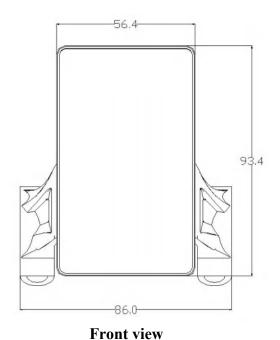
## CHANGZHOU LINGHUI INTELLIGENT TECHNOLOGY CO.,LTD

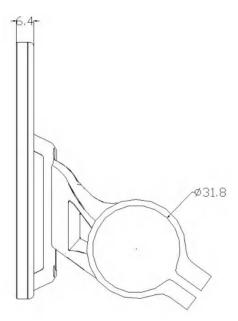
# LCD-M5 Hand Control Panel Operation Instruction

## 2021Latest Edition-V1.2

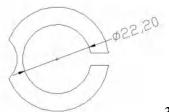


# Out shell Size and Material Out shell material is ABS, Liquid crystal transparent window material is high hardness acrylic.



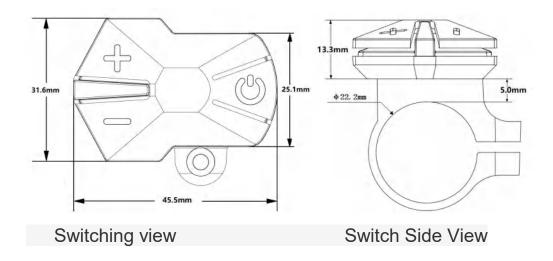


Side view



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

#### Transfer Ring Selection



#### 二、 Work Voltage and connection mode

- 1. Work voltage: DC24V  $\,$  ,  $\,$  36V  $\,$  ,  $\,$  48V  $\,$  ,  $\,$  60V(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

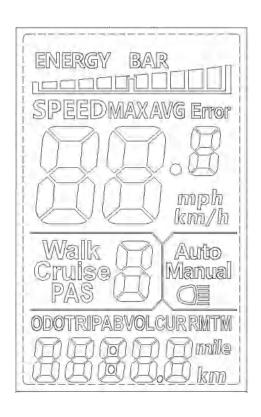
Speed display, power level display, power indicator, failure warning, total mileage, single mileage, headlight display, single driving time display

#### 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



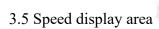
3.3 Multifunctional display area

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;



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	State Meaning	Remarks
E00	Normal	
E06	Battery under voltage	
E07	Motor failure	
E08	turn malfunctioning	
E09	Controller failure	
E10	Communication reception failure	
E11	Communication dispatch failure	

3.7. Setting

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

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; Precision: 0.1;

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, direct input of magnetic steel;

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  $\times$  deceleration ratio;

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

 $20 \times 4.3$ 

P08: Speed limit: range 0-100km / H, 100 means no speed limit,

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; Drive speed maintained at set value,

Error: ± 1km/h; (Speed limit for power and steering)

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 set at this menu under the mile interface is not converted. Is inconsistent with the actual speed limit of the mile

speed;

Note: P09-P15 menu is only valid in communication state

**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).

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

2: Power Drive and Electric Drive Coexistence

**P11:** Help sensitivity setting range: 1-24;

P12: Help start intensity setting range: 0-5;

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, 1: does not include 0

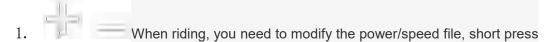
P20:0:2 Protocol 1:5 S Protocol 2: Standby 3: Standby

#### 四、Key Introduction:

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



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



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

 $\pm$ , 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.

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