



# **Installation manual**

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### 1.About the installation manual

Dear assembling company or maintenance company,

To avoid problems in the assembling of the 500 ebike KIT please read through the 500 instruction carefully before to start to use it. We will inform you of all the details, including the installation and function setting of the display with the most concise words. Meanwhile, the specification will also help you to solve possible malfunction.

Reading of the User Manual could be useful to better understand the product.

### 2 SETTINGS UNDER PASSWORD

#### (1) Password setting

This display has a password that is different from manufacturer to manufacturer. Making the assumption it is 1919, you can enter into the operation interface to set other functions by entering the correct password according to the following operation mode.



When the display is power on, hold  and  button together for 10 seconds to enter into the password inputting interface, as shown in figure 2-1.

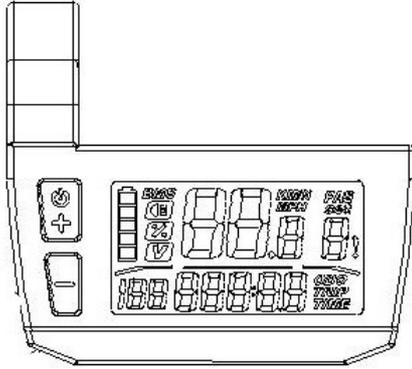


Figure 2-1

Click  button to enter the first password number, the number will be changed

from 0 to 9 step by step when you click  button ,as shown in figure 2-2.

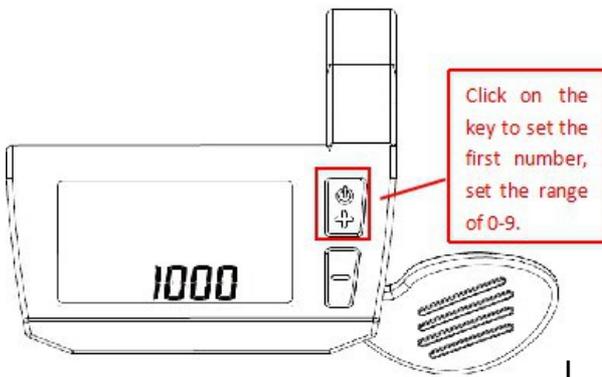


Figure 2-2

To confirm the first password number, click  button, it will go to the second

password setting. Each time you click  button, the number changes from 0-9 step by step, as shown in figure 2-3.

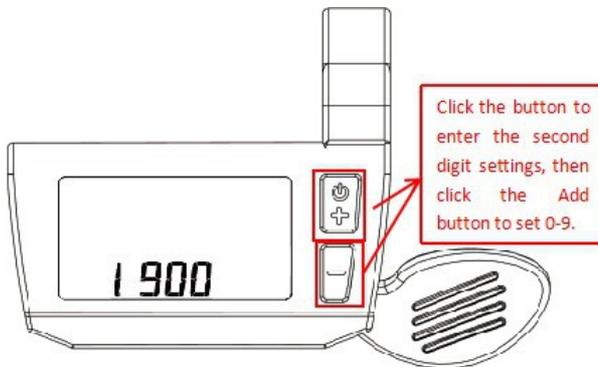


Figure 2-3

To confirm the second password number, click  button, it will go to the third password setting. Each time you click  button, the number changes from 0-9 step by step, as shown in figure 2-4.

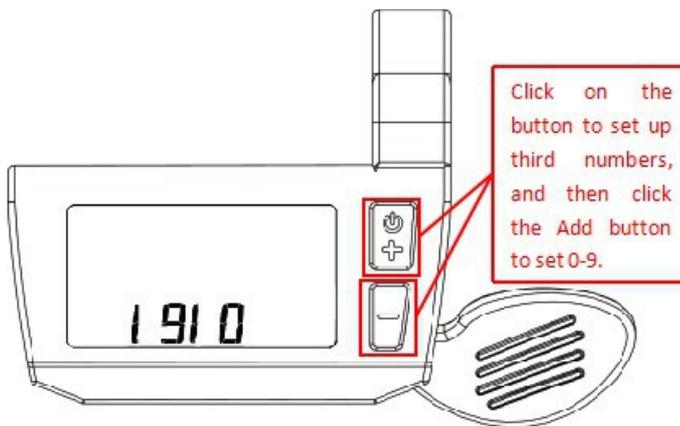


Figure 2-4

To confirm the third password number, click  button, it will go to the fourth password setting. Each time you click  button, the number changes from 0-9 step by step, as shown in figure 2-5.

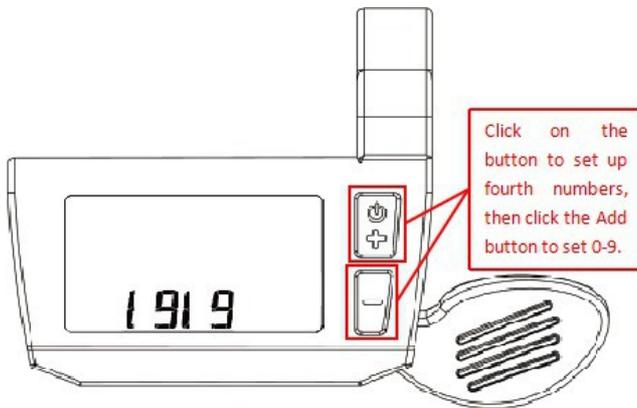


Figure 2-5

To confirm the fourth password number, click  button. After entering into the 4 correct passwords, the display will enter into the wheel diameter setting interface, as shown in the figure 2-6.

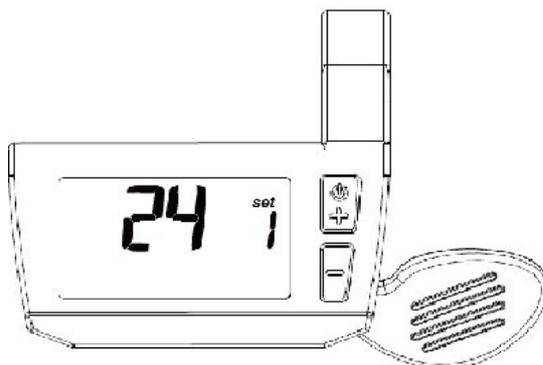


Figure 2-6

## ( 2 ) Wheel diameter setting

After entering the correct password, the display will enter into the wheel diameter setting interface, as mentioned above. The selected wheel diameter parameters are shown in Figure 2-7.

轮径值
12寸 (957mm)
16寸 (1272mm)
18寸 (1350mm)
20寸 (1590mm)
22寸 (1770mm)
24寸 (1948mm)
26寸 (2072mm)
27寸 (2210mm)
28寸 (2260mm)
29寸 (2313mm)

Figure 2-7



Select the correct wheel diameter by clicking  and  button to ensure the accuracy of the display speed and distance indication . It will return to the main operation interface if you don't click any button in 5s. The default wheel diameter of this display is 12 inch,as shown in figure 2-8 (The wheel diameter is shown in the

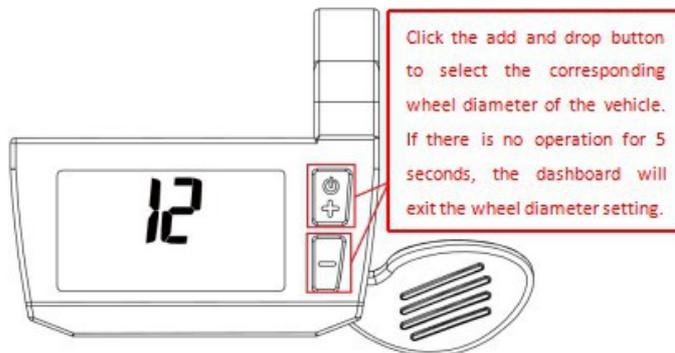


figure is 12 inch)

Figure 2-8

### ( 3 ) Voltage setting



After the wheel diameter is set up, click the  and  button at the same time ,it will enter into the voltage setting interface. As shown in figure2-9

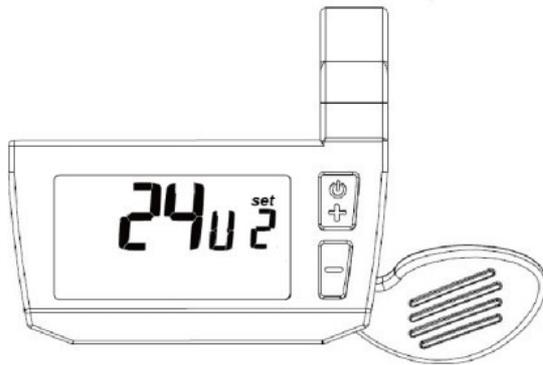


Figure2-9



By clicking  or  button, display will match the 24V, 36V and 48V battery to show you the right capacity of the battery. As shown in figure 2-10. (illustrated is 36V)

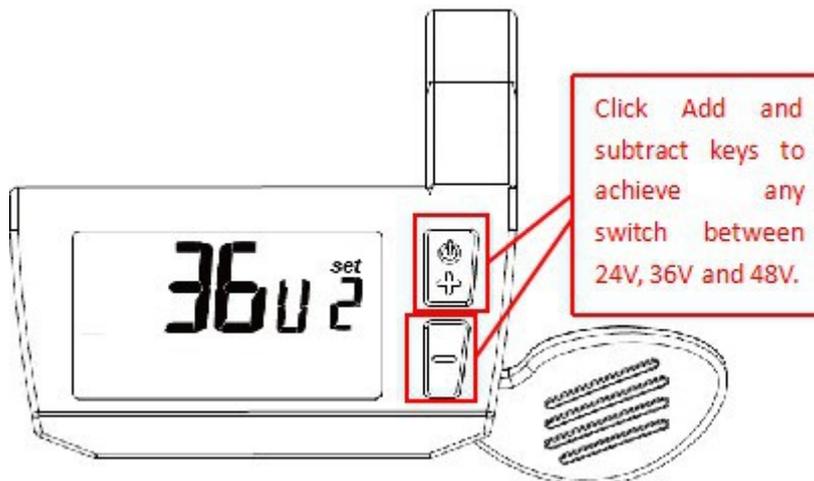


Figure 2-10

#### ( 4 ) Display version information

After the wheel diameter is set up, click the  and  buttons at the same time , it will enter into the software version information interface. We can better identify the system state by reading the software version to find out the original source code to better serve you.

As shown in figure 2-11. (The version is U1.2)

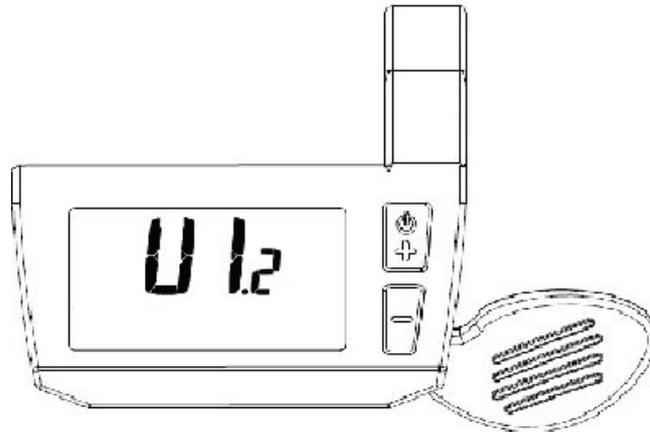


Figure 1-11

It will return to the main operation interface if you don't click any button in 5s.

### 3.Cable definition

CDC1 is normally come out with 5pins cable ,the use of 24V/36V/48V battery voltage supply.5pins cable are:

- 1: the power of the positive;
- 2: ground;
- 3: weak lock;
- 4: communications R;
- 5: communications T;

CDC1 display can more functions with 8pins if you want, such as supply the power to the Front light, throttle signal to the controller.

Cloud drive intelligent system wiring diagram : CDC1+ CDBL\_C+ CDD4+ CDV12L\_B.As shown in the Figure 8 :

# Display

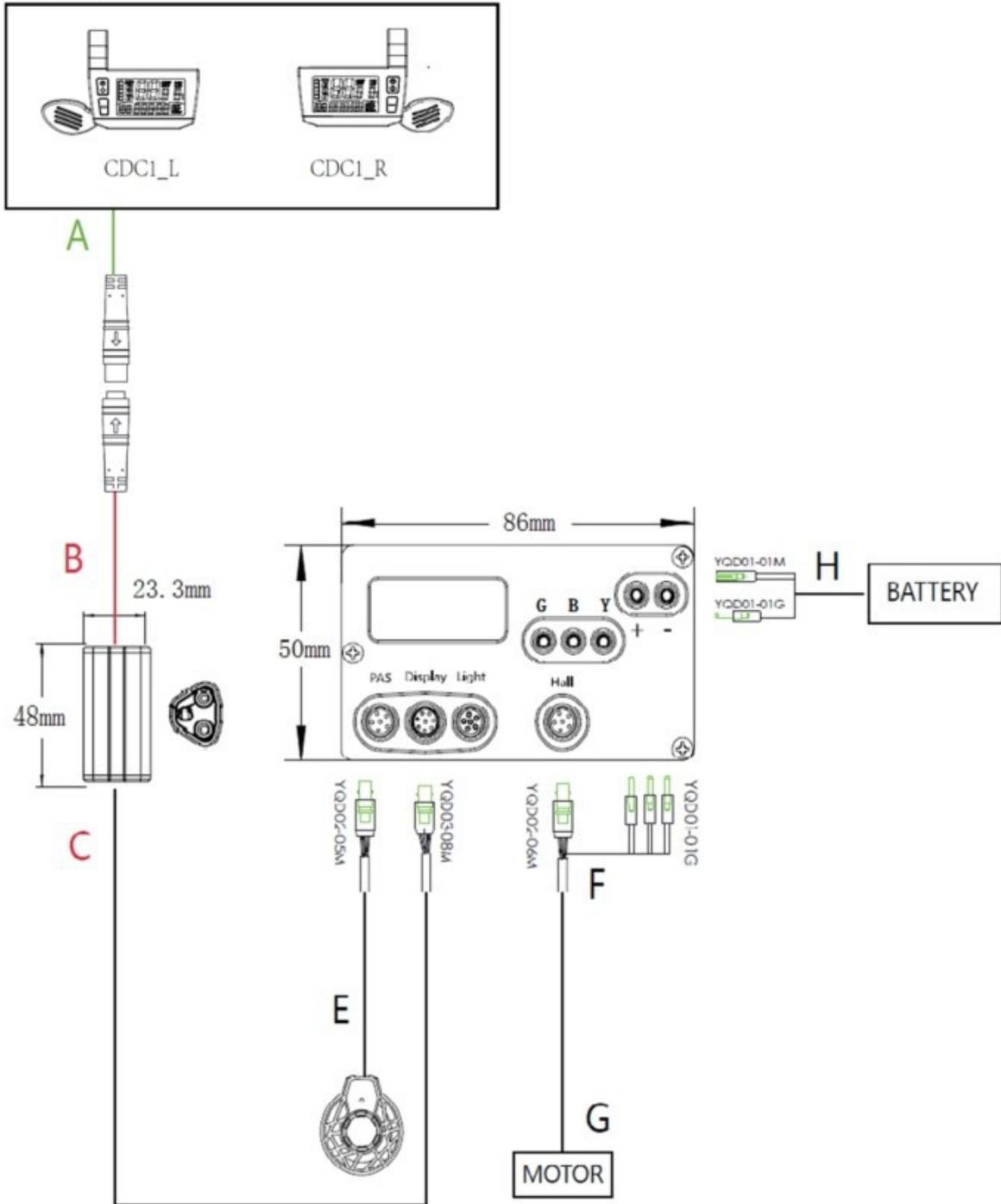


Figure 8

## 4. Installation instruction

During bike assembling the assembler should follow the following steps:

- a) Install the motor inside the wheel using the motor as Wheel Hub. The motor has holes matching with normal 14G spokes for lacing.
- b) Organize cables according with frame cable routing availability taking care of cutting edges. If cables pass trough the frame entering the down tube close to Head tube and going out close to BB the passing holes should be large enough to accept the connectors.
- c) Install display on handlebar taking care to have buttons to be operated close enough to the rider hand so that the system can be operated without taking hands off the handlebar. Recommended distance of the commands from the grip is less than 6cm.
- d) Install PAS sensor on the left side of the Bottom Bracket with the
- e) Install controller inside the controller box usually located in front of the battery and Plug the cable arriving from display, pass sensor, motor and battery in. Pay attention to plug the connectors firmly and in the right direction as showed by arrow on the connectors themselves. If the connector will be forced in a different position PINS inside will be broken and the system failed.

To avoid any short cut during installation install battery only after other electrical components installation.

Be sure that all electrical components are firmly connected with the frame according to frame design.

All electrical components should be protected (according to product possibilities) from accidental impacts and weather injuries.

500 Display, Cables and 500 brake sensor, 500 sensor have to be considered IP65. Motor and battery as well. Controller 500 is IP54 only. So it has to be installed internally.

## 5. Q&A

Q : Why the display is not able to start up ?

A : Checking the connector that between display and controller. Q :  
How to deal with the error code?

A : Find the corresponding problem based on the displayed error code. If it cannot be resolved, you can go to the electric vehicle repair points to repair it.

## 6. Quality assurance and Warranty scope

### Warranty

Any malfunction caused by quality defects of the product during the normal use will be covered by limited warranty of the company within warranty period.

The warranty period is 24 months since the componets are delivered from the factory.

### Other items

The following items is not covered by warranty

- ( 1 ) Disassembly or modification without authorization.
- ( 2 ) ) Malfunction or damage caused by the misuse or improper installation and debugging by the users or the third party.
- ( 3 ) Shell scratch or breakage after leaving the factory.
- ( 4 ) Wiring scratch or breakage.
- ( 5 ) Malfunction or damage caused by the force majored (fire, earthquake etc. ) or natural disasters (lightening etc.)
- ( 6 ) Expired warranty .

## 6. Error code definition table

error code	definition
2	Over current protection is checked by the controller. Check whether the connectors of three-phase power cable and the hall signal connectors are badly connected . There is something wrong with the controller or motor if the problem is still present after reconnect the connectors.
3	The controller can't properly drive the motor : Check whether the connectors of three-phase power cable and the hall signal and the power supply connectors are badly connected .Or there is not enough power to drive the system than 2S, such as climbing or the wheel is stuck . There is something wrong with the controller or motor if the problem is still present after reconnect the connectors.
4	Battery voltage is too low to protect, under voltage protection.
5	After the system power on , check whether the brake is working properly.If the brake signal is less than 0.75V for very a long time, there is something wrong with the brake.
6	Check whether the hall commutation signal of the motor is faulty or not. Check the connector of the motor's hall signal cable is disconnected or not. The hall of motor maybe broken if the problem is still present after reconnect the connectors.
7	After the system power on, check whether the throttle is out of control or the throttle signal is less than 0.75V ,or customer turns the throttle before the system works, the error can be solved after throttle is reset.
8	The controller is broken.
A/10	The display and the controller have communication problems , the yellow cable is not connected.
D/13	The controller program is wrong or the 5V is wrong, check whether the brake signal short with 5V.

F/15	The display and the controller have communication problems, the green cable is not connected, or the communication protocol doesn't match.
<p>If there is something wrong with the 5 cables between the controller and display:</p> <p>(1) If the display can't power on and there is no display on the screen, the reasons may be: the power supply connector between controller and battery is not connected</p>	

