



PRODUCTION USER'S MANUAL

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Parts Identification



User Security

1. Do not operate the e-bike before reading this user manual thoroughly. The manufacturer will not be responsible for any damage or accident due to improper use.
2. For your safety and others, please follow the traffic regulations. These electric bicycles are not suitable for children under thirteen and the physically challenged. The e-bike is not recommended for competition, stunt, any aggressive or off-road riding.
3. Do not lubricate the brakes.
4. Do not ride in water where the depth exceeds the controller, the motor or direct flush with water to electrical components.
5. Avoid prolonged exposure to the sun or rain, and exposure to humid places or aggressive gases may cause parts to corrode or electrical parts to brake. This can lead to malfunctioning or accidents.
6. The electrical components are complicated in structure, so please do not disassemble or modify these parts.
7. The performance and mileage of the unit will be varied with the battery condition, temperature, terrain, wind speed, tire pressure, rider weight and the maintenance, etc. To get the best mileage, we propose that :
 - (1). Ride for 3-5m in power mode when starting.
 - (2). Try to reduce frequent braking or restarts.
 - (3). Ride in PAS mode while on uneven road conditions, uphill or headwind.
 - (4). Avoid carrying people or overloading.
 - (5). Check the tyres before riding to ensure the correct pressure is maintained.
8. To ensure your safety, please use helmets; check brakes, tyres, handlebars and rims before riding; increase braking distance when it is raining.

9. Authorized payload of the bike :100kg(for bike)+15kg(for carrier)
10. For those with child seats, cover the saddle spring in case it pinches child's finger.
11. Improper use could cause harm, please check the connection on frame, front fork and suspension periodically. Every mechanical part has friction and pressure, different materials and parts have different frictions and pressures. If mechanical part has exceed its service life, resultant damage could hurt the user. Any crack, scratch and change of color remind us this part is out of service life, it should be replaced immediately.

Regular check for safety before riding

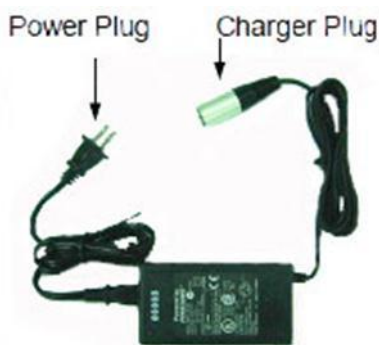
1. Check if the handlebar stem and seat post are safely inserted. Take heed of the maximum height markings (MIN. INSERTION) on the tube.
2. Check if the brake and the power brake function are working well.
 - (1). Hold up the kickstand, switch to the electric mode and then turn the throttle. If the motor does not work, then the kickstand can cut power efficiently.
 - (2). Open the kickstand, switch to the electric mode and then stop the brake. If the motor does not work, then the brake can cut power efficiently.
 - (3). Check if any of brake shoes with excess wear should be replaced.
3. Check if the nuts on the front and rear axis are securely fixed.
4. Check if the chain elastic is proper.
5. Check pedals and other fixtures, check if rotary parts are flexible.
6. Check if the hand grip throttle functions well, and goes back into place immediately after loosening it.
7. Check tyre pressure
 - Check if tyre pressure is in accordance with what is indicated on the tyre.

- Check if the tyre thread is excessively worn out, if so, replace the tyre.
8. Check all electrical connections and mechanical parts are securely locked, and check all cables, connector plugs and sockets must be dry and undamaged.
 9. Make sure that you know how to operate the e-bike and know clearly the traffic regulations.

Battery and Charging

Steps to charge the battery

1. Confirm that the local power supply corresponds with the requirement of the charger, the input voltage is between 100V—240V.
2. Switch your e-bike off on the main switch on the battery case.
3. The battery can be charged on the e-bike or removed from the e-bike as shown.
4. Connect the charger plug and charging port of the battery first, and then connect the power plug and the power source.
5. When the red light turns on the charging starts.
(1)Charge without the e-bike (2)Charge on the e-bike



Safety Charging

Care of the battery is vital to your safety and to maximize its long-term performance. Battery fault fire or explosion hazard will occur if the instructions are not followed.

- Ensure that the charger plugs are dry and securely connected to the charger port of battery case.

- Do not cover the battery or charger while charging, do not use the battery charger near flammable articles or in unventilated places. The ambient temperature should not exceed 40°C.
- Keep the battery away from water, to prevent shocks or shorting.
- Only use the charger provided to charge the battery.
- Do not disassemble or modify the battery.
- Do not expose the battery to fire or extreme temperatures.
- Do not allow impact or force against the battery pack.
- Pull out the power plug first and then the charger plug after charging. Connecting the power plug and the power source for a long time while not charging is not recommended.
- Should any abnormal conditions occur, like overheating or peculiar smells, stop charging immediately and contact your authorized dealer for help.
- Put the battery and charger in a safe place beyond children's touch.
- Regular Use –If you are commuting significant distances, it is advisable to recharge the battery before the return journey.
- Occasional Use – Recharge the battery at least once a week, even if the cycle is unused.
- Always recharge the battery after use.
- The manufacturer will not be responsible for any damage or injury due to improper or unsafe use of the battery charger.

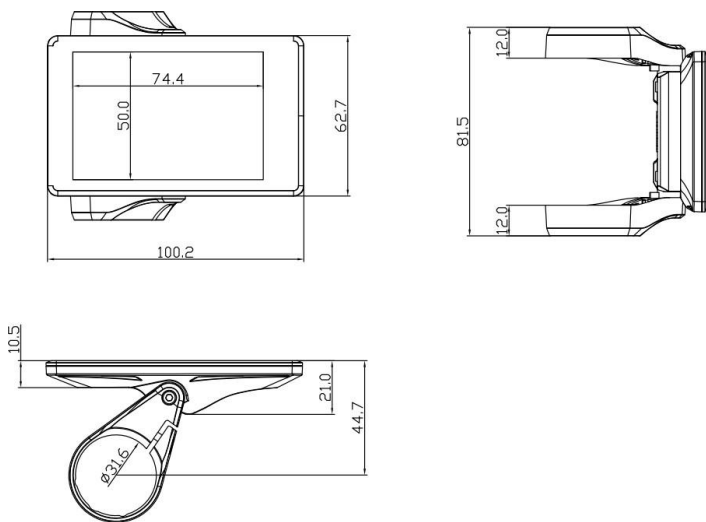
Operation Steps Instruction

LCD Display Instruction

Main material and color:

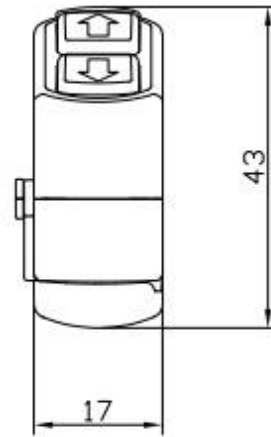
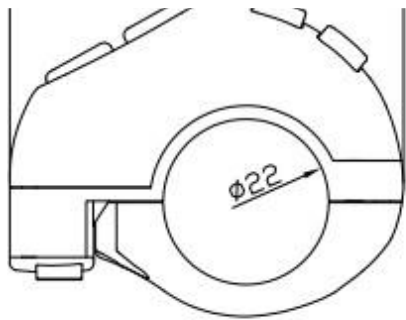
Display is mainly made by black ABS material, and the brace is made by nylon. It works well when temperature ranges from -20°C to 60°C .

Dimension figure (mm)

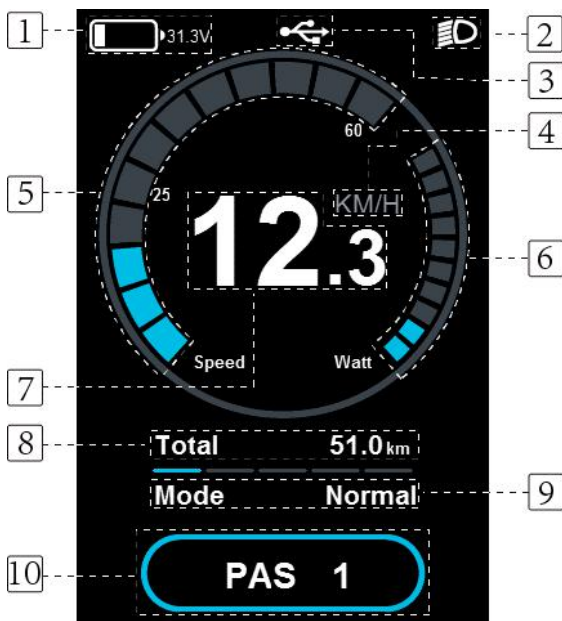


About the buttons

There are four buttons on C900E-USB: ON/OFF, SET, UP and Down.



USB offers several display modes to adapt your using habit. Information that can display on the screen are listed in the following picture:



1 Battery status:

Show current electric quantity, and shine to indicate a low battery quantity.

2 Backlight:

When it is on, press the ON/OFF button to turn the backlight on, and the front light will turn on as well, you will see a light icon.

3. USB:

Press and hold SET and UP to turn USB-Charging on, you will see a USB icon.

4 Metric/British system

To indicate speed in metric system.

5 Speed display:

To show current speed in a progress bar.

6. Power display:

To show current power.

7. Speed display:

To show current speed as your units setup.

8. Statistics display:

To switch between TRIP/OED/TIME by pressing SET button.

9. Ride mode display:

Three ride mode: Power, ECO & Normal. You can change mode in setup menu

and change the appearance as well.

10. Boost power display

Press "+" or "-" to change gears and output power from 1-5, the default setup is 1 when turning on.

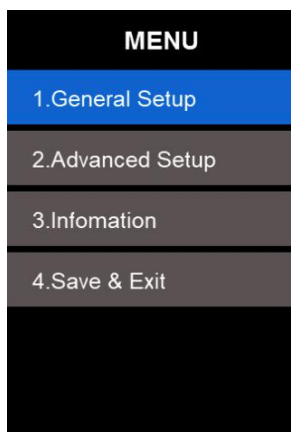
6KM push:

Hold "down" for 2 seconds, this icon will show at position 9.

General setting:

Hold down the SET key for 2 seconds to enter the general setting interface. Press the "SET" key to confirm the setting item. Tap the "+" or "-" key to select the setting item.

1.General Setup



1.1 Single mileage clearance (Y/N)



1.2 Backlight setting

(1: darkest, 5: brightest)



1.3 Speed limit setting (range :20KM/H~99KM/H)



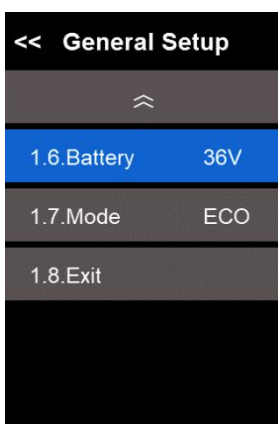
1.4 Wheel diameter setting (range: 16-28 inches)



1.5 Public mile setting (KM/H or MPH)

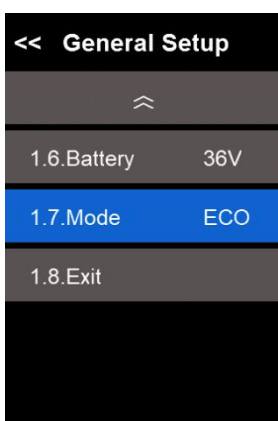


1.6 Voltage setting



1.7 Riding mode setting (ECO/Normal/Power)

There are three modes, and each mode corresponds to its bound.



The interface theme skin color corresponding to each mode is shown in the following pictures:

ECO:



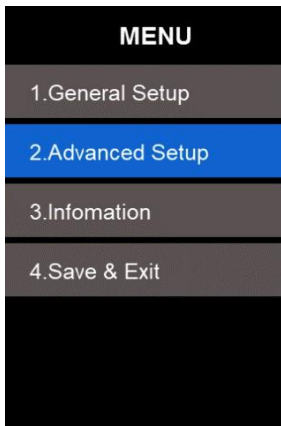
NORMAL:



POWER:



2.Advanced Setup



2.1 Current limiting Settings (range: 10-18A)



2.2 Poles in motor (range: 1 or 6)



2.3 Start after poles setting (range: 2-6)



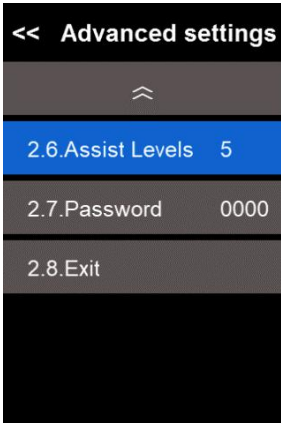
2.4 Handle limit 6km (Y means handle limit 6km, N means normal handle limit)



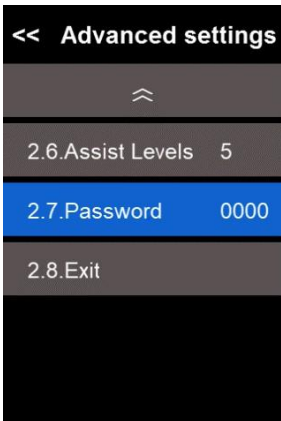
2.5 Throttle level setting (Y/N)



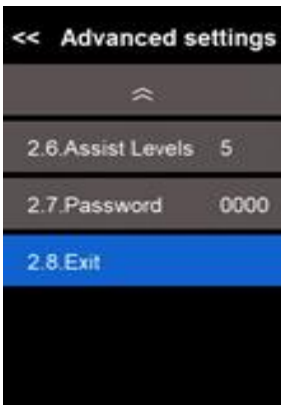
2.6 Power grade (3, 5, 6 and 9 grades can be set)



2.7 Password setting (No password by default)

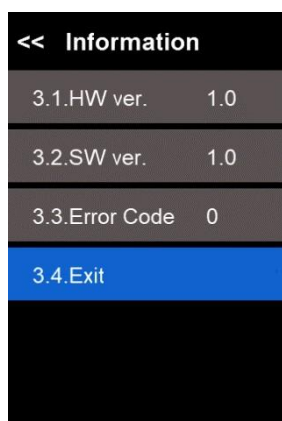


2.8 Returning to the Upper-Level Menu



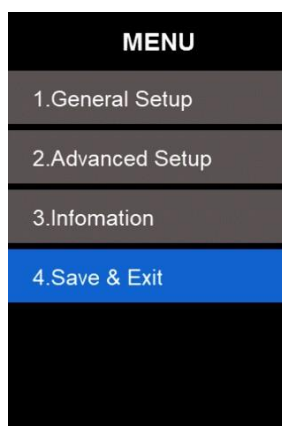
3. Information

Display the current meter information, including software version, hardware version, and fault information.



4. Save & Exit

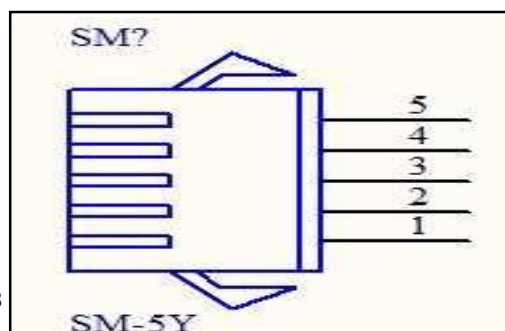
The Settings are automatically saved and the Settings page is displayed.



✘ When the electric vehicle has no operation for 5 minutes, the system will automatically sleep.

Cable definition

- 1 Red : Battery +
- 2 Blue : Weak lock
- 3 Black : Battery-



4 Green: Communication-RECEIVE (RXD)

5 Yellow: Communication - SEND (TXD)

Error code table

The error code is corresponding with the fault definition.

Error code	Definition
0	Normal
1	Abnormal current or MOS damaged
2	Throttle error(Start detection)
3	Motor no phase position
4	Hall error
5	Brake error(Start detection)
6	Under voltage
7	Motor stalling
8	Communication controller receiving error
9	ommunication display receiving error

The way of riding

Turn on the power

Plug in the key , turn on power switch. Turn the throttle slowly to drive the e-bike forward. Remaining battery power displays on the panel after turn on the power. The four lights from full to empty all on means fully charged. One light on means low power state. when there is just one light on, turn off the battery power to charge the battery in case it would effect the service life and function of the battery because of the excessive discharge. When the power is so low that you can't drive the e-bike with power assistant, turn off the power in case it would effect the service life and function of the battery because of the excessive discharge.

Power cut and the brake

To ensure the rider's safety the motor will stop working when braking and restart after release the brake.

Riding

1. Test every function of different switch before riding, then get used to the function of the e-bike by controlling the brake and handlebar.
2. Turn the throttle slowly, then enjoy your riding.
3. Every cyclist should obey the traffic rules.

General Maintenance Remarks

Adjusting the height of the seat /handlebar

Height of your seat / handlebar stem can be adjusted.

Unlock the lever (OPEN), adjust the seat / handlebar stem 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

The way to adjust the suspension fork

Turn the key on both side of the suspension fork to adjust the suspension fork.

The recommended tightening torque of main fasteners (unit: N.m)

Front wheel: 18-20

Rear wheel: 30-35

Saddle & saddle tube: 18-20

Handlebar Clamp Nut: 17- 19

Head Stem Expander Nut: 17- 19

Cleaning and maintenance

Regular maintenance guarantees you a longer durability and roadworthy state of your E-Bike. Maintenance includes cleaning, lubricating, and ride-setting adjustment.

Moreover, regular maintenance work is a requirement for the sustainability of warranty claim. This applies to special corrosions (surface rust) and other damages, which, by non-observance, would not be undertaken by us. Thus, please read through the following section thoroughly.

Please only use the gentle cleaning materials to clean the E-Bike. And in no case, do not use any high pressure washer or vapour cleaning device for dirt removing!

Clean the E-Bike regularly with a sponge or a cloth and apply bike-caring products on after cleaning.

Please note that under certain environmental conditions (ex. By the seaside), the E-Bike should be cleaned more often to reduce chance of rusting.

Lubrication

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

Chain

The chain must be regularly (especially after riding in the rain) lubricated with a standard chain-caring product.

Thorough physical stretching of the chain is a regular checking procedure of chain tension. Examine the chain tension by positioning the E-Bike on its kickstand and test, whether the chain, while being pushed upwardly and downwardly, has a maximum gap of 10-15 mm in between.

If this is not the case, please proceed to the following:

1. Loosen the axle nuts on the both sides of the wheel and the brake counter-bracket (for the back pedaling brake) on the left side of the rear-end stay. Where a gearbox removal is required, please see the manufacturer's instruction manual.
2. Subsequently, adjust the chain's tension by turning the tension screw nuts on both the left and the right sides.
3. Before tightening of the axle nuts, check whether the wheel stands in the centre and adjust if needed.
4. Tightly screw the axle nuts and the tension screw nuts. (Tightening Torque not less than 30N-M)
5. Recheck the chain tension.

An over-tightened chain can cause pops during riding.

Adjust the derailleur

Adjust the Fine-tuning nut or screw when the derailleur makes some abnormal sound.

The way to adjust the brake of the e-bike is the same as adjusting the bike. The most important thing is effective braking and no blockage after braking and make sure the brake and the power brake function are work well. Friction between road and tyre is reduced when raining, so besides concentration every rider should brake gently in advance to keep away from danger. The following several advices are for your reference when the brake doesn't work well or meets the handlebar when braking. Every screw and nut should be tightened properly to make sure the wheel running flexible with no resistance.

Brakes

Spin front wheel to determine if disc is rubbing. A small amount of rubbing is OK but if it is slowing the wheel then an adjustment is needed. To adjust use two bolts on calipers to move in and out as needed. If you have issues then we suggest bringing bike to a local professional bike shop for brake adjustments.



CAUTION

- ① Please make sure all the folder and quick release be locked tightly.
- ② In order to ensure the long service life of the e-bike and your safety, please use the genuine parts.

Radial run-out and end swing of the rim $\leq 1.5\text{mm}$. no crack on the surface of the rim.

The break of the rim which makes the wheel swing have major source of hidden danger.

③ Make sure the waterproof connection is properly connected.



④ Do not use the battery if it has outlived its life expectancy.

Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Battery gauge LEDs with no display.	Power switch is opened	Closed the switch on the battery case
	Buttery case with no power	Charge the battery
	Circuited	Replace fuse
	Battery case not positioned in the right place.	Remove battery case, put it in right place and then lock it.
	Switch damaged	Replace switch
Motor fails to perform its intended function when power on.	Being in power mode	Swift the mode from assist to electric.
	Connection error	Check the connection parts or have professional fix it.
	Buttery case with no power	Charge the battery
Speed-adjust failure	Being in power mode	Swift the mode from assist to electric.
	Connection error or throttle failure	Have professional fix or replace it
	Poor tire pressure	Fill up tire pressure
Poor travelling range after each charging.	Insufficient charge	Fully charge the battery
	Battery aging	replace a new battery case
	Poor road conditions, much slopes, headwinds and frequent start of brake	Swift to the power mode or ride by yourself.
	Battery failure	Replace battery
Abnormal long charging time	Battery aging	Replace battery
	Connection error	Check if the plug corrected plunged.
Charger fails to perform its intended function.	Circuited	Replace fuse
	Charger failure	Change charger
	Other faults that can't be solved or motor, controller, charger, battery failure, please contact your authorized dealer for help. Any changes to these parts will invalid your warranty.	
Other faults		

We recommend you have your cycle serviced by a professional cycle engineer at least once a year to ensure ongoing safe performance.

Since these problems listed may not cover every problem that might occur during the lifetime of your product. You can contact us for more detailed questions you might have.

Warranty

NAME	FAULT	WARRANTY PERIOD
Frame	Fracture, sealing off, or open solder	three year
Front Fork	Fracture, sealing off, or open solder	one year
Handlebar, Stem and Accessories	Fracture	one year
Spindle and Parts	Heat treatment parts damaged or broken	one year
Seat Post	Fracture	one year
Transmission, Shift Lever and Brake Lever	Fracture, broken	one year
Rim	Cracking	one year
Shaft skin, Flywheel, Gear, and Crank	Fracture	one year
Chains, Mudguard, Hanger and Kickstand	Fracture	one year
Speed control switch to, Controller and Charger	Performance Failure	one year
Brush motor	Performance Failure	one year
Brushless motor	Performance Failure	two year
Battery	failure	two year

How the warranty does not apply

- When the bicycle is used negligently or has damage resulting from a traffic accident.
- Normal wear and tear.
- Poor maintenance or modifications that no longer comply with regulations or original specifications.
- Damage due to external causes.
- The bicycle is used for rental.
- The battery pack is used incorrectly or damaged. This also applies to improper charging.
- Compensatory costs arising from damages or accidents, or cost incurred by loss of the bicycle's usage.
- Bulbs, brake blocks, tyres etc. – Are regarded as consumables, therefore when replacements are required, these need to be purchased from your local cycle shop or store.