

Leisger

Immer Cool Bleiben

Instruction Manual for E-bikes



CD5

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1. Your E-Bike

1.1) Introduction

We would like to thank you for your e-bike purchasing. The e-bike, equipped with pedals and an auxiliary electric motor, cannot be propelled exclusively by means of this auxiliary electric motor. You will thoroughly enjoy riding this new and electrical power- assisted bike.

Riding an e-bike means that you're helping preserve the environment, since any CO₂ or other polluting gases will not be released. For your safety and for the safety of others, we recommend that you obey all road regulations and wear a protective helmet. For optimal, safe and enjoyable use of the e-bike, make sure you thoroughly read this user guide before you first use it.

Use the e-bike according to the user guide, or it may shorten the life cycle.

Have a pleasant ride!

1.2) General presentation of the vehicle

1.2.1) General information

Weight of bike without battery: 20.36KG

Maximum assistance speed: 25KM/H

The dimensions of the bike (MM): L 1860 x W230 x H1020 (95% package)

L 1540 x W240 x H740 (75% package)

Maximum total weight: 120KG (includes the bike, battery and rider)



CD5

1.2.2) Spare parts spec

Spare parts name	CD5-650
Motor	DAS-KIT, RX2C, 36V, 350W
Battery	DAS-KIT,D5-3613S 36V13AH SAMSUNG CELLS, with usb port
Display	DAS-KIT, C6BBT
Front fork	RST, NEON-TNL
E-Brake Lever	TEKTRO, Hydraulic, Auriga E-COMP 
Disc Brake	TEKTRO, Hydraulic, Auriga COMP 
Deraillieur	SHIMANO , Acera, Single speed 8
Tire	SCHWALBE, Big Ben 26*2.15

** Charging time: 3-6 hours for 100% charge

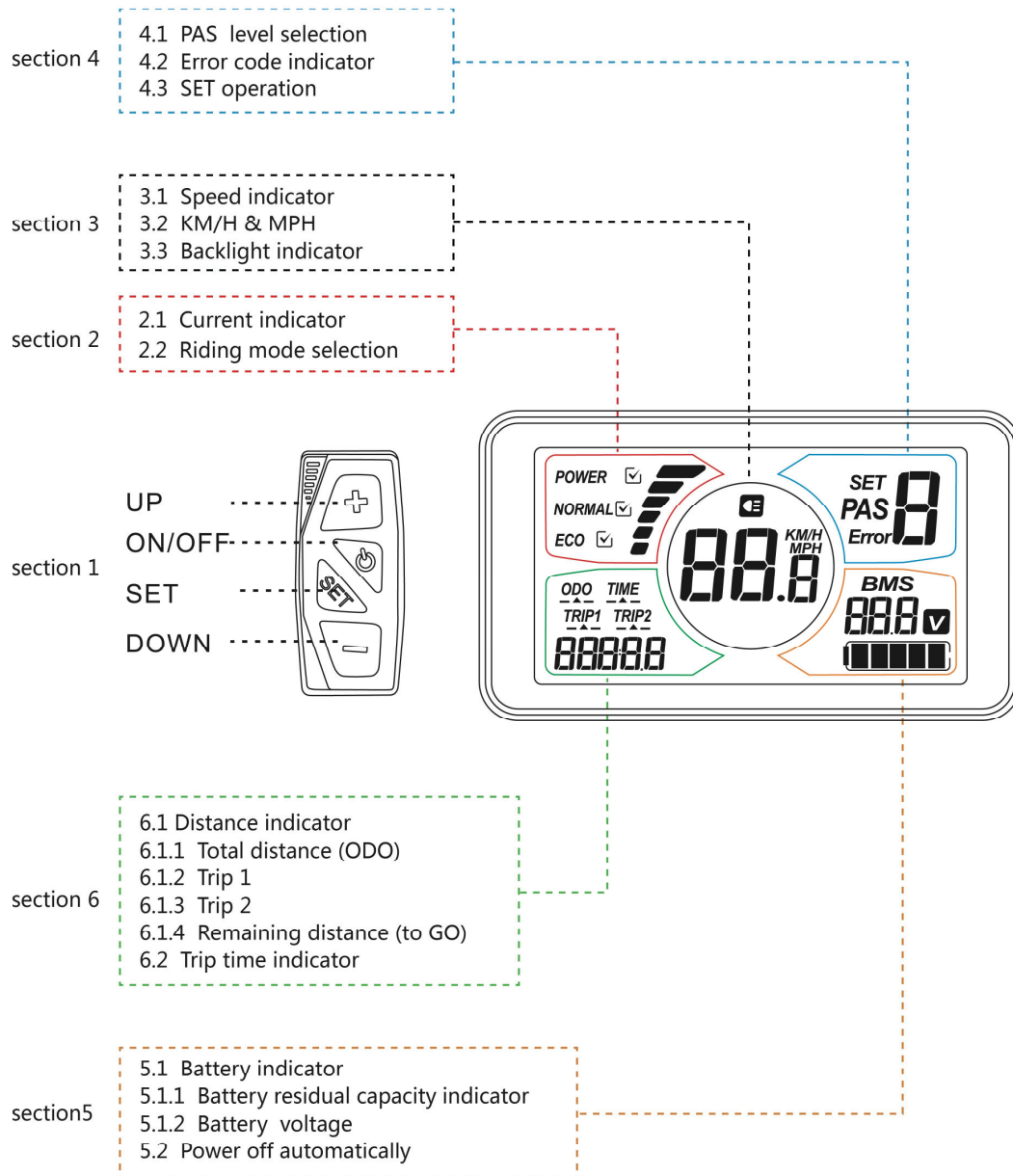
** Autonomy: between 40 to 100 KM, depending on the assistance level and road condition.

** 2 charge indicators: 1 is located on the display; 1 is located on the side of battery.

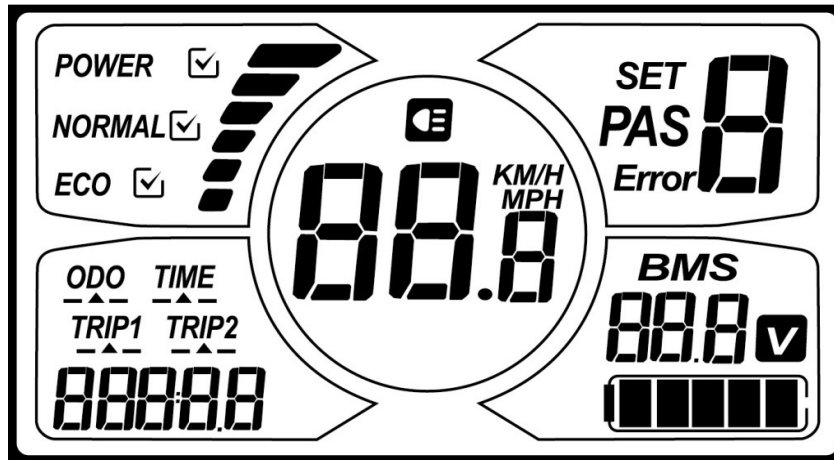
** Weight: 3 KG

2. Function Display

2.1) NORMAL OPERATION

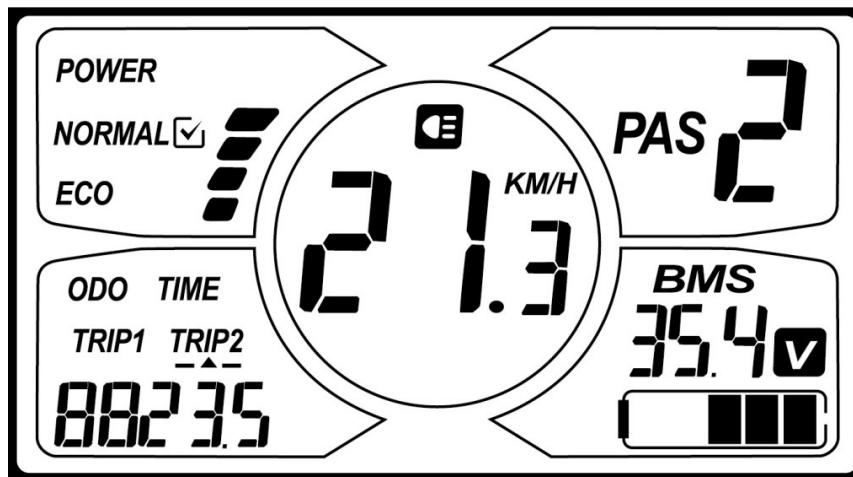


FULL VIEW AREA



NORMAL VIEW AREA

With the display on ,the default indicators are riding speed、trip 2、PAS level、 battery indicator as shown in fig below. Press **SET** to switch the display information.



Section 1: ON/OFF

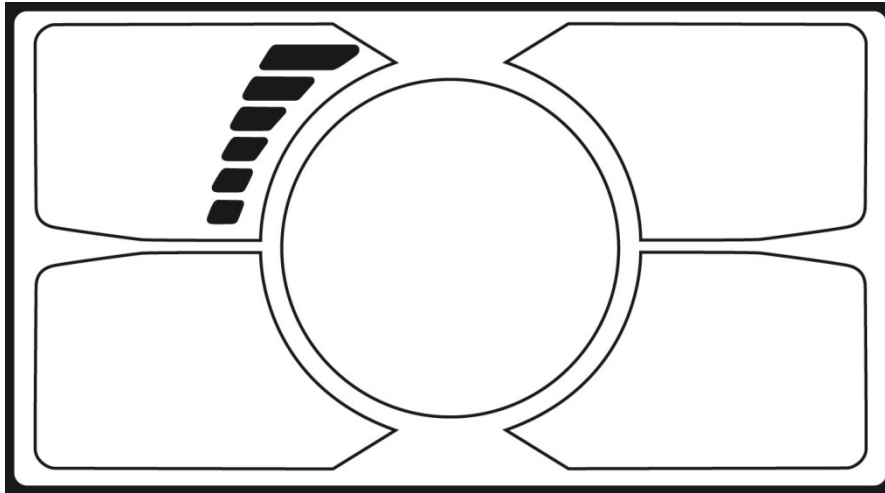
Press **ON/OFF** then the display is activated. The display will provide power for the controller. Press **ON/OFF** again to open the backlight. With display on, press **ON/OFF** for 3 seconds to turn off power. With the display off, there is no battery power consumption. The leakage current is no more than 2μA.

※The panel will automatically power-off when speed is 0km/h for 5minutes.

Section 2:

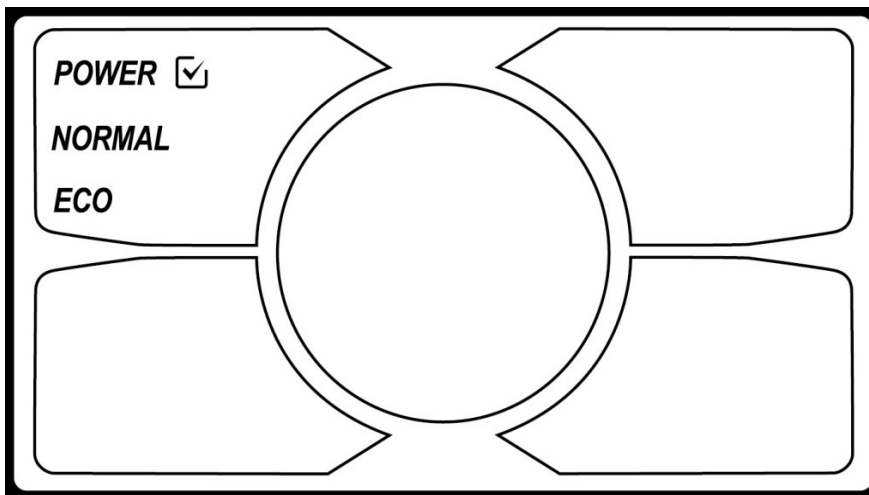
2.1) CURRENT INDICATOR

It represents the discharging current of the controller currently, each segment is 2A, six segments are $\geq 12A$.



2.2) RIDING MODE SELECTION

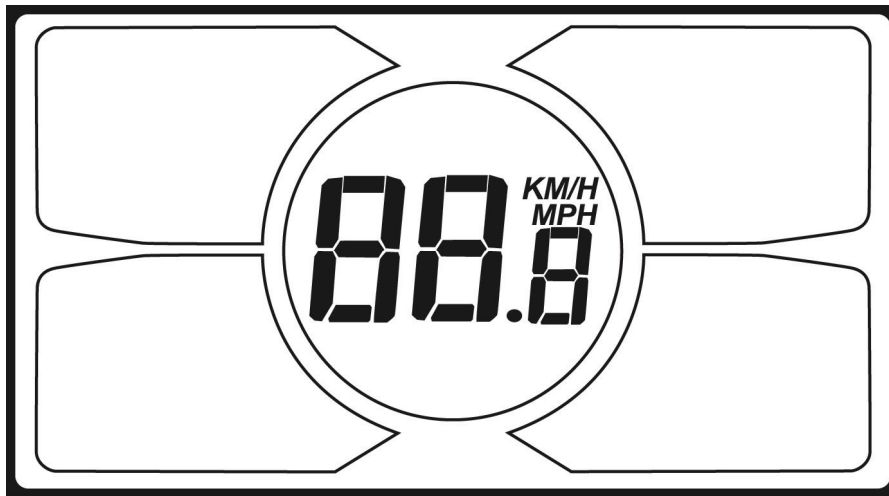
There are three modes for riding mode selection, including POWER, NORMAL and ECO. The default option is POWER.



Section 3:

3.1) SPEED INDICATOR

The speed indicator is as below, user can select KM/H or MPH in **SET 3**.

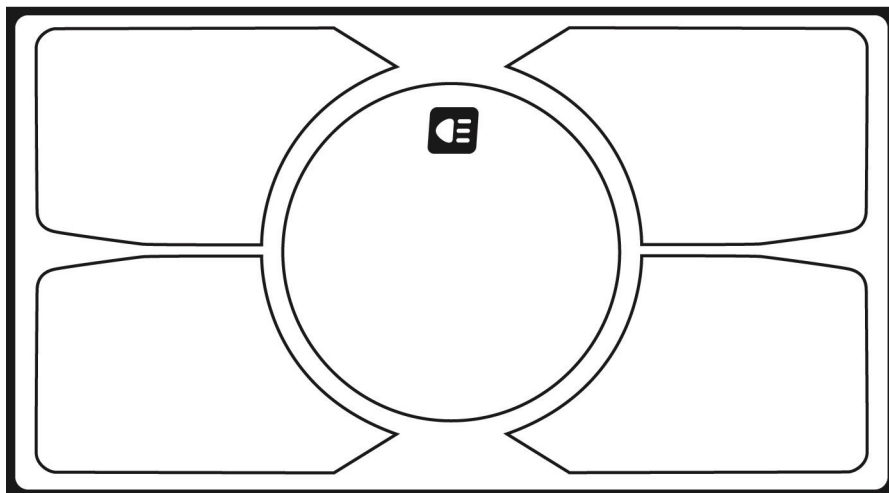


3.2) KM/H & MPH

Select KM/H or MPH for measurement, the display will indicate the matched speed and mileage.

3.3) BACKLIGHT INDICATOR

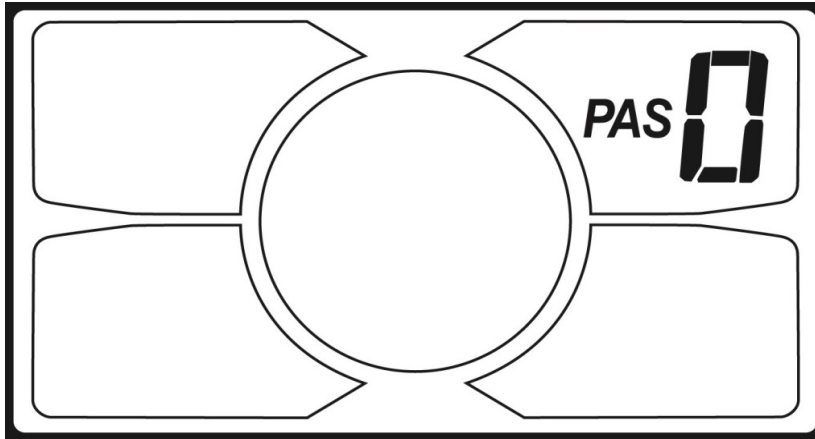
With the display power on, click **ON/OFF** can turn on the backlight. Click it again can turn off the backlight.



Section 4:

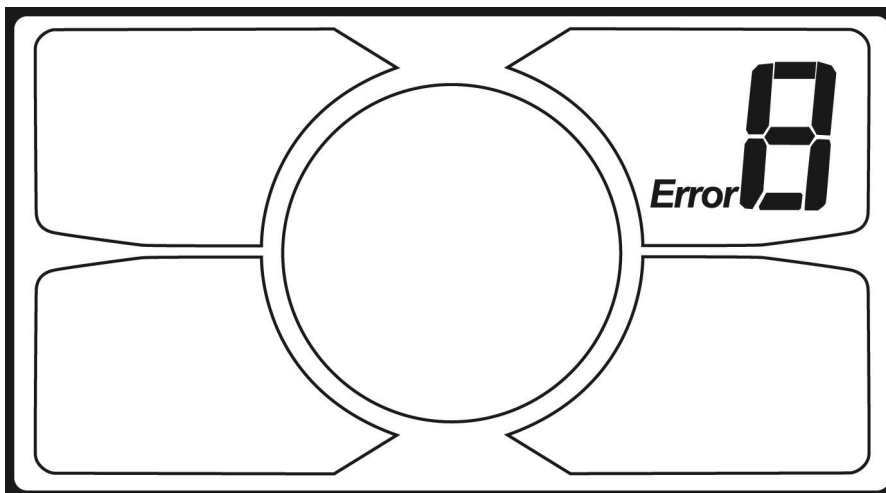
4.1) PAS LEVEL SELECTION

Click **UP** or **DOWN** to change the PAS level and change the output power, the default mode is mode 0 and its output power ranges from level 0 to level 6.



4.2) ERROR CODE INDICATOR

If there is something wrong with the electronic control system, the display will flash at 1 HZ and show the error code automatically. Different error code represents different fault information, the details of **Error code table** are as represented on the Page 12.

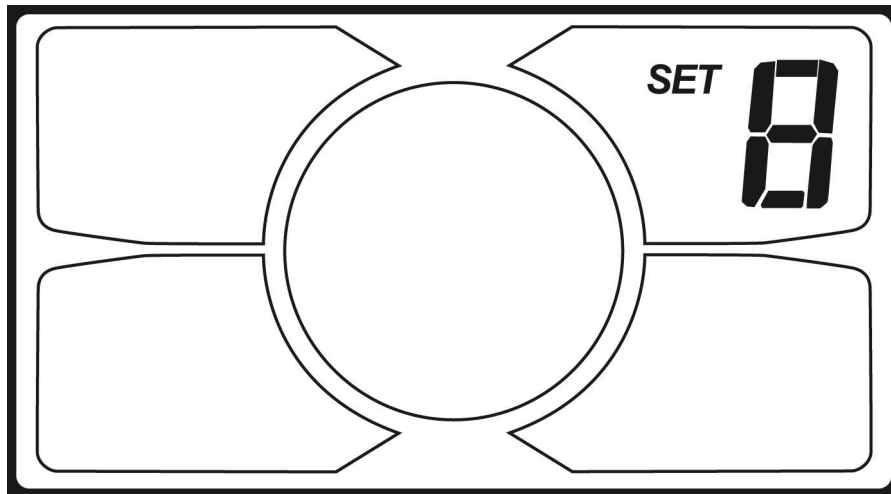


※ The display cannot return to normal status until the problem is solved. And e-bike will not run before solving the problem.

4.3) SET OPEARATION

Hold the **SET** for 2 seconds and enter into the setting interface, then Number 0 keeps lighting, the display will flash at 1 HZ. Click the **SET** to switch from 0 to 4 circularly to set interface, click **UP** or **DOWN** to select the needed

parameter, and press the **SET** for 1 second will exit the setting interface.



4.3.1) SET0: Riding mode selection

There are three modes for selection: POWER、NORMAL、ECO.

4.3.2) SET1: Reset trip1 distance

Click the DOWN to reset the trip1, then the TRIP1 icon will flash at 1 HZ, meanwhile the trip 1 will be cleared.

4.3.3) SET2: Wheel diameter setting

Select the accurate wheel diameter value to ensure the accuracy of speed and mileage on the display.

4.3.4) SET3: KM/H & MPH

Select KM/H or MPH for measurement, the display will indicate the matched speed and mileage.

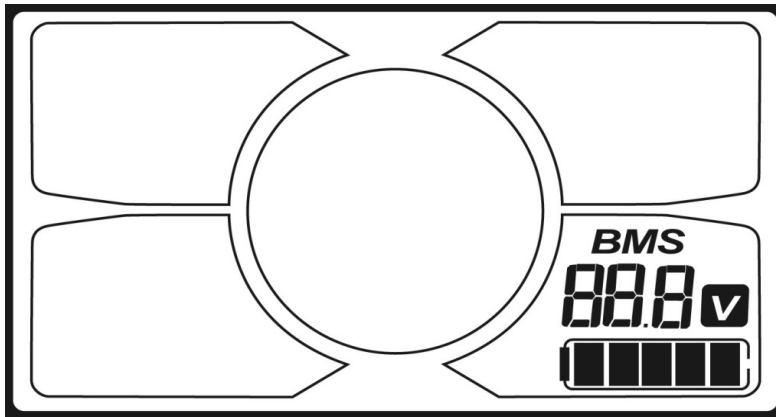
4.3.5) SET4: Quantity of speed magnetic steel selection

Select the quantity of speed magnetic steel to know how many speed signals the magnetic sent in one circle.

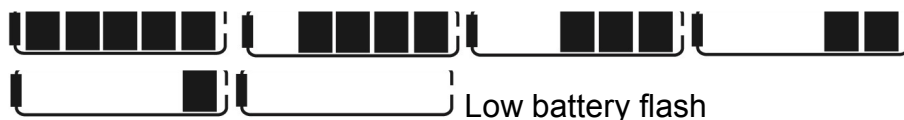
Section 5:

5.1) BATTERY INDICATOR

5.1.1) Battery residual capacity indicator



The battery capacity viewing area have five segments, each segment represent 20% battery capacity. When the capacity is full, the five segments are all light up. If the battery capacity is low, the battery viewing area will flash, it indicates that the battery is severely insufficient and need to be recharged immediately.



5.1.2) Battery voltage

It displays the current voltage of the battery.

5.2) POWER OFF AUTOMATICALLY AFTER 5 MINUTES

When the riding speed is 0 km/h for 5 minutes, the system will power off automatically.

Section 6:

6.1) DISTANCE INDICATOR

With the display on, press **SET** to switch the mode to select ODO, trip 1 and trip 2.

6.1.1) ODO

The ODO records the driving mileage from start using, the accumulated value cannot be cleared.

6.1.2) Trip1

When the riding mileage ≥ 500 km, trip 1 will be reset automatically. The

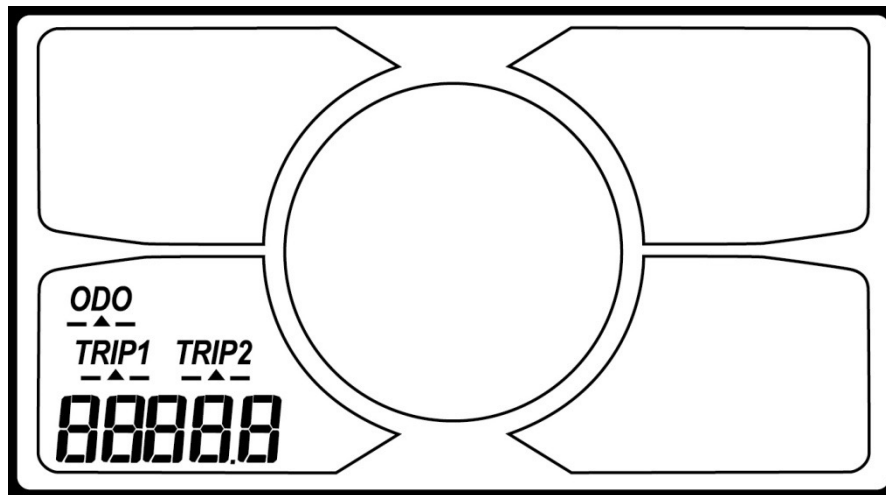
value will be accumulated without resetting.

6.1.3) Trip2

Trip 2 represents the last driving distance for 30 s after turning on the display, it can be reset automatically and start to record the current distance.

6.2) TRIP TIME INDICATOR

The riding time parameter is automatically reset after shutdown.



2.2 ERROR CODE TABLE

The error code is corresponding with the fault definition.

Error Code	Definition
0	normal
1	Current error or MOS damaged
2	Throttle error(detection after turning on)
3	motor without phase position
4	Hall error
5	Brake error(detection after turning on)
6	Under voltage
7	Motor stalling
8	communication controller receiving error
9	communication display receiving error

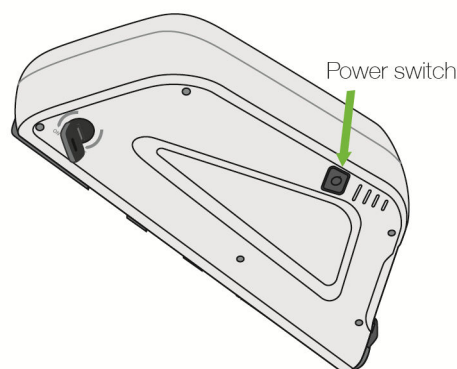
3. Using the bike

3.1) Riding the bike

Before taking off, make sure that you activate the battery by pressing on the button located on the side of battery.

The 4LEDs located on the side of the battery which indicate the charge level.

Turn on the display unit which is on the handlebars. Select your needed assistance level and start to pedal. You'll find that the engine starts as soon as you start pedaling.

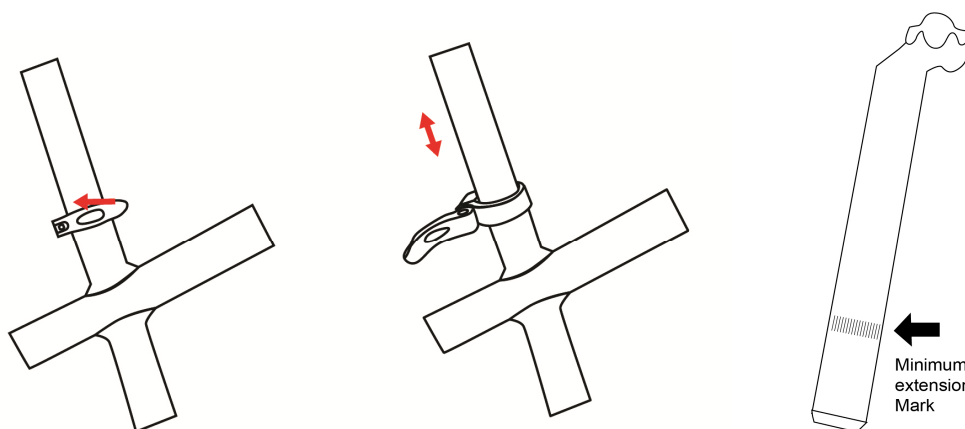


When you use the brakes, the contactor located within these brakes will halt the engine's assistance immediately. The left brake lever controls the rear brake. The right brake lever controls the front brake.

You can also use the bike without electric assistance by turning off the battery (switch off the button or by adjusting the assistance level on 0). The engine will then feature zero resistance: you'll be freewheeling. Select the appropriate gear by activating the 7-speed gear lever.

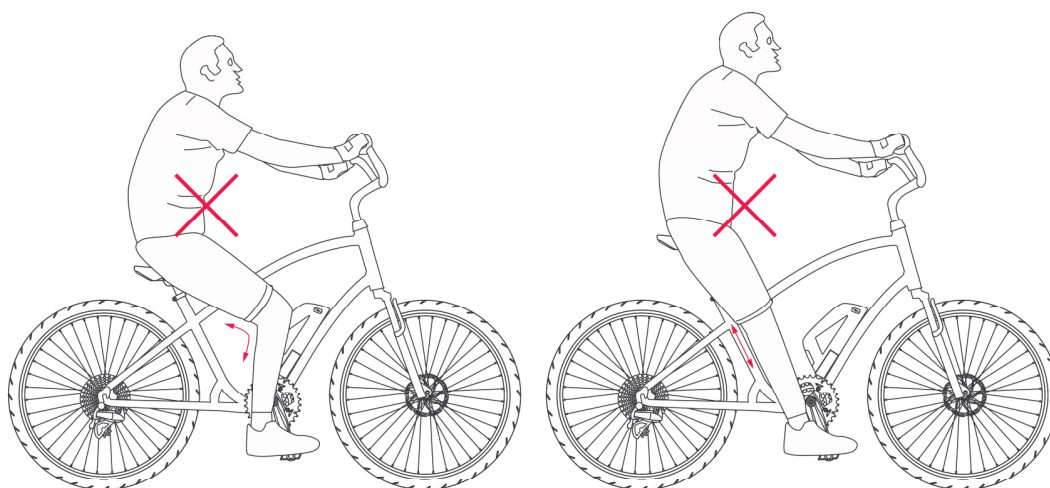
3.2) Quick-release devices

Tighten the adjusting nut by hand and move the quick release lever to the closed position. You should feel considerable resistance while moving the lever. If not, re-open and re-tighten the lever, then move it to the closed position so it is in line with the frame.



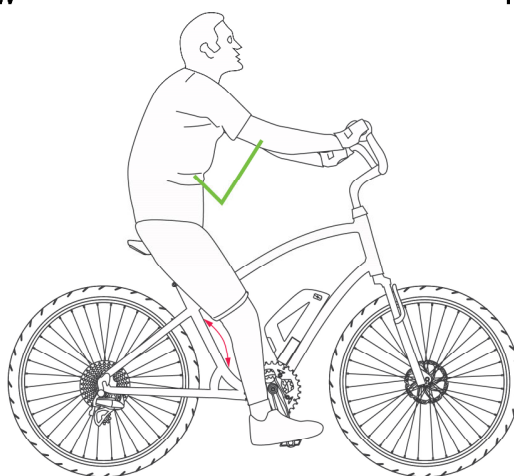
3.3) Adjusting the height of the seat

Unlock the lever (open), adjust the seat height to the desired position without **ever exceeding the mark** carved onto the seat's tube, lock the lever (LOCK). The seat's height must be set so that your leg is stretched out when the corresponding pedal is in the lower position.



Too Low

Too High



Good Height

3.4) Precautions required prior to each use

Verify that the brakes and the front & rear lights are all working properly. Also, check the pressure of the tires.

On derailleur geared bicycles the rear derailleur automatically tensions the chain.

Make sure that the hinges on your bike are properly locked. Indeed, when using the bike on a regular basis, the tension of the hinges' adjustment and locking systems can change slightly. Whenever necessary, adjust the tension once again.

This bike is not designed for rough usage condition, such as jumps, riding up or off of pavements, and riding on unpaved roads. For your own safety, do not modify the bike.

Please note: if you use the bike frequently, it is recommended that you inspect the state of the fork, the frame, the suspension and the fasteners. The materials and components may be subject to different reactions to usage and wear.

If you have any doubts, contact your dealer, who will proceed with the necessary inspection.

3.5) Lubrication

Frequency	Component	Lubricant	How to Lubricate
Weekly	Chain Derailleur Pulleys Derailleurs Brake Calipers Brake Levers	Chain Lube or Light Oil Chain Lube or Light Oil Oil Oil Oil	Brush On or Squirt Brush On or Squirt Oil Can 3 drops from oil can 2 drops from oil can
Monthly	Shift Levers	Lithium Based Grease	Disassemble
Every Six Months	Freewheel Brake Cables	Oil Lithium Based Grease	2 squirts from oil can Disassemble
Yearly	Bottom Bracket Pedals Derailleur Cables Wheel Bearings Headset Seat Post	Lithium Based Grease Lithium Based Grease Lithium Based Grease Lithium Based Grease Lithium Based Grease Lithium Based Grease	Disassemble Disassemble Disassemble Disassemble Disassemble Disassemble

Note: The frequency of maintenance should increase when using in wet or dusty conditions. Do not over lubricate - remove excess lubricant to prevent dirt build up. Never use a degreaser to lubricate your chain.

3.6) Routine maintenance

3.6.1) Recommended values of the nut torque.

Front Wheel Nuts	22-27 Newton Meters	16.2- 19.8 ft.-lb.
Rear Wheel Nuts	24-29 Newton Meters	17.5- 21.3 ft.-lb.
Seat Binder Nut	12- 17 Newton Meters	8.8- 12.5 ft.-lb.
Seat Pillar Clamp Nut	15- 19 Newton Meters	11.0-14.0 ft.-lb.
Brake Anchor Nut	7- 11 Newton Meters	5.1- 8.1 ft.-lb.
Handlebar Clamp Nut	17- 19 Newton Meters	12.5- 14.0 ft.-lb.
Head Stem Expander Nut	17-19 Newton Meters	12.5- 14.0 ft.-lb.
Crank Cotter Pin Nuts	9-14 Newton Meters	6.6- 10.3 ft.-lb.
Brake Centre Bolt	2-17 Newton Meters	1.5- 12.5 ft.-lb.

3.6.2) Service checklist

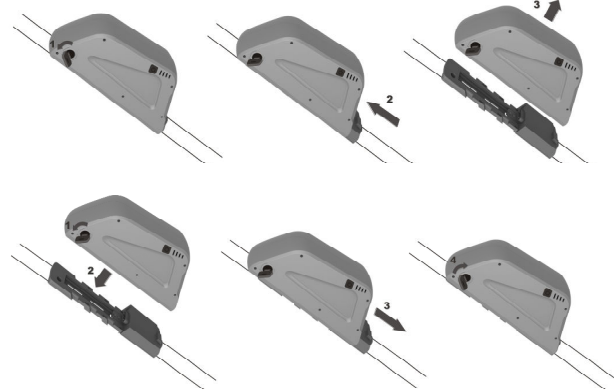
Frequency	Task
Before every ride	Be sure batteries are fully charged Check tire pressure Check brake operation Check wheels for loose spokes
After every ride	Be sure to fully charge batteries Quick wipe down with damp
Weekly	Lubrication as per schedule 3.7
Monthly	Inspect wires Inspect connectors Check derailleur adjustment Check brake adjustment Check brake and gear cable adjustment Check tire wear and pressure Check wheels are true and spokes tight Check hub, head set and crank bearings for looseness Check pedals are tight Check handlebars and stem are tight Check seat and seat post are tight and comfortably adjusted Check frame and fork for trueness Lubrication as per schedule 3.7 Perform safety check
Every six months	Lubrication as per schedule 3.7 Check all points as per monthly service Check and replace brake pads, if required Check chain for excess play or wear
Yearly	Lubrication as per schedule 3.7

4. The battery

4.1) Installing and removing the battery

To remove the battery, unfasten the lock which is located along the battery's box. Remove the battery by pulling it out.

To put the battery back into place, insert the battery along to the guide rail. Push it closely against the controller box. Fasten the lock.



4.2) Charging the battery

Never let a battery be charged unattended.

The battery's voltage is indicated by the 4 LED lights located on the side of the battery, and also on the display unit located on the handlebar.

Your battery must be charged in an ambient temperature, on a non-flammable and dry surface, away from any sources of heat, humidity or flammable materials. Also, it must not be covered.

Here are the steps to be followed when charging your battery:

Step 1	Turn the battery off. The LED lights will be off.
Step 2	Plug the charger (which is off) into the socket and then insert the charger's plug into the battery, which is also off.
Step 3	the charger's LED indicators lit up in the following manner: <ul style="list-style-type: none"> • The red LED lights on: the battery is being charged. (A) • The red LED light becomes green: the battery is full charged; you can unplug the charger. (B)



(A)



(B)

It takes 3 - 6 hours for the battery to be fully charged when using the standard charger that's supplied with your bike.

4.3) Battery autonomy and lifespan

4.3.1) Autonomy

The bike's autonomy ranges from 40 to 100 kilometers, as it depends on many different factors (degree of assistance used, topology, rider's weight, frequent stops/start-ups, hills, tire pressure, etc...)

4.3.2) Battery

Your battery is just like a household battery. It contains a limited amount of energy, which diminishes as it is being used. When the available autonomy no longer corresponds with your needs, you need to buy a new one from your dealer.

4.3.3) Maintenance

If you don't use your bike for a period of time exceeding 2 months, store it in a humidity-free area to protect the electronic components and make sure that the battery is neither completely charged nor completely discharged (2 LEDs lit up)

Note: *Never store a completely discharged battery as it might result in permanent damage.*

During the winter or long storage periods, it is recommended that you charge the battery halfway every 2 months. Don't forget to switch it off. Store your battery at a temperature between 15° and 25°.

4.4) Battery safety instructions

Your bike's battery is an electric component made up of chemical elements. For your safety, it is imperative that you obey the following rules:

Always handle with great care
Always keep it away from children
Do not take it apart or hit, pierce or submerge it
Keep it away from temperatures exceeding 60°
Never create a connection between the contacts located at the bottom of the battery
Never let the battery charge unattended
Never sleep near a battery that is charging
Only use the charger that came with your bike or that was supplied by your dealer
If your battery is damaged, do not use it and take it back to your dealer as soon as possible



5. Safety and maintenance Recommendations

5.1) Safety recommendations

5.1.1) Helmet

For safe riding, use a bicycle helmet.

5.1.2) Tires

Inspect the wear of your tires on a regular basis and verify the tire pressure at least once a month. Tire pressure: 40-65 PSI depending on the weight of the user.

5.1.3) Wheel-rims

Take care of any risk of damage in case of defective wheel-rims. Swap them

immediately when the rim is worn out.

Important: braking distance increases on humid or slippery ground.

5.1.4) Gears

Like the chain, the freewheel must be kept clean and well lubricated. If the chain has become worn and need to be replaced, then it is likely that the freewheel will also have become worn and should also be replaced. Take the chain off the freewheel and rotate it with your hand. If you hear a grinding noise or the freewheel stops suddenly after spinning it, it may need to be adjusted or to be replaced.

The nexus gear does not require any sort of maintenance.

5.1.5) Signaling device

The bike is silent. In order to alert others as to your presence, you have an approved signaling device located on the left brake lever: Use it only when absolutely necessary, don't abuse it!

5.1.6) Battery

Cf. Chapter. 4

WARNING: As with all mechanical components, the bicycle is subjected to wear high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component exceed, it may suddenly fail possibly causing injuries to the rider. Any form of crack, scratches or change of color in highly stressed areas indicate that the life of the component reach and it should be replaced.

5.2) Maintenance

Caution:

Bike maintenance and repair require specific skills and appropriate tools. Do not repair your bike or change any of its settings if you have the slightest doubt regarding your ability to correctly proceed with such work. Contact your dealer. Any adjustments or repairs that are not properly done can damage the bike and lead to accidents resulting in extensive injuries. Use only genuine replacement parts for safety-critical components.

5.2.1) Cleaning

Always remove the battery when cleaning. Use soapy water or water mixed with a gentle detergent, and then rinse it with clean water. Make sure that the controller located behind the battery compartment is not exposed to humidity as it contains electronic components. Do not use a high pressure washer!

5.1.2) Maintenance

Make sure your bike is safe for the environment. Used parts must be disposed of in appropriate selective sorting recycling bins. A battery which no longer works must be returned to your dealer so that he may pass it to a recycling company. Replacing the rear light batteries: remove the screw to access the batteries.

(It is recommended that you need to replace them every year)

Engine: the engine does not require any sort of maintenance.

Chain:

It is recommended that you lubricate your bike's 7 speed gearwheels and chain on a regular basis using appropriate products (ask your dealer for advice).

6. Accessories

Mudguards (Place the mudguard assembly between the stays, make sure the mudguard bracket holes line up with those in the frame. Tighten all bolts and screws until snug.)

Helmet, baskets and storage pouch are not provided with the vehicle.

To order these accessories, get in touch with your dealer.

Using only genuine replacement parts for safety-critical components.

7. Warranty

You are provided with a warranty for one year since the day you buy the bike. Details regarding your bike's warranty coverage terms are available from your dealer.

Have a pleasant ride!

Note: The pattern of bicycle's reflector on the carton shipping mark is according to German standard, physical pattern of reflector is different in different countries, please prevail in kind.



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