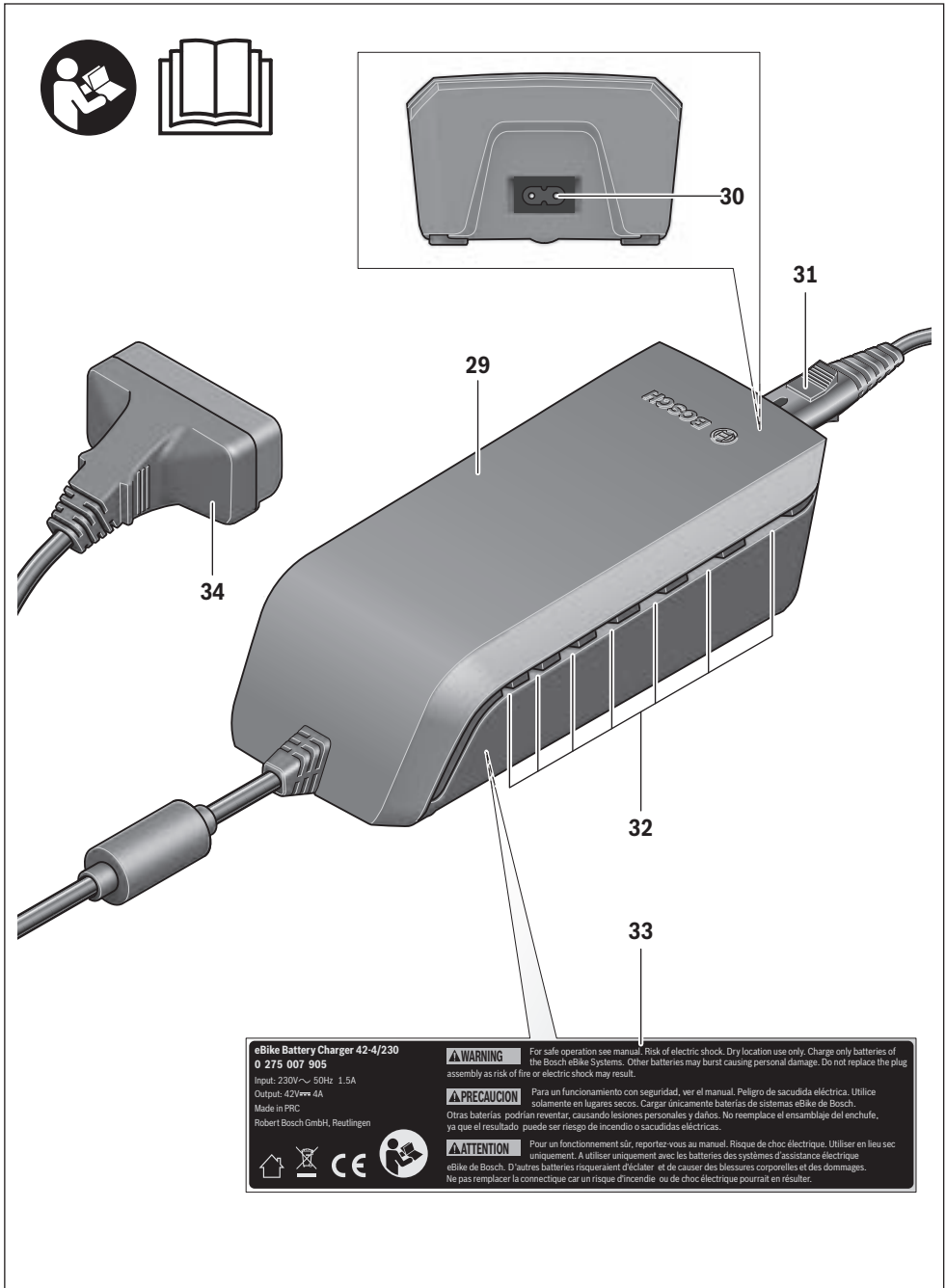


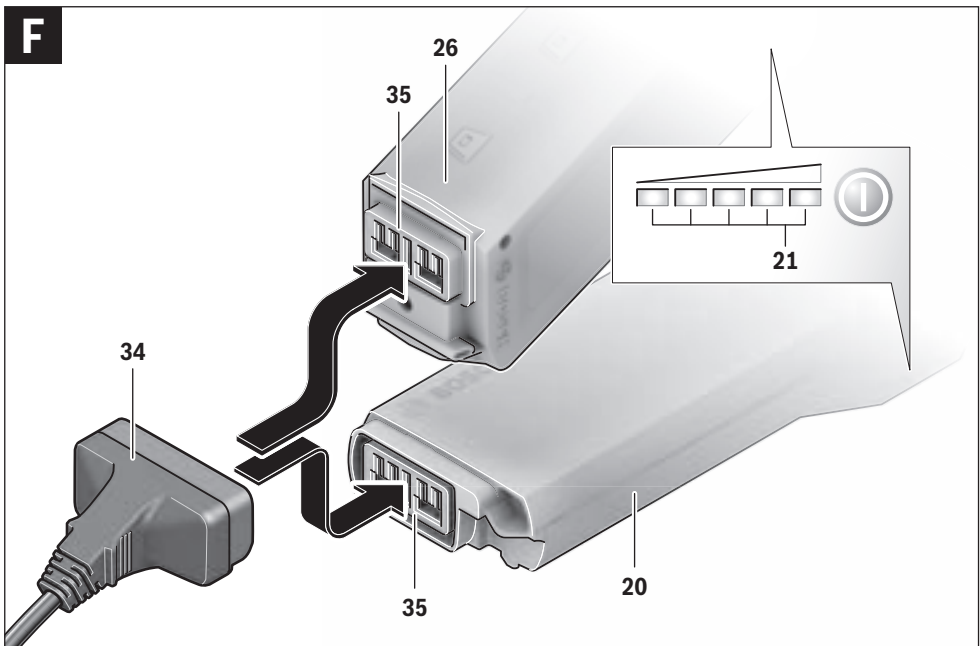
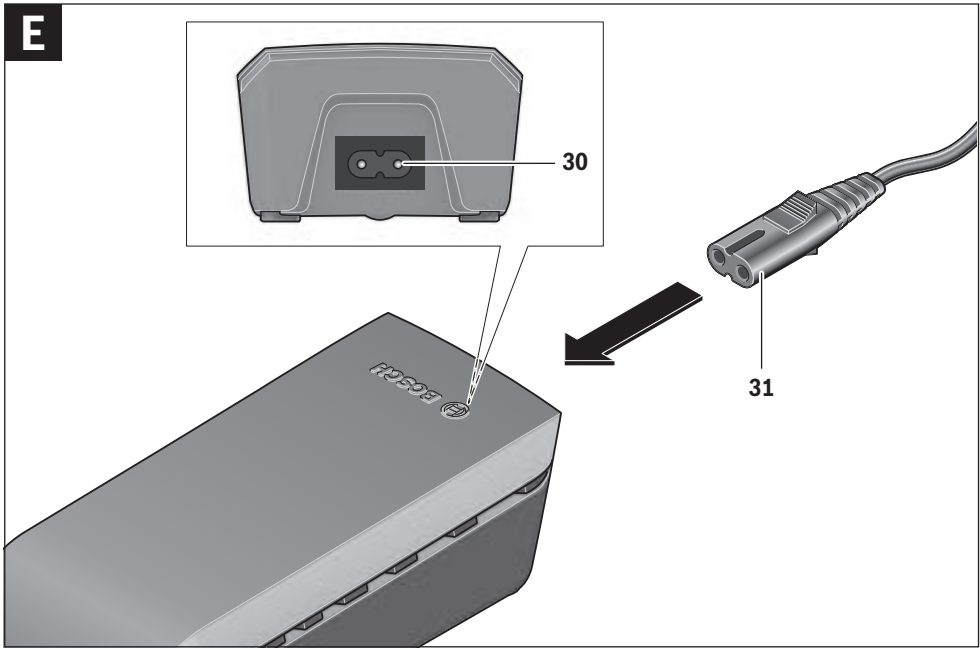






C**D**





Antriebseinheit Drive Unit Cruise/ Bediencomputer Intuvia

Sicherheitshinweise



Lesen Sie alle Sicherheitshinweise und Anweisungen. Versäumnisse bei der Einhaltung der Sicherheitshinweise und Anweisungen können elektrischen Schlag, Brand und/oder schwere Verletzungen verursachen.

Bewahren Sie alle Sicherheitshinweise und Anweisungen für die Zukunft auf.

Der in dieser Betriebsanleitung verwendete Begriff „Akku“ bezieht sich gleichermaßen auf Standard-Akkus (Akkus mit Halterung am Fahrradrahmen) und Gepäckträger-Akkus (Akkus mit Halterung im Gepäckträger).

- ▶ **Öffnen Sie die Antriebseinheit nicht selbst. Die Antriebseinheit ist wartungsfrei und darf nur von qualifiziertem Fachpersonal und nur mit Original-Ersatzteilen repariert werden.** Damit wird sichergestellt, dass die Sicherheit der Antriebseinheit erhalten bleibt. Beim unberechtigten Öffnen der Antriebseinheit erlischt der Gewährleistungsanspruch.
- ▶ **Alle an der Antriebseinheit montierten Komponenten und alle anderen Komponenten des eBike-Antriebs (z. B. Kettenblatt, Aufnahme des Kettenblatts, Pedale) dürfen nur gegen baugleiche oder vom Fahrradhersteller speziell für Ihr eBike zugelassene Komponenten ausgetauscht werden.** Damit wird die Antriebseinheit vor Überlastung und Beschädigung geschützt.
- ▶ **Nehmen Sie den Akku aus dem eBike, bevor Sie Arbeiten (z. B. Montage, Wartung etc.) am eBike beginnen, es mit dem Auto oder dem Flugzeug transportieren oder es aufbewahren.** Bei unbeabsichtigtem Betätigen des Ein-/Ausschalters besteht Verletzungsgefahr.
- ▶ **Die Funktion Schiebehilfe darf ausschließlich beim Schieben des eBikes verwendet werden.** Haben die Räder des eBikes beim Benutzen der Schiebehilfe keinen Bodenkontakt, besteht Verletzungsgefahr.
- ▶ **Verwenden Sie nur original Bosch Akkus, die vom Hersteller für Ihr eBike zugelassen wurden.** Der Gebrauch anderer Akkus kann zu Verletzungen und Brandgefahr führen. Bei Gebrauch anderer Akkus übernimmt Bosch keine Haftung und Gewährleistung.
- ▶ **Beachten Sie alle nationalen Vorschriften zur Zulassung und Verwendung von eBikes.**
- ▶ **Lesen und beachten Sie die Sicherheitshinweise und Anweisungen in der Betriebsanleitung des Akkus sowie in der Betriebsanleitung Ihres eBikes.**

Produkt- und Leistungsbeschreibung

Bestimmungsgemäßer Gebrauch

Die Antriebseinheit ist ausschließlich zum Antrieb Ihres eBikes bestimmt und darf nicht für andere Zwecke verwendet werden.

Das eBike ist zur Verwendung auf befestigten Wegen bestimmt. Es ist nicht für den Wettbewerbsbetrieb zugelassen.

Abgebildete Komponenten (siehe Seite 2 - 3)

Die Nummerierung der abgebildeten Komponenten bezieht sich auf die Darstellungen auf der Grafikkarte.

Alle Darstellungen von Fahrradteilen außer Antriebseinheit, Bediencomputer inkl. Bedieneinheit, Geschwindigkeitssensor und dazugehörigen Halterungen sind schematisch und können bei Ihrem eBike abweichen.

- 1 Taste Anzeigenfunktion „i“
- 2 Taste Beleuchtung
- 3 Bediencomputer
- 4 Halterung Bediencomputer
- 5 Ein-Aus-Taste Bediencomputer
- 6 Reset-Taste „RESET“
- 7 USB-Buchse
- 8 Schutzkappe der USB-Buchse
- 9 Antriebseinheit
- 10 Bedieneinheit
- 11 Taste Anzeigenfunktion „i“ an der Bedieneinheit
- 12 Taste Wert senken/nach unten blättern „-“
- 13 Taste Wert erhöhen/nach oben blättern „+“
- 14 Taste Schiebehilfe „WALK“
- 15 Arretierung Bediencomputer
- 16 Blockierschraube Bediencomputer
- 17 Geschwindigkeitssensor
- 18 Speichenmagnet des Geschwindigkeitssensors

Anzeigenelemente Bediencomputer

- a Anzeige Motorleistung
- b Anzeige Unterstützungslevel
- c Textanzeige
- d Wertanzeige
- e Tachometeranzeige
- f Akku-Ladezustandsanzeige

Technische Daten

Antriebseinheit		Drive Unit Cruise
Sachnummer		0 275 007 006/ 0 275 007 007
Leistung	W	250
Drehmoment am Abtrieb max.	Nm	50
Nennspannung	V _{DC}	36
Betriebstemperatur	°C	-5 ... +40
Lagertemperatur	°C	-10 ... +50
Schutzart		IP 54 (staub- und spritzwassergeschützt)
Gewicht, ca.	kg	4

Bediencomputer		Intuvia
Sachnummer		1 270 020 903
Ladestrom USB-Anschluss max.	mA	500
Ladespannung USB-Anschluss	V	5
Betriebstemperatur	°C	-5 ... +40
Lagertemperatur	°C	-10 ... +50
Schutzart		IP 54 (staub- und spritzwassergeschützt)
Gewicht, ca.	kg	0,15

Beleuchtung*		
Nennspannung	V _{DC}	6
Leistung		
– Vorderlicht	W	2,7
– Rücklicht	W	0,3

* abhängig von gesetzlichen Regelungen nicht in allen länderspezifischen Ausführungen über den eBike-Akku möglich

Montage

Akku einsetzen und entnehmen

Zum Einsetzen des Akkus in das eBike und zum Entnehmen lesen und beachten Sie die Betriebsanleitung des Akkus.

Bediencomputer einsetzen und entnehmen (siehe Bild A)

Zum **Einsetzen** des Bediencomputers **3** schieben Sie ihn von vorn in die Halterung **4**.

Zum **Entnehmen** des Bediencomputers **3** drücken Sie auf die Arretierung **15** und schieben ihn nach vorn aus der Halterung **4**.

► **Entnehmen Sie den Bediencomputer bei abgestelltem eBike, damit der Antrieb nicht durch unberechtigte Dritte benutzt werden kann.** Ohne Bediencomputer kann das eBike-System nicht eingeschaltet werden.

Es ist auch möglich, den Bediencomputer in der Halterung gegen Entnahme zu sichern. Demontieren Sie dazu die Halterung **4** vom Lenker. Setzen Sie den Bediencomputer in die Halterung. Schrauben Sie die Blockierschraube **16** von unten in das dafür vorgesehene Gewinde der Halterung. Montieren Sie die Halterung wieder auf dem Lenker.

Geschwindigkeitssensor überprüfen (siehe Bild B)

Der Geschwindigkeitssensor **17** und der dazugehörige Speichenmagnet **18** müssen so montiert sein, dass sich der Speichenmagnet bei einer Umdrehung des Rades in einem Abstand von mindestens 5 mm und höchstens 17 mm am Geschwindigkeitssensor vorbeibewegt.

Hinweis: Ist der Abstand zwischen Geschwindigkeitssensor **17** und Speichenmagnet **18** zu klein oder zu groß, oder ist der Geschwindigkeitssensor **17** nicht richtig angeschlossen, fällt die Tachometeranzeige **e** aus, und der eBike-Antrieb arbeitet im Notlaufprogramm.

Lösen Sie in diesem Fall die Schraube des Speichenmagnets **18** und befestigen Sie den Speichenmagnet so an der Speiche, dass er in der richtigen Entfernung an der Markierung des Geschwindigkeitssensors vorbeiläuft. Erscheint auch danach keine Geschwindigkeit in der Tachometeranzeige **e**, wenden Sie sich bitte an einen autorisierten Fahrradhändler.

Betrieb

Inbetriebnahme

Voraussetzungen

Das eBike-System kann nur aktiviert werden, wenn folgende Voraussetzungen erfüllt sind:

- Ein ausreichend geladener Akku ist eingesetzt (siehe Betriebsanleitung des Akkus).
- Der Bediencomputer ist richtig in die Halterung eingesetzt (siehe „Bediencomputer einsetzen und entnehmen“, Seite Deutsch – 2).
- Der Geschwindigkeitssensor ist richtig angeschlossen (siehe „Geschwindigkeitssensor überprüfen“, Seite Deutsch – 2).

eBike-System ein-/ausschalten

Zum **Einsetzen** des eBike-Systems haben Sie folgende Möglichkeiten:

- Ist der Bediencomputer bereits eingeschaltet, wenn er in die Halterung gesetzt wird, dann wird das eBike-System automatisch eingeschaltet.
- Drücken Sie bei eingesetztem Bediencomputer und eingesetztem Akku einmal kurz die Ein-Aus-Taste **5** des Bediencomputers.

- Drücken Sie bei eingesetztem Bediencomputer die Ein-Aus-Taste des Akkus (siehe Betriebsanleitung des Akkus).

Hinweis: Die Pedale des eBikes dürfen beim Einschalten des eBike-Systems nicht belastet sein, weil sonst die Motorleistung eingeschränkt wird. In der Textanzeige **c** erscheint die Fehlermeldung „**Pedal entlasten**“.

Wurde das eBike-System versehentlich mit belasteten Pedalen eingeschaltet, dann schalten Sie es aus und ohne Belastung erneut ein.

Der Antrieb wird aktiviert, sobald Sie in die Pedale treten (außer in der Funktion Schiebehilfe, siehe „Schiebehilfe ein-/ausschalten“, Seite Deutsch – 4). Die Motorleistung richtet sich nach den Einstellungen am Bediencomputer.

Sobald Sie im Normalbetrieb aufhören, in die Pedale zu treten, oder sobald Sie eine Geschwindigkeit von 25 km/h erreicht haben, wird die Unterstützung durch den eBike-Antrieb abgeschaltet. Der Antrieb wird automatisch wieder aktiviert, sobald Sie in die Pedale treten und die Geschwindigkeit unter 25 km/h liegt.

Zum **Ausschalten** des eBike-Systems haben Sie folgende Möglichkeiten:

- Drücken Sie die Ein-Aus-Taste **5** des Bediencomputers.
- Schalten Sie den Akku an dessen Ein-Aus-Taste aus (siehe Betriebsanleitung des Akkus).
- Entnehmen Sie den Bediencomputer aus der Halterung.

Wird etwa 10 min lang keine Leistung des Antriebs abgerufen (z. B., weil das eBike steht) und keine Taste an Bediencomputer oder Bedieneinheit gedrückt, schaltet sich das eBike-System aus Energiespargründen automatisch ab.

Anzeigen und Einstellungen des Bediencomputers

Energieversorgung des Bediencomputers

Sitz der Bediencomputer in der Halterung **4**, ist ein ausreichend geladener Akku in das eBike eingesetzt und das eBike-System eingeschaltet, dann wird der Bediencomputer über den Akku des eBikes mit Energie versorgt.

Wird der Bediencomputer aus der Halterung **4** entnommen, erfolgt die Energieversorgung über einen internen Akku. Ist der interne Akku beim Einschalten des Bediencomputers schwach, erscheint für 3 s „**Mit Fahrrad verbind.**“ in der Textanzeige **c**. Danach schaltet sich der Bediencomputer wieder aus.

Zum Aufladen des internen Akkus setzen Sie den Bediencomputer wieder in die Halterung **4** (wenn ein Akku in das eBike eingesetzt ist). Schalten Sie den eBike-Akku an dessen Ein-Aus-Taste ein (siehe Betriebsanleitung des Akkus).

Sie können den Bediencomputer auch über den USB-Anschluss aufladen. Öffnen Sie dazu die Schutzkappe **8**. Verbinden Sie die USB-Buchse **7** des Bediencomputers über ein passendes USB-Kabel mit einem handelsüblichen USB-Ladegerät oder dem USB-Anschluss eines Computers (5 V Ladepotential; max. 500 mA Ladestrom). In der Textanzeige **c** des Bediencomputers erscheint „**USB verbunden**“.

Bediencomputer ein-/ausschalten

Zum **Einschalten** des Bediencomputers drücken Sie kurz die Ein-Aus-Taste **5**. Der Bediencomputer kann (bei ausreichend geladenem internen Akku) auch eingeschaltet werden, wenn er nicht in die Halterung eingesetzt ist.

Zum **Ausschalten** des Bediencomputers drücken Sie die Ein-Aus-Taste **5**.

Ist der Bediencomputer nicht in die Halterung eingesetzt, schaltet er sich nach 1 min ohne Tastendruck aus Energiespargründen automatisch ab.

Akku-Ladezustandsanzeige

Die Akku-Ladezustandsanzeige **f** zeigt den Ladezustand des eBike-Akkus an, nicht den des internen Akkus des Bediencomputers. Der Ladezustand des eBike-Akkus kann ebenfalls an den LEDs am Akku selbst abgelesen werden.

In der Anzeige **f** entspricht jeder Balken im Akkusymbol etwa 20 % Kapazität:



100 % bis 80 % Kapazität



20 % bis 5 % Kapazität, der Akku sollte nachgeladen werden.



Weniger als 5 % Kapazität, die Unterstützung des Antriebs ist nicht mehr möglich. Die LEDs der Ladezustandsanzeige am Akku erlöschen.

Wenn die eBike-Beleuchtung über den Akku betrieben wird (länderspezifisch), dann reicht die Kapazität beim ersten Auftauchen des leeren Akkusymbols noch für etwa 2 Stunden Beleuchtung. Wenn das Symbol zu blinken beginnt, ist auch die Beleuchtung nur noch für kurze Zeit möglich.

Wird der Bediencomputer aus der Halterung **4** entnommen, bleibt der zuletzt angezeigte Akku-Ladezustand gespeichert.

Unterstützungslevel einstellen

Sie können am Bediencomputer einstellen, wie stark Sie der eBike-Antrieb beim Treten unterstützt. Der Unterstützungslevel kann jederzeit, auch während der Fahrt, geändert werden.

Hinweis: In einzelnen Ausführungen ist es möglich, dass der Unterstützungslevel voreingestellt ist und nicht geändert werden kann. Es ist auch möglich, dass weniger Unterstützungslevel zur Auswahl stehen als hier angegeben.

Folgende Unterstützungslevel stehen maximal zur Verfügung:

- „**OFF**“: Der Antrieb ist abgeschaltet, das eBike kann wie ein normales Fahrrad allein durch Treten fortbewegt werden.
- „**ECO**“: wirksame Unterstützung bei maximaler Effizienz, für maximale Reichweite
- „**TOUR**“: gleichmäßige Unterstützung, für Touren mit großer Reichweite
- „**SPORT**“: kraftvolle Unterstützung, für sportives Fahren auf bergigen Strecken sowie für Stadtverkehr
- „**TURBO**“: maximale Unterstützung bis in hohe Trittfrequenzen, für sportives Fahren

Zum **Erhöhen** des Unterstützungslevels drücken Sie die Taste „+“ **13** an der Bedieneinheit so oft, bis der gewünschte Unterstützungslevel in der Anzeige **b** erscheint, zum **Senken** die Taste „-“ **12**.

Die abgerufene Motorleistung erscheint in der Anzeige **a**. Die maximale Motorleistung hängt vom gewählten Unterstützungslevel ab.

Unterstützungslevel	Motorleistung*	
	Kettenschaltung	Nabenschaltung
„ECO“	30 %	30 %
„TOUR“	100 %	90 %
„SPORT“	170 %	150 %
„TURBO“	250 %	200 %

* Die Motorleistung kann bei einzelnen Ausführungen abweichen.

Wird der Bediencomputer aus der Halterung **4** entnommen, bleibt der zuletzt angezeigte Unterstützungslevel gespeichert, die Anzeige **a** der Motorleistung bleibt leer.

Schiebehilfe ein-/ausschalten

Die Schiebehilfe kann Ihnen das Schieben des eBikes erleichtern. Die Geschwindigkeit in dieser Funktion ist abhängig vom eingelegeten Gang und kann maximal 6 km/h erreichen. Je kleiner der gewählte Gang ist, desto geringer ist die Geschwindigkeit in der Funktion Schiebehilfe (bei voller Leistung).

► **Die Funktion Schiebehilfe darf ausschließlich beim Schieben des eBikes verwendet werden.** Haben die Räder des eBikes beim Benutzen der Schiebehilfe keinen Bodenkontakt, besteht Verletzungsgefahr.

Zum **Einschalten** der Schiebehilfe drücken Sie die Taste „WALK“ **14** an der Bedieneinheit und halten sie gedrückt. Der Antrieb des eBikes wird eingeschaltet.

Die Schiebehilfe wird **ausgeschaltet**, sobald eines der folgenden Ereignisse eintritt:

- Sie lassen die Taste „WALK“ **14** los,
- Sie treten vorwärts oder schnell rückwärts in die Pedale,
- die Räder des eBikes werden blockiert (z. B. durch Bremsen oder Anstoßen an ein Hindernis),
- die Geschwindigkeit überschreitet 6 km/h.

Beleuchtung ein-/ausschalten

Je nach länderspezifischen Vorschriften sind zwei Ausführungen der Beleuchtung möglich:

- Über den Bediencomputer können gleichzeitig Vorderlicht, Rücklicht und Display-Hintergrundbeleuchtung ein- und ausgeschaltet werden.

In dieser Ausführung erscheint beim Einschalten der Beleuchtung „Licht an“ und beim Ausschalten der Beleuchtung „Licht aus“ für ca. 1 s in der Textanzeige **c**.

- Es kann nur die Display-Hintergrundbeleuchtung ein- und ausgeschaltet werden, Vorder- und Rücklicht des eBikes sind unabhängig vom Bediencomputer.

Bei beiden Ausführungen drücken Sie zum **Ein- und Ausschalten der Beleuchtung** jeweils die Taste **2**.

Geschwindigkeits- und Entfernungsanzeigen

In der **Tachometeranzeige e** wird immer die aktuelle Geschwindigkeit angezeigt.

In der **Funktionsanzeige** (Kombination von Textanzeige **c** und Werteanzeige **d**) stehen folgende Funktionen zur Auswahl:

- „**Reichweite**“: voraussichtliche Reichweite der vorhandenen Akkuladung (bei gleichbleibenden Bedingungen wie Unterstützungslevel, Streckenprofil usw.)
- „**Strecke**“: seit dem letzten Reset zurückgelegte Entfernung
- „**Fahrzeit**“: Fahrzeit seit dem letzten Reset
- „**Durchschnitt**“: seit dem letzten Reset erreichte Durchschnittsgeschwindigkeit
- „**Maximal**“: seit dem letzten Reset erreichte Maximalgeschwindigkeit
- „**Uhrzeit**“: aktuelle Uhrzeit

Drücken Sie zum **Wechsel in der Anzeigefunktion** die Taste „i“ **1** am Bediencomputer oder die Taste „i“ **11** an der Bedieneinheit so oft, bis die gewünschte Funktion angezeigt wird.

Zum **Reset** von „**Strecke**“, „**Fahrzeit**“ und „**Durchschnitt**“ wechseln Sie zu einer dieser drei Funktionen und drücken dann die Taste „RESET“ **6** so lange, bis die Anzeige auf Null gesetzt ist. Damit sind auch die Werte der beiden anderen Funktionen zurückgesetzt.

Zum **Reset** von „**Maximal**“ wechseln Sie zu dieser Funktion und drücken dann die Taste „RESET“ **6** so lange, bis die Anzeige auf Null gesetzt ist.

Wird der Bediencomputer aus der Halterung **4** entnommen, bleiben alle Werte der Funktionen gespeichert und können weiterhin angezeigt werden.

Grundeinstellungen anzeigen/anpassen

Anzeigen und Änderungen der Grundeinstellungen sind unabhängig davon möglich, ob der Bediencomputer in die Halterung **4** eingesetzt ist oder nicht.

Um in das Menü Grundeinstellungen zu gelangen, drücken Sie gleichzeitig so lange die Taste „RESET“ **6** und die Taste „i“ **1**, bis in der Textanzeige **c** „**Einstellungen**“ erscheint.

Drücken Sie zum **Wechsel zwischen den Grundeinstellungen** die Taste „i“ **1** am Bediencomputer so oft, bis die gewünschte Grundeinstellung angezeigt wird. Ist der Bediencomputer in die Halterung **4** eingesetzt, können Sie auch die Taste „i“ **11** an der Bedieneinheit drücken.

Um die **Grundeinstellungen zu ändern**, drücken Sie zum Verringern bzw. Blättern nach unten die Ein-Aus-Taste **5** neben der Anzeige „-“ oder zum Erhöhen bzw. Blättern nach oben die Taste Beleuchtung **2** neben der Anzeige „+“. Ist der Bediencomputer in die Halterung **4** eingesetzt, dann ist die Änderung auch mit den Tasten „-“ **12** bzw. „+“ **13** an der Bedieneinheit möglich.

Um die Funktion zu verlassen und eine geänderte Einstellung zu speichern, drücken Sie die Taste „RESET“ **6** für 3 s.

Folgende Grundeinstellungen stehen zur Auswahl:

- „**Einheit km/mi**“: Sie können Geschwindigkeit und Entfernung in Kilometern oder Meilen anzeigen lassen.
- „**Zeitformat**“: Sie können die Uhrzeit im 12-Stunden- oder im 24-Stunden-Format anzeigen lassen.
- „**Uhrzeit**“: Sie können die aktuelle Uhrzeit einstellen. Längeres Drücken auf die Einstelltasten beschleunigt die Änderung der Uhrzeit.

Anzeige Fehlercode

Die Komponenten des eBike-Systems werden ständig automatisch überprüft. Wird ein Fehler festgestellt, erscheint der entsprechende Fehlercode in der Textanzeige **c**.

Drücken Sie eine beliebige Taste am Bediencomputer **3** oder an der Bedieneinheit **10**, um zur Standardanzeige zurückzukehren.

Abhängig von der Art des Fehlers wird der Antrieb gegebenenfalls automatisch abgeschaltet. Die Weiterfahrt ohne Un-

- „**Deutsch**“: Sie können die Sprache der Textanzeigen ändern. Zur Auswahl stehen Deutsch, Englisch, Französisch, Spanisch, Italienisch und Niederländisch.
- „**Strecke gesamt**“: Anzeige der gesamten mit dem eBike zurückgelegten Entfernung (nicht änderbar)
- „**Betriebszeit gesamt**“: Anzeige der gesamten Fahrtdauer mit dem eBike (nicht änderbar)

terstützung durch den Antrieb ist aber jederzeit möglich. Vor weiteren Fahrten sollte das eBike überprüft werden.

- ▶ **Lassen Sie alle Überprüfungen und Reparaturen ausschließlich von einem autorisierten Fahrradhändler ausführen.** Wird ein Fehler trotz Ihrer Abhilfe weiterhin angezeigt, wenden Sie sich ebenfalls an einen autorisierten Fahrradhändler.

Code	Ursache	Abhilfe
100	interner Fehler der Antriebseinheit	Antriebseinheit überprüfen lassen
101	Verbindungsproblem der Antriebseinheit	Anschlüsse und Verbindungen überprüfen lassen
102	Fehler des Geschwindigkeitssensors	Geschwindigkeitssensor überprüfen lassen
103*	Verbindungsproblem der Beleuchtung	Anschlüsse und Verbindungen überprüfen lassen
104	Verbindungsproblem des Bediencomputers	Anschlüsse und Verbindungen überprüfen lassen
105	Temperatur der Antriebseinheit zu hoch (über 40 °C)	Lassen Sie die Antriebseinheit abkühlen. Die Weiterfahrt ohne eBike-Antrieb ist möglich und beschleunigt die Abkühlung der Antriebseinheit.
200	interner Elektronikfehler des Akkus	Akku überprüfen lassen
201	Temperatur des Akkus zu hoch (über 40 °C)	Lassen Sie den Akku abkühlen. Die Weiterfahrt ohne eBike-Antrieb ist möglich und beschleunigt die Abkühlung des Akkus.
202	Temperatur des Akkus zu niedrig (unter – 10 °C)	Lassen Sie den Akku in einem warmen Raum langsam aufwärmen.
203	Verbindungsproblem des Akkus	Anschlüsse und Verbindungen überprüfen lassen
204	falsche Akkupolung	Laden Sie den Akku mit dem original Bosch Ladegerät wie in dessen Betriebsanleitung beschrieben auf.
410	Eine oder mehrere Tasten des Bediencomputers sind blockiert.	Prüfen Sie, ob Tasten verklemmt sind, z. B. durch eingedrungenen Schmutz. Reinigen Sie die Tasten gegebenenfalls.
414	Verbindungsproblem der Bedieneinheit	Anschlüsse und Verbindungen überprüfen lassen
418	Eine oder mehrere Tasten der Bedieneinheit sind blockiert.	Prüfen Sie, ob Tasten verklemmt sind, z. B. durch eingedrungenen Schmutz. Reinigen Sie die Tasten gegebenenfalls.
422	Verbindungsproblem der Antriebseinheit	Anschlüsse und Verbindungen überprüfen lassen
423	Verbindungsproblem des Akkus	Anschlüsse und Verbindungen überprüfen lassen
424	Kommunikationsfehler der Komponenten untereinander	Anschlüsse und Verbindungen überprüfen lassen

* nur bei eBike-Beleuchtung über den Akku (länderspezifisch)

Code	Ursache	Abhilfe
430	interner Akku des Bediencomputers leer	Bediencomputer aufladen (in der Halterung oder über USB-Anschluss)
490	interner Fehler des Bediencomputers	Bediencomputer überprüfen lassen

* nur bei eBike-Beleuchtung über den Akku (länderspezifisch)

Energieversorgung externer Geräte über USB-Anschluss

Mithilfe des USB-Anschlusses können die meisten Geräte, deren Energieversorgung über USB möglich ist (z. B. diverse Mobiltelefone), betrieben bzw. aufgeladen werden.

Voraussetzung für das Laden ist, dass der Bediencomputer und ein ausreichend geladener Akku in das eBike eingesetzt sind.

Öffnen Sie die Schutzkappe **8** des USB-Anschluss am Bediencomputer. Verbinden Sie den USB-Anschluss des externen Geräts über ein passendes USB-Kabel mit der USB-Buchse **7** am Bediencomputer.

Hinweise zum Fahren mit dem eBike-System

Wann arbeitet der eBike-Antrieb?

Der eBike-Antrieb unterstützt Sie beim Fahren, solange Sie in die Pedale treten. Ohne Pedal treten erfolgt keine Unterstützung. Die Motorleistung ist immer abhängig von der beim Treten eingesetzten Kraft.

Setzen Sie wenig Kraft ein, wird die Unterstützung geringer sein, als wenn Sie viel Kraft einsetzen. Das gilt unabhängig vom Unterstützungslevel.

Der eBike-Antrieb schaltet sich automatisch bei Geschwindigkeiten über 25 km/h ab. Fällt die Geschwindigkeit unter 25 km/h, steht der Antrieb automatisch wieder zur Verfügung.

Eine Ausnahme gilt für die Funktion Schiebehilfe, in der das eBike ohne Pedal treten mit geringer Geschwindigkeit gescho-ben werden kann.

Sie können das eBike jederzeit auch ohne Unterstützung wie ein normales Fahrrad fahren, indem Sie entweder das eBike-System ausschalten oder den Unterstützungslevel auf „OFF“ stellen. Das Gleiche gilt bei leerem Akku.

Zusammenspiel des eBike-Systems mit der Schaltung

Auch mit eBike-Antrieb sollten Sie die Schaltung wie bei einem normalen Fahrrad benutzen (beachten Sie dazu die Betriebsanleitung Ihres eBikes).

Unabhängig von der Art der Schaltung ist es ratsam, während des Schaltvorganges das Treten kurz zu unterbrechen. Dadurch wird das Schalten erleichtert und die Abnutzung des Antriebsstranges reduziert.

Durch die Wahl des richtigen Ganges können Sie bei gleichem Krafteinsatz die Geschwindigkeit und die Reichweite erhöhen.

Erste Erfahrungen sammeln

Es ist empfehlenswert, die ersten Erfahrungen mit dem eBike abseits vielbefahrener Straßen zu sammeln.

Probieren Sie unterschiedliche Unterstützungslevel aus. Sobald Sie sich sicher fühlen, können Sie mit dem eBike wie mit jedem Fahrrad am Verkehr teilnehmen.

Testen Sie die Reichweite Ihres eBikes unter unterschiedlichen Bedingungen, bevor Sie längere, anspruchsvolle Fahrten planen.

Einflüsse auf die Reichweite

Die Reichweite wird von vielen Faktoren beeinflusst, wie zum Beispiel:

- Unterstützungslevel,
- Schaltverhalten,
- Art der Reifen und Reifendruck,
- Alter und Pflegezustand des Akkus,
- Streckenprofil (Steigungen) und -beschaffenheit (Fahrbahnbelag),
- Gegenwind und Umgebungstemperatur,
- Gewicht von eBike, Fahrer und Gepäck.

Deshalb ist es nicht möglich, die Reichweite vor Antritt einer Fahrt konkret vorherzusagen. Allgemein gilt jedoch:

- Bei **gleicher** Motorleistung des eBike-Antriebs: Je weniger Kraft Sie einsetzen müssen, um eine bestimmte Geschwindigkeit zu erreichen (z. B. durch optimales Benutzen der Schaltung), umso weniger Energie wird der eBike-Antrieb verbrauchen und umso größer wird die Reichweite einer Akkuladung sein.
- Je **höher** der Unterstützungslevel bei ansonsten gleichen Bedingungen gewählt wird, umso geringer ist die Reichweite.

Pfleglicher Umgang mit dem eBike

Beachten Sie die Betriebs- und Lagertemperaturen der eBike-Komponenten. Schützen Sie Antriebseinheit, Bediencomputer und Akku vor extremen Temperaturen (z. B. durch intensive Sonneneinstrahlung ohne gleichzeitige Belüftung). Die Komponenten (besonders der Akku) können durch extreme Temperaturen beschädigt werden.

Wartung und Service

Wartung und Reinigung

Halten Sie alle Komponenten Ihres eBikes sauber, insbesondere die Kontakte von Akku und dazugehöriger Halterung. Reinigen Sie sie vorsichtig mit einem feuchten, weichen Tuch. Alle Komponenten inklusive der Antriebseinheit dürfen nicht ins Wasser getaucht oder mit einem Hochdruckreiniger gereinigt werden.

Für Service oder Reparaturen am eBike wenden Sie sich bitte an einen autorisierten Fahrradhändler.

Kundendienst und Kundenberatung

Bei allen Fragen zum eBike-System und seinen Komponenten wenden Sie sich an einen autorisierten Fahrradhändler.

Kontaktadressen autorisierter Fahrradhändler finden Sie auf der Internetseite www.bosch-ebike.com

Transport

Die Akkus unterliegen den Anforderungen des Gefahrgutrechts. Die Akkus können durch den privaten Benutzer ohne weitere Auflagen auf der Straße transportiert werden. Beim Transport durch gewerbliche Benutzer oder beim Transport durch Dritte (z. B. Lufttransport oder Spedition) sind besondere Anforderungen an Verpackung und Kennzeichnung zu beachten (z. B. Vorschriften des ADR). Bei Bedarf kann bei der Vorbereitung des Versandstückes ein Gefahrgut-Experte hinzugezogen werden.

Versenden Sie die Akkus nur, wenn das Gehäuse unbeschädigt ist. Kleben Sie offene Kontakte ab und verpacken Sie den Akku so, dass er sich nicht in der Verpackung bewegt. Bitte beachten Sie auch eventuelle weiterführende nationale Vorschriften.

Bei Fragen zum Transport der Akkus wenden Sie sich an einen autorisierten Fahrradhändler. Beim Händler können Sie auch eine geeignete Transportverpackung bestellen.

Entsorgung



Antriebseinheit, Bediencomputer inkl. Bedieneinheit, Akku, Geschwindigkeitssensor, Zubehör und Verpackungen sollen einer umweltgerechten Wiederverwertung zugeführt werden.

Werfen Sie eBikes und ihre Komponenten nicht in den Hausmüll!

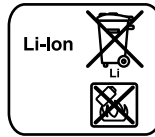
Nur für EU-Länder:



Gemäß der europäischen Richtlinie 2002/96/EG müssen nicht mehr gebrauchsfähige Elektrogeräte und gemäß der europäischen Richtlinie 2006/66/EG müssen defekte oder verbrauchte Akkus/Batterien getrennt gesammelt und einer umweltgerechten Wiederverwertung zugeführt werden.

Der im Bediencomputer integrierte Akku darf nur zur Entsorgung entnommen werden. Durch das Öffnen der Gehäuseschale kann der Bediencomputer zerstört werden.

Geben Sie nicht mehr gebrauchsfähige Akkus und Bediencomputer bitte bei einem autorisierten Fahrradhändler ab.



Li-Ion:

Bitte beachten Sie die Hinweise im Abschnitt „Transport“, Seite Deutsch – 7.

Änderungen vorbehalten.

Li-Ionen-Akku PowerPack

Sicherheitshinweise



Lesen Sie alle Sicherheitshinweise und Anweisungen. Versäumnisse bei der Einhaltung der Sicherheitshinweise und Anweisungen können

elektrischen Schlag, Brand und/oder schwere Verletzungen verursachen.

Bewahren Sie alle Sicherheitshinweise und Anweisungen für die Zukunft auf.

Der in dieser Betriebsanleitung verwendete Begriff „Akku“ bezieht sich gleichermaßen auf Standard-Akkus (Akkus mit Halterung am Fahrradrahmen) und Gepäckträger-Akkus (Akkus mit Halterung im Gepäckträger), es sei denn, es wird ausdrücklich auf die Bauform Bezug genommen.

- ▶ **Nehmen Sie den Akku aus dem eBike, bevor Sie Arbeiten (z. B. Montage, Wartung etc.) am eBike beginnen, es mit dem Auto oder dem Flugzeug transportieren oder es aufbewahren.** Bei unbeabsichtigtem Betätigen des Ein-/Ausschalters besteht Verletzungsgefahr.
- ▶ **Öffnen Sie den Akku nicht.** Es besteht die Gefahr eines Kurzschlusses. Bei geöffnetem Akku entfällt jeglicher Garantieanspruch.



Schützen Sie den Akku vor Hitze (z. B. auch vor dauernder Sonneneinstrahlung), Feuer und dem Eintauchen in Wasser. Es besteht Explosionsgefahr.

- ▶ **Halten Sie den nicht benutzten Akku fern von Büroklammern, Münzen, Schlüsseln, Nägeln, Schrauben oder anderen kleinen Metallgegenständen, die eine Überbrückung der Kontakte verursachen könnten.** Ein Kurzschluss zwischen den Akkukontakten kann Verbrennungen oder Feuer zur Folge haben. Bei in diesem Zusammenhang entstandenen Kurzschlusschäden entfällt jeglicher Anspruch auf Garantie durch Bosch.
- ▶ **Bei falscher Anwendung kann Flüssigkeit aus dem Akku austreten. Vermeiden Sie den Kontakt damit. Bei zufälligem Kontakt mit Wasser abspülen. Wenn die Flüssigkeit in die Augen kommt, nehmen Sie zusätzlich ärztliche Hilfe in Anspruch.** Austretende Akkufflüssigkeit kann zu Hautreizungen oder Verbrennungen führen.
- ▶ **Bei Beschädigung und unsachgemäßem Gebrauch des Akkus können Dämpfe austreten. Führen Sie Frischluft zu und suchen Sie bei Beschwerden einen Arzt auf.** Die Dämpfe können die Atemwege reizen.
- ▶ **Laden Sie den Akku nur mit original Bosch Ladegeräten.** Bei Benutzung von nicht original Bosch Ladegeräten kann eine Brandgefahr nicht ausgeschlossen werden.

- ▶ **Verwenden Sie den Akku nur in Verbindung mit eBikes mit original Bosch eBike-Antriebssystem.** Nur so wird der Akku vor gefährlicher Überlastung geschützt.
- ▶ **Verwenden Sie nur original Bosch Akkus, die vom Hersteller für Ihr eBike zugelassen wurden.** Der Gebrauch anderer Akkus kann zu Verletzungen und Brandgefahr führen. Bei Gebrauch anderer Akkus übernimmt Bosch keine Haftung und Gewährleistung.
- ▶ **Lesen und beachten Sie die Sicherheitshinweise und Anweisungen in den Betriebsanleitungen von Ladegerät und Antriebseinheit/Bediencomputer sowie in der Betriebsanleitung Ihres eBikes.**

Produkt- und Leistungsbeschreibung

Abgebildete Komponenten (siehe Seite 4 – 5)

Die Nummerierung der abgebildeten Komponenten bezieht sich auf die Darstellungen auf den Grafikseiten. Alle Darstellungen von Fahrradteilen außer den Akkus und ihren Halterungen sind schematisch und können bei Ihrem eBike abweichen.

- 19 Halterung des Gepäckträger-Akkus
- 20 Gepäckträger-Akku
- 21 Betriebs- und Ladezustandsanzeige
- 22 Ein-Aus-Taste
- 23 Schlüssel des Akkuschlusses
- 24 Akkuschloss
- 25 Obere Halterung des Standard-Akkus
- 26 Standard-Akku
- 27 Untere Halterung des Standard-Akkus
- 28 Tragegurt
- 29 Ladegerät

Technische Daten

Li-Ionen-Akku		PowerPack 300	PowerPack 400
Sachnummer			
– Standard-Akku schwarz		0 275 007 500	0 275 007 503
– Standard-Akku weiß		0 275 007 501	0 275 007 504
– Gepäckträger-Akku		0 275 007 502	0 275 007 505
Nennspannung	V=	36	36
Nennkapazität	Ah	8,2	11
Energie	Wh	300	400
Betriebstemperatur	°C	–10 ... +40	–10 ... +40
Lagertemperatur	°C	–10 ... +60	–10 ... +60
Zulässiger Ladetemperaturbereich	°C	0 ... +40	0 ... +40
Gewicht, ca.	kg	2,5	2,5
Schutzart		IP 54 (staub- und spritzwassergeschützt)	IP 54 (staub- und spritzwassergeschützt)

Montage

- **Stellen Sie den Akku nur auf sauberen Flächen auf.** Vermeiden Sie insbesondere die Verschmutzung der Ladebuchse und der Kontakte, z. B. durch Sand oder Erde.

Akku vor der ersten Benutzung prüfen

Prüfen Sie den Akku, bevor Sie ihn das erste Mal aufladen oder mit Ihrem eBike benutzen.

Drücken Sie dazu die Ein-Aus-Taste **22** zum Einschalten des Akkus. Leuchtet keine LED der Ladezustandsanzeige **21** auf, dann ist der Akku möglicherweise beschädigt.

Leuchtet mindestens eine, aber nicht alle LEDs der Ladezustandsanzeige **21**, dann laden Sie den Akku vor der ersten Benutzung voll auf.

- **Laden Sie einen beschädigten Akku nicht auf und benutzen Sie ihn nicht.** Wenden Sie sich an einen autorisierten Fahrradhändler.

Akku laden

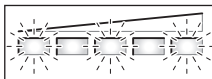
- **Benutzen Sie nur das im Lieferumfang Ihres eBikes enthaltene oder ein baugleiches original Bosch Ladegerät.** Nur dieses Ladegerät ist auf den bei Ihrem eBike verwendeten Li-Ionen-Akku abgestimmt.

Hinweis: Der Akku wird teilgeladen ausgeliefert. Um die volle Leistung des Akkus zu gewährleisten, laden Sie ihn vor dem ersten Einsatz vollständig mit dem Ladegerät auf.

Der Akku muss zum Laden aus dem eBike entnommen werden. Lesen und beachten Sie zum Laden des Akkus die Betriebsanleitung des Ladegerätes.

Der Akku kann jederzeit aufgeladen werden, ohne die Lebensdauer zu verkürzen. Eine Unterbrechung des Ladevorganges schädigt den Akku nicht.

Der Akku ist mit einer Temperaturüberwachung ausgestattet, welche ein Aufladen nur im Temperaturbereich zwischen 0 °C und 40 °C zulässt.



Befindet sich der Akku außerhalb des Ladetemperaturbereiches, blinken drei LEDs der Ladezustandsanzeige **21**. Trennen Sie den Akku vom Ladegerät und lassen Sie ihn auskühlen.

Schließen Sie den Akku erst wieder an das Ladegerät an, wenn er die zulässige Ladetemperatur erreicht hat.

Ladezustandsanzeige

Die fünf grünen LEDs der Ladezustandsanzeige **21** zeigen bei eingeschaltetem Akku den Ladezustand des Akkus an.

Dabei entspricht jede LED etwa 20 % Kapazität. Bei vollständig geladenem Akku leuchten alle fünf LEDs.

Der Ladezustand des eingeschalteten Akkus wird außerdem im Bediencomputer angezeigt. Lesen und beachten Sie dazu die Betriebsanleitung von Antriebseinheit und Bediencomputer.

Liegt die Kapazität des Akkus unter 5 %, erlöschen alle LEDs der Ladezustandsanzeige **21** am Akku, es gibt aber noch eine Anzeigefunktion des Bediencomputers.

Akku einsetzen und entnehmen (siehe Bilder C – D)

- **Schalten Sie den Akku immer aus, wenn Sie ihn in die Halterung einsetzen oder aus der Halterung entnehmen.**

Damit der Akku eingesetzt werden kann, muss der Schlüssel **23** im Schloss **24** stecken und das Schloss muss aufgeschlossen sein.

Zum **Einsetzen des Standard-Akkus 26** setzen Sie ihn mit den Kontakten auf die untere Halterung **27** am eBike. Kippen Sie ihn bis zum Anschlag in die obere Halterung **25**.

Zum **Einsetzen des Gepäckträger-Akkus 20** schieben Sie ihn mit den Kontakten voran bis zum Einrasten in die Halterung **19** im Gepäckträger.

Prüfen Sie, ob der Akku fest sitzt. Schließen Sie den Akku immer am Schloss **24** ab, weil sich sonst das Schloss öffnen und der Akku aus der Halterung fallen kann.

Ziehen Sie den Schlüssel **23** nach dem Abschließen immer aus dem Schloss **24**. Damit verhindern Sie, dass der Schlüssel herausfällt bzw. dass der Akku bei abgestelltem eBike durch unberechtigte Dritte entnommen wird.

Zum **Entnehmen des Standard-Akkus 26** schalten Sie ihn aus und schließen das Schloss mit dem Schlüssel **23** auf. Kippen Sie den Akku aus der oberen Halterung **25** und ziehen Sie ihn am Tragegurt **28** aus der unteren Halterung **27**.

Zum **Entnehmen des Gepäckträger-Akkus 20** schalten Sie ihn aus und schließen das Schloss mit dem Schlüssel **23** auf. Ziehen Sie den Akku aus der Halterung **19**.

Betrieb

Inbetriebnahme

► **Verwenden Sie nur original Bosch Akkus, die vom Hersteller für Ihr eBike zugelassen wurden.** Der Gebrauch anderer Akkus kann zu Verletzungen und Brandgefahr führen. Bei Gebrauch anderer Akkus übernimmt Bosch keine Haftung und Gewährleistung.

Ein-/Ausschalten

Das Einschalten des Akkus ist eine der Möglichkeiten, das eBike-System einzuschalten. Lesen und beachten Sie dazu die Betriebsanleitung von Antriebseinheit und Bediencomputer.

Überprüfen Sie vor dem Einschalten des Akkus bzw. des eBike-Systems, dass das Schloss **24** abgeschlossen ist.

Hinweis: Die Pedale des eBikes sollen beim Einschalten des eBike-Systems nicht belastet sein, weil sonst die Leistung des eBike-Antriebs eingeschränkt wird.

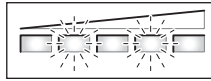
Zum **Einschalten** des Akkus drücken Sie die Ein-Aus-Taste **22**. Die LEDs der Anzeige **21** leuchten auf und zeigen gleichzeitig den Ladezustand an.

Hinweis: Liegt die Kapazität des Akkus unter 5 %, leuchtet am Akku keine LED der Ladezustandsanzeige **21**. Es ist nur am Bediencomputer erkennbar, ob das eBike-System eingeschaltet ist.

Zum **Ausschalten** des Akkus drücken Sie die Ein-Aus-Taste **22** erneut. Die LEDs der Anzeige **21** erlöschen. Das eBike-System wird damit ebenfalls ausgeschaltet.

Wird etwa 10 min lang keine Leistung des eBike-Antriebs abgerufen (z. B., weil das eBike steht) und keine Taste an Bediencomputer oder Bedieneinheit des eBikes gedrückt, schalten sich das eBike-System und damit auch der Akku aus Energiespargründen automatisch ab.

Der Akku ist durch die „Electronic Cell Protection (ECP)“ gegen Tiefentladung, Überladung, Überhitzung und Kurzschluss geschützt. Bei Gefährdung schaltet sich der Akku durch eine Schutzschaltung automatisch ab.



Wird ein Defekt des Akkus erkannt, blinken zwei LEDs der Ladezustandsanzeige **21**. Wenn Sie sich in diesem Fall an

einen autorisierten Fahrradhändler.

Hinweise für den optimalen Umgang mit dem Akku

Die Lebensdauer des Akkus kann verlängert werden, wenn er gut gepflegt und vor allem bei den richtigen Temperaturen gelagert wird.

Mit zunehmender Alterung wird sich die Kapazität des Akkus aber auch bei guter Pflege verringern.

Eine wesentlich verkürzte Betriebszeit nach der Aufladung zeigt an, dass der Akku verbraucht ist. Sie können den Akku ersetzen.

Sollte der Tragegurt **28** des Standard-Akkus defekt sein, dann lassen Sie ihn von einem Fahrradhändler austauschen.

Akku vor und während der Lagerung nachladen

Laden Sie den Akku vor längerer Nichtbenutzung auf etwa 60 % auf (3 bis 4 LEDs der Ladezustandsanzeige **21** leuchten).

Prüfen Sie nach 6 Monaten den Ladezustand. Leuchtet nur noch eine LED der Ladezustandsanzeige **21**, dann laden Sie den Akku wieder auf etwa 60 % auf.

Hinweis: Wird der Akku längere Zeit in leerem Zustand aufbewahrt, kann er trotz der geringen Selbstentladung beschädigt und die Speicherkapazität stark verringert werden.

Es ist nicht empfehlenswert, den Akku dauerhaft am Ladegerät angeschlossen zu lassen.

Lagerungsbedingungen

Lagern Sie den Akku möglichst an einem trockenen, gut belüfteten Platz. Schützen Sie ihn vor Feuchtigkeit und Wasser. Bei ungünstigen Witterungsbedingungen ist es z. B. empfehlenswert, den Akku vom eBike abzunehmen und bis zum nächsten Einsatz in geschlossenen Räumen aufzubewahren.

Der Akku kann bei Temperaturen von -10 °C bis $+60\text{ °C}$ gelagert werden. Für eine lange Lebensdauer ist jedoch eine Lagerung bei ca. 20 °C Raumtemperatur vorteilhaft.

Achten Sie darauf, dass die maximale Lagertemperatur nicht überschritten wird. Lassen Sie den Akku z. B. im Sommer nicht im Auto liegen und lagern Sie ihn außerhalb direkter Sonneneinstrahlung.

Wartung und Service

Wartung und Reinigung

Halten Sie den Akku sauber. Reinigen Sie ihn vorsichtig mit einem feuchten, weichen Tuch. Der Akku darf nicht ins Wasser getaucht oder mit Wasserstrahl gereinigt werden.

Ist der Akku nicht mehr funktionsfähig, wenden Sie sich bitte an einen autorisierten Fahrradhändler.

Kundendienst und Kundenberatung

Bei allen Fragen zu den Akkus wenden Sie sich an einen autorisierten Fahrradhändler.

- **Notieren Sie Hersteller und Nummer des Schlüssels 23.** Bei Verlust der Schlüssel wenden Sie sich an einen autorisierten Fahrradhändler. Geben Sie dabei Schlüsselhersteller und -nummer an.

Kontaktdaten autorisierter Fahrradhändler finden Sie auf der Internetseite www.bosch-ebike.com

Transport

Die Akkus unterliegen den Anforderungen des Gefahrgutrechts. Die Akkus können durch den privaten Benutzer ohne weitere Auflagen auf der Straße transportiert werden. Beim Transport durch gewerbliche Benutzer oder beim Transport durch Dritte (z. B. Lufttransport oder Spedition) sind besondere Anforderungen an Verpackung und Kennzeichnung zu beachten (z. B. Vorschriften des ADR). Bei Bedarf kann bei der Vorbereitung des Versandstückes ein Gefahrgut-Experte hinzugezogen werden.

Versenden Sie die Akkus nur, wenn das Gehäuse unbeschädigt ist. Kleben Sie offene Kontakte ab und verpacken Sie den Akku so, dass er sich nicht in der Verpackung bewegt. Bitte beachten Sie auch eventuelle weiterführende nationale Vorschriften.

Bei Fragen zum Transport der Akkus wenden Sie sich an einen autorisierten Fahrradhändler. Beim Händler können Sie auch eine geeignete Transportverpackung bestellen.

Entsorgung



Akkus, Zubehör und Verpackungen sollen einer umweltgerechten Wiederverwertung zugeführt werden.

Werfen Sie die Akkus nicht in den Hausmüll!

Nur für EU-Länder:



Gemäß der europäischen Richtlinie 2002/96/EG müssen nicht mehr gebrauchsfähige Elektrogeräte und gemäß der europäischen Richtlinie 2006/66/EG müssen defekte oder verbrauchte Akkus/Batterien getrennt gesammelt und einer umweltgerechten Wiederverwendung zugeführt werden.

Geben Sie nicht mehr gebrauchsfähige Akkus bitte bei einem autorisierten Fahrradhändler ab.



Li-Ion:

Bitte beachten Sie die Hinweise im Abschnitt „Transport“, Seite Deutsch – 11.

Änderungen vorbehalten.

Ladegerät Charger

Sicherheitshinweise



Lesen Sie alle Sicherheitshinweise und Anweisungen. Versäumnisse bei der Einhaltung der Sicherheitshinweise und Anweisungen können

elektrischen Schlag, Brand und/oder schwere Verletzungen verursachen.

Bewahren Sie alle Sicherheitshinweise und Anweisungen für die Zukunft auf.

Der in dieser Betriebsanleitung verwendete Begriff „Akku“ bezieht sich gleichermaßen auf Standard-Akkus (Akkus mit Halterung am Fahrradrahmen) und Gepäckträger-Akkus (Akkus mit Halterung im Gepäckträger).



Halten Sie das Ladegerät von Regen oder Nässe fern. Beim Eindringen von Wasser in ein Ladegerät besteht das Risiko eines elektrischen Schlages.

- ▶ **Laden Sie nur für eBikes zugelassene Bosch Li-Ionen-Akkus. Die Akkuspannung muss zur Akku-Ladespannung des Ladegerätes passen.** Ansonsten besteht Brand- und Explosionsgefahr.
- ▶ **Halten Sie das Ladegerät sauber.** Durch Verschmutzung besteht die Gefahr eines elektrischen Schlages.
- ▶ **Überprüfen Sie vor jeder Benutzung Ladegerät, Kabel und Stecker. Benutzen Sie das Ladegerät nicht, sofern Sie Schäden feststellen. Öffnen Sie das Ladegerät nicht selbst und lassen Sie es nur von qualifiziertem Fachpersonal und nur mit Original-Ersatzteilen reparieren.** Beschädigte Ladegeräte, Kabel und Stecker erhöhen das Risiko eines elektrischen Schlages.
- ▶ **Betreiben Sie das Ladegerät nicht auf leicht brennbarem Untergrund (z. B. Papier, Textilien etc.) bzw. in brennbarer Umgebung.** Wegen der beim Laden auftretenden Erwärmung des Ladegerätes besteht Brandgefahr.
- ▶ **Bei Beschädigung und unsachgemäßem Gebrauch des Akkus können Dämpfe austreten. Führen Sie Frischluft zu und suchen Sie bei Beschwerden einen Arzt auf.** Die Dämpfe können die Atemwege reizen.
- ▶ **Beaufsichtigen Sie Kinder.** Damit wird sichergestellt, dass Kinder nicht mit dem Ladegerät spielen.
- ▶ **Kinder und Personen, die aufgrund ihrer physischen, sensorischen oder geistigen Fähigkeiten oder ihrer Unfähigkeit oder Unkenntnis nicht in der Lage sind, das Ladegerät sicher zu bedienen, dürfen dieses Ladegerät nicht ohne Aufsicht oder Anweisung durch eine verantwortliche Person benutzen.** Andernfalls besteht die Gefahr von Fehlbedienung und Verletzungen.

- ▶ **Lesen und beachten Sie die Sicherheitshinweise und Anweisungen in den Betriebsanleitungen von Akku und Antriebseinheit/Bediencomputer sowie in der Betriebsanleitung Ihres eBikes.**
- ▶ Auf der Unterseite des Ladegerätes befindet sich eine Kurzfassung wichtiger Sicherheitshinweise in englischer, französischer und spanischer Sprache (in der Darstellung auf der Grafikkarte mit Nummer **33** gekennzeichnet) und mit folgendem Inhalt:
 - Für eine sichere Benutzung beachten Sie die Betriebsanleitung. Risiko eines elektrischen Schocks.
 - Nur in trockener Umgebung benutzen.
 - Laden Sie nur Akkus des Bosch eBike-Systems. Andere Akkus können explodieren und Verletzungen verursachen.
 - Ersetzen Sie das Netzkabel nicht. Es besteht Brand- und Explosionsgefahr.

Produkt- und Leistungsbeschreibung

Abgebildete Komponenten (siehe Seite 6 – 7)

Die Nummerierung der abgebildeten Komponenten bezieht sich auf die Darstellung des Ladegerätes auf der Grafikkarte.

- 20 Gepäckträger-Akku
- 21 Akku-Ladezustandsanzeige
- 26 Standard-Akku
- 29 Ladegerät
- 30 Gerätebuchse
- 31 Geräterstecker
- 32 Lüftungsöffnungen
- 33 Sicherheitshinweise Ladegerät
- 34 Ladestecker
- 35 Buchse für Ladestecker

Technische Daten

Ladegerät	Charger	
Sachnummer		0 275 007 905
Nennspannung	V~	207 – 264
Frequenz	Hz	47 – 63
Akku-Ladespannung	V---	42
Ladestrom	A	4
Zulässiger Ladetemperaturbereich	°C	0 ... +40

Die Angaben gelten für eine Nennspannung [U] von 230 V. Bei abweichenden Spannungen und in länderspezifischen Ausführungen können diese Angaben variieren.

Ladegerät	Charger	
Ladezeit		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Anzahl der Akkuzellen		10 – 80
Betriebstemperatur	°C	– 10 ... + 75
Lagertemperatur	°C	– 20 ... + 70
Gewicht entsprechend EPTA-Procedure 01/2003	kg	0,8
Schutzart		IP 40

Die Angaben gelten für eine Nennspannung [U] von 230 V. Bei abweichenden Spannungen und in länderspezifischen Ausführungen können diese Angaben variieren.

Betrieb

► **Stellen Sie den Akku nur auf sauberen Flächen auf.** Vermeiden Sie insbesondere die Verschmutzung der Ladebuchse und der Kontakte, z. B. durch Sand oder Erde.

Inbetriebnahme

Ladegerät anschließen (siehe Bilder E – F)

► **Beachten Sie die Netzspannung!** Die Spannung der Stromquelle muss mit den Angaben auf dem Typenschild des Ladegerätes übereinstimmen. Mit 230 V gekennzeichnete Ladegeräte können auch an 220 V betrieben werden.

Stecken Sie den Gerätestecker **31** des Netzkabels in die Gerätebuchse **30** am Ladegerät.

Schließen Sie das Netzkabel (länderspezifisch) an das Stromnetz an.

Schalten Sie den Akku aus und entnehmen Sie ihn aus der Halterung am eBike. Lesen und beachten Sie dazu die Betriebsanleitung des Akkus.

Stecken Sie den Ladestecker **34** des Ladegerätes in die Buchse **35** am Akku.

Ladevorgang

Der Ladevorgang beginnt, sobald das Ladegerät mit dem Akku und dem Stromnetz verbunden ist.

Hinweis: Der Ladevorgang ist nur möglich, wenn sich die Temperatur des Akkus im zulässigen Ladetemperaturbereich befindet.

Während des Ladevorgangs leuchten die LEDs der Ladezustandsanzeige **21** am Akku. Jede dauerhaft leuchtende LED entspricht etwa 20 % Kapazität Aufladung. Die blinkende LED zeigt die Aufladung der nächsten 20 % an.

► **Seien Sie vorsichtig, wenn Sie das Ladegerät während des Ladevorgangs berühren. Tragen Sie Schutzhandschuhe.** Das Ladegerät kann sich insbesondere bei hohen Umgebungstemperaturen stark erhitzen.

Hinweis: Achten Sie darauf, dass das Ladegerät während des Ladevorgangs gut belüftet ist und die Lüftungsöffnungen **32** auf beiden Seiten nicht verdeckt sind.

Der Akku ist vollständig geladen, wenn alle fünf LEDs der Anzeige **21** dauerhaft leuchten. Der Ladevorgang wird automatisch unterbrochen.

Trennen Sie das Ladegerät vom Stromnetz und den Akku vom Ladegerät.

Beim Trennen des Akkus vom Ladegerät wird der Akku automatisch abgeschaltet.

Sie können den Akku jetzt in das eBike einsetzen.

Fehler – Ursachen und Abhilfe

Ursache	Abhilfe
	Zwei LEDs am Akku blinken
Akku defekt	an autorisierten Fahrradhändler wenden
	Drei LEDs am Akku blinken
Akku zu warm oder zu kalt	Akku vom Ladegerät trennen und austemperieren lassen, bis der Ladetemperaturbereich erreicht ist Schließen Sie den Akku erst wieder an das Ladegerät an, wenn er die zulässige Ladetemperatur erreicht hat.
Kein Ladevorgang möglich (keine Anzeige am Akku)	
Stecker nicht richtig eingesteckt	alle Steckverbindungen überprüfen
Kontakte am Akku verschmutzt	Kontakte am Akku vorsichtig reinigen
Lüftungsöffnungen 32 des Ladegerätes verstopft oder verdeckt	Lüftungsöffnungen 32 reinigen und Ladegerät gut belüftet aufstellen
Steckdose, Kabel oder Ladegerät defekt	Netzspannung überprüfen, Ladegerät vom Fahrradhändler überprüfen lassen
Akku defekt	an autorisierten Fahrradhändler wenden

Wartung und Service

Wartung und Reinigung

Sollte das Ladegerät ausfallen, wenden Sie sich bitte an einen autorisierten Fahrradhändler.

Kundendienst und Kundenberatung

Bei allen Fragen zum Ladegerät wenden Sie sich an einen autorisierten Fahrradhändler.

Kontaktdaten autorisierter Fahrradhändler finden Sie auf der Internetseite **www.bosch-ebike.com**

Entsorgung

Ladegeräte, Zubehör und Verpackungen sollen einer umweltgerechten Wiederverwertung zugeführt werden.

Werfen Sie Ladegeräte nicht in den Hausmüll!

Nur für EU-Länder:



Gemäß der Europäischen Richtlinie 2002/96/EG über Elektro- und Elektronik-Altgeräte und ihrer Umsetzung in nationales Recht müssen nicht mehr gebrauchsfähige Ladegeräte getrennt gesammelt und einer umweltgerechten Wiederverwertung zugeführt werden.

Änderungen vorbehalten.

Drive Unit Cruise/ Drive HMI Intuvia

Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier).

- ▶ **Do not open the drive unit yourself. The drive unit is maintenance-free and may be repaired only through a qualified repair person and only using original spare parts.** This will ensure that the safety of the drive unit is maintained. Unauthorised opening of the drive unit will void any and all warranty claims.
- ▶ **All components mounted to the drive unit and all other components of the eBike drive (e.g., the chainwheel, chainwheel seat, pedals) may be replaced only against identical components or components specifically approved for your eBike by the bicycle manufacturer.** This protects the drive unit against overload and damage.
- ▶ **Remove the battery pack from the eBike before working on the eBike (e.g., assembling, maintenance, etc.), transporting it via car or plane, or storing it.** Danger of injury when accidentally actuating the On/Off switch.
- ▶ **The push-assistance function may only be used when pushing the eBike.** Danger of injury when the wheels of the eBike do not have ground contact while using the push-assistance function.
- ▶ **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.
- ▶ **Please observe all national regulations on registering and using eBikes.**
- ▶ **Please read and observe the safety warnings and instructions enclosed in the operating instructions of the battery pack as well as in the operating instructions of your eBike.**

Product Description and Specifications

Intended Use

The drive unit is intended exclusively for your eBike and may not be used for other purposes. The eBike is intended for use on paved paths. It is not permitted for use in competition.

Product Features (see page 2 – 3)

The numbering of the product features refers to the illustrations on the graphics page.

All representations of bike components, with exception of the drive unit, drive HMI incl. operating unit, speed sensor and corresponding holders, are schematic and can deviate from your eBike.

- 1 Display-function button “i”
- 2 Illumination button
- 3 Drive HMI
- 4 Holder for drive HMI
- 5 Drive HMI On/Off button
- 6 “RESET” button
- 7 USB port
- 8 Protective cap of USB port
- 9 Drive unit
- 10 Operating unit
- 11 Display-function button “i” on the operating unit
- 12 Reduce value/scroll down button “-”
- 13 Increase value/scroll up button “+”
- 14 Push-assistance button “WALK”
- 15 Lock latch for drive HMI
- 16 Locking screw for drive HMI
- 17 Speed sensor
- 18 Spoke magnet of the speed sensor

Indication Elements, Drive HMI

- a Motor-output indicator
- b Assistance-level indicator
- c Text indication
- d Value indication
- e Speed indication
- f Battery charge-control indicator

Technical Data

Drive Unit		Drive Unit Cruise
Article number		0 275 007 006/ 0 275 007 007
Power output	W	250
Output torque, max.	Nm	50
Rated voltage	V ^{DC}	36
Operating temperature	°C	-5 ... +40
Storage temperature	°C	-10 ... +50
Degree of protection		IP 54 (dust and splash water protected)
Weight, approx.	kg	4

Drive HMI		Intuvia
Article number		1 270 020 903
Max. charging current, USB connection.	mA	500
Charging voltage, USB connection	V	5
Operating temperature	°C	-5 ... +40
Storage temperature	°C	-10 ... +50
Degree of protection		IP 54 (dust and splash water protected)
Weight, approx.	kg	0.15

Lighting*		
Rated voltage	V ^{DC}	6
Power output		
– Front light	W	2.7
– Rear light	W	0.3

* Not possible via the eBike battery pack in all country-specific versions, depending on the statutory regulations

Assembly

Inserting and Removing the Battery Pack

For inserting and removing the battery pack in/from the eBike, please read and observe the battery pack operating instructions.

Inserting and Removing the Drive HMI (see figure A)

To **insert** the drive HMI **3**, slide it from the front into the holder **4**.

To **remove** the drive HMI **3**, press the lock latch **15** and slide the drive HMI toward the front out of the holder **4**.

► **Remove the drive HMI when parking the eBike, so that the drive cannot be used by unauthorised persons.**

Without the drive HMI, the eBike system cannot be switched on.

The drive HMI can also be secured in the holder against removing. For this, remove the holder **4** from the handlebar. Insert the drive HMI into the holder. Screw the locking screw **16** from below into the corresponding thread in the holder. Mount the holder onto the handlebar again.

Checking the Speed Sensor (see figure B)

The speed sensor **17** and its spoke magnet **18** must be mounted in such a manner that the spoke magnet, after a turn of the wheel, moves past the speed sensor with a clearance of at least 5 mm, yet no more than 17 mm.

Note: If the clearance between speed sensor **17** and spoke magnet **18** is too small or too large, or if the speed sensor **17** is not properly connected, the speed indication will fail, and the eBike drive will operate in emergency mode.

In this case, loosen the screw of the spoke magnet **18** and fasten the spoke magnet to the spoke in such a manner that it runs past the mark of the speed sensor at the correct clearance. When the speed is still not being indicated in the speed indication **e** after this, please refer to an authorised bicycle dealer.

Operation

Initial Operation

Requirements

The eBike system can only be activated when the following requirements are met:

- A sufficiently charged battery pack is inserted (see operating instructions of the battery pack).
- The drive HMI is properly inserted in the holder (see “Inserting and Removing the Drive HMI”, page English – 2).
- The drive HMI is properly connected (see “Checking the Speed Sensor”, page English – 2).

Switching the eBike System On/Off

Options for **switching on** the eBike system:

- If the drive HMI is already switched on when inserting it in the holder, the eBike system is automatically switched on.
- When the drive HMI and the battery pack are inserted, briefly press the On/Off button **5** of the drive HMI once.
- When the drive HMI is inserted, press the On/Off button of the battery pack (see battery pack operating instructions).

Note: When switching on the eBike system, the pedals of the eBike must not be subject to load, as otherwise the motor output capacity will be limited. The error message “**Release pedal**” is displayed in text indication **e**.

If the eBike system was inadvertently switched on with load applied to the pedals, then switch it off and then on again without load.

The drive is activated as soon as you step into the pedals (except when in push-assistance mode, see “Switching the Push-assistance mode On/Off”, page English – 4). The motor output depends on the settings of the drive HMI.

As soon as you stop pedaling when in normal operation, or as soon as you have reached a speed of 25 km/h, the assistance from the eBike drive is switched off. The drive is automatically re-activated as soon you start pedaling again and the speed is below 25 km/h.

Options for **switching off** the eBike system:

- Press the On/Off button **5** of the drive HMI.
- Switch the battery pack off by its On/Off button (see battery pack operating instructions.)
- Remove the drive HMI out of its holder.

When no power output of the drive is requested for approx. 10 minutes (e. g., because the eBike is parked) and no button of the drive HMI or operating unit is pressed, the battery pack automatically switches off to save energy.

Indications and Settings of the Drive HMI

Power Supply of the Drive HMI

When the drive HMI is inserted in holder **4**, a sufficiently charged battery pack is inserted in the eBike and the eBike system is switched on, power is supplied to the drive HMI via the eBike's battery pack.

When the drive HMI is removed from holder **4**, it is supplied with power via an internal battery pack. If the internal battery pack is low when switching on the drive HMI, "**Attach to bike**" is displayed for 3 s in text indication **c**. Afterwards, the drive HMI switches off again.

To recharge the internal battery pack, insert the drive HMI into the holder **4** (a battery pack must be inserted in the eBike). Switch the eBike battery pack off by its On/Off button (see battery pack operating instructions).

The drive HMI can also be charged via USB connection. Open protective cap **8** for this. Using a matching USB cable, connect the USB port **7** of the drive HMI to a commercially available USB charger or to the USB port of a computer; (5 V charging voltage; max. 500 mA charging current). "**USB connected**" is displayed in text indication **c** of the drive HMI.

Switching the drive HMI On/Off

To **switch on** the drive HMI, briefly press the On/Off button **5**. When the internal battery pack is sufficiently charged, the drive HMI can also be switched on when not inserted in the holder.

To **switch off** the drive HMI, press the On/Off button **5**.

When the drive HMI is not inserted in the holder and no button is pressed, it automatically switches off after 1 min to save energy.

Battery Charge-control Indicator

The battery-pack charge-control indicator **f** indicates the charge condition of the eBike's battery pack, and not the charge condition of the drive HMI's internal battery pack. The charge condition of the eBike's battery pack can also be read from the battery pack's LEDs.

On indicator **f**, each bar of the battery pack symbol is equivalent to a capacity of approx. 20 %:



100 % to 80 % capacity



20 % to 5 % capacity; the battery pack should be recharged.



Less than 5 % capacity; drive assistance is no longer possible. The LEDs of the charge-control indicator on the battery pack go out.

When the eBike lighting is powered via the battery pack (country-specific), the capacity upon first indication of the empty battery pack symbol will be sufficient for approx. 2 hours of lighting. When the symbol begins to flash, the lighting will continue to operate only for a short period.

When the drive HMI is removed from holder **4**, the last indicated battery pack charge condition is stored.

Setting the Assistance Level

The level of assistance of the eBike drive when pedaling can be adjusted via the drive HMI. The assistance level can be changed anytime, even during riding.

Note: For individual versions, it is possible that the assistance level is pre-set and cannot be changed. It is also possible that less assistance levels are available for selection than listed here.

The following assistance levels (max.) are available:

- "**OFF**": The drive is switched off, the eBike can be operated as a normal bicycle through pedaling.
- "**ECO**": Effective assistance at maximum efficiency for maximum cruising range
- "**TOUR**": Uniform assistance, for touring with long cruising range
- "**SPORT**": Powerful assistance for sportive riding off road as well as for urban traffic
- "**TURBO**": Maximum assistance, supporting highest cadence for sportive riding

To **increase** the assistance level, press the "+" button **13** on the operating unit until the desired assistance level is displayed in indicator **b**; to **decrease** the assistance level, press the "–" button **12**.

The requested motor output is displayed in indicator **a**. The maximum motor output depends on the selected assistance level.

Assistance Level	Motor Output*	
	Derailleur	Gear Hub
"ECO"	30 %	30 %
"TOUR"	100 %	90 %
"SPORT"	170 %	150 %
"TURBO"	250 %	200 %

* The motor output can vary for individual versions.

When the drive HMI is removed from holder **4**, the last indicated assistance level is stored; the motor-output indicator **a** remains empty.

Switching the Push-assistance mode On/Off

The push-assistance feature makes it easier to push the eBike. The speed in this function depends on the set gear and cannot exceed 6 km/h (max.). The lower the set gear, the lower the speed in the push-assistance function (at full output).

► **The push-assistance function may only be used when pushing the eBike.** Danger of injury when the wheels of the eBike do not have ground contact while using the push-assistance function.

To **activate** the push-assistance function, press and hold the **“WALK” button 14** on the operating unit. The eBike's drive is activated.

The push-assistance function is **switched off** as soon as any of the following incidents occur:

- You release the **“WALK” button 14**,
- You pedal in forward or quickly in backward direction,
- The wheels of the eBike are blocked (e. g., through braking or running against an obstruction),
- Your speed exceeds 6 km/h.

Switching the Lighting On/Off

Depending on country-specific regulations, two lighting versions are possible:

- The front light, rear light and display backlight can be switched on and off at the same time via the drive HMI. In this version, **“Lights on”** is displayed for approx. 1 s in text indication **c** when switching on, and **“Lights off”** when switching off.
- Only the display backlight can be switched on and off; the front and rear light of the eBike are independent of the drive HMI.

For both versions, the **lighting is switched on and off** by pressing button **2**.

Speed and Distance Indication

The **speed indication e** always displays the current speed.

The following functions are available in the **function indication** (combination of text indication **c** and value indication **d**):

- **“Range”**: Estimated range of the available battery-pack charge (for constant conditions such as assistance level, route profile, etc.)
- **“Distance”**: Distance covered since the last reset
- **“Trip time”**: Trip time since the last reset
- **“Avg. Speed”**: Average speed achieved since the last reset
- **“Max. Speed”**: Maximum speed achieved since the last reset
- **“Clock”**: Current time

To **switch between the indication functions**, press the **“i” button 1** on the drive HMI or the **“i” button 11** on the operating unit until the desired function is displayed.

To **reset “Distance”, “Trip time” and “Avg. Speed”**, switch to any of the three functions and then press and hold the **“RESET” button 6** until the indication is set to zero. This also resets the values of the other two functions.

To **reset the “Max. Speed”**, switch to this function and then press and hold the **“RESET” button 6** until the indication is set to zero.

When the drive HMI is removed from the holder **4**, all function values remain stored and can be viewed.

Displaying/Adapting Basic Settings

The basic settings can be displayed and changed no matter if the drive HMI is in the holder **4** or not.

To access the basic settings menu, press and hold the **“RESET” button 6** and the **“i” button 1** until **“Configuration”** is displayed in text indication **c**.

To **switch between the basic settings**, press the **“i” button 1** on the drive HMI until the desired basic setting is displayed. When the drive HMI is inserted in holder **4**, you can also press the **“i” button 11** on the operating unit.

To **change the basic settings**, press the On/Off button **5** next to the **“–”** indication to decrease the value or scroll down, or the illumination button **2** next to the **“+”** indication to increase the value or scroll up.

When the drive HMI is inserted in holder **4**, you can also change the values with the **“–” button 12** or the **“+” button 13** on the operating unit.

To exit the function and store a changed setting, press the **“RESET” button 6** for 3 s.

The following basic settings are available:

- **“unit km/mi”**: The speed and distance can be displayed either in kilometres or miles.
- **“time format”**: The time can be displayed either in the 12 hour or 24 hour format.
- **“clock”**: The current time can be set here. Pressing and holding the setting buttons fast-forwards the setting speed.
- **“English”**: The language for text indication can be changed. The available languages are German, English, French, Spanish, Italian and Dutch.
- **“odometer”**: Indicates the total distance travelled with the eBike (not changeable).
- **“power-on hours”**: Indicates the total travel duration with the eBike (not changeable).

Error Code Indication

The components of the eBike system are continuously and automatically monitored. When an error is detected, the respective error code is indicated in text indication **c**.

To return to the standard indication, press any button on the drive HMI **3** or on the operating unit **10**.

Depending on the type of error, the drive is automatically shut off if required. Continued travel without assistance from the drive is possible at any time. However, have the eBike checked before attempting new trips.

► **Have all inspections and repairs carried out only by an authorised bicycle dealer.** When an error is still displayed despite corrective measures, please also refer to an authorised bicycle dealer.

Code	Cause	Corrective Measure
100	Internal error of the drive unit	Have the drive unit checked
101	Connection problem of the drive unit	Have connections and contacts checked
102	Error of the speed sensor	Have the speed sensor checked
103*	Connection problem of the lighting system	Have connections and contacts checked
104	Connection problem of the drive HMI	Have connections and contacts checked
105	Temperature of the drive unit too high (above 40 °C)	Allow the drive unit to cool down. Continued travel without assistance from the eBike drive is possible and speeds up the cooling of the drive unit.
200	Internal electronic error of battery pack	Have battery pack checked
201	Temperature of the battery pack too high (above 40 °C)	Allow the battery pack to cool down. Continued travel without eBike drive is possible and speeds up the cooling of the battery pack.
202	Temperature of the battery pack too low (below – 10 °C)	Allow the battery pack to warm up slowly in a warm location.
203	Connection problem of battery pack	Have connections and contacts checked
204	Incorrect polarity of battery pack	Charge the battery pack with the original Bosch charger as described in the operating instructions.
410	One or more buttons of the drive HMI are blocked.	Check if any buttons are blocked, e.g. from dirt or debris. Clean the buttons, if required.
414	Connection problem of the operating unit	Have connections and contacts checked
418	One or more buttons of the operating unit are blocked.	Check if any buttons are blocked, e.g. from dirt or debris. Clean the buttons, if required.
422	Connection problem of the drive unit	Have connections and contacts checked
423	Connection problem of battery pack	Have connections and contacts checked
424	Communication error among the components	Have connections and contacts checked
430	Internal battery pack of drive HMI empty	Charge drive HMI (in holder or via USB port)
490	Internal error of the drive HMI	Have the drive HMI checked

* only for eBike lighting via battery pack (country-specific)

Power Supply of External Devices via USB Connection

With the USB connection, it is possible to operate and charge most devices whose power supply is possible via USB (e.g., various mobile phones).

Prerequisite for the charging is that the drive HMI and a sufficiently charged battery pack are inserted in the eBike.

Open the protective cap **8** of the USB port on the drive HMI. Using a matching USB cable, connect the USB port of the external device to the USB port **7** of the drive HMI.

Notes on Riding with the eBike System

When does the eBike Drive Operate?

The eBike drive supports you when riding, as long as you step into the pedals. Without pedaling, there is no assistance. The

motor output always depends on the amount of your pedaling power.

When applying less pedaling power, the assistance or support will be lower than when applying a lot of pedaling power. This applies independent of the assistance Level.

The eBike drive automatically switches off at speeds in excess of 25 km/h. When the speed falls below 25 km/h, the drive is automatically available again.

An exception applies for the push-assistance function, in which the eBike can be pushed at low speed without pedaling.

The eBike can also be ridden as a normal bicycle without assistance at any time, by either switching off the eBike system or setting the assistance level to **"OFF"**. The same applies when the battery pack is empty.

Interaction of the eBike System with the Bicycle Gears

The bicycle gears should be used as with a normal bicycle, even with eBike drive (please observe the operating instructions of your eBike).

Independent of the type of gearing, it is recommended to briefly interrupt the pedaling while changing gears. This makes changing gears easier and reduces the wear of the drive train.

By selecting the right gear, you can increase the speed and range with the same pedaling effort.

Gathering First Experience

It is recommended to gather first experience with the eBike away from roads with heavy traffic.

Try out the different assistance levels. As soon as you feel safe, you can participate in traffic with the eBike as with any other bicycle.

Test the operating range of your eBike under different conditions before planning longer and more challenging rides.

Influences on the Operating Range

The operating range depends on many factors, such as:

- Assistance level,
- Gear-switching behaviour,
- Bicycle tyres and tyre pressure,
- Age and condition of the battery pack,
- Route profile (inclines) and road or path conditions (road or path surface),
- Head wind and ambient temperature,
- Weight of the eBike, rider and equipment/luggage

For these reasons, it is not possible to predict an accurate operating range before starting your ride. General rules:

- For **the same** motor output of the eBike drive: The less power or force that you have to bring about to reach a certain speed (e.g. through optimal use of the gears), the less energy the eBike drive will consume, and the greater the range for a battery-pack charge.
- The **higher** the assistance level under otherwise same conditions, the lower the range.

Careful Handling of the eBike

Please observe the operating and storage temperatures of the eBike components. Protect the drive unit, drive HMI and battery pack against extreme temperatures (e.g. from intense sunlight without adequate ventilation). The components (especially the battery pack) can become damaged through extreme temperatures.

Maintenance and Service

Maintenance and Cleaning

Keep all components of your eBike clean, especially the battery-pack contacts and corresponding holder contacts. Clean them carefully with a soft, damp cloth.

All components including the drive unit may not be immersed in water or cleaned with a high-pressure cleaner.

For service or repairs on the eBike, please refer to an authorised bicycle dealer.

After-sales Service and Customer Assistance

In case of questions concerning the eBike system and its components, please refer to an authorised bicycle dealer.

For contact data of authorised bicycle dealers, please refer to **www.bosch-ebike.com**

Transport

The battery packs are subject to the Dangerous Goods Legislation requirements. Private users can transport battery packs by road without further requirements.

When being transported by commercial users or third parties (e.g. via air transport or forwarding agency), special requirements on packaging and labelling must be observed (e.g. ADR Regulations). For preparation of the item being shipped, an expert for hazardous material can be consulted as required.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery pack in such a manner that it cannot move around in the packaging. Please also observe possibly more detailed national regulations.

In case of questions concerning transport of the battery packs, please refer to an authorised bicycle dealer. Bicycle dealers can also provide suitable transport packaging.

Disposal



The drive unit, drive HMI (incl. operating unit), battery pack, speed sensor, accessories and packaging should be sorted for environmental-friendly recycling.

Do not dispose of eBikes and their components into household waste!

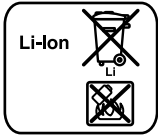
Only for EC countries:



According to the European Guideline 2002/96/EC, electrical devices/tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

The integrated battery pack in the drive HMI may only be removed for disposal. Opening the housing shell can damage or destroy the drive HMI.

Please return battery packs that are no longer usable to an authorised bicycle dealer.



Li-ion:

Please observe the instructions in section “Transport”, page English – 6.

Subject to change without notice.

Lithium ion battery pack PowerPack

Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier), except when explicitly referring to the design type.

- ▶ **Remove the battery pack from the eBike before working on the eBike (e.g., assembling, maintenance, etc.), transporting it via car or plane, or storing it.** Danger of injury when accidentally actuating the On/Off switch.
- ▶ **Do not open the battery pack.** Danger of short-circuiting. Opening the battery pack voids any and all warranty claims.
- ▶ **Protect the battery pack against heat (e.g., also against continuous intense sunlight), fire and immersing into water.** Danger of explosion.
- ▶ **Keep the battery pack not being used away from paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery-pack terminals together may cause burns or a fire. For short-circuiting damage caused in this manner, any and all warranty claims through Bosch shall be invalid.
- ▶ **Under abusive conditions, liquid may be ejected from the battery pack. Avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery pack may cause skin irritations or burns.
- ▶ **Vapours can escape in case of damage and improper use of the battery pack. Provide for fresh air and seek medical attention in case of complaints.** The vapours can irritate the respiratory system.
- ▶ **Charge the battery pack only with original Bosch battery chargers.** When using non-original Bosch chargers, the danger of fire cannot be excluded.

- ▶ **Use the battery pack only together with eBikes that have an original Bosch eBike drive system.** This is the only way to protect the battery pack against dangerous overload.

- ▶ **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.
- ▶ **Please read and observe the safety warnings and instructions enclosed in the operating instructions of the charger and drive unit/drive HMI (Human Machine Interface), as well as in the operating instructions of your eBike.**

Product Description and Specifications

Product Features (see page 4 – 5)

The numbering of the product features refers to the illustrations on the graphics pages.

All representations of bike components, with exception of the battery packs and their holders, are schematic and can deviate from your eBike.

- 19 Holder of the rack-type battery pack
- 20 Rack-type battery pack
- 21 Operation and charge-control indicator
- 22 On/Off button
- 23 Key of the battery pack lock
- 24 Battery-pack lock
- 25 Upper holder of the standard battery pack
- 26 Standard battery pack
- 27 Bottom holder of the standard battery pack
- 28 Carrying strap
- 29 Battery charger

Technical Data

Lithium ion battery pack		PowerPack 300	PowerPack 400
Article number			
– Standard battery pack, black		0 275 007 500	0 275 007 503
– Standard battery pack, white		0 275 007 501	0 275 007 504
– Rack-type battery pack		0 275 007 502	0 275 007 505
Rated voltage	V=	36	36
Rated capacity	Ah	8.2	11
Energy	Wh	300	400
Operating temperature	°C	– 10 ... + 40	– 10 ... + 40
Storage temperature	°C	– 10 ... + 60	– 10 ... + 60
Allowable charging temperature range	°C	0 ... + 40	0 ... + 40
Weight, approx.	kg	2.5	2.5
Degree of protection		IP 54 (dust and splash water protected)	IP 54 (dust and splash water protected)

Assembly

- ▶ **Place down the battery pack only on clean surfaces.** In particular, avoid soiling the charge socket and the contacts, e. g. by means of sand or ground.

Checking the Battery Pack Before Using for the First Time

Check the battery pack before charging it or using it with your eBike for the first time.

For this, press the On/Off button **22** to switch on the battery pack. When no LED of the charge-control indicator **21** lights up, the battery pack may be damaged.

When at least one, but not all LEDs of the charge-control indicator **21** is lit, then fully charge the battery pack before using for the first time.

- ▶ **Do not charge a damaged battery pack and do not use it.** Please refer to an authorised bicycle dealer.

Charging the Battery Pack

- ▶ **Use only the charger provided with your eBike or an identical original Bosch charger.** Only this charger is matched to the lithium-ion battery pack used in your eBike.

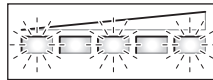
Note: The battery pack is supplied partially charged. To ensure full battery pack capacity, completely charge the battery pack in the charger before using for the first time.

The battery pack must be removed from the eBike for charging.

For charging the battery pack, read and observe the operating instructions of the charger.

The battery pack can be charged any time without reducing the service life. Interrupting the charging procedure does not cause damage to the battery pack.

The battery pack is equipped with a temperature control indicator, which enables charging only within a temperature range between 0 °C and 40 °C.



When the battery pack is not within the charging-temperature range, three LEDs of the charge-control indicator **21**

flash. Disconnect the battery pack from the charger until its temperature has adjusted.

Do not connect the battery pack to the charger until it has reached the allowable charging temperature.

Charge-control Indicator

When the battery pack is switched on, the five green LEDs of the charge-control indicator **21** indicate the charge condition of the battery pack.

In this, each LED indicates approx. 20 % capacity. When the battery pack is completely charged, all five LEDs light up.

Additionally, the charge condition of the switched on battery pack is indicated on the drive HMI. Read and observe the operating instructions of the drive unit and the drive HMI.

When the capacity of the battery pack is below 5 %, all LEDs of charge-control indicator **21** on the battery pack go out; however, the drive HMI does provide an additional indication function.

Inserting and Removing the Battery Pack (see figures C – D)

- ▶ **Always switch the battery pack off when inserting or removing it from the holder.**

In order for the battery pack to be inserted, the key **23** must be inserted into the lock **24** and the lock must be unlocked.

To **insert the standard battery pack 26**, place it via the contacts onto the bottom holder **27** on the eBike. Pivot the battery pack to the stop into the upper holder **25**.

To **insert the rack-type battery pack 20**, slide it with the contacts facing ahead until it engages in the holder **19** of the rear rack/carrier.

Check if the battery pack is tightly seated. Always lock the battery pack with lock **24**, as otherwise the lock can open and the battery pack could fall out of the holder.

After locking, always remove the key **23** from the lock **24**. This prevents the key from falling out and the battery pack from being removed from unauthorised persons when the eBike is parked.

To **remove the standard battery pack 26**, switch it off and unlock the lock with the key **23**. Pivot the battery pack out of the upper holder **25** and pull it by the carrying strap **28** out of the bottom holder **27**.

To **remove the rack-type battery pack 20**, switch it off and unlock the lock with the key **23**. Pull the battery pack out of the holder **19**.

Operation

Initial Operation

► **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.

Switching On and Off

Switching the battery pack on is one of the possibilities to start the eBike system. Read and observe the operating instructions of the drive unit and the drive HMI.

Before switching on the battery pack or the eBike system, check that the lock **24** is locked.

Note: When switching on the eBike system, the pedals of the eBike may not be subject to load, as otherwise the output capacity of the drive will be limited.

To **switch on** the battery pack, press the On/Off button **22**. The LEDs of indicator **21** light up and at the same time indicate the charge condition.

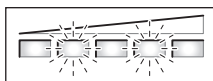
Note: When the battery-pack capacity is below 5 %, none of the LEDs of charge-control indicator **21** will light up. Only the drive HMI will indicate if the eBike system is switched on.

To **switch off** the battery pack, press the On/Off button **22** again. The LEDs of indicator **21** go out. This also switches off the eBike system.

When no power output of the eBike drive is requested for approx. 10 minutes (e. g., because the eBike is parked) and no button of the drive HMI or operating unit is pressed, the eBike system and thus the battery pack automatically switch off to save energy.

The battery pack is protected against deep discharging, overcharging, overheating and short-circuiting through the "Electronic Cell Protection (ECP)". In case of hazardous situations,

a protective circuit automatically switches off the battery pack.



When a defect of the battery pack is detected, two LEDs of the charge-control indicator **21** flash. In this case, please refer

to an authorised bicycle dealer.

Notes for Optimum Handling of the Battery Pack

The battery-pack life can be prolonged when being properly maintained and especially when being operated and stored at the right temperatures.

With increasing age, however, the battery-pack capacity will diminish, even when properly maintained.

A significantly reduced operating period after charging indicates that the battery pack is worn out and must be replaced. You can replace the battery pack yourself.

In case the carrying strap **28** of the standard battery pack should be defective, please have it replaced by a bicycle dealer.

Recharging the Battery Pack prior to and during Storage

When not using the battery pack for a longer period, charge it to approx. 60 % (3 to 4 LEDs lit on the charge-control indicator **21**).

Check the charge condition after 6 months. When only one LED of the charge-control indicator **21** lights up, recharge the battery pack again approx. 60 %.

Note: When the battery pack is stored discharged (empty) for longer periods, it can become damaged despite the low self-discharging and the battery-pack capacity may be strongly reduced.

It is not recommended to have the battery pack connected permanently to the charger.

Storage Conditions

Store the battery pack in a dry, well-ventilated location. Protect the battery pack against moisture and water. Under unfavourable weather conditions, it is recommended e. g. to remove the battery pack from the eBike and store it in an enclosed location until being used again.

The battery pack can be stored at temperatures between $-10\text{ }^{\circ}\text{C}$ and $+60\text{ }^{\circ}\text{C}$. For a long battery-pack life, however, storing the battery pack at a room temperature of approx. $20\text{ }^{\circ}\text{C}$ is of advantage.

Take care that the maximal storage temperature is not exceeded. As an example, do not leave the battery pack in a vehicle in summer and store it out of direct sunlight.

Maintenance and Service

Maintenance and Cleaning

Keep the battery pack clean. Clean the battery pack carefully with a soft, damp cloth. The battery pack may not be immersed in water or cleaned with a water jet.

When the battery pack is no longer operative, please refer to an authorised bicycle dealer.

After-sales Service and Customer Assistance

In case of questions concerning the battery packs, please refer to an authorised bicycle dealer.

- **Note down the manufacturer and the number of the key 23.** In case of loss of the keys, please refer to an authorised bicycle dealer. Please provide the name of the manufacturer and the number of the key.

For contact data of authorised bicycle dealers, please refer to www.bosch-ebike.com

Transport

The battery packs are subject to the Dangerous Goods Legislation requirements. Private users can transport battery packs by road without further requirements.

When being transported by commercial users or third parties (e. g. via air transport or forwarding agency), special requirements on packaging and labelling must be observed (e. g. ADR Regulations). For preparation of the item being shipped, an expert for hazardous material can be consulted as required.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery pack in such a manner that it cannot move around in the packaging. Please also observe possibly more detailed national regulations.

In case of questions concerning transport of the battery packs, please refer to an authorised bicycle dealer. Bicycle dealers can also provide suitable transport packaging.

Disposal



Battery packs, accessories and packaging should be sorted for environmental-friendly recycling.

Do not dispose of the battery packs into household waste!

Only for EC countries:



According to the European Guideline 2002/96/EC, electrical devices/tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in

an environmentally correct manner.

Please return battery packs that are no longer usable to an authorised bicycle dealer.



Li-ion:

Please observe the instructions in section "Transport", page English – 11.

Subject to change without notice.

Charger

Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier).



Keep the charger away from rain or moisture. The penetration of water into a battery charger increases the risk of an electric shock.

- ▶ **Only charge eBike-approved Bosch lithium-ion battery packs. The battery-pack voltage must match the battery-pack charging voltage of the charger.** Otherwise there is danger of fire and explosion.
- ▶ **Keep the battery charger clean.** Contamination can lead to danger of an electric shock.
- ▶ **Before each use, check the battery charger, cable and plug. If damage is detected, do not use the battery charger. Never open the battery charger yourself. Have repairs performed only by a qualified technician and only using original spare parts.** Damaged battery chargers, cables and plugs increase the risk of an electric shock.
- ▶ **Do not operate the battery charger on easily inflammable surfaces (e. g., paper, textiles, etc.) or surroundings.** The heating of the battery charger during the charging process can pose a fire hazard.
- ▶ **Vapours can escape in case of damage and improper use of the battery pack. Provide for fresh air and seek medical attention in case of complaints.** The vapours can irritate the respiratory system.
- ▶ **Supervise children.** This will ensure that children do not play with the charger.
- ▶ **Children or persons that owing to their physical, sensory or mental limitations or to their lack of experience or knowledge, are not capable of securely operating the charger, may only use this charger under supervision or after having been instructed by a responsible person.** Otherwise, there is danger of operating errors and injuries.

- ▶ **Please read and observe the safety warnings and instructions enclosed in the operating instructions of the battery pack and drive unit/drive HMI, as well as in the operating instructions of your eBike.**
- ▶ A short version of important safety warnings in English, French and Spanish with the following content can be found on the bottom side of the charger (marked with number **33** in the representation on the graphics page):
 - For safe operation see manual. Risk of electric shock.
 - Dry location use only.
 - Charge only batteries of the Bosch eBike Systems. Other batteries may burst causing personal damage.
 - Do not replace the plug assembly as risk of fire or electric shock may result.

Product Description and Specifications

Product Features (see page 6 – 7)

The numbering of the product features refers to the illustration of the battery charger on the graphics page.

- 20** Rack-type battery pack
- 21** Battery charge-control indicator
- 26** Standard battery pack
- 29** Battery charger
- 30** Charger socket
- 31** Plug-in connector
- 32** Ventilation openings
- 33** Safety warnings, charger
- 34** Charge connector
- 35** Socket for charge connector

Technical Data

Battery Charger	Charger	
Article number		0 275 007 905
Rated voltage	V~	207 – 264
Frequency	Hz	47 – 63
Output voltage	V=	42
Charging current	A	4
Allowable charging temperature range	°C	0 ... +40

The values given are valid for a nominal voltage [U] of 230 V. For different voltages and models for specific countries, these values can vary.

Battery Charger		Charger
Charging time		
– PowerPack 300	h	2.5
– PowerPack 400	h	3.5
Number of battery cells		10 – 80
Operating temperature		°C – 10... + 75
Storage temperature		°C – 20... + 70
Weight according to EPTA-Procedure 01/2003		kg 0.8
Degree of protection		IP 40
The values given are valid for a nominal voltage [U] of 230 V. For different voltages and models for specific countries, these values can vary.		

Operation

- **Place down the battery pack only on clean surfaces.** In particular, avoid soiling the charge socket and the contacts, e. g. by means of sand or ground.

Initial Operation

Connecting the Charger (see figures E – F)

- **Observe the mains voltage!** The voltage of the power supply must correspond with the data given on the nameplate of the battery charger. Battery chargers marked with 230 V can also be operated with 220 V.

Plug the charger plug **31** of the power cord into the charger socket **30** of the charger.

Connect the mains cable (country-specific) to the mains supply.

Switch the battery pack off and remove it from the holder of the eBike. For this, read and observe the operating instructions of the battery pack.

Insert the charger plug **34** of the battery charger into the socket **35** on the battery pack.

Charging Procedure

The charging procedure begins as soon as the charger is connected with the battery pack and the mains supply.

Note: The charging procedure is only possible when the temperature of the battery pack is within the allowable charging-temperature range.

During the charging procedure, the LEDs of charge-control indicator **21** on the battery pack light up. Each continuously lit LED is equivalent to a charge capacity of approx. 20 %. The flashing LED indicates the charging of the next 20 %.

- **Use caution when touching the charger during the charging procedure. Wear protective gloves.** Especially in high ambient temperatures, the charger can heat up considerably.

Note: Pay attention that the charger is well ventilated during the charging procedure and that the ventilation openings **32** on both sides are not clogged or contaminated.

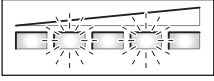
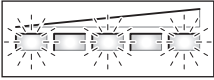
The battery pack is completely charged when all five LEDs of indicator **21** light up continuously. The charge procedure is automatically ended.

Disconnect the charger from the mains supply and the battery pack from the charger.

When disconnecting the battery pack from the charger, the battery pack is automatically switched off.

The battery pack can now be inserted into the eBike.

Troubleshooting – Causes and Corrective Measures

Cause	Corrective Measure
	Two LEDs of the battery pack flashing
Battery pack defective	Refer to an authorised bicycle dealer
	Three LEDs of the battery pack flashing
Battery pack too warm or too cold	Disconnect the battery pack from the charger and allow to adjust to the ambient temperature until the charging-temperature range is reached. Do not connect the battery pack to the charger until it has reached the allowable charging temperature.
No charging procedure possible (no indication on battery pack)	
Plug not inserted correctly	Check all plug connections
Contacts of battery pack soiled	Carefully clean the contacts of the battery pack
Ventilation openings 32 of the charger clogged or contaminated	Clean ventilation openings 32 and set up charger well ventilated
Socket outlet, cable or charger defective	Check mains voltage, have charger checked through bicycle dealer
Battery pack defective	Refer to an authorised bicycle dealer

Maintenance and Service

Maintenance and Cleaning

If the charger should fail, please refer to an authorised bicycle dealer.

After-sales Service and Customer Assistance

In case of questions concerning the charger, please refer to an authorised bicycle dealer.

For contact data of authorised bicycle dealers, please refer to **www.bosch-ebike.com**

Disposal

Battery chargers, accessories and packaging should be sorted for environmental-friendly recycling.

Do not dispose of battery chargers into household waste!

Only for EC countries:



According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national right, battery chargers that are no longer usable must be collected separately and disposed of in an environmental correct manner.

Subject to change without notice.

Unité d'entraînement Drive Unit Cruise/ Ordinateur de commande Intuvia

Avertissements de sécurité



Lire tous les avertissements de sécurité et toutes les instructions. Ne pas suivre les avertissements et instructions peut donner lieu à un choc électrique, un incendie et/ou une blessure sérieuse.

Conserver tous les avertissements et toutes les instructions pour pouvoir s'y reporter ultérieurement.

Le terme « accu » utilisé dans cette notice d'utilisation se réfère aussi bien aux accus standards (accus avec fixation sur le cadre du vélo) qu'aux accus du porte-bagages (accus avec fixation dans le porte-bagages).

- ▶ **N'ouvrez pas l'unité d'entraînement vous-même. L'unité d'entraînement ne nécessite pas d'entretien ne doit être réparée que par une personne qualifiée et seulement avec des pièces de rechange d'origine.** Ceci permet d'assurer la sécurité de l'unité d'entraînement. Une ouverture non autorisée de l'unité d'entraînement annule tous droits de garantie.
- ▶ **Tous les éléments montés sur l'unité d'entraînement et tous les autres éléments de l'entraînement du vélo électrique (par ex. plateau, fixation du plateau, pédales) ne doivent être remplacés que par des éléments d'un type similaire ou spécialement autorisés par le fabricant de vélo pour votre vélo électrique.** Ceci permet de protéger l'unité d'entraînement d'une surcharge et de dommages.
- ▶ **Retirez l'accu du vélo électrique avant d'effectuer des travaux (par ex. montage, entretien etc.) sur le vélo électrique, avant de le transporter en voiture ou en avion ou de le stocker.** Risques de blessures en cas d'activation accidentelle de l'interrupteur Marche/Arrêt.
- ▶ **La fonction d'assistance de poussée ne doit être utilisée que quand vous poussez le vélo électrique.** Les roues du vélo électrique doivent être en contact avec le sol lorsque l'assistance de poussée est utilisée, sinon il y a danger de blessures.
- ▶ **N'utilisez que les accus d'origine Bosch autorisés par le fabricant pour votre vélo électrique.** L'utilisation de tout autre accumulateur peut entraîner des blessures et des risques d'incendie. Bosch décline toute responsabilité et garantie dans le cas d'utilisation d'autres accus.
- ▶ **Respectez tous les réglementations nationales spécifiques à l'autorisation et l'utilisation de vélos électriques.**

- ▶ **Lisez et respectez les consignes de sécurité et les instructions de la notice d'utilisation de l'accu ainsi que celles de la notice d'utilisation de votre vélo électrique.**

Description et performances du produit

Utilisation conforme

L'unité d'entraînement est conçue exclusivement pour l'entraînement de votre vélo électrique et ne doit pas être utilisée à d'autres fins.

Le vélo électrique est conçu pour une utilisation sur des chemins à sol stabilisé. Il n'est pas agréé pour être utilisé dans des compétitions.

Éléments de l'appareil (voir page 2 – 3)

La numérotation des éléments se réfère à la représentation sur la page graphique.

Toutes les représentations d'éléments de vélo à l'exception de l'unité d'entraînement, de l'ordinateur de commande y compris l'unité de commande, du capteur de vitesse et de leurs fixations sont schématiques et peuvent différer des éléments réellement installés sur votre vélo électrique.

- 1 Touche pour la fonction d'affichage « i »
- 2 Touche pour l'éclairage
- 3 Ordinateur de commande
- 4 Fixation de l'ordinateur de commande
- 5 Touche Marche/Arrêt pour l'ordinateur de commande
- 6 Touche de remise à zéro « RESET »
- 7 Douille USB
- 8 Capuchon de protection de la douille USB
- 9 Unité d'entraînement
- 10 Unité de commande
- 11 Touche pour la fonction d'affichage « i » sur l'unité de commande
- 12 Touche pour baisser la valeur/feuilleter vers le bas « - »
- 13 Touche pour augmenter la valeur/feuilleter vers le haut « + »
- 14 Touche pour l'assistance de poussée « WALK »
- 15 Blocage de l'ordinateur de commande
- 16 Vis de blocage de l'ordinateur de commande
- 17 Capteur de vitesse
- 18 Aimant de rayon du capteur de vitesse

Éléments d'affichage de l'ordinateur de commande

- a Puissance du moteur
- b Affichage du niveau d'assistance
- c Texte affiché
- d Affichage des valeurs
- e Indicateur tachymétrique
- f Voyant lumineux indiquant l'état de charge de l'accu

Caractéristiques techniques

Unité d'entraînement	Drive Unit Cruise	
N° d'article		0 275 007 006/ 0 275 007 007
Puissance	W	250
Couple max. de l'entraînement	Nm	50
Tension nominale	V $\overline{--}$	36
Température de fonctionnement	°C	-5 ... +40
Température de stockage	°C	-10 ... +50
Type de protection		IP 54 (étanche à la poussière et aux projections d'eau)
Poids, env.	kg	4

Ordinateur de commande	Intuvia	
N° d'article		1 270 020 903
Courant de charge max. de la connexion USB	mA	500
Tension de charge de la connexion USB	V	5
Température de fonctionnement	°C	-5 ... +40
Température de stockage	°C	-10 ... +50
Type de protection		IP 54 (étanche à la poussière et aux projections d'eau)
Poids, env.	kg	0,15

Éclairage*		
Tension nominale	V $\overline{--}$	6
Puissance		
- Lampe avant	W	2,7
- Lampe arrière	W	0,3

* en fonction des prescriptions légales, pas possible dans toutes les versions nationales via l'accu du vélo électrique

Montage

Montage et démontage de l'accu

Pour monter l'accu dans le vélo électrique, lisez et respectez la notice d'utilisation de l'accu.

Insérer et retirer l'ordinateur de commande (voir figure A)

Pour **monter** l'ordinateur de commande **3** poussez-le de devant dans sa fixation **4**.

Pour **retirer** l'ordinateur de commande **3** appuyez sur le dispositif de blocage **15** et poussez-le vers l'avant pour le sortir de sa fixation **4**.

► **Retirez l'ordinateur de commande lorsque le vélo électrique est garé pour éviter que des tiers non autorisés n'utilisent l'entraînement.** Le système eBike ne peut pas être mis en marche sans ordinateur de commande.

Il est également possible de sécuriser l'ordinateur de commande dans sa fixation pour empêcher qu'il n'en soit enlevé. Pour ce faire, démontez la fixation **4** du guidon. Montez l'ordinateur de commande dans sa fixation. Vissez la vis de blocage **16** par le bas dans le filet prévu de la fixation. Remontez la fixation sur le guidon.

Contrôle du capteur de vitesse (voir figure B)

Le capteur de vitesse **17** et l'aimant de rayon **18** doivent être montés de sorte à ce que l'aimant du rayon dépasse le capteur de vitesse à une distance de 5 mm min. et de 17 mm max. lorsque la roue tourne.

Note : Si la distance entre le capteur de vitesse **17** et l'aimant de rayon **18** est trop faible ou trop élevée ou si le capteur de vitesse **17** n'est pas correctement branché, l'indicateur tachymétrique **e** ne fonctionne pas, et l'entraînement du vélo électrique travaille en mode d'urgence.

Dans un tel cas, desserrez la vis de l'aimant de rayon **18** et fixez l'aimant de rayon sur le rayon de sorte à ce qu'il dépasse le marquage du capteur de vitesse à la distance correcte. Si l'indicateur tachymétrique **e** n'affiche toujours pas de vitesse, adressez-vous à un vélociste autorisé.

Fonctionnement

Mise en service

Conditions préalables

Le système eBike ne peut être activé que si les conditions suivantes sont remplies :

- Un accu suffisamment chargé est inséré (voir notice d'utilisation de l'accu).
- L'ordinateur de commande est correctement monté dans sa fixation (voir « Insérer et retirer l'ordinateur de commande », page Français – 2).
- Le capteur de vitesse est correctement connecté (voir « Contrôle du capteur de vitesse », page Français – 2).

Mise marche/Arrêt du système eBike

Pour mettre le système eBike **en marche**, vous avez les possibilités suivantes :

- Si l'ordinateur de commande est déjà allumé quand il est monté dans sa fixation, le système eBike sera automatiquement mis en marche.
- Une fois l'ordinateur de commande monté et l'accu en place, appuyez une fois brièvement sur la touche Marche/Arrêt **5** de l'ordinateur de commande.
- Une fois l'ordinateur de commande monté, appuyez sur la touche Marche/Arrêt de l'accu (voir notice d'utilisation de l'accu).

Note : Les pédales du vélo électrique ne doivent pas être sollicitées lorsque le système eBike est mis en marche, sinon la puissance du moteur serait réduite. Dans le texte affiché **c** apparaît le message d'erreur « **Relâcher la pédale** ».

Si le système eBike est mis en marche par mégarde alors que les pédales sont sollicitées, éteignez-le et remettez-le en marche sans sollicitation.

L'entraînement est activé dès que vous appuyez sur les pédales (sauf avec la fonction Assistance de poussée, voir « Allumer/éteindre l'assistance de poussée », page Français – 4). La puissance de moteur dépend des réglages de l'ordinateur de commande.

Dès que vous arrêtez de pédaler en mode normal ou dès que vous avez atteint une vitesse de 25 km/h, l'entraînement du vélo électrique éteint l'assistance. L'entraînement est automatiquement activé à nouveau dès que vous pédalez et que la vitesse est inférieure à 25 km/h.

Pour **arrêter** le système eBike, vous avez les possibilités suivantes :

- Appuyez sur la touche Marche/Arrêt **5** de l'ordinateur de commande.
- Éteignez l'accu avec sa propre touche Marche/Arrêt (voir la notice d'utilisation de l'accu)
- Enlevez l'ordinateur de commande de sa fixation.

Si l'entraînement n'est pas sollicité pendant 10 min. (par ex. parce que le vélo électrique est arrêté) et qu'aucune touche de l'ordinateur de commande ou de l'unité de commande n'a été activée, le système eBike s'éteint automatiquement pour économiser l'énergie.

Affichages et réglages de l'ordinateur de commande

Alimentation en énergie de l'ordinateur de commande

Si l'ordinateur de commande se trouve dans la fixation **4** et qu'un accu suffisamment chargé est monté dans le vélo électrique, l'ordinateur de commande est alimenté au moyen de l'accumulateur du vélo électrique.

Si l'on retire l'ordinateur de commande de la fixation **4**, l'alimentation en énergie se fait au moyen d'un accu interne. Si l'accu interne est trop faible lorsqu'on met en marche l'ordinateur de commande, « **Connecter au vélo** » est affiché pen-

dant 3 sec sur l'écran **c**. Ensuite, l'ordinateur de commande s'arrête à nouveau.

Pour recharger l'accu interne, montez l'ordinateur de commande à nouveau dans la fixation **4** (si un accu est monté dans le vélo électrique). Éteignez l'accu du vélo électrique avec sa propre touche Marche/Arrêt (voir la notice d'utilisation de l'accu).

Vous pouvez également recharger l'ordinateur de commande via la connexion USB. Pour ce faire, ouvrez le capuchon de protection **8**. Connectez la douille USB **7** de l'ordinateur de commande au moyen d'un câble USB approprié avec un chargeur USB disponible dans le commerce ou la douille USB d'un ordinateur (5 V tension de charge ; max. 500 mA courant de charge). Dans le texte affiché **c** de l'ordinateur de commande « **USB connectée** » est affiché.

Allumer/éteindre l'ordinateur de commande

Pour mettre l'ordinateur de commande **en marche**, appuyez une fois brièvement sur l'interrupteur Marche/Arrêt **5**. L'ordinateur de commande peut (si son accu interne est suffisamment rechargé) être également mis en marche alors qu'il n'est pas encore monté dans sa fixation.


Pour **arrêter** l'ordinateur de commande, appuyez sur la touche Marche/Arrêt **5**.

Si l'ordinateur de commande n'est pas monté dans sa fixation, il s'éteint automatiquement au bout de 1 min sans activation de touche pour économiser l'énergie.


Voyant lumineux indiquant l'état de charge de l'accu

L'affichage de l'état de charge de l'accu **f** indique l'état de charge de l'accu du vélo électrique, pas de l'accu interne de l'ordinateur de commande. L'état de charge de l'accu du vélo électrique peut également être contrôlé au moyen des LED sur l'accu même.

Sur l'affichage **f** chaque barre du symbole d'accu représente environ 20 % de capacité :

 100 % à 80 % de capacité

 20 % à 5 % de capacité, il faut recharger l'accu.

 Moins de 5 % de capacité, l'assistance de l'entraînement n'est plus possible. Les LED de l'affichage de l'état de charge de l'accu s'éteignent.

Si l'éclairage du vélo électrique se fait au moyen de l'accu (suivant les versions dans les différents pays), la capacité sera suffisante pour 2 heures d'éclairage environ après la première apparition du symbole d'accu vide. Quand le symbole commence à clignoter, l'éclairage n'est plus possible que pendant une courte durée.

Si l'ordinateur de commande est retiré de sa fixation **4** l'état de charge de l'accu affiché en dernier reste mémorisé.

Réglage du niveau d'assistance

Vous pouvez régler sur l'ordinateur de commande la puissance de l'entraînement du vélo électrique selon vos besoins. Le niveau d'assistance peut être modifié à tout moment même pendant que vous roulez.

Note : Dans certaines versions, il est possible que le niveau d'assistance soit pré-régulé et ne puisse pas être modifié. Il est également possible que moins de niveaux d'assistance soient disponibles qu'indiqués ici.

Les niveaux d'assistance suivants sont disponibles :

- « **OFF** » : L'entraînement est hors-service, le vélo électrique peut être utilisé comme un vélo normal en pédalant.
- « **ECO** » : assistance effective avec efficacité maximale, pour portée maximale
- « **TOUR** » : assistance régulière, pour des tours de grande portée
- « **SPORT** » : assistance puissante, pour parcours sportifs sur des chemins montagneux ainsi que pour la circulation urbaine
- « **TURBO** » : assistance maximale jusqu'à des fréquences de pédalage élevées, pour parcours sportifs

Pour passer à un niveau d'assistance **plus élevé**, appuyez plusieurs fois sur la touche « **+** » **13** de l'unité de commande jusqu'à ce que le niveau d'assistance apparaisse sur l'écran **b**, pour passer à un niveau d'assistance **plus bas**, sur la touche « **-** » **12**.

La puissance du moteur lue apparaît sur l'écran **a**. La puissance maximale du moteur dépend du niveau d'assistance sélectionné.

Niveau d'assistance	Puissance du moteur*	
	dérailleur	moyeu à vitesses intégrées
« ECO »	30 %	30 %
« TOUR »	100 %	90 %
« SPORT »	170 %	150 %
« TURBO »	250 %	200 %

* La puissance du moteur peut différer pour certaines versions.

Si l'on retire l'ordinateur de commande de la fixation **4**, le niveau d'assistance reste mémorisé, l'affichage **a** de la puissance de moteur reste vide.

Allumer/éteindre l'assistance de poussée

L'assistance de poussée peut vous aider à pousser le vélo électrique. La vitesse possible avec cette fonction dépend de la vitesse passée et peut atteindre 6 km/h au maximum. Plus vous passez une vitesse basse, moins élevée sera la vitesse de cette fonction d'assistance de poussée (à pleine puissance).

► **La fonction d'assistance de poussée ne doit être utilisée que quand vous poussez le vélo électrique.** Les roues du vélo électrique doivent être en contact avec le sol lorsque l'assistance de poussée est utilisée, sinon il y a danger de blessures.

Pour **mettre en marche** l'assistance de poussée, appuyez sur la touche « **WALK** » **14** de l'unité de commande et maintenez-la appuyée. L'entraînement du vélo électrique sera mis en marche.

L'assistance de poussée sera **arrêtée** dès que surviendra l'un des événements suivants :

- vous relâchez la touche « **WALK** » **14**,
- vous pédalez en avant ou rapidement en arrière,
- les roues du vélo électrique sont bloquées (par ex. par les freins ou si vous heurtez un obstacle),
- la vitesse dépasse 6 km/h.

Allumer/éteindre l'éclairage

En fonction des réglementations nationales, deux versions d'éclairage sont possibles :

- L'ordinateur de commande permet de mettre en marche ou d'éteindre simultanément la lampe avant, la lampe arrière et l'éclairage d'arrière plan de l'écran. Dans cette version, « **Feux allumés** » est affiché sur l'écran **c** pendant 1 sec. environ lorsqu'on allume la lampe et « **Feux éteints** » lorsqu'on éteint la lampe.
- Seul l'éclairage d'arrière plan de l'écran peut être allumé ou éteint, la lampe avant et la lampe arrière du vélo électrique sont indépendantes de l'ordinateur de commande.

Dans les deux modèles, pour **allumer ou éteindre l'éclairage**, appuyez sur la touche **2**.

Affichages de vitesse et de distance

L'**indicateur tachymétrique e** affiche toujours la vitesse actuelle.

Dans l'**affichage du fonctionnement** (combinaison entre affichage du texte **c** et des valeurs **d**), les fonctions suivantes sont à disposition :

- « **Autonomie** » : autonomie prévisible vu la charge actuelle de l'accu (dans des conditions telles que niveau d'assistance, profil du parcours etc. restant constantes)
- « **Distance parcourue** » : distance parcourue depuis la dernière remise à zéro
- « **temps de trajet** » : temps de trajet depuis la dernière remise à zéro
- « **Vitesse Moyenne** » : la vitesse moyenne atteinte depuis la dernière remise à zéro
- « **Vitesse Maximale** » : la vitesse maximale atteinte depuis la dernière remise à zéro
- « **Heure** » : heure actuelle

Pour passer de l'**affichage d'une valeur à une autre**, appuyez plusieurs fois sur la touche « **i** » **1** de l'ordinateur de commande ou sur la touche « **i** » **11** de l'unité de commande jusqu'à ce que la fonction souhaitée soit affichée.

Pour **remettre à zéro** la « **Distance parcourue** », le « **temps de trajet** » ou la « **Vitesse moyenne** », faites afficher l'une de ces trois fonctions et appuyez ensuite sur la touche « **RESET** » **6** jusqu'à ce que l'affichage soit revenu à zéro. Les valeurs des deux autres fonctions seront ainsi également remises à zéro.

Pour **remettre à zéro** la « **Vitesse maximale** », passez à l'affichage de cette fonction et appuyez sur la touche « **RESET** » **6** jusqu'à ce que l'affichage soit revenu à zéro.

Si l'ordinateur de commande est retiré de sa fixation **4** toutes les valeurs des différentes fonctions restent sauvegardées et peuvent être réaffichées ultérieurement.

Afficher/personnaliser la configuration de base

L'affichage ou la personnalisation de la configuration de base peuvent être effectués indépendamment de si l'ordinateur de commande est monté dans sa fixation **4** ou non.

Pour passer au menu Configuration de base, appuyez simultanément plusieurs fois sur la touche « **RESET** » **6** et la touche « **i** » **1** jusqu'à ce que « **Configuration** » apparaisse sur le texte affiché **c**.

Pour passer de l'affichage d'une configuration de base à une autre, appuyez sur la touche « **i** » **1** de l'ordinateur de commande jusqu'à ce que la configuration de base souhaitée soit affichée. Si l'ordinateur de commande est monté dans la fixation **4**, vous pouvez également appuyer sur la touche « **i** » **11** de l'unité de commande.

Pour **modifier la configuration de base**, appuyez pour une réduction ou feuilletter vers le bas sur la touche Marche/Arrêt **5** à côté de l'affichage « - » ou pour une augmentation ou feuilletter vers le haut la touche Eclairage **2** à côté de l'affichage « + ».

Affichage code d'erreur

Les éléments du système eBike sont contrôlés automatiquement en permanence. Si un défaut est détecté, le code défaut correspondant est affiché dans l'affichage de texte **c**.

Appuyez sur une touche quelconque de l'ordinateur de commande **3** ou de l'unité de commande **10** pour revenir à l'affichage standard.

En fonction du type d'erreur, l'entraînement est éventuellement automatiquement arrêté. Il est cependant à tout temps

Si l'ordinateur de commande est dans sa fixation **4**, vous pouvez également effectuer les modifications avec les touches « - » **12** ou « + » **13** de l'unité de commande.

Pour quitter la fonction et sauvegarder la configuration effectuée, appuyez sur la touche « **RESET** » **6** pendant 3 sec.

Les configurations de base suivantes sont à disposition :

- « **unité km/mi** » : vous pouvez afficher la vitesse et la distance parcourue en kilomètres ou en miles.
- « **format de l'heure** » : vous pouvez afficher l'heure au format 12 heures ou 24 heures.
- « **heure** » : vous pouvez régler l'heure actuelle. Maintenir appuyée la touche de réglage accélère la course de l'horloge.
- « **Français** » : vous pouvez modifier la langue du texte affiché. À disposition sont l'allemand, l'anglais, le français, l'espagnol, l'italien et le néerlandais.
- « **distance cumulée** » : affichage de la distance totale parcourue par le vélo électrique (non modifiable)
- « **Temps de fonctionn.** » : affichage de la durée totale de fonctionnement du vélo électrique (non modifiable)

possible de continuer à rouler sans être assisté par l'entraînement. Il est recommandé de faire contrôler le vélo électrique avant d'autres parcours.

► **Ne faites effectuer tous les travaux de contrôle et de réparation que par un vélociste autorisé.** Si une erreur est toujours affichée malgré vos soins pour remédier au problème, adressez-vous alors à un vélociste autorisé.

Code	Cause	Remède
100	Erreur interne de l'unité d'entraînement	Faire contrôler l'unité d'entraînement
101	Problème de connexion de l'unité d'entraînement	Faire contrôler les raccords et connexions
102	Erreur du capteur de vitesse	Faire contrôler le capteur de vitesse
103*	Problème de connexion de l'éclairage	Faire contrôler les raccords et connexions
104	Problème de connexion de l'ordinateur de commande	Faire contrôler les raccords et connexions
105	Température de l'unité d'entraînement trop élevée (supérieure à 40 °C)	Laissez refroidir l'unité d'entraînement. La continuation de la course sans entraînement du vélo électrique est possible et accélère le refroidissement de l'unité d'entraînement.
200	Défaut électronique interne de l'accu	Faire contrôler l'accu
201	Température de l'accu trop élevée (plus de 40 °C)	Laissez refroidir l'accu. La continuation de la course sans entraînement du vélo électrique est possible et accélère le refroidissement de l'accu.
202	Température de l'accu trop basse (moins de -10 °C)	Laissez l'accu se réchauffer lentement dans un endroit chaud.

* seulement pour éclairage par accu du vélo électrique (suivant les versions dans les différents pays)

Code	Cause	Remède
203	Problème de connexion de l'accu	Faire contrôler les raccords et connexions
204	Mauvaise polarité de l'accu	Rechargez l'accu au moyen du chargeur d'origine Bosch suivant les informations données dans la notice d'utilisation de ce dernier.
410	Une ou plusieurs touches de l'ordinateur de commande sont bloquées.	Contrôlez si les touches sont coincées, par ex. par des encrassements profonds. Le cas échéant, nettoyez les touches.
414	Problème de connexion de l'unité de commande	Faire contrôler les raccords et connexions
418	Une ou plusieurs touches de l'unité de commande sont bloquées.	Contrôlez si les touches sont coincées, par ex. par des encrassements profonds. Le cas échéant, nettoyez les touches.
422	Problème de connexion de l'unité d'entraînement	Faire contrôler les raccords et connexions
423	Problème de connexion de l'accu	Faire contrôler les raccords et connexions
424	Erreur de communication des composants entre eux	Faire contrôler les raccords et connexions
430	Accu interne de l'ordinateur de commande vide	Recharger l'ordinateur de commande (dans sa fixation ou par la connexion USB)
490	Erreur interne de l'ordinateur de commande	Faire contrôler l'ordinateur de commande

* seulement pour éclairage par accu du vélo électrique (suivant les versions dans les différents pays)

Alimentation en énergie d'appareils externes par la connexion USB

Au moyen du douille USB, il est possible de faire fonctionner ou de charger la plupart des appareils pouvant être alimentés par USB (p. ex. téléphones portables).

Condition préalable au chargement est que l'ordinateur de commande et un accu suffisamment chargé soient montés sur le vélo électrique.

Ouvrez le capuchon de protection **8** de la douille USB de l'ordinateur de commande. Connectez la prise USB de l'appareil externe au moyen d'un câble USB à la douille USB **7** de l'ordinateur de commande.

Instructions pour utiliser le système eBike

Quand est-ce que l'entraînement du vélo électrique travaille ?

L'entraînement du vélo électrique vous aide pendant votre course tant que vous pédalez. Sans pédaler, aucune assistance. La puissance du moteur dépend toujours de la force appliquée lorsque vous pédalez.

Si vous appliquez peu de force, l'assistance est moins forte que lorsque vous appliquez plus de force. Et cela indépendamment du niveau d'assistance.

L'entraînement du vélo électrique s'arrête automatiquement à une vitesse supérieure à 25 km/h. Si la vitesse tombe au-dessous de 25 km/h, l'entraînement est automatiquement à nouveau disponible.

La fonction d'assistance de poussée est une exception ; dans cette fonction, le vélo électrique peut être poussé à faible vitesse sans avoir à pédaler.

Vous pouvez à tout moment utiliser le vélo électrique comme un vélo normal sans assistance, si vous éteignez le système eBike ou si vous mettez le niveau d'assistance sur « **OFF** ». Il en va de même si l'accu est vide.

Interaction entre le système eBike et la vitesse

Même avec entraînement de vélo électrique vous devriez utiliser la vitesse comme pour un vélo normal (respectez la notice d'utilisation de votre vélo électrique).

Indépendamment du type de vitesse, il est recommandé d'arrêter brièvement de pédaler pendant que vous changez de vitesse. Ceci facilite le changement de vitesse et réduit l'usure de l'arbre d'entraînement.

En choisissant la vitesse appropriée, vous pouvez augmenter la vitesse et la portée en appliquant la même force.

Faire les premières expériences

Il est recommandé de faire les premières expériences avec le vélo électrique à l'écart de rues fortement fréquentées.

Essayez les différents niveaux d'assistance à disposition. Dès que vous vous sentez sûr de vous, vous pouvez circuler avec le vélo électrique comme avec tout autre vélo.

Essayez la portée de votre vélo électrique dans différentes conditions avant de planifier un parcours long et exigeant.

Influences sur la portée

L'autonomie est influencée par beaucoup de facteurs, tels que par exemple :

- le niveau d'assistance,
- la manière de changer les vitesses,
- le type et la pression des pneus,
- l'âge et l'état de l'accu,
- le profil (montées) et les caractéristiques (surface de la route) du parcours,
- le vent de face et les températures ambiantes,
- le poids du vélo électrique, du conducteur et des bagages.

Pour cette raison il n'est pas possible de prédire concrètement la portée avant un parcours. Mais en général vaut :

- Pour une **même** puissance de moteur de l'entraînement du vélo électrique : Plus la force que vous devez appliquer pour atteindre une certaine vitesse sera faible (par ex. par une utilisation optimale des vitesses), plus l'énergie consommée par l'entraînement sera faible et plus grande sera l'autonomie d'une charge d'accu.
- Plus le niveau d'assistance sélectionné sera **élevé**, même dans des conditions constantes, moins l'autonomie sera grande.

Maniement soigneux du vélo électrique

Respectez les températures de fonctionnement et de stockage des éléments du vélo électrique. Protégez l'unité d'entraînement, l'ordinateur de commande et l'accu de températures extrêmes (par ex. exposition intensive au soleil sans aération). Les éléments (surtout l'accu) peuvent être endommagés par des températures extrêmes.

Entretien et Service Après-Vente

Nettoyage et entretien

Maintenez tous les éléments de votre vélo électrique propres, surtout les contacts de l'accu et les fixations. Nettoyez-les avec précaution à l'aide d'un chiffon humidifié et doux.

Ne plongez pas dans l'eau les éléments, y compris l'unité de l'entraînement et ne les nettoyez pas à l'aide d'un nettoyeur haute pression.

Pour le Service Après-Vente ou des réparations sur votre vélo électrique, adressez-vous à un vélociste autorisé.

Service Après-Vente et Assistance Des Clients

Pour toutes les questions concernant le système eBike et ses éléments, adressez-vous à un vélociste autorisé.

Vous trouverez les données de contact de vélocistes autorisés sur le site internet www.bosch-ebike.com

Transport

Les accus sont soumis aux règlements de transport des matières dangereuses. L'utilisateur privé peut transporter les accus par la route sans conditions supplémentaires.

Lors d'un transport par des utilisateurs commerciaux ou par des tiers (par ex. transport aérien ou entreprise de transport), les prescriptions particulières pour l'emballage et le marquage doivent être respectées (par ex. prescriptions de l'ADR). Au besoin, faire appel à un expert en transport de matières dangereuses pour la préparation de l'envoi.

N'expédiez pas l'accu si le boîtier est endommagé. Recouvrez les contacts à l'air libre et emballez l'accu de manière à ce qu'il ne se déplace pas dans l'emballage. Veuillez également respecter des réglementations supplémentaires nationales éventuellement en vigueur.

Pour toute question concernant le transport de l'accu, adressez-vous à un vélociste autorisé. Vous pouvez également commander un emballage de transport approprié auprès d'un commerçant spécialisé.

Élimination des déchets



L'unité d'entraînement, l'ordinateur de commande y compris l'unité de commande, l'accu, le capteur de vitesse, ainsi que leurs accessoires et emballages, doivent pouvoir suivre chacun une voie de recyclage appropriée.

Ne jetez pas les vélos électriques et leurs éléments dans les ordures ménagères !

Seulement pour les pays de l'Union Européenne :



Conformément à la directive européenne 2002/96/CE, les équipements électriques dont on ne peut plus se servir, et conformément à la directive européenne 2006/66/CE, les accus/piles usés ou défectueux doivent être isolés et suivre une voie de recyclage appropriée.

L'accu intégré à l'ordinateur de commande ne doit en être retiré que pour son élimination. Ouvrir la coque du boîtier peut détruire l'ordinateur de commande.

Déposez les accus et l'ordinateur de commande dont on ne peut plus se servir auprès d'un vélociste autorisé.



Lithium ion :

Respectez les indications données dans le chapitre « Transport », page Français – 7.

Sous réserve de modifications.

Accu Li-ions PowerPack

Avertissements de sécurité



Lire tous les avertissements de sécurité et toutes les instructions. Ne pas suivre les avertissements et instructions peut donner lieu à un choc

électrique, un incendie et/ou une blessure sérieuse.

Conserver tous les avertissements et toutes les instructions pour pouvoir s'y reporter ultérieurement.

Le terme « accu » utilisé dans cette notice d'utilisation se réfère également aux accus standards (accus avec fixation sur le cadre de vélo) et accus de porte-bagages (accus avec fixation dans le porte-bagages), à moins que référence ne soit faite au modèle.

► **Retirez l'accu du vélo électrique avant d'effectuer des travaux (par ex. montage, entretien etc.) sur le vélo électrique, avant de le transporter en voiture ou en avion ou de le stocker.** Risques de blessures en cas d'activation accidentelle de l'interrupteur Marche/Arrêt.

► **Ne pas ouvrir l'accu.** Risque de court-circuit. L'ouverture de l'accu entraîne l'annulation de la garantie.



Protégez l'accu de toute source de chaleur (par ex. d'une exposition permanente au soleil) de feu, et ne le plongez pas dans l'eau. Il peut y avoir risque d'explosion.

► **Tenez l'accu non-utilisé à l'écart de toutes sortes d'objets métalliques tels qu'agrafes, pièces de monnaie, clés, clous, vis ou autres, car un pontage pourrait provoquer un court-circuit.** Un court-circuit entre les contacts d'accu peut provoquer des brûlures ou un incendie. La garantie de Bosch est annulée dans en cas de dommages provoqués par un court-circuit survenant dans ce contexte.

► **En cas d'une utilisation erronée, du liquide peut s'échapper de l'accumulateur. Évitez tout contact. En cas de contact accidentel, nettoyez à l'eau. Si le liquide entre en contact avec les yeux, veuillez alors consulter un médecin.** La substance liquide qui s'échappe de l'accumulateur peut entraîner des irritations de la peau ou causer des brûlures.

► **En cas d'endommagement et d'utilisation non conforme de l'accumulateur, des vapeurs peuvent s'échapper. Ventilez le lieu de travail et, en cas de maux, consultez un médecin.** Les vapeurs peuvent irriter les voies respiratoires.

► **Ne recharger l'accu qu'avec un chargeur d'origine Bosch.** En cas d'utilisation d'un chargeur autre qu'en chargeur d'origine Bosch, un risque d'incendie ne peut être exclu.

► **N'utilisez l'accu qu'avec des vélos électriques équipés d'un entraînement de vélo électrique d'origine Bosch.** Ceci protège l'accu contre une surcharge dangereuse.

► **N'utilisez que les accus d'origine Bosch autorisés par le fabricant pour votre vélo électrique.** L'utilisation de tout autre accumulateur peut entraîner des blessures et des risques d'incendie. Bosch décline toute responsabilité et garantie dans le cas d'utilisation d'autres accus.

► **Lisez et respectez les consignes de sécurité et les instructions se trouvant dans les notices d'utilisation du chargeur et de l'unité d'entraînement/de l'ordinateur de commande ainsi que dans la notice d'utilisation de votre vélo électrique.**

Description et performances du produit

Éléments de l'appareil (voir page 4 – 5)

La numérotation des éléments se réfère à la représentation sur les pages graphiques.

Toutes les représentations d'éléments de vélo à l'exception des accus et des fixations sont schématiques et peuvent différer pour votre vélo électrique.

- 19 Fixation de l'accu de porte-bagages
- 20 Accu de porte-bagages
- 21 Voyant de fonctionnement et d'état de charge
- 22 Touche Marche/Arrêt
- 23 Clé de la serrure de l'accu
- 24 Serrure de l'accu
- 25 Fixation supérieure de l'accu standard
- 26 Accu standard
- 27 Fixation inférieure de l'accu standard
- 28 Sangle
- 29 Chargeur

Caractéristiques techniques

Accu Lithium-ion		PowerPack 300	PowerPack 400
N° d'article			
– Accu standard noir		0 275 007 500	0 275 007 503
– Accu standard blanc		0 275 007 501	0 275 007 504
– Accu de porte-bagages		0 275 007 502	0 275 007 505
Tension nominale	V=	36	36
Capacité nominale	Ah	8,2	11
Énergie	Wh	300	400
Température de fonctionnement	°C	– 10 ... + 40	– 10 ... + 40
Température de stockage	°C	– 10 ... + 60	– 10 ... + 60
Plage de température de charge admissible	°C	0 ... + 40	0 ... + 40
Poids, env.	kg	2,5	2,5
Type de protection		IP 54 (étanche à la poussière et aux projections d'eau)	IP 54 (étanche à la poussière et aux projections d'eau)

Montage

► **Ne placez l'accu que sur des surfaces propres.** Évitez tout encrassement de la douille de charge et des contacts, par ex. par du sable ou de la terre.

Contrôler l'accu avant la première utilisation

Contrôlez l'accu avant de le recharger ou de l'utiliser avec votre vélo électrique la première fois.

Pour ce faire, appuyez sur la touche Marche/Arrêt **22** pour mettre l'accu en marche. Si aucune des LED de l'affichage de l'état de charge **21** ne s'allume, l'accu pourrait être endommagé.

Si au moins une des LED s'allume mais pas la totalité des LED de l'affichage de l'état de charge **21**, alors rechargez l'accu à fond avant la première utilisation.

► **Ne chargez pas un accu endommagé et ne l'utilisez pas.** Adressez-vous à un vélociste autorisé.

Charge de l'accu

► **N'utiliser que le chargeur d'origine Bosch fourni avec le vélo électrique ou un chargeur identique.** Seul ce chargeur est adapté à l'accu à ions lithium utilisé dans votre vélo électrique.

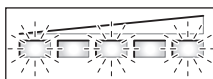
Note : L'accu est fourni en état de charge faible. Afin de garantir la puissance complète de l'accu, rechargez-le complètement dans le chargeur avant la première mise en service.

Pour recharger l'accu, il faut le retirer du vélo électrique.

Pour charger l'accu, lisez et respectez la notice d'utilisation du chargeur.

L'accu à ions lithium peut être rechargé à tout moment, sans que sa durée de vie n'en soit réduite. Le fait d'interrompre le processus de charge n'endommage pas l'accu.

L'accu est équipé d'un contrôle de température qui ne permet de charger l'accu que dans une plage de température entre 0 °C et 40 °C.



Si l'accu se trouve à l'extérieur de la plage de température prévue, trois LED de l'affichage de l'état de charge **21** clignotent.

Débranchez l'accu du chargeur et laissez-le reprendre une température adéquate.

Ne rebranchez l'accu au chargeur que quand il a repris une température de charge admissible.

Voyant lumineux indiquant l'état de charge

Les cinq LED de l'affichage de l'état de charge **21** indiquent, quand l'accu est allumé, dans quel état de charge il se trouve. Chaque LED correspond à environ 20 % de capacité. Si l'accu est complètement rechargé, les cinq LED s'allument.

L'état de charge de l'accu allumé est également indiqué par l'ordinateur de commande. Lisez et respectez la notice d'utilisation de l'unité d'entraînement et de l'ordinateur de commande.

Si la capacité de l'accu est inférieure à 5 %, toutes les LED du voyant lumineux indiquant l'état de charge de l'accu **21** s'éteignent, mais il y a toujours la fonction d'affichage de l'ordinateur de commande.

Montage et démontage de l'accu (voir figures C–D)

► **Eteignez toujours l'accu pour le monter ou pour le retirer de la fixation.**

Pour pouvoir monter l'accu, la clé **23** doit se trouver dans la serrure **24** et la serrure doit être ouverte.

Pour **monter l'accu standard 26**, mettez-le en place avec les contacts sur la fixation du bas **27** sur le vélo électrique. Basculez-le à fond dans la fixation du haut **25**.

Pour **mettre en place l'accu du porte-bagages 20**, enfoncez-le, côté contact, dans la fixation **19** du porte-bagages jusqu'à ce qu'il s'encliquette.

Contrôlez le bon positionnement de l'accu. Fermez toujours l'accu à l'aide de la serrure **24** car sinon, la serrure pourrait s'ouvrir et l'accu tomber de la fixation.

Après avoir fermé la serrure à clé, retirer toujours la clé **23** de la serrure **24**. Ceci permet d'éviter que la clé ne tombe ou que l'accu ne soit retiré par une tierce personne non autorisée, lorsque le vélo électrique est garé.

Pour **enlever l'accu standard 26**, éteignez-le puis ouvrez la serrure avec la clé **23**. Faites basculer l'accu de la fixation supérieure **25** et tirez sur la sangle **28** pour le faire sortir de la fixation inférieure **27**.

Pour **enlever l'accu du porte-bagages 20**, éteignez-le puis ouvrez la serrure avec la clé **23**. Faites basculer l'accu pour le sortir de sa fixation **19**.

Fonctionnement

Mise en service

► **N'utilisez que les accus d'origine Bosch autorisés par le fabricant pour votre vélo électrique.** L'utilisation de tout autre accumulateur peut entraîner des blessures et des risques d'incendie. Bosch décline toute responsabilité et garantie dans le cas d'utilisation d'autres accus.

Mise en marche/arrêt

Allumer l'accu est une des possibilités permettant de mettre le système eBike en marche. Lisez et respectez la notice d'utilisation de l'unité d'entraînement et de l'ordinateur de commande.

Avant d'allumer l'accu ou de mettre le système eBike en marche, vérifiez que la serrure **24** est fermée à clé.

Note : Les pédales du vélo électrique ne doivent pas être sollicitées lorsque le système eBike est mis en marche, sinon la puissance de l'entraînement du vélo électrique serait réduite.

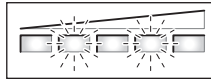
Pour **allumer** l'accu, appuyez sur la touche Marche/Arrêt **22**. Les LED de l'affichage **21** s'allument et indiquent en même temps l'état de charge.

Note : Si la capacité de l'accu baisse à moins de 5 %, la totalité des LED de l'affichage de l'état de charge **21** est éteinte. Seul l'ordinateur de commande indique si le système eBike est mis en marche.

Pour **éteindre** l'accu, appuyez à nouveau sur la touche Marche/Arrêt **22**. Les LED de l'affichage **21** s'éteignent. Le système eBike est en même temps également éteint.

Si l'entraînement du vélo électrique n'est pas sollicité pendant 10 min. (par ex. parce que le vélo électrique est arrêté) et qu'aucune touche de l'ordinateur de commande ou de l'unité de commande n'a été activée, le système eBike s'éteint automatiquement pour économiser l'énergie.

L'accu est protégé par le « Electronic Cell Protection (ECP) » contre décharge profonde, surcharge, surchauffe et court-circuit. En cas de danger, l'accu s'éteint automatiquement grâce à un dispositif d'arrêt de protection.



Si un défaut de l'accu est détecté, deux LED de l'affichage de l'état de charge **21** clignotent. Dans ce cas, veuillez consulter

un vélociste autorisé.

Indications pour le maniement optimal de l'accumulateur

La durée de vie de l'accu peut être prolongée s'il est bien entretenu et surtout s'il est utilisé et stocké à des températures appropriées.

Toutefois, en dépit d'un bon entretien, la capacité de l'accu se réduira avec l'âge.

Si l'autonomie de l'accu diminue considérablement après qu'une recharge a été effectuée, c'est que l'accu est usagé. Vous pouvez remplacer l'accu.

Si la sangle **28** de l'accu standard était défectueuse, faites-la remplacer par un vélociste.

Recharger l'accu avant et pendant le stockage

Quand vous n'utilisez pas le vélo électrique pendant une période prolongée, rechargez l'accu à environ 60 % (3 à 4 LED de l'affichage de l'état de charge **21** sont allumés).

Contrôlez après 6 mois l'état de charge. Si aucune des LED de l'affichage de l'état de charge **21** n'est allumée, rechargez l'accu à nouveau à environ 60 %.

Note : Si l'accu est stocké vide pendant une durée prolongée, il peut être endommagé malgré la faible autodécharge et sa capacité peut être considérablement réduite.

Il n'est pas recommandé de laisser l'accu raccordé en permanence au chargeur.

Conditions de stockage

Si possible, stockez l'accu dans un endroit sec et bien aéré. Protégez-le de l'humidité et de l'eau. Dans des conditions météorologiques défavorables, il est par ex. recommandé de retirer l'accu du vélo électrique et de le stocker jusqu'à la prochaine utilisation dans des locaux fermés.

L'accu peut être stocké à des températures comprises entre -10 °C et +60 °C. Pour une longue durée de vie, un stockage à une température ambiante d'env. 20 °C est recommandé.

Veuillez à ne pas dépasser la température maximale de stockage. Ne laissez pas l'accu trop longtemps dans une voiture surtout en été et maintenez-le à l'abri d'une exposition directe au soleil.

Entretien et Service Après-Vente

Nettoyage et entretien

Maintenez l'accu propre. Nettoyez-le avec précaution à l'aide d'un chiffon doux humidifié. Ne plongez pas l'accu dans l'eau et ne le nettoyez pas au jet d'eau.

Si l'accu ne peut plus fonctionner, veuillez vous adresser à un vélociste autorisé.

Service Après-Vente et Assistance Des Clients

Pour toute question concernant les accus, consultez un vélociste autorisé.

► **Notez le fabricant et le numéro de la clé 23.** Au cas où vous perdriez la clé, adressez-vous à un vélociste autorisé. Indiquez-lui le fabricant et le numéro de la clé.

Vous trouverez les données de contact de vélocistes autorisés sur le site internet www.bosch-ebike.com

Transport

Les accus sont soumis aux règlements de transport des matières dangereuses. L'utilisateur privé peut transporter les accus par la route sans conditions supplémentaires.

Lors d'un transport par des utilisateurs commerciaux ou par des tiers (par ex. transport aérien ou entreprise de transport), les prescriptions particulières pour l'emballage et le marquage doivent être respectées (par ex. prescriptions de l'ADR). Au besoin, faire appel à un expert en transport de matières dangereuses pour la préparation de l'envoi.

N'expédiez pas l'accu si le boîtier est endommagé. Recouvrez les contacts à l'air libre et emballez l'accu de manière à ce qu'il ne se déplace pas dans l'emballage. Veuillez également respecter des réglementations supplémentaires nationales éventuellement en vigueur.

Pour toute question concernant le transport de l'accu, adressez-vous à un vélociste autorisé. Vous pouvez également commander un emballage de transport approprié auprès d'un commerçant spécialisé.

Élimination des déchets



Les accus ainsi que leurs accessoires et emballages doivent pouvoir suivre chacun une voie de recyclage appropriée.

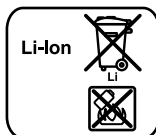
Ne jetez pas les accus dans les ordures ménagères !

Seulement pour les pays de l'Union Européenne :



Conformément à la directive européenne 2002/96/CE, les équipements électriques dont on ne peut plus se servir, et conformément à la directive européenne 2006/66/CE, les accus/piles usés ou défectueux doivent être isolés et suivre une voie de recyclage appropriée.

Déposez les accus dont on ne peut plus se servir auprès d'un vélociste autorisé.



Lithium ion :

Respectez les indications données dans le chapitre « Transport », page Français – 11.

Sous réserve de modifications.

Chargeur Charger

Avertissements de sécurité



Lire tous les avertissements de sécurité et toutes les instructions. Ne pas suivre les avertissements et instructions peut donner lieu à un choc

électrique, un incendie et/ou une blessure sérieuse.

Conserver tous les avertissements et toutes les instructions pour pouvoir s'y reporter ultérieurement.

Le terme « accu » utilisé dans cette notice d'utilisation se réfère aussi bien aux accus standards (accus avec fixation sur le cadre du vélo) qu'aux accus du porte-bagages (accus avec fixation dans le porte-bagages).



N'exposez pas le chargeur à la pluie ou à des conditions humides. Dans le cas de pénétration d'eau dans un chargeur il y a le risque d'un choc électrique.

- ▶ **Ne charger que des accus Li-ion autorisés par Bosch pour les vélos électriques. La tension d'accumulateurs doit correspondre à la tension de charge de l'accumulateur du chargeur.** Sinon, il y a risque d'incendie et d'explosion.
- ▶ **Maintenir le chargeur propre.** Un encrassement augmente le risque de choc électrique.
- ▶ **Avant toute utilisation, contrôler le chargeur, la fiche et le câble. Ne pas utiliser le chargeur si des défauts sont constatés. Ne pas démonter le chargeur soi-même et ne le faire réparer que par une personne qualifiée et seulement avec des pièces de rechange d'origine.** Des chargeurs, câbles et fiches endommagés augmentent le risque d'un choc électrique.
- ▶ **Ne pas utiliser le chargeur sur un support facilement inflammable (tel que papier, textiles etc.) ou dans un environnement inflammable.** L'échauffement du chargeur lors du processus de charge augmente le risque d'incendie.
- ▶ **En cas d'endommagement et d'utilisation non conforme de l'accumulateur, des vapeurs peuvent s'échapper. Ventilez le lieu de travail et, en cas de maux, consultez un médecin.** Les vapeurs peuvent irriter les voies respiratoires.
- ▶ **Ne laissez pas les enfants sans surveillance.** Veillez à ce que les enfants ne jouent pas avec le chargeur.
- ▶ **Les enfants et les personnes souffrant d'un handicap physique, sensoriel ou mental ou n'ayant pas l'expérience et/ou les connaissances nécessaires, ne doivent pas utiliser le chargeur à moins qu'elles ne soient surveillées par une personne responsable de leur sécurité ou qu'elles aient été instruites quant au maniement du chargeur.** Sinon, il y a un risque de mauvaise utilisation et de blessures.

- ▶ **Lisez et respectez les consignes de sécurité et les instructions se trouvant dans les notices d'utilisation des accus et de l'unité d'entraînement/de l'ordinateur de commande ainsi que dans la notice d'utilisation de votre vélo électrique.**
- ▶ En dessous du chargeur se trouve un abrégé des consignes de sécurité les plus importantes en anglais, français et espagnol (marqué du numéro 33 sur la figure de la page graphique) avec le contenu suivant :
 - Pour un fonctionnement sûr, reportez-vous au manuel. Risque de choc électrique.
 - Utiliser en lieu sec uniquement.
 - A utiliser uniquement avec les batteries des systèmes d'assistance électrique eBike de Bosch. D'autres batteries risqueraient d'éclater et de causer des blessures corporelles et des dommages.
 - Ne pas remplacer la connectique car un risque d'incendie ou de choc électrique pourrait en résulter.

Description et performances du produit

Éléments de l'appareil (voir page 6 – 7)

La numérotation des éléments de l'appareil se réfère à la représentation du chargeur sur la page graphique.

- 20 Accu de porte-bagages
- 21 Voyant lumineux indiquant l'état de charge de l'accu
- 26 Accu standard
- 29 Chargeur
- 30 Prise d'appareil
- 31 Fiche de l'appareil
- 32 Orifices d'aération
- 33 Consignes de sécurité du chargeur
- 34 Fiche de charge
- 35 Prise pour fiche de charge

Caractéristiques techniques

Chargeur	Charger	
N° d'article		0 275 007 905
Tension nominale	V~	207 – 264
Fréquence	Hz	47 – 63
Tension de charge de l'accu	V---	42
Courant de charge	A	4
Ces indications sont valables pour une tension nominale de [U] 230 V.		
Ces indications peuvent varier pour des tensions plus basses ainsi que pour des versions spécifiques à certains pays.		

Chargeur		Charger
Plage de température de charge admissible	°C	0 ... + 40
Durée de charge		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Nombre cellules de batteries rechargeables		10 – 80
Température de fonctionnement	°C	– 10 ... + 75
Température de stockage	°C	– 20 ... + 70
Poids suivant EPTA-Procédure 01/2003	kg	0,8
Type de protection		IP 40
Ces indications sont valables pour une tension nominale de [U] 230 V. Ces indications peuvent varier pour des tensions plus basses ainsi que pour des versions spécifiques à certains pays.		

Fonctionnement

► **Ne placez l'accu que sur des surfaces propres.** Évitez tout encrassement de la douille de charge et des contacts, par ex. par du sable ou de la terre.

Mise en service

Raccordement du chargeur (voir figures E – F)

► **Tenez compte de la tension du réseau !** La tension de la source de courant doit correspondre aux indications se trouvant sur la plaque signalétique du chargeur. Les chargeurs marqués 230 V peuvent également fonctionner sous 220 V.

Branchez la fiche **31** du câble secteur à la douille de l'appareil **30** sur le chargeur.

Branchez le câble de secteur (différent selon le pays) sur le réseau d'alimentation électrique.

Éteignez l'accu et retirez-le de la fixation sur le vélo électrique. Lisez et respectez la notice d'utilisation de l'accu.

Branchez la fiche de charge **34** du chargeur à la douille **35** sur l'accu.

Processus de charge

Le processus de charge commence dès que le chargeur est raccordé à l'accu et au réseau électrique.

Note : Le processus de charge n'est possible que si la température de l'accu se trouve dans la plage de température de charge admissible.

Pendant le processus de charge, les voyants de l'affichage de l'état de charge **21** s'allument en rouge sur l'accu. Chaque LED allumée en permanence correspond à environ 20 % de capacité de charge. La LED clignotante indique le processus de charge des 20 % suivants.

► **Soyez prudent lorsque vous touchez le chargeur pendant le processus de charge. Porter des gants de protection.** Le chargeur peut s'échauffer fortement surtout en cas de température ambiante élevée.

Note : Veillez à ce que le chargeur soit bien aéré pendant le processus de charge et que les orifices d'aération **32** des deux côtés ne soient pas couverts.

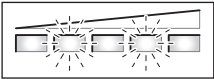
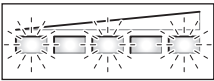
L'accu est complètement rechargé quand les cinq LED de l'affichage **21** sont allumés en permanence. Le processus de charge est automatiquement interrompu.

Déconnectez le chargeur du réseau électrique et l'accu du chargeur.

Lorsque l'accu est déconnecté du chargeur, il est automatiquement éteint.

Vous pouvez maintenant monter l'accu sur le vélo électrique.

Défaut – Causes et remèdes

Cause	Remède
 <p>Accu défectueux</p>	<p>Deux LED de l'accu clignotent</p> <p>Consulter un vélociste autorisé</p>
 <p>L'accumulateur est trop chaud ou trop froid</p>	<p>Trois LED de l'accu clignotent</p> <p>Débrancher l'accu du chargeur et le laisser reprendre une température adéquate comprise dans la plage de températures indiquée.</p> <p>Ne rebranchez l'accu au chargeur que quand il a repris une température de charge admissible.</p>
<p>Recharge impossible (pas d'affichage sur l'accu)</p>	
La fiche n'est pas correctement enfichée	Contrôler toutes les connexions
Contacts de l'accu encrassés	Nettoyer prudemment les contacts de l'accu
Les orifices d'aération 32 du chargeur sont obturés ou couverts	Nettoyer les orifices d'aération 32 et positionner le chargeur de sorte à ce qu'il soit bien aéré
Prise de courant, câble ou chargeur défectueux	Vérifier la tension du secteur, faire contrôler le chargeur par un vélociste
Accu défectueux	Consulter un vélociste autorisé

Entretien et Service Après-Vente

Nettoyage et entretien

Au cas où le chargeur tomberait en panne, adressez-vous à un vélociste autorisé.

Service Après-Vente et Assistance Des Clients

Pour toute question concernant le chargeur, adressez-vous à un vélociste autorisé.

Vous trouverez les données de contact de vélocistes autorisés sur le site internet **www.bosch-ebike.com**

Elimination des déchets

Les chargeurs ainsi que leurs accessoires et emballages, doivent pouvoir suivre chacun une voie de recyclage appropriée.

Ne jetez pas les chargeurs avec les ordures ménagères !

Seulement pour les pays de l'Union Européenne :



Conformément à la directive européenne 2002/96/CE relative aux déchets d'équipements électriques et électroniques et la mise en vigueur conformément aux législations nationales, les chargeurs dont on ne peut plus se servir doivent être isolés et

suivre une voie de recyclage appropriée.

Sous réserve de modifications.

Unidad motriz Drive Unit Cruise/ Ordenador de control Intuvia

Instrucciones de seguridad



Lea íntegramente todas las indicaciones de seguridad e instrucciones. En caso de no atenderse a las indicaciones de seguridad e instrucciones siguientes, puede ocasionarse una descarga eléctrica, un incendio y/o lesión grave.

Guarde todas las indicaciones de seguridad e instrucciones para posibles consultas futuras.

El término “acumulador” empleado en estas instrucciones de uso se refiere indistintamente tanto a los acumuladores estándar (acumuladores de fijación al cuadro de la bicicleta) como a los acumuladores para portaequipajes (acumuladores de fijación al portaequipajes).

- ▶ **No abra la unidad motriz por su propia cuenta, y solamente déjela reparar por un profesional, empleando para ello piezas de recambio originales.** Solamente así se mantiene la seguridad de la unidad motriz. La apertura no autorizada de la unidad motriz anula el derecho de garantía.
- ▶ **Todos los componentes montados en la unidad motriz, así como todos los demás componentes del accionamiento de la eBike (p. ej., el plato, portaplatos, pedales) solamente deberán sustituirse por componentes de iguales dimensiones o por componentes especialmente homologados por el fabricante de su eBike.** Con ello se evita una sobrecarga o deterioro de la unidad motriz.
- ▶ **Desmonte el acumulador de la eBike antes de realizar trabajos en esta última (p. ej. montaje, mantenimiento, etc.) al transportarla en el coche o avión, o al guardarla.** En caso contrario podría accidentarse al accionar fortuitamente el interruptor de conexión/desconexión.
- ▶ **La función de ayuda para empuje deberá usarse exclusivamente al empujar la eBike.** Puede llegar a lesionarse si las ruedas de la eBike no están tocando el firme en el momento de utilizar la ayuda para empuje.
- ▶ **Únicamente utilice acumuladores originales Bosch homologados por el fabricante de su eBike.** El uso de otro tipo de acumuladores puede acarrear lesiones e incluso un incendio. Si se aplican acumuladores de otro tipo Bosch declina cualquier responsabilidad y el derecho a garantía.
- ▶ **Observe la prescripciones nacionales en cuanto al permiso de circulación y uso de la eBike.**
- ▶ **Lea y atégase a las indicaciones de seguridad e instrucciones que figuran en las instrucciones de uso del acumulador y de la eBike.**

Descripción y prestaciones del producto

Utilización reglamentaria

La unidad motriz ha sido diseñada exclusivamente para accionar su eBike y no deberá utilizarse con otro fin.

La eBike ha sido diseñada para circular en caminos afirmados. No es apta para participar en competiciones.

Componentes principales (ver página 2 – 3)

La numeración de los componentes está referida a las imágenes en la página ilustrada.

A excepción de la unidad motriz, ordenador de control incl. cuadro de mandos, captador de velocidad y de los soportes pertinentes, las piezas de la bicicleta solamente se representan de forma esquemática y pueden ser diferentes en su eBike.

- 1 Tecla Función de indicación “i”
- 2 Botón de iluminación
- 3 Ordenador de control
- 4 Soporte del ordenador de control
- 5 Tecla Conexión/desconexión del ordenador de control
- 6 Tecla Reset “RESET”
- 7 Puerto USB
- 8 Capuchón del puerto USB
- 9 Unidad motriz
- 10 Cuadro de mandos
- 11 Tecla Función de indicación “i” en cuadro de mandos
- 12 Tecla Reducir valor/Hojear hacia abajo “-”
- 13 Tecla Aumentar valor/Hojear hacia arriba “+”
- 14 Tecla Ayuda para empuje “WALK”
- 15 Bloqueo del ordenador de control
- 16 Tornillo de bloqueo del ordenador de control
- 17 Captador de velocidad
- 18 Imán de fijación a los radios para el captador de velocidad

Elementos de indicación del ordenador de control

- a Indicador de potencia del motor
- b Indicador del modo de asistencia
- c Indicador de textos
- d Indicador numérico
- e Velocímetro
- f Indicador de estado de carga del acumulador

Datos técnicos

Unidad motriz		Drive Unit Cruise	
Nº de artículo		0 275 007 006/ 0 275 007 007	
Potencia	W	250	
Par de giro en eje de salida, máx.	Nm	50	
Tensión nominal	V _{DC}	36	
Temperatura de operación	°C	-5 ... +40	
Temperatura de almacenamiento	°C	-10 ... +50	
Grado de protección		IP 54 (protección contra polvo y salpicaduras de agua)	
Peso, aprox.	kg	4	

Ordenador de control		Intuvia	
Nº de artículo		1 270 020 903	
Corriente de carga USB, máx.	mA	500	
Tensión de carga en puerto USB	V	5	
Temperatura de operación	°C	-5 ... +40	
Temperatura de almacenamiento	°C	-10 ... +50	
Grado de protección		IP 54 (protección contra polvo y salpicaduras de agua)	
Peso, aprox.	kg	0,15	

Iluminación*			
Tensión nominal	V _{DC}	6	
Potencia			
– Luz delantera	W	2,7	
– Luz trasera	W	0,3	

* dependiente de la regulación legal, por lo que la alimentación a través del acumulador de la eBike no está disponible en la ejecución para ciertos países

Montaje

Montaje y desmontaje del acumulador

Para montar y desmontar el acumulador de la eBike lea y atégase a las instrucciones de uso del mismo.

Montaje y desmontaje del ordenador de control (ver figura A)

Para **montar** el ordenador de control **3** empújelo hacia delante en el soporte **4**.

Para **desmontar** el ordenador de control **3** presione la pestaña del bloqueo **15** y sáquelo hacia atrás del soporte **4**.

► **Desmonte el ordenador de control al estacionar la eBike para evitar que el accionamiento sea utilizado por terceros.** Sin el ordenador de control no es posible conectar el sistema de la eBike.

También es posible evitar que el ordenador de control pueda sacarse del soporte. Para ello, desmonte el soporte **4** del manillar. Monte el ordenador de control en el soporte. Enrosque el tornillo de bloqueo **16** desde abajo en la rosca prevista para tal fin en el soporte. Vuelva a fijar el soporte al manillar.

Comprobación del captador de velocidad (ver figura B)

El captador de velocidad **17** y el imán de fijación a los radios **18** deberán montarse de forma que éste se encuentre a una distancia entre 5 mm y máximo 17 mm al quedar encarado con el captador de velocidad.

Observación: Si la separación entre el captador de velocidad **17** y el imán **18** fuese demasiado pequeña o demasiado grande, o si el captador de velocidad **17** no estuviese correctamente conectado, el velocímetro **e** no funciona y el accionamiento de la eBike trabaja entonces con el programa de emergencia.

En ese caso afloje el tornillo del imán **18** y sujete este último al radio de manera que mantenga la distancia correcta respecto a la marca que lleva el captador de velocidad. Si tras este ajuste el velocímetro **e** sigue sin indicar la velocidad, diríjase a una tienda de bicicletas autorizada.

Operación

Puesta en marcha

Requisitos

El sistema de la eBike solamente puede activarse si se cumplen los siguientes requisitos:

- El acumulador empleado está suficientemente cargado (ver instrucciones de uso del acumulador).
- Ordenador de control correctamente fijado a su soporte (ver "Montaje y desmontaje del ordenador de control", página Español – 2).
- Captador de velocidad correctamente conectado y ajustado (ver "Comprobación del captador de velocidad", página Español – 2).

Conexión y desconexión del sistema de la eBike

El sistema de la eBike se puede **conectar** de las siguientes formas:

- Si el ordenador de control ya está conectado al montarlo en el soporte, el sistema de la eBike es conectado automáticamente.
- Estando montados el ordenador de control y el acumulador, pulse brevemente la tecla de Conexión/desconexión **5** del ordenador de control.
- Estando montado el ordenador de control pulse brevemente la tecla de Conexión/desconexión del acumulador (ver instrucciones de uso del acumulador).

Observación: Al conectar el sistema de la eBike no deberán presionarse los pedales de la eBike ya que ello reduciría la potencia del motor. En el indicador de textos **c** aparece el aviso de fallo **“No pisar pedal”**.

Si el sistema de la eBike se conectó en el momento de presionar los pedales, desconéctelo y vuélvalo a conectar sin ejercer ahora ninguna presión.

El accionamiento es activado nada más apretar los pedales (excepto en la función Asistencia al empujar, ver “Conexión/desconexión de la Ayuda para empuje”, página Español – 4). La potencia a la que opera el motor depende de los ajustes realizados en su ordenador de control.

Durante el funcionamiento normal de la eBike el accionamiento de la misma se desactiva en el momento de que Ud. deje de pedalear o alcance una velocidad de 25 km/h. El accionamiento vuelve a reactivarse automáticamente al volver a pedalear, siempre que la velocidad de marcha sea inferior a 25 km/h.

El sistema de la eBike se puede **desconectar** de las siguientes formas:

- Pulse la tecla de conexión/desconexión **5** del ordenador de control.
- Desconecte el acumulador con la tecla de Conexión/desconexión del mismo (ver instrucciones de uso del acumulador).
- Retire el ordenador de control del soporte.

Si en el transcurso de 10 min el accionamiento sigue inactivo (p.ej., al estar detenida la eBike) y no se ha pulsado ninguna tecla del ordenador de control o cuadro de mandos, el sistema de la eBike se desconecta automáticamente con el fin de ahorrar energía.

Indicadores y ajuste del ordenador de control

Alimentación del ordenador de control

Una vez montado el ordenador de control en el soporte **4** y conectado el sistema de la eBike, el acumulador de la eBike, siempre que esté suficientemente cargado, se ocupa de alimentar el ordenador de control.

Si el ordenador de control se saca del soporte **4** éste es alimentado entonces por el acumulador que incorpora. Si la tensión de éste es muy baja al conectar el ordenador de control, durante 3 s aparece **“Conectar a bicicleta”** en el indicador de textos **c**. Seguidamente se desconecta el ordenador de control.

Para recargar el acumulador interno del ordenador de control vuelva a montarlo en el soporte **4** (siempre que tenga montado un acumulador en la eBike). Conecte el acumulador con la tecla de Conexión/desconexión del mismo (ver instrucciones de uso del acumulador).

Ud. también puede recargar el ordenador de control a través del puerto USB. Para ello, abra el capuchón **8**. Conecte al puerto USB **7** del ordenador de control un cable USB apropiado y su otro extremo a un cargador USB de tipo comercial o al puerto USB de un ordenador (tensión de carga 5 V; corriente de carga máx. 500 mA). En el indicador de textos **c** del ordenador de control aparece **“USB conectado”**.

Conexión/desconexión del ordenador de control

Para **conectar** el ordenador de control pulse brevemente la tecla de Conexión/desconexión **5**. El ordenador de control puede conectarse también sin tenerlo montado en el soporte (siempre que su acumulador integrado esté suficientemente cargado).

Para **desconectar** el ordenador de control pulse brevemente la tecla de Conexión/desconexión **5**.

Si el ordenador de control no está montado en el soporte, éste se desconecta si no se ha pulsado una tecla durante 1 min, para ahorrar energía.

Indicador de estado de carga del acumulador

El indicador del estado de carga del acumulador **f** sólo muestra el nivel de carga del acumulador de la eBike y no el del que incorpora el ordenador de control. El nivel de carga del acumulador de la eBike puede determinarse asimismo en los LED de éste.

En el indicador **f** cada segmento del símbolo del acumulador corresponde aprox. a un 20 % de capacidad:



80 % a 100 % de capacidad



5 % a 20 % de capacidad; el acumulador debe recargarse.



Capacidad menor a un 5 %, no es posible utilizar el accionamiento. Los LED del indicador de estado de carga del acumulador se apagan.

Si la iluminación de la eBike es alimentada por el acumulador (según país), desde el momento en que se presenta por primera vez el símbolo en blanco del acumulador, la autonomía de iluminación es de aprox. 2 horas. Si el símbolo comienza a parpadear, la iluminación solamente puede utilizarse solamente corto tiempo.

Si el ordenador de control se saca del soporte **4** se memoriza el actual nivel de carga del acumulador mostrado en el display.

Ajuste del modo de asistencia

Ud. puede fijar en el ordenador de control en que medida desea ser asistido por el accionamiento de la eBike al pedalear. El modo de asistencia puede modificarse en todo momento, incluso durante la marcha.

Observación: En ciertas ejecuciones puede que venga preajustado fijo el modo de asistencia y no sea posible modificarlo. También es posible que no exista una diversidad de modos de asistencia tan amplia como la aquí indicada.

A lo sumo están disponibles los siguientes modos de asistencia:

- “**OFF**”: Accionamiento desconectado; desplazamiento de la eBike con los pedales como una bicicleta convencional.
- “**ECO**”: eficaz asistencia de gran rendimiento para una autonomía máxima
- “**TOUR**”: asistencia uniforme para recorridos de gran alcance
- “**SPORT**”: enérgica asistencia para una conducción deportiva en trayectos montañosos o para circular en ciudad
- “**TURBO**”: Asistencia máxima, incluso al pedalear velozmente, para una conducción deportiva

Para **augmentar** el nivel de asistencia pulse la tecla “+” **13** en el cuadro de mandos tantas veces como sea necesario hasta visualizar el nivel de asistencia deseado en el indicador **b**, y para **reducirlo**, pulse la tecla “-” **12**.

La potencia del motor demandada se representa en la pantalla **a**. La potencia máxima del motor depende del nivel de asistencia seleccionado.

Modo de asistencia	Potencia del motor*	
	Cambio externo	Cambio interno
“ ECO ”	30 %	30 %
“ TOUR ”	100 %	90 %
“ SPORT ”	170 %	150 %
“ TURBO ”	250 %	200 %

* La potencia del motor puede variar según la ejecución.

Si el ordenador de control se saca del soporte **4** se memoriza el actual nivel de asistencia y el indicador **a** de la potencia del motor queda en blanco.

Conexión/desconexión de la Ayuda para empuje

La Ayuda para empuje le asistirá al empujar la eBike. La velocidad alcanzada en esta función (máximo 6 km/h) depende de la marcha que tenga puesta. Cuanto más pequeña sea la marcha elegida, tanto menor es la velocidad lograda en la función de ayuda para empuje (a plena potencia).

► **La función de ayuda para empuje deberá usarse exclusivamente al empujar la eBike.** Puede llegar a lesionarse si las ruedas de la eBike no están tocando el firme en el momento de utilizar la ayuda para empuje.

Para **conectar** la Asistencia al empujar mantenga pulsada la tecla “**WALK**” **14** del cuadro de mandos. Se conecta el accionamiento de la eBike.

La Ayuda para empuje se **desconecta** en caso de presentarse una de las siguientes situaciones:

- Si suelta la tecla “**WALK**” **14**.
- Si pedalea hacia delante o si pedalea rápidamente hacia atrás.
- Si se bloquean las ruedas de la eBike (p. ej. al frenar o al chocar contra un obstáculo).
- Si la velocidad es superior a 6 km/h.

Conexión/desconexión de la iluminación

Para satisfacer las prescripciones vigentes en los respectivos países existen dos ejecuciones para la iluminación:

- Con el ordenador de control pueden conectarse y desconectarse simultáneamente la luz delantera y trasera y la retroiluminación de la pantalla.
En esta ejecución, al conectar la iluminación aparece en el indicador de textos **c** durante aprox. 1 s “**Luz encendida**” y al desconectarla “**Luz apagada**”.
- Solamente puede conectarse y desconectarse la retroiluminación de la pantalla; las luces delantera y trasera de la eBike se conectan independientemente del ordenador de control.

En ambas ejecuciones pulse la tecla **2** para **conectar y desconectar la iluminación**.

Indicadores de velocidad y distancia

En el **velocímetro e** se indica siempre la velocidad actual.

En el **indicador de función** (combinación de indicador de textos **c** e indicador numérico **d**) puede elegirse entre las siguientes funciones:

- “**Autonomía restante**”: autonomía previsible con la carga actual del acumulador (manteniendo las mismas condiciones como el modo de asistencia, características del terreno, etc.)
- “**Recorrido**”: recorrido cubierto desde la última puesta a cero (reset)
- “**Tiempo de marcha**”: Tiempo de marcha desde el último reset
- “**Velocidad media**”: velocidad promedio alcanzada desde la última puesta a cero (reset)
- “**Velocidad máxima**”: velocidad máxima alcanzada desde la última puesta a cero (reset)
- “**Hora**”: hora actual

Para **acceder al indicador de función** pulse la tecla “**i**” **1** del ordenador de control, o la tecla “**i**” **11** del cuadro de mandos tantas veces como sea necesario hasta visualizar la función deseada.

Para efectuar el **Reset** (puesta a cero) de la “**Recorrido**”, “**Tiempo de marcha**” y “**Velocidad media**” cambie a una de estas tres funciones y mantenga pulsada la tecla “**RESET**” **6** hasta poner a cero el indicador. Con ello se ponen a cero también las otras dos funciones.

Para efectuar el **Reset** de la “**Velocidad máxima**” acceda a esta función y mantenga pulsada la tecla “**RESET**” **6** hasta poner a cero el valor indicado.

Si el ordenador de control se saca del soporte **4** quedan memorizados y pueden seguirse visualizando todos los valores de las funciones.

Visualización/adaptación de los ajustes básicos

La visualización y modificación de los ajustes básicos puede llevarse a cabo teniendo montado o no el ordenador de control en el soporte **4**.

Para acceder al menú Ajustes básicos mantenga simultáneamente pulsadas la tecla **"RESET" 6** y la tecla **"i" 1** hasta representarse **"Configuración"** en el indicador de textos **c**.

Para **seleccionar los parámetros en los ajustes básicos** pulse la tecla **"i" 1** tantas veces como sea necesario hasta visualizar el parámetro deseado. Si el ordenador de control está montado en el soporte **4**, Ud. puede pulsar también la tecla **"i" 11** del cuadro de mandos.

Para **modificar los parámetros de los ajustes básicos** pulse la tecla de conexión/desconexión **5** junto al indicador **"–"** si desea reducir su valor u hojear hacia abajo, o bien, la tecla de iluminación **2** junto al indicador **"+"**, si lo que desea es aumentar el valor u hojear hacia arriba.

Si el ordenador de control está montado en el soporte **4** es posible realizar el cambio también con las teclas **"–" 12** o **"+" 13** del cuadro de mandos.

Indicador de código de fallos

Los componentes del sistema de la eBike son permanentemente controlados de forma automática. En caso de detectarse un fallo aparece el respectivo código de fallos en el indicador de textos **c**.

Pulse una tecla cualquiera del ordenador de control **3** o del cuadro de mandos **10** para regresar a la indicación estándar. Según el tipo de fallo puede que se desactive automáticamente el accionamiento. Sin embargo, es posible continuar la

Para abandonar la función y memorizar el cambio realizado pulse la tecla **"RESET" 6** 3 s.

Puede elegir entre los siguientes ajustes básicos:

- **"Unidad km/mi"**: Representación de la velocidad y distancia en kilómetros o millas.
- **"Formato de hora"**: Representación de la hora en formato de 12 ó 24 horas.
- **"Hora"**: Permite ajustar la hora. Al mantener pulsadas las teclas de ajuste el cambio de la hora es más rápido.
- **"Español"**: Permite ajustar el idioma mostrado en el display. Puede elegirse entre español, alemán, inglés, francés, italiano y holandés.
- **"Recorrido total"**: Indicación del recorrido total (no modificable) realizado con la eBike
- **"Total horas funcion."**: Indicación de tiempo de marcha total (no modificable) realizado con la eBike

marcha en todo momento sin recurrir al accionamiento. Antes de volver a circular con ella deberá hacerse controlar la eBike.

► **Deje que todas las comprobaciones y reparaciones sean realizadas exclusivamente en una tienda de bicicletas autorizada.** Si a pesar de que Ud. haya subsanado el fallo éste se sigue visualizando, diríjase asimismo a una tienda de bicicletas autorizada.

Código	Causa	Solución
100	Fallo interno de la unidad motriz	Haga verificar la unidad motriz
101	Problema de conexión en la unidad motriz	Deje verificar las conexiones y las uniones
102	Fallo en captador de velocidad	Haga verificar el captador de velocidad
103*	Problema de conexión en la iluminación	Deje verificar las conexiones y las uniones
104	Problema de conexión del ordenador de control	Deje verificar las conexiones y las uniones
105	Temperatura excesiva en la unidad motriz (más de 40 °C)	Deje que se enfríe la unidad motriz. Es posible continuar circulando sin el accionamiento de la eBike lo cual además agiliza el enfriamiento de la unidad motriz.
200	Fallo interno en el sistema electrónico del acumulador	Deje verificar el acumulador
201	Temperatura excesiva del acumulador (más de 40 °C)	Deje que se enfríe el acumulador. Es posible continuar circulando sin el accionamiento de la eBike lo cual además agiliza el enfriamiento del acumulador.
202	Temperatura demasiado baja en el acumulador (inferior a – 10 °C)	Mantenga el acumulador en un cuarto caliente para permitir que se caliente lentamente.
203	Problema de conexión del acumulador	Deje verificar las conexiones y las uniones
204	Polaridad incorrecta del acumulador	Cargue el acumulador con el cargador original Bosch según se describe en sus instrucciones de uso.

* solamente si la iluminación de la eBike funciona con el acumulador (según ejecución país)

Código	Causa	Solución
410	Bloqueo de una o varias teclas del ordenador de control	Verifique si las teclas están atascadas, p. ej., al haber penetrado suciedad. Si procede, limpie las teclas.
414	Problema de conexión en el cuadro de mandos	Deje verificar las conexiones y las uniones
418	Bloqueo de una o varias teclas del cuadro de mandos.	Verifique si las teclas están atascadas, p. ej., al haber penetrado suciedad. Si procede, limpie las teclas.
422	Problema de conexión en la unidad motriz	Deje verificar las conexiones y las uniones
423	Problema de conexión del acumulador	Deje verificar las conexiones y las uniones
424	Error de comunicación entre los componentes	Deje verificar las conexiones y las uniones
430	El acumulador interno del ordenador de control está descargado	Recargar el ordenador de control (en el soporte o vía puerto USB)
490	Fallo interno del ordenador de control	Haga verificar el ordenador de control

* solamente si la iluminación de la eBike funciona con el acumulador (según ejecución país)

Alimentación de aparatos externos vía puerto USB

A través del puerto USB pueden funcionar o recargarse la mayoría de los aparatos previstos para ser alimentados vía USB (p. ej. diversos móviles).

Para poder efectuar la carga es necesario que estén montados en la eBike el ordenador de control y un acumulador suficientemente cargado.

Abra el capuchón **8** del puerto USB del ordenador de control. Conecte el puerto USB del aparato externo a través de un cable USB apropiado con el puerto USB **7** del ordenador de control.

Instrucciones para la conducción con el sistema de la eBike

¿Cuándo trabaja el accionamiento de la eBike?

El accionamiento de la eBike le asiste siempre que Ud. vaya pedaleando. La asistencia cesa cuando deja de pedalear. La potencia del motor depende siempre de la fuerza aplicada al pedalear.

Si la fuerza aplicada es baja la asistencia es menor que al aplicar gran fuerza. Ello es independiente del modo de asistencia seleccionado.

El accionamiento de la eBike se desactiva automáticamente a velocidades superiores a 25 km/h. Si la velocidad queda por debajo de 25 km/h el accionamiento se activa nuevamente de forma automática.

Queda exceptuado de ello la función de Ayuda para empuje que permite empujar a baja velocidad la eBike sin pedalear. Siempre que Ud. lo desee puede circular también sin la asistencia motorizada con la eBike, igual que con una bicicleta convencional, ya sea desconectando el sistema de la eBike o ajustando el nivel de asistencia a **"OFF"**. Lo mismo es válido con un acumulador vacío.

Interacción entre el sistema de la eBike y el cambio

También con el accionamiento de la eBike el cambio deberá utilizarse igual que en una bicicleta convencional (consulte al respecto las instrucciones de uso de su eBike).

Independientemente del tipo de cambio empleado es recomendable dejar de pedalear brevemente antes de efectuar un cambio de marcha. Ello no sólo facilita el cambio de marcha sino que también reduce el desgaste del mecanismo de accionamiento.

Seleccionando el cambio de marcha correcto Ud. puede aumentar la velocidad y el alcance aplicando la misma fuerza muscular.

Acumulación de experiencia

Se recomienda ir adquiriendo experiencia con la eBike en lugares alejados de carreteras con mucho tráfico.

Pruebe diferentes modos de asistencia. Cuando se sienta seguro Ud. podrá circular con su eBike en el tráfico igual que con cualquier otra bicicleta.

Compruebe la autonomía de eBike bajo condiciones diferentes antes de realizar unos recorridos más largos y difíciles.

Influencias sobre la autonomía

La autonomía se ve afectada por múltiples factores como, por ejemplo:

- Modo de asistencia.
- Uso del cambio.
- Tipo y presión del neumático.
- Antigüedad y estado del acumulador.
- Características del terreno (pendientes) y del firme (tipo de pavimento).
- Viento de frente y temperatura ambiente.
- Peso de la eBike, del ciclista y del equipaje.

Por ello es imposible predecir con certeza la autonomía para un recorrido específico. Sin embargo, en términos generales puede decirse:

- **A igual** potencia del motor en el accionamiento de la eBike: Cuanto menor sea el esfuerzo que Ud. tenga que realizar para alcanzar una velocidad concreta (p. ej. utilizando de forma óptima el cambio de marchas) tanto menor será la energía consumida por el accionamiento de la eBike y tanto mayor la autonomía con una carga del acumulador.
- Cuanto **mayor** sea el nivel de asistencia, manteniendo iguales las demás condiciones, tanto menor será la autonomía obtenida.

Trato cuidadoso de la eBike

Tenga en cuenta las temperaturas de servicio y almacenaje de los componentes de la eBike. No exponga la unidad motriz, el ordenador de control, y el acumulador a temperaturas extremas (p. ej. sol intenso sin circulación de aire). Los componentes (especialmente el acumulador) pueden dañarse si se exponen a temperaturas extremas.

Mantenimiento y servicio

Mantenimiento y limpieza

Mantenga limpios los componentes de su eBike, especialmente los contactos del acumulador y del respectivo soporte. Límpielos con cuidado con un paño húmedo y suave.

Todos los componentes inclusive la unidad motriz no deberán sumergirse en agua ni tratarse con una limpiadora de alta presión.

Para el servicio técnico o la reparación de la eBike diríjase a una tienda de bicicletas autorizada.

Servicio técnico y atención al cliente

En todas las consultas sobre el sistema de la eBike y sus componentes diríjase a una tienda de bicicletas autorizada.

Las direcciones de tiendas de bicicletas autorizadas las encuentra en la página de internet www.bosch-ebike.com

Transporte

Los acumuladores están sujetos a los requerimientos fijados en la legislación sobre mercancías peligrosas. Los acumuladores pueden ser transportados por carretera por el usuario particular sin más imposiciones.

En caso de transporte por usuarios comerciales o envío por terceros (p. ej., transporte aéreo o agencia de transportes) deberán considerarse las exigencias especiales en cuanto a su embalaje e identificación (p. ej. prescripciones ADR). Si fuese preciso, puede recurrirse a un experto en mercancías peligrosas al preparar la pieza para su envío.

Únicamente envíe acumuladores si su carcasa no está dañada. Si los contactos no van protegidos cúbralos con cinta adhesiva y embale el acumulador de manera que éste no se pueda mover dentro del embalaje. Observe también las prescripciones adicionales que pudieran existir al respecto en su país.

En todas las consultas referentes al transporte de los acumuladores diríjase a una tienda de bicicletas autorizada. En dichas tiendas puede Ud. adquirir también un embalaje de transporte apropiado.

Eliminación



La unidad motriz, el ordenador de control incl. cuadro de mandos, el acumulador, el captador de velocidad, los accesorios y embalajes deberán someterse a un proceso de recuperación que respete el medio ambiente.

¡No arroje las eBike ni sus componentes a la basura!

Sólo para los países de la UE:



Los aparatos eléctricos inservibles, así como los acumuladores/pilas defectuosos o agotados deberán acumularse por separado para ser sometidos a un reciclaje ecológico tal como lo marcan las Directivas Europeas 2002/96/CE y 2006/66/CE, respectivamente.

El acumulador integrado en el ordenador de control solamente deberá desmontarse para ser desechado. Al abrir la semicarcasa puede que se dañe el ordenador de control.

Entregue los acumuladores y ordenadores de control inservibles en una tienda de bicicletas autorizada.



Iones de Litio:

Observe las indicaciones comprendidas en el apartado "Transporte", página Español – 7.

Reservado el derecho de modificación.

PowerPack con acumuladores de Iones de Litio

Instrucciones de seguridad



Lea íntegramente todas las indicaciones de seguridad e instrucciones. En caso de no atenerse a las indicaciones de seguridad e instrucciones si-

guientes, puede ocasionarse una descarga eléctrica, un incendio y/o lesión grave.

Guarde todas las indicaciones de seguridad e instrucciones para posibles consultas futuras.

El término “acumulador” empleado en estas instrucciones de uso se refiere indistintamente tanto a los acumuladores estándar (acumuladores de fijación al cuadro de la bicicleta) como a los acumuladores para portaequipajes (acumuladores de fijación al portaequipajes), excepto en aquellos casos en los que se haga referencia expresa a la forma constructiva.

► **Desmunte el acumulador de la eBike antes de realizar trabajos en esta última (p. ej. montaje, mantenimiento, etc.) al transportarla en el coche o avión, o al guardarla.**

En caso contrario podría accidentarse al accionar fortuitamente el interruptor de conexión/desconexión.

► **No abra el acumulador.** De lo contrario, podría producirse un cortocircuito. Si se abre el acumulador se denegará la garantía.



Proteja el acumulador del calor excesivo (p. ej. también de una exposición prolongada al sol), del fuego y de una inmersión en agua. Existe el riesgo de explosión.

► **Si no utiliza el acumulador, guárdelo separado de clips, monedas, llaves, clavos, tornillos o demás objetos metálicos que pudieran puentear sus contactos.** El cortocircuito de los contactos del acumulador puede causar quemaduras o un incendio. En los daños derivados de un cortocircuito por los motivos antedichos Bosch anula cualquier derecho a garantía.

► **La utilización inadecuada del acumulador puede provocar fugas de líquido. Evite el contacto con él. En caso de un contacto accidental enjuagar el área afectada con abundante agua. Si ha penetrado líquido en los ojos recurra además inmediatamente a un médico.** El líquido del acumulador puede irritar la piel o producir quemaduras.

► **Si el acumulador se daña o usa de forma inapropiada puede que éste emane vapores. Ventile con aire fresco el recinto y acuda a un médico si nota alguna molestia.** Los vapores pueden irritar las vías respiratorias.

► **Únicamente cargue el acumulador con cargadores originales Bosch.** Al utilizar cargadores que no sean originales Bosch no puede excluirse un peligro de incendio.

► **Únicamente utilice el acumulador en eBikes equipadas con el sistema motriz para eBikes original Bosch.** Solamente así queda protegido el acumulador contra una sobrecarga peligrosa.

► **Únicamente utilice acumuladores originales Bosch homologados por el fabricante de su eBike.** El uso de otro tipo de acumuladores puede acarrear lesiones e incluso un incendio. Si se aplican acumuladores de otro tipo Bosch declina cualquier responsabilidad y el derecho a garantía.

► **Lea y atégase a las indicaciones de seguridad e instrucciones que figuran en las instrucciones de uso del cargador y de la unidad motriz/ordenador de control, así como en las instrucciones de uso de su eBike.**

Descripción y prestaciones del producto

Componentes principales (ver página 4 – 5)

La numeración de los componentes está referida a las imágenes en las páginas ilustradas.

A excepción de los acumuladores y sus soportes, las piezas de la bicicleta solamente se representan de forma esquemática y pueden ser diferentes en su eBike.

- 19 Soporte del acumulador para portaequipajes
- 20 Acumulador para portaequipajes
- 21 Indicador de funcionamiento y estado de carga
- 22 Tecla de conexión/desconexión
- 23 Llave de la cerradura del acumulador
- 24 Cerradura del acumulador
- 25 Soporte superior del acumulador estándar
- 26 Acumulador estándar
- 27 Soporte inferior del acumulador estándar
- 28 Correa de transporte
- 29 Cargador

Datos técnicos

Acumulador de Iones de Litio		PowerPack 300	PowerPack 400
Nº de artículo			
– Acumulador estándar negro		0 275 007 500	0 275 007 503
– Acumulador estándar blanco		0 275 007 501	0 275 007 504
– Acumulador para portaequipajes		0 275 007 502	0 275 007 505
Tensión nominal	V=	36	36
Capacidad nominal	Ah	8,2	11
Energía	Wh	300	400
Temperatura de operación	°C	– 10 ... + 40	– 10 ... + 40
Temperatura de almacenamiento	°C	– 10 ... + 60	– 10 ... + 60
Margen admisible de la temperatura de carga	°C	0 ... + 40	0 ... + 40
Peso, aprox.	kg	2,5	2,5
Grado de protección		IP 54 (protección contra polvo y salpicaduras de agua)	IP 54 (protección contra polvo y salpicaduras de agua)

Montaje

- **Únicamente deposite el acumulador sobre superficies limpias.** Ponga especial cuidado de no ensuciar el conector hembra para carga ni los contactos con arena o tierra, p. ej.

Control del acumulador antes del primer uso

Compruebe el acumulador antes de cargarlo o utilizarlo por primera vez en su eBike.

Para ello conecte el acumulador pulsando la tecla de Conexión/desconexión **22**. Si no se enciende ningún LED del indicador de estado de carga **21**, es probable que el acumulador esté dañado.

Si se enciende uno o algunos de los LED (pero no todos ellos) del indicador de estado de carga **21** recargue completamente el acumulador antes de su primer uso.

- **No recargue ni utilice un acumulador dañado.** Diríjase a una tienda de bicicletas autorizada.

Recarga del acumulador

- **Únicamente use el cargador que se suministra con su eBike u otro original Bosch del mismo tipo.** Solamente este cargador ha sido especialmente adaptado al acumulador de iones de litio empleado en su eBike.

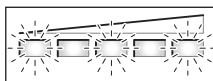
Observación: El acumulador se suministra parcialmente cargado. Con el fin de obtener la plena potencia del acumulador, antes de su primer uso, cárguelo completamente con el cargador.

Para recargar el acumulador es necesario desmontarlo de la eBike.

Lea y atégase a las instrucciones de uso del cargador al cargar el acumulador.

El acumulador puede recargarse siempre que se quiera, sin que ello merme su vida útil. Una interrupción del proceso de carga no afecta al acumulador.

El acumulador viene equipado con un control de temperatura que únicamente permite su recarga dentro de un margen de temperatura entre 0 °C y 40 °C.



Si el acumulador se encuentra fuera del margen de la temperatura de carga parpadean tres LED del indicador de estado de carga **21**. Desconecte el acumulador del cargador y permita que alcance la temperatura correcta.

No conecte de nuevo el acumulador al cargador hasta que haya alcanzado la temperatura de carga correcta.

Indicador de estado de carga

El nivel de carga del acumulador se señala mediante los cinco LED verdes del indicador de carga **21**.

Cada uno de los LED corresponde por lo tanto a una capacidad aprox. de 20 %. Si el acumulador está completamente cargado se encienden los cinco LED.

Una vez conectado el acumulador el nivel de carga se muestra además en el ordenador de control. Lea y considere al respecto las instrucciones de uso de la unidad motriz y del ordenador de control.

Si la capacidad del acumulador es inferior a un 5 % se apagan todos los LED del indicador de estado de carga **21**, pero queda encendida la pantalla del ordenador de control.

Montaje y desmontaje del acumulador (ver figuras C – D)

► Siempre desconecte el acumulador al montarlo o desmontarlo del soporte.

Para poder montar el acumulador es necesario que la llave **23** esté metida en la cerradura **24** y que ésta esté abierta.

Para **montar el acumulador estándar 26** colóquelo con los contactos orientados hacia el soporte inferior **27** en la eBike. Abátalo hasta el tope hacia el soporte superior **25**.

Para **montar el acumulador para portaequipajes 20** empújelo con los contactos mirando hacia el frente hasta enclavarlo en el soporte **19** del portaequipajes.

Controle si ha quedado firmemente sujeto el acumulador. Siempre cierre el acumulador con la cerradura **24** para evitar que el acumulador se salga del soporte.

Saque siempre la llave **23** de la cerradura **24** después de cerrarla. Así evitará que se pierda la llave, o que al tener estacionada la eBike le sea sustraído el acumulador.

Para **desmontar el acumulador estándar 26** desconéctelo primero y abra entonces la cerradura con la llave **23**. Abata hacia atrás el acumulador para desprenderlo del soporte superior **25** y sáquelo del soporte inferior **27** agarrándolo de la correa de transporte **28**.

Para **desmontar el acumulador para portaequipajes 20** desconéctelo primero y abra entonces la cerradura con la llave **23**. Tire del acumulador para sacarlo del soporte **19**.

Operación

Puesta en marcha

► **Únicamente utilice acumuladores originales Bosch homologados por el fabricante de su eBike.** El uso de otro tipo de acumuladores puede acarrear lesiones e incluso un incendio. Si se aplican acumuladores de otro tipo Bosch declina cualquier responsabilidad y el derecho a garantía.

Conexión/desconexión

La conexión del acumulador es una de las posibilidades que existen para conectar el sistema de la eBike. Lea y considere al respecto las instrucciones de uso de la unidad motriz y del ordenador de control.

Antes de conectar el acumulador o el sistema de la eBike asegúrese de que la cerradura **24** esté cerrada.

Observación: Al conectar el sistema de la eBike no deberán presionarse los pedales de la eBike ya que ello reduciría la potencia del accionamiento de la eBike.

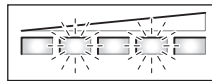
Para **conectar** el acumulador pulse la tecla de Conexión/desconexión **22**. Los LED de la pantalla **21** se iluminan e indican seguidamente el nivel de carga.

Observación: Si la capacidad del acumulador fuese inferior a un 5 %, en el indicador de estado de carga **21** del acumulador no se enciende ningún LED. Solamente en el ordenador de control es posible apreciar en ese caso si el sistema de la eBike está conectado.

Para **desconectar** el acumulador pulse nuevamente la tecla de Conexión/desconexión **22**. Los LED de la pantalla **21** se apagan. Con ello se desconecta asimismo el sistema de la eBike.

Si en el transcurso de 10 min el accionamiento sigue inactivo (p. ej., al estar detenida la eBike) y no se ha pulsado ninguna tecla del ordenador de control o cuadro de mandos de la eBike, el sistema de la eBike, y con ello también el acumulador, se desconectan automáticamente con el fin de ahorrar energía.

El acumulador va protegido contra alta descarga, sobrecarga, sobretemperatura y cortocircuito por "Electronic Cell Protection (ECP) (Protección Electrónica de Celdas)". En esos casos, un circuito de protección se encarga de desconectar automáticamente el acumulador.



Si se detecta un daño en el acumulador parpadean los dos LED del indicador de estado de carga **21**. Diríjase en ese caso a

una tienda de bicicletas autorizada.

Indicaciones para el trato óptimo del acumulador

La vida útil del acumulador puede prolongarse si éste se trata apropiadamente y ante todo si se almacena respetando el margen de temperatura prescrito.

Aún así, a medida que va envejeciendo el acumulador, su capacidad irá mermando.

Si después de haberlo recargado, el tiempo de funcionamiento del acumulador fuese muy corto, ello es síntoma de que está agotado. Puede sustituir entonces el acumulador.

Si está dañada la correa de transporte **28** del acumulador estándar deje sustituirla en una tienda de bicicletas.

Recarga del acumulador antes y durante su almacenaje

Si pretende no utilizar el acumulador durante largo tiempo, recárguelo a aprox. un 60 % (deberán estar encendidos 3 a 4 LED del indicador de estado de carga **21**).

Controle el nivel de carga pasados 6 meses. Si sólo se enciende un LED del indicador de estado de carga **21** vuelva a recargar el acumulador un 60 %, aprox.

Observación: Si el acumulador se guarda durante largo tiempo estando descargado, a pesar de su baja autodescarga, éste puede llegar a dañarse y reducirse considerablemente su capacidad.

No se recomienda dejar permanentemente conectado el acumulador al cargador.

Condiciones para el almacenaje

Se aconseja guardar el acumulador en un lugar seco y bien ventilado. Protéjalo de la humedad y del agua. Si las condiciones atmosféricas son adversas se recomienda, p. ej., desmontar el acumulador de la eBike y guardarlo hasta su próxima utilización en un recinto cerrado.

El acumulador puede almacenarse dentro de un margen de temperatura de $-10\text{ }^{\circ}\text{C}$ a $+60\text{ }^{\circ}\text{C}$. Sin embargo, para lograr un larga vida útil es recomendable almacenarlo a una temperatura ambiente aprox. de $20\text{ }^{\circ}\text{C}$.

Preste atención a no rebasar la temperatura de almacenaje máxima. P. ej., no deje el acumulador en el coche en verano y guárdelo de manera que no quede directamente expuesto al sol.

Mantenimiento y servicio

Mantenimiento y limpieza

Mantenga limpio el acumulador. Límpielo con cuidado con un paño húmedo y suave. El acumulador no deberá sumergirse en agua ni limpiarse con un chorro de agua.

Si su acumulador ya no funciona acuda por favor a una tienda de bicicletas autorizada.

Servicio técnico y atención al cliente

En todas las consultas sobre acumuladores diríjase a una tienda de bicicletas autorizada.

► **Anote el fabricante y el número de la llave 23.** En caso de pérdida de la llave diríjase a una tienda de bicicletas autorizada. Deberá indicar entonces el fabricante y el número de la llave.

Las direcciones de tiendas de bicicletas autorizadas las encuentra en la página de internet www.bosch-ebike.com

Transporte

Los acumuladores están sujetos a los requerimientos fijados en la legislación sobre mercancías peligrosas. Los acumuladores pueden ser transportados por carretera por el usuario particular sin más imposiciones.

En caso de transporte por usuarios comerciales o envío por terceros (p. ej., transporte aéreo o agencia de transportes) deberán considerarse las exigencias especiales en cuanto a su embalaje e identificación (p. ej. prescripciones ADR). Si fuese preciso, puede recurrirse a un experto en mercancías peligrosas al preparar la pieza para su envío.

Únicamente envíe acumuladores si su carcasa no está dañada. Si los contactos no van protegidos cúbralos con cinta adhesiva y embale el acumulador de manera que éste no se pueda mover dentro del embalaje. Observe también las prescripciones adicionales que pudieran existir al respecto en su país.

En todas las consultas referentes al transporte de los acumuladores diríjase a una tienda de bicicletas autorizada. En dichas tiendas puede Ud. adquirir también un embalaje de transporte apropiado.

Eliminación



Los acumuladores, accesorios y embalajes deberán someterse a un proceso de recuperación que respete el medio ambiente.

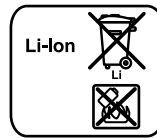
¡No arroje los acumuladores a la basura!

Sólo para los países de la UE:



Los aparatos eléctricos inservibles, así como los acumuladores/pilas defectuosos o agotados deberán acumularse por separado para ser sometidos a un reciclaje ecológico tal como lo marcan las Directivas Europeas 2002/96/CE y 2006/66/CE, respectivamente.

Entregue los acumuladores inservibles en una tienda de bicicletas autorizada.



Iones de Litio:

Observe las indicaciones comprendidas en el apartado "Transporte", página Español – 11.

Reservado el derecho de modificación.

Cargador Charger

Instrucciones de seguridad



Lea íntegramente todas las indicaciones de seguridad e instrucciones. En caso de no atenerse a las indicaciones de seguridad e instrucciones si-

guientes, puede ocasionarse una descarga eléctrica, un incendio y/o lesión grave.

Guarde todas las indicaciones de seguridad e instrucciones para posibles consultas futuras.

El término "acumulador" empleado en estas instrucciones de uso se refiere indistintamente tanto a los acumuladores estándar (acumuladores de fijación al cuadro de la bicicleta) como a los acumuladores para portaequipajes (acumuladores de fijación al portaequipajes).



No exponga el cargador a la lluvia y evite que penetren líquidos en su interior. La penetración de agua en el cargador comporta un mayor riesgo de electrocución.

- ▶ **Solamente cargue acumuladores de iones de litio Bosch homologados para eBikes. La tensión del acumulador deberá corresponder a la tensión de carga del cargador.** En caso de no atenerse a ello podría originarse un incendio o explosión.
- ▶ **Siempre mantenga limpio el cargador.** La suciedad puede comportar un riesgo de electrocución.
- ▶ **Antes de cada utilización verificar el estado del cargador, cable y enchufe. No utilice el cargador en caso de detectar algún desperfecto. Jamás intente abrir el cargador por su propia cuenta, y solamente hágalo reparar por personal técnico cualificado empleando exclusivamente piezas de repuesto originales.** Un cargador, cable y enchufe deteriorados comportan un mayor riesgo de electrocución.
- ▶ **No utilice el cargador sobre una base fácilmente inflamable (p. ej. papel, tela, etc.) ni en un entorno inflamable.** Puesto que el cargador se calienta durante el proceso de carga existe un peligro de incendio.
- ▶ **Si el acumulador se daña o usa de forma inapropiada puede que éste emane vapores. Ventile con aire fresco el recinto y acuda a un médico si nota alguna molestia.** Los vapores pueden irritar las vías respiratorias.
- ▶ **Vigile a los niños.** Con ello se evita que los niños jueguen con el cargador.
- ▶ **Los niños y personas que por sus condiciones físicas, sensoriales o mentales, o por su falta de experiencia o conocimientos no estén en disposición de manejar el cargador de forma segura, no deberán utilizar este cargador sin ser supervisados o instruidos por una perso-**

na responsable. En caso contrario existe el riesgo de un manejo incorrecto y de lesión.

- ▶ **Lea y atégase a las indicaciones de seguridad e instrucciones que figuran en las instrucciones de uso del acumulador y de la unidad motriz/ordenador de control, así como en las instrucciones de uso de su eBike.**
- ▶ En la parte inferior del cargador figuran de forma abreviada importantes instrucciones de seguridad en español, inglés y francés (ver posición **33** en la ilustración) con el siguiente contenido:
 - Para un funcionamiento con seguridad, ver el manual. Peligro de sacudida eléctrica.
 - Utilice solamente en lugares secos.
 - Cargar únicamente baterías de sistemas eBike de Bosch. Otras baterías podrían reventar, causando lesiones personales y daños.
 - No reemplace el ensamblaje del enchufe, ya que el resultado puede ser riesgo de incendio o sacudidas eléctricas.

Descripción y prestaciones del producto

Componentes principales (ver página 6 – 7)

La numeración de los componentes está referida a la imagen del cargador en la página ilustrada.

- 20** Acumulador para portaequipajes
- 21** Indicador del estado de carga del acumulador
- 26** Acumulador estándar
- 29** Cargador
- 30** Conector hembra del aparato
- 31** Enchufe del aparato
- 32** Rejillas de refrigeración
- 33** Instrucciones de seguridad del cargador
- 34** Conector del cargador
- 35** Conector hembra para el cargador

Datos técnicos

Cargador	Charger	
Nº de artículo		0 275 007 905
Tensión nominal	V~	207 – 264
Frecuencia	Hz	47 – 63
Tensión de carga del acumulador	V---	42
Corriente de carga	A	4

Estos datos son válidos para una tensión nominal de [U] 230 V. Los valores pueden variar para otras tensiones y en ejecuciones específicas para ciertos países.

Cargador	Charger	
Margen admisible de la temperatura de carga	°C	0 ... + 40
Tiempo de carga		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Nº de celdas		10 – 80
Temperatura de operación	°C	– 10 ... + 75
Temperatura de almacenamiento	°C	– 20 ... + 70
Peso según EPTA-Procedure 01/2003	kg	0,8
Grado de protección		IP 40

Estos datos son válidos para una tensión nominal de [U] 230 V. Los valores pueden variar para otras tensiones y en ejecuciones específicas para ciertos países.

Operación

► **Únicamente deposite el acumulador sobre superficies limpias.** Ponga especial cuidado de no ensuciar el conector hembra para carga ni los contactos con arena o tierra, p. ej.

Puesta en marcha

Conexión del cargador (ver figuras E – F)

► **¡Preste atención a la tensión de red!** La tensión de alimentación deberá coincidir con aquella indicada en la placa de características del cargador. Los cargadores para 230 V pueden funcionar también a 220 V.

Introduzca el enchufe **31** del cable de red en el conector hembra **30** del cargador.

Conecte el enchufe (específico de cada país) a la red.

Desconecte el acumulador y desmóntelo del soporte de la eBike. Para ello lea y atégase a las instrucciones de uso del acumulador.

Conecte el conector macho **34** del cargador al conector hembra **35** del acumulador.

Proceso de carga

El proceso de carga comienza nada más conectar al acumulador el cargador teniendo éste conectado a la red.

Observación: La carga solamente puede llevarse a cabo si la temperatura del acumulador se encuentra dentro del campo admisible.

Durante la carga se encienden los LED del indicador de estado de carga **21** del acumulador. Cada LED permanentemente encendido supone un incremento de capacidad aprox. de un 20 %. El LED parpadeante señala la carga del 20 % siguiente.

► **Tenga cuidado al tocar el cargador durante el proceso de carga. Utilice guantes de protección.** El cargador puede llegar a calentarse fuertemente, especialmente si la temperatura ambiente es alta.

Observación: Preste atención a que el cargador esté bien ventilado durante el proceso de carga y que no estén obstruidas las rejillas de refrigeración **32** en ambos lados.

El acumulador se encuentra completamente cargado al encenderse permanentemente los cinco LED del indicador **21**. El proceso de carga es interrumpido automáticamente.

Desconecte el cargador de la red y el acumulador del cargador.

Al desconectar del cargador el acumulador éste último se desconecta automáticamente.

Acto seguido puede Ud. montar el acumulador en la eBike.

Fallos – causas y soluciones

Causa	Solución
 <p>Acumulador defectuoso</p>	<p>Parpadeo de dos LED del acumulador</p> <p>Acuda a una tienda de bicicletas autorizada</p>
 <p>Acumulador demasiado caliente o frío</p>	<p>Parpadeo de tres LED del acumulador</p> <p>Desconecte del cargador el acumulador y deje que se atempere a la temperatura de carga admisible.</p> <p>No conecte de nuevo el acumulador al cargador hasta que haya alcanzado la temperatura de carga correcta.</p>
<p>No es posible cargar (ninguna indicación en el acumulador)</p> <p>Enchufe incorrectamente introducido</p>	<p>Verificar todas las conexiones por enchufe</p>
<p>Contactos del acumulador, sucios</p>	<p>Limpiar con cuidado los contactos del acumulador</p>
<p>Rejillas de refrigeración 32 obstruidas o cubiertas</p>	<p>Limpiar las rejillas de refrigeración 32 y colocar el cargador de manera pueda ventilarse bien</p>
<p>Toma de corriente, cable o cargador defectuoso</p>	<p>Verificar la tensión de red, dejar comprobar el cargador en la tienda de bicicletas</p>
<p>Acumulador defectuoso</p>	<p>Acuda a una tienda de bicicletas autorizada</p>

Mantenimiento y servicio

Mantenimiento y limpieza

Si el cargador llegase a averiarse diríjase a una tienda de bicicletas autorizada.

Servicio técnico y atención al cliente

En todas las consultas sobre el cargador diríjase a una tienda de bicicletas autorizada.

Las direcciones de tiendas de bicicletas autorizadas las encuentra en la página de internet **www.bosch-ebike.com**

Eliminación

Los cargadores, accesorios y embalajes deberán someterse a un proceso de recuperación que respete el medio ambiente.
¡No arroje los cargadores a la basura!

Sólo para los países de la UE:



Conforme a la Directiva Europea 2002/96/CE sobre aparatos eléctricos y electrónicos inservibles, tras su transposición en ley nacional, deberán acumularse por separado los cargadores para ser sometidos a un reciclaje ecológico.

Reservado el derecho de modificación.

Unità di azionamento Drive Unit Cruise/ Computer di controllo Intuvia

Norme di sicurezza



Leggere tutte le indicazioni di sicurezza e le istruzioni operative. In caso di mancato rispetto delle indicazioni di sicurezza e delle istruzioni operative possono verificarsi scosse elettriche, incendi e/o lesioni gravi.

Conservare tutte le indicazioni di sicurezza e le istruzioni operative per ogni esigenza futura.

Il termine utilizzato nelle presenti istruzioni per l'uso «batteria ricaricabile» si riferisce allo stesso modo a batterie ricaricabili standard (batterie ricaricabili con supporto sul telaio della bicicletta) e a batterie ricaricabili per montaggio al portapacchi (batterie ricaricabili con supporto nel portapacchi).

- ▶ **Non aprire da soli l'unità di azionamento. L'unità di azionamento non necessita di manutenzione e può essere riparata esclusivamente da personale specializzato ed impiegando solo pezzi di ricambio originali.** In questo modo viene garantita la salvaguardia della sicurezza dell'unità di azionamento. In caso di apertura non autorizzata dell'unità di azionamento decadrà qualsiasi pretesa di garanzia.
- ▶ **Tutti i componenti montati sull'unità di azionamento e tutti gli altri componenti dell'azionamento dell'eBike (p. es. ingranaggio catena, supporto dell'ingranaggio catena, pedali) possono essere sostituiti esclusivamente da componenti uguali strutturalmente oppure omologati dal produttore della bicicletta specificatamente per la Vostra eBike.** In questo modo l'unità di azionamento viene protetta da sovraccarico e danneggiamento.
- ▶ **Rimuovere la batteria ricaricabile dalla eBike prima di iniziare interventi (p. es. montaggio, manutenzione ecc.) alla eBike, prima di trasportarla con l'auto o l'aereo oppure prima di conservarla.** In caso di azionamento accidentale dell'interruttore di avvio/arresto esiste pericolo di lesioni.
- ▶ **La funzione aiuto alla spinta deve essere utilizzata esclusivamente nel caso in cui l'eBike deve essere spinta.** Se durante l'impiego dell'aiuto alla spinta le ruote dell'eBike non hanno alcun contatto con il terreno esiste il pericolo di lesioni.
- ▶ **Utilizzare esclusivamente batterie ricaricabili originali Bosch che sono state omologate dal produttore per l'eBike.** L'impiego di batterie ricaricabili diverse da quelle consigliate potrà comportare il pericolo di lesioni e d'incendio. In caso di impiego di batterie ricaricabili diverse, Bosch non si assumerà alcuna responsabilità civile e garanzia.

- ▶ **Osservare tutte le norme nazionali relative all'immatricolazione ed impiego di eBike.**
- ▶ **Leggere ed osservare le indicazioni di sicurezza e le istruzioni operative indicate nelle istruzioni per l'uso della batteria ricaricabile e nelle istruzioni per l'uso dell'eBike.**

Descrizione del prodotto e caratteristiche

Uso conforme alle norme

L'unità di azionamento è destinata esclusivamente all'azionamento della Vostra eBike e non deve essere utilizzata per altri scopi.

L'eBike è prevista per impiego su percorsi pavimentati. La stessa non è omologata per gare.

Componenti illustrati (vedi pagina 2 – 3)

La numerazione dei componenti si riferisce alle illustrazioni riportate sulla pagina con la rappresentazione grafica.

Tutte le illustrazioni delle parti della bicicletta ad eccezione dell'unità di azionamento, del computer di controllo inclusa unità di comando, del sensore della velocità ed i rispettivi supporti sono riportate in modo schematico e possono essere differenti dalla Vostra eBike.

- 1 Tasto funzione di visualizzazione «i»
- 2 Tasto illuminazione
- 3 Computer di controllo
- 4 Supporto del computer di controllo
- 5 Tasto di accensione/spegnimento computer di controllo
- 6 Tasto reset «RESET»
- 7 Presa USB
- 8 Copertura di protezione della presa USB
- 9 Unità di azionamento
- 10 Unità di comando
- 11 Tasto funzione di visualizzazione «i» sull'unità di comando
- 12 Tasto ridurre valore/sfogliare verso il basso «-»
- 13 Tasto aumentare valore/sfogliare verso l'alto «+»
- 14 Tasto aiuto alla spinta «WALK»
- 15 Bloccaggio computer di controllo
- 16 Vite di bloccaggio computer di controllo
- 17 Sensore di velocità
- 18 Magnete per raggi del sensore di velocità

Elementi di visualizzazione computer di controllo

- a Visualizzazione potenza del motore
- b Visualizzazione livello di assistenza
- c Visualizzazione testo
- d Visualizzazione valori
- e Visualizzazione tachimetro
- f Visualizzazione dello stato di carica della batteria

Dati tecnici

Unità di azionamento	Drive Unit Cruise	
Codice prodotto		0 275 007 006/ 0 275 007 007
Potenza	W	250
Coppia sull'azionamento max.	Nm	50
Tensione nominale	V ⁻⁻⁻	36
Temperatura di esercizio	°C	-5 ... +40
Temperatura di magazzino	°C	-10 ... +50
Tipo di protezione		IP 54 (protezione contro la polvere e contro gli spruzzi dell'acqua)
Peso ca.	kg	4

Computer di controllo	Intuvia	
Codice prodotto		1 270 020 903
Corrente di ricarica collegamento USB max.	mA	500
Tensione di ricarica collegamento USB	V	5
Temperatura di esercizio	°C	-5 ... +40
Temperatura di magazzino	°C	-10 ... +50
Tipo di protezione		IP 54 (protezione contro la polvere e contro gli spruzzi dell'acqua)
Peso ca.	kg	0,15

Illuminazione*		
Tensione nominale	V ⁻⁻⁻	6
Potenza		
- Luce anteriore	W	2,7
- Luce posteriore	W	0,3

* in funzione delle norme di legge, non è possibile in tutti i modelli specifici dei paesi di impiego tramite la batteria ricaricabile eBike

Montaggio

Inserimento e rimozione della batteria ricaricabile

Per l'inserimento e la rimozione della batteria ricaricabile nell'eBike leggere ed osservare le istruzioni per l'uso della batteria ricaricabile stessa.

Inserimento e rimozione del computer di controllo (vedi figura A)

Per l'**inserimento** del computer di controllo **3** spingerlo dal davanti nel supporto **4**.

Per la **rimozione** del computer di controllo **3** premere sul bloccaggio **15** e spingerlo in avanti fuori dal supporto **4**.

► **Togliere il computer di controllo quando l'eBike è parcheggiata affinché l'azionamento non possa essere utilizzato da terzi non autorizzati.** Senza il computer di controllo il sistema eBike non può essere attivato.

È anche possibile assicurare contro rimozione il computer di controllo nel supporto. Per effettuare questa operazione smontare il supporto **4** dal manubrio. Inserire il computer di controllo nel supporto. Avvitare dal basso la vite di bloccaggio **16** nella filettatura prevista allo scopo del supporto. Montare di nuovo il supporto sul manubrio.

Controllo del sensore di velocità (vedi figura B)

Il sensore di velocità **17** ed il relativo magnete per raggi **18** devono essere montati in modo tale che durante un giro della ruota il magnete per raggi si muova davanti al sensore di velocità ad una distanza minima di 5 mm e massima di 17 mm.

Nota bene: Se la distanza tra il sensore di velocità **17** ed il magnete per raggi **18** è troppo piccola o troppo grande oppure se il sensore di velocità **17** non è collegato correttamente, non avviene alcuna visualizzazione tachimetro **e** e l'azionamento dell'eBike lavora nel programma funzionamento d'emergenza.

In questo caso allentare le vite del magnete per raggi **18** e fissare il magnete ai raggi in modo tale che lo stesso passi davanti alla marcatura del sensore di velocità alla distanza corretta. Se anche dopo queste operazioni non compare alcuna velocità sulla visualizzazione tachimetro **e**, rivolgersi ad un rivenditore autorizzato per biciclette.

Uso

Messa in funzione

Presupposti

Il sistema eBike può essere attivato solamente se sono soddisfatti i seguenti presupposti:

- È inserita una batteria ricaricabile sufficientemente carica (vedi istruzioni per l'uso della batteria ricaricabile).
- Il computer di controllo è inserito correttamente nel supporto (vedi «Inserimento e rimozione del computer di controllo», pagina Italiano – 2).
- Il sensore di velocità è collegato correttamente (vedi «Controllo del sensore di velocità», pagina Italiano – 2).

Attivazione/disattivazione del sistema eBike

Per l'**attivazione** del sistema eBike vi sono le seguenti possibilità:

- Se il computer di controllo è già acceso quando viene inserito nel supporto, il sistema eBike viene attivato automaticamente.
- Con computer di controllo inserito e batteria ricaricabile inserita premere una volta brevemente il tasto di accensione/spegnimento **5** del computer di controllo.
- Con computer di controllo inserito premere il tasto di accensione/spegnimento della batteria ricaricabile (vedi istruzioni per l'uso della batteria ricaricabile).

Nota bene: All'attivazione del sistema eBike i pedali dell'eBike non devono essere caricati poiché altrimenti la potenza del motore verrebbe limitata. Nella visualizzazione testo **c** compare la segnalazione di errore «**Scaricare il pedale**».

Se il sistema eBike è stata attivato accidentalmente con pedali caricati, disattivarlo ed inserirlo di nuovo senza carico.

L'azionamento viene attivato non appena si inizia a pedalare (ad eccezione che nella funzione aiuto alla spinta, vedi «Inserimento/disinserimento dell'aiuto alla spinta», pagina Italiano – 4). La potenza del motore dipende dalle regolazioni sul computer di controllo.

Nel funzionamento normale non appena si smette di pedalare oppure non appena viene raggiunta una velocità di 25 km/h, l'assistenza tramite l'azionamento eBike viene disattivata.

L'azionamento viene attivato di nuovo automaticamente non appena si ricomincia a pedalare e la velocità è inferiore a 25 km/h.

Per la **disattivazione** del sistema eBike vi sono le seguenti possibilità:

- Premere il tasto di accensione e spegnimento **5** del computer di controllo:
- Disattivare la batteria ricaricabile al suo tasto di accensione/spegnimento (vedi istruzioni per l'uso della batteria ricaricabile).
- Rimuovere il computer di controllo dal supporto.

Se per ca. 10 min non viene richiesto alcun intervento dell'azionamento (p. es. poiché l'eBike è ferma) e non viene premuto alcun tasto sul computer di controllo o sull'unità di comando, il sistema eBike si disattiva automaticamente per ragioni di risparmio energetico.

Visualizzazioni e regolazioni del computer di controllo

Alimentazione di corrente del computer di controllo

Se il computer di controllo è posizionato nel supporto **4** e nell'eBike è inserita una batteria ricaricabile sufficientemente carica ed il sistema eBike è attivato, il computer di controllo viene alimentato di corrente tramite la batteria ricaricabile dell'eBike.

Se il computer di controllo viene rimosso dal supporto **4** l'alimentazione di corrente avviene tramite una batteria ricaricabile interna. Se all'accensione del computer di controllo la batteria ricaricabile interna è quasi scarica, compare per 3 s «**Collegare a bicic.**» nella visualizzazione testo **c**. Successivamente il computer di controllo si spegne di nuovo.

Per la ricarica della batteria ricaricabile interna inserire di nuovo il computer di controllo nel supporto **4** (se è inserita una batteria ricaricabile nell'eBike). Attivare la batteria ricaricabile eBike al suo tasto di accensione/spegnimento (vedi istruzioni per l'uso della batteria ricaricabile).

È possibile ricaricare il computer di controllo anche tramite il collegamento USB. Per effettuare questo aprire la copertura di protezione **8**. Collegare la presa USB **7** del computer di controllo, tramite un cavo USB adatto, ad una stazione di ricarica USB comunemente in commercio oppure al collegamento USB di un computer (5 V tensione di ricarica; max. 500 mA corrente di ricarica). Nella visualizzazione testo **c** del computer di controllo compare «**USB connessa**».

Accensione/spegnimento del computer di controllo

Per l'**accensione** del computer di controllo premere brevemente il tasto di accensione/spegnimento **5**. Il computer di controllo può essere acceso anche (con batteria ricaricabile interna sufficientemente carica) se lo stesso non è inserito nel supporto.


Per lo **spegnimento** del computer di controllo premere il tasto di accensione/spegnimento **5**.


Se il computer di controllo non è inserito nel supporto, dopo 1 min in cui non viene premuto alcun tasto lo stesso si spegne automaticamente per ragioni di risparmio energetico.


Visualizzazione dello stato di carica della batteria

L'indicatore dello stato di carica della batteria **f** visualizza lo stato di carica della batteria ricaricabile dell'eBike e non della batteria ricaricabile interna del computer di controllo. Lo stato di carica della batteria ricaricabile dell'eBike può essere rilevato anche ai LED sulla batteria ricaricabile stessa.

Nella visualizzazione **f** ogni barretta nel simbolo della batteria ricaricabile corrisponde a circa il 20 % della capacità.

 da 100 % a 80 % della capacità

 da 20 % a 5 % dell'autonomia, la batteria ricaricabile dovrebbe essere ricaricata.

 Inferiore al 5 % dell'autonomia, non è più possibile l'assistenza dell'azionamento. I LED dell'indicatore dello stato di carica sulla batteria ricaricabile si spengono.

Se l'illuminazione dell'eBike viene fatta funzionare tramite la batteria ricaricabile (specifico del paese di impiego), l'autonomia è sufficiente poi, a partire dalla prima comparsa del simbolo vuoto della batteria ricaricabile, per ancora circa 2 ore di illuminazione. Quando il simbolo inizia a lampeggiare, anche l'illuminazione è possibile ancora solo per un breve lasso di tempo.

Se il computer di controllo viene rimosso dal supporto **4**, rimane memorizzato lo stato di carica della batteria ricaricabile visualizzato per ultimo.

Regolazione del livello di assistenza

È possibile regolare al computer di controllo, quanto intensa dovrà essere l'assistenza dell'azionamento eBike durante la pedalata. Il livello di assistenza può essere modificato in qualsiasi momento, anche durante la guida.

Nota bene: In singoli modelli è possibile che il livello di assistenza sia preimpostato e che non possa essere cambiato. È anche possibile che vi siano a disposizione per la selezione meno livelli di assistenza di quelli indicati nelle presenti istruzioni.

Sono a disposizione al massimo i seguenti livelli di assistenza:

- **«OFF»:** L'azionamento è disinserito, l'eBike può essere mossa come una bicicletta normale semplicemente pedalando.
- **«ECO»:** assistenza efficace alla massima efficienza, per massima autonomia
- **«TOUR»:** assistenza regolare, per percorsi con grande autonomia
- **«SPORT»:** assistenza energica, per guida sportiva su percorsi di montagna nonché per traffico cittadino
- **«TURBO»:** Assistenza massima fino alle massime frequenze di pedalata, per guida sportiva

Per **aumentare** il livello di assistenza premere il tasto **«+» 13** sull'unità di comando fino a quando compare nella visualizzazione **b** il livello di assistenza desiderato, per **ridurre** premere il tasto **«-» 12**.

La potenza del motore richiamata compare nella visualizzazione **a**. La potenza del motore massima dipende dal livello di assistenza selezionato.

Livello di assistenza	Potenza del motore*	
	Cambio a catena	Cambio nel mozzo
«ECO»	30 %	30 %
«TOUR»	100 %	90 %
«SPORT»	170 %	150 %
«TURBO»	250 %	200 %

* In singoli modelli la potenza del motore può differire.

Se il computer di controllo viene rimosso dal supporto **4**, rimane memorizzato il livello di assistenza visualizzato per ultimo, la visualizzazione **a** della potenza del motore rimane vuota.

Inserimento/disinserimento dell'aiuto alla spinta

L'aiuto alla spinta può facilitare la spinta dell'eBike. La velocità in questa funzione dipende dalla marcia inserita e può raggiungere al massimo 6 km/h. Tanto inferiore sarà la marcia selezionata, tanto più bassa sarà la velocità nella funzione aiuto alla spinta (alla prestazione massima).

► **La funzione aiuto alla spinta deve essere utilizzata esclusivamente nel caso in cui l'eBike deve essere spinta.** Se durante l'impiego dell'aiuto alla spinta le ruote dell'eBike non hanno alcun contatto con il terreno esiste il pericolo di lesioni.

Per l'**attivazione** dell'aiuto alla spinta premere il tasto **«WALK» 14** sull'unità di comando e tenerlo premuto. L'azionamento dell'eBike viene inserito.

L'aiuto alla spinta viene **disattivato** non appena si verifica uno dei seguenti avvenimenti:

- Viene rilasciato il tasto **«WALK» 14**,
- Si pedala in avanti oppure velocemente indietro,
- Le ruote dell'eBike vengono bloccate (ad es. frenando oppure urtando contro un ostacolo),
- La velocità supera 6 km/h.

Accensione/spegnimento dell'illuminazione

A seconda delle norme specifiche del paese di impiego sono possibili due tipi di illuminazione:

- Tramite il computer di controllo possono essere accese e spente contemporaneamente la luce anteriore, la luce posteriore e l'illuminazione di fondo del display. In questo tipo di illuminazione compare all'accensione dell'illuminazione **«Luce accesa»** e allo spegnimento dell'illuminazione **«Luce spenta»** per ca. 1 s nella visualizzazione testo **c**.
- È possibile accendere e spegnere solamente l'illuminazione di fondo del display, la luce anteriore e la luce posteriore dell'eBike sono indipendenti dal computer di controllo.

In entrambe le versioni per l'**accensione e lo spegnimento dell'illuminazione** premere ogni volta il tasto **2**.

Visualizzazioni della velocità e della distanza

Nella **visualizzazione tachimetro** e viene sempre visualizzata la velocità attuale.

Nella **visualizzazione funzioni** (combinazione della visualizzazione testo **c** e visualizzazione valori **d**) sono disponibili per la selezione le seguenti funzioni:

- **«Distanza rimasta»:** probabile autonomia della carica presente della batteria ricaricabile (a condizioni, come livello di assistenza, profilo del percorso ecc., immutate)
- **«Distanza»:** distanza percorsa dall'ultimo reset
- **«Tempo percorso»:** tempo percorso dall'ultimo reset
- **«Velocità media»:** velocità media raggiunta dall'ultimo reset
- **«Velocità massima»:** velocità massima raggiunta dall'ultimo reset
- **«Ora»:** ora attuale

Per **cambiare nella funzione di visualizzazione** premere il tasto **«i» 1** sul computer di controllo oppure il tasto **«i» 11** sull'unità di comando fino a quando viene visualizzata la funzione desiderata.

Per il **reset di «Distanza», «Tempo percorso» e «Velocità media»** cambiare in una di queste tre funzioni e premere poi il tasto **«RESET» 6** fino a quando la visualizzazione viene azzerata. In questo modo sono ripristinati anche i valori delle altre due funzioni.

Per il **reset di «Velocità massima»** cambiare in questa funzione e premere poi il tasto **«RESET» 6** fino a quando la visualizzazione viene azzerata.

Se il computer di controllo viene rimosso dal supporto **4** tutti i valori delle funzioni rimangono memorizzati e possono essere ancora visualizzati.

Visualizzazione/adattamento delle regolazioni di base

Visualizzazione e modifiche delle regolazioni di base sono possibili indipendentemente dal fatto che il computer di controllo sia o meno inserito nel supporto **4**.

Per arrivare nel menu regolazioni di base premere contemporaneamente il tasto **«RESET» 6** ed il tasto **«i» 1** fino a quando nella visualizzazione testo compare **c «Configurazione»**.

Per **commutare tra le regolazioni di base** premere il tasto **«i» 1** sul computer di controllo fino a quando viene visualizzata la regolazione di base desiderata. Se il computer di controllo è inserito nel supporto **4** è possibile premere anche il tasto **«i» 11** sull'unità di comando.

Per **modificare le regolazioni di base** premere il tasto di accensione/spengimento **5** vicino alla visualizzazione **«-»** per ridurre e sfogliare verso il basso oppure per aumentare e sfogliare verso l'alto premere il tasto illuminazione **2** vicino alla visualizzazione **«+»**.

Se il computer di controllo è inserito nel supporto **4** allora la modifica è possibile anche con i tasti **«-» 12** e **«+» 13** sull'unità di comando.

Per abbandonare la funzione e memorizzare una regolazione modificata premere il tasto **«RESET» 6** per 3 s.

Possono essere selezionate le seguenti regolazioni di base:

- **«Unità km/mi»:** È possibile visualizzare la velocità e la distanza in chilometri oppure in miglia.
- **«Formato ora»:** È possibile visualizzare l'ora nel formato 12 ore oppure 24 ore.
- **«Ora»:** È possibile regolare l'ora attuale. Una pressione prolungata sui tasti di regolazione accelera la modifica dell'ora.
- **«Italiano»:** È possibile modificare la lingua delle visualizzazioni testo. È possibile selezionare tra tedesco, inglese, francese, spagnolo, italiano ed olandese.
- **«Distanza totale»:** Visualizzazione della distanza totale percorsa fino ad ora con l'eBike (non modificabile)
- **«Tempo totale»:** Visualizzazione della durata totale percorsa con l'eBike (non modificabile)

Visualizzazione codice errore

I componenti del sistema eBike vengono costantemente controllati automaticamente. Se viene individuato un errore, compare nella visualizzazione testo **c** il relativo codice di errore.

Premere un tasto a scelta sul computer di controllo **3** o sull'unità di comando **10** per ritornare alla visualizzazione standard.

In funzione del tipo di errore, l'azionamento viene eventualmente disattivato automaticamente. Il proseguimento della corsa senza assistenza tramite l'azionamento è tuttavia possibile in ogni momento. Prima di ulteriori corse l'eBike dovrebbe essere controllata.

► **Lasciare effettuare tutti i controlli e le riparazioni esclusivamente da un rivenditore autorizzato di biciclette.** Se nonostante il rimedio continua ad essere visualizzato un errore, anche in questo caso rivolgersi ad un rivenditore autorizzato di biciclette.

Codice	Causa	Rimedi
100	Errore interno dell'unità di azionamento	Fare controllare l'unità di azionamento
101	Problema di collegamento dell'unità di azionamento	Fare controllare raccordi e collegamenti
102	Errore del sensore di velocità	Fare controllare il sensore di velocità
103*	Problema di collegamento dell'illuminazione	Fare controllare raccordi e collegamenti
104	Problemi di collegamento del computer di controllo	Fare controllare raccordi e collegamenti
105	Temperatura dell'unità di azionamento troppo alta (superiore a 40 °C)	Lasciare raffreddare l'unità di azionamento. Il proseguimento della corsa senza azionamento dell'eBike è possibile ed accelera il raffreddamento dell'unità di azionamento.
200	Errore interno dell'elettronica della batteria ricaricabile	Fare controllare la batteria ricaricabile
201	Temperatura della batteria ricaricabile troppo alta (superiore a 40 °C)	Lasciare raffreddare la batteria ricaricabile. Il proseguimento della corsa senza azionamento dell'eBike è possibile ed accelera il raffreddamento della batteria ricaricabile.
202	Temperatura della batteria ricaricabile troppo bassa (inferiore a -10 °C)	Lasciare riscaldare lentamente la batteria ricaricabile in un ambiente caldo.
203	Problema di collegamento della batteria ricaricabile	Fare controllare raccordi e collegamenti
204	Polarizzazione della batteria ricaricabile errata	Ricaricare la batteria ricaricabile con la stazione di ricarica originale Bosch come descritto nelle sue istruzioni per l'uso.
410	Uno o più tasti del computer di controllo sono bloccati.	Controllare se i tasti sono incastrati ad es. a causa di sporcizia che è penetrata. Se necessario, pulire i tasti.
414	Problema di collegamento dell'unità di comando	Fare controllare raccordi e collegamenti
418	Uno o più tasti dell'unità di comando sono bloccati.	Controllare se i tasti sono incastrati ad es. a causa di sporcizia che è penetrata. Se necessario, pulire i tasti.
422	Problema di collegamento dell'unità di azionamento	Fare controllare raccordi e collegamenti
423	Problema di collegamento della batteria ricaricabile	Fare controllare raccordi e collegamenti
424	Errore di comunicazione dei componenti uno con l'altro	Fare controllare raccordi e collegamenti
430	Batteria ricaricabile interna del computer di controllo scarica	Ricaricare il computer di controllo (nel supporto oppure tramite collegamento USB)
490	Errore interno del computer di controllo	Fare controllare il computer di controllo

* solo per l'illuminazione dell'eBike tramite la batteria ricaricabile (specifico del paese di impiego)

Alimentazione di energia di apparecchi esterni tramite il collegamento USB

Con l'ausilio del collegamento USB possono essere fatti funzionare o ricaricati la maggior parte degli apparecchi la cui alimentazione di energia è possibile tramite USB (p. es. diversi cellulari).

Presupposto per la ricarica è che nell'eBike siano inseriti il computer di controllo ed una batteria ricaricabile sufficientemente carica.

Aprire la copertura di protezione **8** del collegamento USB sul computer di controllo. Collegare il collegamento USB dell'apparecchio esterno, tramite un cavo USB adatto, alla presa USB **7** sul computer di controllo.

Indicazioni per la guida con il sistema eBike

Quando lavora l'azionamento eBike?

L'azionamento dell'eBike assiste durante la guida fintanto che si pedala. Senza pedalata non avviene alcuna assistenza. La potenza del motore dipende sempre dalla forza impiegata durante la pedalata.

Impiegando poca forza, l'assistenza sarà inferiore rispetto all'impiego di molta forza. Questo vale indipendentemente dal livello di assistenza.

L'azionamento eBike si disattiva automaticamente in caso di velocità superiori a 25 km/h. Se la velocità si abbassa sotto 25 km/h, l'azionamento è di nuovo disponibile automaticamente.

Vi è un'eccezione per la funzione aiuto alla spinta ovvero quella in cui l'eBike può essere spinta a bassa velocità senza azionamento dei pedali.

È possibile utilizzare in qualsiasi momento l'eBike come una bicicletta normale anche senza l'assistenza disattivando il sistema eBike oppure posizionando il livello di assistenza su «OFF». La stessa cosa vale in caso di batteria ricaricabile scarica.

Interazione del sistema eBike con il cambio

Anche con l'azionamento eBike il cambio dovrebbe essere utilizzato come in una bicicletta normale (osservare a riguardo le istruzioni per l'uso dell'eBike).

Indipendentemente dal tipo del cambio è consigliabile durante il cambio di marcia interrompere brevemente di pedalare. In questo modo il cambio di marcia diventa più facile e si riduce l'usura degli organi di azionamento.

Grazie alla selezione della marcia corretta è possibile con lo stesso impiego di forza aumentare la velocità e l'autonomia.

Prime corse di prova

Si consiglia di effettuare le prime esperienze con l'eBike lontano da strade con molto traffico.

Provare differenti livelli di assistenza. Non appena Vi sentirete sicuri potrete guidare con l'eBike nel traffico come con ogni bicicletta.

Provare l'autonomia dell'eBike con differenti condizioni prima di organizzare corse più lunghe ed impegnative.

Influssi sull'autonomia

L'autonomia viene influenzata da molti fattori, come ad esempio:

- Livello di assistenza,
- Comportamento nel cambio di marcia,
- Tipo di pneumatici e pressione dei pneumatici.
- Invecchiamento e condizioni della batteria ricaricabile,
- Profilo del percorso (salite) e condizione del percorso (ri-vestimento della carreggiata),
- Vento contrario e temperatura ambientale.
- Peso dell'eBike, ciclista e bagaglio.

Per questa ragione non è possibile prevedere concretamente l'autonomia prima della presenza di un fattore. In linea di massima vale tuttavia:

- Alla **stessa** potenza del motore dell'azionamento eBike: tanto inferiore sarà la forza da impiegare per raggiungere una determinata velocità (p. es. tramite l'uso ottimale del cambio marcia), tanto inferiore sarà l'energia che l'azionamento dell'eBike consumerà e tanto maggiore sarà l'autonomia di una carica della batteria ricaricabile.
- Tanto **maggiore** sarà selezionato il livello di assistenza, a condizioni altrimenti uguali, tanto più limitata sarà l'autonomia.

Trattamento e cura dell'eBike

Osservare le temperature di funzionamento e di magazzino dei componenti dell'eBike. Proteggere l'unità di azionamento, il computer di controllo e la batteria ricaricabile da temperature estreme (p. es. tramite irradiazione solare intensivo senza contemporanea aerazione). I componenti (in modo particolare la batteria ricaricabile) possono venire danneggiati da temperature estreme.

Manutenzione ed assistenza

Manutenzione e pulizia

Mantenere puliti tutti i componenti dell'eBike, in modo particolare i contatti della batteria ricaricabile ed il relativo supporto. Pulirli con cautela con uno straccio umido e morbido.

Tutti i componenti, inclusa l'unità di azionamento non devono essere immersi in acqua oppure puliti con un'idropulitrice.

Per Service e riparazioni all'eBike rivolgersi ad un rivenditore autorizzato di biciclette.

Servizio di assistenza ed assistenza clienti

Per tutte le domande relative al sistema eBike ed ai suoi componenti rivolgersi ad un rivenditore autorizzato di biciclette.

Le informazioni per contattare rivenditori autorizzati di biciclette sono riportate sulla pagina web

www.bosch-ebike.com

Trasporto

Le batterie ricaricabili sono soggette ai requisiti di legge relativi a merci pericolose. Le batterie ricaricabili possono essere trasportate su strada tramite l'utente privato senza ulteriori precauzioni.

In caso di trasporto tramite utente commerciale oppure in caso di trasporto tramite terzi (p. es. trasporto aereo oppure spedizioniere) devono essere osservati particolari requisiti relativi ad imballo e marcatura (ad es. norme dell'ADR). In caso di necessità per la preparazione del pezzo da spedire si può ricorrere ad un esperto per merce pericolosa.

Spedire le batterie ricaricabili solamente se la carcassa non è danneggiata. Coprire con nastro adesivo i contatti scoperti ed imballare la batteria ricaricabile in modo tale che non si muova nell'imballo. Vi preghiamo di osservare anche eventuali, ulteriori norme nazionali.

In caso di domande relative al trasporto delle batterie ricaricabili rivolgersi ad un rivenditore autorizzato di biciclette. Presso il rivenditore è possibile ordinare anche un imballo per il trasporto adatto.

Smaltimento



Avviare ad un riciclaggio rispettoso dell'ambiente l'unità di azionamento, il computer di controllo inclusa unità di comando, la batteria ricaricabile, il sensore di velocità, accessori ed imballaggi non più impiegabili.

Non gettare l'eBike ed i suoi componenti tra i rifiuti domestici!

Solo per i Paesi della CE:



Conformemente alla direttiva europea 2002/96/CE gli apparecchi elettrici diventati inservibili e, in base alla direttiva europea 2006/66/CE, le batterie ricaricabili/batterie difettose o consumate devono essere raccolte separatamente ed essere inviate ad una riutilizzazione ecologica.

La batteria ricaricabile integrata nel computer di controllo può essere rimossa solamente per lo smaltimento. Aprendo la copertura della carcassa il computer di controllo può essere danneggiato irreparabilmente.

Vi preghiamo di consegnare batterie ricaricabili e computer di controllo non più utilizzabili ad un rivenditore autorizzato di biciclette.



Li-Ion:

Si prega di tener presente le indicazioni riportate nel paragrafo «Trasporto», pagina Italiano – 8.

Con ogni riserva di modifiche tecniche.

Batteria ricaricabile agli ioni di litio PowerPack

Norme di sicurezza



Leggere tutte le indicazioni di sicurezza e le istruzioni operative. In caso di mancato rispetto delle indicazioni di sicurezza e delle istruzioni operative

possono verificarsi scosse elettriche, incendi e/o lesioni gravi.

Conservare tutte le indicazioni di sicurezza e le istruzioni operative per ogni esigenza futura.

Il termine utilizzato nelle presenti istruzioni per l'uso «batteria ricaricabile» si riferisce allo stesso modo a batterie ricaricabili standard (batterie ricaricabili con supporto sul telaio della bicicletta) e a batterie ricaricabili per montaggio al portapacchi (batterie ricaricabili con supporto nel portapacchi) ad eccezione se viene fatto espressamente riferimento al tipo di costruzione.

► **Rimuovere la batteria ricaricabile dalla eBike prima di iniziare interventi (p. es. montaggio, manutenzione ecc.) alla eBike, prima di trasportarla con l'auto o l'aereo oppure prima di conservarla.** In caso di azionamento accidentale dell'interruttore di avvio/arresto esiste pericolo di lesioni.

► **Non aprire la batteria ricaricabile.** Esiste il pericolo di un cortocircuito. In caso di batteria ricaricabile aperta decadrà qualsiasi pretesa di garanzia.



Proteggere la batteria ricaricabile dal calore (p. es. anche dall'irradiazione solare continuo), dal fuoco e dall'immersione in acqua. Esiste pericolo di esplosione.

► **Tenere lontano la batteria ricaricabile non utilizzata da graffette, monete, chiavi, viti oppure altri piccoli oggetti metallici che potrebbero causare un'esclusione dei contatti.** Un corto circuito tra i contatti della batteria ricaricabile può causare incendi oppure fuoco. In caso di cortocircuiti verificatisi in relazione a queste condizioni decadrà qualsiasi pretesa di garanzia tramite Bosch.

► **In caso di impiego errato può fuoriuscire liquido dalla batteria ricaricabile. Evitare il contatto con il liquido stesso. In caso di contatto accidentale sciacquare con acqua. Se il liquido dovesse venire a contatto con gli occhi richiedere anche l'intervento di un medico.** Il liquido della batteria ricaricabile che fuoriesce può causare irritazioni della pelle o ustioni.

► **In caso di danneggiamento ed un uso non corretto della batteria ricaricabile possono fuoriuscire vapori. Aerare con aria fresca ed in caso di disturbi rivolgersi ad un medico.** I vapori possono irritare le vie respiratorie.

- **Ricaricare la batteria ricaricabile esclusivamente con stazioni di ricarica originali Bosch.** In caso di impiego di stazioni di ricarica non originali Bosch non può essere escluso il pericolo di incendio.
- **Utilizzare la batteria ricaricabile esclusivamente insieme all'eBike con sistema di azionamento eBike originale Bosch.** Solo in questo modo la batteria ricaricabile viene protetta da sovraccarico pericoloso.
- **Utilizzare esclusivamente batterie ricaricabili originali Bosch che sono state omologate dal produttore per l'eBike.** L'impiego di batterie ricaricabili diverse da quelle consigliate potrà comportare il pericolo di lesioni e d'incendio. In caso di impiego di batterie ricaricabili diverse, Bosch non si assumerà alcuna responsabilità civile e garanzia.
- **Leggere ed osservare le indicazioni di sicurezza e le istruzioni operative riportate nelle istruzioni per l'uso della stazione di ricarica ed unità di azionamento/computer di controllo nonché nelle istruzioni per l'uso dell'eBike.**

Descrizione del prodotto e caratteristiche

Componenti illustrati (vedi pagina 4 – 5)

La numerazione dei componenti si riferisce alle illustrazioni riportate sulle pagine con la rappresentazione grafica.

Tutte le illustrazioni delle parti della bicicletta, ad eccezione delle batterie ricaricabili e dei loro supporti, sono riportate in modo schematico e possono essere differenti dalla Vostra eBike.

- 19 Supporto della batteria ricaricabile per montaggio al portapacchi
- 20 Batteria ricaricabile per montaggio al portapacchi
- 21 Indicatore funzionamento e stato di carica
- 22 Tasto di accensione/spengimento
- 23 Chiave del dispositivo di chiusura della batteria ricaricabile
- 24 Dispositivo di chiusura della batteria ricaricabile
- 25 Supporto superiore della batteria ricaricabile standard
- 26 Batteria ricaricabile standard
- 27 Supporto inferiore della batteria ricaricabile standard
- 28 Cinghia portante
- 29 Stazione di ricarica

Dati tecnici

Batteria ricaricabile agli ioni di litio		PowerPack 300	PowerPack 400
Codice prodotto			
– Batteria ricaricabile standard nera		0 275 007 500	0 275 007 503
– Batteria ricaricabile standard bianca		0 275 007 501	0 275 007 504
– Batteria ricaricabile per montaggio al portapacchi		0 275 007 502	0 275 007 505
Tensione nominale	V=	36	36
Capacità nominale	Ah	8,2	11
Energia	Wh	300	400
Temperatura di esercizio	°C	– 10 ... + 40	– 10 ... + 40
Temperatura di magazzino	°C	– 10 ... + 60	– 10 ... + 60
Campo ammesso di temperatura di ricarica	°C	0 ... + 40	0 ... + 40
Peso ca.	kg	2,5	2,5
Tipo di protezione		IP 54 (protezione contro la polvere e contro gli spruzzi dell'acqua)	IP 54 (protezione contro la polvere e contro gli spruzzi dell'acqua)

Montaggio

► **Applicare la batteria ricaricabile esclusivamente su superfici pulite.** Evitare in modo particolare l'imbrattamento della presa di carica e dei contatti, p. es. tramite sabbia o terra.

Controllo della batteria ricaricabile prima del primo utilizzo

Controllare la batteria ricaricabile prima di effettuare la prima ricarica oppure prima dell'impiego con l'eBike.

Per effettuare questo controllo premere il tasto di accensione/spengimento **22** per l'attivazione della batteria ricaricabile. Se nessun LED dell'indicatore dello stato di carica **21** è acceso esiste la possibilità che la batteria ricaricabile sia danneggiata.

Se almeno un LED di tutti i LED dell'indicatore dello stato di carica **21** è illuminato, ricaricare completamente la batteria ricaricabile prima del primo utilizzo.

► **Non ricaricare una batteria ricaricabile danneggiata e non utilizzarla.** Rivolgersi ad un rivenditore di biciclette autorizzato.

Ricarica della batteria

► **Utilizzare esclusivamente la stazione di ricarica originale Bosch contenuta nel volume di fornitura dell'eBike oppure una uguale strutturalmente.** Solo questa stazione di ricarica è idonea per la batteria ricaricabile agli ioni di litio utilizzata nell'eBike.

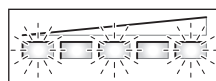
Nota bene: La batteria ricaricabile viene fornita parzialmente carica. Per garantire tutta la potenza della batteria ricaricabile, prima del primo impiego ricaricarla completamente con la stazione di ricarica.

Per la ricarica la batteria ricaricabile deve essere rimossa dall'eBike.

Per la ricarica della batteria ricaricabile leggere ed osservare le istruzioni per l'uso della stazione di ricarica.

La batteria ricaricabile può essere ricaricata in qualsiasi momento senza ridurne la durata. Un'interruzione dell'operazione di ricarica non danneggia la batteria ricaricabile.

La batteria ricaricabile è dotata di un controllo della temperatura che consente una ricarica esclusivamente nel campo di temperatura tra 0 °C e 40 °C.



Se la batteria ricaricabile si trova al di fuori del campo di temperatura di ricarica, i tre LED dell'indicatore dello stato di carica

21 lampeggiano. Staccare la batteria ricaricabile dalla stazione di ricarica e lasciarla adattare alla temperatura ambientale.

Collegare di nuovo la batteria ricaricabile alla stazione di ricarica solamente quando la stessa avrà raggiunto la temperatura di ricarica ammissibile.

Indicatore dello stato di carica

I cinque LED verdi dell'indicatore dello stato di carica **21** indicano, con batteria ricaricabile attivata, lo stato di carica della batteria ricaricabile stessa.

Ogni LED corrisponde a circa il 20 % della capacità. Quando la batteria ricaricabile è completamente carica sono illuminati tutti i cinque LED.

Lo stato di carica della batteria ricaricabile attivata viene inoltre visualizzato sul computer di controllo. A riguardo leggere ed osservare le istruzioni per l'uso dell'unità di azionamento e del computer di controllo.

Se l'autonomia della batteria ricaricabile è inferiore al 5 %, tutti i LED dell'indicatore dello stato di carica **21** sulla batteria ricaricabile si spengono, rimane tuttavia ancora una funzione di visualizzazione del computer di controllo.

Inserimento e rimozione della batteria ricaricabile (vedere figure C – D)

- **Disattivare sempre la batteria ricaricabile quando la stessa viene inserita nel supporto oppure viene rimossa dal supporto stesso.**

Affinché la batteria ricaricabile possa essere inserita, la chiave **23** deve essere inserita nel dispositivo di chiusura **24** ed il dispositivo di chiusura deve essere aperto.

Per l'**inserimento della batteria ricaricabile standard 26** applicare la stessa con i contatti sul supporto inferiore **27** sull'eBike. Ribaltarla fino all'arresto nel supporto superiore **25**.

Per l'**inserimento della batteria ricaricabile per montaggio al portapacchi 20** spingerla con i contatti in avanti fino allo scatto in posizione nel supporto **19** nel portapacchi.

Controllare che la batteria ricaricabile sia posizionata in modo fisso. Chiudere sempre a chiave la batteria ricaricabile sul dispositivo di chiusura **24** poiché in caso contrario il dispositivo di chiusura può aprirsi e la batteria ricaricabile può cadere dal supporto.

Togliere sempre la chiave **23** dal dispositivo di chiusura **24** dopo la chiusura. In questo modo viene evitata la caduta della chiave ovvero che la batteria ricaricabile venga rimossa da parte di terzi non autorizzati in caso di eBike parcheggiata.

Per la **rimozione della batteria ricaricabile standard 26** disinserirla ed aprire il dispositivo di chiusura con la chiave **23**. Inclinare la batteria ricaricabile dal supporto superiore **25** e tirandola alla cinghia portante **28** estrarla dal supporto inferiore **27**.

Per la **rimozione della batteria ricaricabile per montaggio al portapacchi 20** disinserirla ed aprire il dispositivo di chiusura con la chiave **23**. Rimuovere la batteria ricaricabile dal supporto **19**.

Uso

Messa in funzione

- **Utilizzare esclusivamente batterie ricaricabili originali Bosch che sono state omologate dal produttore per l'eBike.** L'impiego di batterie ricaricabili diverse da quelle consigliate potrà comportare il pericolo di lesioni e d'incendio. In caso di impiego di batterie ricaricabili diverse, Bosch non si assumerà alcuna responsabilità civile e garanzia.

Accensione/spengimento

L'attivazione della batteria ricaricabile è una delle possibilità per inserire il sistema eBike. A riguardo leggere ed osservare le istruzioni per l'uso dell'unità di azionamento e del computer di controllo.

Controllare prima dell'attivazione della batteria ricaricabile e del sistema eBike che il dispositivo di chiusura **24** sia chiuso.

Nota bene: All'attivazione del sistema eBike i pedali dell'eBike non devono essere caricati poiché altrimenti la potenza dell'azionamento dell'eBike verrebbe limitata.

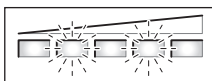
Per l'**attivazione** della batteria ricaricabile premere il tasto di accensione/spengimento **22**. I LED dell'indicatore **21** si accendono e indicano contemporaneamente lo stato di carica.

Nota bene: Se l'autonomia della batteria ricaricabile è inferiore al 5%, sulla batteria ricaricabile non è acceso alcun LED dell'indicatore dello stato di carica **21**. L'attivazione del sistema eBike è visibile solamente sul computer di controllo.

Per lo **spengimento** della batteria ricaricabile premere di nuovo il tasto di accensione/spengimento **22**. I LED dell'indicatore **21** si spengono. In questo modo il sistema eBike viene spento anch'esso.

Se per ca. 10 min non viene richiesto alcun intervento dell'azionamento eBike (p. es. poiché l'eBike è ferma) e non viene premuto alcun tasto sul computer di controllo o sull'unità di comando dell'eBike, il sistema eBike e di conseguenza anche la batteria ricaricabile si disattivano automaticamente per ragioni di risparmio energetico.

La batteria ricaricabile è protetta tramite l'«Electronic Cell Protection (ECP)» contro lo scaricamento totale, il sovraccarico, il surriscaldamento ed il cortocircuito. In caso di pericolo la batteria ricaricabile si spegne automaticamente tramite un interruttore automatico.



Se viene individuato un difetto della batteria ricaricabile, lampeggiano due LED dell'indicatore dello stato di carica **21**. In questo caso rivolgersi ad un rivenditore autorizzato di biciclette.

Indicazioni per l'uso ottimale della batteria ricaricabile

La durata della batteria ricaricabile può essere prolungata se la stessa viene sottoposta ad attenta cura e soprattutto se viene conservata a temperature corrette.

Con l'aumento dell'invecchiamento tuttavia anche in caso di attenta cura, l'autonomia della batteria ricaricabile si ridurrà.

Un tempo di funzionamento notevolmente ridotto dopo la ricarica indica che la batteria ricaricabile è consumata. È possibile sostituire la batteria ricaricabile.

Se la cinghia portante **28** della batteria ricaricabile standard dovesse essere difettosa, farla sostituire da un rivenditore di biciclette.

Ricarica della batteria ricaricabile prima e durante la conservazione

Prima di un lungo periodo di non impiego ricaricare la batteria ricaricabile per circa il 60 % (da 3 a 4 LED dell'indicatore dello stato di carica **21** sono illuminati).

Dopo 6 mesi controllare lo stato di carica. Se è illuminato ancora solo un LED dell'indicatore dello stato di carica **21**, ricaricare di nuovo la batteria ricaricabile a circa il 60 %.

Nota bene: Se la batteria ricaricabile viene conservata scarica per un periodo più lungo, è possibile che, nonostante l'autoscarica limitata, la stessa si danneggi e che la capacità di carica venga notevolmente ridotta.

Non è consigliabile lasciare collegata permanentemente la batteria ricaricabile alla stazione di ricarica.

Condizioni di magazzino

Conservare la batteria ricaricabile possibilmente in un posto asciutto e ben areato. Proteggerla da umidità ed acqua. In caso di condizioni atmosferiche sfavorevoli è ad es. consigliabile togliere la batteria ricaricabile dall'eBike e conservarla in ambienti chiusi fino all'impiego successivo.

La batteria ricaricabile può essere immagazzinata a temperatura da -10 °C fino a +60 °C. Per una lunga durata è tuttavia favorevole un magazzino a ca. 20 °C temperatura ambiente.

Prestare attenzione affinché la temperatura massima di magazzino non venga superata. Non lasciare la batteria ricaricabile p. es. in estate nell'automobile ed immagazzinarla in un luogo non soggetto a irradiazione solare diretto.

Manutenzione ed assistenza

Manutenzione e pulizia

Mantenere pulita la batteria ricaricabile. Pulirla con cautela con uno straccio umido e morbido. La batteria ricaricabile non deve essere immersa nell'acqua oppure pulita con un getto d'acqua.

Se la batteria ricaricabile non è più funzionante rivolgersi ad un rivenditore autorizzato di biciclette.

Servizio di assistenza ed assistenza clienti

Per tutte le domande relative alle batterie ricaricabili rivolgersi ad un rivenditore autorizzato di biciclette.

► **Annottarsi il produttore ed il numero della chiave 23.** In caso di perdita della chiave rivolgersi presso un rivenditore autorizzato di biciclette. Indicare al rivenditore il produttore ed il numero della chiave.

Le informazioni per contattare rivenditori autorizzati di biciclette sono riportate sulla pagina web

www.bosch-ebike.com

Trasporto

Le batterie ricaricabili sono soggette ai requisiti di legge relativi a merci pericolose. Le batterie ricaricabili possono essere trasportate su strada tramite l'utente privato senza ulteriori precauzioni.

In caso di trasporto tramite utente commerciale oppure in caso di trasporto tramite terzi (p. es. trasporto aereo oppure spedizioniere) devono essere osservati particolari requisiti relativi ad imballo e marcatura (ad es. norme dell'ADR). In caso di necessità per la preparazione del pezzo da spedire si può ricorrere ad un esperto per merce pericolosa.

Spedire le batterie ricaricabili solamente se la carcassa non è danneggiata. Coprire con nastro adesivo i contatti scoperti ed imballare la batteria ricaricabile in modo tale che non si muova nell'imballo. Vi preghiamo di osservare anche eventuali, ulteriori norme nazionali.

In caso di domande relative al trasporto delle batterie ricaricabili rivolgersi ad un rivenditore autorizzato di biciclette. Presso il rivenditore è possibile ordinare anche un imballo per il trasporto adatto.

Smaltimento



Avviare ad un riciclaggio rispettoso dell'ambiente batterie ricaricabili, accessori ed imballaggi inutilizzabili. Non gettare le batterie ricaricabili tra i rifiuti domestici!

Solo per i Paesi della CE:



Conformemente alla direttiva europea 2002/96/CE gli apparecchi elettrici diventati inservibili e, in base alla direttiva europea 2006/66/CE, le batterie ricaricabili/batterie difettose o consumate devono essere raccolte separatamente ed essere inviate ad una riutilizzazione ecologica.

Vi preghiamo di consegnare batterie ricaricabili non più utilizzabili ad un rivenditore autorizzato di biciclette.



Li-Ion:

Si prega di tener presente le indicazioni riportate nel paragrafo «Trasporto», pagina Italiano – 12.

Con ogni riserva di modifiche tecniche.

Stazione di ricarica – Charger

Norme di sicurezza



Leggere tutte le indicazioni di sicurezza e le istruzioni operative. In caso di mancato rispetto delle indicazioni di sicurezza e delle istruzioni operative

possono verificarsi scosse elettriche, incendi e/o lesioni gravi.

Conservare tutte le indicazioni di sicurezza e le istruzioni operative per ogni esigenza futura.

Il termine utilizzato nelle presenti istruzioni per l'uso «batteria ricaricabile» si riferisce allo stesso modo a batterie ricaricabili standard (batterie ricaricabili con supporto sul telaio della bicicletta) e a batterie ricaricabili per montaggio al portapacchi (batterie ricaricabili con supporto nel portapacchi).



Tenere la stazione di ricarica lontana da pioggia o umidità. In caso di infiltrazione di acqua in una stazione di ricarica esiste il rischio di una scossa elettrica.

- ▶ **Ricaricare esclusivamente batterie ricaricabili agli ioni di litio Bosch omologate per eBike. La tensione della batteria ricaricabile deve essere adatta alla tensione di ricarica batteria della stazione di ricarica.** In caso contrario esiste pericolo di incendio ed esplosione.
- ▶ **Avere cura di mantenere il caricabatteria sempre pulito.** Attraverso accumuli di sporcizia si crea il pericolo di una scossa elettrica.
- ▶ **Prima di ogni impiego controllare il caricabatteria, il cavo e la spina. Non utilizzare il caricabatteria in caso dovreste riscontrare dei danni. Non aprire mai personalmente il caricabatteria e farlo riparare soltanto da personale qualificato e soltanto con pezzi di ricambio originali.** In caso di caricabatterie per batterie, cavi e spine danneggiate si aumenta il pericolo di una scossa elettrica.
- ▶ **Non utilizzare il caricabatteria su basi facilmente infiammabili (p. es. carta, tessuti ecc.) oppure in ambienti infiammabili.** Per via del riscaldamento del caricabatteria che si ha durante la fase di ricarica si viene a creare il pericolo di incendio.
- ▶ **In caso di danneggiamento ed un uso non corretto della batteria ricaricabile possono fuoriuscire vapori. Aere con aria fresca ed in caso di disturbi rivolgersi ad un medico.** I vapori possono irritare le vie respiratorie.
- ▶ **Sorvegliare i bambini.** In questo modo viene assicurato che i bambini non giocano con la stazione di ricarica.
- ▶ **Bambini e persone che a causa delle loro capacità fisiche, sensoriali o mentali oppure a cui manchi esperienza o conoscenza non sono in grado di utilizzare la stazione di ricarica in modo sicuro, non devono utilizzare questa stazione di ricarica senza la sorveglianza oppure l'istru-**

zione da parte di una persona responsabile. In caso contrario esiste il pericolo di impiego errato e di lesioni.

- ▶ **Leggere ed osservare le indicazioni di sicurezza e le istruzioni operative riportate nelle istruzioni per l'uso della batteria ricaricabile ed unità di azionamento/computer di controllo nonché nelle istruzioni per l'uso dell'eBike.**
- ▶ Sul lato inferiore della stazione di ricarica è riportato un riassunto delle indicazioni di sicurezza più importanti in lingua inglese, francese e spagnolo (contrassegnate nell'illustrazione sulla pagina grafica con il numero **33**) e con il seguente contenuto:
 - Per un impiego sicuro osservare le istruzioni per l'uso. Rischio di una scossa elettrica.
 - Utilizzare esclusivamente in ambiente asciutto.
 - Ricaricare esclusivamente batterie ricaricabili del sistema eBike Bosch. Altre batterie ricaricabili possono esplodere e causare lesioni.
 - Non sostituire il cavo elettrico. Esiste pericolo di incendio ed esplosione.

Descrizione del prodotto e caratteristiche

Componenti illustrati (vedi pagina 6 – 7)

La numerazione dei componenti illustrati si riferisce all'illustrazione della stazione di ricarica sulla pagina con la rappresentazione grafica.

- 20** Batteria ricaricabile per montaggio al portapacchi
- 21** Indicatore dello stato di carica della batteria
- 26** Batteria ricaricabile standard
- 29** Stazione di ricarica
- 30** Presa dell'apparecchio
- 31** Spina dell'apparecchio
- 32** Aperture di ventilazione
- 33** Indicazioni di sicurezza stazione di ricarica
- 34** Spina di ricarica
- 35** Presa per la spina di ricarica

Dati tecnici

Stazione di ricarica		Charger
Codice prodotto		0 275 007 905
Tensione nominale	V~	207 – 264
Frequenza	Hz	47 – 63
Tensione di ricarica della batteria	V=	42
Corrente di carica	A	4
Campo ammesso di temperatura di ricarica	°C	0 ... + 40
Tempo di ricarica		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Numero degli elementi della batteria ricaricabile		10 – 80
Temperatura di esercizio	°C	– 10 ... + 75
Temperatura di magazzino	°C	– 20 ... + 70
Peso in funzione della EPTA-Procedure 01/2003	kg	0,8
Tipo di protezione		IP 40

I dati sono validi per una tensione nominale [U] di 230 V. In caso di tensioni differenti e di modelli specifici dei paesi di impiego, questi dati possono variare.

Uso

► **Applicare la batteria ricaricabile esclusivamente su superfici pulite.** Evitare in modo particolare l'imbrattamento della presa di carica e dei contatti, p. es. tramite sabbia o terra.

Messa in funzione

Collegamento della stazione di ricarica (vedi figure E - F)

► **Osservare la tensione di rete!** La tensione della rete deve corrispondere a quella indicata sulla stazione di ricarica. Stazioni di ricarica previste per l'uso con 230 V possono essere azionate anche a 220 V.

Inserire la spina dell'apparecchio **31** del cavo elettrico nella presa dell'apparecchio **30** sulla stazione di ricarica.

Collegare il cavo elettrico (specifico del paese di impiego) alla rete elettrica.

Disattivare la batteria ricaricabile e toglierla dal supporto sull'eBike. A tal fine leggere ed osservare le istruzioni per l'uso della batteria ricaricabile.

Inserire la spina di ricarica **34** del dispositivo di carica nella presa **35** sulla batteria ricaricabile.

Operazione di ricarica

L'operazione di ricarica inizia non appena la stazione di ricarica è collegata alla batteria ricaricabile ed alla rete elettrica.

Nota bene: L'operazione di ricarica è possibile solamente se la temperatura della batteria ricaricabile si trova nel campo di temperatura di ricarica ammissibile.

Durante l'operazione di ricarica sono illuminati i LED dell'indicatore e dello stato di carica **21** sulla batteria ricaricabile. Ogni LED illuminato permanentemente corrisponde a ca. 20 % della capacità di ricarica. Il LED lampeggiante indica la ricarica del prossimo 20 %.

► **Procedere con cautela in caso di contatto con la stazione di ricarica durante l'operazione di ricarica. Mettere i guanti di protezione.** In modo particolare in caso di elevate temperature ambientali la stazione di ricarica può riscaldarsi notevolmente.

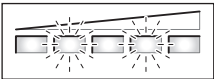
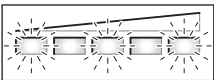
Nota bene: Prestare attenzione affinché la stazione di ricarica durante l'operazione di ricarica sia ben arieggiata e le aperture di ventilazione **32** su entrambi i lati non siano coperte.

La batteria ricaricabile è completamente carica quando sono illuminati permanentemente tutti i cinque LED dell'indicatore **21**. L'operazione di ricarica viene interrotta automaticamente. Staccare la stazione di ricarica dalla rete elettrica e la batteria ricaricabile dalla stazione di ricarica.

Staccando la batteria ricaricabile dalla stazione di ricarica la batteria ricaricabile viene disattivata automaticamente.

Adesso è possibile inserire la batteria ricaricabile nell'eBike.

Anomalie – cause e rimedi

Causa	Rimedi
 <p>Batteria ricaricabile difettosa</p>	<p>Due LED sulla batteria ricaricabile lampeggiano</p> <p>Rivolgersi ad un rivenditore autorizzato di biciclette</p>
 <p>Batteria ricaricabile troppo calda o troppo fredda</p>	<p>Tre LED sulla batteria ricaricabile lampeggiano</p> <p>Staccare la batteria ricaricabile dalla stazione di ricarica e lasciarla adattare alla temperatura ambientale fino a quando è raggiunto il campo di temperatura di ricarica</p> <p>Collegare di nuovo la batteria ricaricabile alla stazione di ricarica solamente quando la stessa avrà raggiunto la temperatura di ricarica ammissibile.</p>

Causa	Rimedi
Operazione di ricarica impossibile (nessuna indicazione sulla batteria ricaricabile)	
Spina non inserita correttamente	Controllare tutti i collegamenti a spina
Contatti sulla batteria ricaricabile sporchi	Pulire con cautela i contatti sulla batteria ricaricabile
Aperture di ventilazione 32 della stazione di ricarica intasate oppure coperte	Pulire le aperture di ventilazione 32 e posizionare la stazione di ricarica in modo che sia ben arieggiata
Preso, cavo o stazione di ricarica difettosi	Controllare la tensione di rete, fare controllare la stazione di ricarica da un rivenditore di biciclette
Batteria ricaricabile difettosa	Rivolgersi ad un rivenditore autorizzato di biciclette

Manutenzione ed assistenza

Manutenzione e pulizia

Qualora la stazione di ricarica dovesse guastarsi rivolgersi ad un rivenditore autorizzato di biciclette.

Servizio di assistenza ed assistenza clienti

Per tutte le domande relative alla stazione di ricarica rivolgersi ad un rivenditore autorizzato di biciclette.

Le informazioni per contattare rivenditori autorizzati di biciclette sono riportate sulla pagina web

www.bosch-ebike.com

Smaltimento

Avviare ad un riciclaggio rispettoso dell'ambiente la stazione di ricarica, gli accessori dismessi e gli imballaggi.

Non gettare tra i rifiuti domestici le stazioni di ricarica dismesse!

Solo per i Paesi della CE:



Conformemente alla norma della direttiva 2002/96/CE sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE) ed all'attuazione del recepimento nel diritto nazionale, le stazioni di ricarica diventeranno inservibili e dovranno essere raccolte separatamente ed essere inviate ad una riutilizzazione ecologica.

Con ogni riserva di modifiche tecniche.

Aandrijfeenheid Drive Unit Cruise/ Bedieningscomputer Intuvia

Veiligheidsvoorschriften



Lees alle veiligheidsvoorschriften en aanwijzingen. Als de veiligheidsvoorschriften en aanwijzingen niet in acht worden genomen, kan dit een elektrische schok, brand en/of ernstig letsel tot gevolg hebben.

Bewaar alle veiligheidsvoorschriften en aanwijzingen voor toekomstig gebruik.

Het in deze gebruiksaanwijzing gebruikte begrip „accu” heeft zowel betrekking op standaardaccu's (accu's bevestigd aan het fietsframe) als op bagagedrageraccu's (accu bevestigd in de bagagedrager).

- ▶ **Open de aandrijfeenheid niet zelf. De aandrijfeenheid is onderhoudsvrij en mag alleen door gekwalificeerd personeel en alleen met originele vervangingsonderdelen worden gerepareerd.** Daarmee wordt gewaarborgd dat de veiligheid van de aandrijfeenheid in stand blijft. Als de aandrijfeenheid door onbevoegden wordt geopend, vervalt de aanspraak op garantie.
- ▶ **Alle op de aandrijfeenheid gemonteerde componenten en alle andere componenten van de aandrijving van de eBike (bijv. kettingblad, opname van kettingblad, pedalen) mogen alleen worden vervangen door componenten met een identieke constructie of door componenten die door de fietsfabrikant speciaal voor uw eBike zijn toegestaan.** Daardoor wordt de aandrijfeenheid beschermd tegen overbelasting en beschadiging.
- ▶ **Neem de accu uit de eBike voordat u begint met werkzaamheden (zoals montage, onderhoud, enz.) aan de eBike, voordat u deze per auto of vliegtuig vervoert en voordat u deze opbergt.** Bij per ongeluk bedienen van de aan/uit-schakelaar bestaat verwondingsgevaar.
- ▶ **De functie hulp bij het lopen mag uitsluitend bij het lopen met de eBike worden gebruikt.** Als de wielen van de eBike bij het gebruik van de hulp bij het lopen geen contact met de grond maken, bestaat gevaar voor letsel.
- ▶ **Gebruik alleen originele Bosch accu's die door de fabrikant voor uw eBike zijn toegestaan.** Het gebruik van andere accu's kan tot letsel en brandgevaar leiden. Bij gebruik van andere accu's wordt door Bosch geen aansprakelijkheid aanvaard en geen garantie geboden.
- ▶ **Neem alle nationale voorschriften voor de toelating en het gebruik van eBikes in acht.**
- ▶ **Lees de veiligheids- en overige voorschriften in de gebruiksaanwijzing van de accu en in de gebruiksaanwijzing van de eBike en neem deze in acht.**

Product- en vermogensbeschrijving

Gebruik volgens bestemming

De aandrijfeenheid is uitsluitend bestemd voor de aandrijving van uw eBike en mag niet voor andere doeleinden worden gebruikt.

De eBike is bestemd voor gebruik op verharde wegen. De eBike is niet goedgekeurd voor wedstrijdgebruik.

Afgebeelde componenten (zie pagina 2 – 3)

De componenten zijn genummerd zoals op de pagina met afbeeldingen.

Alle afbeeldingen van fietsonderdelen behalve aandrijfeenheid, bedieningscomputer incl. bedieningseenheid, snelheidssensor en bijbehorende houders zijn schematisch en kunnen afwijken van de onderdelen van uw eBike.

- 1 Toets indicatiefunctie „i”
- 2 Toets verlichting
- 3 Bedieningscomputer
- 4 Houder bedieningscomputer
- 5 Aan-uit-toets bedieningscomputer
- 6 Reset-toets „RESET”
- 7 USB-aansluitopening
- 8 Beschermkapje van USB-aansluiting
- 9 Aandrijfeenheid
- 10 Bedieningseenheid
- 11 Toets indicatiefunctie „i” op bedieningseenheid
- 12 Toets waarde verlagen/omlaag „-”
- 13 Toets waarde verhogen/omhoog „+”
- 14 Toets hulp bij het lopen „WALK”
- 15 Vergrendeling bedieningscomputer
- 16 Blokkeerschroef bedieningscomputer
- 17 Snelheidssensor
- 18 Spaakmagneet van snelheidssensor

Indicatie-elementen bedieningscomputer

- a Indicatie motorvermogen
- b Indicatie ondersteuningsniveau
- c Tekstdisplay
- d Waarde-indicatie
- e Snelheidsmeterindicatie
- f Accuopladingindicatie

Technische gegevens

Aandrijf-eenheid		Drive Unit Cruise
Zaaknummer		0 275 007 006/ 0 275 007 007
Capaciteit	W	250
Draaimoment aan uitgaande as max.	Nm	50
Nominale spanning	V _{DC}	36
Bedrijfstemperatuur	°C	-5 ... +40
Bewaartemperatuur	°C	-10 ... +50
Beschermingsklasse		IP 54 (stof- en spatwaterbescherming)
Gewicht, ca.	kg	4

Bedieningscomputer		Intuvia
Zaaknummer		1 270 020 903
Laadstroom		
USB-aansluiting max.	mA	500
Laadspanning		
USB-aansluiting	V	5
Bedrijfstemperatuur	°C	-5 ... +40
Bewaartemperatuur	°C	-10 ... +50
Beschermingsklasse		IP 54 (stof- en spatwaterbescherming)
Gewicht, ca.	kg	0,15

Verlichting*		
Nominale spanning	V _{DC}	6
Capaciteit		
– Voorlicht	W	2,7
– Achterlicht	W	0,3

* Afhankelijk van wettelijke regelingen niet in alle, per land verschillende uitvoeringen via accu van eBike mogelijk

Montage

Accu inzetten of verwijderen

Lees de gebruiksaanwijzing voor het in de eBike plaatsen en het eruit verwijderen van de accu en neem de voorschriften in acht.

Bedieningscomputer aanbrengen en verwijderen (zie afbeelding A)

Voor het **inzetten** van de bedieningscomputer **3** duwt u deze van voren in de houder **4**.

Voor het **verwijderen** van de bedieningscomputer **3** drukt u op de vergrendeling **15** en duwt u deze naar voren uit de houder **4**.

► **Verwijder de bedieningscomputer als u de eBike parkeert, zodat de aandrijving niet door anderen kan worden gebruikt.** Zonder bedieningscomputer kan het eBike-systeem niet ingeschakeld worden.

De bedieningscomputer kan ook zo in de houder worden geborgd dat deze niet worden verwijderd. Demonteer daarvoor de houder **4** van het stuur. Zet de bedieningscomputer in de houder. Draai de blokkeerschroef **16** van onderen in de daarvoor voorziene schroefdraad van de houder. Monteer de houder weer op het stuur.

Snelheidssensor controleren (zie afbeelding B)

De snelheidssensor **17** en de bijbehorende spaakmagneet **18** moeten zodanig gemonteerd zijn dat de spaakmagneet bij een omwenteling van het wiel op een afstand van minimaal 5 mm en maximaal 17 mm langs de snelheidssensor beweegt.

Opmerking: Als de afstand tussen snelheidssensor **17** en spaakmagneet **18** te groot is of de snelheidssensor **17** niet juist is aangesloten, valt de snelheidsmeterindicatie **e** uit en werkt de aandrijving van de eBike in het noodprogramma. Draai in dit geval de schroef van de spaakmagneet **18** los en bevestig de spaakmagneet zodanig op de spaak dat deze op de juiste afstand langs de markering van de snelheidssensor loopt. Als er ook daarna geen snelheid op de snelheidsmeterindicatie **e** verschijnt, dient u contact op te nemen met een erkende rijwielvakhandel.

Gebruik

Ingebruikneming

Voorwaarden

Het eBike-systeem kan alleen worden geactiveerd als aan de volgende voorwaarden is voldaan:

- Er is een voldoende opgeladen accu geplaatst (zie gebruiksaanwijzing van de accu).
- De bedieningscomputer is correct in de houder geplaatst (zie „Bedieningscomputer aanbrengen en verwijderen”, pagina Nederlands – 2).
- De snelheidssensor is correct aangesloten (zie „Snelheidssensor controleren”, pagina Nederlands – 2).

eBike-systeem in- en uitschakelen

Als u het eBike-systeem wilt **inschakelen**, heeft u de volgende mogelijkheden:

- Is de bedieningscomputer al ingeschakeld wanneer deze in de houder geplaatst wordt, wordt het eBike-systeem automatisch ingeschakeld.
- Druk bij ingezette bedieningscomputer en ingezette accu eenmaal kort op de aan-uit-toets **5** van de bedieningscomputer.
- Druk bij ingezette bedieningscomputer op de aan-uit-toets van de accu (zie gebruiksaanwijzing van de accu).

Opmerking: De pedalen van de eBike mogen bij het inschakelen van het eBike-systeem niet belast zijn. Anders wordt het vermogen van de aandrijving beperkt. In de tekstindicatie **c** verschijnt de foutmelding „**Pedaal ontlasten**”.

Als het eBike-systeem bij vergissing met belaste pedalen is ingeschakeld, dient u deze uit te schakelen en zonder belasting opnieuw in te schakelen.

De aandrijving wordt geactiveerd zodra u op de pedalen trapt (behalve in de functie hulp bij het lopen, zie „Hulp bij het lopen in- en uitschakelen”, pagina Nederlands – 4). Het motorvermogen is afhankelijk van de instellingen op de bedieningscomputer.

Zodra u bij normaal gebruik niet meer op de pedalen trapt of zodra u een snelheid van 25 km per uur heeft bereikt, wordt de ondersteuning door de aandrijving van de eBike uitgeschakeld. De aandrijving wordt automatisch weer geactiveerd zodra u op de pedalen trapt of de snelheid onder 25 km per uur daalt.

Als u het eBike-systeem wilt **uitschakelen**, heeft u de volgende mogelijkheden:

- Druk op de aan/uit-toets **5** van de bedieningscomputer.
- Schakel de accu met de aan/uit-toets van de accu uit (zie gebruiksaanwijzing van de accu.)
- Verwijder de bedieningscomputer uit de houder.

Als er ca. 10 minuten geen vermogen van de aandrijving wordt opgevraagd (bijv. omdat de eBike stilstaat) en er geen toets op de bedieningscomputer of bedieningseenheid wordt ingedrukt, wordt het eBike-systeem automatisch uitgeschakeld om energie te besparen.

Indicaties en instellingen van de bedieningscomputer

Energievoorziening van de bedieningscomputer

Als de bedieningscomputer in de houder **4** zit, een voldoende opgeladen accu in de eBike geplaatst is en het eBike-systeem ingeschakeld is, wordt de bedieningscomputer door de accu van de eBike van energie voorzien.

Als de bedieningscomputer uit de houder **4** wordt genomen, vindt de energievoorziening plaats via een interne accu. Als de interne accu bij het inschakelen van de bedieningscomputer zwak is, verschijnt gedurende 3 seconden „**Met fiets verbinden**” in het tekstdisplay **c**. Daarna wordt de bedieningscomputer uitgeschakeld.

Als u de interne accu wilt opladen, plaatst u de bedieningscomputer weer in de houder **4** (als een accu in de eBike geplaatst is). Schakel de accu van de eBike met de aan/uit-toets van de accu uit (zie gebruiksaanwijzing van de accu).

U kunt de bedieningscomputer ook via de USB-aansluiting opladen. Open daarvoor het beschermkapje **8**. Verbind de USB-aansluiting **7** van de bedieningscomputer via een geschikte USB-kabel met een in de handel verkrijgbaar USB-oplaadapparaat of de USB-aansluiting van een computer (laadspanning 5 V, laadstroom max. 500 mA). In de tekstindicatie **c** van de bedieningscomputer verschijnt „**USB aangesloten**”.

Bedieningscomputer in- en uitschakelen

Als u de bedieningscomputer wilt **inschakelen**, drukt u kort op de aan/uit-toets **5**. De bedieningscomputer kan (als de interne accu voldoende is opgeladen) ook worden ingeschakeld als deze niet in de houder is geplaatst.




Als u de bedieningscomputer wilt **uitschakelen**, drukt u op de aan/uit-toets **5**.

Als de bedieningscomputer niet in de houder is geplaatst, wordt deze om energie te besparen uitgeschakeld zodra er 1 minuten lang geen toets is ingedrukt.

Accuoplaadindicatie

De accuoplaadindicatie **f** geeft de oplaadtoestand van de eBike-accu aan, niet die van de interne accu van de bedieningscomputer. De oplaadtoestand van de eBike-accu kan eveneens op de leds van de accu worden afgelezen.

In de indicatie **f** komt elk streepje in het accusymbool overeen met ongeveer 20 % van de capaciteit:

-  100 tot 80 % capaciteit
-  20 tot 5 % capaciteit. De accu moet worden opgeladen.
-  Minder dan 5 % capaciteit. De ondersteuning van de aandrijving is niet meer mogelijk. De leds van de oplaadindicatie van de accu gaan uit.

Als de verlichting van de eBike via de accu werkt (per land verschillend), is de capaciteit wanneer het lege accusymbool voor het eerst verschijnt nog voldoende voor ca. 2 uur verlichting. Als het symbool begint te knipperen, is ook de verlichting nog gedurende korte tijd mogelijk.

Als de bedieningscomputer uit de houder **4** wordt genomen, blijft de laatst weergegeven accuoplaadtoestand opgeslagen.

Ondersteuningsniveau instellen

U kunt op de bedieningscomputer instellen in welke mate de aandrijving van de eBike tijdens het trappen ondersteuning biedt. Het ondersteuningsniveau kan op elk moment gewijzigd worden, ook tijdens het rijden.

Opmerking: In sommige uitvoeringen is het ondersteuningsniveau mogelijk vooraf ingesteld en kan dit niet worden gewijzigd. Het is ook mogelijk dat er uit minder ondersteuningsniveaus dan hier vermeld kan worden gekozen.

De volgende ondersteuningsniveaus staan maximaal ter beschikking:

- „**OFF**”: De aandrijving is uitgeschakeld. De eBike kan net als een normale fiets alleen door trappen worden voortbewogen.
- „**ECO**”: effectieve ondersteuning met maximale efficiëntie voor maximaal bereik
- „**TOUR**”: gelijkmatige ondersteuning voor tochten met groot bereik
- „**SPORT**”: krachtige ondersteuning voor sportief rijden op heuvelachtige stukken en voor rijden in de stad
- „**TURBO**”: maximale ondersteuning bij flink doortrappen, voor sportief rijden

Als u het ondersteuningsniveau wilt **verhogen**, drukt u de toets „+” **13** op de bedieningsseenheid zo vaak in tot het gewenste ondersteuningsniveau in de indicatie **b** verschijnt. Als u het ondersteuningsniveau wilt **verlagen**, drukt u op de toets „-” **12**.

Het opgevraagde motorvermogen verschijnt in de indicatie **a**. Het maximale motorvermogen is afhankelijk van het gekozen ondersteuningsniveau.

Ondersteuningsniveau	Motorvermogen*	
	Kettingschakeling	Naafschakeling
„ECO”	30 %	30 %
„TOUR”	100 %	90 %
„SPORT”	170 %	150 %
„TURBO”	250 %	200 %

* Het motorvermogen kan bij sommige uitvoeringen afwijken.

Als de bedieningscomputer uit de houder **4** wordt genomen, blijft het laatst weergegeven ondersteuningsniveau opgeslagen. De indicatie **a** van het motorvermogen blijft leeg.

Hulp bij het lopen in- en uitschakelen

De functie hulp bij het lopen kan het lopen met de eBike gemakkelijker. De snelheid in deze functie is afhankelijk van de ingeschakelde versnelling en kan maximaal 6 km per uur bereiken. Hoe kleiner de gekozen versnelling, hoe lager de snelheid in de functie hulp bij het lopen (bij volledig vermogen).

► **De functie hulp bij het lopen mag uitsluitend bij het lopen met de eBike worden gebruikt.** Als de wielen van de eBike bij het gebruik van de hulp bij het lopen geen contact met de grond maken, bestaat gevaar voor letsel.

Als u de hulp bij het lopen wilt **inschakelen**, drukt u op de toets „WALK” **14** van de bedieningsseenheid en houdt u deze ingedrukt. De aandrijving van de eBike wordt ingeschakeld.

De hulp bij het lopen wordt **uitgeschakeld** zodra zich een van de volgende gebeurtenissen voordoet:

- U laat de toets „WALK” **14** los.
- U trapt snel vooruit of achteruit op de pedalen
- De wielen van de eBike worden geblokkeerd (bijv. door remmen of stoten tegen een obstakel).
- De snelheid komt boven 6 km per uur.

Verlichting in- en uitschakelen

Afhankelijk van per land verschillende voorschriften zijn twee uitvoeringen van de verlichting mogelijk.

– Met de bedieningscomputer kunnen tegelijkertijd voorlicht, achterlicht en display-achtergrondverlichting in- of uitgeschakeld worden.

In deze uitvoering verschijnt bij het inschakelen van de verlichting „Licht aan” en bij het uitschakelen van de verlichting „Licht uit” gedurende ca. 1 seconde in de tekstindicatie **c**.

– Alleen de display-achtergrondverlichting kan in- of uitgeschakeld worden. Voor- en achterlicht van de eBike zijn onafhankelijk van de bedieningscomputer.

Bij beide uitvoeringen drukt u voor het **in- en uitschakelen van de verlichting** op de toets **2**.

Snelheids- en afstandsindicaties

In de **snelheidsmeterindicatie e** wordt altijd de actuele snelheid weergegeven.

In de **functie-indicatie** (combinatie van tekstindicatie **c** en waarde-indicatie **d**) kunt u kiezen uit de volgende functies:

- „**Bereik**”: te verwachten bereik met de aanwezige acculading (bij gelijkblijvende voorwaarden zoals ondersteuningsniveau, routeprofiel, enz.)
- „**Afstand**”: sinds de laatste reset afgelegde afstand
- „**Rijtijd**”: Rijtijd sinds de laatste reset
- „**Gemiddelde**”: sinds de laatste reset bereikte gemiddelde snelheid
- „**Maximum**”: sinds de laatste reset bereikte maximale snelheid
- „**Tijd**”: actuele tijd

Druk voor de **overgang naar de indicatiefunctie** de toets „i” **1** van de bedieningscomputer of de toets „i” **11** van de bedieningsseenheid zo vaak in tot de gewenste functie wordt weergegeven.

Voor een **reset** van „**Afstand**”, „**Rijtijd**” en „**Gemiddelde**” gaat u naar een van deze drie functies en drukt u vervolgens zo lang op de toets „**RESET**” **6** tot de indicatie op nul wordt gezet. Daarmee heeft ook een reset plaatsgevonden van de waarden van de beide andere functies.

Voor een **reset** van „**Maximum**” gaat u naar deze functie en drukt u vervolgens zo lang op de toets „**RESET**” **6** tot de indicatie op nul wordt gezet.

Wordt de bedieningscomputer uit de houder **4** genomen, blijven alle waarden van de functies opgeslagen en kunnen deze verder worden weergegeven.

Basisinstellingen weergeven en aanpassen

Weergeven en wijzigen van de basisinstellingen is mogelijk, of de bedieningscomputer nu in de houder **4** is gezet of niet.

Als u naar het menu Basisinstellingen wilt gaan, drukt u tegelijkertijd zo lang op de toets „**RESET**” **6** en de toets „i” **1** tot in de tekstindicatie **c** „**Instellingen**” verschijnt.

Druk voor het **wisselen tussen de basisinstellingen** zo vaak op de toets „i” **1** op de bedieningscomputer tot de gewenste basisinstelling wordt weergegeven. Is de bedieningscomputer in de houder **4** geplaatst, kunt u ook op de toets „i” **11** van de afstandsbediening drukken.

Bij het **wijzigen van de basisinstellingen** drukt u voor het verlagen resp. omlaag bewegen op de aan-uit-toets **5** naast de indicatie „-” of voor het verhogen resp. omhoog bewegen op de toets Verlichting **2** naast de indicatie „+”.

Als de bedieningscomputer in de houder **4** is geplaatst, is wijzigen ook met de toetsen „-” **12** resp. „+” **13** van de bedieningsseenheid mogelijk.

Als u de functie wilt verlaten en een gewijzigde instelling wilt opslaan, drukt u gedurende 3 seconden op de toets „**RESET**” **6**.

U kunt kiezen uit de volgende basisinstellingen:

- „**Eenheid km/mi**“: U kunt snelheid en afstand in kilometers of mijlen laten weergeven.
- „**Tijdformaat**“: U kunt de tijd in de 12-uur- of 24-uur-indeling laten weergeven.
- „**Tijd**“: U kunt de actuele tijd instellen. Als u de insteltoetsen langer indrukt, verandert de tijdsaanduiding sneller.

- „**Nederlands**“: U kunt de taal van de tekstindicaties wijzigen. U kunt kiezen uit Duits, Engels, Frans, Spaans, Italiaans en Nederlands.
- „**Afstand totaal**“: Weergave van de totale met de eBike afgelegde afstand (kan niet gewijzigd worden).
- „**Gebruiksduur totaal**“: Weergave van de totale tijdsduur waarmee met de eBike is gereden (kan niet gewijzigd worden).

Indicatie foutcode

De componenten van het eBike-systeem worden voortdurend automatisch gecontroleerd. Als een fout wordt vastgesteld, verschijnt de desbetreffende foutcode in de tekstindicatie c.

Druk op een willekeurige toets van bedieningscomputer **3** of bedieningseenheid **10** om naar de standaardindicatie terug te keren.

Afhankelijk van de aard van de fout wordt de aandrijving indien nodig automatisch uitgeschakeld. Verder rijden zonder

ondersteuning door de aandrijving is echter altijd mogelijk. Laat de eBike controleren voordat u er opnieuw mee gaat rijden.

- **Laat alle controles en reparaties uitsluitend door een erkende rijwielhandel uitvoeren.** Als een fout nog steeds wordt weergegeven ondanks uw poging om deze op te lossen, dient u eveneens contact met een erkende rijwielhandel op te nemen.

Code	Oorzaak	Oplossing
100	Interne fout van aandrijfseenheid	Aandrijfseenheid laten controleren
101	Verbindingsprobleem van aandrijfseenheid	Aansluitingen en verbindingen laten controleren
102	Fout van snelheidssensor	Snelheidssensor laten controleren
103*	Verbindingsprobleem van verlichting	Aansluitingen en verbindingen laten controleren
104	Verbindingsprobleem van bedieningscomputer	Aansluitingen en verbindingen laten controleren
105	Temperatuur van aandrijfseenheid te hoog (boven 40 °C)	Laat de aandrijfseenheid afkoelen. Verder rijden zonder eBike-aandrijving is mogelijk en versnelt de afkoeling van de aandrijfseenheid.
200	Interne elektronicafout van de accu	Accu later controleren
201	Temperatuur van accu te hoog (boven 40 °C)	Laat de accu afkoelen. Verder rijden zonder eBike-aandrijving is mogelijk en versnelt de afkoeling van de accu.
202	Temperatuur van de accu te laag (minder dan – 10 °C)	Laat de accu in een warme ruimte langzaam warm worden.
203	Verbindingsprobleem van de accu	Aansluitingen en verbindingen laten controleren
204	Verkeerde accupoolrichting	Laad de accu alleen op met met het originele Bosch oplaadapparaat zoals in de bijbehorende gebruiksaanwijzing beschreven.
410	Een of meer toetsen van de bedieningscomputer zijn geblokkeerd.	Controleer of er toetsen zijn vastgeklemd, bijv. door binnengedrongen vuil. Reinig de toetsen indien nodig.
414	Verbindingsprobleem van bedieningseenheid	Aansluitingen en verbindingen laten controleren
418	Een of meer toetsen van de bedieningseenheid zijn geblokkeerd.	Controleer of er toetsen zijn vastgeklemd, bijv. door binnengedrongen vuil. Reinig de toetsen indien nodig.
422	Verbindingsprobleem van aandrijfseenheid	Aansluitingen en verbindingen laten controleren
423	Verbindingsprobleem van de accu	Aansluitingen en verbindingen laten controleren
424	Communicatiefout van de componenten onderling	Aansluitingen en verbindingen laten controleren

* Alleen bij verlichting van de eBike via de accu (per land verschillend)

Code	Oorzaak	Oplossing
430	Interne accu van de bedieningscomputer leeg	Bedieningscomputer opladen (in de houder of via USB-aansluiting)
490	Interne fout van de bedieningscomputer	Bedieningscomputer laten controleren.

* Alleen bij verlichting van de eBike via de accu (per land verschillend)

Energievoorziening van extern apparaten via USB-aansluiting

Met de USB-aansluiting kunnen de meeste apparaten die via USB van stroom kunnen voorzien (bijvoorbeeld diverse mobiele telefoons) gebruikt en opgeladen worden.

Voorwaarde voor het laden is dat de bedieningscomputer en een voldoende opgeladen accu in de eBike zijn geplaatst.

Open het beschermkapje 8 van de USB-aansluiting van de bedieningscomputer. Verbind de USB-aansluiting van het externe apparaat via een passende USB-kabel met de USB-aansluiting 7 van de bedieningscomputer.

Aanwijzingen voor het rijden met het eBike-systeem

Wanneer werkt de eBike-aandrijving?

De eBike-aandrijving ondersteunt u tijdens het rijden zolang u op de pedalen trapt. Als u niet op de pedalen trapt, vindt geen ondersteuning plaats. Het motorvermogen is altijd afhankelijk van de kracht die u tijdens het trappen uitoefent.

Als u weinig kracht uitoefent, is de ondersteuning geringer dan wanneer u veel kracht uitoefent. Dat geldt onafhankelijk van het ondersteuningsniveau.

De eBike-aandrijving wordt automatisch uitgeschakeld bij snelheden boven 25 km per uur. Als de snelheid onder 25 km per uur daalt, staat de aandrijving automatisch weer ter beschikking.

Een uitzondering geldt voor de functie hulp bij het lopen met de fiets, waarin met de eBike langzaam kan worden gelopen.

U kunt met de eBike altijd ook zonder ondersteuning net als met een normale fiets rijden, als u het eBike-systeem uitschakelt of het ondersteuningsniveau op „OFF” instelt. Hetzelfde geldt als de accu leeg is.

Samenspel van eBike-systeem en versnellingen

Ook met de eBike-aandrijving kunt u de versnellingen net als bij een normale fiets gebruiken (zie daarvoor de gebruiksaanwijzing van uw eBike).

Onafhankelijk van de aard van de versnelling is het raadzaam om tijdens het schakelen het trappen kort te onderbreken. Daardoor wordt het schakelen vergemakkelijkt en de slijtage van de aandrijflijn beperkt.

Door de keuze van de juiste versnelling kunt u bij gelijke krachtsinspanning de snelheid en het bereik vergroten.

Eerste ervaringen opdoen

Geadviseerd wordt om de eerste ervaringen met de eBike op te doen op een weg zonder druk verkeer.

Probeer verschillende ondersteuningsniveaus uit. Zodra u zich zeker voelt, kunt u met de eBike net als met elke andere fiets aan het verkeer deelnemen.

Test het bereik van uw eBike onder verschillende omstandigheden voordat u een langere tocht plant die meer van u eist.

Invloeden op het bereik

Het bereik wordt door vele factoren beïnvloed, zoals:

- ondersteuningsniveau,
- schakelgedrag,
- bandentype en bandendruk,
- ouderdom en onderhoudstoestand van de accu,
- profiel (hellingen) en aard (wegverharding) van de route,
- tegenwind en omgevingstemperatuur,
- gewicht van eBike, fietser en bagage.

Daarom is een concrete voorspelling van het bereik voor het begin van een tocht niet mogelijk. In het algemeen geldt echter:

- Bij **gelijk** motorvermogen van eBike-aandrijving: hoe minder kracht u hoeft te benutten om een bepaalde snelheid te bereiken (bijv. door optimaal gebruik van de versnellingen), des te minder energie de eBike-aandrijving zal verbruiken en des te groter het bereik van een acculading zal zijn.
- Hoe **hoger** het ondersteuningsniveau bij verder gelijke omstandigheden wordt gekozen, des te geringer het bereik.

Vorzorging en onderhoud van de eBike

Houd rekening met de bedrijfs- en bewaartemperaturen van de componenten van de eBike. Bescherm aandrijfleenheid, bedieningscomputer en accu tegen extreme temperaturen (bijv. bij fel zonlicht zonder voldoende ventilatie). De componenten (in het bijzonder de accu) kunnen door extreme temperaturen beschadigd worden.

Onderhoud en service

Onderhoud en reiniging

Houd alle componenten van de eBike schoon, in het bijzonder de contacten van de accu en de bijbehorende houder. Reinig deze voorzichtig met een zachte, vochtige doek.

Geen van de componenten, ook de aandrijfeenheid niet, mogen in water worden ondergedompeld of met een hogedrukreiniger worden gereinigd.

Neem voor service of reparaties aan de eBike contact op met een erkende rijwielhandel.

Klantenservice en advies

Neem bij alle vragen over het eBike-systeem en zijn componenten contact op met een erkende rijwielhandel.

Contactgegevens van de erkende rijwielhandel vindt u op de internetpagina www.bosch-ebike.com

Vervoer

Voor de accu's gelden de eisen ten aanzien van gevaarlijke stoffen. De accu's kunnen door particuliere gebruikers zonder verdere voorwaarden over de weg worden vervoerd.

Bij vervoer door zakelijke gebruikers of bij vervoer door derden (bijv. luchtvervoer of vervoersbedrijf) moeten bijzondere eisen ten aanzien van verpakking en markering in acht worden genomen (bijv. ADR-voorschriften). Indien gewenst kan bij de voorbereiding van de verzending een deskundige voor gevaarlijke stoffen worden geraadpleegd.

Verzend de accu's alleen als de behuizing onbeschadigd is. Plak blootliggende contacten af en verpak de accu zodanig dat deze niet in de verpakking beweegt. Neem ook eventuele overige nationale voorschriften in acht.

Neem bij alle vragen over het vervoer van de accu's contact op met een erkende rijwielhandel. Bij de rijwielhandel kunt u ook een geschikte transportverpakking bestellen.

Afvalverwijdering



Aandrijfeenheid, bedieningscomputer incl. bedieningsseenheid, accu, snelheidssensor, toebehoren en verpakkingen moeten op een voor het milieu verantwoorde wijze worden gerecycled.

Gooi een eBike of componenten daarvan niet bij het huisvuil!

Alleen voor landen van de EU:



Volgens de Europese richtlijn 2002/96/EG moeten niet meer bruikbare elektrische apparaten en volgens de Europese richtlijn 2006/66/EG moeten defecte of lege accu's en batterijen apart worden ingezameld en op een voor het milieu verantwoorde wijze worden gerecycled.

De in de bedieningscomputer geïntegreerde accu mag alleen worden verwijderd als deze moet worden afgevoerd. Door het openen van de behuizing kan de bedieningscomputer onherstelbaar beschadigd worden.

Geef niet meer te gebruiken accu's en bedieningscomputers af bij een erkende rijwielhandel.



Li-ion:

Lees de aanwijzingen in het gedeelte „Vervoer”, pagina Nederlands – 7 en neem deze in acht.

Wijzigingen voorbehouden.

Lithiumionaccu PowerPack

Veiligheidsvoorschriften



Lees alle veiligheidsvoorschriften en aanwijzingen.

Als de veiligheidsvoorschriften en aanwijzingen niet in acht worden genomen, kan dit

een elektrische schok, brand en/of ernstig letsel tot gevolg hebben.

Bewaar alle veiligheidsvoorschriften en aanwijzingen voor toekomstig gebruik.

Het in deze gebruiksaanwijzing gebruikte begrip „accu” heeft zowel betrekking op standaardaccu's (accu's bevestigd aan het fietsframe) als op bagagedrageraccu's (accu bevestigd in de bagagedrager) tenzij het type uitdrukkelijk genoemd wordt.

- ▶ **Neem de accu uit de eBike voordat u begint met werkzaamheden (zoals montage, onderhoud, enz.) aan de eBike, voordat u deze per auto of vliegtuig vervoert en voordat u deze opbergt.** Bij per ongeluk bedienen van de aan/uit-schakelaar bestaat verwondingsgevaar.
- ▶ **Open de accu niet.** Er bestaat gevaar voor kortsluiting. Als de accu geopend wordt, vervalt elke aanspraak op garantie.



Bescherm de accu tegen hitte (bijv. ook tegen langdurig fel zonlicht), vuur en onderdompeling in water. Er bestaat explosiegevaar.

- ▶ **Voorkom aanraking van de niet-gebruikte accu met paperclips, munten, sleutels, spijkers, schroeven en andere kleine metalen voorwerpen die overbrugging van de contacten kunnen veroorzaken.** Kortsluiting tussen de accucontacten kan brandwonden of brand tot gevolg hebben. Bij in dit verband ontstane schade door kortsluiting vervalt elke aanspraak op garantie door Bosch.
- ▶ **Bij verkeerd gebruik kan vloeistof uit de accu lekken. Voorkom contact daarmee. Bij onvoorzien contact met water afspoelen. Als de vloeistof in de ogen komt, dient u bovendien een arts te raadplegen.** Gelekte accuvloeistof kan tot huidirritaties en brandwonden leiden.
- ▶ **Bij beschadiging en onjuist gebruik van de accu kunnen er dampen vrijkomen. Zorg voor frisse lucht en raadpleeg bij klachten een arts.** De dampen kunnen de luchtwegen irriteren.
- ▶ **Laad de accu alleen met originele Bosch-oplaadapparaten op.** Bij gebruik van niet-originele Bosch-oplaadapparaten kan brandgevaar niet worden uitgesloten.
- ▶ **Gebruik de accu alleen in combinatie met een eBike met origineel Bosch eBike-aandrijfsysteem.** Alleen zo wordt de accu tegen gevaarlijke overbelasting beschermd.

- ▶ **Gebruik alleen originele Bosch accu's die door de fabrikant voor uw eBike zijn toegestaan.** Het gebruik van andere accu's kan tot letsel en brandgevaar leiden. Bij gebruik van andere accu's wordt door Bosch geen aansprakelijkheid aanvaard en geen garantie geboden.
- ▶ **Lees de veiligheids- en overige voorschriften in de gebruiksaanwijzing van het oplaadapparaat, de gebruiksaanwijzing van aandrijfeenheid en bedieningscomputer en de gebruiksaanwijzing van de eBike en neem deze in acht.**

Product- en vermogensbeschrijving

Afgebeelde componenten (zie pagina 4 – 5)

De componenten zijn genummerd zoals op de pagina's met afbeeldingen.

Alle afbeeldingen van fietsonderdelen behalve de accu's en hun houders zijn schematisch en kunnen afwijken van de onderdelen van uw eBike.

- 19 Houder van bagagedrageraccu
- 20 Bagagedrageraccu
- 21 Bedrijfs- en oplaadindicatie
- 22 Aan/uit-toets
- 23 Sleutel van accuslot
- 24 Accuslot
- 25 Bovenste houder van standaardaccu
- 26 Standaardaccu
- 27 Onderste houder van standaardaccu
- 28 Draagriem
- 29 Oplaadapparaat

Technische gegevens

Lithiumionaccu		PowerPack 300	PowerPack 400
Zaaknummer			
– Standaardaccu zwart		0 275 007 500	0 275 007 503
– Standaardaccu wit		0 275 007 501	0 275 007 504
– Bagagedrageraccu		0 275 007 502	0 275 007 505
Nominale spanning	V=	36	36
Nominale capaciteit	Ah	8,2	11
Energie	Wh	300	400
Bedrijfstemperatuur	°C	– 10 ... + 40	– 10 ... + 40
Bewaartemperatuur	°C	– 10 ... + 60	– 10 ... + 60
Toegestaan oplaadtemperatuurbereik	°C	0 ... + 40	0 ... + 40
Gewicht, ca.	kg	2,5	2,5
Beschermingsklasse		IP 54 (stof- en spatwaterbescherming)	IP 54 (stof- en spatwaterbescherming)

Montage

- **Plaats de accu alleen op een schone ondergrond.** Voor- kom in het bijzonder het vuil worden van de oplaadaansluiting en de contacten, bijv. door zand of aarde.

Accu voor het eerste gebruik controleren

Controleer de accu voordat u deze voor de eerste keer op- laadt of met uw eBike gebruikt.

Druk daarvoor op de aan-uit-toets **22** voor het inschakelen van de accu. Als er geen led van de oplaadindicatie **21** brandt, is de accu mogelijk beschadigd.

Als er minstens een led brandt, maar niet alle leds van de op- laadindicatie **21** branden, dient u de accu voor het eerste ge- bruik volledig op te laden.

- **Laad een beschadigde accu niet op en gebruik deze niet.** Neem contact op met een erkende rijwielhandel.

Accu opladen

- **Gebruik alleen het met uw eBike meegeleverde origi- nele Bosch-oplaadapparaat of een origineel Bosch-op- laadapparaat van hetzelfde type.** Alleen dit oplaadappa- raat is afgestemd op de bij de eBike gebruikte lithiumionaccu.

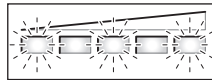
Opmerking: De accu wordt gedeeltelijk opgeladen geleverd. Om de volledige capaciteit van de accu te verkrijgen, laadt u voor het eerste gebruik de accu volledig met het oplaadappa- raat op.

De accu moet voor het opladen uit de eBike worden genomen.

Lees voor het opladen van de accu de gebruiksaanwijzing van het oplaadapparaat en neem de voorschriften in acht.

De accu kan op elk moment worden opgeladen zonder de le- vensduur te verkorten. Een onderbreking van het opladen schaadt de accu niet.

De accu is voorzien van een temperatuurbewaking die ervoor zorgt dat de accu alleen in het temperatuurbereik tussen 0 °C en 40 °C kan worden opgeladen.



Bevindt de accu zich buiten het oplaadtemperatuurbereik, knippen drie leds van de op- laadindicatie **21**. Maak de accu

los van het oplaadapparaat en laat deze op temperatuur komen.

Sluit de accu pas weer aan op het oplaadapparaat als deze de toegestane oplaadtemperatuur heeft bereikt.

Oplaadindicatie

De vijf groene leds van de oplaadindicatie **21** geven de op- laadtoestand van de accu aan als de accu ingeschakeld is.

Daarbij komt elke led overeen met ca. 20 % van de capaciteit. Als de accu volledig is opgeladen, branden alle vijf leds.

De oplaadtoestand van de ingeschakelde accu wordt boven- dien in de bedieningscomputer aangegeven. Lees daarvoor de gebruiksaanwijzing van aandrijfeenheid en bedienings- computer en neem de voorschriften in acht.

Als de capaciteit van de accu daalt beneden 5 %, gaan alle leds van de oplaadindicatie **21** van de accu uit. Er is echter nog een indicatiefunctie van de bedieningscomputer.

Accu inzetten of verwijderen (zie afbeeldingen C – D)

- **Schakel de accu altijd uit als u deze in de houder plaatst of uit de houder neemt.**

Om de accu te kunnen plaatsen, moet de sleutel **23** in het slot **24** steken en het slot moet geopend zijn.

Voor het **plaatsen van de standaardaccu 26** zet u deze met de contacten op de onderste houder **27** van de eBike. Kantel de accu tot deze niet meer verder kan in de bovenste houder **25**.

Voor het **plaatsen van de bagagedrageraccu 20** duwt u deze met de contacten naar voren in de houder **19** in de bagagedrager tot de accu vastklikt.

Controleer of de accu stevig vast zit. Sluit de accu altijd met het slot **24** af. Anders kan het slot opengaan en kan de accu uit de houder vallen.

Trek de sleutel **23** na het afsluiten altijd uit het slot **24**. Daarmee voorkomt u dat de sleutel eruit valt of de accu van een geparkeerde eBike door anderen wordt meegenomen.

Voor het **verwijderen van de standaardaccu 26** schakelt u deze uit en opent u het slot met de sleutel **23**. Kantel de accu uit de bovenste houder **25** en trek deze aan de draagriem **28** uit de onderste houder **27**.

Voor het **verwijderen van de bagagedrageraccu 20** schakelt u deze uit en opent u het slot met de sleutel **23**. Trek de accu uit de houder **19**.

Gebruik

Ingebruikneming

► **Gebruik alleen originele Bosch accu's die door de fabrikant voor uw eBike zijn toegestaan.** Het gebruik van andere accu's kan tot letsel en brandgevaar leiden. Bij gebruik van andere accu's wordt door Bosch geen aansprakelijkheid aanvaard en geen garantie geboden.

In- en uitschakelen

Het inschakelen van de accu is een van de mogelijkheden om het eBike-systeem in te schakelen. Lees daarvoor de gebruiksaanwijzing van aandrijfseenheid en bedieningscomputer en neem de voorschriften in acht.

Controleer voor het inschakelen van de accu of het eBike-systeem dat het slot **24** afgesloten is.

Opmerking: De pedalen van de eBike dienen bij het inschakelen van het eBike-systeem niet belast te zijn. Anders wordt het vermogen van de eBike-aandrijving beperkt.

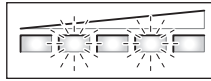
Als u de accu wilt **inschakelen**, drukt u op de aan-uit-toets **22**. De leds van de indicatie **21** gaan branden en geven tegelijkertijd de oplaadtoestand aan.

Opmerking: Als de capaciteit van de accu onder 5 % daalt, brandt er geen led van de oplaadindicatie **21**. Alleen op de bedieningscomputer is herkenbaar of het eBike-systeem is ingeschakeld.

Als u de accu wilt **uitschakelen**, drukt u opnieuw op de aan-uit-toets **22**. De leds van de indicatie **21** gaan uit. Het eBike-systeem wordt daarmee eveneens uitgeschakeld.

Als er ca. 10 minuten geen vermogen van de eBike-aandrijving wordt opgevraagd (bijv. omdat de eBike stilstaat) en er geen toets op de bedieningscomputer of bedieningseenheid van de eBike wordt ingedrukt, worden het eBike-systeem en daardoor ook de accu automatisch uitgeschakeld om energie te besparen.

De accu is door „Electronic Cell Protection (ECP)” beschermd tegen overmatig ontladen, overmatig opladen, oververhitting en kortsluiting. Bij gevaar wordt de accu door een veiligheidschakeling automatisch uitgeschakeld.



Wordt een defect van de accu herkend, knippen twee leds van de oplaadindicatie **21**. Neem in dit geval contact op met een erkende rijwielhandel.

Aanwijzingen voor de optimale omgang met de accu

De levensduur van de accu kan worden verlengd als deze goed wordt behandeld en met name bij de juiste temperatuur wordt bewaard.

Met toenemende ouderdom zal de capaciteit van de accu echter ook bij goede verzorging afnemen.

Een duidelijk kortere gebruiksduur na het opladen geeft aan dat de accu versleten is. U kunt de accu vervangen.

Mocht de draagriem **28** van de standaardaccu defect zijn, dient u deze door een rijwielhandel te laten vervangen.

Accu voor en tijdens het bewaren opladen

Laad de accu op tot ongeveer 60 % (3 tot 4 leds van de oplaadindicatie **21** branden) voordat u deze voor lange tijd opbergt.

Controleer de oplaadtoestand na 6 maanden. Als er nog maar één led van de oplaadindicatie **21** brandt, dient u de accu weer tot ca 60 % op te laden.

Opmerking: Als de accu lange tijd in lege toestand wordt bewaard, kan deze ondanks de geringe zelfontlading worden beschadigd en kan de opslagcapaciteit sterk worden verminderd.

Het is niet aan te raden de accu langdurig aan het oplaadapparaat aangesloten te laten.

Bewaaromstandigheden

Bewaar de accu bij voorkeur op een droge en goed geventileerde plaats. Bescherm deze tegen vocht en water. Bij ongunstige weersomstandigheden is het bijv. aan te raden om de accu van de eBike te nemen en tot het volgende gebruik in een gesloten ruimte te bewaren.

De accu kan bij temperaturen van -10 °C tot +60 °C worden bewaard. Voor een lange levensduur is echter bewaren bij een temperatuur van ca. 20 °C gunstig.

Let erop dat de maximale bewaartemperatuur niet wordt overschreden. Laat de accu bijv. in de zomer niet in de auto liggen en bewaar deze niet in fel zonlicht.

Onderhoud en service

Onderhoud en reiniging

Houd de accu schoon. Reinig deze voorzichtig met een zachte, vochtige doek. De accu mag niet in water worden ondergedompeld of met een waterstraal worden gereinigd.

Als de accu niet meer werkt, dient u contact op te nemen met een erkende rijwielhandel.

Klantenservice en advies

Neem bij alle vragen over het vervoer van de accu's contact op met een erkende rijwielhandel.

► **Noteer fabrikant en nummer van de sleutel 23.** Neem bij verlies van de sleutels contact op met een erkende rijwielhandel. Vermeld daarbij fabrikant en nummers van de sleutels.

Contactgegevens van de erkende rijwielhandel vindt u op de internetpagina www.bosch-ebike.com

Vervoer

Voor de accu's gelden de eisen ten aanzien van gevaarlijke stoffen. De accu's kunnen door particuliere gebruikers zonder verdere voorwaarden over de weg worden vervoerd.

Bij vervoer door zakelijke gebruikers of bij vervoer door derden (bijv. luchtvervoer of vervoersbedrijf) moeten bijzondere eisen ten aanzien van verpakking en markering in acht worden genomen (bijv. ADR-voorschriften). Indien gewenst kan bij de voorbereiding van de verzending een deskundige voor gevaarlijke stoffen worden geraadpleegd.

Verzend de accu's alleen als de behuizing onbeschadigd is. Plak blootliggende contacten af en verpak de accu zodanig dat deze niet in de verpakking beweegt. Neem ook eventuele overige nationale voorschriften in acht.

Neem bij alle vragen over het vervoer van de accu's contact op met een erkende rijwielhandel. Bij de rijwielhandel kunt u ook een geschikte transportverpakking bestellen.

Afvalverwijdering



Accu's, toebehoren en verpakkingen dienen op een voor het milieu verantwoorde manier te worden hergebruikt.

Gooi de accu's niet bij het huisvuil.

Alleen voor landen van de EU:



Volgens de Europese richtlijn 2002/96/EG moeten niet meer bruikbare elektrische apparaten en volgens de Europese richtlijn 2006/66/EG moeten defecte of lege accu's en batterijen apart worden ingezameld en op een voor het milieu verantwoorde wijze worden gerecycled.

Geef niet meer te gebruiken accu's af bij een erkende rijwielhandel.



Li-ion:

Lees de aanwijzingen in het gedeelte „Vervoer”, pagina Nederlands – 11 en neem deze in acht.

Wijzigingen voorbehouden.

Oplaadapparaat Charger

Veiligheidsvoorschriften



Lees alle veiligheidsvoorschriften en aanwijzingen.

Als de veiligheidsvoorschriften en aanwijzingen niet in acht worden genomen, kan dit

een elektrische schok, brand en/of ernstig letsel tot gevolg hebben.

Bewaar alle veiligheidsvoorschriften en aanwijzingen voor toekomstig gebruik.

Het in deze gebruiksaanwijzing gebruikte begrip „accu” heeft zowel betrekking op standaardaccu's (accu's bevestigd aan het fietsframe) als op bagagedrageraccu's (accu bevestigd in de bagagedrager).



Houd het oplaadapparaat uit de buurt van regen en vocht. Bij het binnendringen van water in een oplaadapparaat bestaat het risico van een elektrische schok.

► **Laad alleen voor eBikes toegestane Bosch-lithiumion-accu's op. De accuspanning moet bij de oplaadspanning van het oplaadapparaat passen.** Anders bestaat er brand- en explosiegevaar.

► **Houd het oplaadapparaat schoon.** Door vervuiling bestaat gevaar voor een elektrische schok.

► **Controleer voor elk gebruik oplaadapparaat, kabel en stekker. Gebruik het oplaadapparaat niet als u een beschadiging hebt vastgesteld. Open het oplaadapparaat niet zelf en laat het alleen door gekwalificeerd personeel en alleen met originele vervangingsonderdelen repareren.** Beschadigde oplaadapparaten, kabels en stekkers vergroten het risico van een elektrische schok.

► **Gebruik het oplaadapparaat niet op een gemakkelijk brandbare ondergrond (zoals papier of textiel) of in een brandbare omgeving.** Vanwege de bij het opladen optredende verwarming van het oplaadapparaat bestaat brandgevaar.

► **Bij beschadiging en onjuist gebruik van de accu kunnen er dampen vrijkomen. Zorg voor frisse lucht en raadpleeg bij klachten een arts.** De dampen kunnen de luchtwegen irriteren.

► **Houd toezicht op kinderen.** Daarmee wordt gewaarborgd dat kinderen niet met het oplaadapparaat spelen.

► **Kinderen en personen die op grond van hun fysieke, zintuiglijke of geestelijke vermogens, hun onervarenheid of hun gebrek aan kennis niet in staat zijn het oplaadapparaat veilig te bedienen, mogen dit oplaadapparaat niet zonder toezicht of instructie door een verantwoordelijke persoon gebruiken.** Anders bestaat het gevaar van verkeerde bediening en lichamelijk letsel.

► **Lees de veiligheids- en overige voorschriften in de gebruiksaanwijzing van de accu, de gebruiksaanwijzing van aandrijfleenheid en bedieningscomputer en de gebruiksaanwijzing van de eBike en neem deze in acht.**

► Aan de onderzijde van het oplaadapparaat bevindt zich een kort overzicht van belangrijke veiligheidsvoorschriften in het Engels, Frans en Spaans (in de afbeelding op de pagina met afbeeldingen met nummer **33** aangeduid) met de volgende inhoud:

- Neem voor een veilig gebruik de gebruiksaanwijzing in acht. Risico van een elektrische schok.
- Alleen in droge omgeving gebruiken.
- Laad alleen accu's van het Bosch eBike-System op. Andere accu's kunnen exploderen en letsel veroorzaken.
- Vervang het netsnoer niet. Er bestaat brand- en explosiegevaar.

Product- en vermogensbeschrijving

Afgebeelde componenten (zie pagina 6 – 7)

De componenten zijn genummerd zoals op de afbeelding van het oplaadapparaat op de pagina met afbeeldingen.

- 20 Bagagedrageraccu
- 21 Accu-oplaadindicatie
- 26 Standaardaccu
- 29 Oplaadapparaat
- 30 Apparaataansluiting
- 31 Apparaatstekker
- 32 Ventilatieopeningen
- 33 Veiligheidsvoorschriften oplaadapparaat
- 34 Oplaadstekker
- 35 Contactbus voor oplaadstekker

Technische gegevens

Oplaadapparaat	Charger	
Zaaknummer		0 275 007 905
Nominale spanning	V~	207 – 264
Frequentie	Hz	47 – 63
Oplaadspanning accu	V---	42
Laadstroom	A	4

Toegestaan oplaadtemperatuurbereik °C 0 ... + 40

De gegevens gelden voor nominale spanningen [U] 230 V. Bij afwijkende spanningen en bij per land verschillende uitvoeringen kunnen deze gegevens afwijken.

Oplaadapparaat	Charger	
Oplaadtijd		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Aantal accucellen		10 – 80
Bedrijfstemperatuur	°C	– 10 ... + 75
Bewaartemperatuur	°C	– 20 ... + 70
Gewicht volgens EPTA-Procedure 01/2003	kg	0,8
Beschermingsklasse		IP 40
De gegevens gelden voor nominale spanningen [U] 230 V. Bij afwijkende spanningen en bij per land verschillende uitvoeringen kunnen deze gegevens afwijken.		

Gebruik

► **Plaats de accu alleen op een schone ondergrond.** Voorkom in het bijzonder het vuil worden van de oplaadaansluiting en de contacten, bijv. door zand of aarde.

Ingebruikneming

Oplaadapparaat aansluiten (zie afbeeldingen E – F)

► **Let op de netspanning!** De spanning van de stroombron moet overeenkomen met de gegevens op het typeplaatje van het oplaadapparaat. Met 230 V aangeduide oplaadapparaten kunnen ook met 220 V worden gebruikt.

Steek de apparaatstekker **31** van het netsnoer in de apparaataansluiting **30** op het oplaadapparaat.

Sluit het netsnoer (verschilt per land) op het stroomnet aan.

Schakel de accu uit en verwijder deze uit de houder op de eBike. Lees daarvoor de gebruiksaanwijzing van de accu en neem de voorschriften in acht.

Steek de oplaadstekker **34** van het oplaadapparaat in de aansluiting **35** van de accu.

Opladen

Het opladen begint zodra het oplaadapparaat met de accu en het stroomnet verbonden is.

Opmerking: Het opladen is alleen mogelijk als de temperatuur van de accu binnen het toegestane oplaadtemperatuurbereik ligt.

Tijdens het opladen branden de leds van de oplaadindicatie **21** op de accu. Elke continu brandende led komt overeen met ca. 20 % van de capaciteit van de lading. De knipperende led geeft het opladen van de volgende 20 % aan.

► **Wees voorzichtig als u het oplaadapparaat tijdens het opladen aanraakt. Draag werkhandschoenen.** Het oplaadapparaat kan in het bijzonder bij hoge omgevingstemperaturen zeer heet worden.

Opmerking: Let erop dat het oplaadapparaat tijdens het opladen goed van lucht wordt voorzien en de ventilatieopeningen **32** aan beide zijden niet zijn afgedekt.

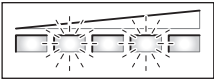
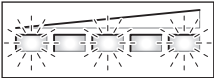
De accu is volledig opgeladen als alle vijf leds van de indicatie **21** continu branden. Het opladen wordt automatisch onderbroken.

Koppel het oplaadapparaat los van het stroomnet en de accu van het oplaadapparaat.

Als de accu van het oplaadapparaat wordt losgekoppeld, wordt de accu automatisch uitgeschakeld.

U kunt de accu nu in de eBike plaatsen.

Oorzaken en oplossingen van fouten

Oorzaak	Oplossing
	Twee leds op de accu knipperen
Accu defect	Contact opnemen met erkende rijwielhandel
	Drie leds op de accu knipperen
Accu te warm of te koud	Accu van oplaadapparaat losmaken en op temperatuur laten komen tot het oplaadtemperatuurbereik wordt bereikt. Sluit de accu pas weer aan op het oplaadapparaat als deze de toegestane oplaadtemperatuur heeft bereikt.
Geen opladen mogelijk (geen indicatie op accu)	
Stekker niet goed ingestoken.	Alle insteekverbindingen controleren
Contacten van accu vuil	Contacten van accu voorzichtig reinigen
Ventilatieopeningen 32 van oplaadapparaat verstopt of afgedekt	Ventilatieopeningen 32 reinigen en oplaadapparaat neerzetten op een plaats met voldoende luchttoevoer
Stopcontact, kabel of oplaadapparaat defect	Netspanning controleren, oplaadapparaat door rijwielhandel laten controleren
Accu defect	Contact opnemen met erkende rijwielhandel

Onderhoud en service

Onderhoud en reiniging

Mocht het oplaadapparaat niet meer werken, neem dan contact op met een erkende rijwielhandel.

Klantenservice en advies

Neem bij alle vragen over het oplaadapparaat contact op met een erkende rijwielhandel.

Contactgegevens van de erkende rijwielhandel vindt u op de internetpagina **www.bosch-ebike.com**

Afvalverwijdering

Oplaadapparaten, toebehoren en verpakkingen moeten op een voor het milieu verantwoorde wijze worden hergebruikt.

Gooi oplaadapparaten niet bij het huisvuil!

Alleen voor landen van de EU:



Volgens de Europese richtlijn 2002/96/EG over elektrische en elektronische oude apparaten en de omzetting van de richtlijn in nationaal recht moeten niet meer bruikbare oplaadapparaten apart worden ingezameld en op een voor het milieu verantwoorde wijze worden hergebruikt.

Wijzigingen voorbehouden.

Drivenhed Drive Unit Cruise/ Cykelcomputer Intuvia

Sikkerhedsinstrukser



Læs alle sikkerhedsinstrukser og anvisninger. Overholdes sikkerhedsinstrukserne og anvisningerne ikke, er der risiko for elektrisk stød, brand og/eller alvorlige kvæstelser.

Opbevar alle sikkerhedsinstrukser og anvisninger til senere brug.

Begrebet „akku“, der anvendes i nærværende brugsanvisning, gælder både for standard-akkuer (akkuer med holder på cykelstel) og bagagebærer-akkuer (akkuer med holder i bagagebærer).

- ▶ **Forsøg ikke selv at åbne drivenheden. Drivenheden er vedligeholdelsesfri og må kun repareres af kvalificeret, specialiseret personale og kun med originale reservedele.** Dermed sikres størst mulig sikkerhed af drivenheden. Åbnes drivenheden uberettiget, bortfalder garantikravet.
- ▶ **Alle komponenter, der er monteret på drivenheden, og alle andre komponenter til eBike-drevet (f. eks. kædeblad, kædebladets holder, pedaler) må kun erstattes af komponenter, der er bygget på samme måde, eller af komponenter, der er godkendt af cykelproducenten specielt til din eBike.** Dermed beskyttes drivenheden mod overbelastning og beskadigelse.
- ▶ **Tag akkuen ud af eBike, før du begynder at arbejde (f. eks. montere, vedligeholde osv.) på eBike, før du transporterer den med bilen eller flyveren eller opbevarer den.** Utilsigtet betjening af start-stop-kontakten er forbundet med kvæstelsesfare.
- ▶ **Funktionen skubbehjælp må udelukkende bruges til at skubbe eBiken.** Har eBikens hjul ikke nogen kontakt med jorden, når skubbehjælpen bruges, kan man komme til skade.
- ▶ **Brug kun originale Bosch akkuer, der er blevet godkendt til din eBike af producenten.** Brug af andre akkuer kan føre til kvæstelser og er forbundet med brandfare. Bosch fraskriver sig ansvaret, og garantien bortfalder, hvis der bruges andre akkuer.
- ▶ **Følg alle nationale forskrifter vedr. registrering/godkendelse og brug af eBikes.**
- ▶ **Læs og følg sikkerhedsinstrukserne og anvisningerne i akkuens brugsanvisning samt i brugsanvisningen til din eBike.**

Beskrivelse af produkt og ydelse

Beregnet anvendelse

Drivenheden er udelukkende beregnet til at trække din eBike og må ikke bruges til andre formål.

eBike er beregnet til gader og veje med fast undergrund. Den er ikke godkendt til konkurrenceformål.

Illustrerede komponenter (se side 2 – 3)

Nummereringen af de illustrerede komponenter refererer til illustrationerne på den grafiske side.

Alle illustrationer af cykeldele undtagen drivenhed, cykelcomputer inkl. betjeningsenhed, hastighedssensor og tilhørende holdere er skematiske og kan afvige fra din eBike.

- 1 Taste indikatorfunktion „i“
- 2 Taste til belysning
- 3 Cykelcomputer
- 4 Holder cykelcomputer
- 5 Tænd-sluk-taste cykelcomputer
- 6 Reset-taste „RESET“
- 7 USB-bøsning
- 8 Beskyttelseskappe til USB-bøsning
- 9 Drivenhed
- 10 Betjeningsenhed
- 11 Taste visefunktion „i“ på betjeningsenheden
- 12 Taste værdi sænkes/bladre nedad „–“
- 13 Taste værdi øges/bladre opad „+“
- 14 Taste skubbehjælp „WALK“
- 15 Fastlåsning cykelcomputer
- 16 Blokeringskrue cykelcomputer
- 17 Hastighedssensor
- 18 Egemagnet for hastighedssensor

Indikatorelementer cykelcomputer

- a Visning motoreffekt
- b Indikator understøtningsniveau
- c Tekstvisning
- d Værdivisning
- e Indikator fartmåler
- f Indikator for akkuens opladningstilstand

Tekniske data

Drivenhed		Drive Unit Cruise
Typenummer		0 275 007 006/ 0 275 007 007
Effekt	W	250
Omdrejningsmoment på udgang maks.	Nm	50
Nominel spænding	V _{DC}	36
Driftstemperatur	°C	-5 ... +40
Opbevaringstemperatur	°C	-10 ... +50
Tæthedegrad		IP 54 (støv- og sprøjte- tevandbeskyttet)
Vægt, ca.	kg	4
Cykelcomputer		Intuvia
Typenummer		1 270 020 903
Ladestrøm USB-tilslutning maks.	mA	500
Ladespænding USB-tilslutning	V	5
Driftstemperatur	°C	-5 ... +40
Opbevaringstemperatur	°C	-10 ... +50
Tæthedegrad		IP 54 (støv- og sprøjte- tevandbeskyttet)
Vægt, ca.	kg	0,15
Belysning*		
Nominel spænding	V _{DC}	6
Effekt		
– forly	W	2,7
– bagly	W	0,3

* afhængigt af de lovmæssige regler og bestemmelser ikke mulig i alle landespecifikke udførelser via eBike-akkuen

Montering

Isætning og udtagning af akkuen

Læs og følg akkuens brugsanvisning mht. hvordan akkuen sættes i og tages ud af eBike.

Isætning og udtagning af cykelcomputeren (se Fig. A)

Cykelcomputeren **3 sættes** i ved at skubbe den ind i holderen forfra **4**.

Cykelcomputeren **3 tages af** ved at trykke på låsen **15** og skubbe den ud af holderen fremad **4**.

► **Fjern altid cykelcomputeren, før eBike stilles fra et sted, så drevet ikke kan bruges af uberettiget tredje-mand.** eBike-systemet kan ikke tændes uden cykelcomputeren.

Det er også muligt at sikre cykelcomputeren i holderen, så den ikke kan tages ud. Demonter hertil holderen **4** fra styret. Anbring cykelcomputeren i holderen. Skru blokeringsskruen **16** nedefra ind i gevindet på holderen. Monter holderen på styret igen.

Kontrol af hastighedssensoren (se Fig. B)

Hastighedssensoren **17** og den tilhørende egemagnet **18** skal være monteret på en sådan måde, at egemagneten bevæger sig forbi hastighedssensoren i en afstand på mindst 5 mm og maks. 17 mm, når hjulet drejer en omdrejning.

Bemærk: Er afstanden mellem hastighedssensor **17** og egemagnet **18** for lille eller for stor, eller er hastighedssensoren **17** ikke tilsluttet rigtigt, fungerer fartmålerindikatoren ikke **e**, og eBike-drevet arbejder i nødkørselsprogrammet. Løsn i dette tilfælde skruen i egemagneten **18** fastgør egemagneten på egen på en sådan måde, at den løber forbi hastighedssensorens markering i den rigtige afstand. Fremkommer der heller ikke herefter nogen hastighed i fartmålerindikatoren **e**, bedes du kontakte en autoriseret cykelforhandler.

Brug

Ibrugtagning

Forudsætninger

eBike-systemet kan kun aktiveres, hvis følgende forudsætninger er opfyldt:

- En tilstrækkeligt opladt akku er sat i (se akkuens brugsanvisning).
- Cykelcomputeren er sat rigtigt ind i holderen (se „Isætning og udtagning af cykelcomputeren“, side Dansk – 2).
- Hastighedssensoren er tilsluttet rigtigt (se „Kontrol af hastighedssensoren“, side Dansk – 2).

eBike-system tændes/slukkes

eBike-systemet **tændes** på følgende måder:

- Er cykelcomputeren allerede tændt, når den sættes ind i holderen, tændes eBike-systemet automatisk.
- Tryk kort en gang på tænd-sluk-tasten **5** på cykelcomputeren, når cykelcomputeren og akkuen er sat i.
- Tryk på akkuens tænd-sluk-tasten, når cykelcomputeren er sat i (se akkuens brugsanvisning).

Bemærk: Pedalerne på eBike må ikke være belastet, når eBike-systemet tændes, da motoreffekten ellers begrænses. I tekstvisningen **c** fremkommer fejlmeldingen „**Release pedal**“ (aflast pedal).

Er eBike-systemet ved et tilfælde blevet tændt med belastede pedaler, skal du slukke for det og så tænde for det igen uden belastning.

Drevet aktiveres, så snart du træder i pedalerne (undtagen i funktionen skubbehjælp, se „Skubbehjælp tændes/slukkes“, side Dansk – 4). Motoreffekten retter sig efter indstillingerne på cykelcomputeren.

Så snart du holder op med at træde i pedalerne i normal funktion, eller så snart du har nået en hastighed på 25 km/h, slukkes understøtningen af drevet på eBike. Drevet aktiveres automatisk igen, så snart du træder på pedalerne, og hastigheden er under 25 km/h.

eBike-systemet **slukkes** på følgende måder:

- Tryk på tænd-sluk-tasten **5** på cykelcomputeren.
- Sluk for akkuen med dens tænd-sluk-taste (se akkuens brugsanvisning.)
- Tag cykelcomputeren ud af holderen.

Påvirkes drevet ikke i ca. 10 min (f. eks. fordi eBike står stille), og der ikke trykkes på nogen taste på cykelcomputer eller betjeningsenhed, slukker eBike-systemet automatisk for at spare på energien.

Visning og indstillinger på cykelcomputeren

Energiforsyning til cykelcomputeren

Sidder cykelcomputeren i holderen **4**, er en tilstrækkeligt ladet akku sat i eBike og er eBike-systemet tændt, forsynes cykelcomputeren med energi via eBikens akku.

Tages cykelcomputeren ud af holderen **4**, sikres energiforsyningen via en intern akku. Er den interne akku svag, når cykelcomputeren tændes, fremkommer „**Attach to bike**“ (forbind med cykel) i tekstvisningen **c** i 3 s. Herefter slukker cykelcomputeren igen.

Den interne akku oplades ved at sætte cykelcomputeren ind i holderen **4** igen (hvis en akku er sat ind i eBiken). Tænd for eBike-akkuen med dens tænd-sluk-taste (se akkuens brugsanvisning).

Du kan også oplade cykelcomputeren via USB-tilslutningen. Åbn hertil beskyttelseskappen **8**. Forbind USB-bøsningen **7** på cykelcomputeren via et passende USB-kabel med et almindeligt USB-ladeaggregat eller USB-tilslutningen på en computer (5 V ladespænding; maks. 500 mA ladestrøm). I tekstvisningen **c** på cykelcomputeren fremkommer „**USB connected**“ (USB forbundet).

Cykelcomputer tændes/slukkes

Cykelcomputeren **tændes** ved at trykke på tænd-sluk-tasten **5**. Cykelcomputeren kan (hvis den interne akku er tilstrækket ladet) også tændes, selv om den ikke sidder i holderen.

Cykelcomputeren **slukkes** ved at trykke på tænd-sluk-tasten **5**. Er cykelcomputeren ikke sat ind i holderen, slukker den automatisk, hvis tasten ikke er blevet trykket ind i 1 min for at spare på energien.

Indikator for akkuens opladningstilstand

Akku-ladetilstandsindikatoren **f** viser ladetilstanden på eBike-akkuen og ikke på cykelcomputerens interne akku. eBike-akkuens ladetilstand kan ligeledes aflæses på LED-lamperne på akkuen.

I indikatoren **f** svarer hver bjælke i akkusymbolet til ca. 20 % kapacitet:



100 % til 80 % kapacitet



20 % til 5 % kapacitet, akkuen bør efterlades.



Mindre end 5 % kapacitet, det er ikke mere muligt at understøtte drevet. Ladetilstandsindikatorens LED-lamper på akkuen slukker.

Hvis eBike-belysningen kører via akkuen (landespecifikt), er der kapacitet til endnu ca. 2 timer belysning, når det tomme akkusymbol fremkommer første gang. Når symbolet begynder at blinke, fungerer belysningen herefter kun i meget kort tid.

Tages cykelcomputeren ud af holderen **4**, gemmes den sidste akku-ladetilstand.

Understøtningsniveau indstilles

På cykelcomputeren kan du indstille, hvor meget eBike-drevet skal understøtte dig, når du træder på pedalerne. Understøtningsniveauet kan ændres til enhver tid, også under kørslen.

Bemærk: I enkelte udførelser er det muligt, at understøtningsniveauet er forindstillet og ikke kan ændres. Det er også muligt, at færre understøtningsniveauer står til rådighed end det er angivet her.

Følgende understøtningsniveauer står maks. til rådighed:

- „**OFF**“: Drevet er slukket, eBike kan bevæges fremad ved at træde på pedalerne lige som på en normal cykel.
- „**ECO**“: Effektiv understøtning ved maks. effektivitet, til maks. rækkevidde
- „**TOUR**“: Jævn understøtning, til ture med stor rækkevidde
- „**SPORT**“: Kraftfuld understøtning, til sporty kørsel på bjergede strækninger samt til bytrafik
- „**TURBO**“: Maks. understøtning indtil høje trædefrekvenser, til sportiv kørsel

Understøtningsniveauet **øges** ved at trykke på tasten „**+**“ **13** på betjeningsenheden igen og igen, til det ønskede understøtningsniveau fremkommer i indikatoren **b**, og **sænkes** ved at trykke på tasten „**-**“ **12**.

Den fremhævede motoreffekt fremkommer i indikatoren **a**. Den maks. motoreffekt afhænger af det valgte understøtningsniveau.

Understøtningsniveau	Motoreffekt*	
	Kædekobling	Navkobling
„ ECO “	30 %	30 %
„ TOUR “	100 %	90 %
„ SPORT “	170 %	150 %
„ TURBO “	250 %	200 %

* Motoreffekten kan afvige ved enkelte udførelser.

Tages cykelcomputeren ud af holderen **4**, gemmes det sidst viste understøtningsniveau, indikatoren **a** til motoreffekten forbliver tom.

Skubbehjælp tændes/slukkes

Skubbehjælpen hjælper dig med at skubbe eBiken. Hastigheden i denne funktion afhænger af det valgte gear og kan komme op på maks. 6 km/timen. Jo lavere det valgte gear er, desto mindre er hastigheden i funktionen skubbehjælp (ved fuld ydelse).

► **Funktionen skubbehjælp må udelukkende bruges til at skubbe eBiken.** Har eBikens hjul ikke nogen kontakt med jorden, når skubbehjælpen bruges, kan man komme til skade.

Skubbehjælpen **tændes** ved at trykke på tasten „**WALK**“ **14** på betjeningsenheden og holde den nede. Drevet på eBiken tændes.

Skubbehjælpen **slukkes**, så snart en af følgende hændelser opstår:

- Du slipper tasten „**WALK**“ **14**,
- Du træder fremad eller hurtigt tilbage på pedalerne,
- eBikens hjul blokeres (f.eks. fordi du bremser eller støder imod en forhindring),
- Hastigheden overskrider 6 km/timen.

Tænding/slukning af belysningen

To belysningsudførelser er mulige afhængigt af de landespecifikke forskrifter:

- Med cykelcomputeren kan forlyst, baglyst og displaybaggrundsbelysning tændes og slukkes.
- I denne udførelse fremkommer „**Lights on**“ (lys tændt), når der tændes for lyset, og „**Lights off**“ (lys slukket), når der slukkes for lyset, i ca. 1 s i tekstindikatoren **c**.
- Kun display-baggrundsbelysningen kan tændes og slukkes, for- og baglyset på eBike er uafhængige af cykelcomputeren.

På begge udførelser trykkes på tasten **2** for at **tænde og slukke for belysningen**.

Hastigheds- og afstandsvisninger

I **farmålerindikatoren e** vises altid den aktuelle hastighed.

I **funktionsindikatoren** (kombination af tekstvisning **c** og værdvisning **d**) kan der vælges mellem følgende funktioner:

- „**Range**“ (**rækkevidde**): Forventet rækkevidde for den eksisterende akkumulering (ved ensblivende betingelser som f.eks. understøtningsniveau, strækingsprofil osv.)
- „**Distance**“ (**strækning**): Afstand, der er tilbagelagt siden sidste reset
- „**Trip time**“ (**køretid**): Køretid siden sidste reset
- „**Avg. Speed**“ (**gennemsnit**): Gennemsnitlig hastighed, der er nået siden sidste reset
- „**Max. Speed**“ (**maks.**): Maksimal hastighed, der er nået siden sidste reset
- „**Clock**“ (**klokkeslæt**): Aktuelt klokkeslæt

Tryk for at **skifte i indikatorfunktionen** på tasten „**i**“ **1** på cykelcomputeren eller på tasten „**i**“ **11** på betjeningsenheden igen og igen, til den ønskede funktion vises.

Til **reset af „Distance“** (strækning), „**Trip time**“ (køretid) og „**Avg. Speed**“ (gennemsnit) skift da til en af disse tre funktioner og tryk så på tasten „**RESET**“ **6**, indtil indikatoren står på nul (0). Dermed er også værdierne for de to andre funktioner nulstillet.

Til **reset af „Max. Speed“** (maksimal) skift da til denne funktion og tryk så på tasten „**RESET**“ **6**, til indikatoren står på nul (0).

Tages cykelcomputeren ud af holderen **4**, er alle funktionernes værdier gemt og kan stadigvæk vises.

Grundindstillinger vises/tilpasses

Indikatorer og ændringer af grundindstillingerne er mulige uafhængigt af, om cykelcomputeren er sat ind i holderend **4** eller ej.

Der springes til menuen Grundindstillinger ved at trykke på tasten „**RESET**“ **6** og tasten „**i**“ **1** samtidigt, til **c** „**Configuration**“ (indstillinger) fremkommer i tekstvisningen.

Tryk for at **skifte mellem grundindstillingerne** på tasten „**i**“ **1** på cykelcomputeren igen og igen, til den ønskede grundindstilling vises. Er cykelcomputeren sat ind i holderen **4**, kan du også trykke på tasten „**i**“ **11** på betjeningsenheden.

Grundindstillingerne ændres (forringe eller blade nedad) ved at trykke på tænd-sluk-tasten **5** ved siden af indikatoren „–“ eller (øge eller blade opad) ved at trykke på tasten belysning **2** ved siden af indikatoren „+“.

Er cykelcomputeren sat ind i holderen **4**, kan ændringen også gennemføres med tasterne „–“ **12** eller „+“ **13** på betjeningsenheden.

Funktionen forlades og en ændret indstilling gemmes ved at trykke på tasten „**RESET**“ **6** i 3 s.

Der kan vælges mellem følgende grundindstillinger:

- „**unit km/mi**“ (**enhed km/mi**): Du kan få vist hastighed og afstand i kilometer eller miles.
- „**time format**“ (**tidsformat**): Du kan få vist klokkeslættet i et 12-timers- eller i 24-timers-format.
- „**clock**“ (**klokkeslæt**): Det aktuelle klokkeslæt kan indstilles. Et længere tryk på indstillingstasterne fremskynder ændringen af klokkeslættet.
- „**English**“ (**engelsk**): Sprog i tekstvisningerne kan ændres. Der kan vælges mellem følgende sprog: tysk, engelsk, fransk, spansk, italiensk og nederlandsk.
- „**odometer**“ (**strækning total**): Visning af den samlede strækning, der er tilbagelagt med eBiken (kan ikke ændres)
- „**power-on hours**“ (**driftstid total**): Visning af den samlede køretid med eBiken (kan ikke ændres)

Visning af fejlkode

eBike-systemets komponenter kontrolleres automatisk hele tiden. Konstateres en fejl, fremkommer den pågældende fejlkode i tekstvisningen c.

Tryk på en vilkårlig taste på cykelcomputeren **3** eller på betjeningsenheden **10** for at vende tilbage til standardvisningen.

Drevet slukkes i givet fald automatisk afhængigt af fejltypen. En viderekørsel uden understøtning er dog til enhver tid mulig. Før yderligere kørsler bør eBike kontrolleres.

► **Lad alt kontrol- og reparationsarbejde udelukkende udføre af en autoriseret cykelforhandler.** Viser en fejl, selv om den er blevet afhjulpet, bedes du ligeledes kontakte en autoriseret cykelforhandler.

Code	Årsag	Afhjælpning
100	Intern fejl på drivenheden	Få drivenheden kontrolleret
101	Forbindelsesproblem for drivenheden	Få tilslutninger og forbindelser kontrolleret
102	Fejl på hastighedssensoren	Få hastighedssensoren kontrolleret
103*	Forbindelsesproblem for belysningen	Få tilslutninger og forbindelser kontrolleret
104	Forbindelsesproblem for cykelcomputeren	Få tilslutninger og forbindelser kontrolleret
105	Drivenhedens temperatur er for høj (over 40 °C)	Lad drivenheden afkøle. En viderekørsel uden eBike-drevet er mulig og fremskynder afkølingen af drivenheden.
200	Intern elektronisk fejl på akkuen	Få akkuen kontrolleret
201	Akkuens temperatur er for høj (over 40 °C)	Lad akkuen afkøle. En viderekørsel uden eBike-drevet er mulig og fremskynder afkølingen af akkuen.
202	Akkuens temperatur er for lav (under -10 °C)	Lad akkuen opvarme langsomt i et varmt rum.
203	Forbindelsesproblem for akkuen	Få tilslutninger og forbindelser kontrolleret
204	Forkert akkupoling	Oplad akkuen med det originale Bosch ladeaggregat som beskrevet i dets brugsanvisning.
410	En eller flere taster på cykelcomputeren er blokeret.	Kontroller, om taster er klemt fast f. eks. på grund af indtrængt snavs. Rengør i givet fald tasterne.
414	Forbindelsesproblem med betjeningsenheden	Få tilslutninger og forbindelser kontrolleret
418	En eller flere taster på betjeningsenheden er blokerede.	Kontroller, om taster er klemt fast f. eks. på grund af indtrængt snavs. Rengør i givet fald tasterne.
422	Forbindelsesproblem for drivenheden	Få tilslutninger og forbindelser kontrolleret
423	Forbindelsesproblem for akkuen	Få tilslutninger og forbindelser kontrolleret
424	Kommunikationsfejl blandt komponenterne	Få tilslutninger og forbindelser kontrolleret
430	Cykelcomputerens interne akku er tom	Oplad cykelcomputeren (i holderen eller via USB-tilslutningen)
490	Intern fejl på betjeningscomputeren	Få cykelcomputeren kontrolleret

* Kun til eBike-belysning via akkuen (landespecifik)

Energiforsyning af eksterne apparater via USB-tilslutning

Ved hjælp af USB-tilslutningen kan de fleste apparater, hvis energiforsyning er mulig via USB (f. eks. diverse mobiltelefoner), drives og oplades.

En opladning forudsætter, at cykelcomputeren og en tilstrækkeligt opladet akku er anbragt i eBike.

Åbn beskyttelseskappen **8** på USB-tilslutningen på cykelcomputeren. Forbind USB-tilslutningen på det eksterne apparat

med USB-bøsningen **7** på cykelcomputeren via et passende USB-kabel.

Henvisninger vedr. kørsel med eBike-systemet

Hvornår arbejder eBike-drevet?

eBike-drevet understøtter dig under kørslen, så længe du træder i pedalerne. Understøtningen fungerer kun, så længe der trædes i pedalerne. Motoreffekten afhænger altid af den kraft, der investeres, når der trædes i pedalerne.

Investerer du lidt kraft, er understøtningen ikke så stor, som hvis du investerer meget kraft. Det gælder uafhængigt af understøtningsniveauet.

eBike-drevet slukker automatisk ved hastigheder over 25 km/h. Underskriver hastigheden 25 km/h, står drevet igen automatisk til rådighed.

En undtagelse gælder for funktionen skubbehjælp, hvor du kan skubbe eBiken uden at træde på pedalerne ved lav hastighed.

Du kan til enhver tid bruge eBike som en almindelig cykel, og så uden understøtning; dette gøres ved at slukke for eBike-systemet eller ved at stille understøtningsniveauet på „OFF“. Det samme gælder, hvis akkuen er tom.

Samspil mellem eBike-systemet og gearet

Også med eBike-drevet bør du bruge gearsystemet som på en normal cykel (læs brugsanvisningen til din eBike).

Uafhængigt af gearsystemets type tilrådes det af afbryde trædningen kort under gearskiftet. Derved gøres det nemmere at skifte gear og drivstrengen slides ikke så hurtigt.

Vælges det rigtige gear, kan du ved ensblivende kraftforbrug øge hastigheden og rækkevidden.

De første erfaringer

Det anbefales at samle de første anbefalinger med eBike på gader og veje med lidt trafik.

Prøv forskellige understøtningsniveauer. Så snart du føler dig sikker, kan du også køre med eBike lige som en almindelig cykel på gader og veje med almindelig trafik.

Test rækkevidden for din eBike under forskellige betingelser, før du planlægger længere og mere krævende ture.

Påvirkninger af rækkevidden

Rækkevidden påvirkes af mange faktorer som f.eks.:

- Understøtningsniveau,
- Gearskifteadfærd,
- Dækkenes og dæktrykkets art,
- Akkuens alder og pasningstilstand,
- Strækingsprofil (stigninger) og -beskaffenhed (kørebansens belægning),
- Modvind og omgivelsestemperatur,
- Vægt for eBike, cyklist og bagage.

Derfor er det ikke muligt at forudsige rækkevidden konkret, før du starter en cykeltur med din eBike. Generelt gælder dog følgende:

- Ved **samme** motoreffekt fra eBike-drevet: Jo mindre kraft du skal bruge for at nå en bestemt hastighed (f.eks. fordi gearsystemet bruges optimalt), jo mindre energi har eBikens drev brug for og jo større er rækkevidden, som en akkuopladning kan klare.
- Jo **højere** understøtningsniveauet vælges ved ellers ens betingelser, desto kortere er rækkevidden.

Omhyggelig pasning af din eBike

Følg drifts- og opbevaringstemperaturerne for eBike-komponenterne. Beskyt drivenhed, cykelcomputer og akku mod ekstreme temperaturer (f.eks. fra intensive solstråler uden samtidig udluftning). Komponenterne (især akkuen) kan blive beskadiget som følge af ekstreme temperaturer.

Vedligeholdelse og service

Vedligeholdelse og rengøring

Hold alle komponenter rene på din eBike, især kontakterne til akku og tilhørende holder. Rengør den forsigtigt med en fugtig, blød klud.

Alle komponenter inkl. drivenhed må hverken dyppes i vand eller rengøres med en højtryksrensler.

Til service eller reparation af eBike bedes du kontakte en autoriseret cykelforhandler.

Kundeservice og kunderådgivning

Ved alle spørgsmål vedr. eBike-systemet og dets komponenter bedes du kontakte en autoriseret cykelforhandler.

Kontaktdata for autoriserede cykelforhandlere findes på internetsiden www.bosch-ebike.com

Transport

Akkuerne skal overholde kravene i retten om farligt gods. Akkuerne kan transporteres af den private bruger på gader og veje uden yderligere pålæg.

Transporteres de af erhvervsmæssige brugere eller af tredjemand (f.eks. lufttransport eller spedition), skal særlige krav til emballage og mærkning overholdes (f.eks. forskrifter fra ADR). Her skal man efter behov kontakte en faregodsekspert, før forsendelsesstykket forberedes.

Send kun akkuerne, hvis huset er ubeskadiget. Tilklæb åbne kontakter og indpak akkuen på en sådan måde, at den ikke kan bevæge sig i emballagen. Følg også eventuelle yderligere nationale forskrifter.

Spørgsmål vedr. transport af akkuerne bedes stillet til en autoriseret cykelforhandler. Hos forhandleren kan du også bestille en egnet transportemballage.

Bortskaffelse



Drivenhed, cykelcomputer inkl. betjeningsenhed, akku, hastighedssensor, tilbehør og emballage skal genbruges på en miljøvenlig måde.

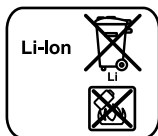
Smid ikke eBikes og deres komponenter ud sammen med det almindelige husholdningsaffald!

Gælder kun i EU-lande:

Iht. det europæiske direktiv 2002/96/EF skal kasseret elektrværktøj og iht. det europæiske direktiv 2006/66/EF skal defekte eller opbrugte akkuer/batterier indsamles separat og genbruges iht. gældende miljøforskrifter.

Akkuen, der er integreret i cykelcomputeren, må kun tages ud, når den skal bortskaffes. Cykelcomputeren kan blive ødelagt, hvis husets skal åbnes.

Aflever gamle akkuer og cykelcomputere til en autoriseret cykelforhandler.

**Li-ion:**

Læs og overhold henvisningerne i afsnit „Transport“, side Dansk – 6.

Ret til ændringer forbeholdes.

Li-ion-akku PowerPack

Sikkerhedsinstrukser



Læs alle sikkerhedsinstrukser og anvisninger. Overholdes sikkerhedsinstrukserne og anvisningerne ikke, er der risiko for elektrisk stød, brand og/eller alvorlige kvæstelser.

Opbevar alle sikkerhedsinstrukser og anvisninger til senere brug.

Begrebet „akku“, der anvendes i nærværende brugsanvisning, gælder både for standard-akkuer (akkuer med holder på cykelstel) og bagagebærer-akkuer (akkuer med holder i bagagebærer), medmindre der refereres udtrykkeligt til konstruktionen.

- ▶ **Tag akkuen ud af eBike, før du begynder at arbejde (f. eks. montere, vedligeholde osv.) på eBike, før du transporterer den med bilen eller flyveren eller opbevarer den.** Utilsigtet betjening af start-stop-kontakten er forbundet med kvæstelsesfare.
- ▶ **Åbn ikke akkuen.** Fare for kortslutning. Garantien bortfalder, hvis akkuen åbnes.



Beskyt akkuen mod varme (f. eks. også mod varme solstråler), brand og dypning i vand. Fare for eksplosion.

- ▶ **Ikke benyttede akkuer må ikke komme i berøring med kontorclips, mønter, nøgler, søm, skruer eller andre små metalgenstande, da disse kan kortslutte kontakterne.** En kortslutning mellem akku-kontakterne øger risikoen for kvæstelser i form af forbrændinger eller brand. Opstår der i denne sammenhæng kortslutningsskader, bortfalder ethvert garantikrav over for Bosch.
- ▶ **Hvis akkuen anvendes forkert, kan der slippe væske ud af akkuen. Undgå at komme i kontakt med denne væske. Hvis det alligevel skulle ske, skylles med vand. Søg læge, hvis væsken kommer i øjnene.** Udstrømmende akku-væske kan give hudirritation eller forbrændinger.
- ▶ **Beskadiges akkuen eller bruges den forkert, kan der sive dampe ud. Tilfør frisk luft og søg læge, hvis du føler dig utilpas.** Dampene kan irritere luftvejene.
- ▶ **Lad kun akkuen med originale ladeaggregater fra Bosch.** Bruges ikke originale Bosch ladeaggregater, kan fare for brand ikke udelukkes.
- ▶ **Brug kun akkuen i forbindelse med eBikes med originalt Bosch eBike-drivsystem.** Kun på denne måde beskyttes akkuen mod farlig overbelastning.

- ▶ **Brug kun originale Bosch akkuer, der er blevet godkendt til din eBike af producenten.** Brug af andre akkuer kan føre til kvæstelser og er forbundet med brandfare. Bosch fraskriver sig ansvaret, og garantien bortfalder, hvis der bruges andre akkuer.
- ▶ **Læs og følg sikkerhedsinstrukserne og anvisningerne i brugsanvisningerne til ladeaggregat og drivenhed/cykelcomputer samt i brugsanvisningen til din eBike.**

Beskrivelse af produkt og ydelse

Illustrerede komponenter (se side 4 – 5)

Nummereringen af de illustrerede komponenter refererer til illustrationerne på de grafiske side. Alle illustrationer af cykeldele undtagen akkuerne og de tilhørende holdere er skematiske og kan afvige fra din eBike.

- 19 Holder til bagagebærer-akku
- 20 Bagagebærer-akku
- 21 Drifts- og ladetilstandsvisning
- 22 Start-stop-tasten
- 23 Nøgle til akku-lås
- 24 Akku-lås
- 25 Øverste holder til standard-akku
- 26 Standard-akku
- 27 Nederste holder til standard-akku
- 28 Bærerem
- 29 Ladeaggregat

Tekniske data

Li-ion-akku		PowerPack 300	PowerPack 400
Typenummer			
– Standard-akku sort		0 275 007 500	0 275 007 503
– Standard-akku hvid		0 275 007 501	0 275 007 504
– Bagagebærer-akku		0 275 007 502	0 275 007 505
Nominel spænding	V=	36	36
Nominel kapacitet	Ah	8,2	11
Energi	Wh	300	400
Driftstemperatur	°C	–10... +40	–10... +40
Opbevaringstemperatur	°C	–10... +60	–10... +60
Tilladt temperaturområde for opladning	°C	0... +40	0... +40
Vægt, ca.	kg	2,5	2,5
Tæthedegrad		IP 54 (støv- og sprøjtevandsbeskyttet)	IP 54 (støv- og sprøjtevandsbeskyttet)

Montering

► **Stil kun akkuen på rene overflader.** Undgå især en tilsmudsning af ladebøsningen og kontakterne (f.eks. fra sand eller jord).

Kontrol af akku før første brug

Kontroller akkuen, før den oplades første gang eller før du bruger den sammen med din eBike.

Tryk hertil på tænd-sluk-tasten **22** for at tænde for akkuen. Lyser der ikke nogen LED-lampe i ladetilstandsindikatoren **21**, er akkuen evt. beskadiget.

Lyser mindst en LED-lampe, men ikke alle LED-lamper i ladetilstandsindikatoren **21**, oplades akkuen helt, før den tages i brug første gang.

► **Oplad ikke en beskadiget akku og tag den ikke i brug.**
Kontakt en autoriseret cykelforhandler.

Akku lades

► **Brug kun det originale ladeaggregat fra Bosch, der følger med din eBike, eller et ladeaggregat, der er bygget på samme måde.** Kun dette ladeaggregat er afstemt i forhold til den Li-ion-akku, der bruges på din eBike.

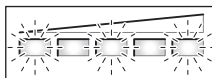
Bemærk: Akkuen er til dels opladet ved udleveringen. For at sikre at akkuen fungerer 100 %, oplades den fuldstændigt i ladeaggregatet, før den tages i brug første gang.

Akkuen skal tages ud af eBiken for at blive opladt.

Læs og følg ladeaggregatets brugsanvisning vedr. opladning af akkuen.

Akkuen kan oplades til enhver tid, uden at levetiden forkortes. En afbrydelse af opladningen beskadiger ikke akkuen.

Akkuen er udstyret med en temperaturovervågning, som kun tillader en opladning i et temperaturområde mellem 0 °C og 40 °C.



Findes akkuen uden for ladetempurområdet, blinker tre LED-lamper på ladetilstandsindikatoren **21**. Afbryd akkuen

fra ladeaggregatet og lad den temperere.

Tilslut først akkuen til ladeaggregatet, når den har nået den tilføjede ladetemperatur.

Ladetilstandsindikator

De fem grønne LED-lamper i ladetilstandsindikatoren **21** viser akkuens ladetilstand, når akkuen er tændt.

Hver LED-lampe svarer til ca. 20 % af kapaciteten. Når akkuen er helt opladt, lyser alle fem LED-lamper.

Ladetilstanden for den tændte akku vises desuden i cykelcomputeren. Læs og følg hertil brugsanvisningen for driftenheden og cykelcomputeren.

Er akkuens kapacitet under 5 %, slukker alle LED-lamper i ladetilstandsindikatoren **21** på akkuen, dog er der endnu en indikatorfunktion i cykelcomputeren.

Isætning og udtagning af akkuen (se Fig. C – D)

► **Sluk altid for akkuen, før du sætter den ind i holderen eller tager den ud af holderen.**

For at akkuen kan sættes i, skal nøglen **23** sidde i låsen **24**, og låsen være låst op.

Til **isætning af standard-akkuen 26** sættes dens kontakter på den nederste holder **27** på eBiken. Vip den helt ind i den øverste holderen **25**.

Til **isætning af bagagebærer-akkuen 20** skubbes dens kontakter frem, til den falder i hak i holderen **19** i bagagebæreren. Kontroller, at akkuen sidder fast. Aflås altid akkuen med låsen **24**, da låsen ellers kan åbne, og akkuen kan falde ud af holderen.

Fjern altid nøglen **23** fra låsen **24** efter aflåsningen. Dermed forhindrer du, at nøglen falder ud, og at akkuen fjernes af en uberettiget tredjemand, når eBiken stilles fra.

Til **udtagning af standard-akkuen 26** slukkes den, og låsen åbnes med nøglen **23**. Vip akkuen ud af den øverste holder **25** og træk den vha. bæreremmen **28** ud af den nederste holder **27**.

Til **udtagning af bagagebærer-akkuen 20** slukkes den, og låsen åbnes med nøglen **23**. Træk akkuen ud af holderen **19**.

Brug

Ibrugtagning

► **Brug kun originale Bosch akkuer, der er blevet godkendt til din eBike af producenten.** Brug af andre akkuer kan føre til kvæstelser og er forbundet med brandfare. Bosch fraskriver sig ansvar, og garantien bortfalder, hvis der bruges andre akkuer.

Tænd/sluk

eBike-systemet kan bl.a. tændes ved at tænde for akkuen. Læs og følg hertil brugsanvisningen for drivenheden og cykelcomputeren.

Kontroller for akkuen eller eBike-systemet tændes, at låsen **24** er aflåst.

Bemærk: Pedalerne på eBike må ikke være belastet, når eBike-systemet tændes, da eBike-drevets ydelse ellers begrænses.

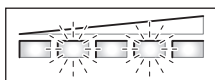
Akkuen **tændes** ved at trykke på tænd-sluk-tasten **22**. LED-lamperne i indikatoren **21** lyser og viser samtidigt ladetilstanden.

Bemærk: Ligger akkuens kapacitet under 5 %, lyser ingen LED-lampe i ladetilstandsindikatoren på akkuen **21**. Kun på cykelcomputeren kan det ses, om eBike-systemet er tændt.

Akkuen **slukkes** ved at trykke på tænd-sluk-tasten **22** en gang til. LED-lamperne i indikatoren **21** slukker. eBike-systemet slukkes dermed ligeledes.

Påvirkes eBike-drevet ikke i ca. 10 min (f.eks. fordi eBike står stille), og trykkes der ikke på nogen tase på eBikens cykelcomputer eller betjeningsenhed, slukker eBike-systemet og dermed også akkuen automatisk for at spare på energien.

Akkuen er beskyttet mod afladning, overladning, overophedning og kortslutning vha. „Electronic Cell Protection (ECP)“. I tilfælde af fare slukker akkuen automatisk vha. en beskyttelseskobling.



Registreres en defekt på akkuen, blinker to LED-lamper på ladetilstandsindikatoren **21**. Kontakt i dette tilfælde en autoriseret forhandler.

Henvisninger til optimal håndtering af akkuen

Akkuens levetid kan forlænges, hvis den passes godt, og især hvis den opbevares ved de rigtige temperaturer.

Akkuens kapacitet forringes, jo ældre den bliver, også selv om den plejes godt.

Når driftstiden efter opladningen forkortes væsentligt, er det tegn på, at akkuen er slidt op. Du kan erstatte akkuen.

Skulle bæreremmen **28** til standard-akkuen være defekt, skal den udskiftes af en cykelforhandler.

Akkue efterlades før og under opbevaringen

Oplad akkuen til ca. 60 % (3 til 4 LED-lamper i ladetilstandsindikatoren **21** lyser), før den tages ud af brug i længere tid.

Kontroller ladetilstanden efter 6 måneder. Lyser kun en LED-lampe i ladetilstandsindikatoren **21**, oplades akkuen igen til ca. 60 %.

Bemærk: Opbevares akkuen i tom tilstand i længere tid, kan den blive beskadiget på trods af den lille selvafledning, og lagerkapaciteten forringes betydeligt.

Det kan ikke anbefales at lade akkuen være tilsluttet varigt til ladeaggregatet.

Opbevaringsbetingelser

Opbevar helst akkuen et tørt og godt ventileret sted. Beskyt den mod fugtighed og vand. Ved ugunstige vejrforhold kan det f.eks. anbefales at fjerne akkuen fra eBiken og opbevare den i lukkede rum, indtil den tages i brug igen.

Akkuen kan opbevares ved temperaturer fra -10°C til $+60^{\circ}\text{C}$. Til en længere levetid skal de helst opbevares ved en stuetemperatur på ca. 20°C .

Sørg for, at den maksimale opbevaringstemperatur ikke overskrides. Sørg for, at akkuen f.eks. om sommeren ikke opbevares i bilen, og opbevar den sådan, at den ikke udsættes for direkte solstråler.

Vedligeholdelse og service

Vedligeholdelse og rengøring

Renhold akkuen. Rengør den forsigtigt med en fugtig, blød klud. Akkuen må hverken dyppes i vand eller rengøres med en vandstråle.

Fungerer akkuen ikke mere, bedes du kontakte en autoriseret cykelforhandler.

Kundeservice og kunderådgivning

Spørgsmål vedr. akkuer bedes stillet til en autoriseret cykelforhandler.

► **Noter producent og nummer på nøglen 23.** Hvis nøglen tabes, bedes du henvende dig til en autoriseret cykelforhandler. Husk at angive nøgleproducent og nøglenummer.

Kontaktdata for autoriserede cykelforhandlere findes på internetsiden www.bosch-ebike.com

Transport


Akkuerne skal overholde kravene i retten om farligt gods. Akkuerne kan transporteres af den private bruger på gader og veje uden yderligere pålæg.

Transporteres de af erhvervmæssige brugere eller af tredje-mand (f.eks. lufttransport eller spedition), skal særlige krav til emballage og mærkning overholdes (f.eks. forskrifter fra ADR). Her skal man efter behov kontakte en faregodseksper, før forsendelsesstykket forberedes.

Send kun akkuerne, hvis huset er ubeskadiget. Tilkøb åbne kontakter og indpak akkuen på en sådan måde, at den ikke kan bevæge sig i emballagen. Følg også eventuelle yderligere nationale forskrifter.

Spørgsmål vedr. transport af akkuerne bedes stillet til en autoriseret cykelforhandler. Hos forhandleren kan du også bestille en egnet transportemballage.

Bortskaffelse

 Akku, tilbehør og emballage skal genbruges på en miljøvenlig måde.

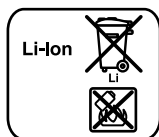
Smid ikke akkuen ud sammen med det almindelige husholdningsaffald!

Gælder kun i EU-lande:



Iht. det europæiske direktiv 2002/96/EF skal kasseret elektrværktøj og iht. det europæiske direktiv 2006/66/EF skal defekte eller opbrugte akkuer/batterier indsamles separat og genbruges iht. gældende miljøforskrifter.

Aflever gamle akkuer til en autoriseret cykelforhandler.



Li-Ion:

Læs og overhold henvisningerne i afsnit „Transport“, side Dansk - 11.

Ret til ændringer forbeholdes.

Ladeaggregat Charger


Sikkerhedsinstrukser



Læs alle sikkerhedsinstrukser og anvisninger. Overholdes sikkerhedsinstrukserne og anvisningerne ikke, er der risiko for elektrisk stød, brand og/eller alvorlige kvæstelser.

Opbevar alle sikkerhedsinstrukser og anvisninger til senere brug.

Begrebet „akku“, der anvendes i nærværende brugsanvisning, gælder både for standard-akkuer (akkuer med holder på cykelstel) og bagagebærer-akkuer (akkuer med holder i bagagebærer).

 **Ladeaggregatet må ikke udsættes for regn eller fugtighed.** Indtrængning af vand i et ladeaggregat er forbundet med risiko for elektrisk stød.

► **Lad kun Bosch li-ion-akkuer, der er godkendt til eBikes. Akkuspændingen skal passe til ladeaggregatets akkueladespænding.** Ellers er der fare for brand og eksplosion.

► **Renhold ladeaggregatet.** Snavs øger faren for elektrisk stød.

► **Kontrollér ladeaggregat, kabel og stik før brug. Anvend ikke ladeaggregatet, hvis det er beskadiget. Forsøg ikke at åbne ladeaggregatet og sørg for at det repareres af kvalificerede fagfolk, og at der kun benyttes originale reservedele.** Beskadigede ladeaggregater, kabler og stik øger risikoen for elektrisk stød.

► **Anvend ikke ladeaggregatet på let brændbar undergrund (f. eks. papir, tekstiler osv.) eller i brændbare omgivelser.** Pas på! Ladeaggregatet bliver varmt under opladningen. Brandfare!

► **Beskadiges akkuen eller bruges den forkert, kan der sive dampe ud. Tilfør frisk luft og søg læge, hvis du føler dig utilpas.** Dampene kan irritere luftvejene.

► **Sørg for, at børn er under opsyn.** Dermed sikres det, at børn ikke leger med ladeaggregatet.

► **Børn og personer, der på grund af deres fysiske, sensoriske eller psykiske evner eller uerfarenhed eller ukendskab ikke er i stand til at betjene ladeaggregatet, må ikke bruge dette ladeaggregat uden opsyn eller instruktion fra en ansvarlig person.** Ellers er der fare for fejlbetjening og kvæstelser.

► **Læs og følg sikkerhedsinstrukserne og anvisningerne i brugsanvisningerne til akku og drivenhed/cykelcomputer samt i brugsanvisningen til din eBike.**

► På undersiden af ladeaggregatet findes en kort vejledning om vigtige sikkerhedsinstrukser på engelsk, fransk og

spansk (i illustrationen på grafiksiden er den kendetegnet med nummer **33**) og med følgende indhold:

- Følg brugsanvisningen for at sikre en rigtig brug. Risiko for elektrisk chock.
- Må kun bruges i tørre omgivelser.
- Lad kun akkuer, der er beregnet til Bosch eBike-systemet. Andre akkuer kan eksplodere og føre til kvæstelser.
- Erstat ikke netkablet. Fare for brand og eksplosion.

Beskrivelse af produkt og ydelse

Illustrerede komponenter (se side 6 – 7)

Nummereringen af de illustrerede komponenter refererer til illustrationen af ladeaggregatet på illustrationssiden.

- 20** Bagagebærer-akku
- 21** Akku-ladetilstandsindikator
- 26** Standard-akku
- 29** Ladeaggregat
- 30** Bøsning
- 31** Stik
- 32** Ventilationsåbninger
- 33** Sikkerhedsforskrifter ladeaggregat
- 34** Ladestik
- 35** Bøsning til ladestik

Tekniske data

Ladeaggregat	Charger	
Typenummer		0 275 007 905
Nominal spænding	V~	207 – 264
Frekvens	Hz	47 – 63
Akkueladespænding	V $\overline{\text{---}}$	42
Ladestrøm	A	4
Tilladt temperaturområde for opladning	°C	0 ... +40
Ladetid		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Antal akkuceller		10 – 80
Driftstemperatur	°C	–10 ... +75
Opbevaringstemperatur	°C	–20 ... +70
Vægt svarer til EPTA-Procedure 01/2003	kg	0,8
Tæthedegrad		IP 40
Angivelserne gælder for en nominal spænding [U] på 230 V. Disse angivelser kan variere ved afvigende spændinger og i landespecifikke udførelser.		

Brug

► **Stil kun akkuen på rene overflader.** Undgå især en tilsmudsning af ladebøsningen og kontakterne (f.eks. fra sand eller jord).

Ibrugtagning

Tilslutning af ladeaggregatet (se Fig. E - F)

► **Kontrollér netspændingen!** Strømkildens spænding skal stemme overens med angivelserne på ladeaggregatets typeskilt. Ladeaggregater til 230 V kan også tilsluttes 220 V.

Sæt netkablets stik **31** ind i bøsningen **30** på ladeaggregatet.

Tilslut netkablet (landespecifikt) til strømnettet.

Sluk for akkuen og tag den ud af holderen på eBiken. Læs og overhold akkuens brugsanvisning.

Sæt ladeaggregatets ladestik **34** i bøsningen **35** på akkuen.

Opladning

Opladningen starter, så snart ladeaggregatet er forbundet med akkuen og strømnettet.

Bemærk: Opladningen er kun mulig, hvis akkuens temperatur befinder sig i det tilladte ladetemperaturområde.

Under opladningen lyser LED-lamperne i ladetilstandsindikatoren **21** på akkuen. Hver konstant lysende LED-lampe svarer ca. til 20 % kapacitet opladning. Den blinkende LED-lampe viser opladningen af de næste 20 %.

► **Vær forsigtig, hvis du berører ladeaggregatet under opladningen. Brug beskyttelseshandsker.** Ladeaggregatet kan blive meget varmt især ved høje omgivelsestemperaturer.

Bemærk: Vær opmærksom på, at ladeaggregatet er godt ventileret under opladningen og at ventilationsåbningerne **32** ikke er tildækket på begge sider.

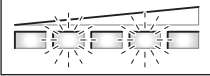
Akkuen er helt opladt, når alle fem LED-lamper i indikatoren **21** lyser hele tiden. Opladningen afbrydes automatisk.

Afbryd ladeaggregatet fra strømnettet og akkuen fra ladeaggregatet.

Når akkuen afbrydes fra ladeaggregatet, slukkes akkuen automatisk.

Nu kan du sætte akkuen ind i eBiken.

Fejl - Årsager og afhjælpning

Årsag	Afhjælpning
	To LED-lamper blinker på akkuen
Akkue defekt	Kontakt en autoriseret cykelforhandler

Årsag	Afhjælpning
	Tre LED-lamper blinker på akkuen
Akkue for varm eller for kold	Afbryd akkuen fra ladeaggregatet og lad den afkøle, til ladetemperaturområdet er nået Tilslut først akkuen til ladeaggregatet, når den har nået den tilladte ladetemperatur.
Opladning er ikke mulig (ingen visning på akkuen)	
Stik er ikke sat rigtigt i	Kontroller alle stikforbindelser
Kontakter er snavsede på akku	Rengør forsigtigt kontakter på akku
Ladeaggregatets ventilationsåbninger 32 er tilstoppet eller tildækket	Rengør ventilationsåbninger 32 og opstil ladeaggregat godt ventileret
Stikdåse, kabel eller ladeaggregat er defekt	Kontroller netspænding, få ladeaggregat kontrolleret af cykelforhandler
Akkue defekt	Kontakt en autoriseret cykelforhandler

Vedligeholdelse og service

Vedligeholdelse og rengøring

Skulle ladeaggregatet svigte, bedes du kontakte en autoriseret cykelforhandler.

Kundeservice og kundefrådgivning

Spørgsmål vedr. ladeaggregatet bedes stillet til en autoriseret cykelforhandler.

Kontaktdata for autoriserede cykelforhandlere findes på internetsiden www.bosch-ebike.com

Bortskaffelse

Ladeaggregater, tilbehør og emballage skal genbruges på en miljøvenlig måde.

Smid ikke ladeaggregater ud sammen med det almindelige husholdningsaffald!

Gælder kun i EU-lande:



Iht. det europæiske direktiv 2002/96/EF om affald af elektrisk og elektronisk udstyr skal kasserede ladeaggregater indsamles separat og genbruges iht. gældende miljøforskrifter.

Ret til ændringer forbeholdes.

Drivenhet Drive Unit Cruise/ Manöverdator Intuvia

Säkerhetsanvisningar



Läs noga igenom alla säkerhetsanvisningar och instruktioner. Fel som uppstår till följd av att säkerhetsanvisningarna och instruktionerna inte följts kan orsaka elstöt, brand och/eller allvarliga personsador.

Ta väl vara på säkerhetsanvisningarna och instruktionerna för framtida behov.

Begreppet ”batteri” som används i denna bruksanvisning hänför sig till både standardbatterier (batterier med fäste på cykelramen) och pakethållarbatterier (batterier med fäste i pakethållaren).

- ▶ **Öppna inte själv drivenheten. Drivenheten är underhållsfri och får endast repareras med originalreservdelar av kvalificerad yrkespersonal.** Detta garanterar att drivenhetens säkerhet upprätthålls. Om drivenheten öppnas utan berättigande gäller inte längre garantin.
- ▶ **Alla komponenter som monterats på drivenheten och alla andra komponenter på elcykelns drivning (t.ex. kedjehjul, kedjehjulets stöd och pedaler) får endast ersättas med komponenter av samma slag eller med av cykeltillverkaren speciellt för din elcykel godkända komponenter.** Detta skyddar drivenheten mot överbelastning och skada.
- ▶ **Ta bort batteriet från elcykeln innan arbeten (t. ex. montering, underhåll m.m.) startas på elcykeln, före den transporteras i bil och flygplan eller lagras.** Vid oavsiktligt aktivering av strömställaren finns risk för personskada.
- ▶ **Funktionen för ledhjälp får endast användas när elcykeln leds.** Om elcykelns hjul inte har kontakt med marken när ledhjälpen används finns risk för personskada.
- ▶ **Använd endast originalbatterier från Bosch som tillverkaren rekommenderat för din elcykel.** Om andra batterier används, finns risk för kroppsskada och brand. Om andra batterier används fritar sig Bosch från allt ansvar och garantiåtagande.
- ▶ **Beakta alla nationella föreskrifter för registrering och användning av elcykeln.**
- ▶ **Läs och beakta säkerhetsanvisningarna och instruktionerna i batteriets bruksanvisning samt bruksanvisningen för din elcykel.**

Produkt- och kapacitetsbeskrivning

Ändamålsenlig användning

Drivenheten är uteslutande avsedd för drivning av din elcykel och får inte användas för andra ändamål.

Elcykeln är avsedd för belagda vägar. Elcykeln är inte godkänd för tävlingar.

Illustrerade komponenter (se sidan 2 – 3)

Numreringen av avbildade komponenter hänvisar till illustrationerna på grafiksidan.

Förutom drivenhet, manöverdator inkl. manöverenhet, hastighetssensor och tillhörande fästen är cykeldelarnas alla illustrationer schematiska och kan därför avvika från din elcykel.

- 1 Knapp indikeringsfunktion ”i”
 - 2 Knapp för belysning
 - 3 Manöverdator
 - 4 Manöverdatorns fäste
 - 5 På-Av-knapp manöverdator
 - 6 Återställningsknapp ”RESET”
 - 7 USB-kontaktdon
 - 8 USB-kontaktdonets skyddskåpa
 - 9 Drivenhet
 - 10 Manöverenhet
 - 11 Knapp för indikeringsfunktion ”i” på manöverenheten
 - 12 Knapp för sänk värdet/bläddra nedåt ”–”
 - 13 Knapp för öka värdet/bläddra uppåt ”+”
 - 14 Knapp för ledhjälp ”WALK”
 - 15 Låsning av manöverdatorn
 - 16 Blockeringskruv på manöverdatorn
 - 17 Hastighetssensor
 - 18 Hastighetssensorns ekermagnet
- Indikeringslement på manöverdatorn**
- a Indikering av motoreffekt
 - b Indikering av assistansnivå
 - c Textindikering
 - d Värdesindikering
 - e Hastighetsmätarens display
 - f Indikering av batteriets laddningstillstånd

Tekniska data

Drivenhet		Drive Unit Cruise
Produktnummer		0 275 007 006/ 0 275 007 007
Effekt	W	250
Vridmoment vid kraftuttag max.	Nm	50
Märkspänning	V _{DC}	36
Driftstemperatur	°C	-5 ... +40
Lagringstemperatur	°C	-10 ... +50
Kapslingsklass		IP 54 (damm- och spolsäker)
Vikt, ca.	kg	4
Manöverdator		Intuvia
Produktnummer		1 270 020 903
Laddström USB-kontaktidon max.	mA	500
Laddspänning USB-kontaktidon	V	5
Driftstemperatur	°C	-5 ... +40
Lagringstemperatur	°C	-10 ... +50
Kapslingsklass		IP 54 (damm- och spolsäker)
Vikt, ca.	kg	0,15
Belysning*		
Märkspänning	V _{DC}	6
Effekt		
- Framljus	W	2,7
- Bakljus	W	0,3

* beroende på lagliga bestämmelser kan elcykelns batteri inte användas för alla landsspecifika utföranden

Montage

Insättning och uttagning av batteriet

För insättning av batteriet på elcykeln och för borttagning se batteriets bruksanvisning.

Insättning och borttagning av manöverdatorn (se bild A)

För **insättning** av manöverdatorn **3** skjut framifrån in den i fästet **4**.

För **borttagning** av manöverdatorn **3** tryck på spärren **15** och skjut ut den framåt ur fästet **4**.

- **Ta bort manöverdatorn från parkerad elcykel för att obefogad person inte ska kunna använda drivenheten.** Utan manöverdator kan elcykelsystemet inte kopplas på.

Det är även möjligt att som skydd mot stöld låsa manöverdatorn i fästet. Demontera fästet **4** från styret. Placera manöverdatorn i fästet. Skruva in blockeringskruven **16** underifrån i avsedd gänga på fästet. Återmontera fästet på styret.

Kontroll av hastighetssensorn (se bild B)

Hastighetssensorn **17** och tillhörande ekermagnet **18** måste monteras så att ekermagneten vid ett hjulvarv passerar hastighetssensorn på ett avstånd om minst 5 mm och högst 17 mm.

Anvisning: Om avståndet mellan hastighetssensorn **17** och ekermagneten **18** är för litet eller för stort eller är hastighetssensorn **17** inte korrekt ansluten, fungerar inte indikeringen på hastighetsmätaren **e** och elcykelns drivenhet fungerar i nödkörningsprogram.

Lossa i detta fall ekermagnetens **18** skruv och fäst ekermagneten så att den på korrekt avstånd passerar markeringen på hastighetssensorn. Om hastighetsmätaren **e** fortfarande saknar indikering, kontakta en auktoriserad cykelhandlare.

Drift

Driftstart

Förutsättningar

Elykel-systemet kan aktiveras endast under följande förutsättningar:

- Ett fulladdat batteri har satts in (se batteriets bruksanvisning).
- Manöverdatorn sitter korrekt i fästet (se "Insättning och borttagning av manöverdatorn", sida Svenska – 2).
- Hastighetssensorn är korrekt ansluten (se "Kontroll av hastighetssensorn", sida Svenska – 2).

In-/urkoppling av elcykelsystemet

För **inkoppling** av elcykelsystemet finns följande alternativ.

- Om manöverdatorn redan är påkopplad när den placeras i fästet slås elcykelsystemet automatiskt på.
- Tryck vid insatt manöverdator och insatt batteri helt kort på manöverdatorns På-Av-knapp **5**.
- Tryck vid insatt manöverdator batteriets På-Av-knapp (se batteriets bruksanvisning).

Anvisning: Elykelns pedaler får inte belastas när elcykelsystemet kopplas på, i annat fall begränsas motoreffekten. I text-indikeringen **c** visas felmeddelandet "**Release pedal**" (avlasta pedalen).

Om elcykelsystemet oavsiktligt påkopplats med belastade pedaler, koppla i detta fall från och åter på utan belastning. Drivenheten aktiveras så fort du trampar pedalerna (förutom vid ledhjälpfunktionen, se "In-/urkoppling av ledhjälp", sida Svenska – 3). Motoreffekten är relaterad till inställningarna på manöverdatorn.

Så fort du slutat trampa pedalerna i normaldrift eller en hastighet på 25 km/h uppnåtts, fränkopplar elcykeldriften assistansen. Drivningen aktiveras åter automatiskt när pedalerna trampas och en hastighet på 25 km/h underskrids.

För **urkoppling** av elcykelsystemet finns följande alternativ:

- Tryck manöverdatorns På-Av-knapp **5**.
- Koppla från batteriet med På-Av-knappen (se batteriets bruksanvisning.)
- Ta manöverdatorn ur fästet.

Om cykelns drivenhet under ca 10 minuter inte upptar ström (t. ex. när elcykeln står stilla) och ingen knapp tryckts på manöverdatorn eller manöverenheten kopplas elcykelsystemet automatiskt från för att spara energi.

Manöverdatorns indikeringar och inställningar

Manöverdatorns energiförsörjning

När manöverdatorn sitter i fästet **4** och ett fulladdat batteri placerats i elcykeln och elcykelsystemet kopplats på försörjs manöverdatorn via elcykelns batteri med energi.

Om manöverdatorn tas ur fästet **4** får den energi från ett internt batteri. Om det interna batteriet vid inkoppling av manöverdatorn har låg kapacitet, visas för 3 s **"Attach to bike"** (anslut till cykeln) på textdisplayen **c**. Därefter kopplar manöverdatorn åter från.

För uppladdning av det interna batteriet placera åter manöverdatorn i fästet **4** (när ett batteri sitter på elcykeln). Koppla från elcykelns batteri med På-Av-knappen (se batteriets bruksanvisning.)

Manöverdatorn kan också laddas upp via USB-kontaktdonet. Öppna dammskyddet **8**. Anslut manöverdatorns USB-kontaktdon **7** med en lämplig USB-kabel till en gängse USB-laddare eller till USB-kontaktdonet på en dator (5 V laddspänning; max. 500 mA laddström). På manöverdatorns textdisplay **c** visas **"USB connected"** (USB kopplad).

Manöverdatorns in-/urkoppling

För **Inkoppling** av manöverdatorn tryck På-/Av-knappen **5**. Manöverdatorn kan även kopplas på (vid tillräckligt laddat batteri) när den inte sitter i fästet.

För **frånkoppling** av manöverdatorn tryck På-Av-knappen **5**.

För att spara energi när manöverdatorn inte sitter i fästet, kopplas den automatiskt från om knappen inte trycks under 1 minuter.

Indikering av batteriets laddningstillstånd

Batteriladdningsindikatorn **f** indikerar elcykelbatteriets laddningstillstånd, men inte tillståndet för manöverdatorns interna batteri. Elcykelbatteriets laddningstillstånd kan avläsas med hjälp av LED på själva batteriet.

På displayen **f** motsvarar varje stapel i batterisymbolen en kapacitet på ungefär 20 %:



100 % till 80 % kapacitet



Kapacitet mellan 20 % och 5 %, batteriet måste laddas upp.



När kapaciteten underskrider 5 % ger drivenheten inte längre stöd. Laddningsdisplayens LED på batteriet slocknar.

När batteriet försörjer elcykelns belysning (landsspecifikt) räcker kapaciteten när första tomma batterisymbolen dyker upp ännu till för ca 2 timmars belysning. När symbolen börjar blinka, slocknar belysningen efter en liten stund.

Om manöverdatorn tas ur fästet **4**, kvarstår senast sparad batteriladdningstillstånd.

Inställning av assistansgrad

På manöverdatorn kan elcykeldrivenhetens hjälp för pedaltramp ställas in. Assistansgraden kan när som helst ändras även under körning.

Anvisning: På vissa utföranden kan den förinställda assistansen inte ändras. Det kan även hända att endast färre assistansfunktioner finns att tillgå än vad som här anges.

Maximalt följande assistansgrader finns att tillgå:

- **"OFF"**: (Från) Drivenheten är nu frånkopplad och elcykeln kan med pedalerna drivas som en vanlig cykel.
- **"ECO"**: aktiv hjälp vid maximal effektivitet, för maximal räckvidd
- **"TOUR"**: konstant hjälp, för långdistansturer
- **"SPORT"**: kraftig hjälp, för sportig cykling på bergig sträcka samt för stadstrafik
- **"TURBO"**: maximal assistans upp till hög pedalfrekvens, för sportig cykling

För **ökning** av assistansgraden tryck knappen **"+" 13** på manöverenheten tills önskad assistansgrad visas på displayen **b**, för **sänkning** tryck knappen **"–" 12**.

Upptagen motoreffekt visas på displayen **a**. Den maximala motoreffekten är beroende av vald assistansgrad.

Assistansnivå	Motoreffekt*	
	Kedjeväxel	Navväxel
"ECO"	30 %	30 %
"TOUR"	100 %	90 %
"SPORT"	170 %	150 %
"TURBO"	250 %	200 %

* Motoreffekten kan avvika på enskilda utföranden.

Om manöverdatorn tas ur fästet **4** kvarstår senast visad assistansgrad sparad, på displayen **a** indikeras ingen motoreffekt.

In-/urkoppling av ledhjälpen

Ledhjälpen kan underlätta elcykelns ledning. Hastigheten i denna funktion är beroende av ilagd växel och kan uppnå högst 6 km/h. Ju mindre ilagd växelläge är desto lägre är hastigheten i funktionen ledhjälp (vid full effekt).

► **Funktionen för ledhjälp får endast användas när elcykeln leds.** Om elcykelns hjul inte har kontakt med marken när ledhjälpen används finns risk för personskada.

För **inkoppling** av starthjälpen tryck knappen **"WALK" 14** på manöverenheten och håll den nedtryckt. Elcykelns drivenhet kopplas in.

Ledhjälpen **slås från** så fort ett av följande moment inträffar:

- när du släpper knappen **”WALK” 14**,
- trampar pedalerna framåt eller snabbt bakåt,
- när elcykelns hjul blockeras (t. ex. vid bromsning eller om cykeln stöter mot ett hinder),
- hastigheten överskrider 6 km/h.

Slå på och av belysningen

Alltefter landsspecifika föreskrifter finns cykellyse i två utföranden:

- Via manöverdatorn kan samtidigt framlyse, baklyse och displayens bakgrundsbelysning tändas och släckas. I detta utförande visas vid påkoppling av lyset **”Lights on”** (tänt lyse) och vid fränkoppling av lyset **”Lights off”** (släckt lyse) för ca 1 s på textdisplayen c.
- Endast displayens bakgrundsbelysning kan slås på och av, fram- och baklyset på elcykeln är oberoende av manöverdatorn.

För båda utförandena trycker du för **På och Av för belysningen** knappen **2**.

Hastighets- och avståndindikeringar

På **hastighetsmätaren e** indikeras alltid aktuell hastighet.

I **funktionsindikeringen** (kombination av textindikering c och värdeindikering d) kan följande funktioner väljas:

- **”Range” (körsträcka)**: sannolik körsträcka med aktuell batteriladdning (vid oföränderliga villkor som hjälpnivå, linjeprofil m.m.)
- **”Distance” (sträcka)**: åkt distans från senaste återställning
- **”Trip time” (tripptid)**: Tripptid från senaste nollställning
- **”Avg. Speed” (medelhastighet)**: medelhastighet från senaste nollställning
- **”Max. Speed” (max. hastighet)**: max. hastighet från senaste nollställning
- **”Clock” (klocka)**: aktuellt klockslag

Tryck för **omkoppling av indikeringsfunktionen** knappen **”i” 1** på manöverdatorn eller knappen **”i” 11** på manöverenheten tills önskad funktion visas.

För **Reset av ”Distance”** (sträcka), **”Trip time”** (tripptid) och **”Avg. Speed”** (medelhastighet) koppla om till en av dess tre funktioner och tryck sedan knappen **”RESET” 6** tills indikeringen nollställs. Härvid nollställs även de båda andra funktionerna.

För **Reset av ”Max. Speed”** (max. hastighet) koppla om till denna funktion och tryck sedan knappen **”RESET” 6** tills indikeringen nollställs.

När manöverdatorn tas ur fästet **4** kvarstår och sparas funktionernas alla värden och kan i fortsättningen visas.

Visning/anpassning av grundinställningarna

Indikeringar och ändringar av grundinställningar kan göras oberoende av om manöverdatorn är i fästet **4** eller inte.

För att hämta menyn för grundinställningar tryck samtidigt knappen **”RESET” 6** och knappen **”i” 1** tills textdisplayen visar **c”Configuration”** (inställningar).

Tryck för **omkoppling mellan grundinställningarna** knappen **”i” 1** på manöverdatorn tills önskad grundinställning visas. När manöverdatorn är insatt i fästet **4** kan även knappen **”i” 11** på manöverenheten tryckas.

För **ändring av grundinställningar**, tryck för minskning resp. bländring nedåt På-Av-knappen **5** bredvid displayen –” eller för ökning resp. bländring uppåt knappen för belysning **2** bredvid displayen **+**”.

År manöverdatorn insatt i fästet **4** kan ändringen även ske med knapparna –” **12** resp. **+**” **13** på manöverenheten. För att gå ur funktionen och spara ändrad inställning, tryck knappen **”RESET” 6** för 3 s.

Följande grundinställningar står till buds:

- **”unit km/mi” (enhet km/mi)**: Hastigheten och avståndet kan visas i km eller engelsk mil.
- **”time format” (tidsformat)**: Klockslaget kan visas i formatet 12 timmar eller 24 timmar.
- **”clock” (klocka)**: Aktuell tid kan ställas in. Håll inställningsknapparna längre tid nedtryckta för snabbare ändring av tiden.
- **”English” (Engelska)**: Du kan ändra textindikeringens språk. Du kan välja mellan tyska, engelska, franska, spanska, italienska och nederländska.
- **”odometer” (total sträcka)**: Indikering av total körsträcka med elcykeln (kan inte ändras)
- **”power-on hours” (total drifttid)**: Indikering av total körtid med elcykeln (kan inte ändras)

Indikering av felkod

Komponenterna på elcykelsystemet kontrolleras ständigt och automatiskt. Om ett fel konstateras visas respektive felkod på textdisplayen c.

Tryck en valfri knapp på manöverdatorn **3** eller på manöverenheten **10** för återgång till standardindikering.

Beroende på felets typ kopplas drivningen eventuellt automatiskt från. Fortsatt åkning utan hjälpmotor är alltid möjlig. Före långa turer ska elcykeln kontrolleras.

► **Låt alltid en auktoriserad cykelhandlare kontrollera och reparera cykeln.** Om ett åtgärdat fel fortfarande indikeras, kontakta en auktoriserad cykelhandlare.

Kod	Orsak	Åtgärd
100	Internt fel i drivenheten	Kontrollera drivenheten
101	Drivenheten med anknypningsproblem	Kontrollera anslutningarna och förbindelserna
102	Fel i hastighetssensorn	Låt hastighetssensorn kontrolleras
103*	Belysningen med anknypningsproblem	Kontrollera anslutningarna och förbindelserna
104	Manöverdatorn med anknypningsproblem	Kontrollera anslutningarna och förbindelserna
105	Drivenhetens temperatur är för hög (över 40 °C)	Låt drivenheten svalna. Åkning utan elcykelns hjälpmotor är möjlig och dessutom kyls drivenheten snabbare.
200	internt elektronikfel i batteriet	Låt batteriet kontrolleras
201	Batteriets temperatur är för hög (över 40 °C)	Låt batteriet svalna. Elcykeln kan köras vidare utan hjälpmotor och samtidigt kyls batteriet snabbare.
202	Batteriets temperatur är för låg (under -10 °C)	Låt batteriet långsamt värmas upp i ett varmt rum.
203	Batteriet har kopplingsproblem	Kontrollera anslutningarna och förbindelserna
204	felaktig batteripolning	Ladda batteriet med Bosch originalladdaren enligt beskrivning i bruksanvisningen.
410	En eller flera knappar på manöverdatorn är blockerade.	Kontrollera att knapparna inte råkat i kläm t. ex. till följd av smuts. Rengör i så fall knapparna.
414	Manöverenhetens kopplingsproblem	Kontrollera anslutningarna och förbindelserna
418	En eller flera knappar är blockerade på manöverenheten.	Kontrollera att knapparna inte råkat i kläm t. ex. till följd av smuts. Rengör i så fall knapparna.
422	Drivenheten med anknypningsproblem	Kontrollera anslutningarna och förbindelserna
423	Batteriet har kopplingsproblem	Kontrollera anslutningarna och förbindelserna
424	Komponenterna har inbördes kommunikationsfel	Kontrollera anslutningarna och förbindelserna
430	Manöverdatorns interna batteri är tomt	Ladda upp manöverdatorn (i fästet eller via USB-kontakttonet)
490	Internt fel på manöverdatorn	Låt manöverdatorn kontrolleras

* Endast med elcykelbelysning från batteriet (landsspecifikt)

Energiförsörjning av externa enheter via USB-kontakttonet

Med hjälp av USB-anslutningen kan de flesta apparaterna drivas och laddas upp när såvida elförsörjningen sker via USB (t. ex. diverse mobiltelefoner).

Förutsättningen för laddning är att manöverdatorn och ett tillräckligt laddat batteri satts in i elcykeln.

Öppna USB-kontakttonets dammskydd **8** på manöverdatorn. Anslut den externa enhetens USB-kontaktton med en lämplig USB-kabel till USB-hylsdonet **7** på manöverdatorn.

Anvisningar för åkning med elcykelssystemet

Hur fungerar elcykelns hjälpmotor?

Elcykelns drivenhet ger hjälp under den tid pedalerna trampas. Utan pedaltramp ger drivenheten ingen hjälp. Motoreffekten är alltid beroende av den kraft du använder vid tramp. Är kraften låg kommer även hjälpen att bli mindre än vid högre kraft. Detta gäller oberoende av assistansnivån.

Elcykelns hjälpmotor kopplas automatiskt från när hastigheten överskrider 25 km/h. När hastigheten sjunker under 25 km/h kopplas hjälpmotorn åter till.

Ett undantag gäller för ledhjälpfunktionen; elcykeln kan utan pedaltramp ledas med låg hastighet.

Elcykeln kan när som helst utan assistans köras som en vanlig cykel genom att koppla från elcykelssystemet eller genom att ställa assistansgraden i läge **"OFF"**. Samma sak gäller för tomt batteri.

Elcykelssystemets samspel med växeln

Växeln ska även med elcykelns hjälpmotor användas som på en vanlig cykel (beakta elcykelns bruksanvisning).

Oberoende av växels typ rekommenderar vi att under växling avbryta pedaltrampet. Härvid underlättas växlingen varvid kraftöverföringens slitage minskar.

Genom att välja rätt växelläge kan med en och samma kraft hastigheten och räckvidden ökas.

Lär av erfarenhet

Vi rekommenderar att du lär dig hantera elcykeln avsidet trafikerade vägar.

Jämför olika assistansnivåer. När du är säker på din sak, kan du med elcykeln delta i trafiken som med en vanlig cykel.

Testa elcykelns räckvidd under olika villkor innan du startar för längre turer.

Räckvidden påverkas av

Körsträckan påverkas dock av många fler faktorer som exempelvis:

- assistansnivå,
- växlingssätt,
- däckens typ och lufttryck,
- batteriets ålder och tillstånd,
- vägprofil (motlut) och -beskaffenhet (vägens beläggning),
- motvind och omgivningstemperatur,
- elcykelns, cyklistens och bagagets vikt.

Därför är det inte möjligt att konkret före en tripp förutsäga räckvidden. Allmänt gäller:

- Vid drivenhetens **samma** motoreffekt: Ju mindre kraft du måste använda för att uppnå en viss hastighet (t. ex. vid optimal växling), desto mindre energi förbrukar elcykelns drivenhet och desto längre blir körsträckan med en batteriladdning.
- Ju **högre** assistansgraden är under samma villkor, desto kortare blir körsträckan.

Sköt elcykeln väl

Beakta elcykelkomponenternas drifts- och lagringstemperatur. Skydda drivenheten, manöverdatorn och batteriet mot extrem temperatur (t. ex. vid intensiv solbestrålning utan ventilation). Komponenterna (speciellt batteriet) kan skadas vid extrema temperaturer.

Underhåll och service

Underhåll och rengöring

Håll elcykelns alla komponenter rena, detta gäller speciellt batteriets kontakter och tillhörande fäste. Rengör försiktigt med en fuktig, mjuk trasa.

Komponenterna och drivenheten får inte doppas i vatten och inte heller rengöras med högtrycksaggregat.

För underhåll och reparation av elcykeln kontakta en auktoriserad cykelhandlare.

Kundservice och kundkonsulter

Vid frågor beträffande elcykelssystemet och dess komponenter kontakta en auktoriserad cykelhandlare.

För auktoriserade cykelhandlare kan du hitta kontaktadresser på internetsidan www.bosch-ebike.com

Transport

Batterierna är underkastade kraven för farligt gods. En privat person kan utan ytterligare förpliktelser transportera batterierna på allmän väg.

Vid transport genom rörelsedrivande person eller tredje person (t. ex. flygfrakt eller spedition) ska speciella villkor för förpackning och märkning beaktas (t. ex. föreskrifterna i ADR). I detta fall måste vid förberedelse av transport en expert för farligt gods konsulteras.

Batterier får försändas endast om höljet är oskadat. Tejpa öppna kontakter och förpacka batteriet så att det inte kan röras i förpackningen. Ta även hänsyn till eventuella nationella föreskrifter.

Vid alla frågor beträffande transport av batterier kontakta en auktoriserad cykelhandlare. Hos handlaren kan du även beställa en lämplig transportförpackning.

Avfallshantering



Drivenheten, manöverdatorn inkl. manöverenheten, batteriet, hastighetssensorn, tillbehör och förpackning skall omhändertas på miljövänligt sätt för återvinning.

Släng inte elcykeln eller tillhörande komponenter i hushållsavfall!

Endast för EU-länder:



Enligt europeiska direktivet 2002/96/EG måste obrukbara elapparater och enligt europeiska direktivet 2006/66/EG felaktiga eller förbrukade batterier separat omhändertas och på miljövänligt sätt lämnas in för återvinning.

I manöverdatorn inbyggt batteri får demonteras endast för avfallshantering. Om kåpan öppnas finns risk för att manöverdatorn förstörs.

Lämna in obrukbara batterier och manöverdatorer till en auktoriserad cykelhandlare.



Li-jon:

Beakta anvisningarna i avsnittet "Transport", sida Svenska – 6.

Ändringar förbehålles.

Litiumjonbatteri PowerPack

Säkerhetsanvisningar



Läs noga igenom alla säkerhetsanvisningar och instruktioner. Fel som uppstår till följd av att säkerhetsanvisningarna och instruktionerna

inte följts kan orsaka elstöt, brand och/eller allvarliga personskador.

Ta väl vara på säkerhetsanvisningarna och instruktionerna för framtida behov.

Begreppet "batteri" som används i denna bruksanvisning hänför sig till både standardbatterier (batterier med fäste på cykelramen) och pakethållarbatterier (batterier med fäste i pakethållaren) om inte hänvisning uttryckligen görs till byggform.

▶ **Ta bort batteriet från elcykeln innan arbeten (t. ex. montering, underhåll m.m.) startas på elcykeln, före den transporteras i bil och flygplan eller lagras.** Vid oavsiktligt aktivering av strömställaren finns risk för personskada.

▶ **Öppna inte batteriet.** Detta kan leda till kortslutning. Om batteriet öppnats lämnas ingen garanti.



Skydda batteriet mot hög värme (t. ex. längre solbestrålning), eld och neddopning i vatten. Explosionsrisk föreligger.

▶ **Håll gem, mynt, nycklar, spikar, skruvar och andra små metallföremål på avstånd från reservbatteriet för att undvika en bygling av kontakterna.** En kortslutning mellan batterikontakterna kan leda till brännskador eller brand. För skada som uppstår genom kortslutning fritar sig Bosch från allt ansvar och ingen garanti lämnas.

▶ **Om batteriet används på fel sätt finns risk för att vätska rinner ur batteriet. Undvik all kontakt med vätskan. Vid oavsiktlig kontakt spola med vatten. Om vätska kommer i kontakt med ögonen uppsök dessutom läkare.** Batterivätskan kan medföra hudirritation och brännskada.

▶ **Ur skadat eller felanvänt batteri kan ångor avgå. Tillför friskluft och uppsök läkare vid åkomor.** Ångorna kan leda till irritation i andningsvägarna.

▶ **Ladda batteriet endast med Bosch originalladdare.** Om inte Bosch originalladdare används, kan brandrisk inte uteslutas.

▶ **Använd batteriet endast i kombination med elcyklar; med original Bosch elcykeldrivsystem.** På så sätt skyddas batteriet mot farlig överbelastning.

▶ **Använd endast originalbatterier från Bosch som tillverkaren rekommenderat för din elcykel.** Om andra batterier används, finns risk för kroppsskada och brand. Om andra batterier används fritar sig Bosch från allt ansvar och garantiåtagande.

▶ **Läs noga säkerhetsanvisningarna och instruktionerna i bruksanvisningarna för laddare och drivenhet/manöverdator samt elcykelns bruksanvisning.**

Produkt- och kapacitetsbeskrivning

Illustrerade komponenter (se sidan 4 – 5)

Numreringen av avbildade komponenter hänvisar till illustrationerna på grafiksidiorna.

Förutom batterierna och tillhörande fästen är alla illustrationer av cykeldelarna schematiska och kan därför avvika från din elcykel.

- 19 Fäste för pakethållarbatteriet
- 20 Pakethållarbatteri
- 21 Indikering av drift och laddningstillstånd
- 22 På-/Av-knapp
- 23 Batterilåsets nyckel
- 24 Batterilås
- 25 Standardbatteriets övre fäste
- 26 Standardbatteri
- 27 Standardbatteriets undre fäste
- 28 Bärrem
- 29 Laddare

Tekniska data

Litiumjonbatteri		PowerPack 300	PowerPack 400
Produktnummer			
– Standardbatteri svart		0 275 007 500	0 275 007 503
– Standardbatteri vitt		0 275 007 501	0 275 007 504
– Pakethållarbatteri		0 275 007 502	0 275 007 505
Märkspänning	V=	36	36
Nominell kapacitet	Ah	8,2	11
Energi	Wh	300	400
Driftstemperatur	°C	-10 ... +40	-10 ... +40
Lagringstemperatur	°C	-10 ... +60	-10 ... +60
Tillåtet temperaturområde för laddning	°C	0 ... +40	0 ... +40
Vikt, ca.	kg	2,5	2,5
Kapslingsklass		IP 54 (dam- och spolsäker)	IP 54 (dam- och spolsäker)

Montage

► **Ställ upp batteriet på en ren yta.** Se till att laddningshysan och kontaktarna inte nedsmutsas med t. ex. sand eller jord.

Kontroll av batteriet före första användningen

Kontrollera batteriet innan det för första gången laddas upp eller används på elcykeln.

Tryck på På/Av-knappen **22** för inkoppling av batteriet. Om ingen LED tänds på laddningsdisplayen **21** är batteriet eventuellt skadat.

Om minst en, men inte alla LED tänds på laddningsdisplayen **21**, ladda fullständigt upp batteriet innan det används för första gången.

► **Ett skadat batteri får inte laddas upp och inte heller användas.** Kontakta en auktoriserad cykelaffär.

Ladda batteriet

► **Använd endast med din elcykel levererad Bosch originalladdare eller laddare i samma konstruktion.** Endast denna typ av laddare är anpassad till litiumjonbatteriet för elcykeln.

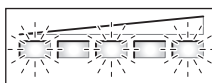
Anvisning: Batteriet levereras delladdat. För full effekt ska batteriet före första användningen med laddaren laddas upp fullständigt.

Batteriet måste för laddning tas bort från elcykeln.

För laddning av batteriet läs och beakta laddarens bruksanvisning.

Batteriet kan när som helst laddas upp eftersom detta inte påverkar livslängden. Batteriet skadas inte om laddning avbryts.

Batteriet är försett med en temperaturövervakning som endast tillåter laddning inom ett temperaturområde mellan 0 °C och 40 °C.



Om batteriet ligger utanför temperaturområdet för laddning blinkar tre LED på laddningsindikatorn **21**. Ta bort batteriet från laddaren och låt det tempereras.

Anslut batteriet till laddaren först sedan tillåten laddningstemperatur uppnåtts.

Laddningsdisplay

De fem gröna LED på laddningsdisplayen **21** visar laddningstillståndet för påkopplat batteri.

Härvid motsvarar varje LED en kapacitet på ungefär 20 %. På ett fullständigt laddat batteri lyser alla fem LED.

Det påkopplade batteriets laddningstillstånd indikeras dessutom i manöverdatorn. Läs och beakta bruksanvisningen för drivenheten och manöverdatorn.

Om batteriets kapacitet underskrider 5 % slocknar alla LED på batteriets laddningsdisplay **21** men i manöverdatorn kvarstår ännu en indikering.

Insättning och uttagning av batteriet (se bilder C – D)

► **Frånkoppla batteriet när det sätts in i eller tas ur fästet.**

För att batteriet ska kunna sättas in måste nyckeln **23** sitta i låset **24** och låset vara upplåst.

Vid **insättning av standardbatteriet 26** lägg kontaktarna mot elcykelns undre fäste **27**. Fäll sedan ned batteriet mot anslag i övre fästet **25**.

Vid **insättning av pakethållarbatteriet 20** skjut upp batteriet med kontaktarna framåt tills det snäpper fast i fästet **19** på pakethållaren.

Kontrollera att batteriet sitter stadigt. Lås alltid batteriets lås **24**, i annat fall kan låset gå upp och batteriet falla ur fästet.

Efter låsning dra alltid nyckeln **23** ur låset **24**. Härvid undviks att nyckeln faller ur låset eller att en olovlig person tillgriper batteriet vid parkerad elcykel.

Vid **borttagning av standardbatteriet 26** frånkoppla batteriet och öppna låset med nyckeln **23**. Tippa batteriet ur övre fästet **25** och dra batteriet med bärremmen **28** ur undre fästet **27**.

Vid **borttagning av standardbatteriet 20** frånkoppla batteriet och öppna låset med nyckeln **23**. Dra batteriet ur fästet **19**.

Drift

Driftstart

► **Använd endast originalbatterier från Bosch som tillverkaren rekommenderat för din elcykel.** Om andra batterier används, finns risk för kroppsskada och brand. Om andra batterier används fritar sig Bosch från allt ansvar och garantiåtagande.

In- och urkoppling

En möjlighet är att efter inkoppling av batteriet slå på elcykel-systemet. Läs och beakta bruksanvisningen för drivenheten och manöverdatorn.

Kontrollera innan batteriet resp. elcykelsystemet kopplas på att låset **24** är låst.

Anvisning: Elcykelns pedaler får inte belastas när elcykelsystemet kopplas på, i annat fall begränsas elcykeldrivningens effekt.

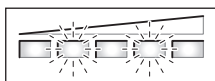
För **Inkoppling** av batteriet tryck På-/Av-knappen **22**. Lysdi-oderna på displayen **21** tänds och visar samtidigt batteriets laddningstillstånd.

Anvisning: Om batteriets kapacitet underskrider 5 % tänds ingen LED på batteriets laddningsdisplay **21**. Endast manöverdatorn indikerar att elcykelsystemet är inkopplat.

För **frånkoppling** av batteriet tryck åter på På-/Av knappen **22**. Lysdi-oderna på displayen **21** slocknar. Nu frånkopplas även elcykelsystemet.

För att spara energi när cykelns drivenhet under ca 10 minuter inte upptar ström (t. ex. när elcykeln står stilla) och ingen knapp trycks på manöverdatorn eller manöverenheten kopplas elcykelsystemet automatiskt från och sålunda även batteriet.

Batteriet är genom "Electronic Cell Protection (ECP)" skyddat mot djupurladdning, överladdning, överhettning och kortslutning. Vid risk för fara kopplar en skyddskoppling automatiskt från batteriet.



Om ett fel i batteriet konstateras, blinkar två LED på laddningsindikatorn **21**. Kontakta i detta fall en auktoriserad cykelaffär.

Anvisningar för optimal hantering av batteriet

Batteriets livslängd kan förlängas om det sköts väl och drivs samt lagras vid korrekt temperatur.

Vid åldring försämras batteriets kapacitet även om det sköts väl.

Är brukstiden efter uppladdning onormalt kort tyder det på att batteriet är förbrukat. Batteriet kan bytas.

Om standardbatteriets bärrem **28** är defekt låt en cykelhandlare byta ut den.

Efterladda batteriet före och under lagring

Om batteriet inte används under en längre tid ska det laddas upp till ungefär 60 % (3 eller 4 LED tänds på laddningsdisplayen **21**).

Kontrollera laddningstillståndet efter 6 månader. Är nu endast en LED tänd på laddningsdisplayen **21**, ladda upp batteriet igen till ca 60 %.

Anvisning: Om batteriet under en längre tid lagras utan laddning kan det även om självurladdningen är låg skadas varvid ackumulatorkapaciteten kraftigt reduceras.

Låt inte batteriet permanent vara anslutet till laddaren.

Lagringsvillkor

Lagra batteriet på en möjligast torr och välventilerad plats. Skydda batteriet mot fukt och vatten. Vid ogynnsam väderlek rekommenderar vi att ta bort batteriet från elcykeln och att förvara det inomhus för nästa användning.

Batteriet kan lagras vid temperaturer mellan -10°C och $+60^{\circ}\text{C}$. För en lång livslängd rekommenderas en lagring vid en rumstemperatur på ca 20°C .

Kontrollera att högsta lagringstemperaturen inte överskrids. Låt därför inte batteriet t. ex. under sommaren ligga kvar i bilen och lagra det inte heller i direkt solsken.

Underhåll och service

Underhåll och rengöring

Håll batteriet rent. Rengör försiktigt med en fuktig, mjuk trasa. Batteriet får inte doppas i vatten och inte heller rengöras med vattenstråle.

Om batteriet inte längre fungerar, kontakta en auktoriserad cykelhandlare.

Kundservice och kundkonsulter

Vid alla frågor beträffande transport av batterier kontakta en auktoriserad cykelhandlare.

► **Anteckna nyckelns tillverkare och nummer 23.** Om nyckeln går förlorad kontakta en auktoriserad cykelhandlare. ange härvid nyckelns tillverkare och nummer.

För auktoriserade cykelhandlare kan du hitta kontaktadresser på internetsidan www.bosch-ebike.com

Transport


Batterierna är underkastade kraven för farligt gods. En privat person kan utan ytterligare förpliktelser transportera batterierna på allmän väg.

Vid transport genom rörelsedrivande person eller tredje person (t. ex. flygfrakt eller spedition) ska speciella villkor för förpackning och märkning beaktas (t. ex. föreskrifterna i ADR). I detta fall måste vid förberedelse av transport en expert för farligt gods konsulteras.

Batterier får försändas endast om höljet är oskadat. Tejpa öppna kontakter och förpacka batteriet så att det inte kan röras i förpackningen. Ta även hänsyn till eventuella nationella föreskrifter.

Vid alla frågor beträffande transport av batterier kontakta en auktoriserad cykelhandlare. Hos handlaren kan du även beställa en lämplig transportförpackning.

Avfallshantering

 Batteri, tillbehör och förpackning ska omhändertas på miljövänligt sätt för återvinning.

Släng inte batterier i hushållsavfall!

Endast för EU-länder:



Enligt europeiska direktivet 2002/96/EG måste obrukbara elapparater och enligt europeiska direktivet 2006/66/EG felaktiga eller förbrukade batterier separat omhändertas och på miljövänligt sätt lämnas in för återvinning.

Lämna in obrukbara batterier till en auktoriserad cykelhandlare.



Li-jon:

Beakta anvisningarna i avsnittet "Transport", sida Svenska - 10.

Ändringar förbehålles.

Laddare Charger

Säkerhetsanvisningar



Läs noga igenom alla säkerhetsanvisningar och instruktioner. Fel som uppstår till följd av att säkerhetsanvisningarna och instruktionerna

inte följts kan orsaka elstöt, brand och/eller allvarliga personskador.

Ta väl vara på säkerhetsanvisningarna och instruktionerna för framtida behov.

Begreppet "batteri" som används i denna bruksanvisning hänför sig till både standardbatterier (batterier med fäste på cykelramen) och pakethållarbatterier (batterier med fäste i pakethållaren).



Skydda laddaren mot regn och väta. Tränger vatten in i laddaren ökar risken för elstöt.

- ▶ **Ladda endast för elcyklar godkända Bosch litiumjonbatterier. Batteriets spänning måste passa till laddarens laddspänning.** I annat fall finns risk för brand och explosion.
- ▶ **Håll laddaren ren.** Förorening kan leda till elektrisk stöt.
- ▶ **Kontrollera laddare, kabel och stickkontakt före varje användning. En skadad laddare får inte användas. Du får själv aldrig öppna laddaren, låt den repareras av kvalificerad fackman och endast med originalreservdelar.** Skadade laddare, ledningar eller stickkontakter ökar risken för elektrisk stöt.
- ▶ **Använd inte laddaren på lättantändligt underlag (t. ex. papper, textilier mm) resp. i brännbar omgivning.** Vid laddningen värms laddaren upp vilket kan medföra brandrisk.
- ▶ **Ur skadat eller felanvänt batteri kan ångor avgå. Tillför friskluft och uppsök läkare vid åkomor.** Ångorna kan leda till irritation i andningsvägarna.
- ▶ **Håll barn under uppsikt.** Barn får inte leka med laddaren.
- ▶ **Laddaren får inte användas av barn eller personer med begränsad fysisk, sensorisk eller psykisk förmåga eller som saknar den erfarenhet och kunskap som krävs för säker hantering. Undantag görs om personen övervakas av en ansvarig person som även kan undervisa i laddarens användning.** I annat fall finns risk för felhantering och personskada.
- ▶ **Läs noga säkerhetsanvisningarna och instruktionerna i bruksanvisningarna för laddare och drivenhet/manöverdator samt elcykelns bruksanvisning.**
- ▶ På laddarens undre sida finns ett sammandrag av viktiga säkerhetsanvisningar på engelska, franska och spanska

(märkta i illustrationen på grafiksidan med nummer **33**) med följande innehåll:

- För säker användning ska bruksanvisningen beaktas. Risk för elstöt.
- Använd endast i torr omgivning.
- Ladda endast batterier för Bosch elcykelssystemet. Risk finns att andra batterier exploderar och orsakar personskada.
- Byt inte ut nätsladden. I annat fall finns risk för brand och explosion.

Produkt- och kapacitetsbeskrivning

Illustrerade komponenter (se sidan 6 – 7)

Numreringen av komponenterna hänvisar till illustration av laddaren på grafiksidan.

- 20** Pakethållarbatteri
- 21** Indikering av batteriets laddningstillstånd
- 26** Standardbatteri
- 29** Laddare
- 30** Apparathyldson
- 31** Apparatkontakt
- 32** Ventilationsöppningar
- 33** Säkerhetsanvisningar för laddaren
- 34** Laddstickkontakt
- 35** Hylsdon för laddkontakt

Tekniska data

Laddare	Charger	
Produktnummer		0 275 007 905
Märkspänning	V~	207 – 264
Frekvens	Hz	47 – 63
Batteriladdningsspänning	V=	42
Laddningsström	A	4
Tillåtet temperaturområde för laddning	°C	0 ... +40
Laddningstid		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Antal battericeller		10 – 80
Drifttemperatur	°C	–10 ... +75
Lagringstemperatur	°C	–20 ... +70
Vikt enligt EPTA-Procedure 01/2003	kg	0,8
Kapslingsklass		IP 40
Uppgifterna gäller för en märkspänning på [U] 230 V. Vid avvikande spänning och för utföranden i vissa länder kan uppgifterna variera.		

Drift

► **Ställ upp batteriet på en ren yta.** Se till att laddningshylsan och kontakterna inte nedsmutsas med t. ex. sand eller jord.

Driftstart

Anslutning av laddaren (se bilder E - F)

► **Beakta nätspänningen!** Kontrollera att strömkällans spänning överensstämmer med uppgifterna på laddarens typskylt. Laddare märkta med 230 V kan även anslutas till 220 V.

Anslut sedan nätkabelns stickkontakt **31** till apparathyldsodet **30** på laddaren.

Anslut (landsspecifik) nätkabel till strömnätet.

Frånkoppla batteriet och ta bort det ur fästet på elcykeln. Läs och följ batteriets bruksanvisning.

Anslut laddarens stickkontakt **34** till hylsan **35** på batteriet.

Laddning

Laddningen startar genast när laddaren med insatt batteri kopplats till strömnätet.

Anvisning: Laddning är endast möjlig om batteriets temperatur ligger inom tillåtet temperaturområde för laddning.

Under laddning lyser laddningsdisplayens **21** LED på batteriet. Varje kontinuerligt tänd LED motsvarar en laddad kapacitet på ungefär 20 %. En blinkande LED indikerar att nästa laddning till 20 % pågår.

► **Var försiktig om du under laddning berör laddaren. Bär skyddshandskar.** Laddaren kan bli mycket het speciellt vid hög omgivningstemperatur.

Anvisning: Kontrollera att laddaren under laddning är välventilerad och att ventilationsöppningarna **32** på båda sidorna inte är övertäckta.


Batteriet är fullständigt laddat när de fem lysdioderna lyser kontinuerligt på displayen **21**. Laddningen avbryts automatiskt.

Bryt strömmen till laddaren och koppla bort batteriet från laddaren.

Batteriet frånkopplas automatiskt när det tas ur laddaren.

Batteriet kan nu anslutas till elcykeln.

Fel – Orsak och åtgärd

Orsak	Åtgärd
	Två LED blinkar på batteriet
Batteriet är defekt	kontakta en auktoriserad cykelhandlare

Orsak	Åtgärd
	Tre LED blinkar på batteriet
Batteriet är för varmt eller kallt	Ta bort batteriet från laddaren och låt batteriets temperatur utjämnas tills temperaturområdet uppnås Anslut batteriet till laddaren först sedan tillåten laddningstemperatur uppnåtts.
Laddning kan inte ske (ingen indikering på batteriet)	
Stickkontakten sitter inte korrekt	kontrollera alla stickanslutningar
Batteriets kontakter är nedsmutsade	rengör försiktigt batteriets kontakter
Laddarens ventilationsöppningar 32 är tilltäppta eller övertäckta	rengör ventilationsöppningarna 32 och ställ upp laddaren så att den ventileras väl
Nätuttaget, nätsladden eller laddaren är defekt	kontrollera nätspänningen och låt en cykelhandlare kontrollera laddaren
Batteriet är defekt	kontakta en auktoriserad cykelhandlare

Underhåll och service

Underhåll och rengöring

Om laddaren fallerar, ta kontakt med en auktoriserad cykelhandlare.

Kundservice och kundkonsulter

Vid alla frågor beträffande laddaren kontakta en auktoriserad cykelhandlare.

För auktoriserade cykelhandlare kan du hitta kontaktadresser på internetsidan www.bosch-ebike.com

Avfallshandtering

Laddare, tillbehör och förpackning ska omhändertas på miljövänligt sätt för återvinning.

Släng inte laddare i hushållsavfall!

Endast för EU-länder:



Enligt europeiska direktivet 2002/96/EG för kasserade elektriska och elektroniska apparater och dess modifiering till nationell rätt måste obrukbara laddare omhändertas separat och på miljövänligt sätt lämnas in för återvinning.

Ändringar förbehålles.

Drivenhet Drive Unit Cruise/ Styreenhet Intuvia

Sikkerhetsinformasjon



Les alle sikkerhetsinformasjoner og instruksjoner. Feil ved overholdelsen av sikkerhetsinformasjonene og instruksene kan forårsake elektrisk støt, brann og/eller alvorlige skader.

Ta vare på alle sikkerhetsinformasjoner og instruksjoner for fremtidig bruk.

I driftsinstruksen brukes uttrykket «Batteri» som gjelder både for standard-batterier (batterier med holder på sykkelrammen) og bagasjebrett-batterier (batterier med holder på bagasjebrettet).

- ▶ **Du må ikke åpne drivenheten på egen hånd. Drivenheten trenger ikke vedlikehold og må kun åpnes av kvalifisert fagpersonale og kun repareres med original-reservedeler.** Slik opprettholdes drivenhetens sikkerhet. Hvis drivenheten åpnes uten tillatelse, mister garantien sin gyldighet.
- ▶ **Alle komponenter som er montert på drivenheten og alle andre komponenter til el-sykkeldriften (f. eks. kjedekive, feste for kjedekive, pedaler) må kun skiftes ut mot samme type komponenter eller komponenter som er godkjent av sykkelprodusenten spesielt for denne el-sykkelen.** Slik beskyttes drivenheten mot overbelastning og skader.
- ▶ **Ta batteriet ut av el-sykkelen før du begynner å arbeide (f. eks. montering, vedlikehold etc.) på el-sykkelen, transporterer den med bil eller fly eller oppbevarer den.** Ved utilsiktet betjening av på-/av-bryteren er det fare for skader.
- ▶ **Funksjonen skyvehjelp må utelukkende benyttes når el-sykkelen startes.** Dersom hjulene til el-sykkelen ikke har bakkekontakt når skyvehjelpen benyttes, er det fare for skader.
- ▶ **Benytt bare original Bosch batterier som er godkjent av produsenten for el-sykkelen.** Bruken av andre batterier kan føre til skader og brannfare. Ved bruk av andre batterier overtar Bosch intet ansvar og ingen garanti.
- ▶ **Følg alle nasjonale forskrifter om godkjenning og bruk av el-sykkelen.**
- ▶ **Les og følg sikkerhetsinformasjonene og instruksene i driftsinstruksen for batteriet og i driftsinstruksen for el-sykkelen.**

Produkt- og ytelsesbeskrivelse

Formålmessig bruk

Drivenheten skal utelukkende brukes til drift av el-sykkelen og må ikke brukes til andre formål.

El-sykkelen er beregnet til bruk på veier med fast veidekke. Den er ikke tillatt til konkurranseformål.

Illustrerte komponenter (Se side 2 – 3)

Nummereringen av de illustrerte komponentene gjelder for bildene på illustrasjonssiden.

Alle illustrasjoner av sykkeldeleer unntatt drivenheten, styreenheten inkl. betjeningsenhet, hastighetssensoren og de tilhørende holderne er skjematisk og kan avvike fra el-sykkelen din.

- 1 Tast indikatorfunksjon «i»
 - 2 Tast for belysning
 - 3 Styreenhet
 - 4 Holder for styreenheten
 - 5 På/av-tast styreenhet
 - 6 Reset-tast «RESET»
 - 7 USB-kontakt
 - 8 Beskyttelseshette for USB-kontakten
 - 9 Drivenhet
 - 10 Betjeningsenhet
 - 11 Tast indikatorfunksjon «i» på betjeningsenheten
 - 12 Tast redusere verdi/bla nedover «-»
 - 13 Tast øke verdi/bla oppover «+»
 - 14 Tast skyvehjelp «WALK»
 - 15 Låsing styreenhet
 - 16 Sperreskrue styreenhet
 - 17 Hastighetssensor
 - 18 Ekemagnet til hastighetssensoren
- Indikatorelementer på styreenheten**
- a Indikator motoreffekt
 - b Indikator støtetrinn
 - c Tekstindikator
 - d Verdiindikator
 - e Tachometerindikator
 - f Batteri-ladetilstandsindikator

Tekniske data

Drivenhet		Drive Unit Cruise
Produktnummer		0 275 007 006/ 0 275 007 007
Ytelse	W	250
Utgående dreiemoment max.	Nm	50
Nominell spenning	V _{DC}	36
Driftstemperatur	°C	-5 ... +40
Lagertemperatur	°C	-10 ... +50
Beskyttelsestype		IP 54 (støv- og sprutvannbeskyttet)
Vekt, ca.	kg	4

Styreenhet		Intuvia
Produktnummer		1 270 020 903
Ladestrøm USB-kontakt max.	mA	500
Ladespenning USB-kontakt	V	5
Driftstemperatur	°C	-5 ... +40
Lagertemperatur	°C	-10 ... +50
Beskyttelsestype		IP 54 (støv- og sprutvannbeskyttet)
Vekt, ca.	kg	0,15

Belysning*		
Nominell spenning	V _{DC}	6
Ytelse		
– Frontlykt	W	2,7
– Baklykt	W	0,3

* avhengig av lovbestemmelser ikke mulig på alle nasjonale modeller med el-sykkel-batteri

Montering

Innsetting og fjerning av batteriet

For innsetting og for fjerning av batteriet i el-sykkelen må du lese og følge driftsinstruksen for batteriet.

Innsetting og fjerning av styreenheten (se bilde A)

For **innsetting** av styreenheten **3** skyver du den forfra inn i holderen **4**.

For **fjerning** av styreenheten **3** trykker du på låsingen **15** og skyver den fremover ut av holderen **4**.

► **Fjern styreenheten når du har satt fra deg el-sykkelen slik at drivverket ikke kan brukes av uberettigede tredjepersoner.** Uten styreenhet kan el-sykkel-systemet ikke innkoples.

Det er også mulig å sikre styreenheten i holderen mot at den fjernes. Demonter til dette holderen **4** fra styret. Sett styreenheten inn i holderen. Skru sperreskruen **16** nedenfra inn i gjengene på holderen. Monter holderen igjen på styret.

Kontroll av hastighetssensoren (se bilde B)

Hastighetssensoren **17** og den tilhørende ekemagneten **18** må være montert slik at ekemagneten ved omdreining av hjulet beveger seg i en avstand på minst 5 mm og maksimalt 17 mm fra hastighetssensoren.

Merk: Hvis avstanden mellom hastighetssensor **17** og ekemagnet **18** er for liten eller for stor eller hastighetssensoren **17** ikke er riktig tilkople, svikter tachometerindikatoren **e**, og el-sykkel-driften arbeider i nødprogrammet.

Du må da løsne skruen på ekemagneten **18** og feste ekemagneten slik på eken, at den går forbi markeringen til hastighetssensoren i en så liten avstand som mulig. Hvis det deretter fortsatt ikke vises en hastighet på tachometerindikatoren **e**, må du henvende deg til en autorisert sykkel-forhandler.

Bruk

Ilgangsetting

Forutsetninger

Systemet til el-sykkelen kan kun aktiveres når følgende forutsetninger er oppfylt:

- Et tilstrekkelig ladet batteri er satt inn (se driftsinstruksen for batteriet).
- Styreenheten er satt riktig inn i holderen (se «Innsetting og fjerning av styreenheten», side Norsk – 2).
- Hastighetssensoren er tilkople riktig (se «Kontroll av hastighetssensoren», side Norsk – 2).

Inn-/utkopling av el-sykkel-systemet

For **innkopling** av el-sykkel-systemet har du følgende muligheter:

- Hvis styreenheten allerede er innkople når den settes inn i holderen, koples el-sykkel-systemet automatisk inn.
- Trykk ved innsatt styreenhet og innsatt batteri en gang kort på på-av-tasten **5** til styreenheten.
- Trykk ved innsatt styreenhet på på-av-tasten til batteriet (se batteriets driftsinstruks).

Merk: Pedalene til el-sykkelen må ikke være belastet ved innkopling av el-sykkel-systemet, ellers innskrenkes motoreffekten. I tekstindikatoren **c** vises feilmeldingen «**Release pedal**» (avlast pedal).

Dersom el-sykkel-systemet ved en feiltagelse ble innkople med belastede pedaler, kople du det ut og inn igjen uten belastning.

Drivverket blir aktivert så snart du trør på pedalene (unntatt ved funksjonen skyvehjelp, se «Innkopling/utkopling av skyvehjelpen», side Norsk – 3). Motoreffekten retter seg etter innstillingene på styreenheten.

Når du i normaldrift slutter å trø på pedalene eller når du har nådd en hastighet på 25 km/h, koples støtten fra el-sykkeldrivverket ut. Drivverket aktiveres automatisk igjen når du trør på pedalene og hastigheten er under 25 km/h.

For **utkopling** av el-sykkelsystemet har du følgende muligheter:

- Trykk på på-av-tasten **5** til styreenheten.
- Kople ut batteriet på på-/av-tasten (se driftsinstruks for batteriet.)
- Ta styreenheten ut av holderen.

Hvis det ikke aktiveres en driveffekt i løpet av ca. 10 min (f.eks. fordi el-sykkelen står stille) og det ikke trykkes på noen tast på styreenheten eller betjeningsenheten, koples el-sykkelsystemet automatisk ut for å spare energi.

Anvisninger og innstillinger på styreenheten

Energiltførsel for styreenheten

Når styreenheten sitter i holderen **4**, et tilstrekkelig ladet batteri er satt inn i el-sykkelen og el-sykkelsystemet blir koplet inn, så forsynes styreenheten med energi fra batteriet til el-sykkelen.

Når styreenheten tas ut av holderen **4** skjer energiltførselen via et internt batteri. Dersom det interne batteriet er for svakt når styreenheten koples inn, vises i 3 s «**Attach to bike**» (kople til sykkel) i tekstindikatoren **c**. Deretter koples styreenheten ut igjen.

For opplading av det interne batteriet setter du styreenheten igjen inn i holderen **4** (når et batteri er satt inn i el-sykkelen). Kople inn batteriet til el-sykkelen på på-/av-tasten (se driftsinstruks for batteriet.)

Du kan også lade opp styreenheten via USB-porten. Åpne til dette beskyttelsesheftet **8**. Kople USB-kontakten **7** til styreenheten via en passende USB-kabel til et vanlig USB-ladeapparat eller til USB-porten på en datamaskin (5 V ladespenning, max. 500 mA ladestrøm). I tekstindikatoren **c** til styreenheten vises «**USB connected**» (USB tilkoplet).

Innkopling/utkopling av styreenheten


For **innkopling** av styreenheten trykker du kort på på-av-tasten **5**. Styreenheten kan (ved tilstrekkelig ladet internt batteri) også koples inn når den ikke er satt inn i holderen.


For **utkopling** av styreenheten trykker du på på-av-tasten **5**. Hvis styreenheten ikke er satt inn i holderen, utkoples den automatisk uten tastetrykk etter 1 min for å spare energi.


Batteri-ladetilstandsindikator

Batteri-ladeindikatoren **f** viser ladetilstanden til el-sykkelen, ikke til det interne batteriet til styreenheten. Ladetilstanden til el-sykkelen kan likeledes avleses på LEDene på batteriet.

I indikatoren **f** tilsvarer hver strek på batterisymbolet ca. 20 % kapasitet:

 100 % til 80 % kapasitet

 20 % til 5 % kapasitet, batteriet bør opplades.

 Mindre enn 5 % kapasitet, driftsstøtte er ikke lenger mulig. LEDene på batteri-ladeindikatoren slukner.

Når belysningen for el-sykkelen brukes via batteriet (avhengig av landet hvor du bor i), er kapasiteten tilstrekkelig for belysning i ca. 2 timer etter at symbolet tomt batteri vises for første gang. Når symbolet begynner å blinke, kan belysningen kun fortsatt brukes i kort tid.

Når styreenheten tas ut av holderen **4**, blir den sist viste ladetilstand til batteriet lagret.

Innstilling av støttrinn

På styreenheten kan du stille inn hvor sterkt el-sykkelenes drivverk skal støtte deg når du trør. Støttrinnene kan endres når som helst, også under syklingen.

Merk: På enkelte modeller er det mulig at støttrinnene er stilt inn på forhånd og ikke kan endres. Det er også mulig at det står færre trinn til disposisjon enn de som er angitt her.

Følgende støttrinn står maksimalt til disposisjon:

- «**OFF**»: Drivverket er utkoplet, el-sykkelen kan brukes som en normal sykkel, kun ved å trø.
- «**ECO**»: virksom støtte ved maksimal effektivitet, for maksimal rekkevidde
- «**TOUR**»: jevn støtte, for turer med stor rekkevidde
- «**SPORT**»: kraftig støtte, for sportslig sykling i bratte områder og byer
- «**TURBO**»: maksimal støtte opptil høye trø-frekvenser, for sportslig sykling

For **øking** av støttrinnene trykker du på tasten «**+**» **13** på betjeningsenheten så ofte til det ønskede støttrinnene vises på indikatoren **b**, for **senking** tasten «**-**» **12**.

Den valgte motoreffekten vises i indikatoren **a**. Den maksimale motoreffekten er avhengig av det valgte støttrinnene.

Støttrinn	Motoreffekt*	
	Kjedegir	Navgir
« ECO »	30 %	30 %
« TOUR »	100 %	90 %
« SPORT »	170 %	150 %
« TURBO »	250 %	200 %

* Motoreffekten kan avvike ved enkelte utførelser.

Når styreenheten tas ut av holderen, **4** blir det sist viste støttrinnene lagret, indikatoren **a** til motoreffekten blir tom.

Innkopling/utkopling av skyvehjelpen

Skyvehjelpen kan lette det for deg å skyve el-sykkelen. Hastigheten er i denne funksjonen avhengig av giret som er satt i og kan oppnå maksimalt 6 km/h. Jo lavere gir som er valgt, desto mindre er hastigheten i funksjonen skyvehjelp (ved full effekt).

► **Funksjonen skyvehjelp må utelukkende benyttes når el-sykkelen startes.** Dersom hjulene til el-sykkelen ikke har bakkekontakt når skyvehjelpen benyttes, er det fare for skader.

For **innkopling** av skyvehjelpen trykker du på tasten **«WALK» 14** på betjeningsenheten og hold den trykt inne. Drivverket til el-sykkelen innkoples.

Skyvehjelpen blir **utkople**t, så snart en av de følgende hendelsene inntreffer:

- du slipper tasten **«WALK» 14**,
- du trør fremover eller raskt bakover på pedale,ne,
- hjulene til el-sykkelen blokkeres (f.eks. ved bremsing eller støt mot et hinder).
- hastigheten overskrider 6 km/h.

Inn-/utkopling av belysningen

Alt etter nasjonale bestemmelser er to utførelser for belysning mulig:

- Via styreenheten kan samtidig frontlys, baklys og displayets bakgrunnsbelysning slås på og av. I denne utførelsen vises ved innkoplingen av belysningen **«Lights on»** (lys på) og ved utkopling av belysningen **«Lights off»** (lys av) i ca. 1 s i tekstindikatoren **c**.
- Det kan kun displayets bakgrunnsbelysning slås på og av, frontlys og baklys til el-sykkelen er uavhengige av styreenheten.

På begge modellene trykker du for **inn- og utkopling av belysningen** henholdsvis på tasten **2**.

Hastighets- og avstandsindikatorer

På **tachometerindikatoren e** vises alltid aktuell hastighet.

På **funksjonsindikatoren** (kombinasjon av tekstindikator **c** og verdiindikator **d**) står følgende funksjoner til disposisjon:

- **«Range» (rekkevidde)**: forventet rekkevidde for eksisterende batterilading (ved konstante betingelser som støtte-trinn, strekningsprofil osv.)
- **«Distance» (strekning)**: tilbakelagt avstand siden siste reset
- **«Trip time» (kjøretid)**: kjøretid siden siste reset
- **«Avg. Speed» (gjennomsnitt)**: oppnådd gjennomsnittshastighet siden siste reset
- **«Max. Speed» (maksimal)**: oppnådd maksimalhastighet siden siste reset
- **«Clock» (klokkeslett)**: aktuelt klokkeslett

Trykk til **skifting i indikatorfunksjonen** på tasten **«i» 1** på styreenheten eller på tasten **«i» 11** på betjeningsenheten så ofte til den ønskede funksjonen vises på indikatoren.

For **reset av «Distance»** (strekning), **«Trip time»** (kjøretid) og **«Avg. Speed»** (gjennomsnitt) skifter du til en av disse tre funksjonene og trykker så på tasten **«RESET» 6** helt til indikatoren er nullstilt. Ved dette er også verdiene til de to andre funksjonene nullstilt.

For **reset av «Max. Speed»** (maksimal) skifter du til denne funksjonen og trykker så på tasten **«RESET» 6** helt til indikatoren er nullstilt.

Når styreenheten tas ut av holderen **4**, blir alle verdiene til funksjonene lagret og kan fortsatt vises.

Visning/tilpasning av grunninnstillingene

Visning og endringer av grunninnstillingene er mulig uavhengig av om styreenheten er satt inn i holderen **4** eller ikke.

For å skifte til menyen grunninnstillinger, trykker du samtidig så lenge på tastene **«RESET» 6** og på tasten **«i» 1**, helt til **c «Configuration»** (innstillinger) vises på tekstindikatoren.

Trykk til **skifting mellom grunninnstillingene** på tasten **«i» 1** på styreenheten helt til ønsket grunninnstilling vises. Er styreenheten satt inn i holderen **4**, kan du også trykke på tasten **«i» 11** på betjeningsenheten.

For **å endre grunninnstillingene** trykker du for redusering/blå nedover på av-tasten **5** ved siden av indikatoren **«-»** eller for økning eller blå oppover på tasten belysning **2** ved siden av indikatoren **«+»**.

Er styreenheten satt inn i holderen **4**, er endringen også mulig med tastene **«-» 12** hhv. **«+» 13** på betjeningsenheten.

For å forlate funksjonen og lagre en endret innstilling, trykk på tasten **«RESET» 6** i 3 s.

Følgende grunninnstillinger står til disposisjon:

- **«unit km/mi» (enhet km/mi)**: Slik kan du la deg vise hastigheten og tilbakelagt avstand i kilometer eller engelske mil.
- **«time format» (tidsformat)**: Du kan la deg vise klokkeslettet i 12-timers- eller i 24-timers-format.
- **«clock» (klokkeslett)**: Du kan stille inn det aktuelle klokkeslettet. Ved å trykke lenger på innstillingstastene endrer du klokkeslettet raskere.
- **«English» (engelsk)**: Du kan endre språket på tekstindikatoren. Du kan velge mellom tysk, engelsk, fransk, spansk, italiensk og nederlandsk.
- **«odometer» (total strekning)**: Anvisning av den totale strekningen tilbakelagt med el-sykkelen (kan ikke endres)
- **«power-on hours» (total driftstid)**: Anvisning av den totale kjøretiden med el-sykkelen (kan ikke endres)

Feilkode-indikator

Komponentene til el-sykel-systemet kontrolleres kontinuerlig automatisk. Hvis det registreres en feil, vises den tilsvarende feilkoden i tekstindikatoren **c**.

Trykk på en annen tast på styreenheten **3** eller på betjeningsenheten **10** for å vende tilbake til standardindikatoren.

Avhengig av feiltypen koples drivverket eventuelt også automatisk ut. Videre sykling uten støtte fra drivverket er alltid mulig. el-sykkelen bør sjekkes før videre turer.

► **La alle kontroller og reparasjoner utelukkende utføres av en autorisert sykkel-forhandler.** Hvis en feil fortsatt anvises, til tross for at den er utbedret, må du også henvende deg til en autorisert sykkel-forhandler.

Kode	Årsak	Utbedring
100	Intern feil på drivenheten	La drivenheten sjekkes
101	Forbindelsesproblem for drivenheten	La kontakter og forbindelser sjekkes
102	Feil på hastighetssensoren	La hastighetssensoren sjekkes
103*	Forbindelsesproblem på belysningen	La kontakter og forbindelser sjekkes
104	Forbindelsesproblem på styreenheten	La kontakter og forbindelser sjekkes
105	For høy temperatur på drivenheten (over 40 °C)	La drivenheten avkjøle. Videresykling uten el-sykkel-drift er mulig og kjøler drivenheten hurtigere.
200	Intern elektronisk feil på batteriet	La batteri kontrolleres
201	Batteriets temperatur for høy (over 40°C)	La batteriet avkjøles. Det er mulig å sykle videre uten el-sykkel-drivverk og det fremskynder avkjølingen av batteriet.
202	Batteriets temperatur for lav (under – 10 °C)	La batteriet langsomt varmes opp i et varmt rom.
203	Forbindelsesproblem på batteriet	La kontakter og forbindelser sjekkes
204	Feil poling på batteriet	Lad opp batteriet med original Bosch ladeapparatet som beskrevet i dets driftsinstruks.
410	En eller flere taster på styreenheten er blokkert.	Sjekk om tastene er klemt fast, f.eks. fordi det er kommet inn smuss. Rengjør tastene eventuelt.
414	Forbindelsesproblem på betjenings-enheten	La kontakter og forbindelser sjekkes
418	En eller flere taster på betjenings-enheten er blokkert.	Sjekk om tastene er klemt fast, f.eks. fordi det er kommet inn smuss. Rengjør tastene eventuelt.
422	Forbindelsesproblem for drivenheten	La kontakter og forbindelser sjekkes
423	Forbindelsesproblem på batteriet	La kontakter og forbindelser sjekkes
424	Kommunikasjonsfeil av komponentene med hverandre	La kontakter og forbindelser sjekkes
430	Internt batteri i styreenheten tomt	Lad opp styreenheten (i holderen eller via USB-porten)
490	Intern feil på styreenheten	La styreenheten kontrolleres

* kun med el-sykkel-belysning via batteriet (nasjonal innstilling)

Energitilførsel til eksterne apparater via USB-port

Ved hjelp av USB-porten kan de fleste apparatene med mulig energitilførsel via USB (f. eks. diverse mobiltelefoner) brukes hhv. lades opp.

Forutsetning for oppladingen er at styreenheten og et tilstrekkelig ladet batteri er satt inn i el-sykkelen.

Åpne beskyttelseshetten **8** til USB-porten på styreenheten. Forbind USB-porten til det eksterne apparatet via en passende USB-kabel med USB-kontakten **7** på styreenheten.

Henvisninger til sykling med el-sykkel-systemet

Når virker el-sykkel-drivverket?

El-sykkel-drivverket støtter deg ved syklingen, så lenge du trør på pedalene. Uten pedaltråkking kommer ingen støtte. Motoreffekten er alltid avhengig av kreftene du bruker til tråkking.

Hvis du bruker lite krefter, vil støtten bli mindre enn hvis du bruker mange krefter. Dette gjelder uavhengig av støtteinnet.

El-sykkel-drivverket koples automatisk ut ved hastigheter over 25 km/h. Når hastigheten synker til under 25 km/h, står drivverket automatisk til disposisjon igjen.

Et unntak gjelder for funksjonen skyvehjelp hvor el-sykkelen kan skyves med lav hastighet uten pedaltråkking.

Du kan alltid bruke el-sykkelen uten støtte og sykle som med en vanlig sykkel, enten ved å kople ut el-sykkel-systemet eller sette støtteinnet på «**OFF**». Det samme gjelder hvis batteriet er tomt.

Samspill av el-sykel-systemet med giret

Også med el-sykel-drivverk skal du bruke giret som på en vanlig sykkel (følg da driftsinstruksjonen for el-sykkelen).

Uavhengig av giretypen, anbefales det å avbryte tråkkingen et øyeblikk mens du girer. Slik forenkles giringen og slitasjonen på drivstrengen reduseres.

Med valg av riktig gir kan du øke hastigheten og rekkevidden med samme mengde krefter.

Samle første erfaringer

Det anbefales å samle første erfaringer med el-sykkelen litt avsides fra trafikkerte veier.

Prøv forskjellige støttestrinn. Med en gang du føler deg sikker, kan du med el-sykkelen sykle i trafikken som med en vanlig sykkel.

Test rekkevidden til el-sykkelen under forskjellige vilkår før du planlegger lengre, krevende turer.

Innflytelser på rekkevidden

Rekkevidden påvirkes av mange faktorer som for eksempel:

- støttestrinn
- giring,
- type dekk og dekktrykk,
- batteriets alder og pleietilstand,
- strekningsprofil (bakker) og -tilstand (veibelegg),
- motvind og omgivelsestemperatur,
- vekt til el-sykel, syklist og bagasje.

Derfor er det ikke mulig å beregne rekkevidden helt konkret før en tur påbegynnes. Men generelt gjelder:

- Ved **den samme** motoreffekten til el-sykel-drivverket: Jo mindre krefter du må bruke for å oppnå en viss hastighet (f.eks. med optimal bruk av giret), desto mindre energi forbruker el-sykel-drivverket og desto større er rekkevidden for en batteri-opplading.
- Jo **høyere** støttenivået velges ved ellers like vilkår, desto mindre er rekkevidden.

God bruk av el-sykkelen

Ta hensyn til drifts- og lagringstemperaturerne for el-sykelkomponentene. Beskytt drivenheten, styreenheten og batteriet mot ekstreme temperaturer (f.eks. fra intensiv solinnstråling uten samtidig ventilasjon). Komponentene (spesielt batteriet) kan skades av ekstreme temperaturer.

Service og vedlikehold

Vedlikehold og rengjøring

Hold alle komponentene på el-sykkelen rene, spesielt kontaktene på batteri og den tilhørende holderen. Rengjør dem forsiktig med en fuktig, myk klut.

Alle komponentene inklusiv drivenheten må ikke dyppes i vann eller rengjøres med en høytrykkspyler.

Til service og reparasjon av el-sykkelen henvender du deg til en autorisert sykkel-forhandler.

Kundeservice og kundefrådgivning

Ved alle spørsmål til el-sykel-systemet og dets komponenter, ta kontakt med en autorisert sykkelforhandler.

Kontaktinformasjoner til autoriserte sykkelforhandlere finner du på internettsiden www.bosch-ebike.com

Transport

For batteriene gjelder kravene i loven om farlig gods. En privat bruker kan transportere batteriene uten ytterligere pålegg på vanlige veier.

Ved transport som utføres av yrkesmessige brukere eller ved transport av tredjepersoner (f.eks. lufttransport eller spedisjon) må det oppfylles spesielle krav til emballasje og merking (f.eks. de tyske forskriftene ADR). Ved behov kan du konsultere en ekspert for farlig gods ved forberedelse av forsendelsen.

Send batteriene kun hvis huset ikke er skadet. Lim igjen de åpne kontaktene og pakk batteriet slik at det ikke beveger seg i emballasjen. Ta også hensyn til eventuelle videregående nasjonale bestemmelser.

Henvend deg til en autorisert sykkelforhandler ved spørsmål om transport av batteriene. Hos forhandleren kan du også bestille en egnet transportemballasje.

Deponering



Drivenhet, styreenhet inkl. betjeningsenhet, batteri, hastighetssensor, tilbehør og emballasje må leveres inn til en miljøvennlig gjenvinning.

El-sykkelen og deres komponenter må ikke kastes i vanlig søppel!

Kun for EU-land:



Iht. det europeiske direktivet 2002/96/EF om gamle elektriske apparater og iht. det europeiske direktivet 2006/66/EF må defekte eller oppbrukte batterier/oppladbare batterier samles inn adskilt og leveres inn til en miljøvennlig resirkulering.

Batteriet som er integrert i styreenheten må kun fjernes for deponering. Styreenheten kan bli ødelagt når huset åpnes.

Lever ubrukelige batterier og styreenheter til en autorisert sykkelforhandler.

Li-ion:

Ta hensyn til informasjonene i avsnittet «Transport», side Norsk – 6.



Retten til endringer forbeholdes.

Li-ion-batteri PowerPack

Sikkerhetsinformasjon



Les alle sikkerhetsinformasjoner og instruksjoner. Feil ved overholdelsen av sikkerhetsinformasjonene og instruksene kan forårsake elektrisk støt,

brann og/eller alvorlige skader.

Ta vare på alle sikkerhetsinformasjoner og instruksjoner for fremtidig bruk.

I driftsinstruksjonen brukes uttrykket «Batteri» som gjelder både for standard-batterier (batterier med holder på sykkelrammen) og bagasjebrett-batterier (batterier med holder på bagasjebrettet), dersom det ikke uttrykkelig refereres til byggeformen.

► **Ta batteriet ut av el-sykkelen før du begynner å arbeide (f. eks. montering, vedlikehold etc.) på el-sykkelen, transporterer den med bil eller fly eller oppbevarer den.** Ved utilsiktet betjening av på-/av-bryteren er det fare for skader.

► **Åpne ikke batteriet.** Det er fare for en kortslutning. Ved åpnede batteri bortfaller ethvert garantikrav.



Beskytt batteriet mot varme (f. eks. også mot varig solinnstråling), ild og nedsenking i vann.

Det er eksplosjonsfare.

► **Hold batterier som ikke benyttes borte fra binderser, mynter, nøkler, spiker, skruer eller andre mindre metallgjenstander som kan forårsake en brokling av kontaktene.** En kortslutning mellom batterikontaktene kan føre til forbrenninger eller til brann. Ved kortslutninger som er oppstått i denne sammenheng bortfaller ethvert garantikrav ved Bosch.

► **Ved feil bruk kan væske lekke ut av batteriet. Unngå kontakt. Skyll med vann ved tilfeldig kontakt. Dersom væske er kommet i øynene, konsulter lege i tillegg.** Batterivæske som lekker ut kan føre til hudirritasjoner eller forbrenninger.

► **Ved skader på og usakkyndig bruk av batteriet kan damper slippe ut. Tilfør friskluft og oppsøk lege ved plager.** Damper kan irritere luftveiene.

► **Lad batteriet kun med originale Bosch ladeapparater.** Ved bruk av ikke originale Bosch ladeapparater kan en brannfare ikke utelukkes.

► **Bruk batteriet kun i forbindelse med el-sykler med original Bosch el-sykel-drivsystem.** Bare slik beskyttes batteriet mot farlig overlast.

► **Benytt bare original Bosch batterier som er godkjent av produsenten for el-sykkelen.** Bruken av andre batterier kan føre til skader og brannfare. Ved bruk av andre batterier overtar Bosch intet ansvar og ingen garanti.

► Les og følg sikkerhetsinformasjonene og anvisningene i driftsinstruksene for ladeapparat og drivenhet/styreenhet og i driftsinstruksjonen for el-sykkelen.

Produkt- og ytelsesbeskrivelse

Illustrerte komponenter (se side 4 – 5)

Nummereringen av de illustrerte komponentene gjelder for bildene på illustrasjonssiden. Alle illustrasjoner av sykkeldeler unntatt batteriene og holderne er skjematisk og kan avvike fra el-sykkelen din.

19 Holder for bagasjebrett-batteriet

20 Bagasjebrett-batteri

21 Drifts- og ladetilstandsindikator

22 På-/av-tast

23 Nøkkel til batterilåsen

24 Batterilås

25 Øvre holder til standard-batteriet

26 Standard-batteri

27 Nedre holder til standard-batteriet

28 Bærerem

29 Ladeapparat

Tekniske data

Li-ion-batteri		PowerPack 300	PowerPack 400
Produktnummer			
– Standard-batteri svart		0 275 007 500	0 275 007 503
– Standard-batteri hvitt		0 275 007 501	0 275 007 504
– Bagasjebrett-batteri		0 275 007 502	0 275 007 505
Nominell spenning	V=	36	36
Nominell kapasitet	Ah	8,2	11
Energi	Wh	300	400
Driftstemperatur	°C	-10... +40	-10... +40
Lagertemperatur	°C	-10... +60	-10... +60
Godkjent ladetemperaturområde	°C	0... +40	0... +40
Vekt, ca.	kg	2,5	2,5
Beskyttelsestype		IP 54 (støv- og sprutvannbeskyttet)	IP 54 (støv- og sprutvannbeskyttet)

Montering

► **Plasser batteriet kun på rene flater.** Unngå spesielt at ladekontakten og andre kontakter tilsmusses, f. eks. av sand eller jord.

Sjekk batteriet før førstegangs bruk

Sjekk batteriet før du lader det opp for første gang eller bruker det med el-sykkelen.

Trykk da på på-av-tasten **22** til innkopling av batteriet. Hvis det ikke lyser en LED på ladeindikatoren **21**, er batteriet eventuelt skadet.

Hvis minst en, men ikke alle LEDene på ladeindikatoren lyser **21**, må du lade batteriet helt opp før førstegangs bruk.

► **Ikke lad opp eller bruk et skadet batteri.** Henvend deg til en autorisert sykkelforhandler.

Lading av batteriet

► **Bruk kun Bosch ladeapparatet som er med i leveranseprogrammet til din el-sykkel eller et original Bosch ladeapparat av identisk type.** Kun dette ladeapparatet er tilpasset til Li-ion batteriet som brukes på el-sykkelen.

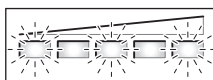
Merk: Batteriet leveres delvis oppladet. For å sikre full effekt fra batteriet må du lade det fullstendig opp i ladeapparatet før førstegangs bruk.

Batteriet må tas ut av el-sykkelen til opplading.

Les og følg driftsinstruksen for ladeapparatet til opplading av batteriet.

Batteriet kan lades opp til enhver tid uten at levetiden forkortes. Det skader ikke batteriet å avbryte oppladingen.

Batteriet er utstyrt med en temperatuvervåking som muliggjør en opplading kun i temperaturområdet mellom 0 °C og 40 °C.



Hvis batteriet befinner seg utenfor ladetemperaturområdet, blinker de tre LEDene på ladeindikatoren **21**. Kople batteriet fra ladeapparatet og la det tempereres.

Kople batteriet først til ladeapparatet når det har oppnådd den tillatte ladetemperaturen.

Kople batteriet først til ladeapparatet når det har oppnådd den tillatte ladetemperaturen.

Ladetilstandsindikator

De fem grønne LEDene på ladetilstandsindikatoren **21** viser batteriets ladetilstand ved innkoplet batteri.

Hver LED tilsvarer ca. 20 % kapasitet. Ved et helt oppladet batteri lyser alle fem LEDene.

Ladetilstanden til det innkoblede batteriet anvises dessuten på styreenheten. Les og følg driftsinstruksen for drivenhet og styreenhet.

Hvis batterikapasiteten er under 5 %, slukner alle LEDene på ladetilstandsindikatoren **21** på batteriet, men det finnes fremdeles en visning på styreenheten.

Innsetting og fjerning av batteriet (se bildene C – D)

► **Slå batteriet alltid av når du setter det inn eller tar det ut av holderen.**

For at batteriet kan settes inn, må nøkkelen **23** stå i låsen **24** og låsen må være låst opp.

For **innsetting av standard-batteriet 26** setter du det med kontaktene på den nedre holderen **27** på el-sykkelen. Vipp det helt inn i øvre holder **25**.

For **innsetting av bagasjebrett-batteriet 20** skyver du det med kontaktene foran til det smekker inn i holderen **19** på bagasjebrettet.

Sjekk om batteriet sitter godt fast. Lås batteriet alltid med låsen **24**, fordi låsen ellers kan åpne og batteriet kan da falle ut av holderen.

Trekk nøkkelen **23** etter låsingen alltid ut av låsen **24**. Slik forhindrer du at nøkkelen faller ut hhv. at batteriet tas ut av uberegtigede tredjepersoner når el-sykkelen er parkert.

For **fjerning av standard-batteriet 26** slår du det av og låser opp låsen med nøkkelen **23**. Vipp batteriet ut av den øvre holderen **25** og trekk det i bæreremmen **28** ut av den nedre holderen **27**.

For **fjerning av bagasjebrett-batteriet 20** slår du det av og låser opp låsen med nøkkelen **23**. Trekk batteriet ut av holderen **19**.

Bruk

Igangsetting

► **Benytt bare original Bosch batterier som er godkjent av produsenten for el-sykkelen.** Bruken av andre batterier kan føre til skader og brannfare. Ved bruk av andre batterier overtar Bosch intet ansvar og ingen garanti.

Inn-/utkobling

Å kople inn batteriet er en mulighet for å kople inn el-sykkelsystemet. Les og følg driftsinstruks for drivenhet og styreenhet.

Før batteriet hhv. el-syssel-systemet koples inn, må du sjekke om låsen **24** er låst.

Merk: Pedalene til el-sykkelen må ikke være belastet ved innkopling av el-syssel-systemet, ellers innskrenkes el-syssel-drivverkets effekt.

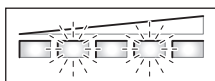
For **innkopling** av batteriet trykker du på på-av-tasten **22**. LEDene på indikatoren **21** lyser og anviser samtidig ladetilstanden.

Merk: Hvis batterikapasiteten er under 5 %, lyser det ikke en LED på batteriets ladetilstandsindikator **21**. Det vises kun på styreenheten om el-syssel-systemet er innkoplet.

For **utkopling** av batteriet trykker du på på-av-tasten **22** på nytt. LEDene på indikatoren **21** slukner. El-syssel-systemet koples ved dette likeledes ut.

Hvis det ikke aktiveres en effekt fra el-syssel-drivverket i løpet av ca. 10 min (f.eks. fordi el-sykkelen står stille) og det ikke trykkes på noen tast på styreenheten eller betjeningsenheten til el-sykkelen, koples el-syssel-systemet og dermed også batteriet automatisk ut for å spare energi.

Batteriet er ved «Electronic Cell Protection (ECP)» beskyttet mot total utladning, overoppheting og kortslutning. Ved fare utkoples batteriet automatisk med en beskyttelseskopling.



Hvis det oppdages en defekt på batteriet, blinker to LEDer på ladetilstandsindikatoren **21**. Henvend deg i dette tilfelle til en autorisert sykkelforhandler.

Henvisninger til optimal håndtering av batteriet

Levetiden til batteriet kan forlenges hvis det vedlikeholdes godt, og fremfor alt lagres ved korrekt temperatur.

Med økende alder reduseres batteriets kapasitet også ved bra vedlikehold.

En vesentlig kortere driftstid etter opplading er et tegn på at batteriet er oppbrukt. Du kan skifte ut batteriet.

Hvis bæreremmen **28** til standard-batteriet skulle være defekt, la den skiftes ut av en sykkel-forhandler.

Etteropplading av batteriet før og under lagring

Lad batteriet opp til ca. 60 % før det tas ut av drift i lengre tid (3 til 4 LEDer på ladetilstandsindikatoren **21** lyser).

Sjekk ladetilstanden etter 6 måneder. Hvis kun en LED på ladetilstandsindikatoren **21** lyser, må batteriet lades opp til ca. 60 % igjen.

Merk: Hvis batteriet oppbevares i tom tilstand over lengre tid, kan det til tross for lav selvutlading skades og lagringskapasiteten kan reduseres sterkt.

Det anbefales ikke å la batteriet stå konstant tilkoppelt til ladeapparatet.

Lagringsvilkår

Batteriet må helst lagres på et tørt, godt ventilert sted. Beskytt det mot fuktighet og vann. Ved ugunstige værforhold anbefales det f. eks. å fjerne batteriet fra el-sykkelen og oppbevare det i et lukket rom til neste bruk.

Batteriet kan lagres ved temperaturer fra –10 °C opptil +60 °C. For å oppnå en lang levetid er det fordelaktig med ca. 20 °C romtemperatur.

Pass på at den maksimale lagertemperaturen ikke overskrides. La ikke batteriet f. eks. ligge i bilen om sommeren og oppbevar det utenfor direkte solinnstråling.

Service og vedlikehold

Vedlikehold og rengjøring

Hold batteriet rent. Rengjør det forsiktig med en fuktig, myk klut. Batteriet må ikke dyppes i vann eller rengjøres med en vannstråle.

Hvis batteriet ikke lenger er funksjonsdyktig, henvend deg til en autorisert sykkelforhandler.

Kundeservice og kundefrådgivning

Henvend deg til en autorisert sykkelforhandler ved spørsmål til batteriene.

► **Skriv opp produsenten og nummeret på nøkkelen 23.**

Hvis du mister nøkkelen må du henvende deg til en autorisert sykkelforhandler. Oppgi da nøkkelprodusent og -nummer.

Kontaktinformasjoner til autoriserte sykkelforhandlere finner du på nettsiden www.bosch-ebike.com

Transport


For batteriene gjelder kravene i loven om farlig gods. En privat bruker kan transportere batteriene uten ytterligere pålegg på vanlige veier.

Ved transport som utføres av yrkesmessige brukere eller ved transport av tredjepersoner (f. eks. lufttransport eller spedisjon) må det oppfylles spesielle krav til emballasje og merking (f. eks. de tyske forskriftene ADR). Ved behov kan du konsultere en ekspert for farlig gods ved forberedelse av forsendelsen.

Send batteriene kun hvis huset ikke er skadet. Lim igjen de åpne kontaktene og pakk batteriet slik at det ikke beveger seg i emballasjen. Ta også hensyn til eventuelle videregående nasjonale bestemmelser.

Henvend deg til en autorisert sykkelforhandler ved spørsmål om transport av batteriene. Hos forhandleren kan du også bestille en egnet transportemballasje.

Deponering

 Batterier, tilbehør og emballasje skal tilføres en miljøvennlig gjenvinning.

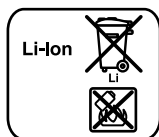
Batteriene må ikke kastes i husholdningsavfallet!

Kun for EU-land:



Iht. det europeiske direktivet 2002/96/EF om gamle elektriske apparater og iht. det europeiske direktivet 2006/66/EF må defekte eller oppbrukte batterier/oppladbare batterier samles inn adskilt og leveres inn til en miljøvennlig resirkulering.

Lever ubrukelige batterier til en autorisert sykkelforhandler.



Li-ion:

Ta hensyn til informasjonene i avsnittet «Transport», side Norsk - 10.

Rett til endringer forbeholdes.

Ladeapparat Charger

Sikkerhetsinformasjon



Les alle sikkerhetsinformasjoner og instruksjer. Feil ved overholdelsen av sikkerhetsinformasjonene og instruksene kan forårsake elektrisk støt,

brann og/eller alvorlige skader.

Ta vare på alle sikkerhetsinformasjoner og instruksjer for fremtidig bruk.

I driftsinstruksen brukes uttrykket «Batteri» som gjelder både for standard-batterier (batterier med holder på sykkelrammen) og bagasjebrett-batterier (batterier med holder på bagasjebrettet).



Hold ladeapparatet unna regn eller fuktighet. Der som det kommer vann i et ladeapparat, øker risikoen for elektriske støt.

- ▶ **Lad kun opp Bosch Li-ion batterier som er godkjent for el-sykler. Batterispenningen må passe til ladeapparatets batteri-ladespenning.** Ellers er det fare for brann og eksplosjon.
- ▶ **Hold ladeapparatet rent.** Smuss fører til fare for elektriske støt.
- ▶ **Før hver bruk må du kontrollere ladeapparatet, ledningen og støpselet. Ikke bruk ladeapparatet hvis du registrerer skader. Du må ikke åpne ladeapparatet selv og la det alltid kun repareres av kvalifisert fagpersonale og kun med originale reservedeler.** Skadet ladeapparat, ledning og støpselet øker risikoen for elektriske støt.
- ▶ **Ikke bruk ladeapparatet på lett brennbar undergrunn (f. eks. papir, tekstiler etc.) eller i brennbare omgivelser.** Ladeapparatet oppvarmes under oppladingen og det er derfor fare for brann.
- ▶ **Ved skader på og usakkyndig bruk av batteriet kan damper slippe ut. Tilfør friskluft og oppsøk lege ved plager.** Damper kan irritere luftveiene.
- ▶ **Barn må være under oppsyn.** Slik kan du sørge for at barn ikke leker med ladeapparatet.
- ▶ **Barn og personer, som på grunn av sine fysiske, sensoriske eller åndelige evner eller sin uerfarenhet eller manglende kunnskaper ikke er i stand til å betjene ladeapparatet sikkert, må ikke bruke dette ladeapparatet uten oppsyn eller anvisning av en ansvarlig person.** Ellers er det fare for feil betjening og skader.
- ▶ **Les og følg sikkerhetsinformasjon og instruksene i driftsinstruksene til batteri og drivenhet/styreenhet samt i driftsinstruksen for din el-sykkel.**
- ▶ På undersiden av ladeapparatet befinner det seg en kort versjon av viktige sikkerhetsinstruksjer på engelsk, fransk

og spansk (merket med nummer **33** på bildet på illustrasjonssiden) og med følgende innhold:

- Ta hensyn til bruksanvisningen for sikker bruk. Fare for elektrisk støt.
- Må kun brukes i tørre omgivelser.
- Lad kun batterier til Bosch el-sykkel-systemet. Andre batterier kan eksplodere og forårsake skader.
- Skift ikke ut nettleddningen. Det er fare for brann og eksplosjon.

Produkt- og ytelsesbeskrivelse

Illustrerte komponenter (se side 6 – 7)

Nummereringen av de illustrerte komponentene gjelder for bildet av ladeapparatet på illustrasjonssiden.

- 20** Bagasjebrett-batteri
- 21** Batteri-ladeindikator
- 26** Standard-batteri
- 29** Ladeapparat
- 30** Apparatkontakt
- 31** Apparatstøpsel
- 32** Ventilasjonsåpninger
- 33** Sikkerhetsinformasjoner ladeapparat
- 34** Ladestøpsel
- 35** Kontakt for ladestøpsel

Tekniske data

Ladeapparat	Charger	
Produktnummer		0 275 007 905
Nominell spenning	V~	207 – 264
Frekvens	Hz	47 – 63
Batteri-ladespenning	V=	42
Ladestrøm	A	4
Godkjent ladetemperaturområde	°C	0 ... +40
Oppladingstid		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Antall battericeller		10 – 80
Driftstemperatur	°C	– 10 ... + 75
Lagertemperatur	°C	– 20 ... + 70
Vekt tilsvarende EPTA-Procedure 01/2003	kg	0,8
Beskyttelsestype		IP 40
Informasjonene gjelder for nominell spenning [U] på 230 V. Ved avvikende spenning og på visse nasjonale modeller kan disse informasjonene variere noe.		

Bruk

- **Plasser batteriet kun på rene flater.** Unngå spesielt at ladekontakten og andre kontakter tilsmusses, f. eks. av sand eller jord.

Igangsetting

Tilkopling av ladeapparat (se bildene E – F)

- **Ta hensyn til strømspenningen!** Spenningen til strømkilden må stemme overens med angivelsene på ladeapparatets typeskilt. Ladeapparater som er merket med 230 V kan også brukes med 220 V.

Sett apparatstøpselet **31** til nettleidingen i apparatkontakten **30** på ladeapparatet.

Koble nettleidingen (avhengig av landet) til strømmettet.

Slå av batteriet og ta det ut av holderen på el-sykkelen. Les og følg til dette driftsinstruksen for batteriet.

Sett ladestøpselet **34** til ladeapparatet inn i kontakten **35** på batteriet.

Opplading

Oppladingen begynner så snart ladeapparatet er forbundet med batteriet og strømmettet.

Merk: Oppladingen er kun mulig når temperaturen på batteriet befinner seg i tillatt ladetemperaturområde.

Under oppladingen lyser LEDene på ladetilstandsindikatoren **21** på batteriet. Hver varig lysende LED tilsvarer ca. 20 % kapasitet på oppladingen. Den blinkende LEDen anviser oppladingen til de neste 20 %.

- **Vær forsiktig hvis du berører ladeapparatet i løpet av oppladingen. Bruk vernehansker.** Ladeapparatet kan varmes sterkt opp, spesielt ved høye omgivelsestemperaturer.

Merk: Pass på at ladeapparatet er godt ventilert i løpet av oppladingen og at ladeåpningene **32** på begge sider ikke er tildekket.

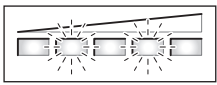
Batteriet er fullstendig oppladet når alle fem LEDene på indikatoren **21** lyser kontinuerlig. Oppladingen avbrytes automatisk.

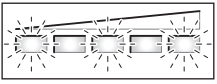
Kople ladeapparatet fra strømmettet og batteriet fra ladeapparatet.

Når batteries koples fra ladeapparatet slås batteriet automatisk av.

Du kan nå sette batteriet inn i el-sykkelen.

Feil – Årsaker og utbedring

Årsak	Utbedring
	To LEDer på batteriet blinker
Batteriet er defekt	Henvend deg til autorisert sykkelforhandler

Årsak	Utbedring
	Tre LEDer på batteriet blinker
Batteriet er for varmt eller for kaldt	Kople ladeapparatet fra batteriet og la det tempereres til ladetemperaturområdet er oppnådd Kople batteriet først til ladeapparatet når det har oppnådd den tillatte ladetemperaturen.
Ingen opplading mulig (ingen visning på batteriet)	
Støpselet er ikke satt riktig inn	Sjekk alle stikkforbindelsene
Kontaktene på batteriet er tilsmusset	Rengjør kontaktene på batteriet forsiktig
Ventilasjonsåpningene 32 på ladeapparatet er tett eller tildekket	Rengjør ventilasjonsåpningene 32 og plasser ladeapparatet slik at det er godt ventilert
Stikkontakt, ledning eller ladeapparat er defekt	Sjekk nettspenningen, la ladeapparatet kontrolleres av en sykkel-forhandler
Batteriet er defekt	Henvend deg til autorisert sykkelforhandler

Service og vedlikehold

Vedlikehold og rengjøring

Hvis ladeapparatet skulle svikte, må du henvende deg til en autorisert sykkel-forhandler.

Kundeservice og kundefråging

Hvis du har spørsmål om ladeapparatet, må du henvende deg til en autorisert sykkel-forhandler.

Kontaktinformasjoner til autoriserte sykkelforhandlere finner du på internetsiden **www.bosch-ebike.com**

Deponering

Ladeapparater, tilbehør og emballasje må leveres inn til miljøvennlig gjenvinning.

Ikke kast ladeapparater i vanlig søppel!

Kun for EU-land:



Jf. det europeiske direktivet 2002/96/EF vedr. gamle elektriske og elektroniske apparater og tilpassingen til nasjonale lover må gamle ladeapparater som ikke lenger kan brukes samles inn og leveres inn til en miljøvennlig resirkulering.

Retten til endringer forbeholdes.

Käyttövoimayksikkö Drive Unit Cruise/ Käyttötietokone Intuvia

Turvallisuusohjeita



Lue kaikki turvallisuus- ja käyttöohjeet. Turvallisuus- ja käyttöohjeiden noudattamisen laiminlyönti saattaa johtaa sähköiskuun, tulipaloon ja/tai vakavaan loukkaantumiseen.

Säilytä kaikki turvallisuus- ja käyttöohjeet myöhempää käyttöä varten.

Tässä käyttöohjeessa käytetty käsite ”akku” viittaa sekä vakioakkuihin (akut, joiden pidike on polkupyörän rungossa), että tavaratelineakkuihin (akut, joiden pidike on tavaratelineessä).

- ▶ **Älä avaa käyttövoimayksikköä itse. Käyttövoimayksikkö on huoltovapaa, sen saa korjata ainoastaan ammattitaitoiset henkilöt, alkuperäisiä varaosia käyttäen.** Täten varmistat, että käyttövoimayksikkö säilyy turvallisena. Takuun voimassaolo loppuu jos käyttövoimayksikkö avataan luvatta.
- ▶ **Kaikkia käyttövoimayksikköön asennettuja osia ja kaikkia muita eBike:n käyttövoiman osia (esim. ketjupyörä, ketjupyörän kiinnitin, polkimet) saa vaihtaa ainoastaan rakenteeltaan samanlaisiin tai polkupyörän valmistajan erityisesti sinun eBike:si sallittuihin osiin.** Täten käyttövoimayksikkö suojataan ylikuormalta ja vaurioitumiselta.
- ▶ **Irrota akku eBike:sta ennen kaikkia siihen kohdistuvia töitä (esim. asennus, huolto jne.) sekä kun kuljetat eBike:a autolla, lentokoneessa tai säilytät sitä.** Käynnistyskytkimen tahaton painallus aikaansaa loukkaantumisvaaran.
- ▶ **Toimintoa talutusapua saa käyttää ainoastaan eBike:a talutettaessa.** Jos eBike:n pyörät eivät kosketa maata talutusapua käytettäessä, on olemassa loukkaantumisvaara.
- ▶ **Käytä ainoastaan alkuperäisiä Bosch-akkuja, joita valmistaja sallii sinun eBike:ssa.** Muiden akkujen käyttö saattaa johtaa loukkaantumiseen ja tulipaloon. Muita akkuja käytettäessä takuu raukeaa eikä Bosch ota mitään vastuuta.
- ▶ **Noudata kaikkia kansallisia eBike:n hyväksyntään ja käyttöön liittyviä määräyksiä.**
- ▶ **Lue ja noudata akun ja eBike:si käyttöohjeiden turvallisuus- ja muita ohjeita.**

Tuotekuvaus

Määräyksenmukainen käyttö

Käyttövoimayksikkö on tarkoitettu ainoastaan polkupyöräsi käyttövoimaksi, eikä sitä saa käyttää muihin tarkoituksiin. eBike on tarkoitettu käytettäväksi päällystetyillä teillä. Sitä ei saa käyttää kilpailuissa.

Kuvassa olevat osat (katso sivu 2–3)

Kuvassa olevien osien numerointi viittaa grafiikkasivussa oleviin kuviin.

Kaikki polkupyörän osien kuvat, käyttövoimayksikköä, käyttötietokonetta käyttöyksikköineen, nopeustunnistinta ja niihin kuuluvia pidikkeitä lukuun ottamatta, ovat kaavamaisia ja ne voivat poiketa sinun eBike:ssa.

- 1 Näyttötoiminnon painike ”I”
 - 2 Valaistuksen painike
 - 3 Käyttötietokone
 - 4 Käyttötietokoneen pidike
 - 5 Käyttötietokoneen käynnistyspainike
 - 6 Nollauspainike ”RESET”
 - 7 USB-liitäntä
 - 8 USB-liitännän suojakansi
 - 9 Käyttövoimayksikkö
 - 10 Käyttöyksikkö
 - 11 Näyttötoiminnon painike ”II” käyttöyksikössä
 - 12 Arvon alennus/alaspäin selailun painike ”–”
 - 13 Arvon korotus/ylöspäin selailun painike ”+”
 - 14 Talutusavun painike ”WALK”
 - 15 Käyttötietokoneen lukitus
 - 16 Käyttötietokoneen lukitusruuvi
 - 17 Nopeusanturi
 - 18 Nopeusanturin puolamagneetti
- Käyttötietokoneen näyttöelimet**
- a Moottoritehon näyttö
 - b Tehostustason näyttö
 - c Tekstinäyttö
 - d Arvonnäyttö
 - e Nopeusmittarin näyttö
 - f Akun lataustilan näyttö

Tekniset tiedot

Käyttövoimayksikkö	Drive Unit Cruise	
Tuotenumero		0 275 007 006/ 0 275 007 007
Teho	W	250
Vääntömomentti voiman ulosotossa maks.	Nm	50
Nimellisjännite	V _{DC}	36
Käyttölämpötila	°C	-5 ... +40
Varastointilämpötila	°C	-10 ... +50
Suojaus		IP 54 (pöly- ja roiske- vesisuojaus)
Paino n.	kg	4

Käyttötietokone	Intuvia	
Tuotenumero		1 270 020 903
USB-liitännän maks. latausvirta	mA	500
USB-liitännän latausjännite	V	5
Käyttölämpötila	°C	-5 ... +40
Varastointilämpötila	°C	-10 ... +50
Suojaus		IP 54 (pöly- ja roiske- vesisuojaus)
Paino n.	kg	0,15

Valaistus*		
Nimellisjännite	V _{DC}	6
Teho		
– Etuvalo	W	2,7
– Takavalot	W	0,3

* Iainsäädöstä riippuen ei eBike:n akun kautta toimiva valaistus ole mahdollinen kaikissa maakohtaisissa malleissa

Asennus

Akun asennus ja irrotus

Lue ja noudata akun käyttöohjetta koskien akun asentamista ja irrotusta eBike:sta.

Käyttötietokoneen asennus ja irrotus (katso kuva A)

Asenna käyttötietokone **3** työntämällä se edestäpäin pidikkeeseen **4**.

Irrota käyttötietokone **3** painamalla lukitusta **15** ja työntämällä se eteenpäin irti pidikkeestä **4**.

► **Poista käyttötietokone pysäköidystä eBike:sta, jotta sivullinen ei luvattomasti voi käyttää käyttölaitetta.** Ilman käyttötietokonetta eBike-järjestelmää ei voida käynnistää.

On myös mahdollista estää käyttötietokoneen irrotus pidikkeestä. Irrota sitä varten pidike **4** ohjaustangosta. Aseta käyttötietokone pidikkeeseen. Kierrä lukitusruuvi **16** alhaaltapäin sitä varten olevaan pidikkeen kierteeseen. Asenna pidike takaisin ohjaustankoon.

Nopeusanturin tarkistus (katso kuva B)

Nopeusanturin **17** ja siihen kuuluvan puolamagneetin **18** tulee olla niin asennettuja, että pyörän pyöriessä yhden kierroksen puolamagneetti liikkuu nopeusanturin ohi vähintään 5 mm ja korkeintaan 17 mm etäisyydellä.

Huomio: Jos etäisyys nopeusanturista **17** puolamagneettiin **18** on liian pieni tai liian suuri tahi, jos nopeusanturi **17** on liitetty väärin, jää nopeusmittarin näyttö **e** puuttumaan ja eBike-käyttölaite toimii hätäkäyntiohjelmassa.

Avaa tässä tapauksessa puolamagneetin **18** ruuvi ja kiinnitä puolamagneetti puolaan (pinnaan) niin, että se ohittaa nopeusanturin merkintää oikealla etäisyydellä. Jos nopeusmittarin näyttö **e** ei vielä tämänkään jälkeen näytä nopeutta, käänny valtuutetun polkupyöräkaupiaan puoleen.

Käyttö

Käyttöönotto

Edellytykset

eBike-järjestelmä voidaan aktivoida vain, jos seuraavat edellytykset täyttyvät:

- riittävästi ladattu akku on asennettuna (katso akun käyttöohje).
- Käyttötietokone on asennettu pidikkeeseen oikealla tavalla (katso "Käyttötietokoneen asennus ja irrotus", sivu Suomi – 2).
- Nopeusanturi on liitetty oikein (katso "Nopeusanturin tarkistus", sivu Suomi – 2).

eBike-järjestelmän käynnistyksen ja pysäytys

eBike-järjestelmän **käynnistykseen** sinulla on seuraavat mahdollisuudet:

- eBike-järjestelmä käynnistyy automaattisesti, jos käyttötietokone jo on kytkettynä, kun se asennetaan pidikkeeseen.
- Paina asennettulla käyttötietokoneella ja asennettulla akulla keran lyhyesti käyttötietokoneen käynnistyspainiketta **5**.
- Paina asennettulla käyttötietokoneella akun käynnistyspainiketta (katso akun käyttöohje).

Huomio: eBike:n polkimia ei saa kuormittaa kun eBike-järjestelmä käynnistetään, muuten se rajoittaa moottoritehoa. Tekstinäyttöön **c** ilmestyy vikailmoitus "**Release pedal**" (vapauta poljin).

Jos eBike-järjestelmä vahingossa käynnistetään kun polkimia kuormitetaan, se kytkeytyy pois päältä ja sitten uudelleen päälle, kun kuormitus poistuu.

Käyttölaite aktivoituu heti, kun painat poljinta (paitsi talutus-aputoiminnassa, katso ”Talutusavun kytkeminen päälle ja pois”, sivu Suomi – 4). Moottorin teho riippuu käyttötietokoneeseen tehdyistä asetuksista.

Heti kun normaaliikäytössä lopetat paineen polkimelta tai heti, kun olet saavuttanut nopeuden 25 km/h, eBike-käyttölaite kytkee tehostuksen pois päältä. Käyttölaite aktivoituu uudelleen heti, kun painat poljinta ja nopeus on alle 25 km/h.

eBike-järjestelmän **pysäyttämiseen** sinulla on seuraavat mahdollisuudet:

- paina käyttötietokoneen käynnistyspainiketta **5**;
- Kytke akku pois sen käynnistyspainikkeella (katso akun käyttöohje).
- Ota käyttötietokone ulos pidikkeestä.

Jos 10 minuutin aikana ei käyttövoimaa käytetä (esim. koska eBike on paikallaan), eikä mitään käyttötietokoneen tai käyttöyksikön painiketta paineta, akku kytkeytyy automaattisesti pois päältä energian säästämiseksi.

Käyttötietokoneen näytöt ja asetukset

Käyttötietokoneen energiahuolto

Jos käyttötietokone on pidikkeessä **4** ja eBike:en on asetettu riittävästi ladattu akku, eBike-järjestelmä saa energiansa eBike:n akusta.

Jos käyttötietokone poistetaan pidikkeestä **4**, sen energiahuolto tapahtuu sisäisestä akusta. Jos sisäinen akku on heikko kun käyttötietokone käynnistetään, tekstinäyttöön **c** ilmestyy kolmeksi sekunniksi teksti ”**Attach to bike**” (yhdistä polkupyörään). Tämän jälkeen käyttötietokone taas pysähtyy.

Sisäisen akun lataata asettamalla käyttötietokone takaisin pidikkeeseen **4** (kun eBike:ssa on akku). Kytke akku päälle sen käynnistyspainikkeella (katso akun käyttöohje).

Voit ladata käyttötietokoneen myös USB-liitännän kautta. Avaa suojakansi **8**. Liitä käyttötietokoneen USB-liitin **7** sopivalla USB-johdolla yleismalliseen USB-latauslaitteeseen tai tietokoneen USB-liitäntään (5 V latausjännite; maks. 500 mA latausvirta). Käyttötietokoneen tekstinäyttöön **c** ilmestyy ”**USB connected**” (liitetty USB-liitäntään).

Käyttötietokoneen käynnistys/pysäytys

Käynnistä käyttötietokone painamalla lyhyesti käynnistyspainiketta **5**. Käyttötietokoneen voi (riittävästi ladatulla sisäisellä akulla) käynnistää myös, kun se ei ole pidikkeessä.

Pysäytä käyttötietokone painamalla käynnistyspainiketta **5**.

Jos käyttötietokone ei ole pidikkeessä, kytkeytyy se ilman painikkeiden painallusta automaattisesti pois päältä 1:n minuutin kuluttua energian säästämiseksi.

Akun lataustilan näyttö

Akun lataustilan näyttö **f** osoittaa eBike:n akun varaustilan, ei käyttötietokoneen sisäisen akun varausta. eBike-akun varaustilanne voidaan myös nähdä itse akun LED:eistä.

Näytössä **f** jokainen akkutunnuksen palkki vastaa noin 20 % kapasiteetista:



100 % ... 80 % kapasiteetti



20 % ... 5 % kapasiteetti, lataa akku.



Alle 5 % kapasiteetti, käyttölaitteen tehostus ei enää toimi. Akun lataustilan näytön LED:it sammuvat.

Jos eBike-valaistus käyttää akkua (maakohtainen), kapasiteetti riittää vielä 2 tunnin valaistukseen, kun tyhjän akun tunnus ilmestyy ensimmäisen kerran. Kun tunnus alkaa vilkkua, toimii valaistus enää vähän aikaa.

Jos käyttötietokone poistetaan pidikkeestä **4**, akun viimeisin osoitettu varaustilanne säilyy muistissa.

Tehostustason asetus

Käyttötietokoneen avulla voit säätää kuinka paljon eBike-käyttölaite tehostaa polkemista. Tehostustasoa voi milloin vain, myös ajon aikana, muuttaa.

Huomio: Yksittäisissä malleissa on mahdollista, että tehostustaso on valmiiksi asetettu, jolloin sitä ei voi muuttaa. On myös mahdollista, että valittavissa on tässä esitettyä vähemmän tehostustasoa.

Käytettävissä on korkeintaan seuraavat tehostustasot:

- ”**OFF**”: Käyttölaite on poiskytkettyä, Bike:a voidaan polkea tavallisen pyörän tavoin ilman tehostusta.
- ”**ECO**”: aktiivinen tehostus suurimmalla tehokkuudella suurinta mahdollista toimintamatkaa varten
- ”**TOUR**”: tasainen tehostus pitkiä toimintamatkoja varten
- ”**SPORT**”: voimakas tehostus urheilulliseen ajoon mäkisillä osuuksilla sekä kaupunkikilienteeseen
- ”**TURBO**”: suurin tehostus suurella poljinnopeudella urheilulliseen ajoon

Nosta tehostustasoa painamalla käyttöyksikön painiketta ”+” **13** niin monta kertaa, että haluttu tehostustaso ilmestyy näyttöön **b**. **Alenna** tehostustasoa painamalla painiketta ”-” **12**.

Moottorin kyseinen teho ilmestyy näyttöön **a**. Moottorin suurin mahdollinen teho riippuu valitusta tehostustasosta.

Tehostustaso	Moottorin teho*	Napakytkentä
” ECO ”	30 %	30 %
” TOUR ”	100 %	90 %
” SPORT ”	170 %	150 %
” TURBO ”	250 %	200 %

* Moottorin teho saattaa poiketa yksittäisissä malleissa.

Jos käyttötietokone poistetaan pidikkeestä **4**, viimeisin osoitettu tehostustaso säilyy muistissa, moottoritehon näyttö **a** pysyy tyhjänä.

Talutusavun kytkeminen päälle ja pois

Talutusapu keventää eBike:n taluttamista. Nopeus tätä toimintoa käytettäessä riippuu valitusta vaihteesta ja voi olla korkeintaan 6 km/h. Mitä pienempi valittu vaihte on, sitä pienempi on talutusaputoiminnon nopeus (täydellä teholla).

► **Toimintoa talutusapua saa käyttää ainoastaan eBike:ä talutettaessa.** Jos eBike:n pyörät eivät kosketa maata talutusapua käytettäessä, on olemassa loukkaantumisvaara.

Käynnistä talutusapu painamalla käyttöyksikön painiketta **"WALK" 14** ja pitämällä se painettuna. eBike:n käyttölaite käynnistyy.

Talutusavun **kytkeytyy pois päältä** heti, kun jokin seuraavista tapahtuu:

- päästät painikkeen **"WALK" 14** vapaaksi,
- poljet eteenpäin tai nopeasti taaksepäin,
- eBike:n pyörät lukkiutuvat (esim. jarruttamalla tai törmäämällä esteeseen),
- nopeus ylittää 6 km/h.

Valaistuksen kytkentä päälle ja pois päältä

Riippuen maakohtaisista määräyksistä on olemassa kaksi mahdollista toteutusta valaistukselle:

- Käyttötietokoneen kautta voidaan etuvalo, takavalvo ja näytön taustavalaistus samanaikaisesti kytkeä päälle ja pois päältä.

Tässä toteutuksessa tekstinäyttöön **c** ilmestyy n. 1 s ajaksi **"Lights on"** (valot sytytetty), kun valaistus kytketään päälle ja **"Lights off"** (valot sammutettu), kun valaistus kytketään pois päältä.

- Vain näytön taustavalaistus voidaan kytkeä päälle ja pois päältä. eBike:ni etu- ja takavalvo ovat riippumattomia käyttötietokoneesta.

Paina kummassakin versiossa painiketta **2 Valaistuksen kytkeminen päälle ja pois päältä**.

Nopeus- ja etäisyysnäytöt

Nopeusmittarin näytössä e näkyy aina senhetkinen nopeus.

Toiminnon näytössä e (tekstinäytön **c** ja arvonäytön **d** yhdistelmä) voidaan valita seuraavista toiminnoista:

- **"Range" (toimintamatka):** todennäköinen toimintamatka akun senhetkiselällä varauksella (olosuhteiden kuten tehostason, matkan profiilin jne. säilyessä samanlaisina)
- **"Distance" (matka):** viimeisestä nollauksesta kuljettu matka
- **"Trip time" (ajoaika):** ajoaika edellisestä nollauksesta
- **"Avg. Speed" (keskinopeus):** viimeisimmän nollauksen jälkeen saavutettu keskinopeus
- **"Max. Speed" (suurin nopeus):** viimeisimmän nollauksen jälkeen saavutettu suurin nopeus
- **"Clock" (kelloaika):** kyseinen kelloaika

Paina **näyttötoiminnon vaihtamiseksi** käyttötietokoneen painiketta **"i" 1** tai käyttöyksikön painiketta **"i" 11** niin monta kertaa, että haluttu toiminto näkyy näytössä.

Nollaa **Reset "Distance"** (matka), **"Trip time"** (ajoaika) ja **"Avg. Speed"** (keskinopeus) vaihtamalla johonkin näistä kolmesta toiminnoista ja painamalla sitten painiketta **"RESET" 6**

kunnes näytössä on nolla. Tällöin myös kahden muun toiminnon arvot nollantuvat.

Nollaa "Max. Speed" (suurin nopeus) vaihtamalla tähän toimintoon ja painamalla sitten painiketta **"RESET" 6** kunnes näytössä on nolla.

Jos käyttötietokone poistetaan pidikkeestä **4**, säilyy kaikkien toimintojen arvot muistissa ja ovat edelleen näytettävissä.

Perussäätöjen näyttö/sovitus

Perussäätöjen näyttö ja muutokset ovat mahdollisia siitä riippumatta, onko käyttötietokone pidikkeessä **4** tai ei.

Pääset perussäätöjen valikkoon painamalla samanaikaisesti painiketta **"RESET" 6** ja painiketta **"i" 1**, kunnes tekstinäyttöön **c** ilmestyy **"Configuration"** (asetukset).

Paina **perussäätöjen vaihtamiseksi** käyttötietokoneen painiketta **"i" 1**, niin monta kertaa, että haluttu perussäätö näkyy näytössä. Jos käyttötietokone on pidikkeessä **4**, voit painaa myös käyttöyksikön painiketta **"i" 11**.

Paina **perussäätöjen muuttamiseksi** pienemmiksi tai alaspäin selataksesi käynnistyspainiketta **5** näytön **"–"** viereessä, suuremmiksi tai ylöspäin selataksesi valaistuksen painiketta **2** näytön **"+"** viereessä.

Jos käyttötietokone on pidikkeessä **4**, on muutos mahdollinen myös käyttöyksikön painikkeilla **"–" 12** tai **"+" 13**.

Poistu toiminnoista ja tallenna muutettu säätö painamalla painiketta **"RESET" 6** 3 s ajan.

Seuraavista perussäädöistä voit valita:

- **"unit km/mi" (yksikkö km/mi):** voit valita näytön nopeus- ja matkayksiköksi kilometrin tai mailin.
- **"time format" (aikamuoto):** voit valita kelloajan muodoksi 12-tunnin tai 24-tunnin näytön.
- **"clock" (kelloaika):** voit asettaa oikean kelloajan. Säätöpainikkeiden pitempi painallus nopeuttaa kelloajan muutoksen.
- **"English" (englanti):** voit muuttaa tekstinäytön kielen. Vaihtoehdot kielekiet ovat saksa, englanti, ranska, espanja, italia ja hollanti.
- **"odometer" (matka yhteensä):** eBike:lla toistaiseksi kuljettu kokonaismatka (ei muutettavissa)
- **"power-on hours" (käyttöaika yhteensä):** eBike:lla toistaiseksi käytetty kokonaisajoaika (ei muutettavissa)

Vikakoodin näyttö

eBike:n osat tarkistetaan koko ajan automaattisesti. Jos vika todetaan, tekstinäyttöön **c** ilmestyy vastaava vikakoodi.

Paina mielivaltaista käyttötietokoneen **3** tai käyttöyksikön **10** painiketta palataksesi vakionäyttöön.

Riippuen vain laadusta käyttölaite kytkeytyy tarvittaessa automaattisesti pois päältä. Matkan jatkaminen ilman käyttölaitteen tehostusta on kuitenkin aina mahdollista. Anna tarkista eBike ennen seuraavia matkoja.

► **Jätä kaikki tarkistukset ja korjaukset ainoastaan valtuutetun polkupyöräkaupiaan suoritettaviksi.** Jos vika esiintyy edelleen korjauksista huolimatta, käänny valtuutetun polkupyöräkaupiaan puoleen.

Koodi	Syy	Korjaus
100	käyttövoimayksikön sisäinen vika	anna tarkistaa käyttövoimayksikkö
101	ongelmia käyttövoimayksikön liitännöissä	anna tarkistaa liitokset ja kytkennät
102	vika nopeusanturissa	anna tarkistaa nopeusanturi
103*	ongelmia valaistuksessa	anna tarkistaa liitokset ja kytkennät
104	ongelmia käyttötietokoneen liitännöissä	anna tarkistaa liitokset ja kytkennät
105	käyttövoimayksikön lämpötila on liian korkea (yli 40 °C)	Anna käyttövoimayksikön jäähtyä. Matkan jatkaminen ilman eBike-käyttölaitetta on mahdollista ja se nopeuttaa käyttövoimayksikön jäähtymistä.
200	Akun sisäinen elektroniikkavika	anna tarkistaa akku
201	Akun lämpötila on liian korkea (yli 40 °C)	anna akun jäähtyä. Matkan jatkaminen ilman eBike-käyttölaitetta on mahdollista ja se nopeuttaa akun jäähtymistä.
202	Akun lämpötila on liian alhainen (alle -10 °C)	anna akun lämmitä hitaasti lämpimässä huoneessa.
203	Ongelmia akun liitännöissä	anna tarkistaa liitokset ja kytkennät
204	akun väärä napaisuus	Lataa akku alkuperäisellä Bosch-latauslaitteella sen käyttöohjeessa selostetulla tavalla.
410	Yksi tai useampi käyttötietokoneen painike on lukkiutunut.	Tarkista ovatko painikkeet jumissa esim. sisään päässeen lian takia. Puhdista painikkeet tarvittaessa.
414	Käyttöyksikön yhteydessä ongelma	anna tarkistaa liitokset ja kytkennät
418	Käyttöyksikön yksi tai useampi painike on lukkiutunut.	Tarkista ovatko painikkeet jumissa esim. sisään päässeen lian takia. Puhdista painikkeet tarvittaessa.
422	ongelmia käyttövoimayksikön liitännöissä	anna tarkistaa liitokset ja kytkennät
423	Ongelmia akun liitännöissä	anna tarkistaa liitokset ja kytkennät
424	Komponenttien välinen kommunikaatiovika	anna tarkistaa liitokset ja kytkennät
430	Käyttötietokoneen sisäinen akku on tyhjä	lataa käyttötietokone (pidikkeessä tai USB-liitännän kautta)
490	käyttötietokoneen sisäinen vika	anna tarkistaa käyttötietokone

* vain jos eBike-valaistus tulee akusta (maakohtainen)

Ulkoisten laitteiden energiahuolto USB-liitännän kautta

USB-liitännän avulla voidaan käyttää tai ladata useimmat laitteet, joiden energiahuolto USB:n kautta on mahdollinen (esim. eräät matkapuhelimet).

Latauksen edellytyksenä on, että käyttötietokone ja riittävästi ladattu akku on asennettu eBike:en.

Avaa käyttötietokoneen USB-liitännän suojakansi **8**. Liitä ulkoisen laitteen USB-liitäntä sopivan USB-johdon avulla käyttötietokoneen USB-liitäntään **7**.

Ajovihjeitä eBike-järjestelmän käyttöön

Milloin eBike-käyttölaite toimii?

eBike-käyttölaite tehostaa ajoa aina, kun poljet. Polkematta tehostus ei toimi. Moottorin teho riippuu aina siitä voimasta, jolla poljet.

Kun käytät vähän voimaa, tehostus on pienempi kuin paljon voimaa käytettäessä. Tämä pätee riippumatta tehostustasosta.

eBike-käyttölaite kytkeytyy automaattisesti pois yli 25 km/h nopeudessa. Kun nopeus putoaa alle 25 km/h, käyttölaite on automaattisesti taas käytettävissä.

Poikkeuksena on talutusaputoiminto, jolloin eBike talutetaan pienellä nopeudella ja polkematta.

Voit myös milloin vain ajaa eBike:ia ilman tehostusta kuten tavallista polkupyörää, joko kytkemällä eBike-järjestelmä pois päältä tai asettamalla tehostustaso asentoon **"OFF"**. Sama koskee tilannetta, jolloin akku on tyhjä.

eBike-järjestelmän yhteispeli vaihteiden kanssa

Käytä vaihteita kuten tavallisessa polkupyörässä myös eBike-käyttölaiteen kanssa (noudata eBike:n käyttöohjetta).

Kaikessa vaihtamisessa on suositeltavaa hetkeksi keskeyttää polkeminen vaihtamisen ajaksi. Tällöin vaihtaminen on helpompaa ja voimansiirron kuluminen on pienempi.

Valitsemalla vaihde oikein voit nostaa nopeutta ja pidentää toimintamatkaa käyttövoimaa lisäämättä.

Ensimmäisten kokemusten hankkiminen

On suositeltavaa hankkia ensimmäiset kokemukset eBike:n kanssa muualla kuin vilkkaasti liikennöidyillä kaduilla.

Kokeile erilaisia tehostustasoja. Kun olet saavuttanut varmuuden, voit käyttää eBike:a liikenteessä, kuten mitä tahansa polkupyörää.

Kokeile eBike:si toimintamatkaa erilaisissa olosuhteissa, ennen kuin suunnittelet pitkiä, vaativia matkoja.

Toimintamatkaan vaikuttavat tekijät

Toimintamatkaan vaikuttavat kuitenkin monet tekijät, kuten esimerkiksi:

- tehostustaso
- vaihteiden valinta,
- rengasmalli ja renkaiden ilmanpaine,
- akun ikä ja hoitotila,
- matkan profiili (nousut) ja tien ominaisuus (päällystys),
- vastatuuli ja ympäristön lämpötila,
- eBike:n, pyöräilijän ja matkatavaran paino.

Tämän takia ei ole mahdollista ennustaa toimintamatkaa konkreettisesti ennen liikkeellelähtöä. Yleisesti pätee kuitenkin:

- eBike:n käyttölaitteen **samalla** moottoriteholla: mitä vähemmän voimaa käytät määrätyn nopeuden saavuttamiseksi (esim. vaihtamalla optimaalisesti), sitä vähemmän energiaa eBike:n käyttölaite kuluttaa, ja sitä pidemmälle pääset yhdellä akun latauksella.
- Mitä **suuremman** tehostustaseen valitset muuten samalaisissa olosuhteissa, sitä lyhyemmäksi muodostuu toimintamatka.

eBike:n hoito ja käsittely

Ota huomioon eBike-osien käyttö- ja varastointilämpötilat. Suojaa käyttövoimayksikkö, käyttötietokone ja akku äärimmäiseltä lämpötilalta (esim. suoralta auringonpaisteelta ilman samanaikaista tuuletusta). Osat (erityisesti akku) voivat vaurioitua äärimmäisestä lämpötilasta.

Hoito ja huolto

Huolto ja puhdistus

Pidä eBike:si osat puhtaana, etenkin akun liittimet ja pidike. Puhdista niitä varovasti kostealla, pehmeällä liinalla.

Mitä osaa (käyttövoimayksikkö mukaan luettuna) ei saa upottaa veteen tai puhdistaa painepesurilla.

Käännä valtuutetun polkupyöräkauppiaan puoleen eBike:n huoltoja ja korjauksia varten.

Huolto ja asiakasneuvonta

Käännä valtuutetun polkupyöräkauppiaan puoleen kaikissa eBike-järjestelmään ja sen osiin liittyvissä kysymyksissä.

Valtuutettujen polkupyöräkauppioiden yhteystiedot löydät internetsivulta www.bosch-ebike.com

Kuljetus

Akut ovat vaara-ainelain määräysten alaisia. Yksityinen käyttäjä saa kuljettaa akkuja kadulla ilman erikoistoimenpiteitä. Ammattimaisessa kuljetuksessa tai toimitettaessa sivullisen kautta (esim.: lentorahti tai huolinta) on noudatettava pakkausta ja merkintää koskevia erikoisvaatimuksia (esim. ADR:n määräyksiä). Tällöin voi tarvittaessa käyttää vaara-aineasian-tuntijaa lähetysten valmistelussa.

Lähetä akku ainoastaan, jos kotelo on vaurioitumaton. Teippaa avoimet liittimet ja pakkaa akku niin, että se ei pääse liikkumaan pakkauksessa. Ota myös huomioon mahdolliset tarkeimmat kansalliset määräykset.

Käännä valtuutetun polkupyöräkauppiaan puoleen akun kuljetukseen liittyvissä kysymyksissä. Kauppiaalta voit myös tilata sopivan kuljetuspakkauksen.

Hävitys



Käyttövoimayksikkö, käyttötietokone käyttöyksikköineen, akku, nopeusanturi, lisätarvikkeet ja pakkaukset tulee toimittaa ympäristöystävälliseen uusiokäyttöön.

Älä heitä eBike:a tai sen osia talousjätteisiin!

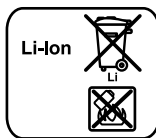
Vain EU-maita varten:



Eurooppalaisen direktiivin 2002/96/EY mukaan käytökelvottomat sähkölaitteet ja eurooppalaisen direktiivin 2006/66/EY mukaan vialliset tai loppuun käytetyt akut/paristot täytyy kerätä erikseen ja toimittaa ympäristöystävälliseen kierrätykseen.

Käyttötietokoneen sisännrakennetun akun saa irrottaa ainoastaan hävitystä varten. Kotelon avaaminen saattaa tuhota käyttötietokoneen.

Luovuta käytöstä poistetut akut ja käyttötietokoneet valtuutetulle polkupyöräkauppiaille.



Litiumioni:

Katso ohjeita kappaleessa "Kuljetus", sivu Suomi – 6.

Oikeus teknisiin muutoksiin pidätetään.

Litiumioniakku Powerpack

Turvallisuusohjeita



Lue kaikki turvallisuus- ja käyttöohjeet. Turvallisuus- ja käyttöohjeiden noudattamisen laiminlyönti saattaa johtaa sähköiskuun, tulipaloon ja/tai

vakavaan loukkaantumiseen.

Säilytä kaikki turvallisuusohjeet ja käyttöohjeet myöhempää käyttöä varten.

Tässä käyttöohjeessa käytetty käsite ”akku” viittaa sekä vakioakkuihin (akut, joiden pidike on polkupyörän rungossa), että tavaratelineakkuihin (akut, joiden pidike on tavaratelineen alla) paitsi, jos nimenomaan viitataan rakenteeseen.

► **Irrota akku eBike:sta ennen kaikkia siihen kohdistuvia töitä (esim. asennus, huolto jne.) sekä kun kuljetat eBike:a autolla, lentokoneessa tai säilytät sitä.** Käynnistyskytkimen tahaton painallus aikaansaa loukkaantumisvaaran.

► **Älä avaa akkua.** On olemassa oikosulun vaara. Jos akku on avattu, takuu raukeaa.



Suojaa akku kuumuudelta (esim. myös pitkäaikaiselta auringonpaisteelta), tulelta ja veteen upotukselta. On olemassa räjähdysvaara.

► **Pidä irrallista akkua loitolla paperinliittimistä, kolikoista, avaimista, nauloista, ruuveista tai muista pienistä metalliesineistä, jotka voivat oikosulkea akun koskettimet.** Akkukoskettimien välinen oikosulku saattaa aiheuttaa palovammoja tai johtaa tulipaloon. Bosch hylkää aina tässä yhteydessä syntyneiden oikosulkuvahinkojen takuuvaatimukset.

► **Väärästä käytöstä johtuen saattaa akusta vuotaa nestettä. Vältä koskettamasta nestettä. Huuhtelee vedellä, jos vahingossa kosketat nestettä. Jos nestettä pääsee silmiin, tarvitaan tämän lisäksi lääkärin apua.** Akusta vuotava neste saattaa aiheuttaa ärsytystä ja palovammoja.

► **Jos akku vaurioituu tai sitä käytetään asiaankuulumattomalla tavalla, saattaa siitä purkautua höyryjä. Tuuleta raikkaalla ilmalla ja hakeudu lääkärin luo, jos haittoja ilmenee.** Höyryt voivat ärsyttää hengitysteitä.

► **Lataa akku ainoastaan alkuperäisillä Bosch-latauslaitteilla.** Käytettäessä muita kuin Boschin alkuperäisiä latauslaitteita ei tulipalovaaraa voi sulkea pois.

► **Käytä akkua ainoastaan yhdessä eBike:n ja alkuperäisten Boschin eBike käyttölaitteiden kanssa.** Vain täten suojaat akkua vaaralliselta ylikuormitukselta.

► **Käytä ainoastaan alkuperäisiä Bosch-akkuja, joita valmistaja sallii sinun eBike:ssa.** Muiden akkujen käyttö saattaa johtaa loukkaantumiseen ja tulipaloon. Muita akkuja käytettäessä takuu raukeaa eikä Bosch ota mitään vastuuta.

► **Lue ja noudata latauslaitteen ja käyttövoimayksikön/käyttötietokoneen sekä eBike:si käyttöohjeiden turvallisuusohjeita.**

Tuotekuvas

Kuvassa olevat osat (katso sivu 4 – 5)

Kuvassa olevien osien numerointi viittaa grafiikkasivuissa oleviin kuviin.

Kaikki polkupyörän osien kuvat, akkuja ja niiden pidikkeitä lukuun ottamatta, ovat kaavamaisia ja ne voivat poiketa sinun eBike:ssa.

- 19 Tavaratelineakun pidike
- 20 Tavaratelineakku
- 21 Käyttö- ja lataustilanäyttö
- 22 Käynnistyspainike
- 23 Akkulukon avain
- 24 Akkulukko
- 25 Vakioakun yläpidike
- 26 Vakioakku
- 27 Vakioakun alapidike
- 28 Kantohihna
- 29 Latauslaite

Tekniset tiedot

Litiumioniakku		PowerPack 300	PowerPack 400
Tuotenumero			
– Musta vakioakku		0 275 007 500	0 275 007 503
– Valkoinen vakioakku		0 275 007 501	0 275 007 504
– Tavaratelineakku		0 275 007 502	0 275 007 505
Nimellisjännite	V=	36	36
Nimellinen kapasiteetti	Ah	8,2	11
Energia	Wh	300	400
Käyttölämpötila	°C	–10... +40	–10... +40
Varastointilämpötila	°C	–10... +60	–10... +60
Sallittu latauslämpötila-alue	°C	0... +40	0... +40
Paino n.	kg	2,5	2,5
Suojaus		IP 54 (pöly- ja roiskevesisuojattu)	IP 54 (pöly- ja roiskevesisuojattu)

Asennus

► **Aseta akku vain puhtaalle pinnalle.** Vältä etenkin lataushylsyn ja koskettimien likaantumista esim. hiekasta tai mullasta.

Akun tarkistus ennen ensimmäistä käyttöä

Tarkista akku, ennen kuin lataat sitä ensimmäistä kertaa tai käytät sitä eBike:ssasi.

Paina käynnistuspainiketta **22** akun kytkemiseksi. Jos lataustilan näytössä **21** ei syty yhtään LED:iä, akku on mahdollisesti viallinen.

Jos vähintään yksi lataustilan näytön **21** LED syttyy, mutta eivät kaikki, lataa akku täyteen ennen ensimmäistä käyttöä.

► **Älä lataa viallista akkua äläkä käytä sitä.** Käännä valtuutetun polkupyöräkaupiaan puoleen.

Akun lataus

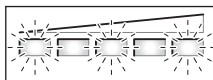
► **Käytä eBike:n toimitukseen kuuluvaa tai saman rakenteen omaavaa alkuperäistä Bosch latauslaitetta.** Vain tämä latauslaite on sovitettu eBike:ssasi olevalle litiumioniakulle.

Huomio: Akku toimitetaan osittain ladattuna. Jotta akun täysi teho olisi taattu, lataa akku täyteen latauslaitteessa ennen ensimmäistä käyttöä.

Akku on poistettava eBike:sta latausta varten.

Lue ja noudata akkua ladattaessa latauslaitteen käyttöohjetta. Akkua voidaan ladata milloin vain, lyhentämättä sen elinikää. Latauksen keskeytys ei vaurioita akkua.

Akku on varustettu lämpötilanvalvonnalla, joka sallii lataamisen vain akun lämpötilan ollessa välillä 0 °C ja 40 °C.



Jos akku on latauslämpötila-alueen ulkopuolella, varaustilan näytön **21** kolme LED:iä vilkkuvat. Irrota akku latauslaitteesta ja anna sen temperoida.

Liitä akku uudelleen latauslaitteeseen vasta, kun se on saavuttanut sallitun latauslämpötilan.

Lataustilan merkivalo

Akun lataustilan **21** viisi vihreää LED:iä osoittaa akun varaustilan sen ollessa kytkettynä.

Tällöin jokainen LED vastaa n. 20 % akun kapasiteetista. Akun ollessa täysin ladattu kaikki viisi LED:iä palaa.

Kytkeyden akun varaustilan näkee lisäksi käyttötietokoneesta. Lue ja noudata tätä varten käyttövoimayksikön ja käyttötietokoneen käyttöohjeita.

Jos akun kapasiteetti on alle 5 %, akussa sijaitsevan lataustilan näytön **21** kaikki LED:it sammuvat, käyttötietokoneessa on kuitenkin vielä näyttötoiminto.

Akun asennus ja irrotus (katso kuvat C – D)

► **Kytke aina akku pois päältä ennen kuin asetat sen pidikkeeseen tai otat sen pidikkeestä.**

Jotta akku voidaan asentaa, on avaimen **23** oltava lukossa **24** ja lukon oltava avattuna.

Asenna vakioakku 26 asettamalla sen koskettimet eBike:n alapidikkeeseen **27**. Käännä se vasteeseen asti yläpidikkeeseen **25**.

Asenna tavaratelineakku 20 työntämällä se koskettimet edellä vasteeseen asti tavaratelineen pidikkeeseen **19**.

Tarkista, että akku on tiukasti paikallaan. Lukitse aina akku lukolla **24**, koska lukko muuten saattaa aueta ja akku voi pudota pidikkeestä.

Poista aina avain **23** lukosta **24** lukitsemisen jälkeen. Täten estät avaimen putoamasta ja sen, että sivullinen luvottomasti irrottaa akun pysäköidystä polkupyörästä.

Irrota vakioakku 26 kytkemällä se pois päältä ja avaamalla lukko avaimella **23**. Käännä akku ulos yläpidikkeestä **25** ja vedä se kantohihnaa **28** käyttäen ulos alapidikkeestä **27**.

Irrota tavaratelineakku 20 kytkemällä se pois päältä ja avaamalla lukko avaimella **23**. Vedä akku ulos pidikkeestä **19**.

Käyttö

Käyttöönotto

► **Käytä ainoastaan alkuperäisiä Bosch-akkuja, joita valmistaja sallii sinun eBike:ssa.** Muiden akkujen käyttö saattaa johtaa loukkaantumiseen ja tulipaloon. Muita akkuja käytettäessä takuu raukeaa eikä Bosch ota mitään vastuuta.

Käynnistys ja pysäytys

Akun kytkentä on yksi eBike-järjestelmän käynnistykseen mahdollisuuksista. Lue ja noudata tätä varten käyttövoimayksikön ja käyttötietokoneen käyttöohjeita.

Tarkista ennen akun tai eBike-järjestelmän käynnistämistä, että lukko **24** on lukittuna.

Huomio: eBike:n polkimia ei saa kuormittaa kun eBike-järjestelmä käynnistetään, muuten se rajoittaa eBike:n käyttölaitteen tehoa.

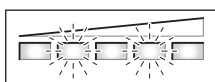
Kytke akku painamalla käynnistyspainiketta **22**. Näytön **21** LED:it syttyvät ja näyttävät samalla varaustilan.

Huomio: Jos akun kapasiteetti on alle 5 %, ei akun lataustilan näytössä **21** syty yhtään LED-merkkivaloa. Ainoastaan käyttötietokoneesta voi päätellä onko eBike-järjestelmä kytkettyä.

Kytke pois akku painamalla käynnistyspainiketta **22** uudelleen. Näytön **21** LED:it sammuvat. Myös eBike-järjestelmä on tällöin poiskytkettyä.

Jos 10 minuutin aikana ei eBiken-käyttölaitteen tehoa käytetä (esim. koska eBike on paikallaan), eikä mitään käyttötietokoneen tai käyttöyksikön painiketta paineta, eBike-järjestelmä ja siten myös akku kytkeytyvät automaattisesti pois päältä energian säästämiseksi.

”Elektroninen kennojen suojaus (ECP)” suojaaa akkua syväpurkaukselta, yllilataukselta, ylikuumenemiselta ja oikosululta. Vaaratilanteessa akku kytkeytyy automaattisesti pois suojakytken avulla.



Jos akussa todetaan vika, varaustilan näytön **21** kaksi LED:iä vilkkuu. Käännä tällöin valtuutetun polkupyöräkauppiaan puoleen.

Ohjeita akun optimaaliseen käsittelyyn

Akun elinikää voidaan pidentää, jos se hoidetaan hyvin ja etenkin, jos se varastoidaan oikeassa lämpötilassa.

Ikääntymisen myötä akun kapasiteetti pienenee kuitenkin myös oikein hoidettuna.

Huomattavasti lyhentynyt käyttöaika latauksen jälkeen osoittaa, että akku on loppuun käytetty. Voit vaihtaa akku.

Jos vakioakun kantohihna **28** on viallinen, anna polkupyöräkauppiaan vaihtaa se uuteen.

Akun lataus ennen varastointia ja sen aikana

Lataa akku ennen pitkää käyttötaukoa noin 60 % kapasiteettiin (3 ... 4 LED:iä palaa lataustilan näytössä **21**).

Tarkista varaustilanne 6 kuukauden jälkeen. Jos lataustilan näytössä **21** palaa enää yksi LED, lataa akku uudelleen n. 60 % kapasiteettiin.

Huomio: Jos akku säilytetään kauan tyhjänä, saattaa se pienestä itsepurkauksesta huolimatta vaurioitua, jolloin varauskyky pienenee huomattavasti.

Ei ole suositeltavaa pitää akku jatkuvasti kytkettynä latauslaitteeseen.

Varastointivaatimukset

Säilytä akku mahdollisuuksien mukaan kuivassa, hyvin tuuletetussa tilassa. Suojaa akku kosteudelta ja vedeltä. Epäsuotuisissa sääolosuhteissa on esim. suositeltavaa irrottaa akku eBike:sta ja säilyttää se suljetussa tilassa seuraavaan käyttökertaan asti.

Akku voidaan varastoida lämpötilassa –10 °C ... +60 °C. Pitkää elinikää varten on kuitenkin varastointi n. 20 °C huoneämpötilassa eduksi.

Varmista, ettei suurinta sallittua varastointilämpötilaa ylitetä. Älä esim. jätä akku kesällä autoon ja säilytä se poissa suorasta auringonvalosta.

Hoito ja huolto

Huolto ja puhdistus

Pidä akku puhtaana. Puhdista sitä varovasti kostealla, pehmeällä liinalla. Akkua ei saa upottaa veteen tai puhdistaa vesisuihkussa.

Jos akku ei enää toimi, käänny valtuutetun polkupyöräkauppiaan puoleen.

Huolto ja asiakasneuvonta

Käänny valtuutetun polkupyöräkauppiaan puoleen kaikissa akkuun liittyvissä kysymyksissä.

► **Merkitse muistiin avaimen 23 valmistaja ja numero.**

Käänny valtuutetun polkupyöräkauppiaan puoleen, jos avain häviää. Ilmoita tällöin avaimen valmistaja ja numero. Valtuutettujen polkupyöräkauppioiden yhteystiedot löydät internetsivulta www.bosch-ebike.com

Kuljetus

Akut ovat vaara-ainelain määräysten alaisia. Yksityinen käyttäjä saa kuljettaa akkuja kadulla ilman erikoistoimenpiteitä. Ammattimaisessa kuljetuksessa tai toimitettaessa sivullisen kautta (esim.: lentorahti tai huolinta) on noudatettava pakkausta ja merkintää koskevia erikoisvaatimuksia (esim. ADR:n määräyksiä). Tällöin voi tarvittaessa käyttää vaara-aineasian-tuntijaa lähetyksen valmistelussa.

Lähetä akkuja ainoastaan, jos kotelo on vaurioitumaton. Teippaa avoimet liittimet ja pakkaa akku niin, että se ei pääse liikkumaan pakkauksessa. Ota myös huomioon mahdolliset tarkemmat kansalliset määräykset.

Käänny valtuutetun polkupyöräkauppiaan puoleen akun kuljetukseen liittyvissä kysymyksissä. Kauppiaalta voit myös tilata sopivan kuljetuspakkauksen.

Hävitys



Toimita akut, lisätarvikkeet ja pakkausmateriaali ympäristöystävälliseen jätteiden kierrätykseen.

Älä heitä akkuja talousjätteisiin!

Vain EU-maita varten:



Eurooppalaisen direktiivin 2002/96/EY mukaan käyttökeltomat sähkölaitteet ja eurooppalaisen direktiivin 2006/66/EY mukaan vialliset tai loppuun käytetyt akut/paristot täytyy kerätä erikseen ja toimittaa ympäristöystävälliseen kierrätykseen.

Luovuta käytöstä poistetut akut valtuutetulle polkupyöräkauppiaille.



Li-Ion

Litiumioni:

Katso ohjeita kappaleessa ”Kuljetus”, sivu Suomi - 10.

Oikeus teknisiin muutoksiin pidätetään.

Latauslaite Charger

Turvallisuusohjeita



Lue kaikki turvallisuus- ja käyttöohjeet. Turvallisuus- ja käyttöohjeiden noudattamisen laiminlyönti saattaa johtaa sähköiskuun, tulipaloon ja/tai

vakavaan loukkaantumiseen.

Säilytä kaikki turvallisuusohjeet ja käyttöohjeet myöhemmää käyttöä varten.

Tässä käyttöohjeessa käytetty käsite ”akku” viittaa sekä vakioakkuihin (akut, joiden pidike on polkupyörän rungossa), että tavaratelineakkuihin (akut, joiden pidike on tavaratelineessä).



Pidä latauslaite poissa sateesta ja kosteudesta.

Jos vettä tunkeutuu latauslaitteen sisään on sähköiskun riski olemassa.

- ▶ **Lataa ainoastaan eBike:lle sallittuja litiumioniakkuja.** Akun jännitteen tulee vastata latauslaitteen latausjännitettä. Muussa tapauksessa syntyy tulipalo- ja räjähdysvaara.
- ▶ **Pidä latauslaite puhtaana.** Likaantuminen lisää sähköiskun vaaraa.
- ▶ **Tarkista latauslaite, johto ja pistoke, ennen jokaista käyttöä. Älä käytä latauslaitetta jos huomaat siinä olevan vaurioita. Älä avaa latauslaitetta itse. Anna ainoastaan ammattitaitoisten henkilöiden korjata se alkupe räisii varaosia käyttäen.** Vahingoittuneet latauslaitteet, johdot tai pistokkeet kasvattavat sähköiskun vaaraa.
- ▶ **Älä käytä latauslaitetta helposti palavalla alustalla (esim. paperi, kangas jne.) tai palavassa ympäristössä.** Latauslaitteen kuumentuminen latauksen aikana synnyttää tulipalovaaran.
- ▶ **Jos akku vaurioituu tai sitä käytetään asiaankuulumattomalla tavalla, saattaa siitä purkautua höyryjä. Tuuleta raikkaalla ilmalla ja hakeudu lääkärin luo, jos haittoja ilmenee.** Höyryt voivat ärsyttää hengitysteitä.
- ▶ **Pidä lapsia silmällä.** Täten varmistat, että lapset eivät leiki latauslaitteen kanssa.
- ▶ **Lapset ja henkilöt, jotka fyysisten, aistillisten tai henkisten kykyjensä, kokemattomuutensa tai puuttuvan tietonsa takia eivät turvallisesti voi käyttää latauslaitetta, eivät saa käyttää sitä ilman vastuullisen henkilön valvontaa tai neuvontaa.** Muussa tapauksessa on olemassa vääriinkäytön ja loukkaantumisen vaara.
- ▶ **Lue ja noudata akun ja käyttövoimayksikön/käyttötietokoneen sekä eBike:si käyttöohjeiden turvallisuus- ja muita ohjeita.**

- ▶ Latauslaitteen pohjassa on lyhennelmä tärkeistä turvallisuusohjeista englanniksi, ranskaksi ja espanjaksi (graafiikkasivun kuvassa merkitty numerolla **33**), sisältö on seuraava:
 - Noudata käyttöohjetta turvallista käyttöä varten. Sähköiskun vaara.
 - Käytä vain kuivassa ympäristössä.
 - Lataa ainoastaan Bosch-eBike-järjestelmän akkuja. Muut akut voivat räjähtää ja aiheuttaa loukkaantumisia.
 - Älä vaihda verkkojohtoa. On olemassa tulipalo- ja räjähdysvaara.

Tuotekuvas

Kuvassa olevat osat (katso sivu 6–7)

Kuvassa olevien osien numerointi viittaa grafiikkasivussa olevaan latauslaitteen kuvaan.

- 20** Tavaratelineakku
- 21** Akun latausvalvontanäyttö
- 26** Vakioakku
- 29** Latauslaite
- 30** Laitehylsy
- 31** Laitepistoke
- 32** Tuuletusaukko
- 33** Latauslaitteen turvallisuusohjeet
- 34** Latauspistoke
- 35** Latauspistokkeen liitin

Tekniset tiedot

Latauslaite	Charger	
Tuotenumero		0 275 007 905
Nimellisjännite	V~	207 – 264
Taajuus	Hz	47 – 63
Акun latausjännite	V---	42
Latausvirta	A	4
Sallittu latauslämpötila-alue	°C	0 ... +40
Latausaika		
– PowerPack 300	h	2,5
– PowerPack 400	h	3,5
Akkukennojen lukumäärä		10 – 80
Käyttölämpötila	°C	–10 ... +75
Varastointilämpötila	°C	–20 ... +70
Paino vastaa EPTA-Procedure 01/2003	kg	0,8
Suojaus		IP 40
Tiedot koskevat 230 V nimellisjännitettä [U]. Poikkeavilla jännitteillä ja maakohtaisissa malleissa nämä tiedot voivat vaihdella.		

Käyttö

► **Aseta akku vain puhtaalle pinnalle.** Vältä etenkin lataushylsyn ja koskettimien likaantumista esim. hiekasta tai mullasta.

Käyttöönotto

Latauslaitteen liitäntä (katso kuvat E - F)

► **Ota huomioon verkkojännite!** Virtalähteen jännitteen tulee vastata laitteen tyyppikilvessä olevia tietoja. 230 V merkittyjä laitteita voidaan käyttää myös 220 V verkoissa.

Työnnä sitten verkkojohdon laitepiste **31** latauslaitteen laitehylsyyn **30**.

Liitä verkkojohto (maakohtainen) sähköverkkoon.

Kytke akku pois päältä ja poista se eBike:n pidikkeestä. Lue ja noudata akun käyttöohjetta.

Työnnä latauslaitteen latauspiste **34** akun hylsyyn **35**.

Lataustapahtuma

Lataustapahtuma alkaa heti kun latauslaite on kytketty akkuun ja sähköverkkoon.

Huomio: Lataustapahtuma on mahdollinen vain, jos akun lämpötila on sallitulla latauslämpötila-alueella.

Lataustapahtuman aikana akussa olevat lataustilan näytön **21** LED:it palavat. Jokainen pysyvästi palaava LED vastaa latauksessa n. 20 % akun kapasiteetista. Vilkkuva LED näyttää seuraavan 20 % latauksen.

► **Ole varovainen, jos kosketat latauslaitetta latauksen aikana. Käytä suojakäsineitä.** Latauslaite saattaa tulla hyvin kuumaksi, etenkin korkeassa ympäristön lämpötilassa.

Huomio: Varmista, että latauslaite on hyvin tuuletettu latauksen aikana ja että tuuletusaukot **32** kummallakin puolella ovat vapaat.

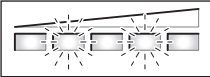
Akku on täysin ladattu, kun lataustilan näytön **21** kaikki viisi LED:iä palaa pysyvästi. Lataus keskeytyy automaattisesti.

Irrota latauslaite sähköverkosta ja akku latauslaitteesta.

Kun akku poistetaan latauslaitteesta se kytkeytyy automaattisesti pois päältä.

Voit nyt asettaa akun eBike:iin.

Viat - Syyt ja korjaus

Syy	Korjaus
	Kaksi LED:iä vilkkuu akussa
Akku on viallinen	käännä valtuutetun polkupyöräkaupiaan puoleen

Syy	Korjaus
	Kolme LED:iä vilkkuu akussa
Akku on liian kuuma tai liian kylmä	Irrota akku latauslaitteesta ja anna akun lämpötilan asettua, kunnes latauslämpötila-alue on saavutettu. Liitä akku uudelleen latauslaitteeseen vasta, kun se on saavuttanut sallitun latauslämpötilan.
Lataaminen ei ole mahdollista (akussa ei näy mitään merkkivaloa)	
pistoke on asennettu väärin	tarkista kaikki pistokeliitännät
Akun koskettimet likaantuneet	puhdistaa akun koskettimet varovasti
latauslaitteen tuuletusaukot 32 ovat tukossa tai peitetyt	puhdistaa tuuletusaukot 32 ja aseta latauslaite hyvin tuuletettuun paikkaan
pistorasia, verkkojohto tai latauslaite on viallinen	tarkista verkkojännite, anna polkupyöräkaupiaan tarkistaa latauslaite
Akku on viallinen	käännä valtuutetun polkupyöräkaupiaan puoleen

Hoito ja huolto

Huolto ja puhdistus

Käännä valtuutetun polkupyöräkaupiaan puoleen, jos latauslaite menee rikki.

Huolto ja asiakasneuvonta

Käännä valtuutetun polkupyöräkaupiaan puoleen kaikissa latauslaitteeseen liittyvissä kysymyksissä.

Valtuutettujen polkupyöräkauppioiden yhteystiedot löydät internetsivulta www.bosch-ebike.com

Hävitys

Latauslaitteet, lisätarvikkeet ja pakkaukset tulee toimittaa ympäristöystävälliseen uusiokäyttöön.

Älä heitä latauslaitteita talousjätteisiin!

Vain EU-maita varten:



Eurooppalaisen vanhoja sähkö- ja elektroniikkalaitteita koskevan direktiivin 2002/96/EY ja sen kansallisten lakien muunnosten mukaan, tulee käyttökelpottomat sähkötyökälyt kerätä erikseen ja toimittaa ympäristöystävälliseen uusiokäyttöön.

Oikeus teknisiin muutoksiin pidätetään.