LCD Manual Control Panel Instructions
2013 Latest Version

Item No：861-A

Working Voltage：DC24V 36V（Setting of the meter）
 48V（According to customers' requires to customized）

Mode of connection：
1. **Red Line（D+）:Enter of the power's plus**
2. **Black Line（GND）：Power's minus**
3. **Blue Line（DS）：Controller electric door lock**
4. **Yellow Line（DD+）：Lighting control's plus(If the controller's software and hardware support the lighting control's line,this yellow line won't conncet)**
5. **Green Line（DAT）:Received the communication**
6. **White Line（TX）：Send the communication**
7. **Extended Function：PWM type of voltage assistance gear's control、Independence circumscribed speed sensor**
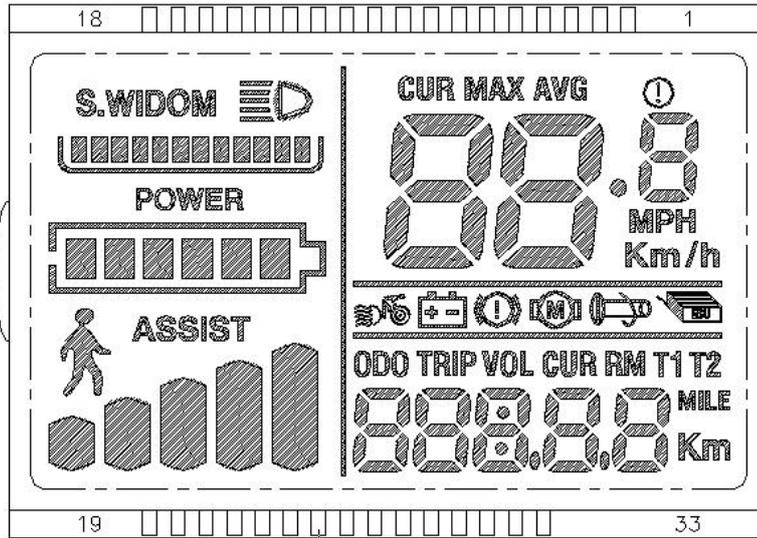
Function：
1．Function of Display
Speed display、Assistance display、Battery indicator、Problems prompt、Mileage 、 Accumulative mileage 、 Cruise constant speed 、 Braking indicator、Headlight display
2．Function of Control and Setting
Power switch control、Front light switch control、6Km/h inching control、Real time cruise control、Wheel diameter's setting、5 mode assistance's setting、Highest speed setting、Automatic dormancy time setting、Backlight brightness setting、startup mode、 drive mode is set、power sensitivity setting、 dynamical disk type、 voltage grade setting、controller set current limiting values
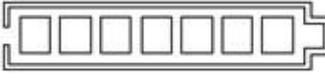
3. Communication Protocol：UART
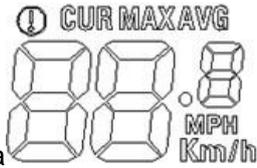## All The Content On The Display Screen(Opened In One Second)

Introduce of Display Content

1. Headlight

2. Current Status Grade This function need controller's software support

3. Voltage Status Grade POWER

4. Display of Multifunction Area
Total Mileage(ODO) 、 Once Mileage(TRIP) 、 Digital Voltage(VOLT) 、 Digital Current(CURRENT) 、 Surplus Mileage(Need battery protective plate's software support)(RM)、 Runtime(TIME)
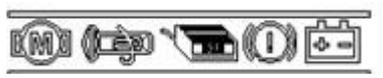
5. Display of Speed Area

Average Speed、Max Speed 、AVG

Unit: MPH, KM/H

Speed has 4 ways to come true，depending on the specific way，partial way could compose.

1. Hall signal attaching electric motor
2. Controller send Hall signal of motor to meter
3. slow speed Hall signal as the type run a circle.
4. Controller send signal of slow Hall signal as type run a circle to meter.
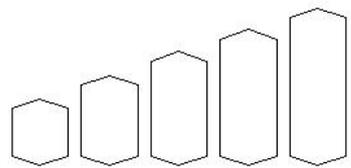   (single Hall cycle, Unit：1MS)

The meter could calculate true speed according to the data of wheel diameter and the signal's data (electric motor's Hall need to set up the magnet steel's quantities)

6. Malfunction Status Display Area

Motor stoppage、 throttle stoppage、 controller stoppage、 power brake

handle、 Under Voltage Protector

7．Assistance status display area

Assistance status (1-5 gear)、 Cruise marks

8. Set

P01：Backlight lamp brightness, level 1 is the most dark, level 3 is the brightest;

P02：Unit mileage, 0: KM;1: the MILE;

P03：Level of voltage: 24 v, 36 v, 48 v, 36 v (by default);

P04：Sleep time: 0, means don't sleep;Other Numbers means for the sleep time, range: 1-60;Units of minutes;

P05：Assistance gears:0, 3Mode：1lever　2V、2lever　3V、3lever　4V;

1, 5Mode：1lever　2V、2lever　2.5V、3lever　3V、4lever　3.5V、5lever　4V;

P06：Wheel diameter: unit, inch;Accuracy: 0.1;

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

P08：Speed: the range 0 to 50 km/h;The default 50, 50 said not the speed limit;

Note：when the speed is greater than the set speed, shut off the PWM output;When speed down to less than the set speed, automatically open the PWM output, driving speed to the current + 1 km/h;

Numerical based on km as a benchmark here, after the unit set from miles to miles, display the speed of numerical value is automatically converted to the correct miles, but miles under the interface of the menu in the values of speed limit set by the data conversion, MPH speed limit values are not consistent with the actual display,

P09：Zero start, non-zero start setting, 0:0 start;1: the non-zero start;

P10：Driving mode setting 0: power drive (decided how much output power by power gear, at this time to turn the invalid).

1: electric (by going to drive, steering gear is invalid at this time).

2: power drive and electrical drive coexist (electric zero start state is invalid).

P11：Power sensitivity setting range: 1-24;

P12：Assistance start the intensity setting range: 0-5;

P13：Power magnetic steel plate type 5 Sherwin grain of magnetic steel three types;

P14：Controller for the current limit value to set,12A(by default) range: 1 - 20 A;

Ⅱ. Button Introduction:
Specific buttons position as bellow:

Button's Design Introduction

Button operation includes short-time press, long-time press and combination buttons long-time press.

Short-time press used in quickly/frequently operation, such as:

1. During riding, press shortly to change assistance/speed gear.

2. During riding, press shortly to switch the multifunctional area to display data.
    Press single button for long time is mainly to switch the mode/button status.
    Press combination button (for long time) is mainly used for parameter setting, which could reduce maloperation due to complicated operation.
  (No combination buttons with short-time press, as they are too difficult to operate due to they are easy to be triggered by mistake).
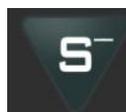
Explain of Specific Operation：

Ⅰ.Shift to assistant/electric gear,

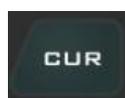Suppose current condition is assistance mode,

1)shortly press , assistance + 1

2)shortly press ,assistance - 1

Ⅱ.shift speed display

Extended press to shift the way of speed display

Ⅲ.set/ release the condition of 6km/h cruise、real time cruise,on/off light

When the e-bike is stops,extended press ,you can get into the 6KM/h cruise

mode. When the e-bike is running, extended press ,you can get into the real time cruise mode. If just now you are in cruise mode, the mode will be released.

Shortly press to turn on/off light.

Ⅳ.Turn on/off LCD screen

If current display screen is working, extended press ,the screen will be off, otherwise, the screen will be on.

Ⅴ.Shift to multifunctional display version,

Shortly press , you can shift the value on multifunctional display version.

Ⅵ.parameter setting

Press + and hold, get into the version of parameter setting, then you can set up parameters bellow,wheel diameter (unit: inch), magnet steel number,LCD brightness, under-voltage point etc.(See Settings: P01 - P14)

Under the set interface,you could shortly press or to add or subtract the value, after modified the parameters ,it will be shine,after you choose the assumed value,

1. Press shortly to save current value,parameters shine will be stop .

2. Press +,save setting, if didn't press, it will be automatically save and exit after 10 seconds to modify parameters

Note：according to upgrading of our products, there may be some differences between product introduction and products you received. The differences would not influent your daily usage.