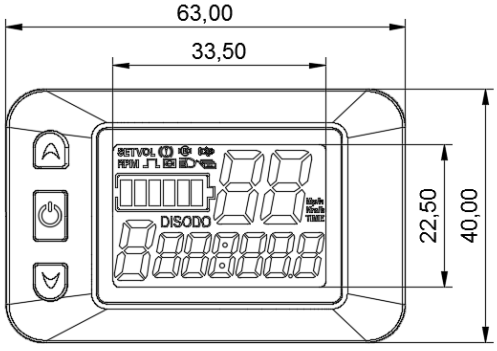
JIANGSU LINGHUI INTELLIGENT TECHNOLOGY CO.,LTD

LCD-P9Hand Control Panel Operation Instruction

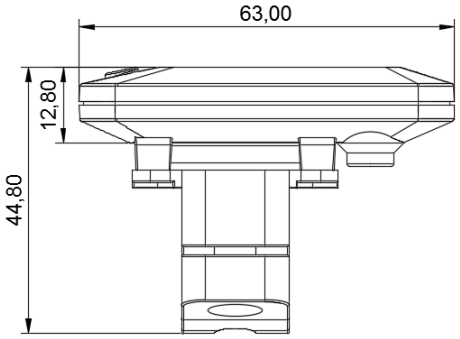
2017Latest Edition-V1.2

一、 Out shell Size and Material

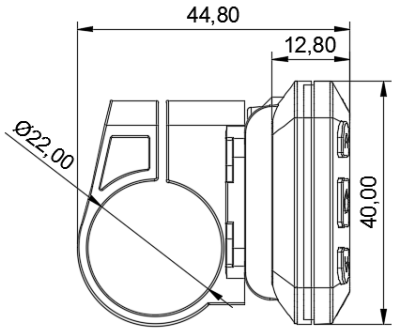
Out shell material is ABS, Liquid crystal transparent window material is high hardness acrylic, which hardness is same as toughened glass.



Front view



Side view



Bracket view

二、 Specifications and wiring

1、Specifications

※ 24V，36V，48V，60Vpower supply

※ Instrument rated operating current 10mA

※ Maximum working current of the meter 30mA

※ Shutdown leakage current<1uA

※ Supply of operating current at the end of the controller 50mA

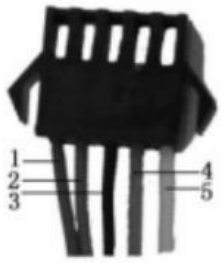
※ The maximum working current of the headlamp 200mA

※ Use of temperature ： -18~65℃

※ Storage temperature ： -30~80℃

2、connection mode

Line sequence of the label connector



Connected to the controller　　Meter outlet end　　To the terminal

Table: Line sequence of the label connector table

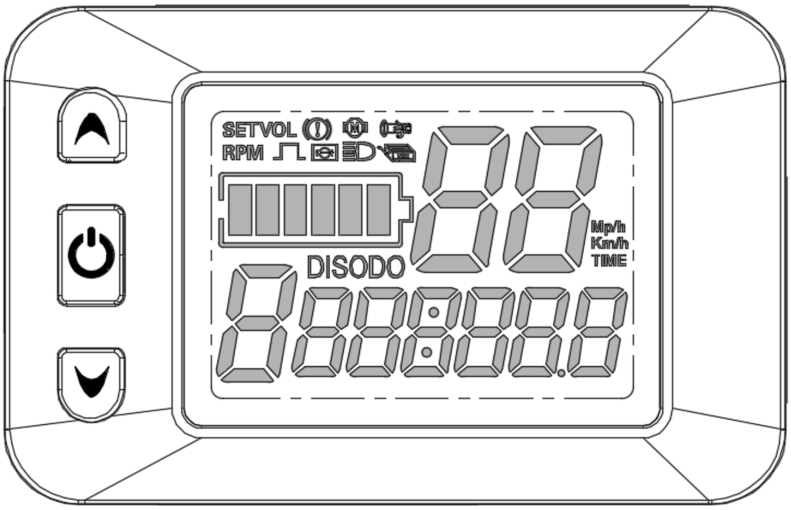
Order of line	Color of line	Function
1	Red(VCC)	Meter wire
2	Blue(k)	wire of Controller
3	Black(GND)	Meter earth wire
4	Green(RX)	Meter data receiving line
5	Yellow(TX)	Meter data transmission line

Note: The lead wire of some products uses the waterproof connector, and the user cannot see the lead color in the wire harness

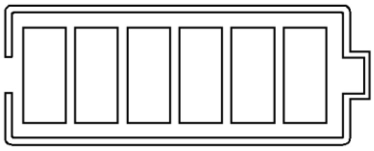
三、三．Functional description：

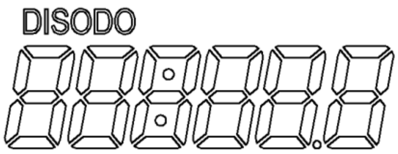
Function：

1、Display function: power indication, fault indication, total mileage and single mileage, setting the drive mode, The full content of the display (full display in the boot 1S)



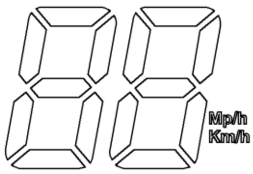
Display content introduction

3.1 Voltage state level POWER 



3.2 Multifunction display area

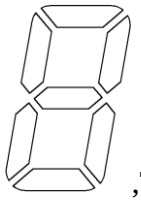
Single mileage DIS and total mileage ODO (unit: mile, KM).

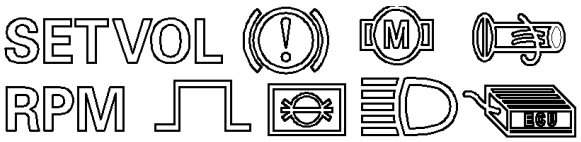


3.3Speed display area

Unit Mp/h, km/h

The speed signal is taken from the Holzer signal in the motor and sent to the instrument by the controller. (a single Holzer cycle time, unit: 1MS) instrument will calculate the real speed according to the wheel diameter and signal data (the number of magnetic steel should be set up by the motor Holzer).

3.4 Vehicle support gear adjustment  ,There are 1, 2, 3 adjustable ；

3.5 Vehicle state display area 

SET:Setup mode；VOL:Current voltage； :Brake cue ； :Motor failure ;

:Malfunction ； :Wheel diameter; :The headlamps；:Controller fault 。

3.6The instrument is equipped with three, respectively with the symbol  key(Alternative text UP)、  key(Alternative text SW)and  key(Alternative text DOWN)express 。

4.Setting up menu introduction

P01: The luminance of the backlight, the darkest at the 1 level, and the brightest of the 3 level.
P02: public and British units, 0:KM; 1:MILE;
P03: voltage level: 24V, 36V, 48V, 60V, 64V 36V.
P04: dormancy time: 0, no dormancy; the rest number is dormancy time, range: 1-60; unit: minute.
P05: support gear: 0, 3 gear mode:
1, 5 gear mode:
P06: wheel diameter: unit, inch; precision: 0.1;
This parameter is related to the display speed of instrument, and needs to input correctly.

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

This parameter is related to the display speed of instrument, and needs to input correctly.

If it is a common hub motor, directly input the number of magnetic steel.

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

For example, the number of magnetic steel in motor is 20, and the deceleration ratio is 4.3: the input data is: 86=20 * 4.3.

P08：Maximum riding speed setting: range 0-100km/h, 100 for speed limit.

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

Error: + 1km/h; (assisting, turning the speed limit)

Note: the value here is based on a kilometer. When the unit is set from a kilometer to a mile, the speed value of the display interface automatically converts to the correct mile value, but the speed limit data set at this menu in the mile interface does not change, which is not consistent with the actual speed limit of the mph.

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

P09: zero start, non zero start setup, 0: zero start, 1: non zero start.

P10: drive mode set 0: boost drive, decide the output power through the power shift, and turn it off.

1: electric drive (by turning the drive, then the auxiliary gear is invalid).

2: both power drive and electric drive coexist simultaneously

P11: power sensitivity setting range: 1-24;

P12: the setting range of power booting strength: 0-5;

P13: help the magnet plate type set 5, 8, 12 magnetic steel three types.

P14: the controller's current limit is set to the default 12A range: 1-20A.

P15: the undervoltage value of the controller

P16: ODO zero setting long press top key for 5 seconds ODO clean

P17:0: do not enable cruising, 1: enable cruising; automatic cruise optional (only for protocol 2).

P18: the speed range of the display speed is 50%~150%.

P19:0 gear position, 0: 0 gear, 1: No 0 gear

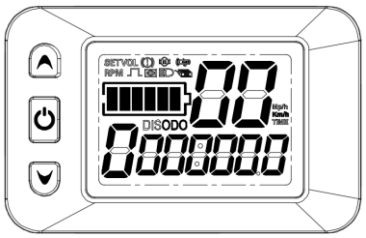
P20:0: 2 protocol 1: 5S protocol 2: standby 3: standby.

四、Keystroke operation

1、Turn on and turn off

Long press key，turn on；again long press key，turn off。When the vehicle stops running and does not operate on the instrument for 10 minutes continuously, the instrument will automatically turn off and turn off the power source of the electric vehicle.

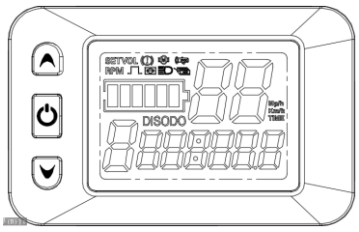
2、Display interface 1



Long press key，turn on，Enter the display interface one

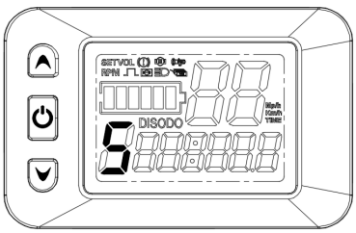
。

2.1 Turn on and close the lights



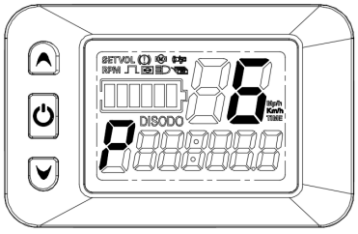
Long press key， turn on the light；again long press key， close the light。

2. 2 Power shift switch



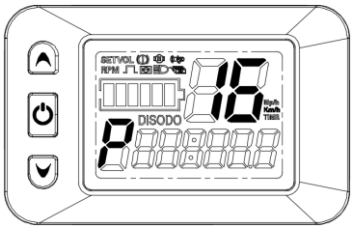
Short press and key， Switch 1-5. 1 gear minimum power gear, 5 gear highest power gear. The default 1 files are automatically restored every time they start. The 0 gear has no power function.

2.3 6KM/H Promoting function



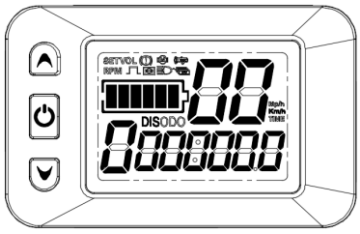
Press key， The sign in the gear area indicates that the vehicle runs at a speed not greater than 6Km/h. Release keys, function revocation.

2. 4 Cruise function



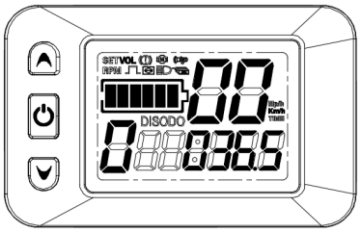
When riding speed is greater than 7 km / h, Press the key, Enter the cruise state at the same time P Symbol。Brake or again long press Key revocation 。

3、Display interface II



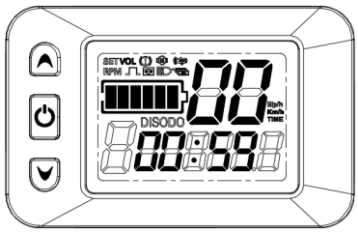
In the display interface I，short press key，enter the display interface two。

4、Display interface III



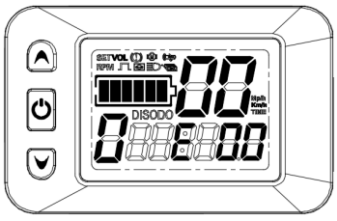
In the display interface II，short press key，enter the display interface three。

5、Display interface IV



In the display interface III，short press key，enter the display interface four。

6、Display interface V



In the display interface IV，short press key，enter the display interface five。If the electronic control system fails, the instrument will automatically jump to the display interface and display the corresponding fault code.

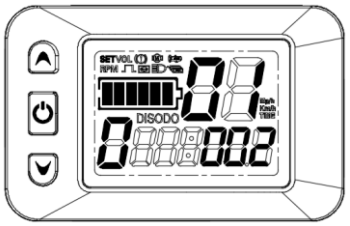
The meaning of the fault code is shown in the table below：

Status code(decimal)	State meaning	remarks
0	Normal status	
1	retain	

2	Brake	Not here
3	Helps sensor failure(riding signs)	Not here
4	6KM/H cruise	Not here
5	Real time cruise.	Not here
6	Batteries under pressure	
7	Electrical failure	
8	Turn it off.	
9	Controller malfunction.	
10	Communication reception failure	
11	Transmission fault.	
12	BMS communication failure	
13	Headlight malfunction	

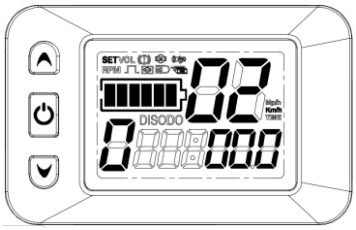
五、Menu Item Settings

1.Backlight brightness settings（P01）



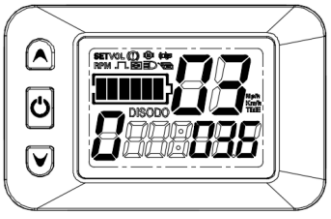
After boot，Press simultaneously and key，enterP01menu，set backlight brightness。Short press or key，Adjust backlight brightness After adjustment，short press key，go to next parameter settings。

2、Common English Unit Settings（P02）



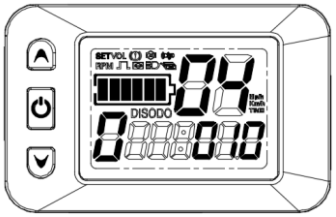
Short press or key，Adjusting metric units(synchronizing mileage and speed units)。After adjustment，short press key，go to next parameter settings。

3、Voltage Level Settings（P03）



Short press or key，Adjusting Voltage Level，24V，36V，48V，60VOptional。After adjustment，short press key，go to next parameter settings。

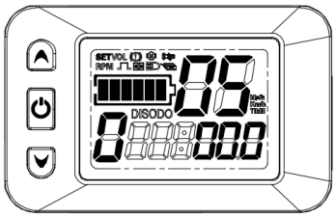
4、Dormancy Time Settings（P04）



Short press or key，Adjust hibernation time，0-60Minute adjustable(0: not dormant)。After

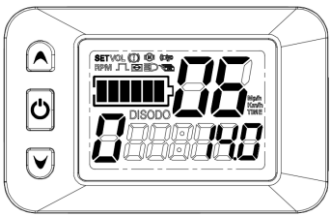
adjustment，short press key，go to next parameter settings。

5、Power File Settings（P05）



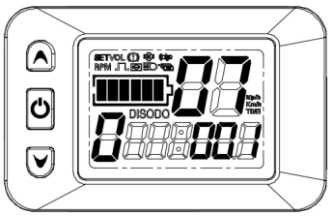
Short press or key，Adjust the number of files(0: 3, 1: 5, 3: 9).After adjustment，short press key，go to next parameter settings。

6、Wheel Path Settings（P06）



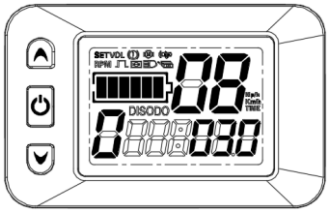
Short press or key，Adjusting wheel diameter(in inch, range: 5.0-50 .0)，After adjustment，short press key，go to next parameter settings。

7、Set the number of measuring magnetic steel（P07）



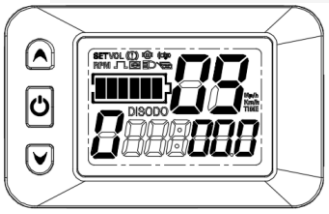
Short press or key，Adjusting the values of measuring speed magnetic steel(in sheets, range: 1-255)。After adjustment，short press key，go to next parameter settings。

8、Maximum riding speed settings（P08）



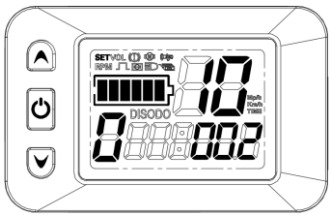
Short press or key，Adjusting maximum riding speed(range: 0-100)。After adjustment，short press key，go to next parameter settings。

9、Zero start, non-zero start settings（P09）



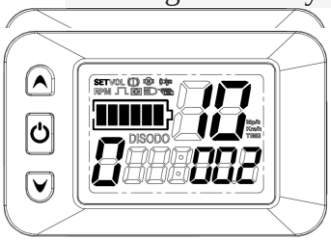
Short press or key，Adjusting zero start/non-zero start（0：zero start，1：non-zero start）。After adjustment，short press key，go to next parameter settings。

10、Drive Mode Settings（P10）



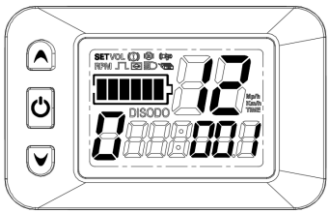
Short press or key，Adjusting drive mode （0：Only driving force is effective ，1：Only turn the drive to be effective，2：Both power and transfer drive are effective ）。After adjustment，short press key，go to next parameter settings。

11、Enabling sensitivity settings（P11）



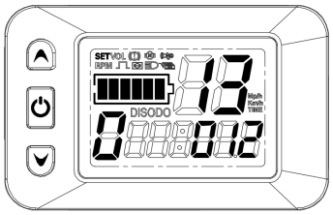
Short press or key，Adjusting enabling sensitivity （Range ：1-24）。After adjustment，short press key，go to next parameter settings。

12、Power Start Strength Settings（P12）



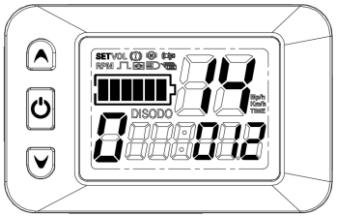
Short press or key，Adjusting Power Start strength （Range：1-5）。After adjustment，short press key，go to next parameter settings。

13、Helped Magnetic Steel Disk Type Settings（P13）



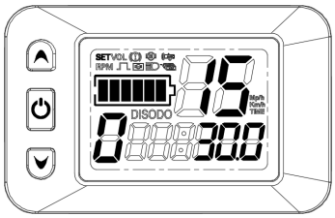
Short press or key，Adjusting helped magnetic steel disk type（Range：5,6,7,8,9,10,11,12grain 8 types of magnetic steel plates）。After adjustment，short press key，go to next parameter settings。

14、Controller limit value settings（P14）



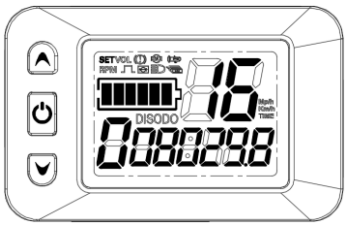
Short press or key，Adjusting controller limit value（Range：1-20A）。After adjustment，short press key，go to next parameter settings。

15、Controller default value settings（P15）



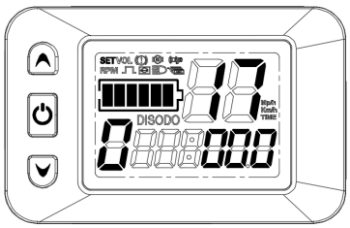
Short press or key，Adjusting controller default value（Range：5V adjustable）。After adjustment，short press key，go to next parameter settings。

P16、ODO zero settings （P16）



Long press key 5seconds，ODO complete zero operation，After adjustment, short press key，go to next parameter settings。

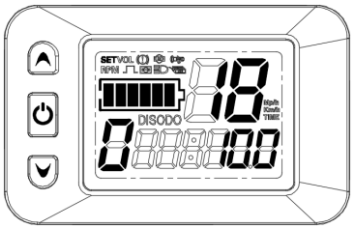
P17、Automatic Cruise Enabling Settings（P17）



Short press or key，Adjust automatic cruise enabled value（0：Can not enable automatic cruise, 1：Enable automatic cruise）。After adjustment，short

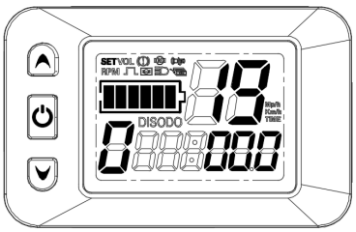
press key，go to next parameter settings。

P18、Show speed scale adjustment（P18）



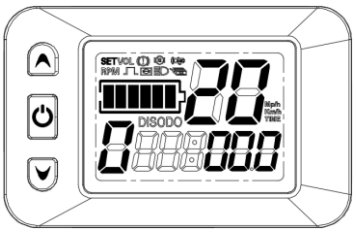
Short press or key，Adjusting speed ratio（Range： 50%-150%）。After adjustment，short press key，go to next parameter settings。

P19、0 File Enabling Settings（P19）



Short press or key，adjusting 0 files making energy value（0：contain 0 files，1：Not included 0 files）。After adjustment，short press key，go to next parameter settings。

P20、Communication Protocol Selection Settings(P20)



Short press or key，Adjust communication protocol options（0：Agreement No. 2，1：Agreement No. 5，2：Agreement J-LCD，3standby）。After adjustment，Short press key，Go to P01 parameter setting

P1-P20 menu settings except ODO zero settings(P16),the other menu long press or key，Can be adjusted rapidly continuously。

21、Exit menu item settings

After the menu is set，Press simultaneously and key，Exit the menu interface, return to bounded one, and set the value to be saved.

At each setting interface, if the button operation is not implemented for more than 8 seconds, the display interface will be returned automatically and this setting value will be saved.

六、Use Note

Be careful to drive safely while in use, avoid the instrument bump. Try not to use in bad environment, such as heavy rain, snow, sun exposure. Try not to use it under pressure to avoid damaging the battery.

When the temperature is below-10 ℃, the screen will darken as the temperature decreases and will return to normal when the temperature rises.

七、Frequently Asked Questions and Answers

1) Q: Why can't you turn it on?

Answer:Check that the instrument bundle is in good contact with the controller's plug-in.

2) Q: How should the instrument display fault code respond?

Answer: To the after-sale agency in time for maintenance.

八、Quality assurance and warranty coverage

After the instrument comes out of the factory, the casing is cut and damaged. The lead is cut and broken without repair; The circuit function is lost, the warranty period: 12 months from the instrument factory.

九、Version Changes

Upgrades to the company's products may show up in parts of your product that differ from the instructions, but will not affect your normal use.