

KING-METER

USERS GUIDE 中文 1-15 页 English P/16-32

J-LCD



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1、前 言

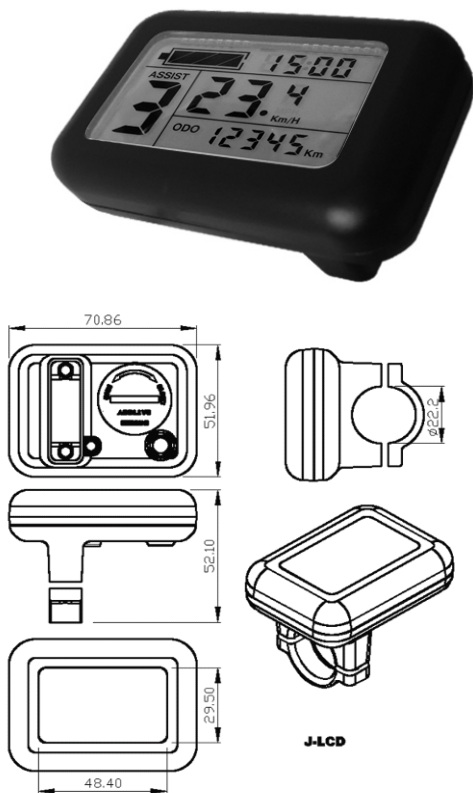
尊敬的用户，为了让您更好地操作电动车，请在使用前仔细阅读 J—LCD 仪表的说明书。我们将以最简洁的语言告诉您仪表使用的每一个环节，包括从硬件的安装、设置到仪表的正常使用。同时帮助您解决有可能出现的困惑与障碍。

2、外观尺寸

2.1 主要材质及颜色

J—LCD 产品采用黑色 PC 材料。外壳的材料允许在 -20°C 到 60°C 温度中正常使用，并且能保证很好的机械性能。

2.2 显示尺寸及安装尺寸（单位：mm）



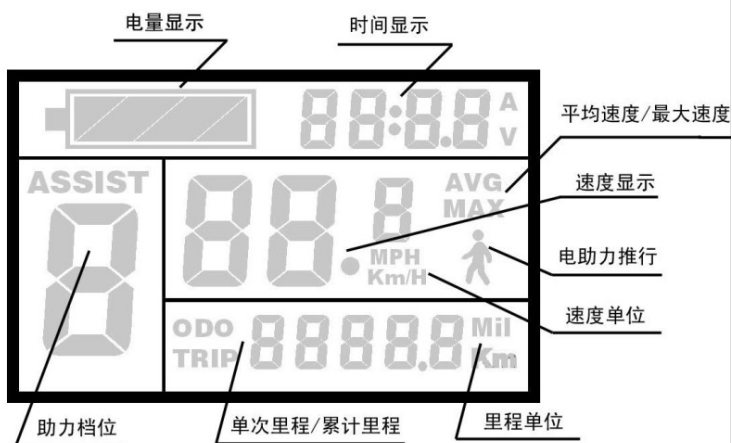
3、功能概述及按钮定义

3.1 用户设置概述

J—LCD 的用户设置项目有：设置当地时间，设置最高骑行速度，公制/英制单位选择(MPH 和 Km/H, Mile 和 Km)，车轮直径选择（18—28inch），LCD 背光亮度选择。

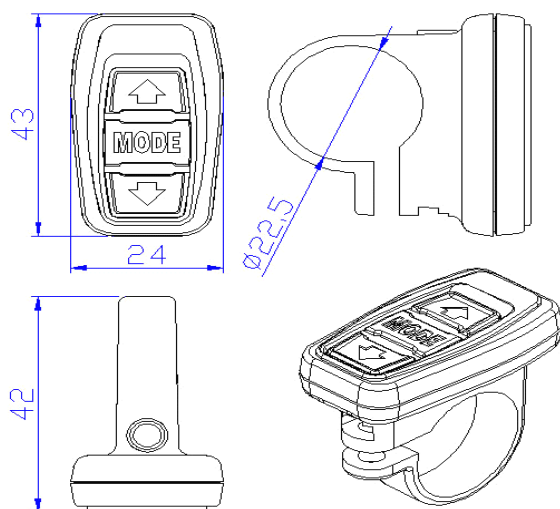
3.2 正常显示区域

J—LCD 显示的内容有：电量显示，时间显示，电机功率比例显示，骑行速度显示，骑行里程显示，6Km/h 助力推行显示，电控系统故障代码显示。



3.3 按钮定义

J—LCD 匹配有专用的 30 组合按钮，组合按钮可以安装在车把的左边，也可以安装在车把的右边。其形状如下：



30 按键有缆连接在仪表底部。

在后续の説明中， 按键用文字“MODE”替代。



按键用文字“UP”替代，



按键用文字

“DOWN”替代。

4、安装说明

将仪表和 30 组合按钮固定在车把上,调整好合适的视角。
仪表的接插件与控制器对应的接插件对插即可完成安装。

5、设置

5. 1 开机前准备

确保接插件对接牢靠,并打开电动车电源。

5. 2 开机与进入设置

按 **MODE** 键即可开机。

开机后,同时按住 **UP** 和 **DOWN** 后,3 秒钟进入 LCD 设定状态。

5. 3 设置时间

在进入设定状态后,首先是设定小时,通过 **UP** 和 **DOWN** 选择小时的数值,按 **MODE** 键确认小时数值并进入分钟设置。通过 **UP** 和 **DOWN** 选择分钟数值,按 **MODE** 键确认分钟数值并进入最高骑行速度设置。



小时设定

分钟设定

5. 4 设置最高速度

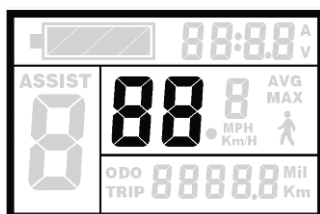
仪表出厂的最高骑行速度默认值是 25Km/h。

更改此数值，可以设定电动车的最高骑行速度，当电动车超过设定值时，控制器会停止对电机的供电，以保护骑行者的安全行驶。

最高速度设定值的可选范围是 10km/h-25km/h 之间。

具体情况以实物为准。

选择好最高骑行速度数值后，按 **MODE** 确认，并进入显示单位选择。

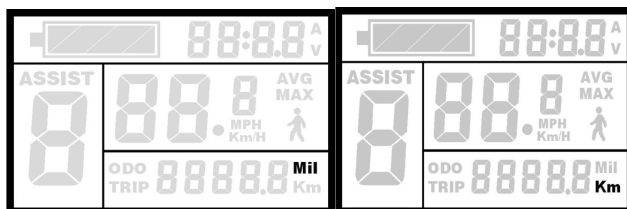


速度设定界面

5. 5 选择显示单位（公制/英制）

用户可以按 **UP** 和 **DOWN**，选择显示单位。

单位可以是 Mile 和 Km。在选择速度显示单位的同时，里程单位 Mile 和 Km 也跟随一起改变。



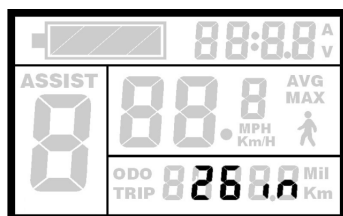
英制单位选择

公制单位选择

5. 6 设置轮径

按 **MODE** 键确认选择显示单位，并进入轮径选择。

通过 **UP** 和 **DOWN** 选择车辆对应的轮径，以确保仪表速度显示和里程显示的准确性。其界面如下：



按 **MODE** 确认轮径数值。进入 LCD 背光亮度选择。J—LCD 的出厂默认轮径数值是 26inch。

5. 7 设置背光亮度

通过 **UP** 和 **DOWN** 调节背光亮度。背光的亮度在 1—3 之间选择，1 是最低亮度，3 是最高亮度。

J—LCD 的背光亮度出厂默认数值是 1。

5. 8 退出设置

在数值设定状态下，短按 **MODE** (2 秒以内)，是确认输入，长时间按 **MODE** (2 秒以上)，是确认输入，是保存当前设置，并退出设置状态。

6、正常操作

6. 1 开机/关机

按 **MODE**，仪表开始工作，并提供控制器工作电源。

在开机状态下，长按 **MODE** 键，或者静置（无速度、非设

定状态) 5 分钟, 可以关闭电动车电源。在关机状态下, 仪表和控制器不再使用电池的电源, 仪表和控制器的耗电是零。

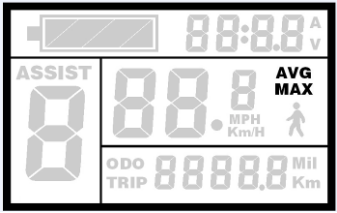
建议: 如果超过 4 小时不使用电动车, 请把电动车的电池从车上取下来, 合理存放电池。

6. 2 切换显示 “当前速度/平均速度/最大速度”

电动车开机后, 仪表默认显示当前速度。



长按 UP 显示本次骑行的最高速度 (MAX), 再长按 UP, 显示本次骑行的平均速度 (AVG), 再次长按 UP 回到当前速度显示, 如此循环。

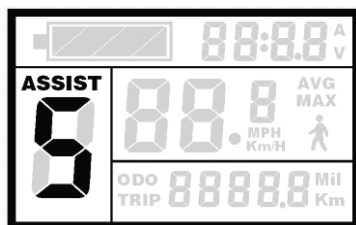


切换速度界面

6. 3 切换助力或转把档位

单独按 **UP** 或者单独按 **DOWN**，改变电机输出功率，功率范围是 1—5 档，1 档是最低功率，5 档是最高功率。

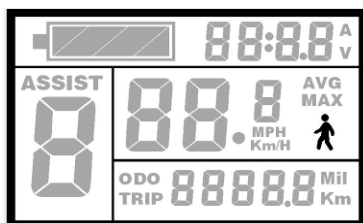
开机默认档位是 1 档。



电机功率比例选择

6. 4 电助力推行

长按 **DOWN** 进入电助力推行模式，电动车以每小时 6 公里的速度匀速行驶。



电助力推行界面

警告：6Km/h 助力推行功能只能在使用者推行电动车时使用，请勿在骑行状态使用。

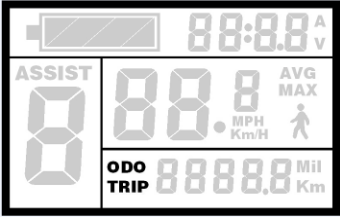
6. 5 背光的开启和关闭

同时按 **UP** 和 **MODE** 延时 3 秒钟开启 J—LCD 背光。当外部光线不足或者夜晚行车的时候，可以开启 LCD 背光。再次同时按 **UP** 和 **MODE** 延时 3 秒钟，可以关闭 LCD 背光。

6. 6 切换显示“单次骑行里程及时间/累计骑行里程及时间”

按 **MODE** 切换单次骑行里程及时间/累计骑行里程及时。方便使用者查看当次的骑行里程及时间（TRIP）和累计骑行里程及时间（ODO）。

单次骑行时间以小时分钟显示，累计骑行时间以小时显示。时间会在切换后显示十秒钟后恢复到时钟界面。



里程界面

6. 7 电量显示

当电池电压高时五段 LCD 均亮，当电池欠压时电池外边框以 1HZ 的频率闪烁，表示电池已严重欠压，需要马上充电。



6. 8 故障代码显示

当电动车电控系统出现故障时，仪表将自动显示错误代码，以下是错误代码的定义

显示值	定义
21	电流异常
22	转把异常
23	电机缺相
24	电机霍尔信号异常
25	刹车异常
30	通讯异常

错误代码定义表



错误代码显示

只有故障被排除时才能退出故障显示界面，出现故障后电动车将不能继续行驶。

7、使用注意与更换电池

使用中注意安全行驶，避免仪表磕碰。更换电池时将仪表从车把上拆下来，拧下电池盖更换新的电池。

仪表电池的型号是 CR2032，此仪表电池是专供仪表内部电子表使用的，电池寿命不低于 2 年。

注意：更换电池后，请设置仪表时间。

8、常见问题及解答

问：为什么不能开机？

解决办法：检查仪表线束与控制器的接插件接触可靠。

问：为什么时间显示不正常？

答：请更换仪表内部电池，型号 CR2032。

问：仪表显示故障代码应如何处理？

答：及时到维修电动车的维修点修理。

9、质量承诺与包修范围

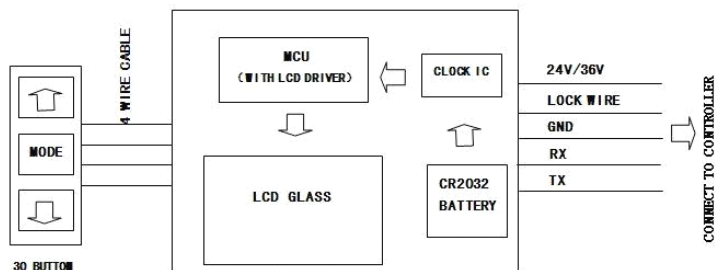
仪表出厂后，外壳划伤或外壳破损不包修。

引线划伤或断裂不包修。

电路功能丢失，质保期：自用户开始使用计算 18 个月以内。

仪表内部电池寿命：自仪表出厂之日起 24 个月以内。

10、电路框图与引线



红色：电池正极，蓝色：控制器锁线，黑色：电池负极，绿色/黄色：与控制器通讯线。

注：部分产品的引线采用防水接插件，用户无法看到线束内部的引线颜色。

11、版本变更

本仪表的使用说明书是天津嘉特机电技术有限公司通用软件版本（V2.0 版本）的操作说明书。部分整车上使用的仪表软件版本有可能与本说明书略有差异，均以实际使用版本为准。

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1、Preface

Dear users,

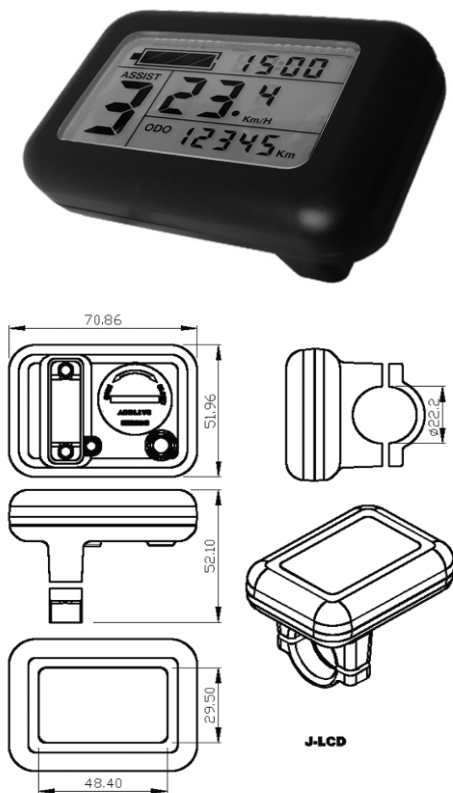
To ensure better performance of your e-bike, please read through the J-LCD product introduction carefully before using it. We will use the most concise words to inform you of all the details （including hardware installation, setting and normal use of the display）when using our display. Meanwhile, the 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 $60\text{ }^{\circ}\text{C}$, the shell material can ensure normal usage and good mechanical performance of the products.

2.2 Display Size and Installation Size (Unit: mm)



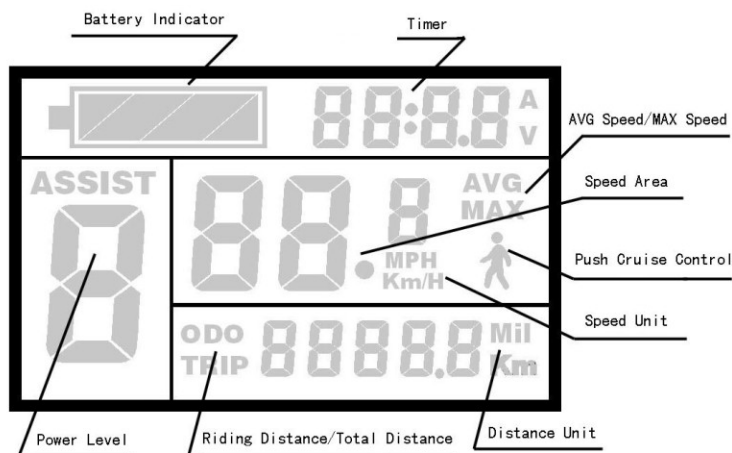
3、 **Function Summary and Button Definition**

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.

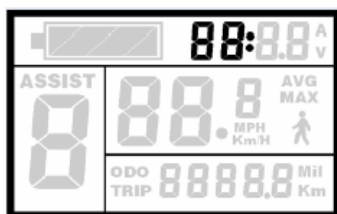
5.2 Start and Entry Setting

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

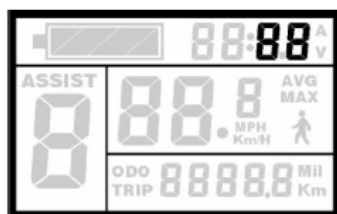
After start-up, please hold both **UP** and **DOWN** at the same time, for 3 seconds, LCD will enter into the setting state.

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

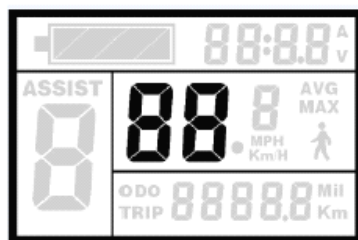
The default figure of the top riding speed in the display is 25 Km/h.

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.

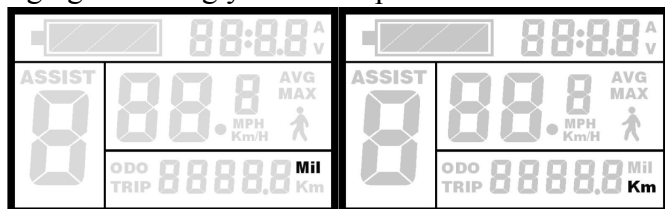


Speed Setting Interface

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.



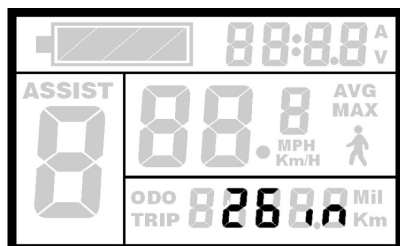
English System

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.

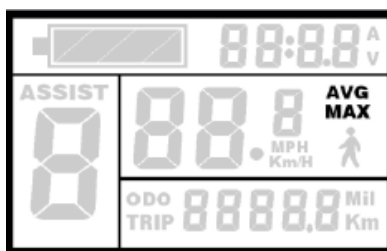
Suggestion : If you won't use the e-bike in 4 hours, please take the battery off the e-bike and put it away in a proper place.

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

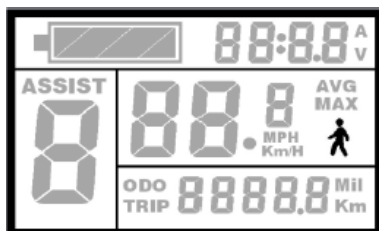
Press **UP** or **DOWN** change motor output power of the motor. The power ranges from level 1 to level 5. Level 1 is the minimum power. Level 5 is the maximum power. The default value is level 1.



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.

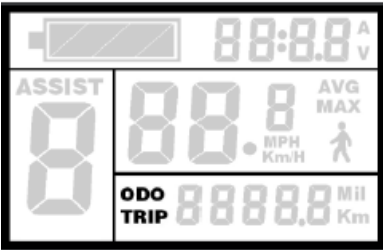
6.5 Turn On and Turn Off the Backlight

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

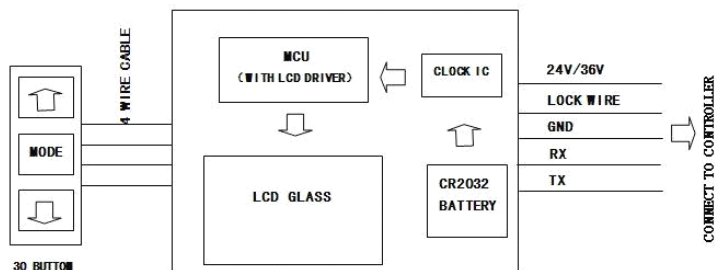
We are not responsible for the scratched or broken shell after the products are delivered out of the factory.

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.