

1. Important Warning

This manual contains crucial safety and performance information, as well as service details. Please ensure you read the following warning content before using our product for the first time.

If you lend your electric bicycle to others, please have the user read this manual. It can help reduce the risk of accidents.

Always wear a suitable and secure helmet before riding. Wear clothing with fluorescent and reflective stripes when riding at night. Do not exceed the speed limit, as it is a primary cause of traffic accidents. Obey traffic regulations and avoid exceeding speed limits.

Do not touch the bike's charging port or use metal objects to touch it. Otherwise, a short circuit could occur, leading to an accident.

Starting from zero, frequent braking, riding against the wind, carrying passengers or cargo, and insufficient tire air pressure all consume more electric energy, reducing the range. For optimal range, follow these steps:

- 1) Use the assist mode;
- 2) Minimize frequent braking and zero starting, prioritizing

safety;

- 3) Avoid overloading;
- 4) Before riding, check and adjust tire pressure.

Our E-bike should not be exposed to prolonged sunlight or rain, and avoid storing it in high-temperature or corrosive environments. This prevents chemical corrosion of plated and painted surfaces, as well as damage to electrical components, ensuring operational success and safety.

Your current insurance policy may not cover situations while riding an electric bike. Contact your insurance company or broker for relevant information.

When using our E-bike in your country, adhere to local laws and regulations. For instance, in the UK, electric bicycle (EAPC) riders must be at least 14 years old.

Bicycles pose inherent risks; please follow traffic rules. During emergency braking, apply the rear brake first, followed by the front brake. Sudden front brake application at high speeds may lead to tipping over. Ride cautiously.

2. Product Components



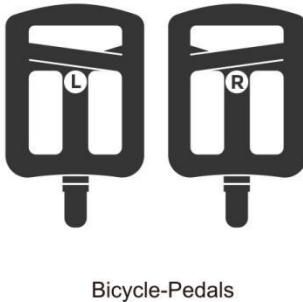
1. Handlebar	2. Display screen	3. Front basket	4. Headlight	5. Front fork
6. Front tire	7. Pedals	8. Crank set	9. Battery	10. Chain
11. Freewheel	12. Motor	13. Rear light	14. Seat post	15. Saddle

3. Technical Parameters

Category	Parameter	Value
Basic Parameters	Vehicle Size	1700*640*1300mm
	Wheel Size	20 Inches
	Body Material	Aluminium alloy
	Maximum Load	264 lbs (120 kg)
	Vehicle weight	68.2 lbs (31 kg)
Main Parameters of the Whole Vehicle	Maximum Speed	25 km/h
	Maximum Gradient	10°
	Rear Derailleur	7-Speed
	Mileage Range	55 km (34 miles)
	Working Temperature	23°F~95°F (-5°C~35°C)
Battery Parameters	Rated Voltage	36V
	Battery Capacity	15.6AH
	Service Life	500 Charge Cycles
Motor Parameters	Motor Power	250W
	Motor Type	Brushless Gear Motor
	Maximum Torque	40Nm
Charger Parameters	Input V voltage	100-240V
	Output Voltage	42V
	Output Current	3A

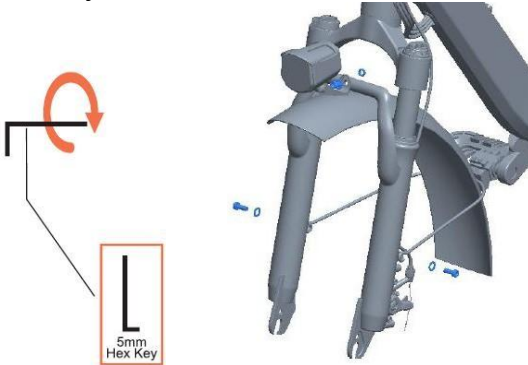
4. Product Installation

List of kits



4.1 Front mudguard installation

(1) Connect the lifting lug of the mudguard to the hole on the front fork axle pipe. Thread in the screw and tighten it with a 5mm hex key.



(2) Align the fender bracket with the headlight hole and the front fork fender pull hole. Insert the threaded end into the screw and tighten.



4.2 Front wheel installation

(1) Remove the front wheel from the packaging, and then proceed to remove the packing material. Install the nut spacer according to the provided diagram.



(2) Place the front wheel into the slot on the front fork and secure it by tightening with a 15mm wrench.



4.3 Front shelf installation

(1) Remove the vegetable basket from the packaging, and then install the screw gasket as indicated in the diagram.

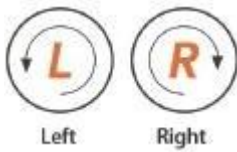


(2) Secure the shelf by clockwise installing the 4 bolts using a 4mm hex key.



4.4 Pedals installation

(1) Prepare the Left and Right pedals (marked L and R on the sides). Screw the right pedal clockwise into the right crank arm by hand, while turning the left pedal counterclockwise to screw it into the left crank arm.



(2) Tighten the right pedal clockwise and the left pedal counterclockwise by using a 15mm wrench.



5. Instrument Panel Instructions

5.1. Product name and model

Name: Intelligent LCD Display for E-Bike

Model: YL80C

5.2. Specifications

- Power Supply: 36V/48V
- Rated Operating Current: 15mA
- Maximum Operating Current: 30mA
- Power-Off Leakage Current: <1uA
- Supply Controller End Current: 50mA
- Operating Temperature Range: -20°C to 60°C
- Storage Temperature Range: -30°C to 70°C

5.3. Appearance of the display and buttons



Picture of Display



Picture of Buttons

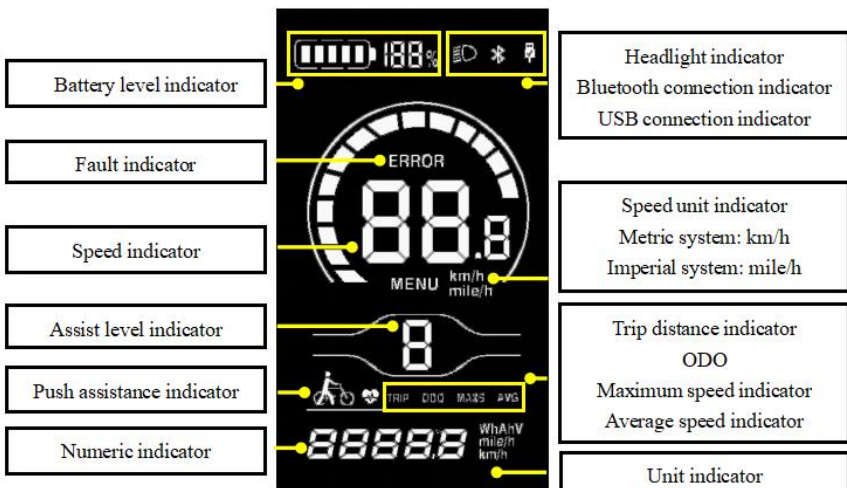
5.4. Instrument Functions and interface

(1) Instrument functions

The YL80C offers a variety of features to meet your riding needs, including:






- Battery level indicator
- Motor power indicator
- Assist level adjustment and indication
- Speed indicator (including real-time speed, maximum speed and average speed)
- Distance indicator (including travel distance and ODO)
- Headlight control and indication
- Error code indicator
- USB connection indicator (reserved)
- Heart rate indicator (reserved)
- Bluetooth connection indicator (reserved)
- Custom parameter setting (e.g., wheel diameter, speed limit, battery level, assist level, power-on password, controller current limit, etc.)
- Reset function

(2) Instrument Interface





5.5. Button definition

There are five buttons on the operating unit of YL80C, i.e., the on/off button

, plus button , minus button , headlight button  and switching button .

5.6. General operation

Power on/off

By pressing and holding the button , the display will start to work and the working power supply of the controller will be turned on. While powered on, press the button  and your e-bike will turn off. In the power-off state, the display will no longer use battery power and its leakage current will be less than 1uA.

- If your e-bike is not used for more than 10 minutes, the display will automatically turn off.


Basic information switching

After the display is turned on, the display will show the real-time speed (km/h)

and the trip distance (km) by default. By pressing the button , the

information displayed will be switched between the trip distance (km), ODO (km), maximum speed (km/h), average speed (km/h) and riding power.

Push assistance



By pressing and holding the button , the power-assisted push mode will be enabled. Your e-bike will run at the constant speed of 6km/h. The

display will show . By releasing the button , your e-bike will



immediately stop power output and return to the state before push assistance.

- The push assistance function can only be used when you are pushing your e-bike. Please do not use it during riding.

Headlight on/off

Press and hold the button  for 2 seconds, the headlights will be turned on, and the instrument headlight indicator will light up; Press and hold the button  again, the headlights are turned off, and the the headlight indicator goes out.

Assist level selection

Short press the button  /  to switch the power assist gear, the higher the power assist gear, the higher the power and speed output of the motor will be.

Battery level indicator

The battery level indicator consists of 5 bars. When the battery is fully charged, the 5 bars will be all on. When all 5 bars are used up, the outline of the battery indicator light will flash, which means the battery needs to be charged immediately.

Error code indicator

When a fault occurs in the electronic control system of your e-bike, the display will automatically indicate the error code. The detailed definitions of the error codes are shown in **Table 1**.

- When an error code appears on the display interface, please troubleshooting in time. Otherwise, your e-bike will not work normally.

Table 1 Error Code Definitions

Error Code	Fault Problem
E001	Controller malfunction
E002	Communication system malfunction
E003	Hall sensor malfunction
E004	Throttle malfunction
E005	Brake lever malfunction
E006	Motor phase loss







6. General setting

6.1. Operation of setting interface


When setting parameters, please ensure that the e-bike is stopped.

The steps for general setting are as follows:

In the power-on state, when the display shows the speed of 0,





- (1) Press and hold the buttons  and  together at the same time for more than 2 seconds to enter the selection interface of general setting options.
- (2) Press the button  to switch the selection interface of general setting options, and press the button  to enter the parameter modification interface;
- (3) Press the button  for parameter selection;
- (4) Press the button  to save the parameter and return to the selection

interface of general setting options;

(5) Press and hold the button  to save the parameter and exit the selection interface of general setting options.





6.2. Trip distance reset

tC refers to the trip distance reset option. tC-n means not to reset the trip distance, and tC-y means to reset the trip distance.

Press the button  to enter the parameter modification interface. Press the button  /  for parameter selection. Press the button  to save the parameter and return to the selection interface of general setting options.





6.3. Backlight luminance setting

bL refers to the backlight luminance setting option. Parameters bL-1, bL-2 and bL-3 are available, which represent the backlight luminance, 1 for the minimum luminance, 2 for the standard luminance and 3 for the maximum luminance.

Press the button  to enter the parameter modification interface. Press the button  /  for parameter selection. Press the button  to save the parameter and return to the selection interface of general setting options.

6.4. Metric/imperial unit setting

Un refers to the unit setting option. U-1 represents the imperial units, and U-2 represents the metric units.

Press the button  to enter the parameter modification interface. Press the button  /  for parameter selection. Press the button  to save the parameter and return to the selection interface of general setting options.

7. Battery

- The battery's range depends on factors such as load weight, road conditions and battery capacity. Under the same conditions, riding at a constant speed can continuously travel a longer distance range.
- When storing the battery for a longer time, (during winter time) it is important to place the fully charged battery in a dry place.
- Attention: The battery should be re-charged once every 2-3 months when it is not used.

WARNING:

- Keep the battery out of reach of children.
- Do not attempt to open the battery casing.
- Only use the battery supplied by ENGWE. Do not use batteries from different product models.
- If the battery is damaged due to dropping or a biking accident, there is a risk of electrolyte leakage. Be cautious of chemical burns and immediately cease use of the damaged battery.
- Handle the battery with gloves or a cloth; avoid contact with acid.
- Store the battery in temperatures between 23°F and 95°F.
- Never fully deplete the battery before charging. Charge it before storing the product. Complete depletion could prevent the battery from recharging.
- Charge a new battery for 4-6 hours before initial use. Avoid overcharging as this reduces battery life and product runtime.

IMPORTANT: Battery Disposal

- Dispose of batteries through environmentally responsible methods such as recycling.
- Never dispose of batteries in fire, as they can explode or leak.
- Avoid including batteries in regular household trash.

8. Charging

- You can charge the bike directly, or you can remove the battery for charging.
- The RED light indicates it is in charging and the GREEN light indicates the battery is fully charged. Please unplug in time after fully charged.
- The charging time is usually 4-6 hours, but in actual use, the charging time depends on the remaining capacity of the battery.

WARNING:

- It is prohibited to charge for more than 10 hours. Keep it away from high temperature environment and store it in a cool place.
- Please make sure that the battery charger and charging plug are always kept dry.
- The charger should only be cleaned with a dry cloth. Never use a wet cloth, oil or any other liquid.
- Do not connect positive and negative terminals.
- Stop the charging process immediately if you notice anything unusual.

- It is strictly prohibited to cut the battery charging and discharging circuit.
- It is strictly prohibited to disassemble the battery box or modify the internal structure and protective plate of the lithium battery
- Only use the ENGWE supplied charger. Do not use a charger from any other different product models.
- After using the battery, please charge it within 12 hours.

9. Warranty service

Dear customer, thank you for purchasing ENGWE series products!
For warranty services, please go to the official website <https://engwe-bikes.com/> to view ENGWE's warranty policy.

Contact Us

Tell:

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USA: +1 8442007117 Available from 9 am to 6 pm (Pacific Standard Time, starting at 8 am), Monday to Friday.

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We typically respond within 1 working day.