

VLCD5 Manual

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1. Summary

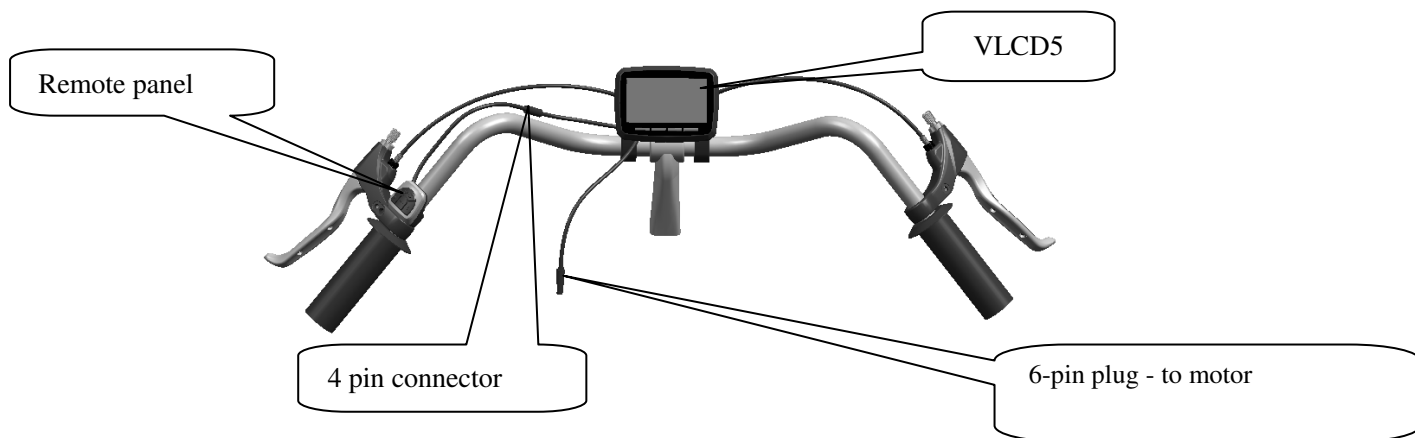
The Intelligent VLCD-5 is specially designed for e-bikes. It is used to control the power assistance, and can also show the battery consumption, the speed at which you are travelling, and record the trip distance.

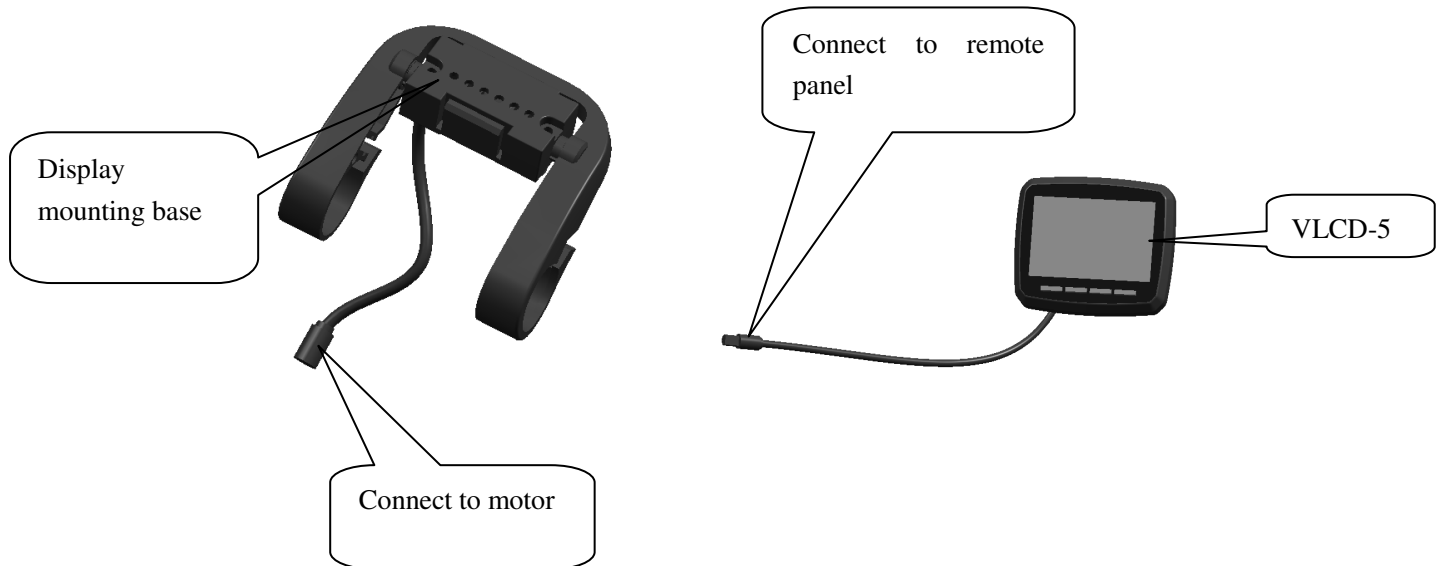
2. Specification

Type	VLCD-5
Working voltage	DC 11V-60V
Max working current	70mA(11V) 32mA(50V)
Display type	21*4 segment LCD
Measuring the speed	1-12 pulses each rotation of wheel
Working temperature	-20 ⁰ C—+70 ⁰ C
Backlight	White LED mode, brightness:200cd/m ²
Dimensions	102.5mm×75.5mm×28mm (exclude thickness of Pedestal)

2. Installation

Mount the display and remote panel on the handlebars. Attach the 4 pin connector from the remote panel to the matching connector from the display.





VLCD wire system
1、 Orange (RX)
2、 Brown (TX)
3、 White (Weak current)
4、 Green (Power)
5、 Black (Earth)
6、 Purple (Brake)

4、 Functions

4. 1、 Speed display

km/h, mile/h

Show current speed, unit: Km/h and mile/h, switchable.

4. 2、 Battery voltage indicator

Four segments to show the remaining battery capacity (each block represents 25%). The display will flash when the battery is low to remind you to charge the battery.

4. 3、 Trip distance(reset while power off)

Show trip distance. Can be reset to zero.

4. 4、 Odometer

Shows total miles from new.

4. 5、 Trip Time

Shows how long the bike has been in use (for this specific trip).

4. 6、 Average speed (AVG)

Shows average speed.

- 4. 7、 **Power assist level**
Indicates the power assist level. There are 4 levels.
- 4. 8、 **Backlight**
Switch between 2 levels brightness, default is backlight off.
- 4. 9、 **Wheel-diameter setting**
Select wheel-diameter among 14-32 inch. Default is 26-inch.
- 4. 10、 **Speed sensor setting**
Select the number of spoke magnets used for the speed sensor, default value is 1.
- 4. 11、 **Speed unit**
Switch speed unit from Km/h or Mil/h..
- 4. 12、 **6km/h throttle setting**
Select function of 6km, default is OFF.
- 4. 13、 **Maximum speed setting**
Select max speed during 15-45km/h, Default is 25Km/h.
- 4. 14、 **Assist ratio setting (reserved)**
Select the ratio but default is 16..
- 4. 15、 **Zone setting (reserved)**
Default is Europe.
Speed limit setting , default is ON.
- 4. 16、 **Software version**
Showing the current version of s/ware – currently 3.7
- 4. 17、 **Fault code**
The system does a self-check when the kit is powered up. If there are any issues, a fault code will be shown on the screen.
- 4. 18、 **Torque signal value (reserved)**
Torque signal value displays.
- 4. 19、 **Initial torquevalue (reserved)**
Initial torque signal value displays

5、 Operation Procedure

5.1 Button Definition




5.2 Operation and setting

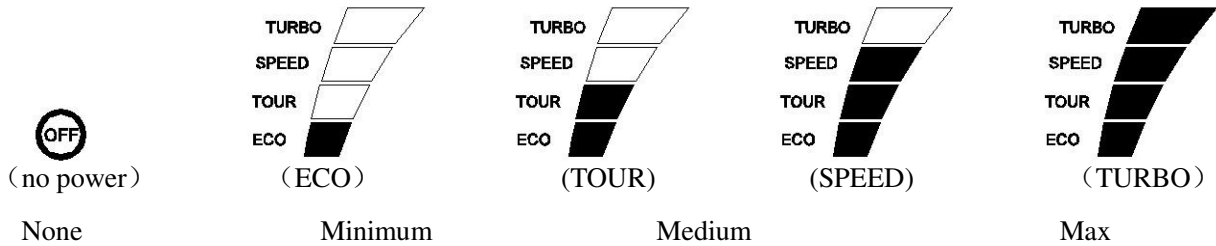
1) Power: .

Press this button to power on the LCD display, press and hold the button for 2 seconds to power off.

The kit will power down after 5 minutes of inactivity.

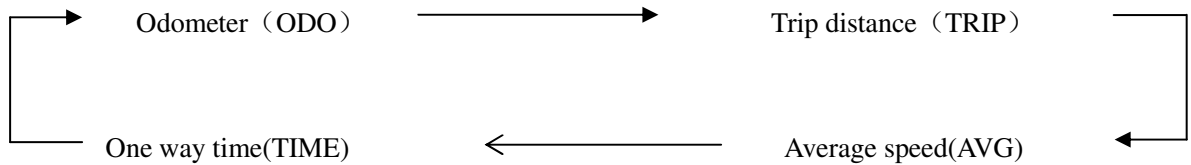
2) Assist.  

There are 4 levels of assistance. Press the +/- buttons to adjust the power assist level. The default is ECO (minimum) assist.



3) Info. 

There are 4 levels of mode (odometer, trip distance, average speed, one way time). Press this button to adjust the mode. Default is odometer.



5.3 Basic functions

Backlight 

Quick press the power button switch background lighting under switching on state.

Odometer (ODO)   


When shown in odometer, press and hold those three buttons simultaneously for 10 seconds to reset the ODO.

ODO

8888 km

Odometer

Trip distance (TRIP) 

In the trip distance state, press the  button for 2s, Reset counter and time.

TRIP

888.8 km

Trip distance

Average speed (AVG)

Show average speed (average speed=trip distance / movement time), speed resolution is 0.1km/h (mil/h), full range is 99 km/h or 99.9mil/h.

AVG

888.8 km/h

Average speed

Riding time (TIME)

Required time for a single mileage.

TIME

888.8 h

Riding time


Show diagnostic code






If the controller encounters an error, the relevant code will be shown on the top half of the display.

E01

ODO

8888 km/h 




5.4 Settings mode

To show the hidden settings, you should press these two buttons   simultaneously for 3 seconds on the startup screen, then quick press the  4 times, you will then see the first setting.

If you leave the setting menu for a few seconds, the LCD will exit the setting mode.

There are 11 levels of mode (odometer, trip distance, average speed, one way time, wheel diameter selection, magnet number selection, speed unit selection, 6/Km/h function selection, top speed selection, power adjustment selection, mode selection). Default is odometer.




Wheel diameter selection(d1)

Use  button to enter the speed selection, press  or  button to choose the correct diameter. The default is 26”.



Wheel diameter selection



Spoke magnet number selection (CC):

Use the  button to enter the magnet number selection, press  or  buttons to choose the no. of magnets 1-12. The default is 1. The no. represents the no. of pulses from one complete rotation of the wheel.



Spoke Magnet number selection

Speed units selection(km/h mil/h)

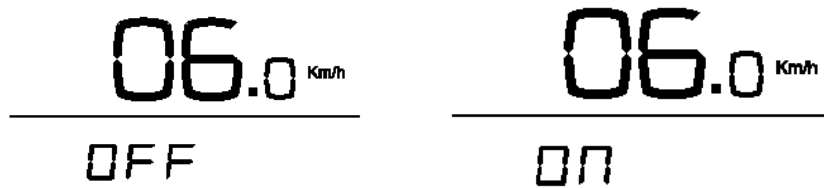
Use the  button to enter the speed units interface, press  button to switch between km/h and mil/h. The default is Km/h.



Speed units interface

6km/h setting

Use the **i** button to enter the 6/Km/h function selection, press **+** buttons to switch between ON/OFF. Default is OFF. **Kept press button 3s in the neutral**, enter the 6Km/h rotation motor, when selecting the open.



6/Km/h function selection

Speed limit setting (SD)

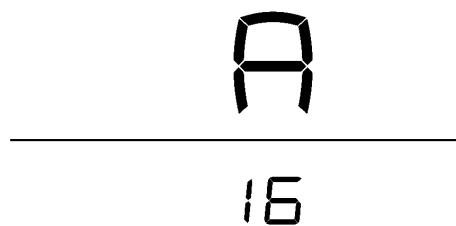
Use the **i** button to enter the speed limit selection, press **+** or **-** buttons to set the speed limit. 15-45. The default is 25Km/h.



Speed limit selection

Power setting (A)

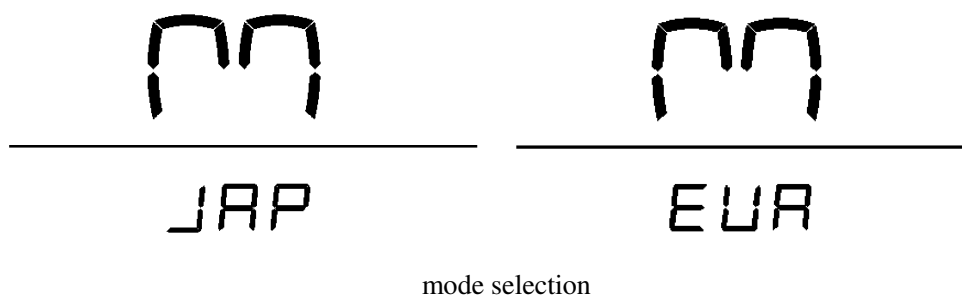
Use the **i** button to enter the power adjustment submenu, press **+** or **-** buttons to change (6-35). The default is 16.




Power adjustment selection

Zone mode setting (M)

Use the **i** button to enter the mold submenu, press **+** button to switch between Japan and Europe. Default is Europe.



Software version 3.7

Use the  button to show the current version is 3.7.



5.5 Fault codes

If there is a fault, the display will show an error code – see below.

ERR-02	Motor hall fault or motor short circuit
ERR-03	Controller failure
ERR-04	Throttle failure
ERR-08	Low battery alarm
ERR-06	Turn on the motor with cyclist's feet on the pedal for coaster brake version

5.6 Torque signal value display (reserved for viewing only)



Torque signal value display

5.7 Initial value for torque signal display

Under submenu “TE1”, press *i* again, it shows initial torque value, which is for service viewing only



(Initial value for torque signal display)

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VLCD-5

VLCD-5 Display Instrument Operational Manual



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