

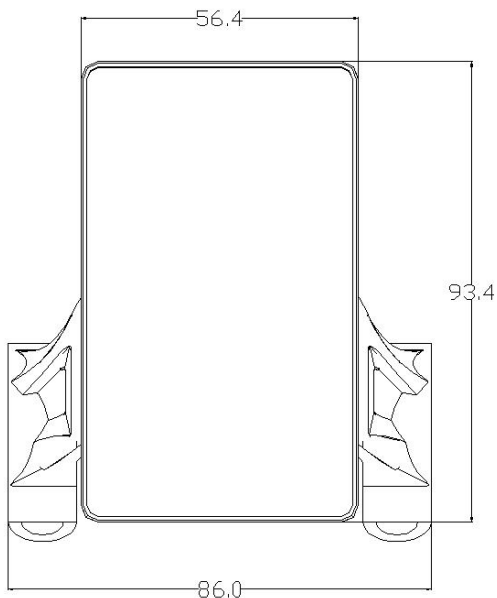
**LCD-M5 Hand Control Panel Operation Instruction**

**2017Latest Edition-V1.1**

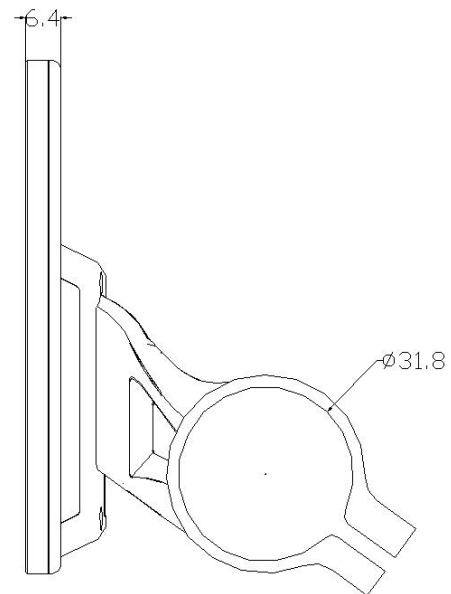


一、 **Out shell Size and Material**

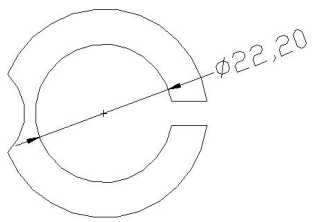
Out shell material is ABS, Liquid crystal transparent window material is high hardness acrylic.



**Front view**

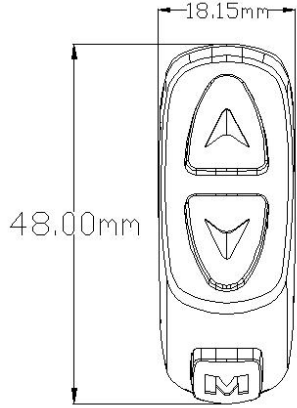


**Side view**

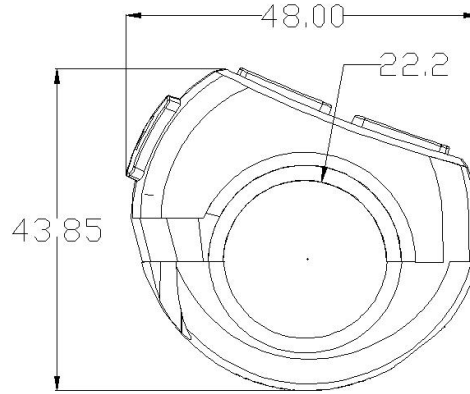


31.8mm stent is available 22.2mm、25.4mm、28.6mm

Transfer Ring Selection



Switching view



Switch Side View

二、 Work Voltage and connection mode

1、 Work voltage: DC24V 、 36V、 48V、 60V 、 64V(which you can choose on the meter),the others you can customized.

2、 Connection mode :

Line sequence of the label connector



Instrument Outlet

Table: Line sequence of the label connector table

Order of line	Color of line	Function
1	Brown (VCC)	Instrument power cord
2	Green (RX)	Meter data receiving line
3	Black (GND)	Meter earth wire
4	Orange (K)	Controller power line
5	White (TX)	Data transmission line of instrument

**Notes: Part of the products lead wire use waterproof connection. User cannot see the color of lead line.**

### 三、Function description

#### 1、Display function

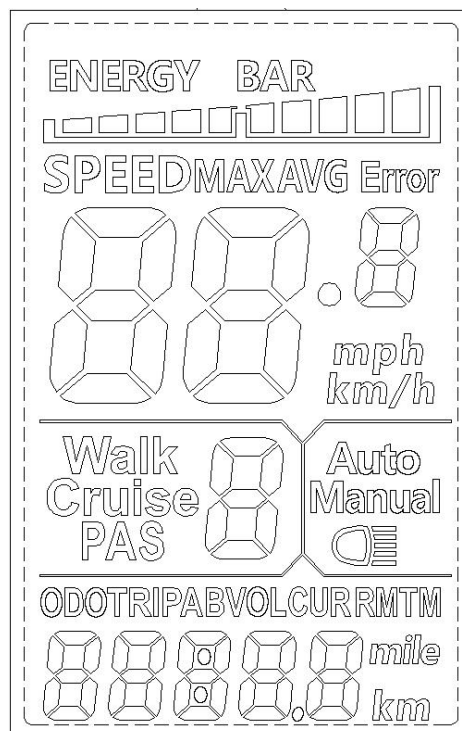
Speed display, power level display, power indicator, failure warning, total mileage, single mileage, headlight display, single driving time display

#### 2. Control, setting up functions

Power switch control, headlight switch control, 6Km/h point control, wheel diameter setting, maximum speed setting, idle automatic hibernation time setting, backlight brightness setting, voltage level setting

#### 3.Communication protocol: UART

All the contents of the display screen(full display in boot 1S)



# Show content introduction



## 3.1 Headlight

The instrument can be manually turned on and the

brightness of the sensing environment is automatically turned on (light sensitivity support is required).

## 3.2 Battery power display

BATTERY



## 3.3 Multifunctional display area



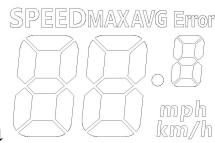
Total mileage ODO, single mileage TRIP A, single mileage TRIP B, battery current voltage VOL, current operating current CUR, remaining mileage RM; Instrument boot time TM

## 3.4 Vehicle mode



Walk boost mode; Cruise: constant speed cruise mode; PAS: Power file position: 0 ~ 9 adjustable;

## 3.5 Speed display area

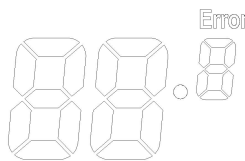


Maximum speed MAX, average speed AVG

Unit MPH, KM/H

The meter will calculate the true speed based on the wheel diameter and signal data

## 3.6 Vehicle Status Display Area



Vehicle Status Code Meaning:

Status Code(Decimal)	State Meaning	Remarks
0	Normal	
1	Reservation	
2	Brakes	
3	Power Sensor Fault(Riding Mark)	Not Realized Here
4	6KM/H cruise	

5	Real-time cruising	
6	Battery undervoltage	
7	Motor failure	
8	turn malfunctioning	
9	Controller failure	
10	Communication reception failure	
11	Communication dispatch failure	
12	BMS communication failure	
13	Headlight failure	

### 5S Protocol Vehicle Status Code Meaning:

Status Code(Decimal)	State Meaning	Remarks
33	Current anomaly	
34	Turn the anomaly	
35	Motor phase deficiency	
36	Motor Hall anomaly	
37	Brake anomaly.	
30	Communication anomaly	

### 3. 7. install

P01: Backlight brightness, the darkest level 1, the brightest level 3;

P02: mileage unit, 0: KM; 1: MILE;

P03: Voltage level: 24V, 36V, 48V, 60V, 64V default 36V;

P04: Dormancy time: 0, not dormancy; Other numbers are dormancy times, range: 1-60;  
Unit minutes;

P05: Help file bit: 0, 3 file mode:

1,5 gear mode:

P06: Wheel diameter: unit, inch;

Protocol 2 wheel diameter value: 5.0 ~ 50 Precision: 0.1 inch

5S protocol wheel diameter value: 0:16 inch, 1:18 inch, 2:20 inch, 3:22 inch,

4:24 inch, 5:26 inch, 6:700 C, 7:28 inch;

This parameter is related to the meter display speed and needs to be entered correctly;

P07: Speed gauge magnetic steel number: range: 1-100;

This parameter is related to the meter display speed and needs to be entered correctly;

If it is an ordinary hub motor, the number of magnetic steel is input directly;

If it is a high-speed motor, it is also necessary to calculate the deceleration ratio, and the input data = the number of magnetic steel × deceleration ratio;

For example: number of motor magnets 20, deceleration ratio 4.3: input data is: 86 = 20 ×

#### 4.3

P08: Speed limit: Agreement No. 2 range 0-100km / H, 100 means no speed limit;  
5S protocol 0-41km / H;

The input data here represents the maximum operating speed of the vehicle: for example, input 25, indicating that the maximum operating speed of the vehicle will not exceed 25km/h; The drive speed is maintained at the set value,

Error:  $\pm 1$ km/h; (The speed limit for power and turning is equal)

Note: The value here is based on kilometers. When the unit setting is converted from kilometers to miles, the speed value of the display interface automatically converts to the correct mile value, but the speed limit value data set at this menu under the mile interface is not converted. Is inconsistent with the actual speed limit of the mile speed;

P09: zero start, non-zero start setting, 0: zero start; 1: Non-zero start;

P10: The drive mode is set to 0: Power Drive(how much power is output is determined by the power file bit, and the switch is invalid at this time).

1: Electric drive(by turning the handle drive, the power file bit is invalid at this time).

2: Power Driven and Electric Driven Coexistence

P11: Help sensitivity setting range: 1-24;

P12: Help start intensity setting range: 1-5;

P13: Power Magnetic Steel Disk Type Setting 5, 8, 12 Magnetic Steel Types

P14: Controller limit value set default 12A range: 1-20A

P15: Controller undervoltage

P16: ODO zero setting length press key 5 seconds ODO zero

P17 :0: No enabling cruising, 1: enabling cruising; Automatic cruise optional(valid for protocol 2 only)

P18: Display speed ratio adjustment range: 50 % ~ 150 %,

P19: 0 power bit, 0: 0 file, 1: does not include 0 file

P20 :0:2 Protocol 1:5 S Protocol 2: Standby 3: Standby

#### 四、Key Introduction:



The specific combination of keys is as follows




Press the button to use the brief

Key operation is divided into short press and long press, and combination key length press

Short press is used for rapid/frequent operations, such as the specific key combination position as follows

1.   When riding, you need to modify the power/speed file, short press

2.  Toggle display data for multi-function areas during cycling, short click

Single key length is mainly used to switch the mode / switch state

Composite keys(long presses) are used to set parameters because the operation is complex, which can reduce errors

(Short press does not make the composite key, because it is easy to trigger mistakenly, so it is too difficult to do)

Specific operational explanations:

一, modify the power ratio / power file

Let's say the current is power mode.

1) Short press , Help + 1


2) Short press , Help - 1

二, Toggle speed display

Long press,  +  Toggle speed display

三, Set / Disable 6Km/h Cruise, Switch Headlight, ODO Clear Zero

Static state of vehicles, long press , Will enter 6KM/h cruise mode, let go of cruise


mode; long press  Turn the lights on and off;

P16Menu Interface, long press  five seconds, ODO clear zero.



#### 四, Switching liquid crystal display





If the current display is working, long press  , Will turn off the screen, instead turn on the screen

#### 五, Toggle multi-function display area content


Short  Can switch the value of the multifunction display area

#### 六, Set Parameters

Long press  +  Will enter the parameter setting interface. Parameters that can be set include, Wheel diameter(in: inches), number of magnetic steel, liquid crystal brightness, low pressure points, etc.(see settings: P01-P20);

Under Settings Interface, Can be short press  , or  Set the value to perform a minimum-precision unit value operation, you can also long press  , or 

#### Continuous Fast Modify Parameters:

1.Short press  Switch to Next Parameter; Exit settings and save parameters. If not operated, the modified parameters will automatically exit and be saved after 8 seconds.

**Note: due to the upgrade of the company's products, the content of the product will be different from the specifications, but it will not affect your normal use.**