

# KING-METER

USERS GUIDE 中文 1-15 页 English P/16-33

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## J-LCD



## Contents

1、 Preface .....	18
2、 Appearance and Size.....	19
2.1 Material and color.....	19
2.2 Display Size and Installation Size .....	19
3、 Function Summary and Button Definition .....	20
3.1 Brief Introduction of User Setting.....	20
3.2 Normal Display Area .....	20
3.3 Button definition.....	21
4、 Installation Instruction.....	22
5、 Setting .....	22
5.1 Preparation before Starting the Display.....	22
5.2 Start and Entry Setting .....	22
5.3 Time Setting .....	22
5.4 Top-speed Setting.....	23
5.5 Choice of Display Unit.....	24
5.6 Wheel Size Setting .....	24
5.7 Backlight Brightness Setting.....	25
5.8 Exit Setting.....	25
6、 Normal Operation.....	25
6.1 Power ON/OFF.....	25
6.2 Speed Display (Current Speed/Average Speed/Max Speed) .....	26
6.3 Assisted Power Select or Throttle Level Select.....	27
6.4 Power Assist Walk.....	28

6.5 Turn On and Turn Off the backlight.....	28
6.6 Distance Display (Riding Distance and Time/Total Distance Time) .....	28
6.7 Battery Capacity Display.....	29
6.8 Malfunction Code Display .....	30
7、 Button Battery Replacement.....	30
8、 FAQ Answers.....	31
9、 Quality Warranty.....	31
10、 Circuit Block Diagram.....	32
11、 Software Version .....	32

## **1、Preface**

Dear users,

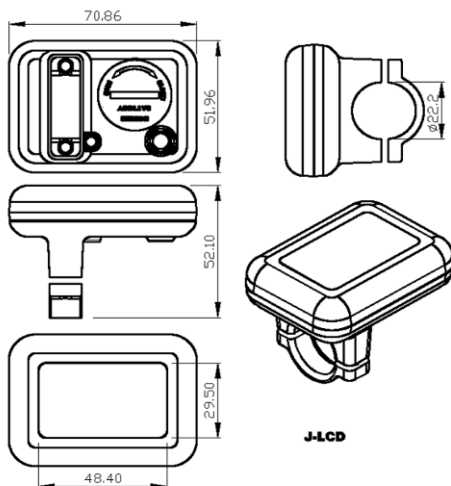
To ensure better performance of your e-bike, please read through the J-LCD product introduction carefully before using it. We will use the most concise words to inform you of all the details (including hardware installation, setting and normal use of the display) when using our display. Meanwhile, the introduction will also help you solve possible confusion and malfunctions.

## 2、 Outlook and Size

### 2.1 Material and Color

J—LCD products are made of black PC material. Under the temperature of  $-20$  to  $60^{\circ}\text{C}$ , the shell material can ensure normal usage and good mechanical performance of the products.

### 2.2 Display Size and Installation Size (Unit: mm)



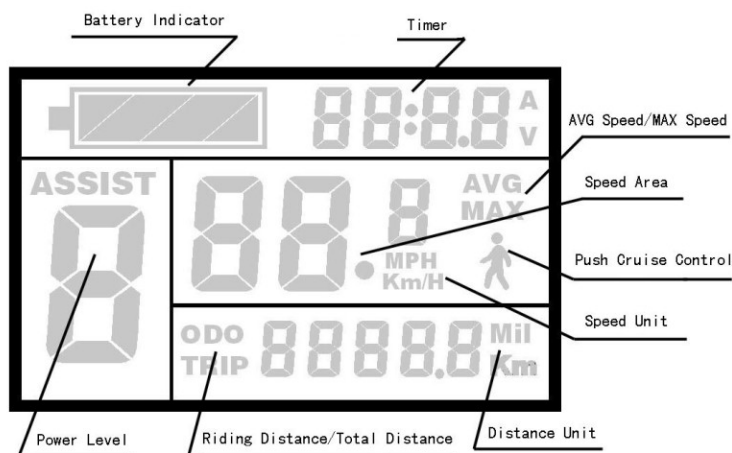
### 3、Function Summary and Button Definition

#### 3.1 Brief Introduction of User Setting

J—LCD user settings include local time setting, top riding speed setting, metric system/English system setting (MPH and Km/H, Mile and Km) , wheel size setting (18—28inch) , LCD backlight brightness setting.

#### 3.2 Normal Display Area

J—LCD displays battery capacity, time, motor power ratio, riding speed, riding distance, 6Km/h power assist walk, and malfunction code of the electronic control system.





### 3.3 Button Definition

J—LCD is equipped with special 30 button. The button can be installed either on the left side or on the right side of the handlebar. Its shape is as follows:



30 button is connected to the bottom of the display through wire cable.

In the following introduction,  is named as

“MODE”.  is named as “UP” and 

is named as “DOWN”.

## 4、 Installation Instruction

Fix the display and 30 button onto the handlebar and adjust to an appropriate visual angle. Match display connectors with controller connectors.

## 5、 Setting

### 5.1 Preparation before Starting the Display

Make sure connector linked properly to the motor controller on the bike.

### 5.2 Start and Entry Setting

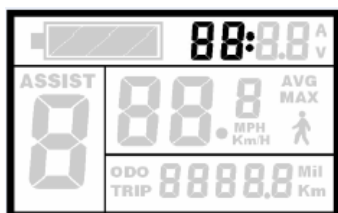
Press the **MODE** button and start the display.

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

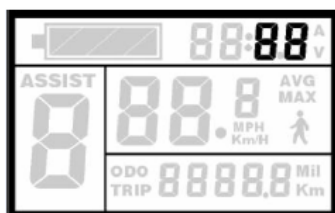
### 5.3 Time Setting

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

#### 5.4 Top-speed Setting

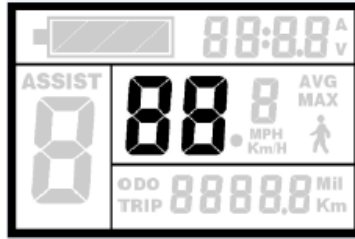
The default figure of the top riding speed in the display is 25 Km/h.

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.

The above for reference only, subject to the available products.

After setting the top riding speed, please press **MODE** for confirmation and enter into the display unit setting.

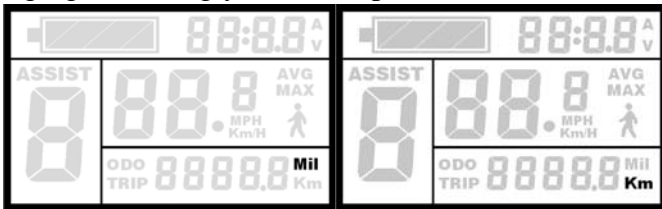


Speed Setting Interface

### 5.5 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.



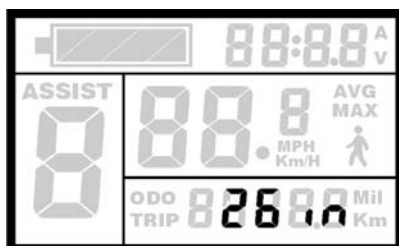
English System

Metric System

### 5.6 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.

### 5.7 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.

### 5.8 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.

## 6、 Normal Operation

### 6.1 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 (the sate is no speed and no setting) 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.

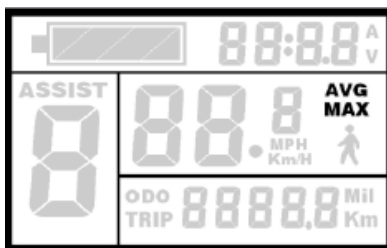
**Suggestion: If you won't use the e-bike in 4 hours, please take the battery off the e-bike and put it away in a proper place.**

## 6.2 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

### 6.3 Assisted Power Select or Throttle Level Select

Press **UP** or **DOWN** change motor 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.

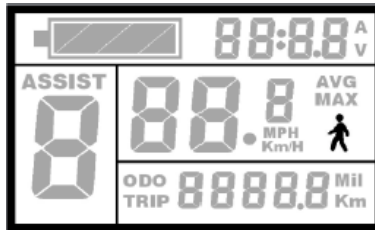
The default value is level 1.



Motor power level

#### 6.4 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.**

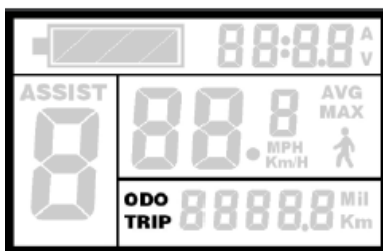
#### 6.5 Turn On and Turn Off the Backlight

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.

#### 6.6 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

### 6.7 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

## 6.8 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

## 7、 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.



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 the button battery, please set the time of the display.**

## **8、 FAQ Answers**

Q: Why can't turn on the display?

A: Please check if the cable is well connected with the controller.

Q: Why the timer error?

A: Please replace the button battery. The battery model is CR2032.

Q: How to deal with the error code display?

A: Contact the e-bike maintenance station in time.

## **9、 Quality Warranty**

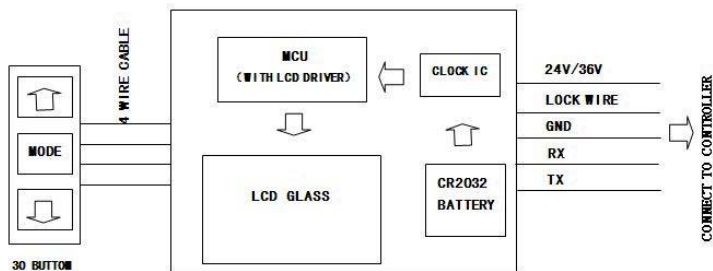
We are not responsible for the scratched or broken shell after the products are delivered out of the factory.

We don't repair scratched or broken lead wires.

The LCD display function warranty: 18 months starting from the first usage of the user.

The button battery warranty: 18 months from the delivery time of the display out of the factory.

## 10、Circuit Block Diagram



Red: 24V/36V, Blue: lock wire, Black: GND, Green/Yellow: RX/TX wire.

If using the water proof connector, Users cannot see the leads color of the internal wiring.

## 11、Software Version

This operating instruction is a general-purpose software (version V2.0). Some of the version of the e-bike LCD may have slightly different, all with actual use version.