# **EB-V2** operation manual

# **Caution**

Before riding, please carefully read the product manual and carefully Check whether all parts are in good condition to ensure your riding safety, such as If you find any problems, please contact the dealer in time.

Please observe the urban traffic regulations and do not bring people; Slow down in rainy and snowy days and slippery roads, and increase the braking distance when braking to ensure safety.

The car is not afraid of rain and snow, but it cannot Wade When the water level is flooded to the wheel hub of the rear wheel motor, it will cause a short circuit in the internal circuit of the car and damage electrical appliances. Please pay attention!

The battery used in this vehicle is a safe power supply, but the two metal contacts of the battery box cannot be touched by hand at the same time, let alone contact with the metal at the same time, otherwise a large short-circuit current will be generated and an accident will be caused. Please pay attention

Please do not disassemble and disassemble the parts by yourself. If you need to replace them, please purchase standard parts from the general agency of our company.

For the safety of others, please don't lend your electric bicycle to someone who can't operate it Ride, so that your car will not be damaged unnecessarily.



# **Catalogue**

- 1. Analysis diagram of various parts of mountain bike
- 2.echnical parameters
- 3.Battery instructions
- 4.Instructions for instrument use
- 5. Maintenance and cleaning
- **6.Attachment table 1**
- 7. 178×69×120(Length, width & height)
- 8. 149 $\times$ 32.5x99 (carton length, width and height)
- 9.gross weight (43.6kg)



١.	Handlebar	10. Pedals

2. Display 11. Battery

3. Fingering 12. Car seat

4. Front lamp 13. frame

5. Front fork 14. Tail lamp

6. Front disc brake 15. Controller

16. Fender

8. Tooth disc 17. Disc brake

9. Chain

7. Tires

18. Rear disc brake

19. Transmission

20. Car ladder

21.Grip

22. Two inone switch

23. Handlebar

24. Brake handle

25. Swivel handle

# 2.Technical parameter

Product name	EB-V2	
Voltage	48V	
Power	750-1000W	
battery	15Ah	
speed	≤40km/h	
Cruising range	≤60km	
Charge time	7—9H	
Wheel diameter	≤120kg	
Load weight	44.6 <b>kg</b>	

# 3.Battery instructions

## **Battery charging**

This car is an external lithium battery, which can be removed for charging.

When the battery is low, open the key and take out the battery. Hold the battery tightly with both hands to prevent it from falling, Take out the charger, plug the input end into the power supply, and plug the output end DC 2.1 into the battery charging hole, When the red light is on, it will be charged for 7-9 hours, and when the green light is on, it will be full.

#### > Warning

- 1. Load circuit may cause voltage and current, and the voltage or current may add to pack, the voltage or current must be controlled as lower than RWV and RWI, larger voltage or current may damage the PCM of pack.
- 2. Do not immerse the pack in water and seawater Guard against Damp.
  - 3. Do not use and leave the pack near a heat source as fire or heater.
- 4. When recharging, use the battery charger specifically for that purpose.
  - 5. Do not reverse the position and negative terminals.
  - 6.Do not connect the pack to an electrical outlet.
  - 7. Do not discard the pack in fire or heat it.
- 8.Do not short-circuit the pack by directly connecting the

positive and negative terminal with metal object such wire.

- 9. Do not transport and store the battery together with metal objects such as necklaces, hairpins etc.
- 10. Do not strike or throw the pack.
- 11. Do not directly solder the pack or battery and pierce the

battery with a nail or other sharp object.

- 12. As installed safety device in the battery, please do not resolve or change any other sections of the battery to protect the inherent safety functions.
- 13. Do not use it in a location where static electricity is great, otherwise the safety devices in the pack may be damaged, which will cause hidden trouble of safety.
- 14.If the pack leaks and the electrolyte get into the eyes, do not rub eyes, instead, rinse the eyes, with clean running water, and immediately seek medical attention. Otherwise, eye injury can result.

15.If the battery emits peculiar smell, heating, discoloration, deformation during use or storage, or any abnormal phenomenon occurs during charging, immediately remove the battery from the charger or device, and stop using the primary charge and discharge to activate the battery

16. In case the pack terminals are dirt, clean the terminals with a dry cloth before use. Otherwise power failure or charge failure may occur due to the poor connection with the instrument.

17. Be aware discharged battery may cause fire or smoke, tape the terminals to insulate them

18. The pack should be stored at room temperature, charged to about 40% to 60% of capacity. In case of over-discharge, pack should be charged for one time every 3 months while storing and batteries should be discharge and charge after being stored more than a year in order to activate it and restore energy.

## 4.Instructions for instrument use

#### Product name and model

Intelligent LCD display for e-bike; model: YI 81C

### > Specifications

- 36V/48V power supply
- Rated working current 15mA
- Maximum working current 30mA
- Leakage current at power-off <1uA
- Working current at the supply controller end 50mA
- Working temperature -20 ~ 60°C
- Storage temperature -30 ~ 70°C

### > Appearance

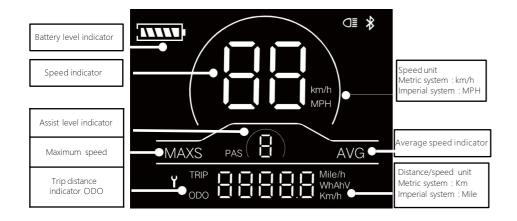


## Function overview and functional area layout

#### Function overview

Display YL81C provides a variety of functions to meet the riding needs of users, including:

- Battery level indicator
- Assist level adjustment and indication
- Headlight indicator
- $\bullet$  Speed indicator (including real-time speed, maximum speed (MAXS) and average speed (AVG))
- Distance indicator (including ODO and trip distance (Trip))
- Error code indicator
- Functional area layout



#### Button definitions

There are three buttons on the operating unit of display YL81C, i.e., the on/off button , plus button and minus button.

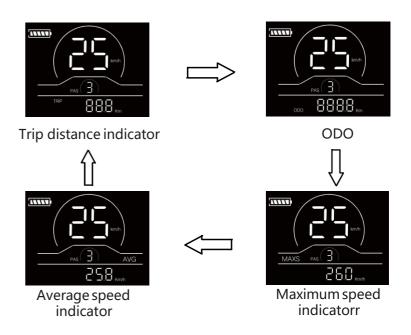
## > General operation

### > Power on/off

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

## Display interface

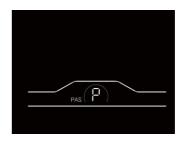
After the display is turned on, the display will show the real-time speed (km/h) and the trip distance (km) by default. By pressing the button , the information displayed will be switched between the trip distance (km), ODO (km), maximum speed (km/h) and average speed (km/h). When the distance reaches 9999.9 km, it will be automatically reset to zero.



**Display Interface Switching** 

#### > Push assistance

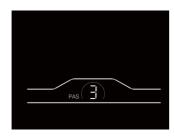
By pressing and holding the button the electric push assistance mode will be enabled. Your e-bike will run at the constant speed of 6km/h. The display will show level P.By releasing the button, your e-bike will immediately stop power output and return to the state before push assistance.



**Push Assistance Indicator Interface** 

#### Assist level selection

By pressing the button  $\bigcirc$  , the e-bike assist level will be switched to change the motor output power. The assist levels available for the display include: levels 0-3, levels 1-3, levels 0-5, levels 1-5, levels 0-7, levels 1-7, levels 0-9 and levels 1-9.



**Assist Level Switching Interface** 

### Battery level indicator

The battery level indicator consists of five segments. When the battery is fully charged, the five segments will be all on. In case of under voltage, the outline of the battery indicator will flash, which means the battery has to be charged immediately.







Full battery level indication 4-segment indicatio

3-segment indication







Battery Level Indicator Interface

## > Error code indicator

When a fault occurs in the electronic control system of your e-bike, the display will automatically indicate the error code in the distance area in the format of E0\*\*. Detailed definitions of error codes are shown in Attachment table 1



**Error Code Indicator Interface** 

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

#### > General setting

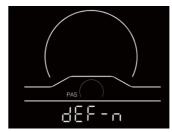
All parameters can only be set when your e-bike stops. The steps for general setting are as follows: In the power-on state, when the display shows the speed of 0.

### > Trip distance reset

Press and hold the buttons and at the same time for more than 2 seconds to reset the trip distance.

## > Restore factory setting

dEF refers to factory reset. dEF-n represents not to restore factory settings, and dEF-y represents to restore factory settings. Press and hold the buttons ( ) and ( ) at the same time for more than 2 seconds to enter the factory reset interface, and press the button ( ) to select a parameter.



Restore the factory setting interface

## > Custom setting

#### All parameters can only be set when your e-bike stops.

The steps for custom setting are as follows:

(1)In the power-on state, when the display shows the speed of 0, Press and hold the button at each same time for more than 2 seconds to enter the selection interface of custom setting options;

- (2) Press the button no setch the selection interface of general setting options, and press the button to enter the parameter modification interface;
- (4)Press the buttor to save the parameter and return to the selection interface of custom setting options;
- (5)Press and hold the button to save the parameter and exit the selection interface of custom setting options.

## > Rated voltage setting

P1 refers to the rated voltage setting option. Available values include: 36V and 48V. Press the button to enter the parameter modification interface. Press the buttor parameter selection. Press the button to save the parameter and return to the selection interface of general setting options.



**Rated Voltage Setting Interface** 

## Wheel diameter setting

P2 refers to the wheel diameter setting option. Available parameters include: 8-32 inches. 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.



**Wheel Diameter Setting Interface** 

## Speed limit setting

P3 represents the speed limit setting option. The adjustable range is 10~40km/h. 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.



**Speed Limit Setting Interface** 

### Metric/imperial system setting

P4 refers to the metric/imperial system setting option. 00 represents the metric system, and 01 represents the imperial system. 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.



Metric system indicator interface



Imperial system indicator interface

# Metric/imperial System Setting Interface

## Speed sensor setting

P5 refers to the speed sensor setting option, which can be set according to the number of magnetic heads installed on the wheels of your e-bike. The setting range is 1-63. 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.



**Speed Sensor Setting Interface** 

#### > Current limit setting

P6 refers to current limit setting. The adjustable range is 1-25A. 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.



**Current Limit Setting Interface** 

## > Assistance sensor setting

P7 is the power sensor setting option, set the power disk magnetic steel grid number, optional range: 5, 6, 7, 8, 9, 10, 12. Short press to enter the change parameter state; Short press for parameter selection; Short-press to save the parameters and return to the General Settings Options screen.



**Assistance Sensor Setting Interface** 

## Boot password settings

P8 refers to the power-on password setting option. PSd-Y means that a power-on password is required, and PSd-N means that no power-on passwords are required. The default value of the display is PSd-N. Press the button to enter the modification interface, and press the button // to enter the selection interface.

If PSd-N is selected, press the button to return to the selection interface of custom setting options;

When selecting PSd-Y, press to enter password settings; If you do not change the password long press to exit the personalized settings interface; To change the password, short press displacement, short press to select the value, and then short press again to return to the personalized selection interface.



Power-on Password Setting Interface

# 5. Maintenance and cleaning

- If your bike is very dirty, please clean it with water or mild detergent and non abrasive sponge Driving.
- Do not use high pressure to wash the bicycle.
- Never wash the bearing points or electronic components of the electric bicycle directly.
- Do not use irritant chemicals or alcohol wipes to clean the bike.
- Please use lubricating oil to wipe the metal parts of the car body for maintenance.
- It is strictly forbidden to oil the brake and wheel hub.

Lubrication part	Lubrication cycle	Recommended lubricating oil	
Front fork assembly	one year	Butter (lithium grease)	
Front and rear axles	one year	Butter (lithium grease)	
Central axis	one year	Butter (lithium grease)	
Pedal shaft	one year	Butter (lithium grease)	
Sprocket	one week	Lubricating oil	
chain	one week	Lubricating oil	
Inside the flywheel	one month	Lubricating oil	
Brake handle	one month	Lubricating oil	

## 6. Attachment table 1

#### **Error code definition table**

According to the fault code, check the connecting line of the corresponding line to see if it is damaged.

fault code	fault name	fault code	fault name
E001	controller failure	E004	handle failure
E002	communication failure	E005	brake handle failure
E003	Hall fault	E006	motor failure