***About Mother Board Test:***

After receiving the goods, please do not hurry to link the battery, please remove the motherboard screws, carefully check the inside of the port name.

1．The distribution of small key switches and joints welding.

2．Then reassemble the motherboard. Do not connect the battery in the case of the motherboard decomposition, so that the permanent damage to the motherboard

3．The following figure is the test board to connect the battery the most simple wiring diagram.

4．Motherboard power supply voltage: 18V ~ 100V (many customers can not start the motherboard, because the motherboard input voltage is too low)

5．Start the motherboard: the need to link the line to complete, hold down the small switch for 3 seconds, until the motherboard red light, release the switch.

6．Off the motherboard:

   a, hold down the boot switch for about 5 seconds, release the switch, the motherboard display lights go out;

   b, the phone APP link TO motherboard, click APP on the button to close the motherboard.

7．If the motherboard is successful, please disconnect the power supply.  the battery balance line into the motherboard, the display can be displayed on the battery pack voltage. The battery equalizer line must be checked to see if the connection is correct, if not correct, directly connected to the motherboard, the motherboard will cause damage. )

***About Turn ON/OFF Button***:

1.If BMS close abnormally,Please short press the button.

2.If the BMS in working status, press the button above 5 seconds, the BMS will close automatically. stop work, O consumption. If short press, it will can switch into Screen display.

3.If BMS the discharge cannot open long than 5 minutes, BMS will close the power automatically, stop work, O consumption.

4.If due to 2 or 3 BMS power closed, needs to press power button 3 seconds to work.

5.If well connect the LCD screen, short press, can switch into LCD screen display.

6.Make sure the power button in insulation,otherwise it will not turn off BMS power.

***About Automatic equalization function:***

Automatic equalization function is mainly for the battery difference is too large and set a function, the user must be fully charged in the battery, or near full power when used in the case of basic full power of the battery, unplug the charger, Automatic equalization ", then the protection board will automatically equalize until the battery pack is less than 0.001 differential pressure is turned off, or the user again click the" auto-balance "to turn off, automatic equalization is turned on or off can switch the screen to the" system state " "State, if the display" auto-balance "is explained in the automatic equalization!

Total voltage over-voltage protection: the highest voltage of your battery cell \* battery strings

Total voltage under-voltage protection: the minimum voltage of your battery cell \* battery strings

***About Bluetooth:***

After BMS in normal status, please activate Bluetooth and connect it.

BMS Pass word: **1234**

**When BMS standby , the Bluetooth power will automatically close.(If Bluetooth has connected, without closing)**

***About LCD Screen:***

The newest LCD screen version is RV4.8.

1. Voltage range :24V-100V ,battery pack support directly.
2. Connect power,press start button to start.
3. Short switch button into screen display,long press switch button, close screen display.

4.Hall testing with a hole in the mother board, it can attach a wire to motor Hall wire.

***About Temperature Sensor:***

Temperature sensor are yellow thin slice which without positive and negative end, connect to temperature sensor socket. Sensor common food is GND, other foots are T1,T2,T3,T4

***Protection board calibration:***

1. Single voltage calibration: you can adjust the "system reference voltage" (default 3.0 or so), the amplitude of 0.001 to slow the transfer large, small transfer, you can change the voltage value until accurate!

2. Total pressure calibration: you can adjust the "total pressure calibration parameters" (default 3330 or so), slowly adjust the size of the value, you can change the total pressure until accurate!

3. Current calibration: You can adjust the "current sensor range", slowly adjust the size of this value, you can change the current until accurate!