

Operating instructions for electric bikes

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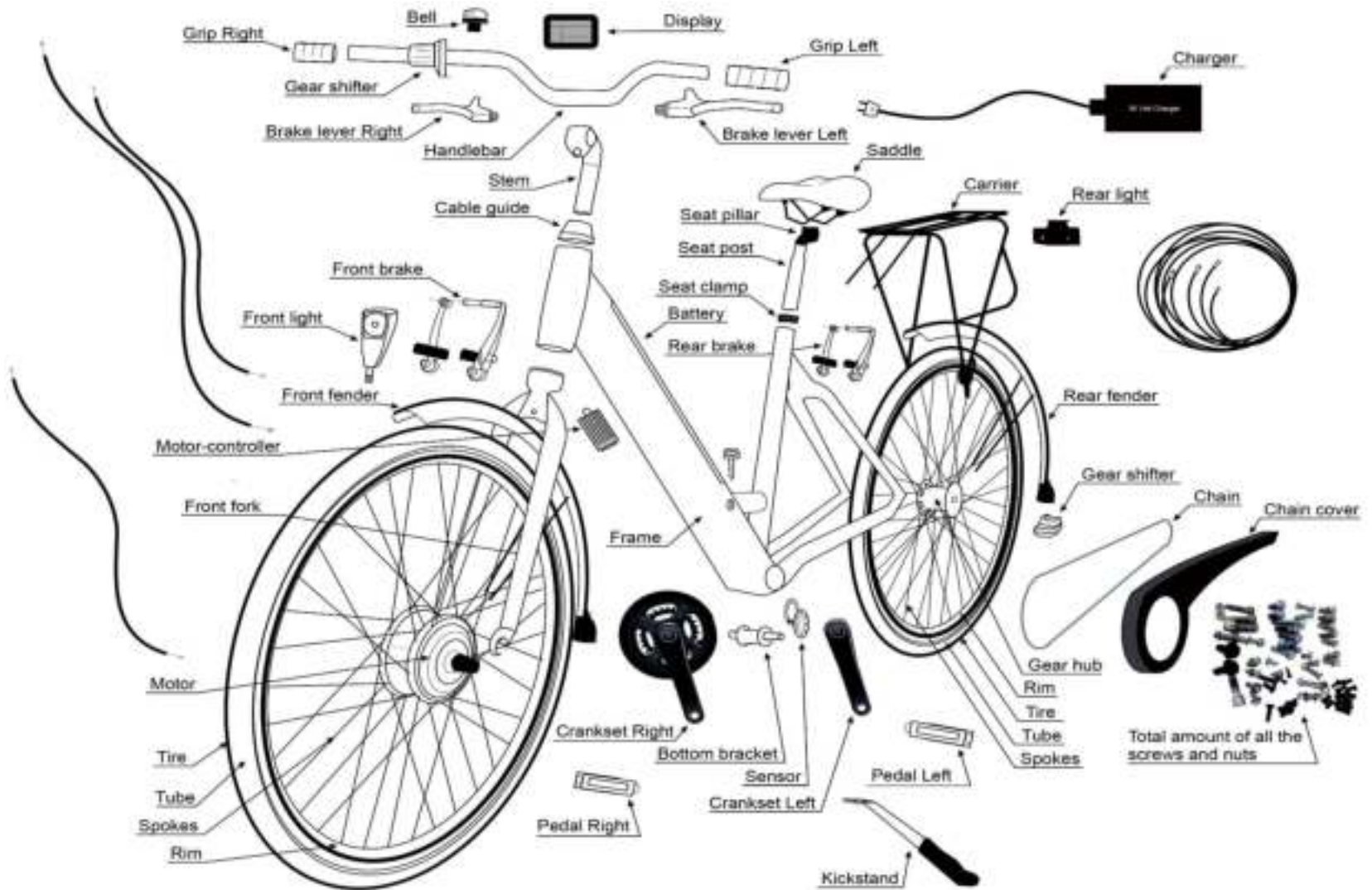
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1. Important information before you start biking

- Before your first ride, please read the operating instructions carefully and check that all parts are in good condition.
- Please slow down in slippery conditions, e.g. in rain or snow, and consider that you will need greater braking distances to guarantee stopping safely.
- This e-bike works reliably under all weather conditions although excessive water exposure could damage the electronics and/or the electric motor.
- Never touch the electronics on the e-bike with wet hands and never touch the plus and minus poles at the same time, as the strong short-circuit current could cause injury.
- Never attempt to repair electronics on the e-bike yourself, always ask a specialist retailer.
- The battery performance can vary depending on the temperature. Temperatures below 0°C will decrease the distance you can ride the e-bike without recharging. The battery performs the best in temperatures above 0°C.

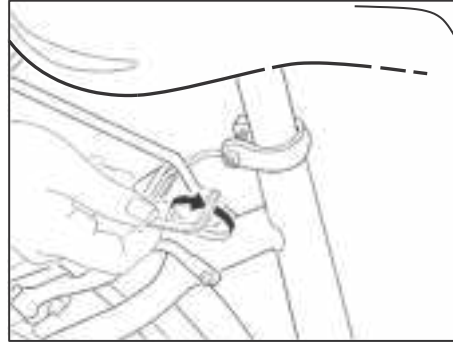
2. Introduction



3. Before the first ride

Please insure that your bicycle is ready for use and properly adjusted to fit your body

Tighten the screws:



PRODUCT DESCRIPTION	TORQUE SPEC	PRODUCT DESCRIPTION	TORQUE SPEC
Stem @ steerer tube	10-12 Nm	Brake levers	3 Nm
Stem @ handlebar	8 Nm	Brake bolts	9 Nm
Seat clamp	7 Nm	Rear wheel axle	15 Nm
Seat post @ saddle rails	10 Nm	Front wheel axle	8 Nm
Bottom bracket	40-50 Nm	Kick stand bolt	10 Nm
Crank bolts	38-41 Nm	Ferder bolts	4 Nm

Seat

Adjust the seat post to a height where your knees are slightly bend when riding.

Do **NOT** raise the seat post above the minimum insertion mark. It should always be hidden inside the seat tube.

Handlebar

Adjust the handlebar to a comfortable position.

Do **NOT** raise the stem above the minimum insertion mark. It should always be hidden inside the head tube.

Brakes

Brake lever on left side of the handlebar activates brake on front wheel and brake lever on right side of the handlebar activates brake on rear wheel. Make sure that all bolts on brakes are tightened according to specifications and brake pads are adjusted according to rims on wheels. (2-5 mm of space between brake pads and braking surface on rims)

Chain

Make sure the chain is tight without slack.

Gears

The gear shifter is already set, but if needed it can be adjusted this way:

1. Set the shift lever to position 3.



The cable should now have very little tension at all or even be slightly slack.

2. Set the shift lever to position 1.

The cable should now be quite tight and the yellow arrow on the shifting mechanism behind the rear sprocket should now be aligned between the two yellow lines on the side of the shifting mechanism. When in first gear the yellow arrow points between the two yellow lines the gear is adjusted correctly.

Pedals

Before fitting the pedals to the crank, grease the threads with a little lubricating grease. The pedals are marked with an "L" (left) and "R" (right) on the threads that screw into the crank. Make sure you fit the right pedal to the right crank.

IMPORTANT!

Be careful when attaching the pedals to the cranks. Attempting to attach a pedal on the wrong crank, or not aligning them properly, can damage both the pedal and the crank. Pedals fitted incorrectly or not tightly enough could come loose, which could cause injury or damage the e-bike.



PLEASE NOTE!

Screw the left-hand pedal anti-clockwise as it has a left-hand thread.



Left Pedal (L)



Right Pedal (R)

Before each ride

Before each ride, please check that:

- The bell and lights are working properly and are properly secured
- The brakes are working safely and are properly secured
- Both wheels run freely
- The tires are free of foreign objects and damage
- The tires have sufficient tread depth
- All bolts and nuts are tight (See page xxx)
- The frame and fork are not damaged
- The handlebar and stem are correctly and securely fastened as well as set up in the correct position
- The seat post and seat are secure and in the correct position. Try turning the seat or tipping it upwards or downwards. It should not move

WARNING: If you are unsure of whether your bicycle is in a sound technical condition, take it to an Authorized bicycle workshop to be checked instead of riding it.

Frame, fork and other parts relevant to your safety such as brakes

4. Your first ride

- Be very careful the first time you ride your e-bike! In power mode, the e-bike is considerably faster than a normal bike!
- Take your first ride on open land so you can get used to the improved acceleration.
- The control unit has a low-voltage protection system which automatically switches off the power assist if the battery voltage falls below a certain level.
- Be careful when braking. Always brake with the rear wheel brake first, it is less aggressive than the front wheel brake.
The power assist is deactivated at 25 km/h. It is automatically switched back on again once the speed drops below 25 km/h.
- Do not use power assist on slippery surfaces and gravel.
- Switch power assist off if the e-bike is not behaving normally to avoid damaging electrical components.
- In order to not damage the electrical components, never load the e-bike luggage carrier with more than 25 kg.

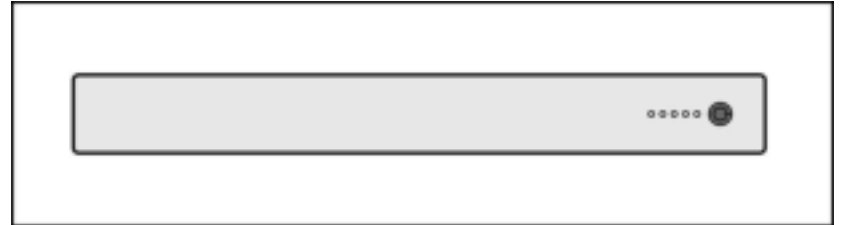
5. Using your E-bike

- Start pedaling; the electric motor will only assist you while you are pedaling.
- If you wish to change the assist level, press the plus or minus buttons.
- The power assists stops when you use the brakes.
- The power assists stops when you reach 25km/h.
- If you leave the e-bike unattended, lock it and removing the battery key.

To start the battery, Press the ON button.



To turn on the display, press the **MODE** button.

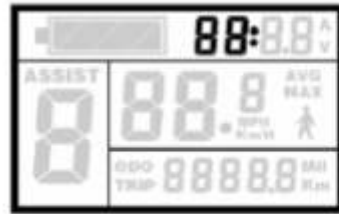


6. Setting Display

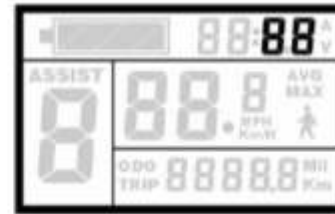
After start-up, please hold both **UP** and **DOWN** at the same time, for 3 seconds, LCD will enter into the setting state.

Time Setting

After entering into the setting state, first set the HOUR by using **UP** and **DOWN**. Press **MODE** for confirmation and then set the MINUTE by using **UP** and **DOWN**. Press **MODE** for confirmation and then set the top riding speed.



Setting HOUR

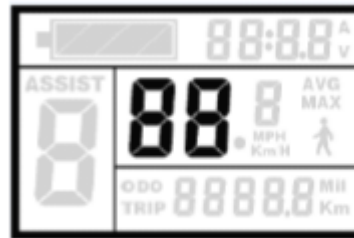


Setting MINUTE

Top-speed Setting

The default figure of the top riding speed in the display is 25Km/h. You can change this figure and re-set a new top riding speed. If the e-bike speed exceeds this new figure, the controller will limit the speed and return to the max speed to ensure the rider's safety.

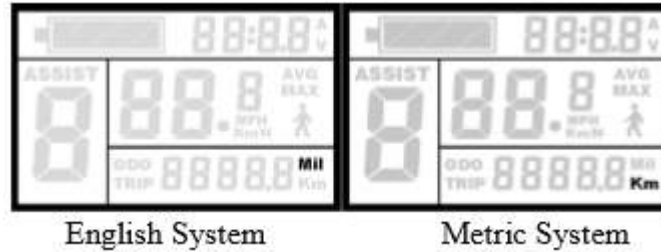
The setting range of top riding speed is from 10Km/h to 25Km/h. After setting the top riding speed, please press **MODE** for confirmation and enter into the display unit setting.



Speed Setting Interface

Choice of Display Unit (Metric system/ English system)

Press **UP** or **DOWN** to choose a display unit. The unit could be MPH and Km/h. The range unit is changing accordingly with the speed unit.



Wheel Size Setting

Press **MODE** for confirmation and enter into the wheel size setting. Press **UP** or **DOWN** to choose a corresponding wheel diameter to ensure the accurate display of speed and distance. The interface is as follows:



Press **MODE** to confirm the wheel size and enter into the LCD backlight brightness setting. The default value of the wheel size is 26 inch.

Backlight Brightness Setting

Press **UP** or **DOWN** to modify the backlight brightness. You can choose from level 1 to level 3. Level 1 is the minimum brightness. Level 3 is the maximum brightness. The default value of the backlight brightness in J—LCD display is level 1.

Exit Setting

In the state of parameter setting, short press MODE (within 2 seconds) to make confirmation. Hold **MODE** (more than 2 seconds) , save the current setting and exit the setting interface.

7. Display Operation

On/Off

Press **MODE** and the display start to work for the controller power supply.

In the Power On State, hold **MODE** or lay aside for five minutes, to cut off the e-bike power supply. In the Power Off state, the display and the controller don't use the battery power supply. So the power consumption is ZERO.

Speed Display (Current Speed/Average Speed/Max Speed)

When the e-bike starts, the display will automatically show the current speed.



Hold **UP** and the display will show the MAX speed during this ride. Hold **UP** again and the display will show the AVG speed during this ride. Hold **UP** again and the display will turn to the current speed display.



The interface of switching speeds

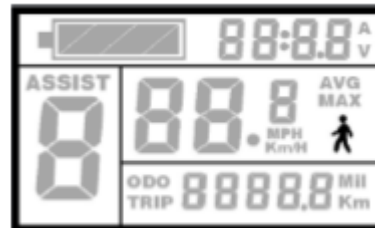
Assisted Power Select or Throttle Level Select

Press **UP** or **DOWN** to change output power of the motor. The power ranges from level 1 to level 5. Level 1 is the minimum power. Level 5 is the maximum power. The default value is level 1.



Power Assist Walk

Hold **DOWN** and enter into the mode of power assist walk. The e-bike will go on at a uniform speed of 6 Km/h.



Interface of power assist walk

Warning: 6Km/h "assisted power walk" function can only be used when the user is pushing the e-bike. Please don't use this function during riding.

Turn On and Turn Off the Backlight

Hold both **UP** and **MODE** for 3 seconds and turn on the J—LCD backlight. When the surrounding light is not enough or it is in the evening, you can turn on the backlight. Hold both **UP** and **MODE** for 3 seconds again and you can turn off the backlight.

Distance and Time Display (Riding Distance and time/Total Distance and time)

Press **MODE** and change between riding distance and total distance. Meanwhile the riding time and total time will change with it. The riding time is indicated by hours and minutes. The total time is indicated by minutes. 10 seconds to run before turning back to the clock interface.



Range Interface

Capacity Display

When the battery capacity is high, the five battery segments are all right. When the battery is low voltage, the battery display frame will flash at the frequency of 1 HZ. This indicates that the battery is severely low voltage and needs to be recharged immediately.



Battery Voltage



Low Voltage Flash

Malfunction Code Display

If there is something wrong with the electronic control system, the display will show the error code automatically. The following are some definition of malfunction codes.

Display Value	Definition
21	Current Abnormality
22	Throttle Abnormality
23	Motor Open- phase
24	Motor Hall signal Abnormality
25	Brake Abnormality
30	Abnormal Communication Definition Diagram of Error Codes.



Error Code Display

Button Battery Replacement

Ride your bike in a safe way. Don't hit or knock the display. When you replace the display battery, please detach the display from the handlebar first. Take off the battery cap and put in a new battery.

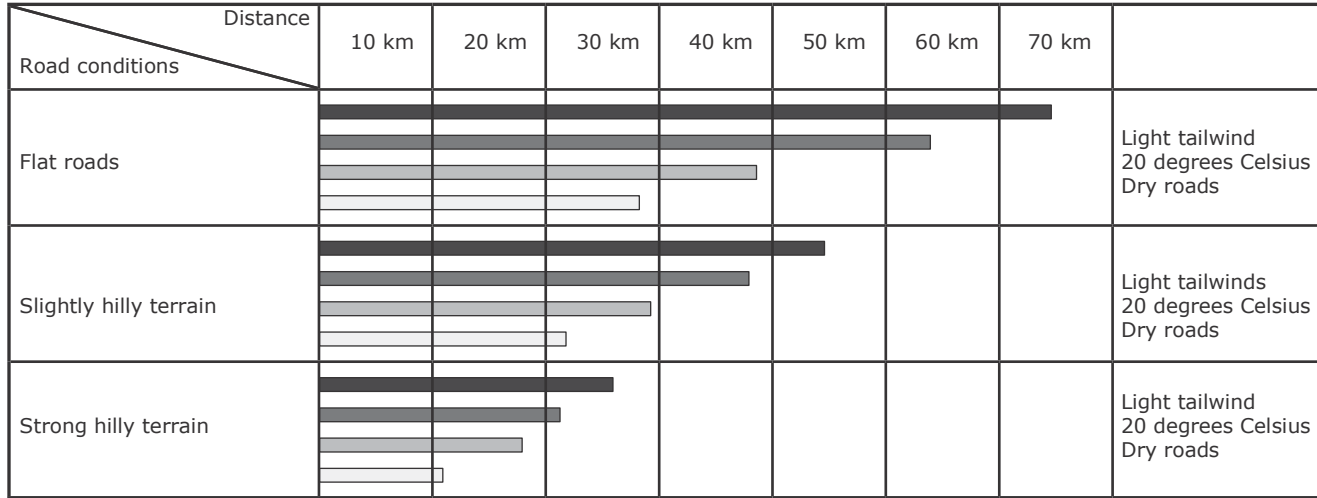
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The model of the display battery is CR2032. This button battery is used exclusively for the timer IC inside the display. The life of the button battery is more than 2 years.

Attention: After replacement of the button battery, please set the time of the display.

8. RANGE OVERVIEW

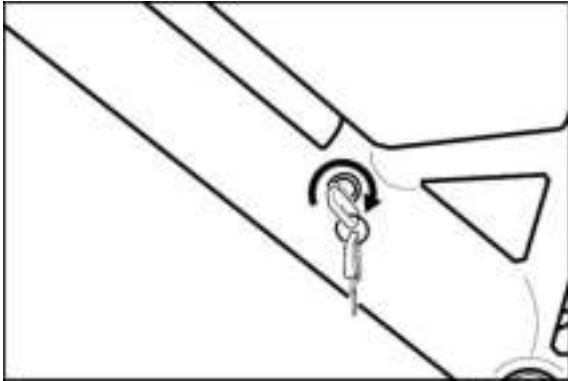
Condition: Battery is fully charged and new (314Wh)
 Load: Driver approximately 70 kg



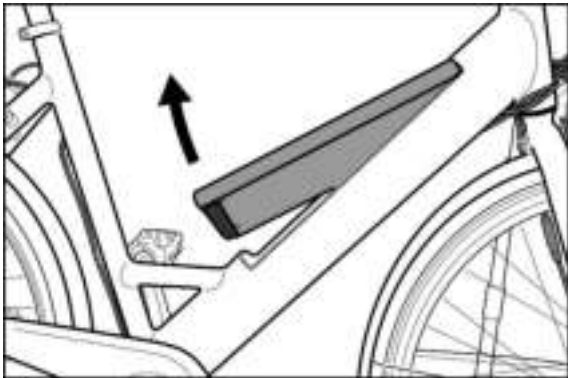
-  Medium assist - maximum help from own pedaling
-  Medium assist - low to medium help from own pedaling
-  Maximum assist - maximum help from own pedaling
-  Maximum assist - low to medium help from own pedaling

9. REMOVING AND REATTACHING THE BATTERY

1. Switch off the display.
2. Turn the key left to unlock the battery.



3. Lift the battery up out of the holder and remove it.



Please note the following reservations:

- The bike's tyres should be inflated to the proper tyre pressure.
- If the weather temperature drops - the range will be reduced.
- If the rider's weight increases - the range will be reduced.
- If the roads are wet or icy - the range will be reduced.

Maximizing your range

Many factors influence the performance of the battery which has impact on your range.

- Charge the battery completely before a long ride.
- More energy is required on uneven roads and hilly conditions.
- Frequent speed changes use up more energy.
- Heavier loads use up more energy.
- Make sure your tyre pressure is OK and always keep the e-bike clean and well lubricated, as this helps save energy.
- Make sure both wheels can move freely, it helps save energy if brake linings are not sticking. Check brake linings regularly.
- Vigorous pedaling helps save the battery and increases your range.

1. To fit the battery, first insert the battery in the battery holder from underneath then push it in place from above.
2. Turn the key right to lock the battery again.

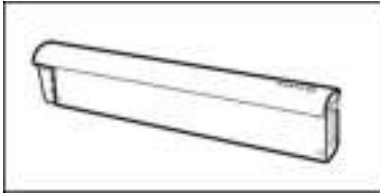
Parking

- Gently press the power button on the battery until the top diode turns off. After a few seconds the other diodes will turn off and the battery will be completely switched off.
- Avoid leaving the e-bike unprotected in rain or snow.
- If the e-bike gets wet, dry it off with a dry towel at the end of your ride.
- Don't forget to turn off the front and rear lights separately.

7. Battery charging instruction

- Always switch the battery off before charging it.
- The battery gets hot while charging. For safety reasons, never cover the battery.
- Place the charger on an even surface.
- You can either charge the battery on the e-bike or removed it from the e-bike.

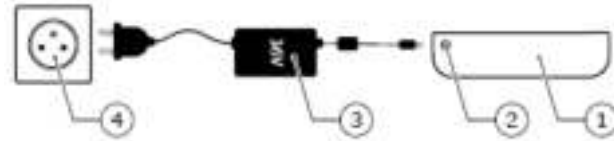
Battery



Charger



1. Connect the charger to the battery and then plug in the charger. A completely empty battery will take approximately 6 hours to fully charge.
2. When the battery is fully charged, the LED on the charger switches from red to green. For safety reasons, unplug the battery as soon as it is fully charged.
3. Unplug the charger and then disconnect it from the battery.



1. Battery
2. Battery charging connector
3. Charger
4. 230V

8. Safety instructions for the battery and charger

Your e-bike has a lithium-ion battery. Never charge the battery with a replacement charger which is not designed for this purpose. Using an unsuitable charger on a lithium-ion battery could lead to overheating, fire or explosion. If your charger gets lost or damaged, contact your local store to order a replacement.

- The battery is half charged when new. The first three times, charge the battery for at least 12 hours.
- Please make sure that the charger voltage matches your mains voltage.
- The charger must always be used indoors.
- Don't open the charger, it is a high-voltage unit.
- Never touch the two battery electrodes at the same time as this could cause an electric shock.
- Never take the battery out of the e-bike while it is charging.
- Please charge the battery for at least 2 hours every 3 months, otherwise we can accept no liability for the battery guarantee.
- Never charge the battery with other chargers.
- Don't allow liquids or metals to penetrate into the charger.
- Never charge the battery near infants and small children.
- Never use the charger in oily, dusty, dirty or damp environments and avoid direct sunlight.
- Avoid using the charger in thunderstorms.
- Always use the charger in cool, well ventilated places.
- Do not hit the battery and avoid strong vibrations.
- The guarantee is voided if the battery is opened or damaged.
- Your e-bike is designed for normal road traffic and for a single person. Never use your e-bike for extreme maneuvers, such as extreme off-road use, jumps or excess load. This could damage the e-bike and cause serious injuries.
- Only to be used with charger model C060L1001.
- As a road user you have to abide by the traffic regulations in your country.

9. Technical specifications

E-bike parameters	
Dimensions (L × W × H)	1900 × 700 × 1180mm
Weight	≤ 25kg
Maximum speed	25 km/h
Maximum load	≤ 120kg
Wheelbase between front/rear wheel hubs	1135 ± 5mm
Power consumption per 1000 km	1.2 kW/h

Motor parameters	
Motor type	Brushless permanent magnet motor
Rated output	250 Watts
Rated voltage	36 Volts
Rated torque	7Nm/32Nm
Motor effectiveness	>75%

Tyres	
Maximum tyre pressure	3,5 – 6 BAR

Charger parameters	
Full Charging time	6,22 hours
Input voltage	220V/60Hz
Maximum performance	60 Watts

Control unit parameters	
Low voltage protection	31.5 ± 1 Volts
Over-voltage protection	15 ± 1 Amperes

Battery parameters	
Battery type	Lithium-ion battery
Capacity	8.7 Ah
Battery voltage	36 Volts

10. Maintenance

Make sure you carry out the following safety checks before riding your E-bike:

Brakes

- Check that the brakes are working properly.
- Visual inspection of the brake linings to check that they are not worn and that they are aligned to the wheels.
- Make sure that the handbrake cables are attached properly and that there is no evidence of wear.

Crank and pedals

- Check that the pedals and crank are seated correctly.
- Check that the crank arm is properly fitted to the axle.

Lubrication

The chain should always feel greasy when touching. Under normal weather conditions you only need to lubricate the chain after every 200-300 km of riding. However, in rainy conditions it may be necessary to lubricate more often.

Washing

You may wash your bicycle when needed but you should avoid spraying water directly on electrical parts such as battery, motor in front hub, speed sensor in bottom bracket and display on handlebar.

11. Other information

- Make sure that all reflectors are properly fitted and not covered.
- Do not clean your e-bike with a pressure washer. Water could penetrate into the motor, cause short circuits and damage electrical components. Only ever use a damp cloth with a neutral detergent to clean your e-bike. Do not use acidic detergents as these could damage the e-bike.
- Do not over-lubricate. If oil gets onto the wheels or the brake pads, it reduces the performance of the brakes and increases braking distances.
- Never oil the tread of the pedals use grease instead. Wash excess oil from the wheels or brake pads with soapy water. Dry the e-bike before using it again.
- Don't forget your helmet!

12. Declaration of conformity

DECLARATION OF CONFORMITY

The product satisfies the provision for CE-marking according to the following directives:

- Machinery Directive 2006/42/EC
- EMC Directive 2004/108/EC
- RoHS Directive 2011/65/EU

The following harmonized European standards or technical specifications, which comply with good engineering practice in safety matters in force within the EEA, have been applied.

EN 15194:2009

EN 14764:2005

ISO 4210-2

Additional information:

The product is CE-marked 2016.

As the manufacturer/manufacturers authorized representative established within the EEA, we declare under our sole responsibility that the equipment follows the provisions of the Directives stated above.

Date



The crossed-out wheeled bin symbol indicates that the item should be disposed of separately from household waste. The item should be handed in for recycling in accordance with local environmental regulations for waste disposal. By separating a marked item from household waste, you will help reduce the volume of waste sent to incinerators or land-fill and minimize any potential negative impact on human health and the environment.