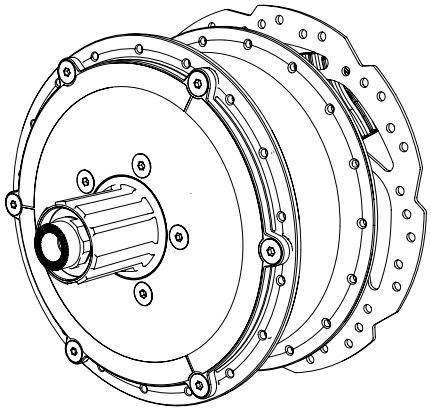
SR SUNTOUR

HESC ATS

E-Bike-Components

User manual

250WTA-RM



Contents

Safety information

⚠ WARNING

There is an increased risk of injury – even fatal – if you do not follow instructions.

Managing the battery

- Use only batteries and chargers from SR Suntour with your bike. Use of other battery packs can cause injury and involve a risk of fire. If you use other battery packs, SR Suntour will assume no liability or warranties.
- Do not throw the battery pack into a fire.
- The battery must not be exposed to direct sunlight, or charged or stored in the vicinity of high temperatures.
- Do not use the battery for any other purpose.
- Avoid contact with metal objects (paper clips, coins, keys, nails, screws, or other small metal objects, as this may cause a short-circuit. Shorts caused in this way will invalidate any warranty claims.
- Do not open the battery pack. This could cause a short circuit. Opening of the battery package will invalidate any warranty claims.
- Do not connect, or disconnect the battery pack / charger with wet hands.
- Keep the battery / charger out of reach of children/animals.

⚠ WARNING

There is a risk of serious injury – even fatal – if you do not follow instructions.

How safe riding is ensured

- While riding, do not focus your attention too much on the screen, as this can lead to accidents.
- Ensure that the wheels are securely attached to the bike before you begin your trip. If the wheels are not securely attached, the bike may fall over, causing severe damage.
- When riding a power-assisted bike, be sure that you are completely familiar with the starting characteristics of the bike before riding on multilane roads and footpaths. If the bike suddenly switches on, accidents can happen.
- If applicable, check that the bike lights are working before you ride at night.

How safe riding is ensured

- Remove the battery pack from the eBike before you start working on it (e.g., assembly work, maintenance, working on the chain, etc.), before transporting it by car or plane, or before storing it. There is a risk of injury in case of accidental activation of the eBike system.
- Be sure to remove the battery before you perform wiring or installation work on the bike. Otherwise there is a danger of electric shock.
- When you install this product, be sure to follow the instructions given in the user manual. We also recommend that you use only genuine SR SUNTOUR parts. If nuts and bolts are left loose or the product is damaged, the bike may fall over suddenly and cause serious injury.
- After you have carefully read the user manual, store it in a safe place for later reference.
- Ensure that unused connections are provided with caps.
- Contact a retailer for installation and adjustment of the product.
- To allow riding in wet weather, the product is designed to be completely waterproof. Nevertheless, do not expose the product intentionally to water.
- Do not expose the bike to high-pressure cleaning. If water should penetrate into one of the components, operating problems or rust may result.

Managing the battery

- Do not subject the battery or the charger to physical shocks, e.g., by dropping. Rinse in the event of accidental contact with water. If fluid gets in your eyes, seek medical advice. Fluid that leaks from the battery pack may cause skin irritation or burns.
- If you detect a strange odour or smoke, pull the plug.
- Ensure that the power plug is fully inserted into the wall outlet.
- Pull on the plug instead of the cable to unplug the power cord from a wall outlet.
- Do not place anything on the cable. Do not lay anything on the cable.
- Do not bend the cable. The cable must not be rolled up while charging.
- It is dangerous to use a single outlet for multiple devices.
- If the cable or plug is damaged, replace the parts with new ones. Contact your authorized dealer.
- Always keep your charging set away from flammable gases when charging.
- The charger can be hot. Do not wrap the charger.
- The charger can be hot. Do not place the charger on floor coverings such as carpets, tatamis, etc.
- The charger can be hot. Avoid long skin contact with the charger.
- Do not immerse the battery or the charger. Do not use in rain.
- Do not charge the battery for more than 24 hours continuously.
- If the battery is not fully charged after six hours, disconnect it immediately from the output to stop the charging process and contact your place of purchase. This can lead to overheating, bursting, or ignition of the battery.

⚠ WARNING

There is a danger of personal injury or property damage

How safe riding is ensured

Follow the instructions in the user manual of the bike to ensure a safe ride.

Managing the battery

- The battery comes with a 40% charge. Discharge and charge the battery fully twice to reach an optimum range.
- Charge the battery before riding.
- The charger can be used with an input voltage in the range of 100V to 240VAC.
- After charging pull the cable from the battery and from the wall outlet.
- Keep the power plug clean and dust free. The charger should be cleaned regularly.
- Do not rotate the pedals while the battery is being charged and is on the battery holder.
- Provide ventilation/venting while the battery is charging in enclosed spaces.
- During storage keep the battery at a charge level of at least 40%.
- Charge the battery at room temperature between 5°C and 35°C (41°F and 95°F).

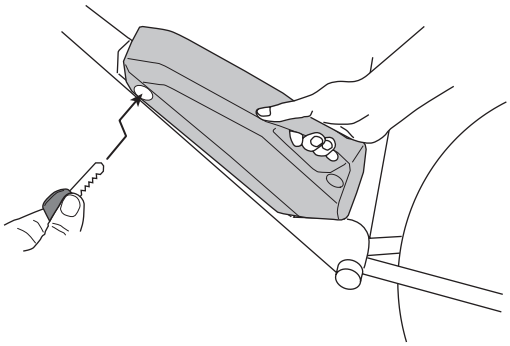
Safe use of the product

- Examine the battery charger regularly for damage, especially the cable, plug and housing. If the battery charger is damaged, it must only be used after it has been repaired.
- This product must not be used by persons (including children) with reduced physical, sensory or mental capabilities, or who lack experience and knowledge, unless they are supervised by a person responsible for their safety, or instructed in the use of the product.
- Do not let children play near the product.

Riding the E-Bike

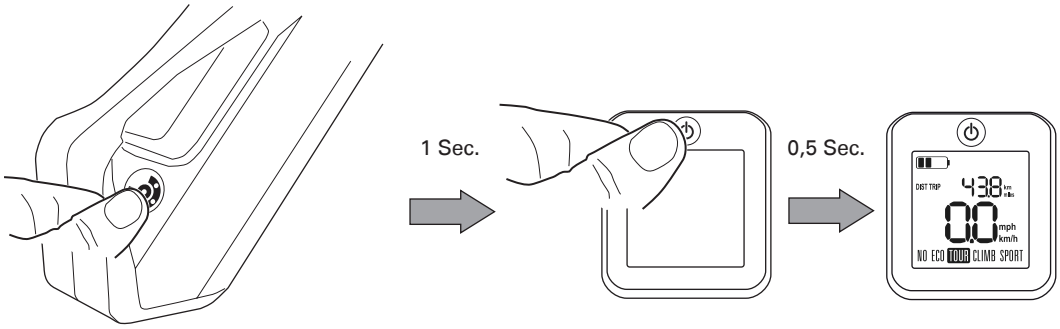
1

Fit the battery and push the battery ON/OFF button



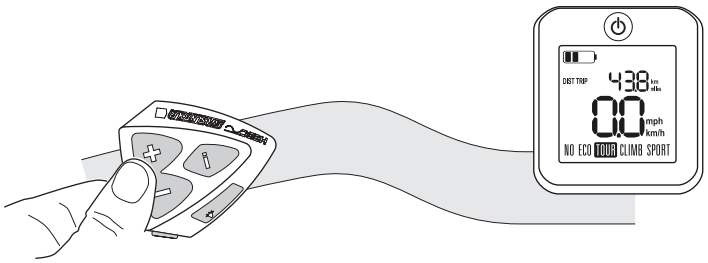
2

Switch on the bike



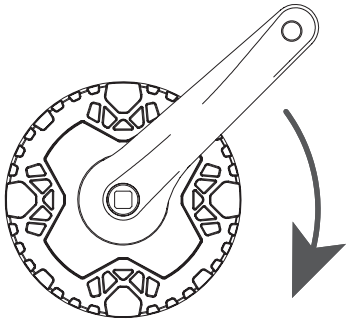
3

Select mode

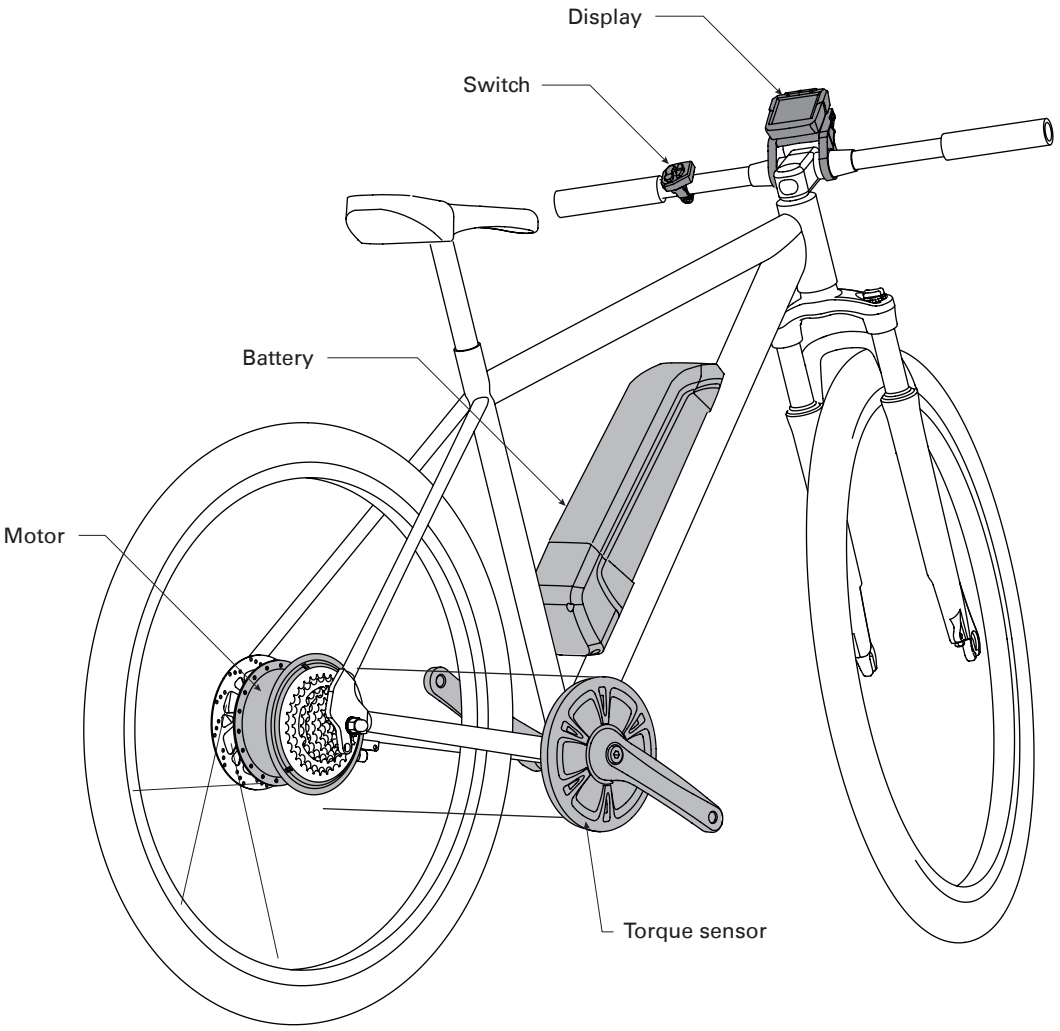


4

Start riding



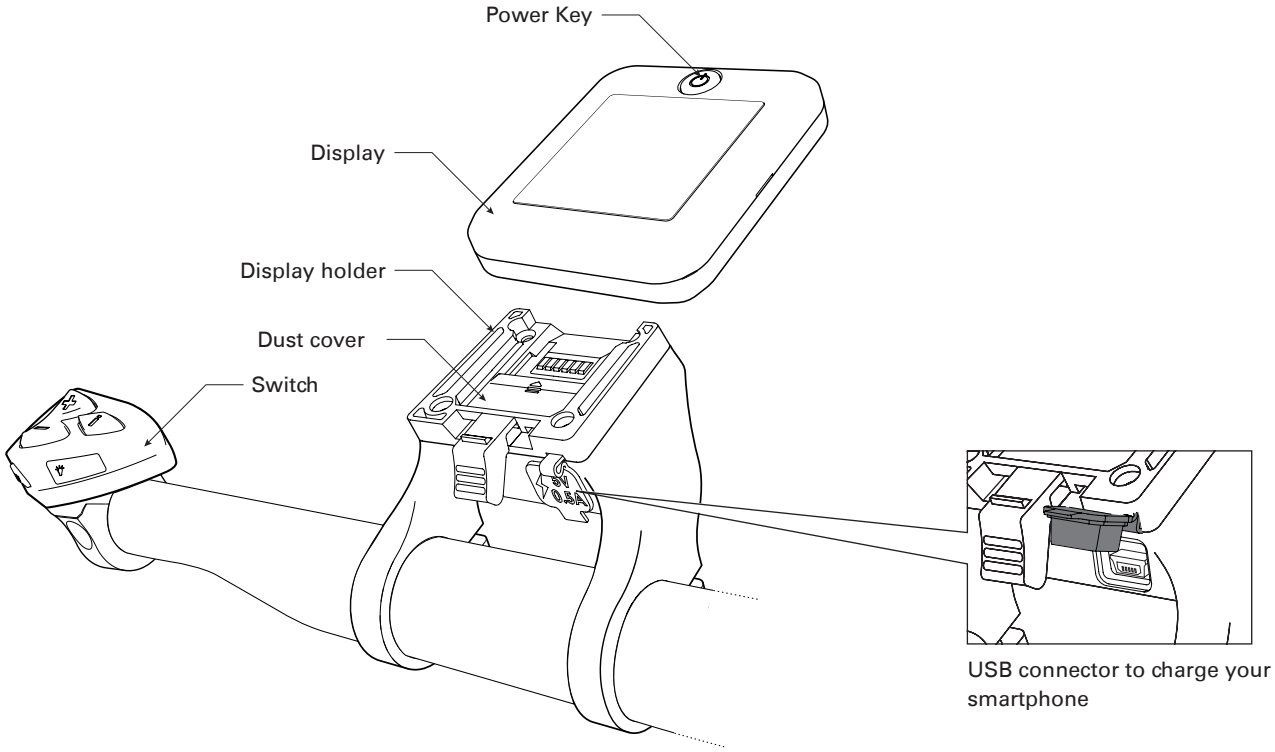
Product characteristics

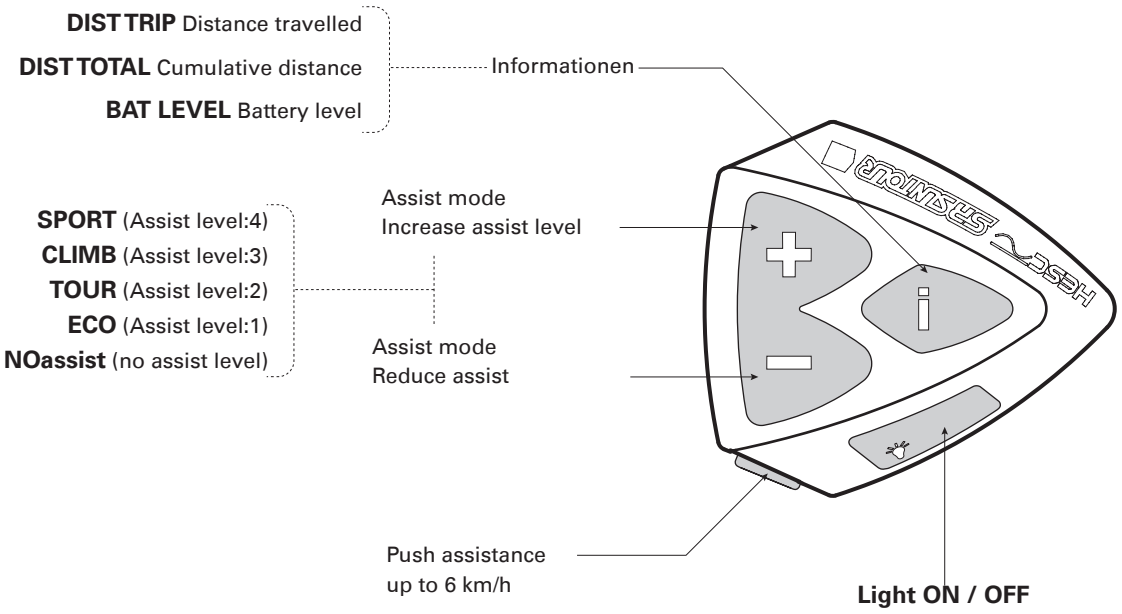


Product specifications

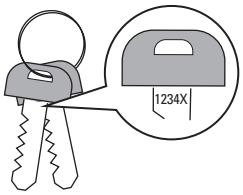
Operating temperature range during discharge	-20°C to 60°C
Operating temperature range during charge	0°C to 45°C
Storage temperature (battery)	-20°C to 45°C
Humidity (storage)	up to 80%
Charging voltage	100V to 240VAC
Charging time	approx. 5 hours
Battery type	Lithium ion battery
Capacity	615Wh
Nominal voltage	36V DC
Motor type	Rear-wheel drive
Motor type	Brushless DC Motor
Nominal motor power	250W
Maximum motor power	450W
Torque	70Nm

Display


Power Key
Display
Display holder
Dust cover
Switch
USB connector to charge your smartphone

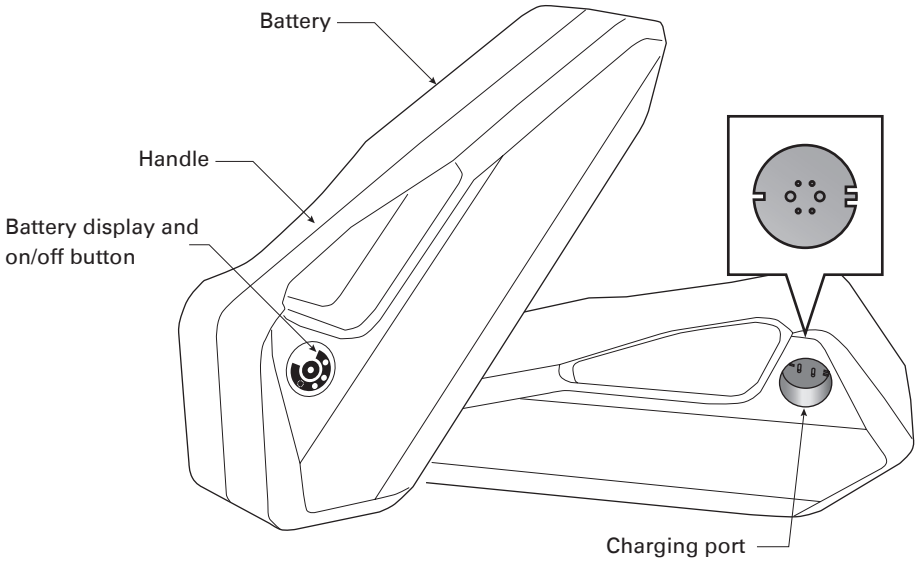

DIST TRIP Distance travelled
DIST TOTAL Cumulative distance
BAT LEVEL Battery level
Informationen
SPORT (Assist level:4)
CLIMB (Assist level:3)
TOUR (Assist level:2)
ECO (Assist level:1)
NOassist (no assist level)
Assist mode
Increase assist level
Assist mode
Reduce assist
Push assistance
up to 6 km/h
Light ON / OFF

Battery



The number located on the battery key is required when purchasing replacement keys. Write it down in the following box and store it in a safe place..

Key number



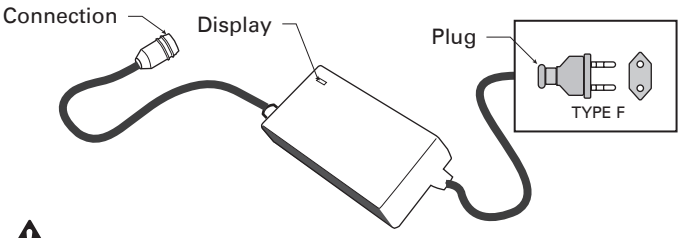
- If the E-Bike not in use, remove the battery and store it at a temperature between 0°C and 40°C in a dry environment.
- Do not store the battery with low capacity for a longer period.
- For storage, the battery should have a capacity of at least 40%.
- It is recommended to always discharge the battery completely and then fully charge it.

Retailer note: (only in retailer workbook)
Store the battery separately from the E-Bike. Regularly check the charge status of the battery and maintain at least 40%.
As an added service to the customer, the E-Bike should be charged and discharged twice prior to sale. After a complete discharge or charge, we recommend leaving the battery for 1–2 hours before charging or discharging again.

Battery charger

⚠ WARNING

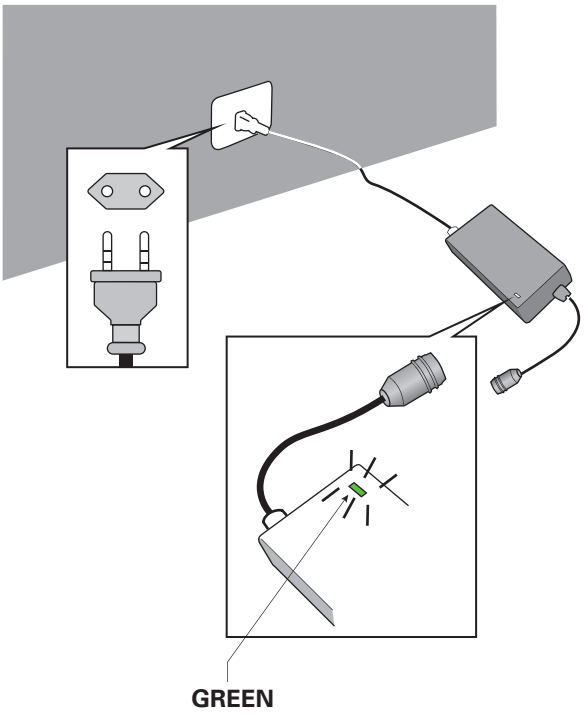
- Use only batteries and chargers from SR SUNTOUR with your bike. Use of other battery packs can cause injury and involve a risk of fire. If you use other battery packs, we will assume no liability or honour warranties.
- The battery must not be exposed to direct sunlight, or charged or stored in the vicinity of high temperatures.
- Avoid contact with metal objects (paper clips, coins, keys, nails, screws, or other small metal objects, as this may cause a short-circuit. Shorts caused in this way will invalidate any warranty claims.
- Do not open the battery pack. This could cause a short circuit. Opening of the battery package will invalidate any warranty claims.
- Do not connect, or disconnect the battery pack/charger with wet hands.
- Keep the battery/charger out of reach of children and animals.



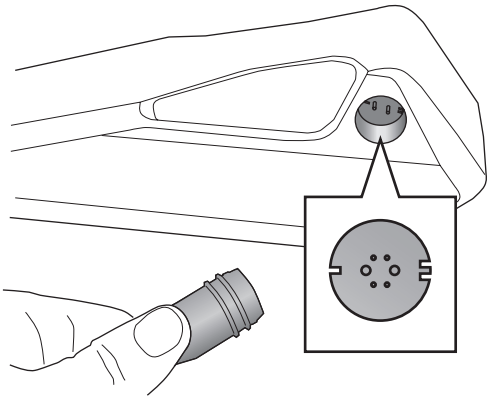
⚠ WARNING

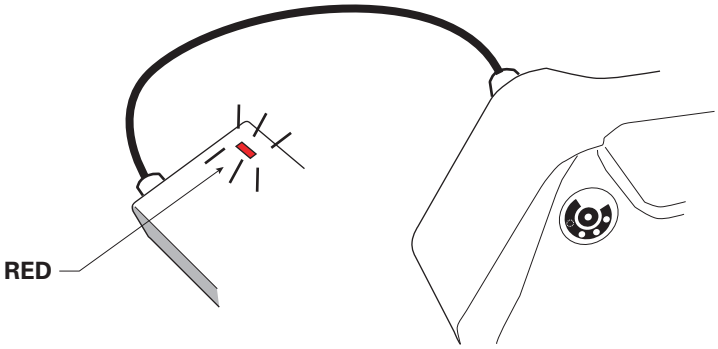
- Do not subject the battery or the charger to physical shocks, e.g., by dropping. Rinse in the event of accidental contact with water. If fluid gets in your eyes, seek medical advice. Fluid that leaks from the battery pack may cause skin irritation or burns.
- Do not bend the cable. The cable must not be rolled up while charging.
- The charger can be hot. Do not wrap the charger and place it on floor coverings such as carpets, etc.
- If the battery is not fully charged after six hours, disconnect it immediately from the output to stop the charging process and contact your place of purchase. This can lead to overheating, bursting, or ignition of the battery.

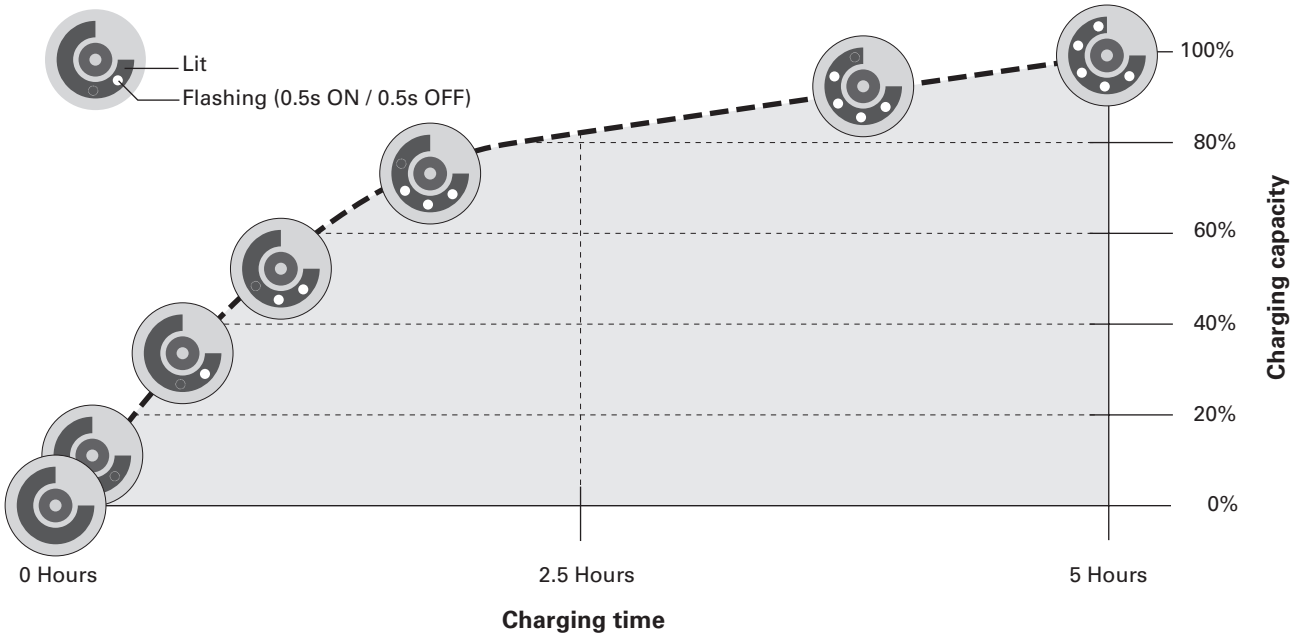
Charging the battery



Ensure that the power plug is fully inserted into the wall outlet.

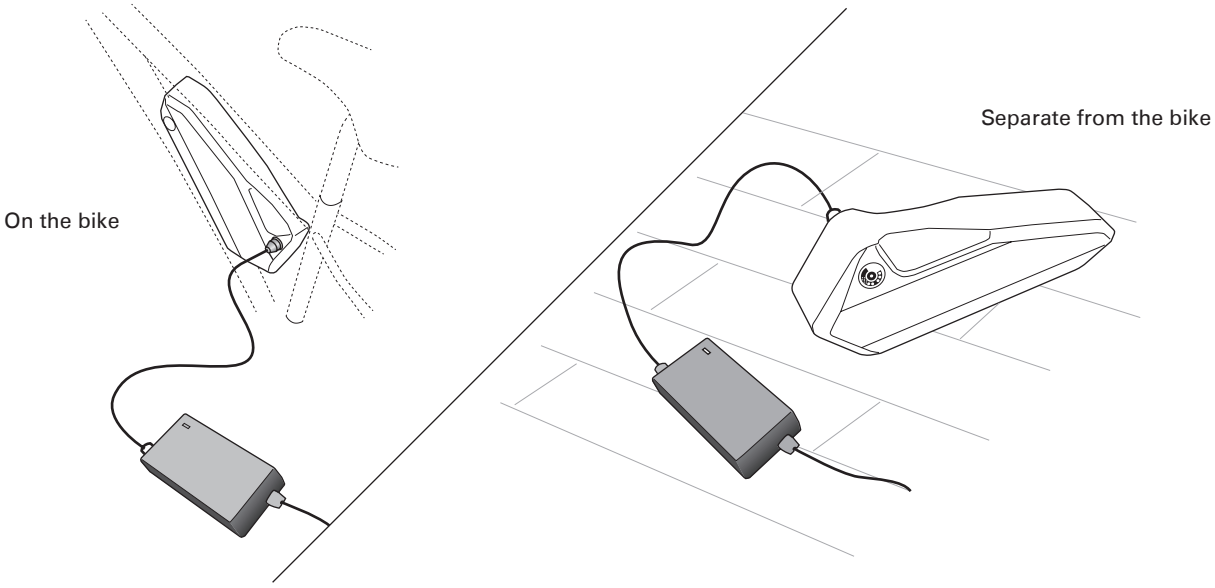




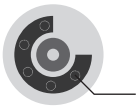


Every three months or after 40 sub-cycles, you should perform a complete discharge and recharge.

Charging alternatives



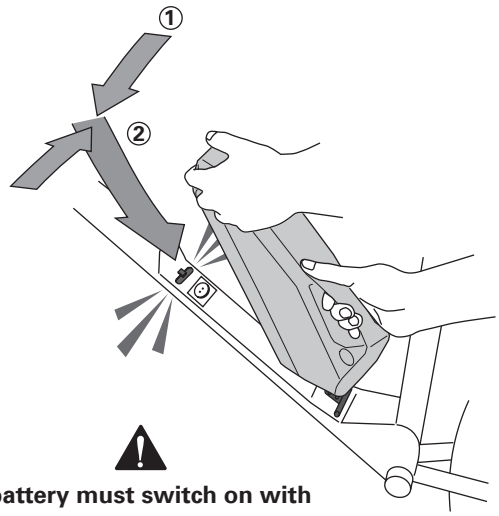
Battery faults

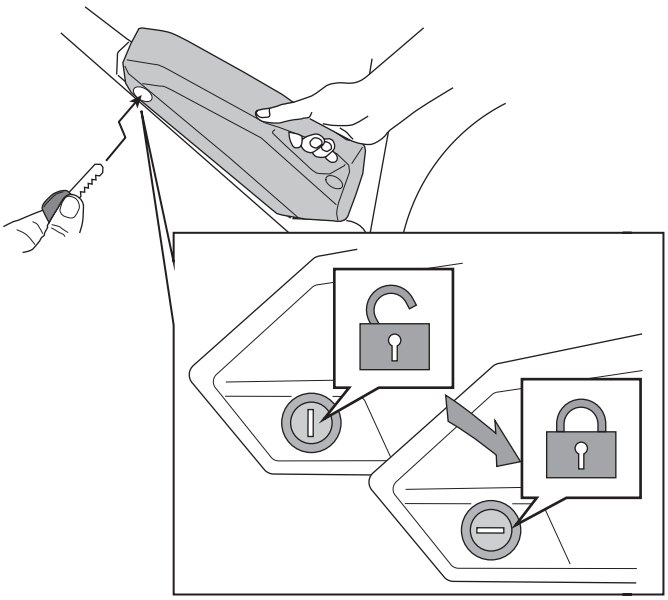


A fault is indicated by a flashing LED.

1. Fault in peripheral device
2. Overvoltage
3. Undervoltage
4. Over-current discharge, short circuit
5. Over-current discharge
6. High/low temperature discharge
7. Deep discharge voltage
8. Measurement alarm

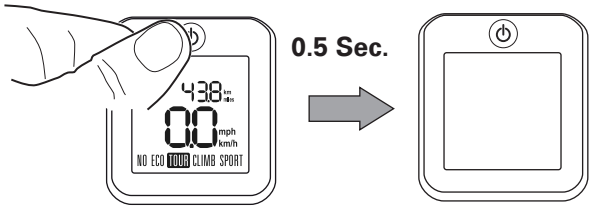
Inserting the battery





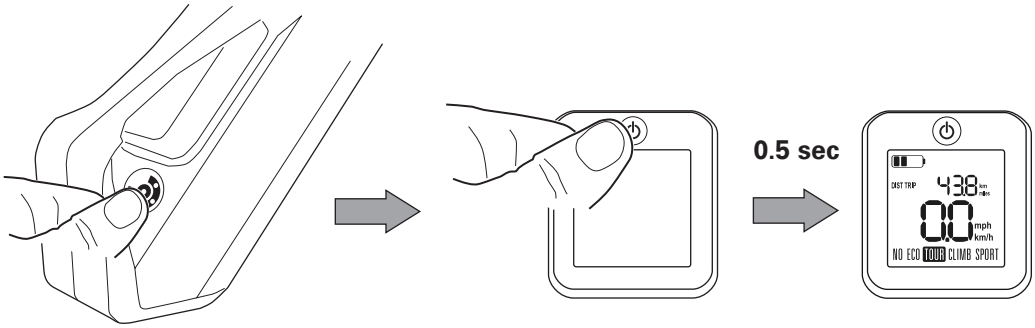
The battery must switch on with an audible click.

Removing the battery

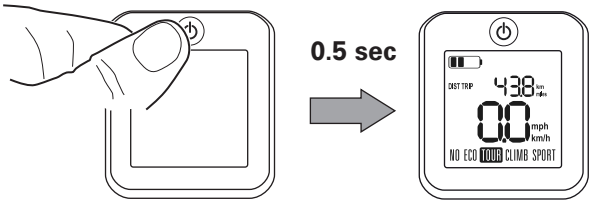


Switching the bike ON/OFF

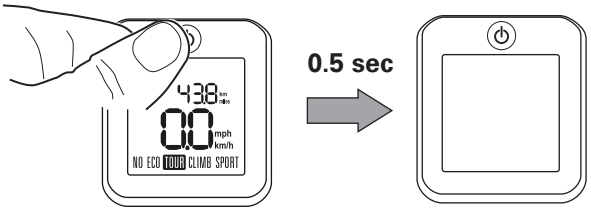
SWITCHING ON



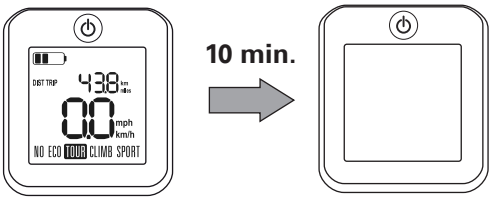
If the system has not been used for more than 48 hours, the battery will be completely switched off. The battery can be reactivated by pressing the ON button.



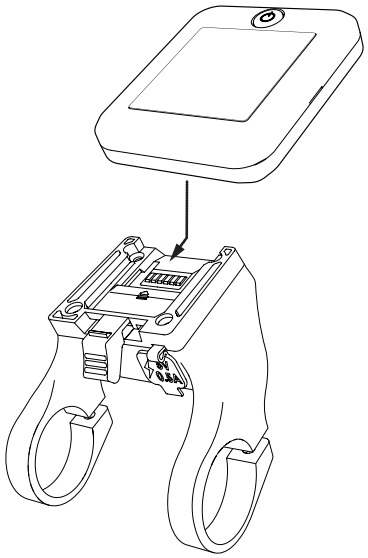
SWITCHING OFF



Automatic SWITCHING OFF

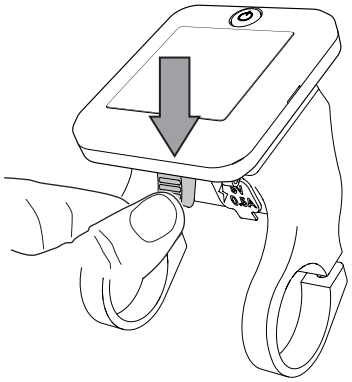


Placing the display

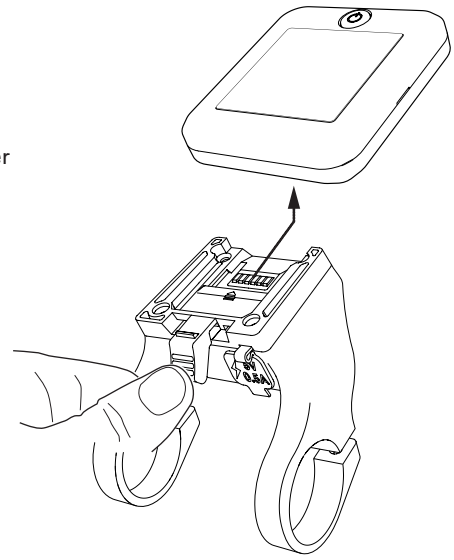


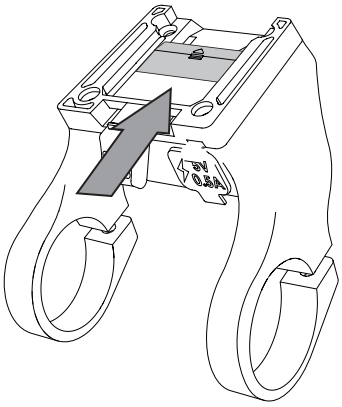
Slide the display as shown in the figure to mount it on the holder. Set the display securely until it clicks on.

Removal of the display



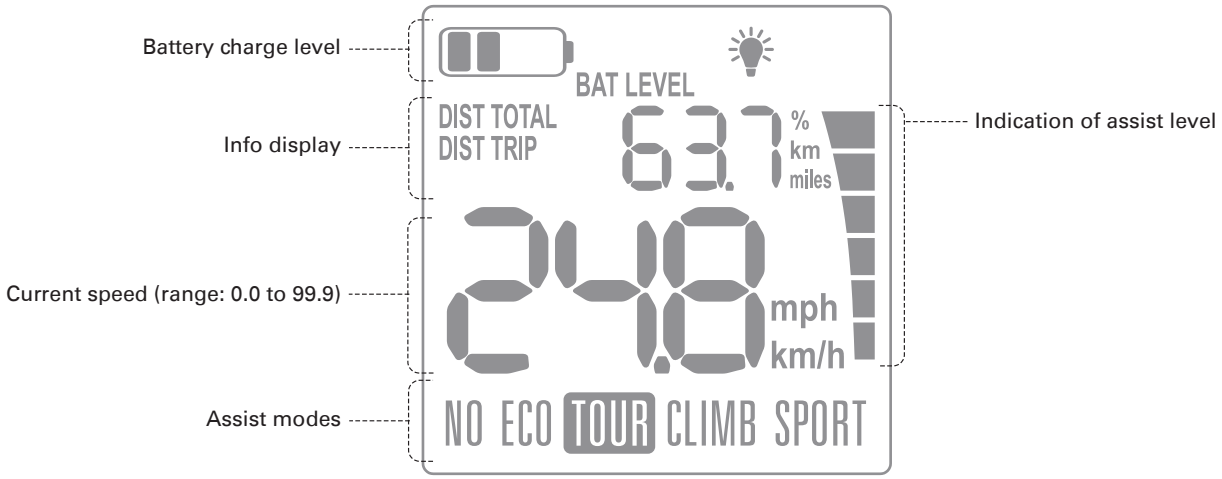
Press firmly on the lever of the display holder while you slide out the display.





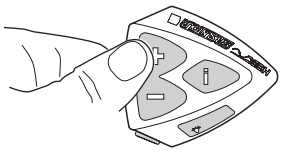
Slide up to cover the contacts and to prevent short circuits and malfunctions.

Base screen display



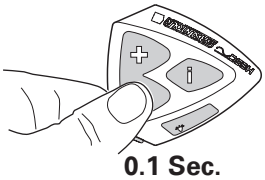
1. Km/h <-> mph setting:
When DIST TRIP or DIST TOTAL is displayed, you can choose between km/h & km or mph & miles.
Press the “i” button for 5 seconds to perform the switch.

2. Display for changing assist mode

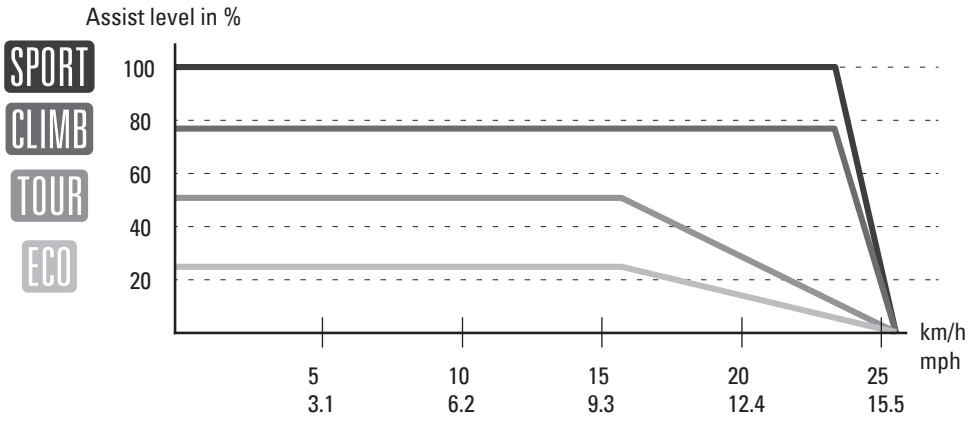


0.1 Sec.

Default setting



0.1 Sec.



3. Assist level indicator

85 to 100%

68 to 84%

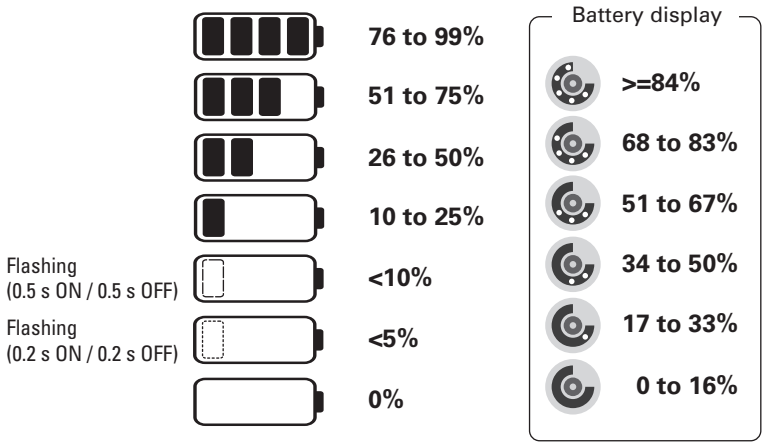
51 to 67%

34 to 50%

17 to 34%

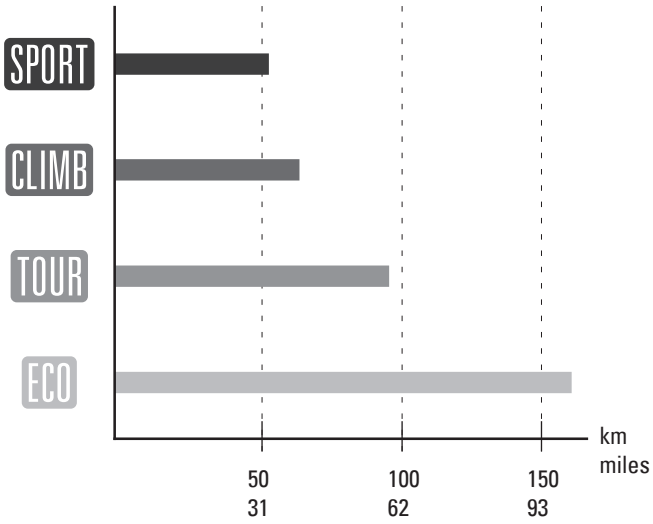
0 to 16%

4. Battery capacity



Note:
When the battery charge level has reached less than 10%, the output power will be reduced.

5. Range



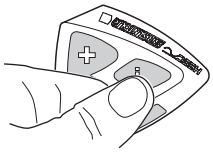
Factors which affect the range

The above figures are based on a speed of 20 km/h on a level road at 15°C–20°C.
The range is influenced by many factors:

- Weight of the rider
- Weight of the luggage
- Selection of path
- Experience and concentration of the rider
- State of maintenance of the E-Bike
- Type, condition and air pressure in the tires
- Nature of the route
- Speed, average speed and changes in speed
- Traffic flow, for example, stop and go
- Wind direction and wind speed

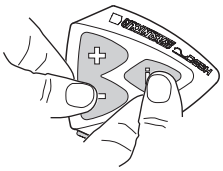
For information on using the battery, see pages 3, 4 and 8. You'll also find information on how to maintain capacity and extend duration.

6. Changing trip information



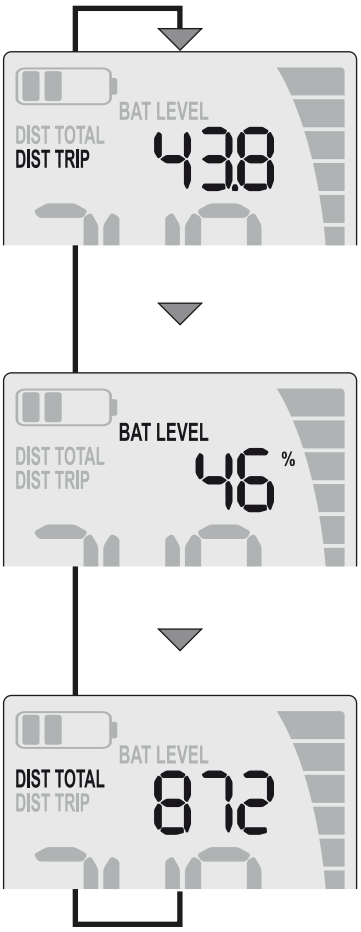
0.5 Sec.

RESETTING
TRIP DISTANCE



0.5 Sec.

(- & i) key



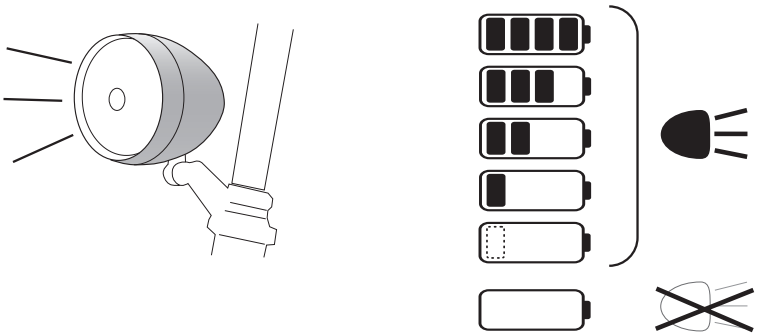
DIST TRIP:
Distance travelled
Unit: 0.1 km / miles
Measurement range: 0.0 to 999.9 km / miles
(default setting)

BAT LEVEL:
Battery charge level
Unit: %
Measurement range: 0% to 99%

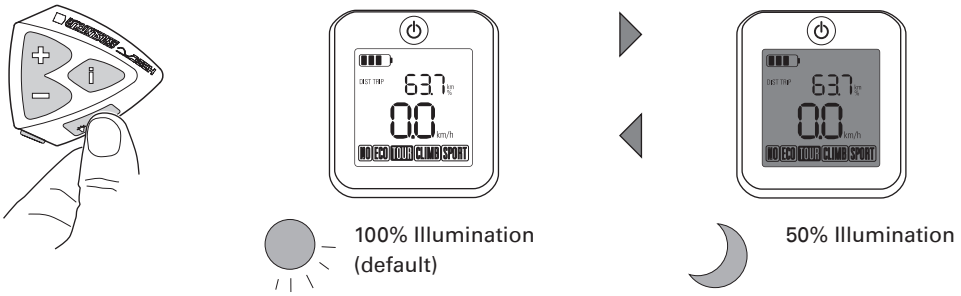
DIST TOTAL:
Cumulative distance
Unit: km / miles
Measurement range: 0 to 9999 km / miles

Lighting

Technical data
Nominal voltage 6V
Output power: 3.0 W



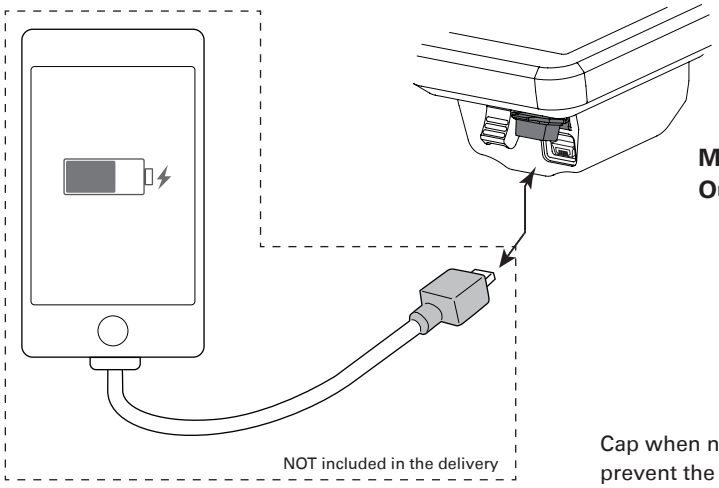
Changing background lighting



Note:
During use both the front and real lights are automatically in operation. In accordance with traffic regulations the light must always be illuminated during the ride. The backlighting can be changed by using the ‚Light' swith.

Charging support function

Power supply for external devices via USB port. The USB connector allows you to charge most devices with a mini-USB port.



Mini-USB port
Output: 5VDC 0.5A

⚠ WARNING

Cap when not in use. Always close to prevent the possible ingress of water.

Overheating warning

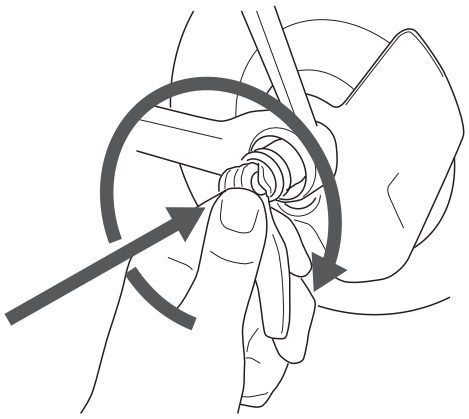
Long and sharp gradients may cause heating of the motor. Flashing of the "SPORT" mode indicates this.

If the engine really overheats, the system will switch itself off in advance to protect the components.

FKA102 ø12 THRU AXLE SET Instruction

STEP 1:

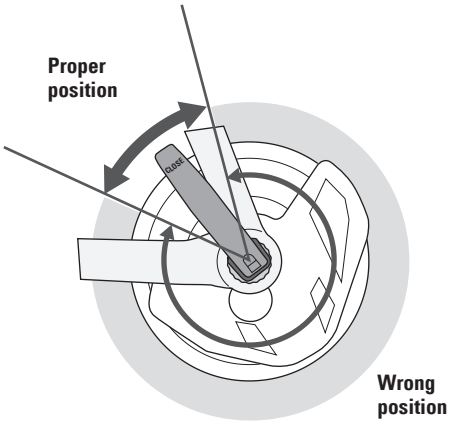
Lever is in OPEN position, insert into frame and motor



Note:
Do not turn with a torque greater than 10Nm.

STEP 2:

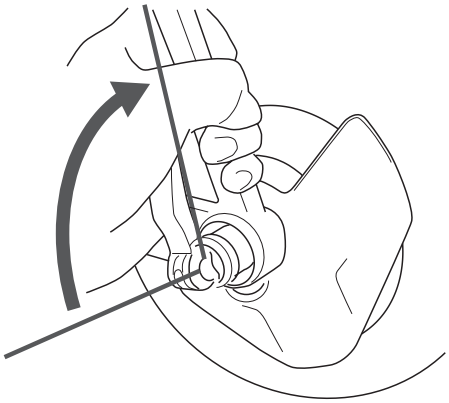
Turn the lever clockwise to proper position.



Note:
For safety reason, the lever should be along the bicycle frame when in the CLOSE position.

STEP 3:

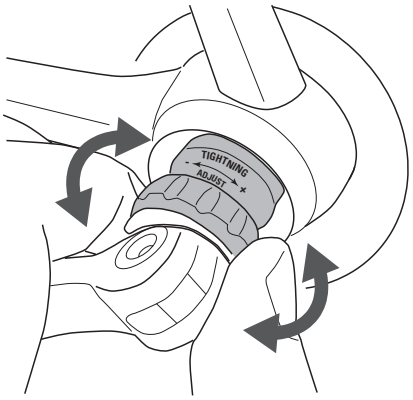
Grip the frame with your fingers and use the palm of your hand to close the lever with as much strength as possible. The side of the lever with the inscription „CLOSE“ must be facing away from the bicycle.



Note:
Tightening force: 80-120N

STEP 4:

If the clamping strength is adjusted too strong and the lever cannot be pushed to the CLOSE position, turn the adjusting knob in a counter-clockwise direction to reduce the clamping strength.
Turn it 1/8 of a revolution, and then try to push the lever to CLOSE, to set the maximum clamping strength with which you can push the quick release lever to the CLOSE position.



BMZ battery information
and
charger user instructions

BMZ battery information

Connection data:

Discharge socket:

Pin 1: Communication (green)
Pin 3 (orange)
Pin 4 (brown)
Pin 5: 36VDC (red)
Pin 6: GND (black)

On the system side pin 3 and pin 4 must be connected (orange and brown).

Short description:

Modes:

The system has two modes:
1 Active mode
2 Deep sleep mode

Active mode

Carry out the following steps to switch on the active mode:
- Press the battery switch (only once).
- Identification of terminal (pin 3 at low level)

All LEDs flash once and indicate that the active mode is on.

The following functions run automatically in active mode:
- System status
- Capacity
- Control of current, voltage and temperature
- Control of charging and discharging
- Automatic equalizing of battery cell status

After 48 hours, the battery will automatically go into deep sleep mode when no communication between the battery and the system takes place, or the battery is not being charged or discharged. In case of undervoltage, the system also switches automatically into deep sleep mode. To reactivate the active mode, press the battery switch for eight seconds. LED 1 and LED 5 will flash twice simultaneously.

LED display:

The following is shown on the display when the battery is being charged:

LEDs ON	LEDs flash 0.5s ON / 0.5s OFF	Remaining capacity
none	1	0%–19%
1.2	2	20%-39%
1,2,3,4	3	40%–59%
1,2,3,4,5,6	4	60%–79%
1,2,3,4,5,6,7,8	5	80%–96%
1…10	none	>=97%

The charge status of the battery is indicated as follows when the button is pressed on the battery:

LEDs ON	LEDs flash 0.5s ON / 0.5s OFF	Remaining capacity
none	1	0%-16%
1.2	none	17%–33%
1,2,3,4	none	34%–50%
1,2,3,4,5,6	none	51%–67%
1,2,3,4,5,6,7,8	none	68%–83%
1…10	none	>=84%

Faults are indicated by rapid flashing of all LEDs (0.2 sec on / 0.2 sec off):
- "General device error" – "Battery overvoltage"
- "Battery undervoltage" – "Charging current too high“
- "Discharge current too high“ – "Temperatures too high or low“
- "Total battery discharge“

User instructions for BMZ charging unit

CHARGER 42VDC 4A, article no. 24555-1, suitable for charging a 10S/36V, max. 25Ah Li-Ion battery pack

Read instructions carefully before use!

1. This charger is suitable for charging a lithium-ion battery pack with nominal 36 volts, 10 lithium-ion cells in series. The charging current is max. 4A. The max. capacity of the battery can be up to 25Ah.
2. The charger has overcurrent, short circuit, overvoltage and reverse polarity protection.
   – Overcurrent protection (shutdown when the output current is greater than 7A).
   – Short circuit protection (protection against short-circuit on the DC side).
   – Overvoltage protection (shutdown when the output voltage is greater than 50V).
   – Reverse polarity protection (shutdown if a wrong polarity battery pack is connected to the charger cable).
3. The charger has an additional capacity counter which will disconnect charging after 25Ah have been loaded. This is indicated as a fault.
4. The device has a temperature control which protects the unit against too high ambient temperature as well as sustained overload. In this case, the output power is reduced.
5. When a fault occurs, the red LED flashes.

Operation

1. Prior to the commissioning check the parameters of the charger and your battery for compliance based on the information on the nameplate or the included documentation.
2. Check whether the voltage is correct for the charger.

	Mini-mum	Nominal	Maxi-mum
Input voltage (volts)	207	230	264

3. For a functionally test plug the charger plug into the socket. The green LED flashes slowly when ready.
4. Then connect the charging cable (DC cable) with your battery. The green LED flashes evenly and indicates that the charging process has begun. At a too low battery voltage (<25VDC) when charging begins, the battery is charged with a pre-charge current of about 500mA. The green LED flashes evenly. This process takes max. 30 minutes. If the threshold voltage of 25VDC is not exceeded during this period, the charger will be switched off as there is a battery defect. The charger indicates a fault. In this case contact the battery supplier.
5. When the battery is fully charged, the charger switches off. The green LED lights continuously and indicates that the battery is fully charged.
6. The device has a temperature control which protects the unit against too high ambient temperature as well as sustained overload. In this case, the output power is reduced until a stable operating temperature is obtained.

Status	LED display	
	LED red	LED green
Readiness	off	slow flashing
Precharging	off	flashing
Charging process	off	flashing
Fully charged	off	continuous
Fault	flashing	off

Notes

The charger has reverse polarity protection. Correct connection to the battery is needed for the charger to produce an output voltage. If the battery has been discharged below its nominal discharge voltage, it possible that the battery can no longer be charged. In this case, please contact the battery manufacturer.

Scope of delivery: Charger with charging cable, AC cable with plug, quick start guide.

General safety instructions

Read instructions carefully before use! Improper handling of lithium batteries may result in fire, explosion and danger of chemical burns! It is imperative to observe the battery manufacturers instructions!

Only charge lithium-ion battery packs. Do not charge lead, NiCd, NiMh or primary cells! Only connect the charger to suitable power sources. In case of long-term non-use separate the power supply of the device and disconnect connected batteries.

The charger is designed for operation in a ventilated, dry and dust-free environment. Under no circumstances expose to rain or excessive heat. Do not cover the device. Keep the charger clean and dry.

Do not charge hot batteries – the battery pack must first be cooled to ambient temperature. Interrupt the charging process if the battery gets too hot. (>55°C–60°C)
Do not operate the charger if damaged. Do not open the device or make changes to it. Repairs may only be carried out by authorized personnel. Do not leave the charger unattended during operation.

Contact

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