

USER MANUAL

AS THE ORIGINAL OPERATING MANUAL

DIN EN 15194 / DIN EN 82079-1

E-BIKE (PEDELEC/EPAC)
(S-PEDELEC/S-EPAC)



Sales:

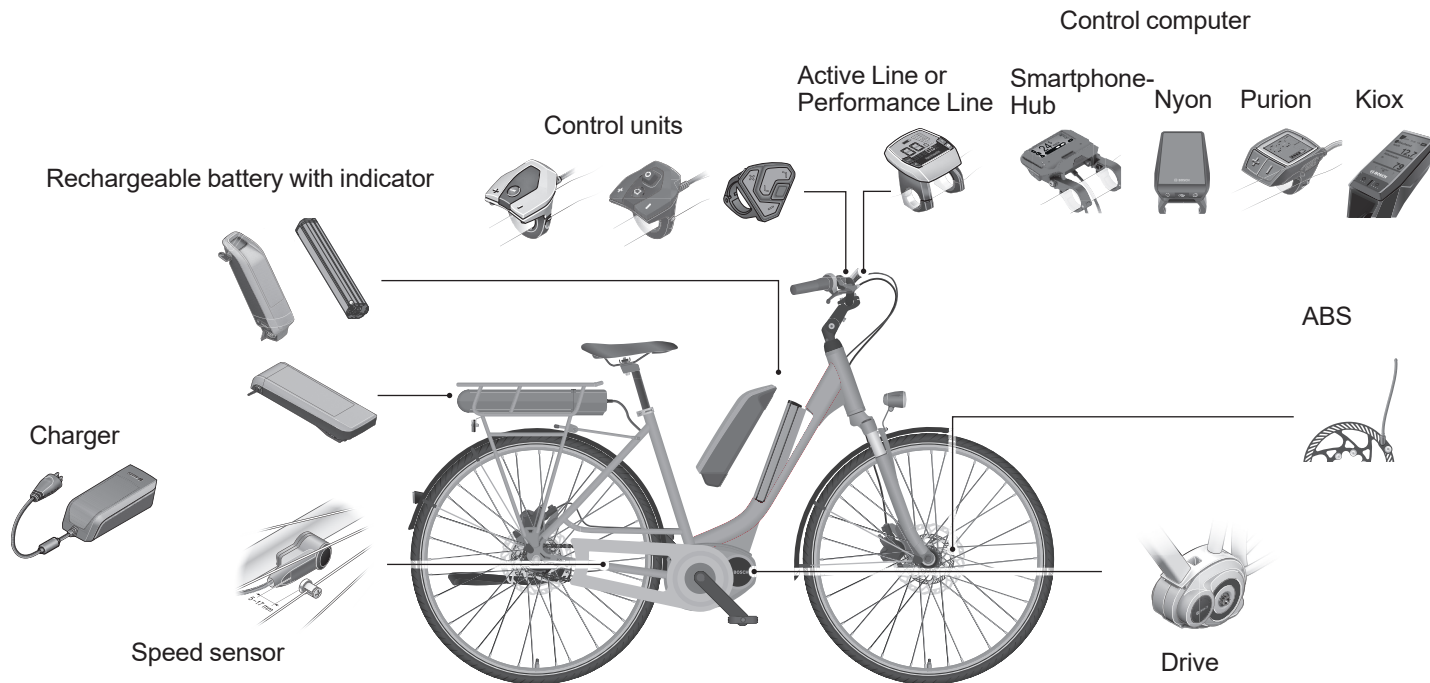
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1 E-bike components

The BOSCH drive systems comprise the components depicted here. Based on the model, the drive systems differ in terms of equipment, technical configuration and operation.

Familiarise yourself with the operation and functions, as well as the care and maintenance instructions.



1 E-bike components	3	5 Basic information	15
2 In an emergency	8	5.1 Symbols on the products	15
2.1 General protective measures	8	5.2 Symbols in this manual	16
2.2 In the event of excessive heat	8	5.3 Terms	16
2.3 In the event of deformation, odour, liquid	8	5.4 Written labels	16
2.4 If the rechargeable battery catches fire	9	5.5 Units	16
3 Tuning or manipulations	9	6 Notes on the e-bike	17
4 Safety	10	6.1 Differences between a bicycle and an e-bike	17
4.1 Be absolutely sure to read the warning notes	10	6.2 Special characteristics of 45 km/h e-bikes	17
4.2 Categorisation of warning notes	10	6.3 EC Certificate of conformity for 45 km/h e-bikes	18
4.3 Use	11	6.4 Functionality	18
4.4 Rechargeable battery	12	6.5 Range	18
4.5 Charger	14	6.6 Cycling with an empty rechargeable battery	19
4.6 Residual risks	14	6.7 Cycling with ABS	19
4.6.1 Risk of injury	14	6.7.1 Data privacy statement	19
4.6.2 Fire hazard	15	6.7.2 Basic information	19
4.6.3 Risk of damage	15	6.7.3 Operation	20
		6.8 Drive overheat protection	21

7	General notes on the rechargeable battery . . .	21	10	Transport	26
7.1	Charging times	22	10.1	By car	26
7.2	Storing the rechargeable battery	22	10.2	Using other forms of transportation	27
7.3	Transporting or shipping the rechargeable battery	23	10.3	Shipping	27
7.4	Temperature monitor	23	11	Start-up	27
7.4.1	Electronic cell protection (ECP)	23	11.1	Before each ride	27
8	Tube frame rechargeable battery	24	11.2	Your first ride	27
8.1	Changing the tube frame rechargeable battery	24	11.3	Inspection instructions	28
8.1.1	Dismantling the tube frame rechargeable battery	24	11.4	Preparations	28
8.1.2	Assembling the tube frame rechargeable battery	24	11.4.1	Rechargeable battery	28
9	Notes on use	25	11.4.2	Charger	28
9.1	Information regarding road traffic	25	12	Operation	29
9.2	Areas of application of the rechargeable battery and charger	25	12.1	Rechargeable battery	29
9.3	Insurance	25	12.1.1	Removing the rechargeable battery	29
9.4	Lights	25	12.1.2	Inserting the rechargeable battery	31
9.5	Permissible total weight	26	12.1.3	Charging indicator	31
9.6	Exclusion of wearable parts	26	12.1.4	Checking the charge level of the rechargeable battery	32
9.7	Disclaimer	26	12.1.4.1	Rechargeable battery removed	32

12.1.4.2 Inserted rechargeable battery	32	12.3.9 Switching off the e-bike	43
12.1.5 Charging the battery	32	12.3.10 Control computer indicators	43
12.2 SmartphoneHub	35	12.3.10.1 Rechargeable battery indicator	43
12.2.1 Power supply	35	12.3.10.2 Cycling data	44
12.2.2 SmartphoneHub installation	36	12.3.10.3 Optional indicators	45
12.2.3 SmartphoneHub holder installation	36	12.3.10.4 Resetting the indicators (Reset)	45
12.2.4 Inserting and removing the smartphone	36	12.3.11 Basic settings	45
12.2.5 Pairing with a smartphone	37	12.3.12 Optional basic settings	46
12.3 Control computer	37	12.3.13 Basic settings for SmartphoneHub	46
12.3.1 Switching on and off	37	12.3.14 Purion basic settings	47
12.3.2 Inserting and removing the control computer ..	37	12.3.15 Indicators of the Purion control computer	47
12.3.3 Removal lock	38	12.3.16 Switching Purion control computer on and off ..	47
12.3.4 Power supply	39	12.3.17 Start screen of control computer Kiox	48
12.3.5 Charging the control computer	39	12.3.18 Switching Kiox control computer on and off ...	48
12.3.5.1 On the e-bike	39	12.3.19 Switching Kiox lights on and off	48
12.3.5.2 Via USB	39	12.3.20 SmartphoneHub indicators	49
12.3.6 Changing the batteries	40	12.3.21 Kiox control unit and SmartphoneHub	49
12.3.7 Switching on the e-bike	41	12.3.21.1 Button functions	49
12.3.8 Using the drive	43	12.3.22 Setting the level of assistance	50
		12.3.23 Lights	50

12.3.24 Charging external devices via USB	51	17.4 Rechargeable battery	62
12.3.25 System query with USB	51	17.5 Rechargeable battery weight	62
12.3.26 Walk assistance	52	17.6 Rapid charger	62
12.3.27 Nyon option	53	17.7 Standard charger	63
12.3.27.1 Buttons on the control computer	53	17.8 Compact charger	63
13 Speed sensor	53	18 Declaration of conformity	64
14 Care	55	19 Legal notice	65
14.1 Notes on the key	55		
15 Disposal	55		
15.1 Disposing of the e-bike	56		
15.2 Disposing of rechargeable batteries and chargers	56		
15.3 Disposing of the packaging	56		
16 Error messages	57		
16.1 Rechargeable battery	60		
16.2 Charger	60		
17 Technical data	61		
17.1 Control computer/SmartphoneHub	61		
17.2 Lights	61		
17.3 Operating unit	61		

2 In an emergency

You can find notes on handling the rechargeable battery in this user manual. Despite compliance with all safety measures, the rechargeable battery may pose a risk, for example, if it catches fire (see chapter “*Residual risks*” on page 14).

- In an emergency, act in such a way that you do not at any time endanger yourself or other persons.
- In an emergency, follow the instructions on this page.
- Immediately read these instructions so that you can concentrate and respond in a calculated manner in the event of an emergency.
- We recommend keeping a suitable fire extinguisher readily available at all times.

2.1 General protective measures

If you identify defects or damages to the rechargeable battery:

1. Do not use the rechargeable battery.
2. Wear protective gloves when you touch the rechargeable battery.
3. Do not inhale any gases or vapours that are emitted.
4. Avoid contact between your skin and any liquid that is leaked.

2.2 In the event of excessive heat

If you notice that excessive heat is being generated by the rechargeable battery:

1. Have the rechargeable battery checked by your specialist dealer immediately. Inform your specialist dealer about the rechargeable battery's status prior to transport.
2. For short-term temporary storage, select an outdoor location and, if possible, place the rechargeable battery in a fire-proof container or on the soil.
3. If you store the rechargeable battery outdoors, clearly secure the area with ample space around the storage location.

2.3 In the event of deformation, odour, liquid

If you identify any deformation, odour or leaking liquids on the rechargeable battery:

1. If you are not put at risk and you are physically capable of doing so, place the battery in a fire-proof and acid-resistant container (e.g. made of stone or clay) and cover the rechargeable battery with sand.
2. If you are not put at risk and you are physically capable of doing so, use a fire extinguisher to put out a fire.
3. Have your specialist dealer dispose of the rechargeable battery immediately.
4. Select a location outdoors for short-term temporary storage.
5. If you store the rechargeable battery outdoors, clearly secure the area with ample space around the storage location.

2.4 If the rechargeable battery catches fire

1. Call the fire brigade immediately.
2. If you are not put at risk and you are physically capable of doing so, use a suitable fire extinguisher to put out a fire.
3. If you are not put at risk and you are physically capable of doing so, cool off the rechargeable battery by putting it in a fire-proof container filled with water. The water must cover the rechargeable battery completely.
4. If you are not put at risk and you are physically capable of doing so, cover the rechargeable battery completely with sand.

3 Tuning or manipulations



WARNING

Tuning or manipulating your e-bike's speed settings may have a negative impact on your bicycle's braking or riding performance and may lead to accidents and injury.

Risk of accident and injury!

- Do not make any structural modifications.



WARNING

Brake failure can occur if the anti-lock braking system (ABS) is manipulated.

Risk of accident and injury!

- Do not make any structural modifications to the anti-lock braking system.



CAUTION

The e-bike may respond in a manner other than that which you expect if the drive system has been manipulated.

Risk of injury!

- Do not make any structural modifications to the drive system.



NOTICE

You can cause irreparable damage to your e-bike by tuning it.

Risk of damage!

- Do not make any structural modifications to the drive system.
- You can cause irreparable damage to your e-bike by tuning it.

- The frame, wheels and brakes are not designed for higher speeds.
- Any modification to the drive system or ABS system render the warranty or other claims for damages invalid.
- Tuning your e-bike has legal consequences.
- Operating an e-bike at speeds of over 25 km/h requires a driving licence and an insurance policy as well as a registration plate.
- E-bike operators travelling at a speed of over 25 km/h are required to wear a helmet.
- Any change made to the drive system will result in the loss of the driving licence.
- Any change made to the drive system will result in loss of insurance cover (personal liability insurance).
- A criminal record entry may also be made in the case of a repeat offence (previous conviction)!
- Any change made to the drive system will result in the loss of the Declaration of Conformity (CE).
- Modifications to the drive system preclude participation in road traffic.
- Brake failure can occur if the anti-lock braking system (ABS) is modified.

4 Safety

4.1 Be absolutely sure to read the warning notes



Read all warnings and notes in this user manual with care before you operate the e-bike for the first time. This user manual is a supplementary manual and integral part of the e-bike user manual. Keep all user manuals so that they are handy and available at all times. Include the user manual when passing the e-bike on to third parties.

4.2 Categorisation of warning notes

The warning notes are intended to draw your attention to potential hazards. Your complete attention is required when reading the warning notes; the statements must be understood completely. Failure to follow a warning note may result in injury to yourself or other persons. The warning notes alone cannot prevent dangers. Follow all warning notes to avoid a risk when using the e-bike.

There are safety notes in the following categories:



WARNING

The signal word “Warning” designates a hazard with moderate degree of risk which may lead to death or severe injury if not avoided.



CAUTION

The signal word “Caution” designates a hazard with low degree of risk which may lead to minor or moderate injury if not followed.



NOTICE

The signal word “Notice” warns against potential damage to property.

4.3 Use



WARNING

The e-bike, rechargeable battery and the charger may only be used by persons, who are able to act without restriction with respect to their mental and physical abilities. There is a high risk of injury for persons with restricted mental and physical capacities.

Risks for children and persons with impaired physical, sensory or mental capacities or lack of experience and knowledge, e.g. children or persons with impaired mental and physical capacities.

- Only allow the e-bike, rechargeable battery and the charger to be used by persons briefed on safe and proper use and who understand the risks arising in connection with it.
- Do not let children, young persons and persons without a driving licence play with the e-bike.

**WARNING**

There is an increased risk of accident and injury if the bicycle is used in an improper manner or with disregard for regulations.

Risk of accident and injury!

- Do not repair the e-bike yourself.
- Have repairs performed by your specialist dealer.

**CAUTION**

High or low temperatures could restrict the functioning of the e-bike or damage it.

Risk of damage!

- Take note of the temperature limits.
- Do not park the e-bike near heat sources.

4.4 Rechargeable battery

**WARNING**

Rechargeable batteries that have caught fire are very difficult to extinguish; the cells affected must burn down in a controlled manner. Responding properly may prevent severe damages.

Risk of fire and explosion!

- Read section *"In an emergency"* on page 8 in order to be prepared for such an event.

**WARNING**

Internal damages to the rechargeable battery may cause the rechargeable battery to overheat, emit gases or leak liquids even a significant amount of time after the damage occurred.

Risk of fire and explosion!

- Have your specialist dealer inspect the rechargeable battery after falls or severe impacts.
- Do not open, dismantle, drill through or deform the rechargeable battery.

**CAUTION**

Lithium could be leaked if the rechargeable battery is damaged. Lithium causes severe burns to the skin.

Danger to health and the environment!

- Do not touch the damaged rechargeable batteries with bare hands.

**NOTICE**

Improperly charging the rechargeable battery can damage the rechargeable battery and the drive.

Risk of damage!

- Do not charge the rechargeable battery if you suspect that it is damaged.
- Before charging the rechargeable battery for the first time, be absolutely sure to read the section “*Charging the battery*” on page 32.
- Only use the original charger to charge the rechargeable battery and only under supervision.
- While charging the rechargeable battery, always place it on non-flammable materials (e.g. stone, glass, ceramics).
- If you are not absolutely sure how to handle lithium ion rechargeable batteries, have a qualified specialist explain how to do so.

**NOTICE**

Incorrect use of the rechargeable battery could cause damage to the rechargeable battery, the drive or surrounding objects, e.g. due to overheating.

Risk of damage!

- Only use the rechargeable battery included in the product contents for the original drive.
- Only use original rechargeable batteries approved for use with the original drive.
- Keep the rechargeable battery away from fire and other heat sources; protect it against exposure to intense sunlight.
- Protect the rechargeable battery against moisture. Never clean or spray the rechargeable battery with liquids.
- Do not use the rechargeable battery if you notice any unusual warmth, odour or discolouration and/or if the rechargeable battery exhibits obvious damages.

4.5 Charger



DANGER

Incorrect handling of electrical current and corresponding components poses a risk to life due to electric shock.

Risk to life!

- Check the charger, mains cord and mains plug for damage before each use.
- If you identify or suspect damages, do not use the charger.
- Only use the charger indoors.
- Only connect the charger to a properly installed power supply: in Europe “220 to 240 V ~ (50 Hz)” (see section “*Technical data*” on page 61)
- Position the charger in such a way that it cannot become moist or wet, e.g. due to splashing water.
- Never clean or spray the charger with liquids.
- While charging always place the charger on non-flammable materials (e.g. stone, glass, ceramics). Do not open, dismantle, drill through or deform the charger.

- Only have the charger repaired by qualified professionals with original spare parts.
- Only use the charger to charge the original rechargeable battery or equivalent replacement rechargeable batteries.
- Always pull the mains plug out of the socket after use.
- Read the additional safety notes on the housing of the charger.

4.6 Residual risks

Using the e-bike is associated with the following unforeseeable residual risks despite compliance with all safety notes:

4.6.1 Risk of injury

- Gases, vapours and liquids could leak out of the rechargeable battery due to internal, invisible damages and in the event of fire. Injuries to external and internal organs are possible, for example, in the event of contact with skin or inhalation of the gases (see section “*In an emergency*” on page 8).

4.6.2 Fire hazard

Internal, invisible damage can cause the rechargeable battery to catch fire and ignite objects in the surrounding area (see section *"In an emergency"* on page 8).

4.6.3 Risk of damage

- If the rechargeable battery catches fire, hydrofluoric acid leaks out with the smoke gas. Hydrofluoric acid is highly corrosive and causes permanent damage to surfaces (see section *"In an emergency"* on page 8).

5 Basic information

5.1 Symbols on the products

The following symbols are located on the packaging, the rechargeable battery or the charger:



Label for electrical devices that you must not dispose of with household waste. You are obligated by law to dispose of correspondingly labelled products at suitable recycling points for environmentally-friendly recycling.



Label for rechargeable batteries and batteries that you must not dispose of with household or other garbage. You are obligated by law to dispose of correspondingly labelled products at suitable recycling points for environmentally-friendly recycling.



Label for environmentally-harmful hazardous substances. Exercise special caution when handling products labelled as such. Observe disposal guidelines!



Label for waste materials intended for recycling. Sort the packaging before you dispose of it. Dispose of cardboard and carton as waste paper and foils via the recyclable material collection service.



Symbol confirming conformity with guidelines for products corresponding to the requirements of the European General Product Safety Directive.



Labelling for products that may only be used indoors.



The 230 V ~/50 Hz mains connection corresponds to protection class II.



Symbol for direct current (DC).

5.2 Symbols in this manual

- 1. Instructions for steps to be performed in a particular order begin with a number.
- Steps to be performed in no particular order begin with a dot.
- Lists begin with a so-called dash.

Note: Supplementary notes regarding steps to be performed or use.

5.3 Terms

Terms with “nominal”: Nominal output, nominal capacitance etc. are values stipulated according to the design. The actual values may differ from the nominal values depending on operating conditions.

E-bike (Pedelec/EPAC): An e-bike is a bike powered by an electrical auxiliary motor. E-bikes of this kind are also referred to as pedelecs (pedal electric cycle) or EPAC (electric power assisted cycles). The term “e-bike” will be used hereinafter.

Capacitance: The amount of electrical charge expressed in the unit “Ah” if the rechargeable battery has been completely charged (see section “Units” on page 16).

Charging cycle: Refers to fully charging a completely depleted rechargeable battery.

Memory effect: Refers to the loss in the capacitance of rechargeable batteries if they are not completely charged (does not apply to lithium ion rechargeable batteries).

Pedal drive: Assembly consisting of pedal, crank arm and chain wheel.

Temperature limits: Minimum and maximum temperature at which the corresponding component may be used. At the same time, both the temperature limits for the component as well as for the ambient temperature may be specified.

Peddalling frequency: Number of revolutions of the pedal drive in one minute expressed in the unit “1/min”.

5.4 Written labels

- Image captions and references in the text are rendered in *italics*.

5.5 Units

Unit	Meaning	Unit for
1/min	per minute	Revolutions
A	Amperes	Electrical current (= W/V)
Ah	Ampere hour	Electrical charge (= Wh/V)
g	Gram	Weight (= kg/1000)
Hz	Hertz	Frequency (Hz = vibrations/sec)
kg	Kilogramme	Weight (= gx1000)
Nm	Newton meter	Torque
V	Volt	Electrical voltage (= W/A)
W	Watt	Electrical power (= V × A)
Wh	Watt hour	Electrical capacity (= V × Ah)

6 Notes on the e-bike

E-bikes are available with a speed of up to 25 km/h or with a speed of over 25 km/h.

E-bikes with a speed of up to 25 km/h do not require a licence within the EU.

Stricter regulations apply to e-bikes which travel at speeds of over 25 km/h which will be indicated separately.

The term e-bike is used in this original operating manual for both categories.

6.1 Differences between a bicycle and an e-bike

The additional components of the electric drive constitute the major differences between a conventional bike and an e-bike.

- The e-bike is significantly heavier and its weight distribution is different from conventional bicycles. This results in different handling.
- The drive has a significant effect on braking characteristics.
- E-bikes require greater braking forces. This may result in greater wear than with conventional bicycles.
- The electrical assistance will increase your average speed.

- You should therefore cycle attentively. Keep in mind that other road users must get used to the increased speed of the e-bike.
- The bike's handling and braking as well as handling of the rechargeable battery and charger require an appropriate level of knowledge.
- Familiarise yourself with the characteristics of your e-bike even if you already have some experience with electrically power-assisted bicycles (see section *"Your first ride" on page 27*).

6.2 Special characteristics of 45 km/h e-bikes

45 km/h e-bikes are vehicles with electric auxiliary engines, which, when the pedals are depressed, offer assistance up to a maximum of 45 km/h. Depending on the model, it is possible to operate the bicycle using electricity only up to a maximum of 18 km/h.

In some countries, 45 km/h e-bikes are classified as motor vehicles. Obtain information about country-specific and regional regulations and categorisation in your country, e.g. at the Ministry of Transport.

Do not make any structural modifications.

- Only use original space parts e.g. tyres.
- Only use approved accessories.

Take account of differences which are specific to countries and regions in regard to:

- Minimum age for the use of 45 km/h e-bikes

- Driving licence
- Compulsory insurance and requirement to register the bike
- Operating licence
- Mandatory helmet use
- Provisions governing the use of cycle paths and tracks through woods and forests.

6.3 EC Certificate of conformity for 45 km/h e-bikes

CoC – Certificate of Conformity

This document is included with your 45 km/h e-bike and specifically belongs to this particular e-bike. The CoC confirms that the e-bike corresponds to the approved type. You need the CoC to insure your e-bike and where appropriate, to register it. Prior to your first journey, inform yourself of country-specific and regional regulations.

Note:

Keep the CoC safe. You need it in order to insure the e-bike. The buyer will request the CoC even if you later sell the e-bike. Obtaining a duplicate of the CoC at a later date involves a great deal of effort and significant costs.

Non EU countries:

It is not certain that the EC certificate of conformity is sufficient in countries outside the European Union. For Switzerland, for example, a type approval and a registration document are also necessary.

6.4 Functionality

The drive only provides you with riding assistance when you pedal. The intensity of assistance is automatically adjusted depending on the selected riding mode, the pressure applied when pedalling, the load and the speed. The drive assists you up to a speed of 25 km/h or 45 km/h.

The A-weighted emission sound pressure level at the height of the bike operator's ears is less than 70 db(A).

6.5 Range

The drive is an assistive motor. The range is affected by your pedalling intensity.

- Set the assistance as low as possible.

The lower the pedalling frequency of the pedal drive the higher the energy requirement for the drive.

- Use the gear shift as you would without assistance.
- For inclines, head wind or a heavy load, use the lower gears of the gear shift.

The drive requires a large amount of energy when starting.

- Always start in a low gear and apply as much pressure to the pedal as possible.
- Before travelling uphill, switch to a lower gear in time.
- Ride with foresight to avoid any unnecessary stops. The energy consumption will increase with high loads.
- Do not transport any unnecessary loads.

Lack of care and maintenance may reduce the range.

- Handle the e-bike with care and observe all notes regarding the rechargeable battery in this user manual.
- Check the tyre pressure regularly.
- Comply with the maintenance intervals.

Temperatures below +10 °C may negatively affect the performance of the rechargeable battery during operation. When you are not using your e-bike:

- At low outdoor temperatures, take the rechargeable battery out of the holder and put it in storage (see section “*Storing the rechargeable battery*” on page 22).
- Only put it back in the holder directly before cycling.

6.6 Cycling with an empty rechargeable battery

If the rechargeable battery is completely used up during the ride, you can use your e-bike as you would a normal bike (see section “*Charging indicator*” on page 31).

Note: If the battery charge has been used up, the drive will switch off. Lights will be supplied with energy for another 2 hours.

6.7 Cycling with ABS

6.7.1 Data privacy statement

When the eBike is connected to the Bosch DiagnosticTool, data is transmitted to Bosch eBike Systems (Robert Bosch GmbH) for the purpose of improving product performance using Bosch eBike ABS (brake pressure, deceleration, etc.). Further information is available on the Bosch eBike website at www.bosch-ebike.com.

6.7.2 Basic information

Depending on your e-bike's model, it is equipped with ABS (anti-lock braking system).

- Do not make any structural modifications to the anti-lock braking system (see section “*Tuning or manipulations*” on page 9).

ABS prevents wheels from locking up upon braking.

The wheels' grip to the road remains unchanged.



CAUTION

ABS system failure caused by incorrectly selected spare parts.

Risk of accident and injury!

- Seek advice from your specialist dealer about appropriate spare parts.
- Only use original spare parts.



CAUTION

Longer braking distance due to ABS and increased risk of falling when braking around corners.

Risk of accident and injury!

- Anticipate situations while riding the bicycle.
- Adapt the way you ride the bicycle to suit the environmental conditions.



CAUTION

Prolonged braking can cause ABS failure.

Risk of accident and injury!

- Briefly releasing the front brake restarts the ABS system.

6.7.3 Operation

The ABS system is only available with a charged and inserted rechargeable battery.

If the battery charge has been used up, the braking system remains fully functional; only the ABS control is not available.

Once you switch on the system, the ABS system indicator light must illuminate and then switch off after being started up at approx. 5 km/h.

If the indicator light does not switch off after start-up or lights up while riding, then there is a problem with the ABS system. The braking system remains fully function; the ABS control is no longer available.

The wheel speed sensors on the front and rear wheels allow the ABS system to recognise the rotational movement of the wheels when the brakes are applied (see Fig. "ABS components").

If one of the wheels is at risk of coming to a complete stop, the ABS system limits the brake pressure on the front wheel and stabilises it.

The ABS function is deactivated if one of the following events occur:

- The memory compartment in the ABS control unit is completely full.
- The e-bike has come to a complete stop.
- The bike operator releases the brake.
- Check that the ABS indicator light illuminates on the display when you switch on the system.
- Check the front and rear brake before each ride.

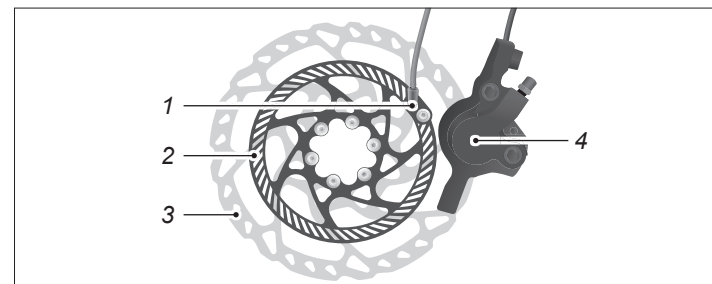


Fig. ABS components

- 1 Bike speed sensor
- 2 Sensor disc

- 3 Brake disc
- 4 Brake calliper

6.8 Drive overheat protection



CAUTION

The drive and rechargeable battery can become very hot if a fault is at hand. You could injure yourself in the event of contact with your skin.

Risk of injury!

- Do not touch the drive and rechargeable battery.

The drive is automatically protected against damage caused by overheating. If the temperature of the drive is too high, the drive will automatically switch off.

- To prevent the drive from overheating, set a low level of assistance at high outdoor temperatures or roads or paths with a substantial incline (see section “*Setting the level of assistance*” on page 50).
- If the drive is switched off when the rechargeable battery is charged and at a speed of under 25 km/h or 45 km/h, do not use the e-bike temporarily to allow the drive to cool off.
 - If allowing the drive to cool off does not resolve the disturbance, have your specialist bike dealer inspect the e-bike.

7 General notes on the rechargeable battery

Your e-bike is equipped with a high-quality lithium-ion rechargeable battery (Li-ion rechargeable battery). Li-ion rechargeable batteries are safe if used properly.

Li-ion rechargeable batteries have a relatively high energy density. Therefore, this rechargeable battery must be handled with great care. For your safety, be absolutely sure to observe the following notes to ensure reliable operation and a long life-cycle:

Partial charging does not damage the rechargeable battery as it does not have a memory effect. Partial charging is evaluated according to its capacitance (a charge of 50% corresponds to a ½ charge cycle).

Note: Depending on the bike model, your rechargeable battery uses one of the following On/Off symbols  or .



NOTICE

Self-discharge of the rechargeable battery for technical reasons may cause irreparable damages.

Risk of damage!

- Immediately recharge the rechargeable battery if empty.
- Take note of the temperature limits of the rechargeable battery (see section “*Technical data*” on page 61).
 - Please note that outside temperatures under +10 °C may reduce the power of the rechargeable battery.

- Please note that the rechargeable battery's performance declines with age.
- Keep in mind that you will get used to cycling with electrical assistance after a while. This may result in a perceived drop in the output of the rechargeable battery.
- If there is a loss of power or the operating time is significantly reduced, contact your specialist dealer.
- Never perform any modifications on the rechargeable battery.

Note: You can find more information about the rechargeable battery in section *"Rechargeable battery"* on page 29.

7.1 Charging times

If the rechargeable battery is empty, a full charge cycle requires up to 9.5 hours. The duration of the rechargeable battery charge cycle depends on the following factors:

- Battery capacitance
- Charge level of the rechargeable battery.
- Temperature of the rechargeable battery and surroundings.

7.2 Storing the rechargeable battery

If you do not use the rechargeable battery for a prolonged period of time, please store it as follows:

- Charge the rechargeable battery to approx. 30% to 60% of the capacitance.
- For storage, take the rechargeable battery out of the holder and place it in a safe location.

- Store the rechargeable battery so that there is no risk of it falling down and so that it is out of reach of children and animals.
- If possible, store the rechargeable battery at room temperature in a dry, well ventilated area.
- If you are not using the rechargeable battery for a prolonged period, it is best to store the rechargeable battery in a well-ventilated location (e.g. basement) at approx. +10°C to +15°C.
- Protect the rechargeable battery against moisture and water.
- Make sure that the upper and lower temperature limit is not exceeded or underrun during storage (see section *"Technical data"* on page 61).

For storage exceeding 3 months, please recharge the rechargeable battery every quarter to half year depending on storage conditions. Then charge the rechargeable battery again to approx. 30% to 60 % of the capacitance.

- After the charging process, always disconnect the charger from the rechargeable battery and pull the mains plug out of the socket.

7.3 Transporting or shipping the rechargeable battery

Lithium ion rechargeable batteries are subject to the requirements of dangerous goods legislation. The private user may transport undamaged rechargeable batteries on the road without any further requirements.

- Please note that the special requirements for packaging and labelling e.g. during air transport or shipping orders apply for commercial transport.
- Contact the forwarding company or your specialist bicycle dealer directly for information regarding the transportation of the rechargeable battery and suitable transport packaging.

Note: Read section “Transport” on page 26 for information on how to transport the e-bike.

7.4 Temperature monitor

The rechargeable battery is equipped with a temperature monitor. It can only be charged at temperatures between 0 °C and 40 °C. If the rechargeable battery is not within the temperature range for charging, the three LEDs on the charge indicator will flash.

- Disconnect the rechargeable battery from the charger and let it reach the operating temperature.
- Only connect the rechargeable battery to the charger again once it has reached the permissible charging temperature.



CAUTION

Temperatures of over 40 °C can cause injury to the skin.

Risk of injury!

- If the charging process has ended prematurely, let the rechargeable battery cool off.

1. Pull the mains plug out of the socket.
2. Once the rechargeable battery has cooled off, pull the charging plug out of the charging slot.
3. Have your specialist dealer inspect the rechargeable battery.
 - Inform your specialist dealer about the rechargeable battery's status prior to transport.

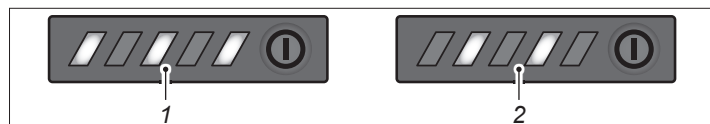


Fig. Error displays

1 Overheat protection

2 Electronic Cell Protection

7.4.1 Electronic cell protection (ECP)

The “electronic cell protection (ECP)” protects the rechargeable battery against deep discharge, overcharging and short-circuiting. If there is a risk, a protective circuit will automatically deactivate the rechargeable battery. If a defect is detected in the rechargeable battery, two LEDs on the charge indicator will flash (see Fig. “Error displays”).

- If the “ECP” error appears, have the rechargeable battery inspected by your specialist dealer.

8 Tube frame rechargeable battery

Depending on your e-bike's model, it can be equipped with different tube frame rechargeable batteries:

- a 500 Wh rechargeable battery with an adapter
- a 625 Wh rechargeable battery.

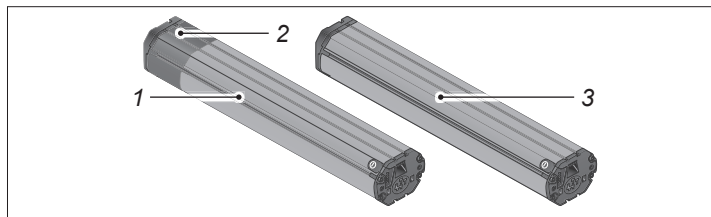


Fig. Tube frame rechargeable battery

- 1 500 Wh rechargeable battery 3 625 Wh Rechargeable battery
2 Adapter

Please refer to Fig. “Tube frame rechargeable battery” to see which battery is built in to your e-bike.

8.1 Changing the tube frame rechargeable battery

Instead of operating your e-bike with the built-in 625 Wh battery, you can also operate it with a 500 Wh battery with an adapter, for example, to use it as a spare or second rechargeable battery.

8.1.1 Dismantling the tube frame rechargeable battery

1. Turn the two fixing screws anticlockwise and completely unscrew them from the tube frame rechargeable battery.
2. Carefully remove the faceplate from the tube frame rechargeable battery.

8.1.2 Assembling the tube frame rechargeable battery

1. Place the adapter on the tube frame rechargeable battery and hold it in position.
2. Guide two fixing screws (7 cm) through the adapter.
 - Use the fixing screws (7 cm) that come supplied with the adapter's package contents.
3. Carefully tighten both fixing screws by turning them clockwise.
4. Place the faceplate on back of the tube frame rechargeable battery's adapter and hold it in position.
5. Guide two fixing screws (7.5 cm) through the faceplate and adapter.
6. Carefully tighten both fixing screws by turning them clockwise.

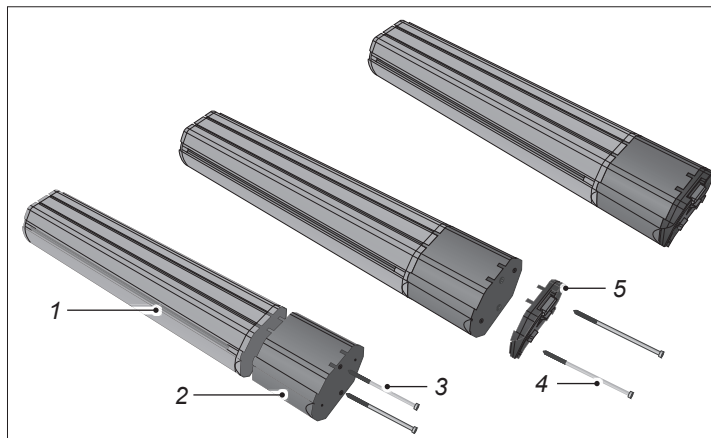


Fig. Changing the tube frame rechargeable battery

- | | |
|-------------------------------|------------------------|
| 1 500 Wh rechargeable battery | 4 7.5 cm fixing screws |
| 2 Adapter | 5 Faceplate |
| 3 7 cm fixing screws | |

9 Notes on use

9.1 Information regarding road traffic

The assistance provided by e-bikes is effective up to a speed of 25 km/h or 45 km/h. Your e-bike's technical design complies with the European Standard EN 15194

for Electrically Power Assisted Cycles and the bicycle standard DIN EN ISO 4210.

- Seek information regarding the relevant applicable road traffic regulations for your respective country or the region, for example, from the Ministry of Transport.
- Ensure that you regularly obtain information regarding changes to the content of valid regulations.

9.2 Areas of application of the rechargeable battery and charger

The drive unit, rechargeable battery and charger are configured for use with one another and are approved only for use with your e-bike.

9.3 Insurance

- Check whether the conditions of your insurance policies (e.g. liability insurance, household contents insurance) provide sufficient cover for damage.
- In case of doubt, contact your insurer.

9.4 Lights

Your e-bike is equipped with rechargeable battery-powered lights. The rechargeable battery must always be inserted when using public roads so that the lights are operational at all times.

Depending on the bike model, the rear light flashes temporarily when the lights are switched on to indicate to traffic behind the bicycle that the lighting has been activated.

9.5 Permissible total weight

The total admissible weight of your e-bike is specified on the CE sticker. The sticker is located on the down tube or inside of the chain stays.

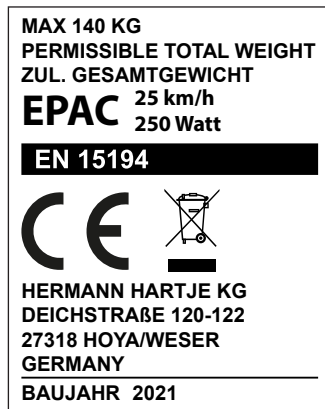


Fig. CE sticker (example)

9.6 Exclusion of wearable parts

In addition to the wearable parts listed in the user manual for the bicycle, the rechargeable battery – with the exception of production defects – is not covered by the warranty.

9.7 Disclaimer

The manufacturer cannot be held liable for damages or breakdowns resulting from direct or indirect use of the e-bike.

10 Transport



WARNING

The lithium ion rechargeable battery is considered a dangerous good and may be damaged if exposed to shocks and impacts without such damages being externally apparent.

Risk of short-circuiting and fire!

- When transporting your e-bike, remove the rechargeable battery and store it separately.
 - Transport the rechargeable battery with special care.
- To rule out any risks and damages, transport the e-bike as follows:
 - Remove the rechargeable battery prior to transport (see section “Transporting or shipping the rechargeable battery” on page 23).

10.1 By car

- Store the rechargeable battery so as to prevent slipping and collision with other objects during the trip.
- Properly secure the load to protect the rechargeable battery against compressive loads and avoid shocks.
- Store the rechargeable battery so that it is unable to be heated up by exposure to the sun or other heat sources.

With e-bikes, the forces from braking and lateral forces that act on the bike rack are stronger than with conventional bicycles.

- Check whether your bike rack is suitable for e-bikes.

- Ask your specialist dealer about suitable bike racks for your e-bike.
 - It is prohibited to use roof bike racks to transport e-bikes.

10.2 Using other forms of transportation

When transporting e-bikes with the rechargeable battery, special guidelines, which are constantly being expanded or updated, apply. These guidelines may differ from one another depending on the form of transportation.

- Contact the airline, train or ferry company in due time to ascertain the valid provisions that apply for transporting e-bikes. Have the technical data handy for this purpose.

10.3 Shipping

- If you ship your e-bike, ship the rechargeable battery separately and well-packed in a suitable transport container (see section *“Transporting or shipping the rechargeable battery” on page 23*).

11 Start-up

11.1 Before each ride

- Check your e-bike according to the section *“Inspection instructions” on page 28* in this user manual and in the user manual for your bicycle.



CAUTION

The e-bike may respond in a manner other than you expect if operated incorrectly.

Risk of injury!

- Read section *“Operation” on page 29* completely before you switch it on for the first time.

- Fully charge the rechargeable battery before your first ride.

11.2 Your first ride

- Practice operating and using it in an open area away from public traffic.
 - Practice on level, solid ground with adequate grip.
- 1. Select the lowest level of assistance on the control unit (see section *“Setting the level of assistance” on page 50*). Start slow.
- 2. Exercise caution when using the brakes and get used to the braking effect; for models with ABS, get used to the ABS control.
- 3. Once you are able to safely operate the brakes, familiarise yourself with the fully automatic assistance.
- 4. Once you are able to ride safely, repeat the familiarisation phase and test the brake in other riding modes.
- 5. Practice using the walk assistance function (see section *“Walk assistance” on page 52*).

11.3 Inspection instructions

- Check whether the rechargeable battery lock is engaged.
- Check the rechargeable battery for any damage (visual inspection).
- Check the drive for any damage (visual inspection).
- Check the cables and plug connections for damage and make sure they are securely fastened (visual check).
 - If you discover any missing or damaged parts, do not use the e-bike.
 - Have your specialist repair the e-bike.
- Make sure that the front and rear brakes are working properly.

Note: Depending on the type of bicycle, your e-bike is equipped with a frame rechargeable battery, a rack rechargeable battery or a battery integrated in the frame.

- Read the entire user manual before you operate the e-bike.
- Prepare the rechargeable battery and the charger for the start-up of your e-bike.

11.4 Preparations

1. Read the entire user manual before you operate the e-bike.
2. Prepare the rechargeable battery and the charger for the start-up of your e-bike.

11.4.1 Rechargeable battery



NOTICE

If the rechargeable battery is not fully charged before start-up, the nominal charge of the rechargeable battery will decrease.

Risk of damage!

- Before start-up, charge the rechargeable battery until the charging indicator on the rechargeable battery goes out.

Depending on your e-bike's model, it is equipped with two rechargeable batteries.

- One of the two rechargeable batteries must be inserted and charged in order for the e-bike to be used.
- If both rechargeable batteries are used, they will be depleted at the same time.

11.4.2 Charger

A summary of important safety notes with the following content is located on the bottom of the chargers:

- Observe the user manual to ensure safe use. Risk of electrical shock.
- Only use in a dry environment.
- Only charge the rechargeable battery of the Bosch e-bike. Other rechargeable batteries may explode and cause injury.
- Do not replace the mains cord. This poses a risk of fire and explosion.
- Read the information on the nameplate of the charger.

- If the information does not correspond to the power supply, do not use the charger. Read section *“Charging the battery”* on page 32 before connecting the charger to the power supply.

12 Operation

12.1 Rechargeable battery

12.1.1 Removing the rechargeable battery

NOTICE

The electronic system could be damaged.

Risk of damage!

- Always switch off the e-bike before you take the rechargeable battery out of the holder.

1. To switch off the e-bike, push the  button on the rechargeable battery or the  button on the control computer (see section *“Switching off the e-bike”* on page 43).
2. Hold the rechargeable battery tightly.
3. Insert the key in the rechargeable battery lock and open the rechargeable battery lock.
4. Frame rechargeable battery:
 - Carefully tilt the rechargeable battery out of the top holder. Do not tilt the rechargeable battery by more than 7° relative to the frame (see Fig. *“Frame rechargeable battery”* and *“Frame with two rechargeable batteries”*).

- Pull the rechargeable battery up and out of the bottom holder.

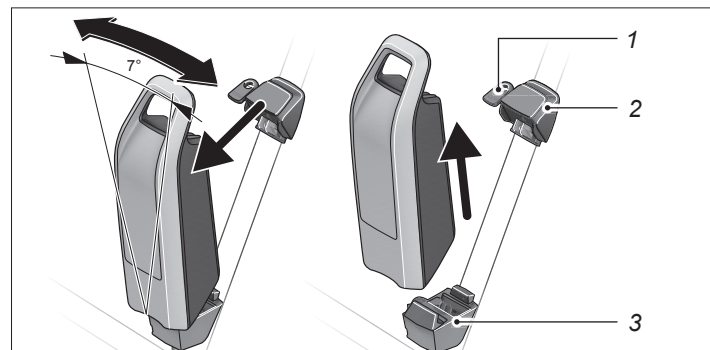


Fig. Frame rechargeable battery

1 Key 2 Upper holder 3 Bottom holder

4. Rack rechargeable battery:
 - Carefully pull the rechargeable battery back and out of the rechargeable battery holder (see Fig. *“Rack rechargeable battery”*).

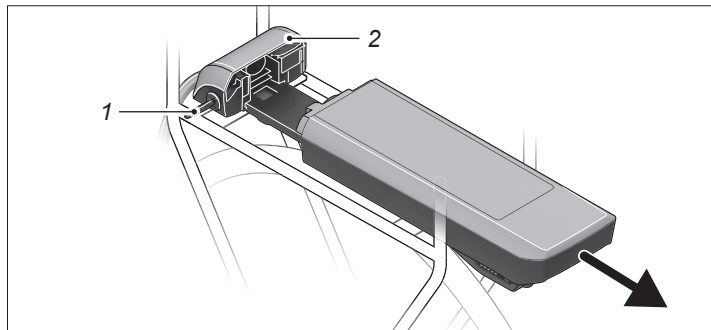


Fig. Rack rechargeable battery

1 Key

2 Holder

4. Tube frame rechargeable battery:
 - Carefully tilt the rechargeable battery out of the top holder into the restraint. Press on the restraint from above and tip the rechargeable battery until you can pull it out of the frame (see Fig. *“Tube frame rechargeable battery”* and *“Frame with two rechargeable batteries”*).
 - Pull the rechargeable battery up and out of the bottom holder.
5. To prevent damage, pull the key out of the rechargeable battery lock.

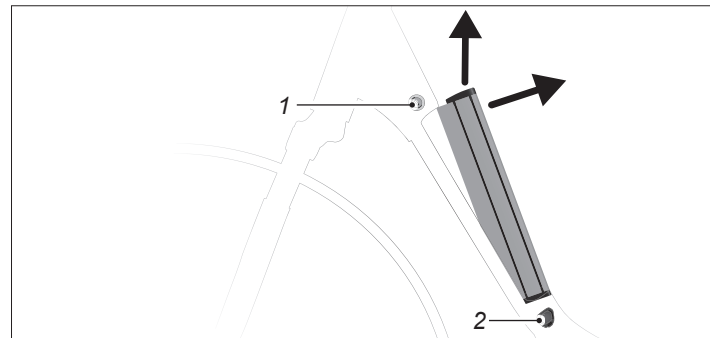


Fig. Tube frame rechargeable battery

1 Closure

2 Charging slot

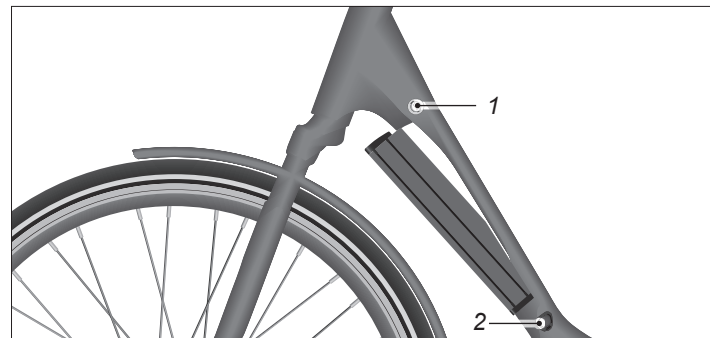


Fig. Tube frame rechargeable battery

1 Closure

2 Charging slot

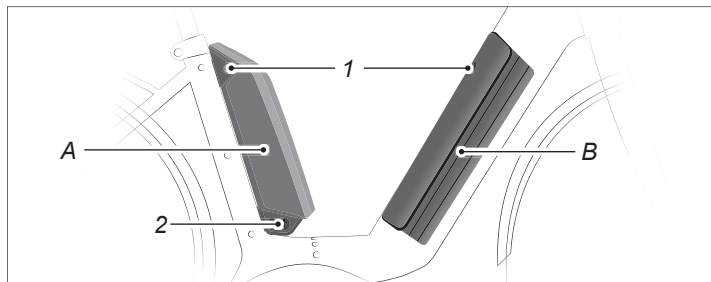


Fig. Frame with two rechargeable batteries

- 1 Closure
A Frame rechargeable battery
2 Charging slot
B Tube frame rechargeable battery

12.1.2 Inserting the rechargeable battery

1. Use the key to unlock the rechargeable battery lock.
2. Frame rechargeable battery:
 - Place the rechargeable battery with the contacts on the bottom holder. In the process, do not tilt the rechargeable battery by more than 7° relative to the frame.
 - Tilt the rechargeable battery into the upper holder until it reaches the stop point.
2. Rack rechargeable battery:
 - Push the rechargeable battery with the contacts facing forward into the rechargeable battery holder until the rechargeable battery locks into the holder.

Once you have inserted the rechargeable battery, engage the rechargeable battery lock.

2. Tube frame rechargeable battery:
 - Place the rechargeable battery with the contacts on the bottom frame holder.
 - Press the rechargeable battery into the upper holder until it visibly and audibly reaches the stop point.
3. After locking, always pull the key out of the rechargeable battery lock.



WARNING

The rechargeable battery lock could open. The rechargeable battery could fall out of the holder and be damaged.

Risk of damage resulting in fire!

- Check whether the rechargeable battery is securely fixed in the holder.
4. Touch the rechargeable battery and make sure that you cannot pull it out.

12.1.3 Charging indicator

The rechargeable battery is equipped with a charging indicator on the left side and on the lower side (see Fig. "Charging indicator").

If no bar is shown, the rechargeable battery charge for the drive has been used up. The drive will be deactivated. The display and lights will be supplied with energy for another 2 hours.

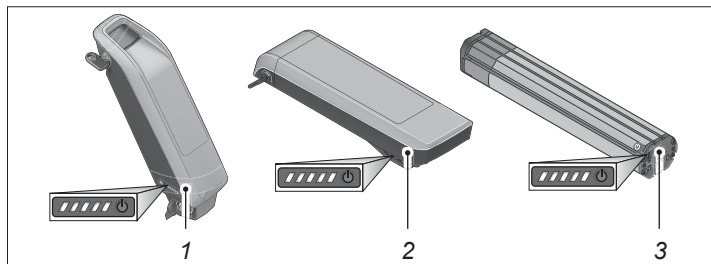


Fig. Charging indicator

- 1 Frame rechargeable battery 3 Tube frame rechargeable battery
2 Rack rechargeable battery

12.1.4 Checking the charge level of the rechargeable battery

12.1.4.1 Rechargeable battery removed

1. Push the  button on the rechargeable battery.
2. Read the charge level on the charging indicator.

1 bar is illuminated:	Charge level of 1 to	20 %
2 bars are illuminated:	Charge level of 21 to	40 %
3 bars are illuminated:	Charge level of 41 to	60 %
4 bars are illuminated:	Charge level of 61 to	80 %
5 bars are illuminated:	Charge level of 81 to	100 %

Note: If the rechargeable battery and the control computer are installed, you can switch the e-bike on or off with the  button.

12.1.4.2 Inserted rechargeable battery

1. To check the charge level, switch the e-bike on (see section *"Switching on the e-bike" on page 41*).
2. Read the charge level on the rechargeable battery indicator (see section *"Control computer indicators" on page 43*).

12.1.5 Charging the battery



WARNING

If you notice heat, an odour or damages while charging:

Risk of fire and injury!

- Do not inhale gases that are emitted.
- Do not touch the charger and the rechargeable battery.
- Pull the mains plug of the charger out of the socket.
- Read section *"In an emergency" on page 8*.



NOTICE

If the charging process takes an excessive amount of time, the rechargeable battery may be damaged.

Risk of damage!

- During excessively long charge cycles disconnect the rechargeable battery from the charger and contact your specialist dealer.

The rechargeable battery is charged with the rechargeable battery inserted on the e-bike with the rechargeable battery removed.

For e-bikes with two rechargeable batteries, both batteries are charged at the same time through the charging slot (see Fig. *"Frame with two rechargeable batteries"*).

- Only charge the rechargeable battery in dry rooms.
- If you cannot park your e-bike under shelter, remove the rechargeable battery to charge it (see section *"Removing the rechargeable battery" on page 29*).
- Remove any dirt on the charging slot and the contacts with a dry cloth.
- Only charge the rechargeable battery under supervision.
- When the rechargeable battery is inserted: Switch the e-bike off (see section *"Switching off the e-bike" on page 43*).

Note: During the charging process, the e-bike cannot be switched on when the rechargeable battery is inserted. You can remove or insert the control computer during the charging process (see section *"Control computer" on page 37*).

When the control computer is inserted, the backlight on the display panel will be activated at low brightness. "Bicycle is being charged" will appear in the text display field. The internal rechargeable battery of the control computer is charged at the same time.



NOTICE

If there is no bar blinking on the charging indicator after the charger has been connected to an empty rechargeable battery, the rechargeable battery or the charger is damaged. If several bars are blinking, a protective function is active.

Risk of damage!

- Disconnect the charger from the rechargeable battery and the power supply.
- Have your specialist dealer check the rechargeable battery and charger.

1. When the rechargeable battery is removed: Place the rechargeable battery on a clean, solid and non-flammable surface.
2. Insert the device plug into the device jack of the charger (see Fig. *"Device jack of the charger"*).
3. Insert the mains plug of the charger in a socket.
4. Only when the rechargeable battery is inserted: Open the cover of the charging slot.
5. Insert the charging plug in the charging slot (see Fig. *"Inserted rechargeable battery" or "Rechargeable battery removed"*).

The charging process will start. The charging progress is displayed on the charging indicator of the rechargeable battery (see section *"Charging indicator" on page 31*).

6. Monitor the charging process.

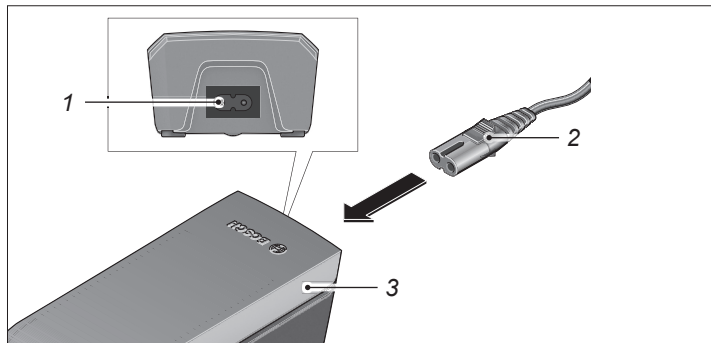


Fig. Device jack of the charger

1 Device jack 2 Device plug 3 Charger

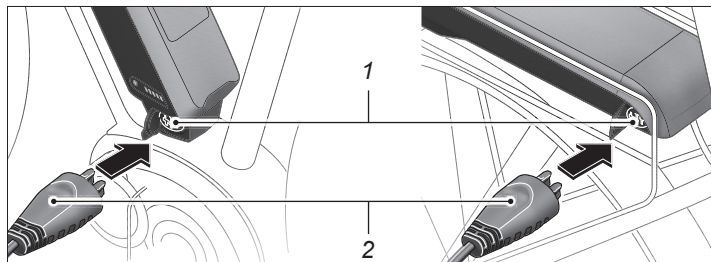


Fig. Inserted rechargeable battery

1 Charging slot 2 Charging plug

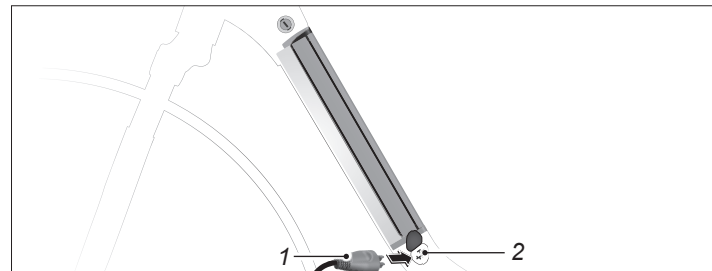


Fig. Tube frame rechargeable battery

1 Charging plug 2 Charging slot

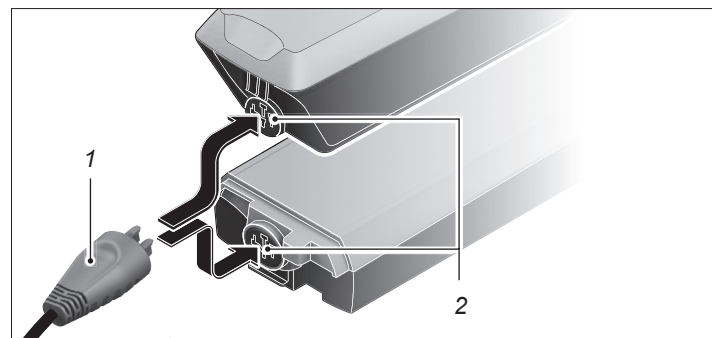


Fig. Rechargeable battery removed

1 Charging plug 2 Charging slot

Note: To check the rechargeable battery charge, push the  button on the rechargeable battery.

7. Once the charging process is complete, the charging indicator on the rechargeable battery goes out.
8. Pull the charging plug out of the rechargeable battery.
9. Pull the mains plug out of the socket.
10. Only when the rechargeable battery is inserted: Close the charging slot with the cover.

12.2 SmartphoneHub

SmartphoneHub makes it possible for you to use your iPhone or Android smartphone as your display for your e-bike.

- Download and install an app suitable for your smartphone.
- Follow the instructions provided on the screen during app installation.

Note: Basic cycling data is also shown on the SmartphoneHub's built-in display.

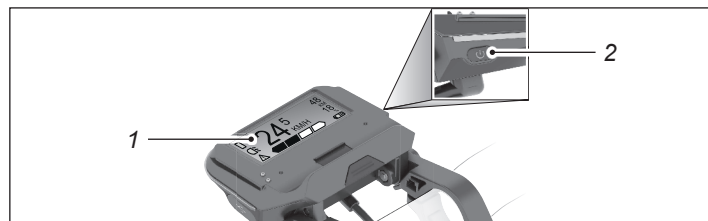


Fig. "SmartphoneHub" display

1 Basic cycling data

2 On/Off button

12.2.1 Power supply

The "SmartphoneHub" has a permanently installed internal rechargeable battery.

- Charge the "SmartphoneHub" once every three months for approx. one hour in order to prevent deep discharging.

Note: The "SmartphoneHub" is either charged by the switched-on e-bike rechargeable battery or via the USB socket with a commercial USB charger.

12.2.2 SmartphoneHub installation



CAUTION

Incorrect installation of the SmartphoneHub can lead to muscle strain, joint pain and falls:

Risk of accident and injury!

- Install the “SmartphoneHub” in such a manner as to ensure easy and ergonomic reading at all times.
- Install the “SmartphoneHub” in such a manner as to ensure a relaxed riding position while reading.

1. Unscrew the screws from the holder.
 - Make sure not to drop the “SmartphoneHub” while doing this.
2. Place the holder around the handlebars (see Fig. “SmartphoneHub installation”).
3. Carefully tighten screws.
4. Check if you can rotate the “SmartphoneHub”.
 - If you are able to move the “SmartphoneHub”, have it installed by your specialist dealer.

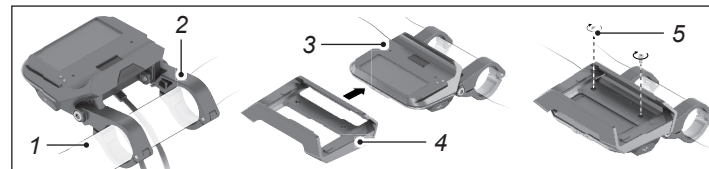


Fig. “SmartphoneHub” installation

- | | |
|-----------------|--------------------|
| 1 Handlebars | 4 Universal holder |
| 2 Holder | 5 Fixing screw |
| 3 SmartphoneHub | |

12.2.3 SmartphoneHub holder installation

1. Slide the universal holder onto the “SmartphoneHub” from the front until you hear it click into place (see Fig. “SmartphoneHub installation”).
2. Use the fixing screws to secure the universal holder in place.
 - Carefully tighten the fixing screws.

12.2.4 Inserting and removing the smartphone

1. Pull the front mounting bracket toward the travelling direction in order to open the smartphone holder (see Fig. “Inserting the smartphone”).
2. Hold the smartphone holder in this position.
3. Place the smartphone onto the rear mounting bracket with its longer side facing upward.
4. Allow the front mounting bracket to slide slowly towards the smartphone and release it.

5. Make sure that the smartphone is firmly held in place in the holder.

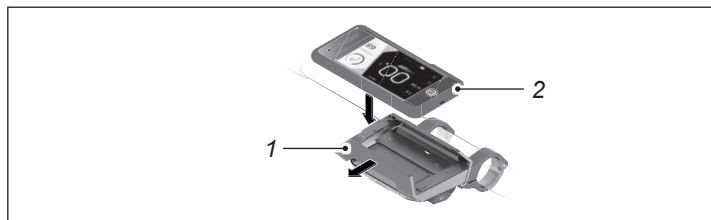


Fig. Inserting the smartphone

1 Smartphone holder

2 Smartphone

12.2.5 Pairing with a smartphone

Communication between the “SmartphoneHub” and the smartphone is carried out via Bluetooth®.

- Push the On/Off button on the SmartphoneHub for approx. 3 seconds to establish a Bluetooth® connection.
- Read your smartphone’s user manual for instructions on how to establish a Bluetooth® connection to other devices.

12.3 Control computer

Depending on the bike model, your control computer or control unit uses one of the following light symbols  or .

12.3.1 Switching on and off

If the control computer is not inserted in the holder, it can be switched on separately to read the cycling data and for settings (see section “Inserting and removing the control computer” on page 37).

Note: After one minute of inactivity, the control computer, which has been removed, will automatically switch off.

- To switch on the removed control computer, push the  button.
- To switch off the removed control computer, push the  button again.

12.3.2 Inserting and removing the control computer

- To insert the control computer, insert the “ActiveLine”, “PerformanceLine” or “Nyon” control computer into the holder from the front (see Fig. “Inserting the control computer”).
- To remove the control computer, push the locking mechanism and push the control computer forward out of the holder.
- First place the “Kiox” control computer with the contacts in the holder and then gently press the front end into the holder.

- To remove the “Kiox” control computer, lift it out of the holder from the front.
- Remove the control computer when you park the e-bike unless you are using the removal lock (see section “Removal lock” on page 38).

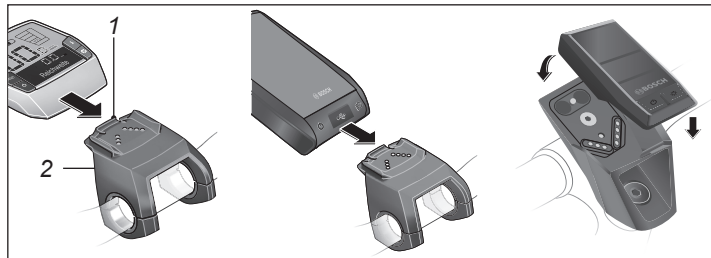


Fig. Inserting the control computer “ActiveLine”, “PerformanceLine” or “Nyon” or “Kiox”

1 Locking mechanism 2 Holder



NOTICE

Attempting to remove the control computer when the removal lock is engaged will damage the holder

Risk of damage!

- Check whether the blocking screw is inserted before removing the control computer.

12.3.3 Removal lock

The control computer can be locked in the holder to prevent removal.

- If you have no experience mounting bicycle components, have your specialist dealer mount the removal lock.
1. Disconnect the holder from the handlebars.
 2. Place the control computer in the holder.
 3. Screw the blocking screw (M3 × 8 mm) into the threading of the holder from below (see Fig. “Control computer holder”).
 4. Mount the holder back on the handlebars.

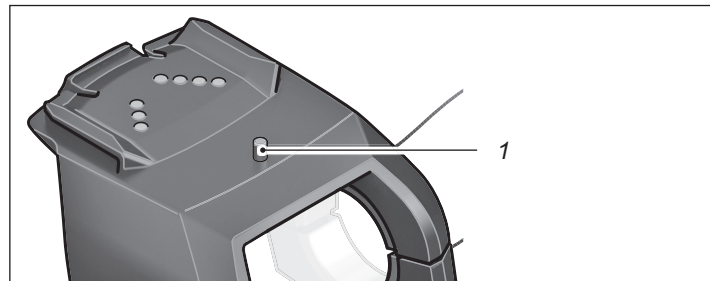


Fig. Control computer holder

1 Blocking screw

12.3.4 Power supply

When the e-bike is switched on and the rechargeable battery is charged, the inserted control computer “ActiveLine”, “PerformanceLine” or “Nyon” or the “SmartphoneHub” is supplied with energy via the e-bike rechargeable battery. An iPhone is also automatically supplied with power. An Android smartphone can only be supplied with power via a USB cable.

The “Kiox” control computer is charged every three months for approx. one hour via the USB interface provided (e.g. on a PC).

The control computer that has been removed is supplied with power from an internal rechargeable battery.

If the internal rechargeable battery is weak when you activate the control computer that has been removed, “Attach to bike” will appear for 3 seconds in the text display field (see Fig. “Control computer”). The control computer will switch back off afterwards.

- Charge the control computer (see section “Charging the control computer” on page 39).



Fig. Control computer

12.3.5 Charging the control computer

Note: Without charging the internal rechargeable battery again, the data and time will remain saved for a maximum of 6 months. .

- Charge the “Kiox” control computer at least every 3 months; all other control computers need to be charged at least every 6 months.

12.3.5.1 On the e-bike

1. Insert a full rechargeable battery in the e-bike (see section *"Rechargeable battery"* on page 29).
2. Place the control computer in the holder (see section *"Inserting and removing the control computer"* on page 37).
3. The "SmartphoneHub" is automatically supplied with power as soon as the e-bike is switched on.
4. Use the  button on the rechargeable battery to switch on the e-bike.

12.3.5.2 Via USB

1. Open the cover (see Fig. *"USB port on the control computer"* or *"USB port on the SmartphoneHub"*).
2. Use a USB 2.0 cable to connect the USB jack of the control computer to a commercially available USB charger or the USB port on a computer.

“USB connected” will appear in the text display field.

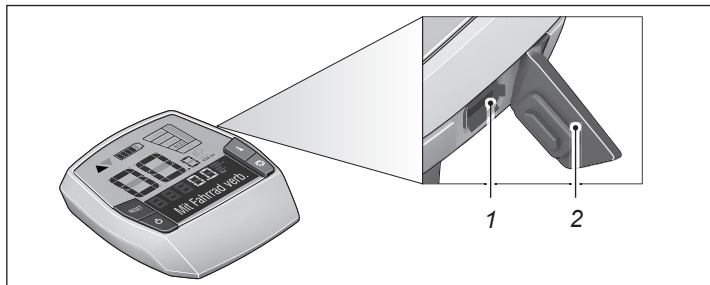


Fig. USB port on the control computer

1 USB socket

2 Protective cap

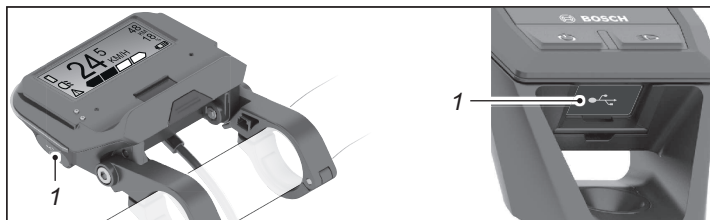


Fig. USB port on the “SmartphoneHub” and on the “Kiox”

1 USB socket

12.3.6 Changing the batteries

Note: This section applies only to the “Purion” control computer. It is powered by two CR2016 batteries. Change the batteries when the message “LOW BAT” appears in the display of the control computer.

1. Unscrew the fixing screw.
2. Remove the control computer from the handlebars.
3. Open the battery compartment on the bottom of the control computer using a coin.
4. Remove the empty batteries.
5. Insert the new batteries.
6. Lock the battery compartment using the coin.
7. Re-attach the control computer to the handlebars using the fixing screw.

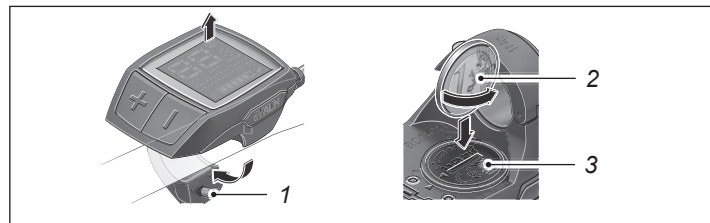


Fig. Battery change

1 Fixing screw

3 Battery compartment

2 Coin



WARNING

If you do not concentrate on the road traffic, you will endanger yourself and other road users.

Risk of accident and injury!

- Operate the control computer with the control unit in road traffic.
- Do not use your smartphone while riding.
- Keep an eye on road traffic when reading data during your ride.
- Stop to read more extensive information or to perform settings on the control computer.



CAUTION

The e-bike may respond in a manner other than you expect if operated incorrectly.

Risk of injury!

- Read section “*Operation*” on page 29 completely before you switch it on for the first time.

Note: After 10 minutes of inactivity, the e-bike will automatically switch off.

- Before you switch the e-bike on, check whether the rechargeable battery is charged and has been properly inserted (see section “*Rechargeable battery*” on page 29).

12.3.7 Switching on the e-bike

Note: Do not apply pressure to the pedals during activation.

To switch on the e-bike

- push the  button on the rechargeable battery or
- push the  button on the inserted control computer or on the smartphone (see section “*Control computer*” on page 37) or
- insert the control computer, which has been switched on.

Note: The e-bike cannot be switched on when charging the rechargeable battery on the e-bike.

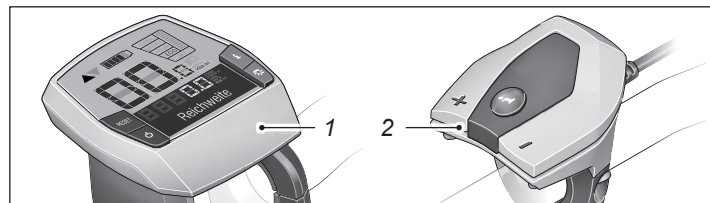


Fig. “ActiveLine” and “PerformanceLine”

1 Control computer

2 Control unit

Control computer “ActiveLine” or “PerformanceLine” and the control unit.

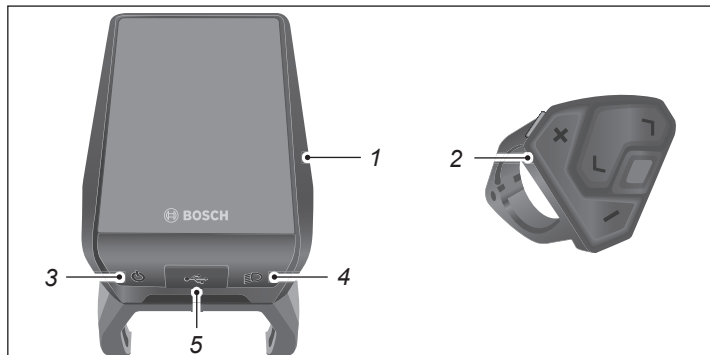


Fig. "Nyon"

- | | |
|--------------------|----------------|
| 1 Control computer | 4 Light button |
| 2 Control unit | 5 USB socket |
| 3 On/Off button | |

Control computer "Nyon" and the control unit.

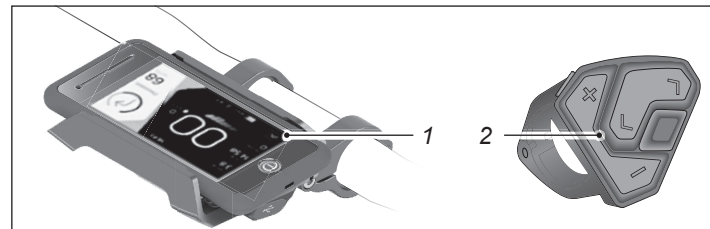


Fig. "SmartphoneHub"

- | | |
|--------------|----------------|
| 1 Smartphone | 2 Control unit |
|--------------|----------------|

Smartphone adapter "SmartphoneHub" and the control unit.

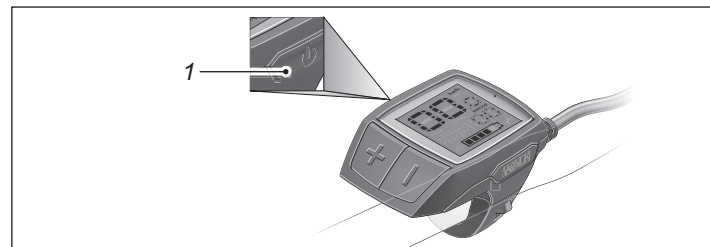


Fig. "Purion"

- | |
|-----------------|
| 1 On/Off button |
|-----------------|

Control computer "Purion" with On/Off button.



Fig. “Kiox”

1 On/Off button

2 Light button

Control computer “Kiox” with On/Off button and light button.

12.3.8 Using the drive

- The drive will automatically activate as soon as you pedal.
- The drive will automatically switch off when you are not pedaling or when you reach a speed of 25 km/h or 45 km/h.
- At speeds of below 25 km/h or 45 km/h the drive will automatically switch on when you pedal.

12.3.9 Switching off the e-bike

- To switch off the e-bike:
 - Push the  button of the control computer.
 - Push the  button on the rechargeable battery.
 - Take the control computer out of the holder.

12.3.10 Control computer indicators

Note: This section describes the indicators for the rechargeable battery, error messages and cycling data.

- Read the description provided for the other indicators in the sections “Operation” on page 29 “Setting the level of assistance” on page 50 and “Walk assistance” on page 52.

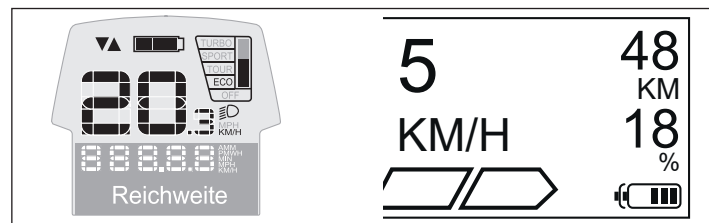


Fig. Rechargeable battery indicator

With the “ActiveLine” or “PerformanceLine”, the rechargeable battery indicator is located on the top (left) and with “SmartphoneHub” on the bottom right of the display (right).

12.3.10.1 Rechargeable battery indicator

The rechargeable battery indicator  displays the charge level of the e-bike’s rechargeable battery and not that of the control computer (see section “Control computer” on page 37). The indicator for the rechargeable battery charge level is displayed in line with the charging indicator on the rechargeable battery.

- Read the charge level on the control computer (see Fig. “Rechargeable battery indicator”).

1 bar is illuminated:	Charge level of 1 to	20 %
2 bars are illuminated:	Charge level of 21 to	40 %
3 bars are illuminated:	Charge level of 41 to	60 %
4 bars are illuminated:	Charge level of 61 to	80 %
5 bars are illuminated:	Charge level of 81 to	100 %

If no bar is shown, the rechargeable battery charge for the drive has been used up. The drive will be deactivated. The display and lights will be supplied with energy for another 2 hours.

12.3.10.2 Cycling data

Note: This section only applies to the “ActiveLine” and the “PerformanceLine”.

- Read the current speed shown in the middle of the indicator (see Fig. “Indicators on the control computer”).

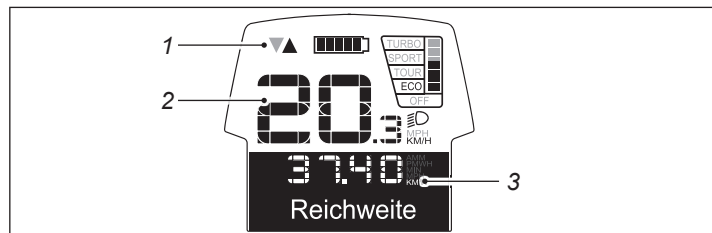


Fig. Indicators on the control computer

- | | |
|-----------------------|---------------------|
| 1 Gear recommendation | 2 Speed |
| | 3 Operating display |

The operating display is a combination of a value and text display field (see Fig. “Indicators on the control computer”).

The following views are available for selection on the operating display:

- **Range:** remaining range if conditions remain the same (estimate).
- **Distance:** the distance covered since the last reset.
- **Cycling time:** the riding time attained since the last reset.
- **Average:** the average speed attained since the last reset.
- **Maximum:** the maximum speed attained since the last reset.
- **Time:** current time.
- **Total distance:** Displays the total distance covered with the e-bike (reset not possible).
- To change the view, push the **i** button repeatedly until the desired view appears (see Fig. “Control unit” or “Buttons on the control computer”).

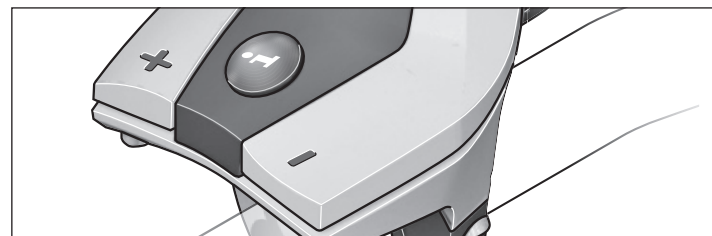


Fig. Control unit

Control unit with the buttons + (plus), – (minus) and the **i** button (only with the “ActiveLine” or “PerformanceLine”).

12.3.10.3 Optional indicators

Note: This section only applies to the “ActiveLine” or “PerformanceLine” with the option “Intuvia eShift” and electronic gear shift.

- **Gear** (only for models with a “Shimano Di2” gear shift): Gear indicator.
- **Enviolo pedalling frequency/gear** (only for models with a “enviolo H|Sync” gear shift): Displaying and setting the desired pedalling frequency and the gear.

Note: You can access this view directly by pushing the **i** button for 1 second.

- Change the desired pedalling frequency or the gear by pushing the – (minus) or + (plus) button on the control unit.
 - To switch from “enviolo pedalling frequency” to “enviolo gear”, push the **i** button for 1 second.
 - To switch from “enviolo gear” to “enviolo pedalling frequency”, briefly push the **i** button.

12.3.10.4 Resetting the indicators (Reset)

Note: This section only applies to the “Active or PerformanceLine”, if applicable in the optional version “Intuvia eShift”.

Resetting the **Distance**, **Cycling time** and **Average** :

1. To simultaneously reset the “Distance”, “Cycling time” and “Average”, push the **i** button repeatedly until one of these three views is shown.
2. Push the **RESET** button until the indicator is set to zero.

This will also reset the values for the two other views. It is not possible to perform an individual reset.

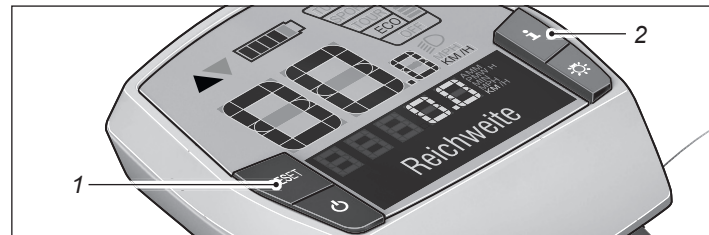


Fig. Buttons on the control computer

1 Reset

2 Button **i**

Resetting **Maximum**:

1. With the **i** button, switch to the “Maximum” view.
2. Push the **RESET** button until the indicator is set to zero.

Resetting the **Range**:

1. With the **i** button, switch to the “Range” view.
2. Push the **RESET** button until the indicator is reset to the factory default value.

12.3.11 Basic settings

Note: This section only applies to the “ActiveLine”, “PerformanceLine” and “Purion”.

You can select the following basic settings:

- **Unit km/mi:** Indicator for speed and distance in kilometres or miles.
- **Time format:** The time is displayed in 12 or 24 hour format.
- **Time:** Changing the time.

Note: Pushing and holding the – (minus) or + (plus) buttons accelerates how fast the time changes.

- **English:** You can change the language of the text in the text display field. You can choose from German, English, French, Spanish, Italian and Dutch.
- **Total cycling time:** Displays the total cycling time with the e-bike (cannot be changed).
- **Wheel circumference:** If other tyres are used, this value can be changed by $\pm 5\%$.
- **Gear recommendation on/off:** Switch gear recommendation on/off.

Displaying and changing the basic settings is possible when the control computer is inserted and removed.

1. To select the basic settings, push the **RESET** button and the **i** button at the same time until “Settings” appears in the text display field.
2. Push the **i** button repeatedly until the desired basic setting appears.
3. To reduce the value or scroll down, push the  button. To increase the value or scroll up, push the  button.
 - When the control computer is inserted, use the – (minus) or + (plus) buttons on the control unit.
4. To leave the basic setting and save it, push the **RESET** button for 3 seconds.

12.3.12 Optional basic settings

Note: This section only applies to the “ActiveLine” or “PerformanceLine” with the option “Intuvia eShift” and electronic gear shift.

- **Gear recommendation on/off:** You can activate or deactivate the gear recommendation display.
- **Gear calibration** (only for models with a “enviolo H|Sync” gear shift): Calibration of the continuous variable gear.
 - Start the calibration by pushing the  button on the control computer.
 - Then follow the instructions on the indicator.
- **Displ. vx.x.x.x:** Software version of the indicator.
- **DU vx.x.x.x*:** Software version of the drive unit.
- **Bat vx.x.x.x*:** Software version of the rechargeable battery.
- **Gear vx.x.x.x*:** Software version of the gear shift.

*This value is only displayed if the board computer is located in the holder.

12.3.13 Basic settings for SmartphoneHub

Use the direction buttons on your control unit to navigate through the individual menu items to adjust settings if necessary.

1. Pair the “SmartphoneHub” with your smartphone (see section “Pairing with a smartphone” on page 37).
2. Then follow the prompts provided by the app.

12.3.14 Purion basic settings

Note: For the display of the basic settings on the “Purion” control computer, please refer to the figure “Purion control computer”.

Action	Keys	Time
Switching on the control computer		any
Switching off the control computer		any
Increasing the level of assistance	+	short push
Decreasing the level of assistance	-	short push
Display “TRIP”, “TOTAL”, “RANGE”, translation modes	-	longer push
Switching on the bicycle lights	+	longer push
Switching off the bicycle lights	+	longer push
Resetting the distance	- +	longer push
Activating Walk assistance	WALK	1. short push
Performing Walk assistance	+	any
Switching from kilometres to miles	- 	1. hold short push
Check version status (E-bike system must be switched off. Info is displayed as moving text)	- + 	1. hold short push

Table 1: “Purion” basic settings

12.3.15 Indicators of the Purion control computer

- | | | | |
|---|----------------------|----|-----------------------------|
| 1 | “TOTAL” | 7 | Lights |
| 2 | Unit km/h | 8 | Levels/Values of assistance |
| 3 | Unit mph | 9 | “TRIP” |
| 4 | “RANGE” | 10 | Speedometer |
| 5 | Service | 11 | On/Off button |
| 6 | Battery charge level | 12 | Walk assistance button |

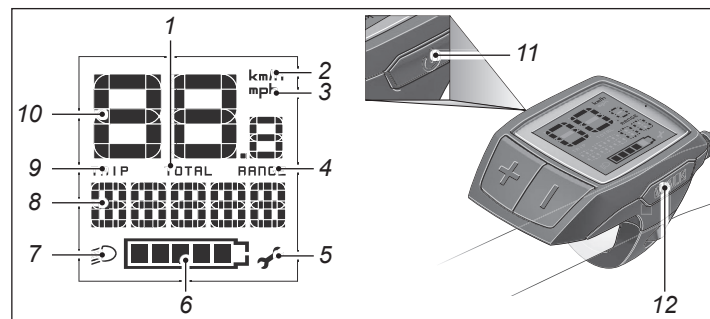


Fig. Purion control computer

12.3.16 Switching Purion control computer on and off

- To switch on the control computer, push the On/Off button (see Fig. “Purion control computer”).
- To switch off the control computer, push the On/Off button again.

12.3.17 Start screen of control computer Kiox

- | | |
|-------------------------------|---|
| 1 <i>Level of assistance</i> | 7 <i>Light indicator</i> |
| 2 <i>Time/Speed</i> | 8 <i>Charge level of the rechargeable battery</i> |
| 3 <i>Performance analysis</i> | 9 <i>Speed sensor</i> |
| 4 <i>Average speed</i> | 10 <i>Speed</i> |
| 5 <i>Own pedalling power</i> | 11 <i>Guidance bar</i> |
| 6 <i>Motor output</i> | |

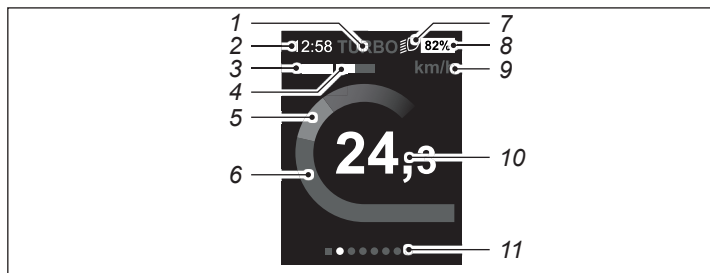


Fig. Start screen of “Kiox” display

The status bar is made up of indicators 1, 2, 7 and 8, which are displayed on every screen.

- **Time/Speed:** the current time or the current speed in km/h or mph is displayed.
- **Level of assistance:** the selected level of assistance is displayed according to a colour code.
- **Light indicator:** a symbol shows that the lights are switched on.

- **Charge level of the rechargeable battery:** the current charge level of the e-bike rechargeable battery is displayed here.
- The **performance analysis** is plotted in relation to the **average speed** (white bar).
- The guidance bar shows which screen is currently being used. The “Kiox” control computer is equipped with a brightness display. Make sure that it works properly by ensuring the brightness sensor area is:
 - not covered
 - protected from becoming dirty

12.3.18 Switching Kiox control computer on and off

- To switch on the control computer, push the On/Off button (see Fig. “Kiox”).
- To switch off the control computer, push the On/Off button again.

12.3.19 Switching Kiox lights on and off

- To switch the lights on, push the light button again (see Fig. “Kiox”).
- To switch the lights on or off, push the light button.

12.3.20 SmartphoneHub indicators

- | | |
|--|-------------------------|
| 1 Current speed | 7 Error display |
| 2 Unit km/h or mph | 8 Light indicator |
| 3 Range of rechargeable battery | 9 Smartphone connection |
| 4 Rechargeable battery charge level in % | 10 On/Off button |
| 5 Charger status indicator | 11 USB socket |
| 6 Level of assistance indicator | |

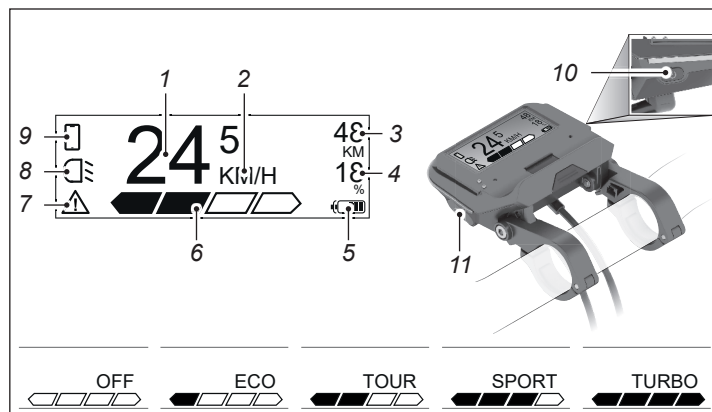


Fig. SmartphoneHub

12.3.21 Kiox control unit and SmartphoneHub

Use the control unit to navigate easily through the menus and control the e-bike from here.

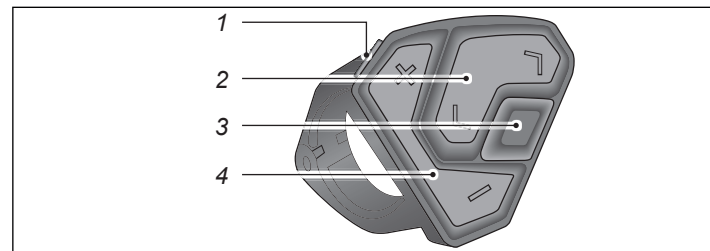


Fig. “Kiox”, “SmartphoneHub” and “Nyon” control unit

- | | |
|---------------------|---------------------|
| 1 Walk button | 3 Menu button |
| 2 Left/right button | 4 Plus/Minus button |

12.3.21.1 Button functions

Walk button:

- Briefly push the Walk button to activate walk assistance.

Left/right button:

- Use the left/right button to navigate through the menu.

Menu button:

- Push the Menu button on to select a menu item.
- Push the Menu button on to confirm your selection.

Plus/Minus button:

- Push the Plus/Minus button to increase or decrease the level of assistance.

The levels of assistance available can be found in the section “*Setting the level of assistance*” on page 50.

The intensity of assistance is displayed on the “Kiox” control computer as a bar chart with additional text.

12.3.22 Setting the level of assistance

Assistance level indicator for “ActiveLine” or “PerformanceLine” (left) and “SmartphoneHub” (right) (see Fig. “*Assistance indicator*”).

1. Push the + (plus) or – (minus) button on the control unit to adjust the level of assistance.

2. Select one of the following levels:

OFF: The drive is deactivated. You can propel the e-bike by pedalling, just like a bicycle.

ECO: Effective assistance with maximum efficiency for maximum range.

TOUR: Uniform assistance, for touring with a long cruising range.

SPORT / eMTB:

SPORT: Powerful assistance for sportive riding on mountainous routes as well as for urban traffic.

eMTB: optimal support, sporty start, improved dynamics, maximum performance.

TURBO: Maximum assistance, supporting the highest cadence for sportive riding.

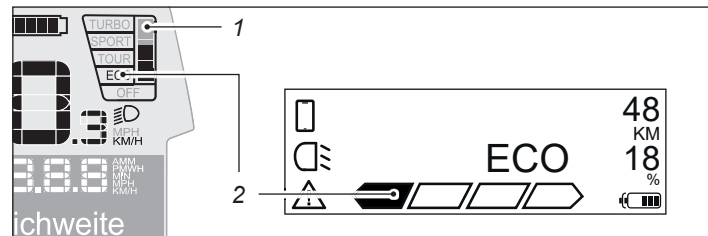


Fig. Assistance indicator

1 Assistance

2 Level of assistance

The intensity of assistance is displayed on the control computer as well as on the “SmartphoneHub” as a bar chart (see Fig. “*Assistance indicator*”).

Note: If the control computer is taken out of the holder, the last riding mode shown is stored in the memory.

12.3.23 Lights

When switching on the lights, “Light on” will appear for approx. one second in the text display field and “Light off” when deactivating the lights. The light symbol is shown when the lights are activated.

Note: Depending on the bike model, the rear light flashes temporarily when the lights are switched on to indicate to traffic behind the bicycle that the lighting has been activated.

- To switch the lights on or off, push the button.

Activating and deactivating the lights does not affect the backlight of the display. The backlight of the display is active as soon as the e-bike or the control computer has been activated.

12.3.24 Charging external devices via USB

You can operate or charge external devices by connecting them to the USB port on the control unit.

Note: The control computer and a sufficiently charged rechargeable battery must be inserted in the e-bike in order to use and charge external devices.

NOTICE

Irreparable damages may occur if the USB port is used incorrectly.

Risk of damage!

- Read the user manual of the external device and check whether the device is suitable for connection.
- Only use a compliant USB cable.
- The USB port must always be sealed with the protective cap.
- Do **not** charge or operate external devices while driving or in the rain.

1. Open the cover.
2. Use a USB 2.0 cable (Micro A or Micro B type) that complies with applicable standards to connect the USB port of the external device with the USB jack on the control computer.

12.3.25 System query with USB

Note: You can use the USB port to connect a diagnosis system from the “Purion” model and check the version status of the sub-systems. The USB port has no other function.

1. When the e-bike system is switched off, push both the - (Minus) and + (Plus) buttons at the same time.
2. Push the  button on the control computer.

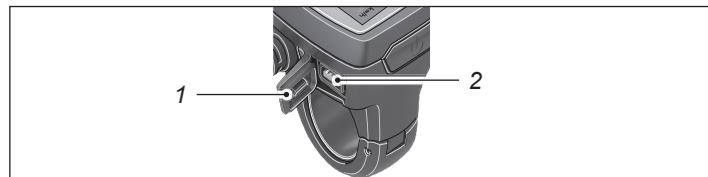


Fig. USB port on the “Purion” control computer

1 Protective cap

2 USB socket

12.3.26 Walk assistance



CAUTION

If used incorrectly, your limbs could get caught in rotating parts.

Risk of injury!

- Only use the “Walk assistance” function when pushing the e-bike.
- Only use the walk assistance on level and solid ground.
- Only use the walk assistance function if the e-bike is on both wheels

Walk assistance helps you push the e-bike. With this function, the speed depends on the selected gear and may reach up to 6 km/h. The lower the gear, the lower the speed in the walk assist function.

- Activate the walk assistance by tapping the **WALK** button on the control unit.
- Push the + (plus) button within 3 seconds and keep it held in order to implement the walk assistance.
- The e-bike drive will be activated.

Walk assistance will be deactivated as soon as one of the following events occurs:

- You release the + (plus) button.
- The wheels of the e-bike are blocked, e.g. by braking or running into an obstacle.
- The pedal drive is locked (only for models with a back pedal brake).
- The speed exceeds 6 km/h.

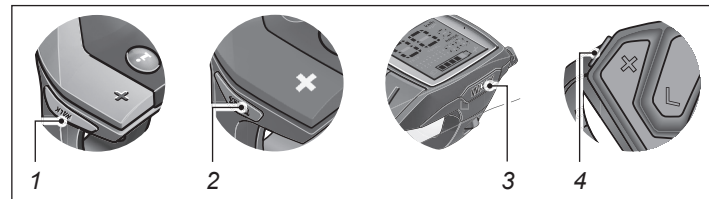


Fig. WALK button

1 Active Line

2 Performance Line

3 Purion

4 Kiox/Smartphone/Nyon

Note: With some systems, the walk assistance can be directly launched by pushing the **WALK** button.

12.3.27 Nyon option

You can find a detailed description of the functions of “Nyon” in the online user manual under www.Bosch-eBike.com/nyon-manual.

12.3.27.1 Buttons on the control computer

The control computer features a touchscreen, which you can use to access the menu and control the functions.

The control computer is equipped with the following buttons.

-  button: Switching the control computer or the e-bike on and off (see section “Operation” on page 29).
-  button: Switching the lights on and off (see section “Lights” on page 50).

13 Speed sensor

The speed sensor and the corresponding spoke magnet must be mounted so that the spoke magnet is at least 5 mm and no more than 17 mm away from the speed sensor when it moves past it during one full revolution.

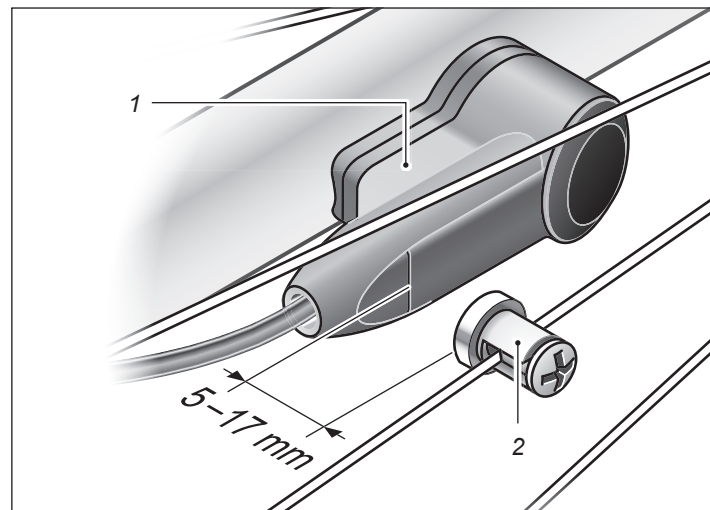


Fig. Speed sensor

1 Sensor

2 Spoke magnet

If the distance is too small or too great, the speed indicator on the control computer will not work and the e-bike drive will operate in the emergency programme.

1. To set the spoke magnet, loosen the screw of the spoke magnet.
2. Arrange the spoke magnet as shown in Fig. "Speed sensor".
3. Tighten the screw. Do not use excessive force in the process.
 - If the speed is still not shown on the speed indicator, please contact your specialist dealer.



CAUTION

The drive and rechargeable battery may become very hot in the event of errors. You could injure yourself in the event of contact with your skin

Risk of injury!

- Read section "Operation" on page 29 completely before you switch it on for the first time.



WARNING

When working with an inserted rechargeable battery or connected charger, there is a risk of electric shock

Risk of electric shock!

- Check whether the mains plug of the charger has been pulled out off the socket.
- Remove the rechargeable battery.
- Do not clean the components with running water or other liquids.
- Do not use a high-pressure cleaner or water jet. The components of the e-bike undergo continual automatic monitoring. If an error is identified, a corresponding error message appears in the text display field.

- The components of the e-bike undergo continual automatic monitoring. If an error is identified, a corresponding error message appears in the text display field.
 - To return to the standard indicator, push any button on the control computer.

Depending on the type of error, the drive will be automatically deactivated if necessary. You can continue to cycle without the assistance of the drive.

- Check the e-bike before the next rides.
 - If the described measures do not help, please consult your specialist dealer.

14 Care



WARNING

When performing care, maintenance and repairs, there is a risk associated with the electrical current.

Risk of electric shock and short circuit!

- Check whether the mains plug of the charger has been pulled out off the socket.
- Remove the rechargeable battery.
- Do not clean the components with running water or other liquids.
- Do not use a high-pressure cleaner or water jet.



CAUTION

The e-bike may respond in a manner other than you expect if operated incorrectly.

Risk of injury!

- Read section “*Operation*” on page 29 completely before you switch it on for the first time

Regular care will ensure that your e-bike stays safe and reliable.

- Wipe the e-bike components clean with a damp cloth.
- Use a mild cleaner.
- Check to make sure that all electrical lines, connections and contacts are not damaged and are clean (visual inspection).
 - Have damaged or corroded parts replaced by your specialist dealer.
- Prevent moisture or dirt from contaminating the contacts.

14.1 Notes on the key

- Take note of the key number(s) imprinted on the key.
- If you lose the key, contact your specialist dealer for a replacement key.

15 Disposal

- Read the explanation of the symbols printed or stamped on the packaging, the rechargeable battery and the charger (see section “*Symbols on the products*” on page 15).
- Contact your specialist dealer or the appropriate authorities for information on disposal.

15.1 Disposing of the e-bike

(Applicable in the European Union and other European countries with systems for the separate collection of recyclable materials)



E-bikes must not be disposed of with household rubbish!

If the e-bike can no longer be used, you as a consumer are legally obliged to dispose of it as waste equipment separately from your household rubbish, e.g. at a recycling centre or a municipal/district waste collection point. This will guarantee that waste equipment can be correctly recycled and any negative impact on the environment can be avoided. Electrical devices are, therefore, labelled with this symbol.

In the case of e-bikes, all rechargeable batteries and batteries, as well as all control parts containing rechargeable batteries or batteries, must be removed before disposal.

Conformity with RoHS Directive: The product that you have purchased complies with the EU RoHS Directive (2011/65/EC). The product does not contain any of the hazardous or prohibited materials specified in this Directive.

15.2 Disposing of rechargeable batteries and chargers



Rechargeable batteries which supply the motor with energy and permanently installed display batteries are usually lithium-ion batteries that must be disposed of as hazardous waste.

- Dispose of rechargeable batteries and batteries at a recycling centre or a municipal/district waste collection point.

15.3 Disposing of the packaging



Sort the packaging before you dispose of it. Dispose of cardboard and carton as waste paper and foils via the recyclable material collection service.

16 Error messages

Display	Error source	Measure
410 /418	Button(s) blocked	Check the buttons and clean them if necessary.
414	Control computer connection	Check the cable connections and contacts (visual check).
419	Configuration	Restart the e-bike.
422	Drive unit connection	Check the cable connections and contacts (visual check).
423	Rechargeable battery connection	Check the cable connections and contacts (visual check).
424	Communication	Check the cable connections and contacts (visual check).
426	Internal timeout	Restart the e-bike (see section <i>“Operation” on page 29</i>).
430	The control computer's rechargeable battery is empty	Read section <i>“Control computer” on page 37</i> .
431	Software version	Restart the e-bike.
440	Drive unit	Restart the e-bike.
450	Software	Restart the e-bike.
460	USB port	Remove the cable from the control computer.
490	Control computer	Consult a specialist dealer.
500	Drive unit	Restart the e-bike.
502	Lights	Check the components of lights and their connection (visual check).
503	Speed sensor	Restart the e-bike.
504	Speed sensor manipulated	Check the spoke magnet position and adjust if necessary. Check for manipulation (tuning).
510	Internal sensor	Restart the e-bike.
511	Drive unit	Restart the e-bike.

Display	Error source	Measure
530	Rechargeable battery	- 1) Switch the e-bike off. - 2) Remove the rechargeable battery and check it with the  button. - 3) If the rechargeable battery is charged, insert it and start the e-bike.
531	Configuration	Restart the e-bike.
540	Overheating of the drive unit	- 1) Switch the e-bike off. - 2) Let the motor cool off. - 3) Select a low riding mode.
550	USB consumer	Disconnect the external device from the USB port and restart the e-bike.
580	Software version	Restart the e-bike
591	Authentication	Switch the e-bike off. Remove the rechargeable battery and insert it again. Restart the e-bike.
592	Incompatible components	Insert compatible display.
593	Configuration	Restart the e-bike.
595, 596	Communication	Check the cable connections and contacts (visual check). Restart the e-bike.
602	Rechargeable battery or charging error of the rechargeable battery	- 1) Restart the e-bike. - or - 1) Disconnect the charger from the rechargeable battery. - 2) Restart the e-bike. - 3) Connect the charger to the rechargeable battery.
603	Rechargeable battery	Restart the e-bike.
605	Temperature of the rechargeable battery or charging error of the rechargeable battery	Let the rechargeable battery reach the operating temperature. or Disconnect the charger from the rechargeable battery and let the rechargeable battery and charger reach the operating temperature.

Display	Error source	Measure
606	Rechargeable battery connection	Check the cable connections and contacts.
610	Rechargeable battery voltage error	Restart the e-bike.
620	Charger	Replace the charger. Only use an approved charger.
640	Rechargeable battery	Restart the e-bike.
655	Rechargeable battery collective message	- 1) Switch the e-bike off. - 2) Remove the rechargeable battery and check it with the  button. - 3) If the rechargeable battery is charged, insert it and start the e-bike.
656	Software version	Have your specialist dealer perform an update.
7xx	Gears	Follow the operating instructions for the gear manufacturer.
800	ABS error	Consult a specialist dealer.
810	Bike speed sensor	Consult a specialist dealer.
820, 821...826	Front bike speed sensor	Consult a specialist dealer.
830, 831, 833...835	Rear bike speed sensor	Restart the e-bike/Consult a specialist dealer.
840, 850	ABS error	Consult a specialist dealer.
860, 861	Power supply	Restart the e-bike.
870, 871, 880, 883...885	Communication error	Restart the e-bike/Consult a specialist dealer.
889	ABS error	Consult a specialist dealer.
890	ABS indicator light defective or not functioning	Consult a specialist dealer.
no indicator	Control computer	Restart the e-bike.

16.1 Rechargeable battery

Display	Error source	Measure
The 2nd and 4th LED are flashing	Electric Cell Protection (ECP)	Contact your specialist dealer.
The 1st, 3rd and 5th LED are flashing	Temperature too high or low	Let the rechargeable battery reach the operating temperature.
No indicator during the charging process	Connection or charger	- 1) Check the connections for dirt. - 2) Check the mains voltage. - 3) Have the charger checked.

16.2 Charger

Display	Error source	Measure
The LED will flash in red.	Charging error	Check the connections for dirt.

17 Technical data

17.1 Control computer/SmartphoneHub

Storage temperature:	-10 °C to +60 °C
Permissible charging temperature:	0 °C to +40 °C
Operating temperature:	-5 °C to +40 °C
Weight:	150 g Intuvia 120 g SmartphoneHub 100 g Purion 55 g Kiox 140 g Nyon
Protection class:	IP54* Intuvia IP54* SmartphoneHub IP54* Purion IPX7* Kiox IPX7* Nyon
USB input (charging the control computer):	5 V ===, max. 0.5 A
USB output for control computer	5 V ===, max. 0.5 A
USB output for SmartphoneHub (charging external devices):	5 V ===, max. 1.0 A

17.2 Lights

Combined performance of lights	Max. 18 W
Nominal voltage:	12 V ===

Note: On all models, the rear light is switched on together with the headlight.

17.3 Operating unit

Nominal output:	250 W
Nominal voltage:	36 V ===
Operating temperature:	-5 °C to +40 °C
Maximum torque:	40 Nm (ActiveLine) 50 Nm (ActiveLine Plus) 63 Nm (PerformanceLine Cruise) 75 Nm (PerformanceLine CX)
Storage temperature:	-10 °C to +50 °C
Weight:	2.9 kg (ActiveLine) 3.3 kg (ActiveLine Plus) 4 kg (PerformanceLine Cruise) 3.2 kg (PerformanceLine CX)
Protection class:	IP54*

17.4 Rechargeable battery

	PowerPack 300	PowerPack 400	PowerPack / PowerTube 500	PowerTube 625
Nominal voltage:	36 V ===	36 V ===	36 V ===	36 V ===
Nominal capacitance:	8.2 Ah	11 Ah	13.4 Ah	16.7 Ah
Energy:	300 Wh	400 Wh	500 Wh	625 Wh
Operating temperature:	-10 to +40 °C	-10 to +40 °C	-10 to +40 °C	-10 to +40 °C
Storage temperature:	0 to +60 °C	0 to +60 °C	0 to +60 °C	0 to +20 °C
Permissible charging temperature:	0 to +40 °C	0 to +40 °C	0 to +40 °C	0 to +40 °C
Protection class:	IP54*	IP54*	IP54*	IP54*

17.5 Rechargeable battery weight

	Standard rechargeable battery	Rack rechargeable battery
PowerPack 300	2.5 kg	2.6 kg
PowerPack 400	2.5 kg	2.6 kg
PowerPack 500	2.6 kg	2.7 kg
PowerTube 500	2.9 kg	
PowerTube 625	3.5 kg	

17.6 Rapid charger

Input:	90 to 264 V ~ (47-63 Hz)
Output:	42 V === 6 A
Frequency:	47 to 63 Hz
Storage temperature:	-10 °C to +50 °C
Permissible charging temperature:	0 °C to +40 °C
Rechargeable battery type:	Rechargeable battery 300 (40 cells) Rechargeable battery 400 (40 cells) Rechargeable battery 500 (40 cells) Rechargeable battery 625 (50 cells)
Charging time for rechargeable battery 300 / 400 / 500 / 625:	2.0 hrs / 2.5 hrs / 3.0 hrs / 4.0 hrs
Weight (according to EPTA procedure 01-2003):	1000 g

Input:	90 to 264 V ~ (47-63 Hz)
Protection class:	IP40*

17.7 Standard charger

Input:	207 to 264 V ~ (47-63 Hz)
Output:	42 V === 4 A
Frequency:	47 to 63 Hz
Storage temperature:	-10 °C to +50 °C
Permissible charging temperature:	0 °C to +40 °C
Rechargeable battery type:	Rechargeable battery 300 (40 cells) Rechargeable battery 400 (40 cells) Rechargeable battery 500 (40 cells) Rechargeable battery 625 (50 cells)
Charging time for rechargeable battery 300 / 400 / 500 / 625:	2.5 hrs / 3.5 hrs / 4.5 hrs / 4.9 hrs
Weight (according to EPTA procedure 01-2003):	800 g
Protection class:	IP40*

17.8 Compact charger

Input:	90 to 264 V ~ (47-63 Hz)
Output:	42 V === 2 A
Frequency:	47 to 63 Hz
Storage temperature:	-10 °C to +50 °C
Permissible charging temperature:	0 °C to +40 °C
Rechargeable battery type:	Rechargeable battery 300 (40 cells) Rechargeable battery 400 (40 cells) Rechargeable battery 500 (40 cells) Rechargeable battery 625 (50 cells)
Charging time for rechargeable battery 300 / 400 / 500 / 625:	5 hrs / 6.5 hrs / 7.5 hrs / 8.8 hrs
Weight (according to EPTA procedure 01-2003):	600 g
Protection class:	IP40*

- * *IP40: Protection against debris with a diameter of 1 mm or greater.*
- * *IP54: Protection against harmful amounts of dust and splashing water from all sides.*
- * *IPX7: Protection against temporary submersion.*

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EC DECLARATION OF CONFORMITY

according to EC directive 2006/42/EC on machinery (Annex II A)

Name and address of the manufacturer:

Hermann Hartje KG, Deichstr. 120 – 122, 27318 Hoya/Weser, Germany

This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user. The declaration is no more valid, if the product is modified.

Herewith we declare, that the product described below:

E-Bike VICTORIA model:

Cysalo 1, 2, 3, 7, 9, 11, 13, Scalvo 1, 2, 3, 5, 11

Modelyear 2023 + battery charger

is complying with all essential requirements of the Machinery Directive 2006/42/EC and Directive 2014/30/EU relating to electromagnetic compatibility.

The following technical standards were used:

DIN EN ISO 4210:2021-01 Cycles -- Safety requirements for bicycles
DIN EN 15194:2018-11(D) Electrically power assisted cycles (EPAC)

Hoya/Weser, August 2022

Management:
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19 Legal notice

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The user manual is a supplemental user manual for your bicycle and meets the requirements and the domain of validity of the DIN EN 15194 and DIN EN 82079-1 standards.

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