BMS battery pack protection board function description

1. Protection board to support any of the battery within the string of 24 (lithium titanate, iron lithium, ternary, etc.) (supply voltage is greater than 24v)
2. Battery cell voltage detection, the voltage detection range 1-5v (less than 1v and can not be detected than 5v), high precision, the integrated error is less than 5mv, for all voltage within the range of battery pack, overshoot Protection, over-discharge protection voltage can be arbitrarily set in this range.
3. Using a controlled equalization mode, the charge can be detected by the pressure is greater than the set value after the start balance.
3. Current measurement (current measurement within 300a)
4 coulomb meter function, based on the current time integral, accurate calculation of battery capacity, charge power and so on.
5. Support Android phone set different battery parameters, view the voltage and current information
6. Support the screen display battery pack status, parameters, each section of the single voltage
7. Based on motor Hall pulse detection speed, and can calculate the remaining life mileage
8. Independent 6-channel temperature measurement, you can set the temperature over-temperature protection value
9. Independent watchdog real-time monitoring program, never crash!

Note: protection board wiring and sensitive to fragile, every step of the wiring are carefully checked, not sloppy, each step must be well insulated to prevent any short-circuit possible! (There are a lot of careless customers short-circuit burned board) The battery's temperature sensor needs to be placed inside the battery pack so that the battery pack temperature can be better tested. At the same time, please do the temperature sensor insulation. . . Otherwise, any consequences caused by the customer at their own expense

Motherboard test

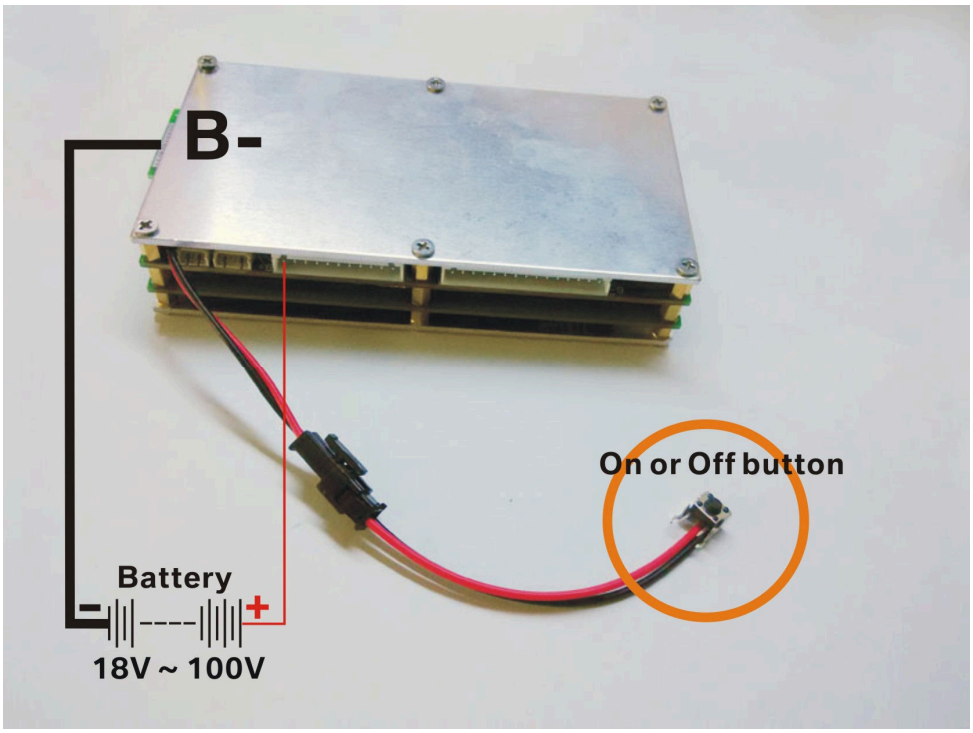
After receiving the goods, please do not hurry to link the battery, please remove the motherboard screws, carefully check the inside of the port name.

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:

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

   2, the phone APP link 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.)

The following picture is the simplest motherboard connection.



On or Off button description

1. Protection board if it is abnormal power off caused by the shutdown, just a short press to start BMS normal work;

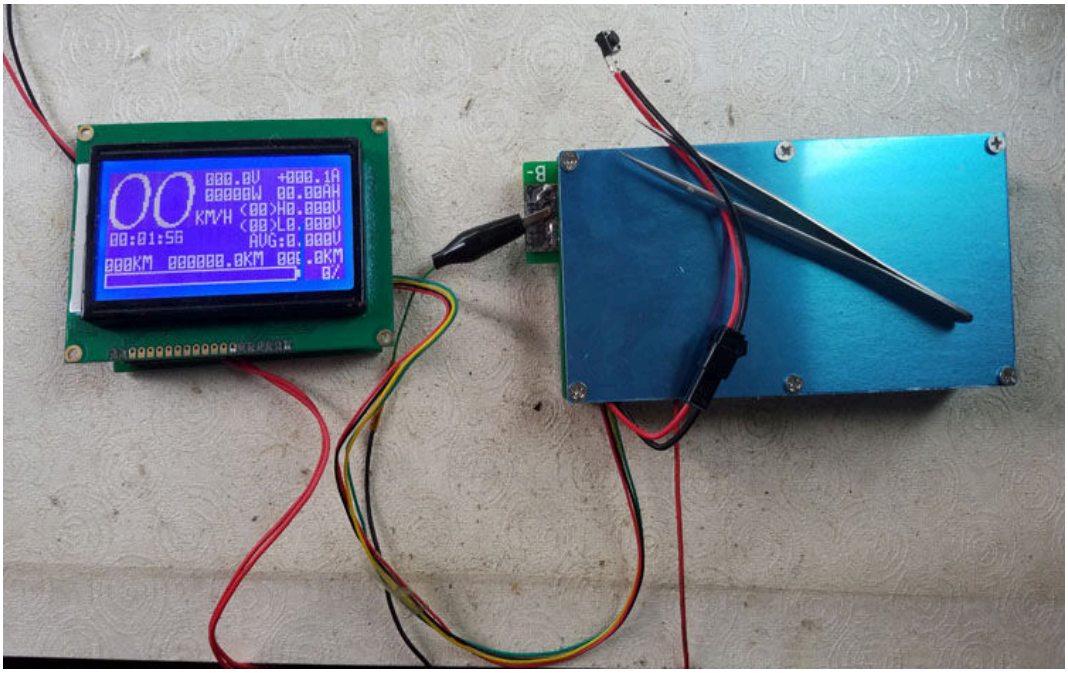
2. Protection board normal work, long press this button for more than 5 seconds, then release the button, the protection board will automatically turn off the power, stop working, no power consumption. Boot case, short press can be achieved to switch the protective board matching screen display.

3. Protection board If the discharge tube is not open more than 5 minutes, the protection board will automatically turn off the total power, stop working, zero power consumption.

4. If the BMS power is turned off for the purposes of Article 2 and Article 3, you need to press the power button for 3 seconds to make the protection board work normally.

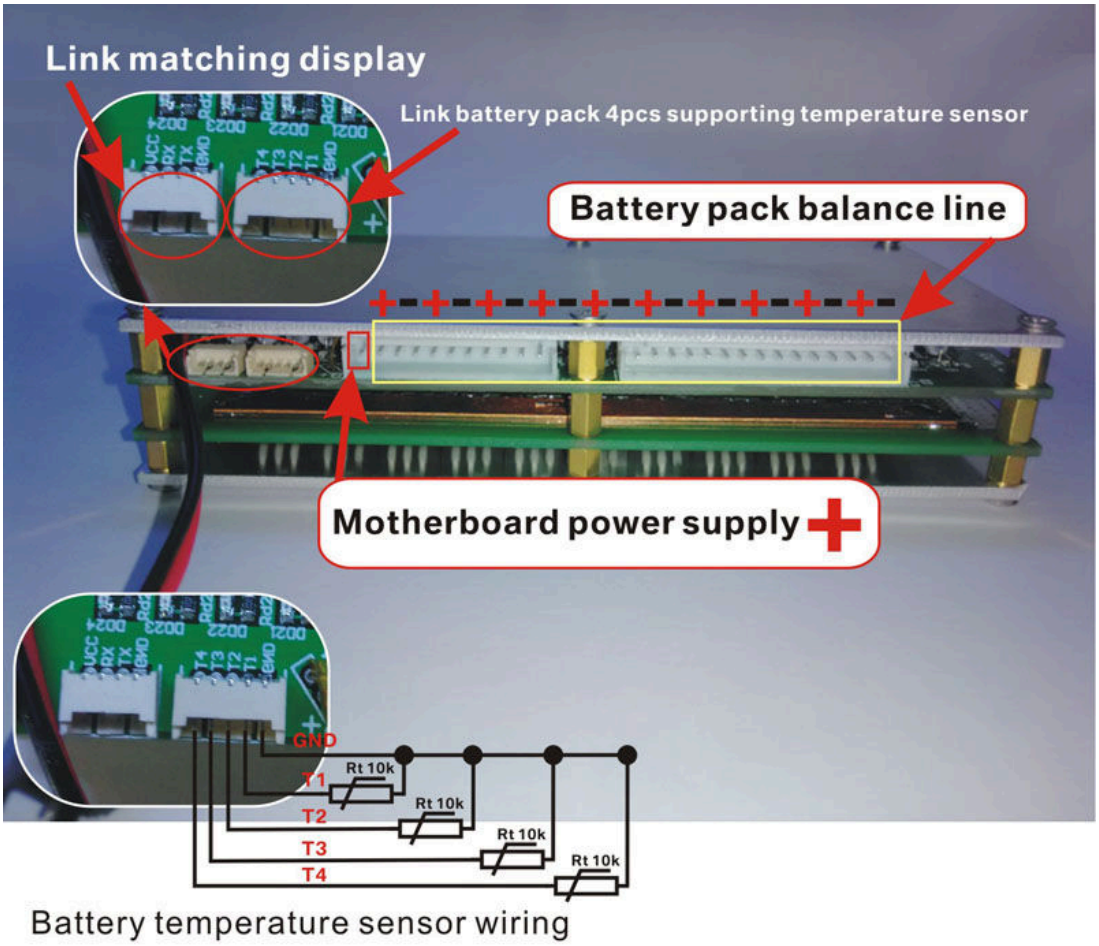
5. If the matching display is connected, press this button briefly to switch the screen display.

6. Power button to ensure good insulation, otherwise, may not be able to automatically turn off the BMS power supply.

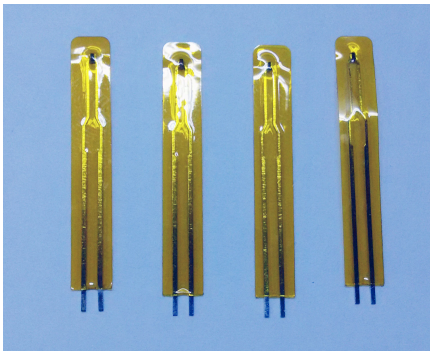


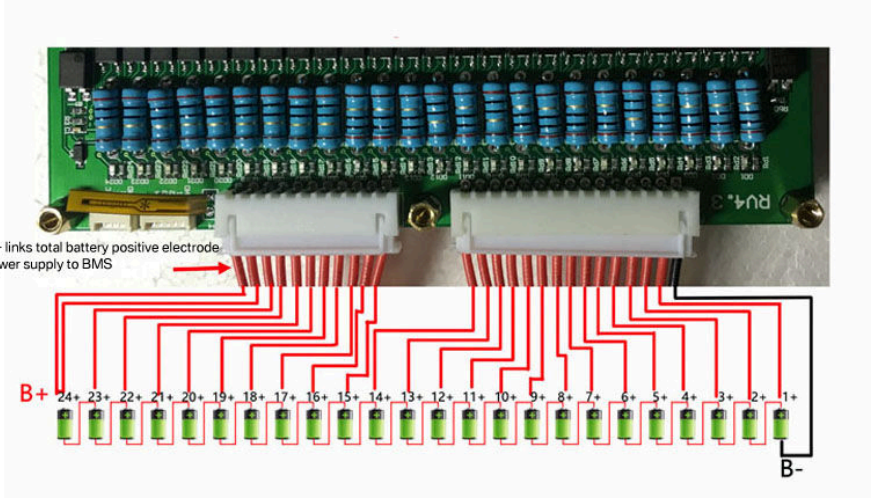
Wiring instructions:

Temperature sensor and balanced wiring

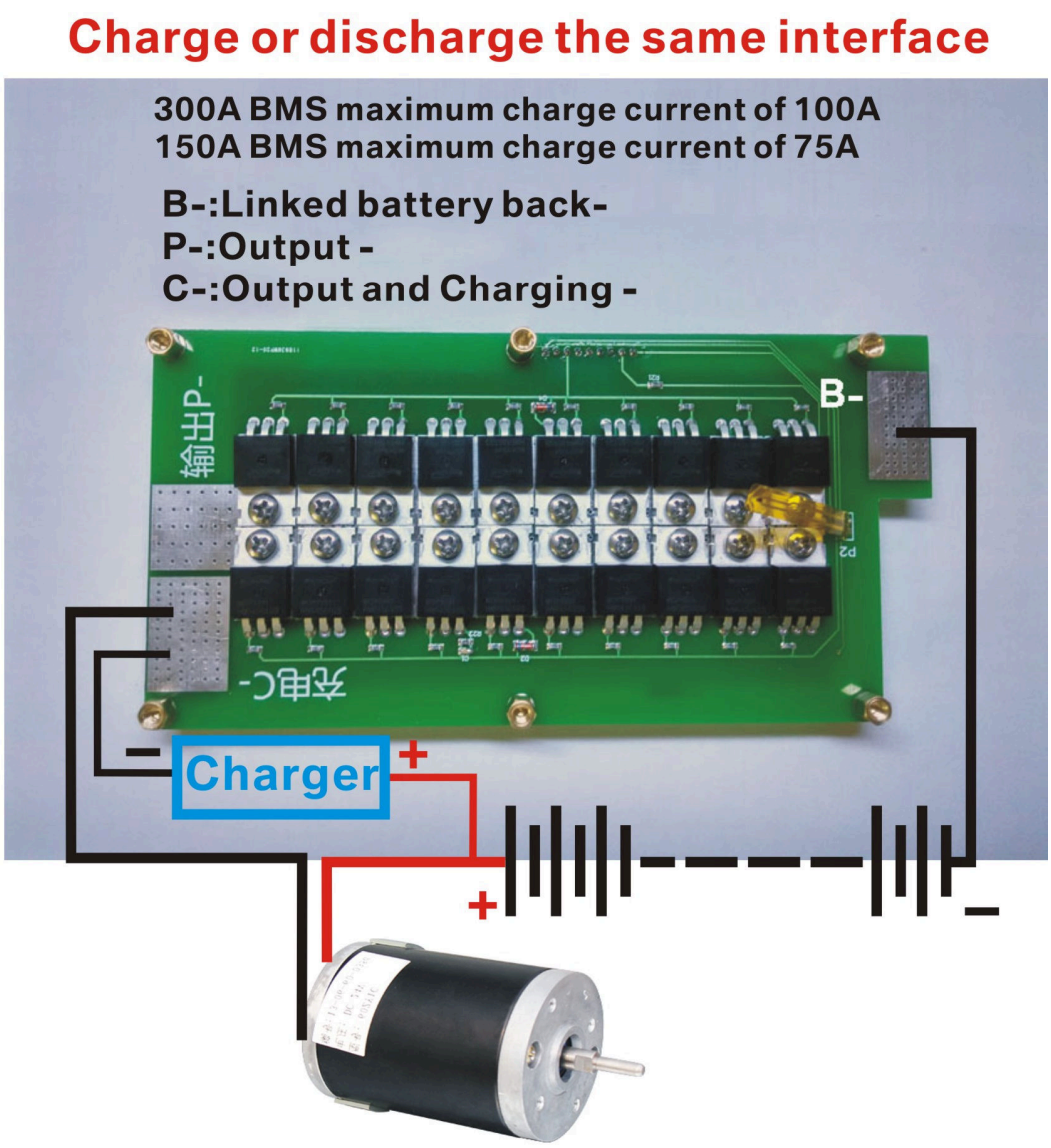


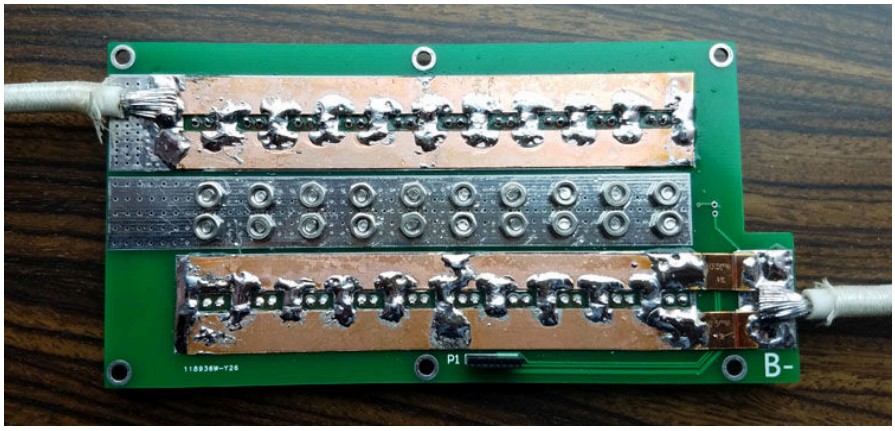
Battery temperature sensor wiring



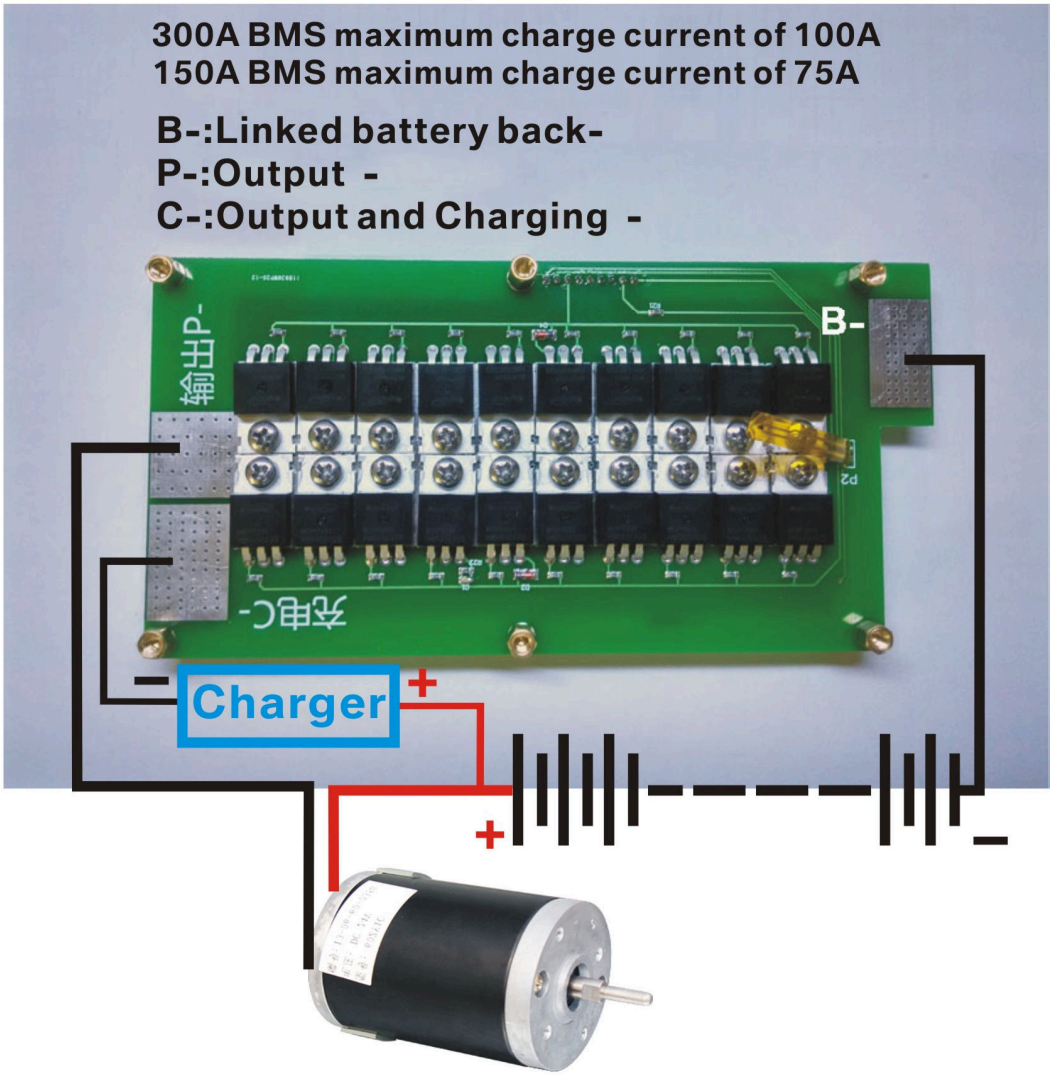


Board output and charging wiring



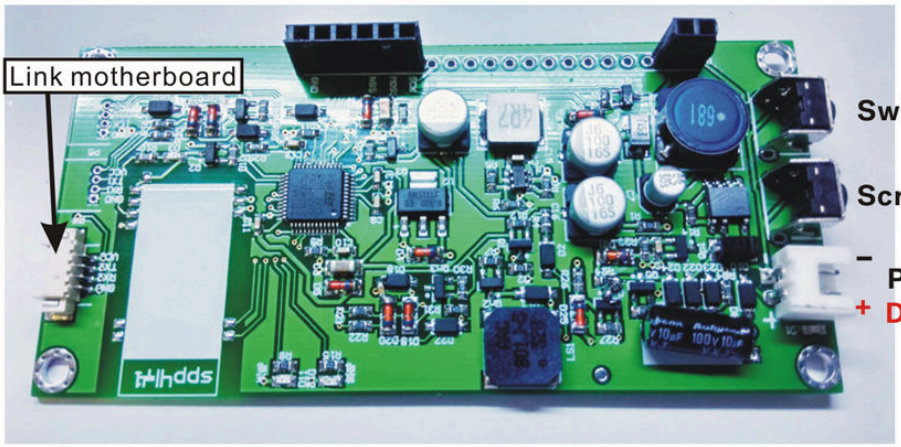


Charge or discharge is not the same interface



Display description RV4.8

Display description RV4.8

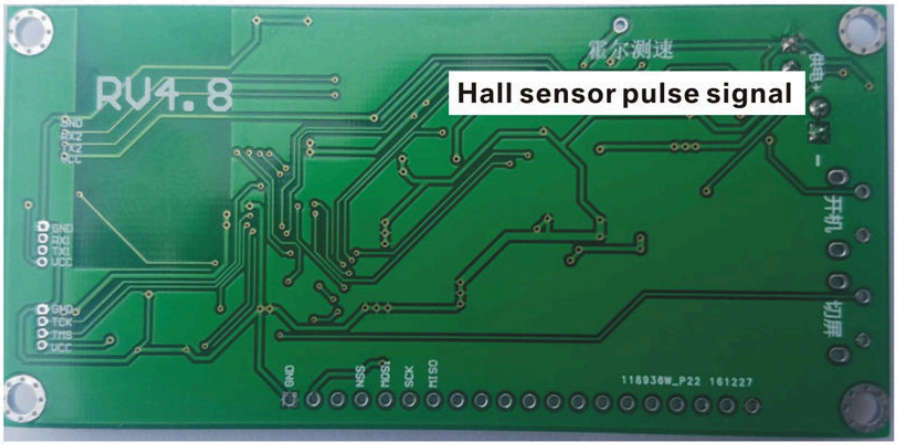


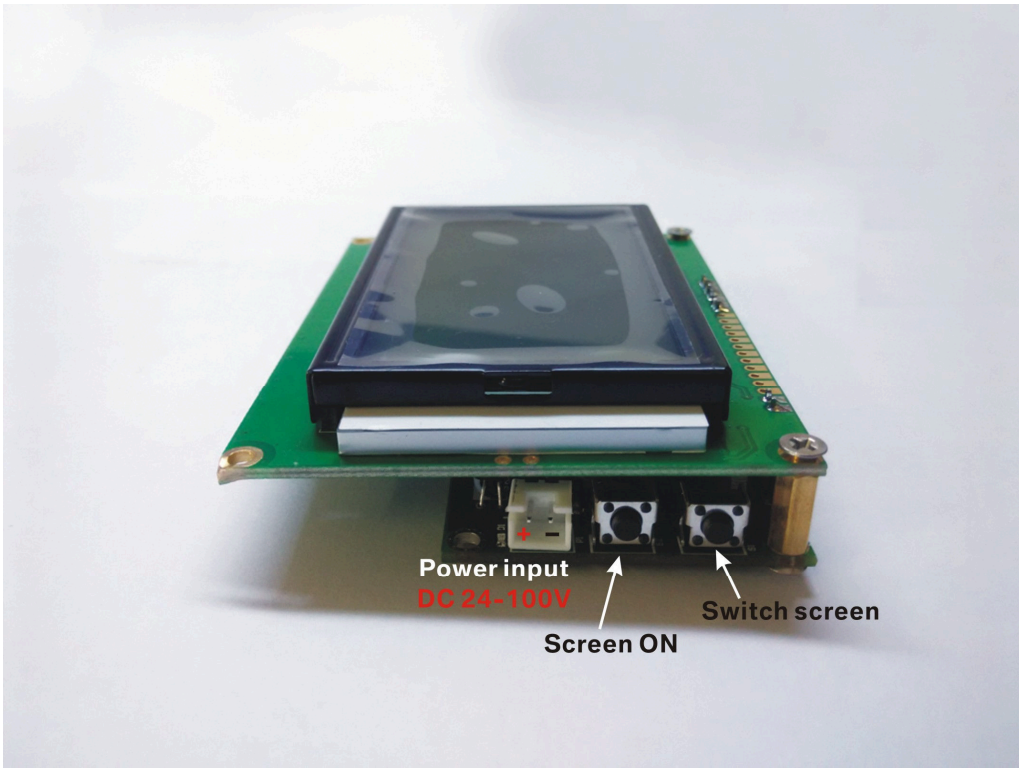
Screen ON

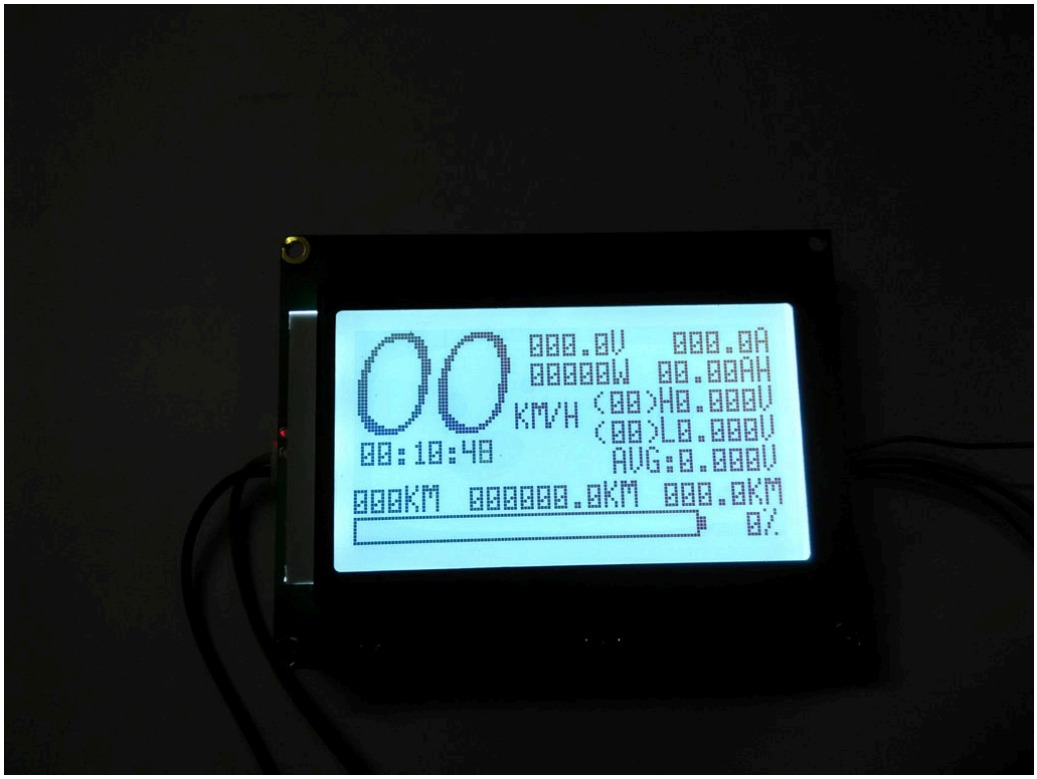
Long press the button to boot

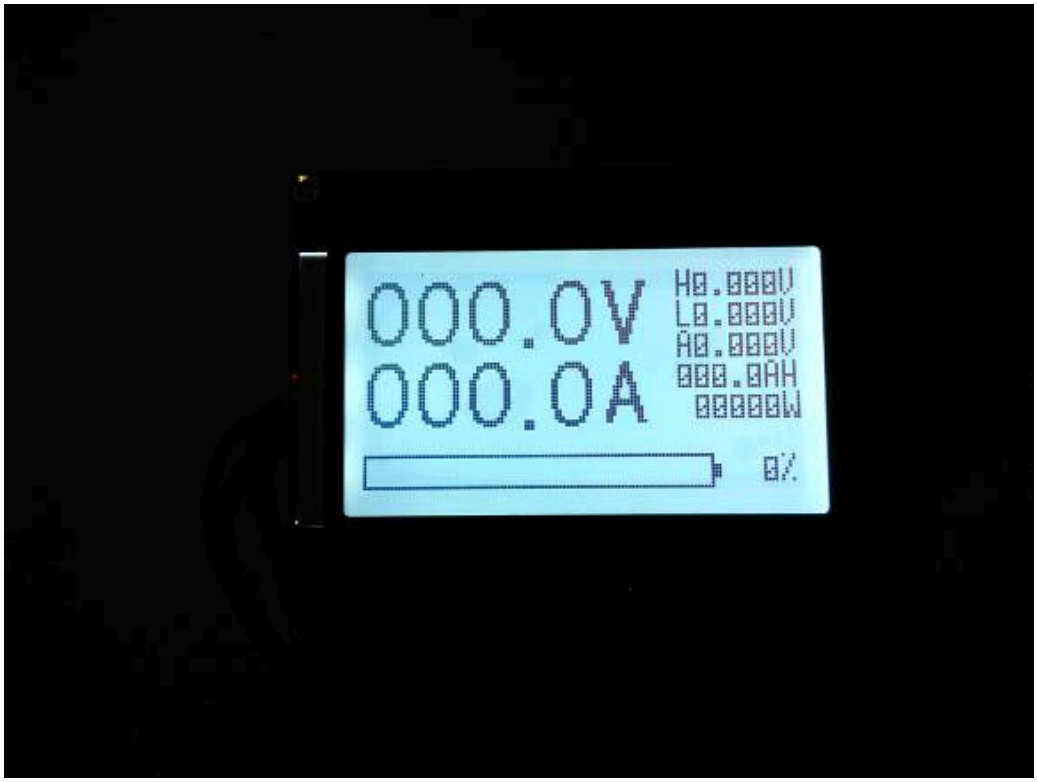
Switch screen

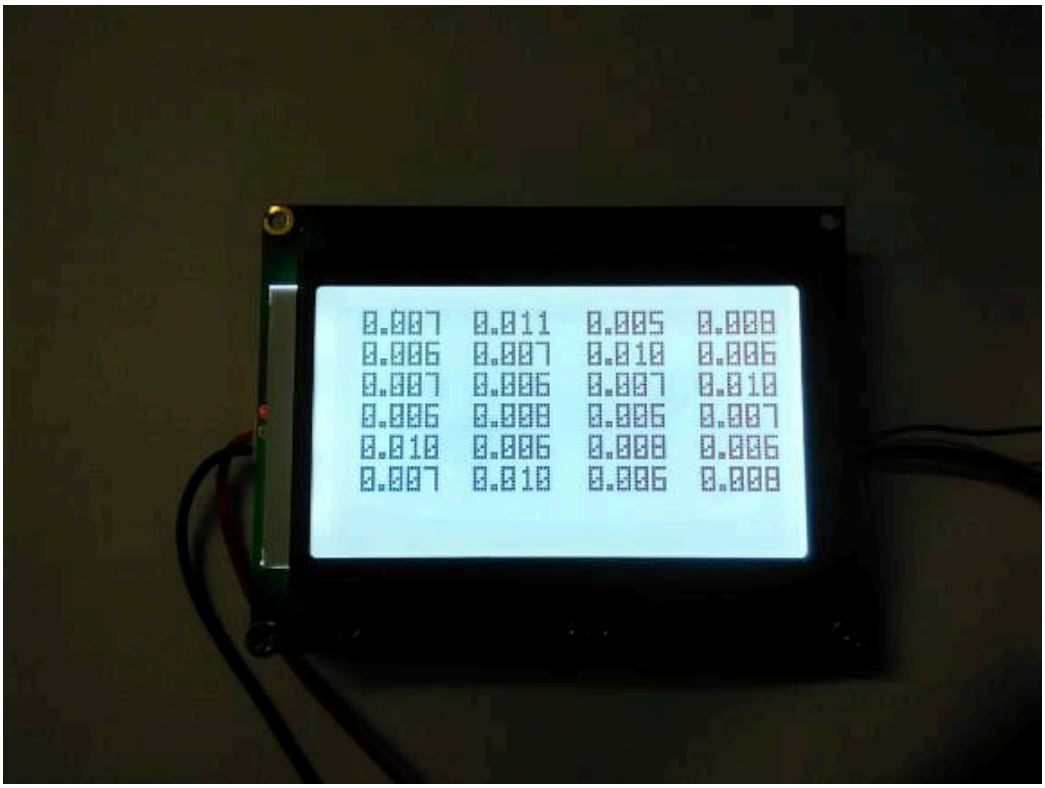
Short press "Switch screen" button to switch the screen display.
Long press "Switch screen" to close the screen.

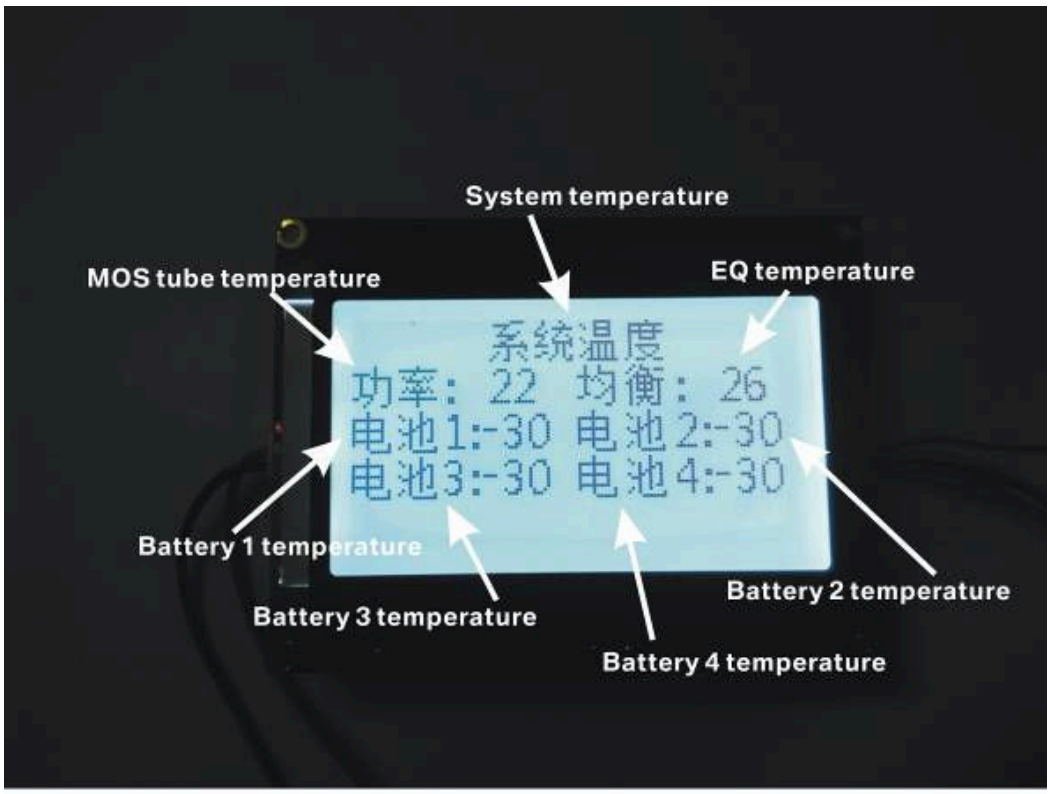



Power input
DC 24-100V
Screen ON
Switch screen


00
000.0V 000.0A
00000W 00.00AH
KM/H (00)H0.000V
(00)L0.000V
00:10:48 AVG:0.000V
000KM 000000.0KM 000.0KM
0%


000.0V
000.0A
H0.000V
L0.000V
A0.000V
000.0AH
00000W
0%


0.007 0.011 0.005 0.008
0.006 0.007 0.010 0.006
0.007 0.006 0.007 0.010
0.006 0.008 0.006 0.007
0.010 0.006 0.008 0.006
0.007 0.010 0.006 0.008

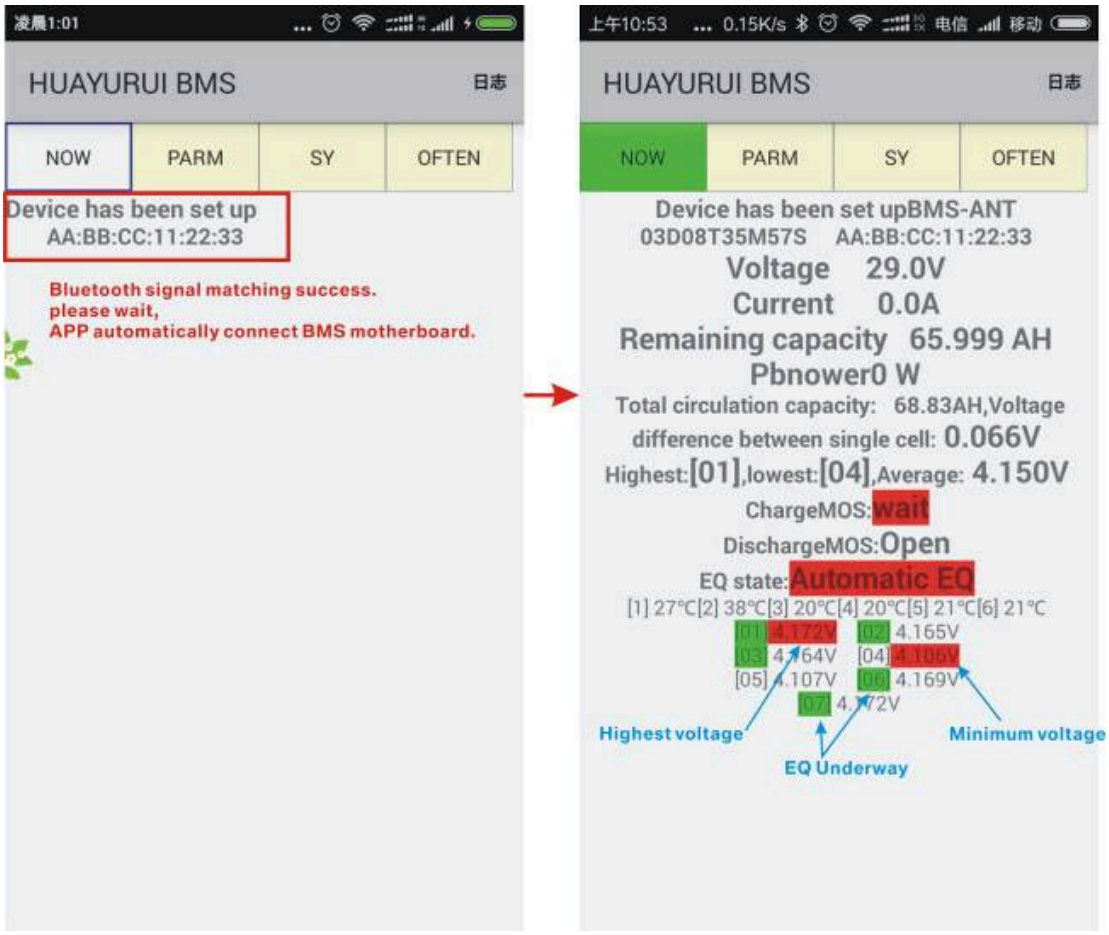

System temperature
MOS tube temperature
EQ temperature
系统温度
功率: 22 均衡: 26
电池1:-30 电池2:-30
电池3:-30 电池4:-30
Battery 1 temperature
Battery 2 temperature
Battery 3 temperature
Battery 4 temperature


system log
系统日志

APP link:

The APP currently only supports Android 2.3 above system, does not support IOS system.

Before using APP, please open your phone Bluetooth function, search BMS motherboard Bluetooth signal (if you can not display BMS signal, please BMS motherboard restart, search again), search BMS motherboard signal, click on the signal to match, paired password: 1234.



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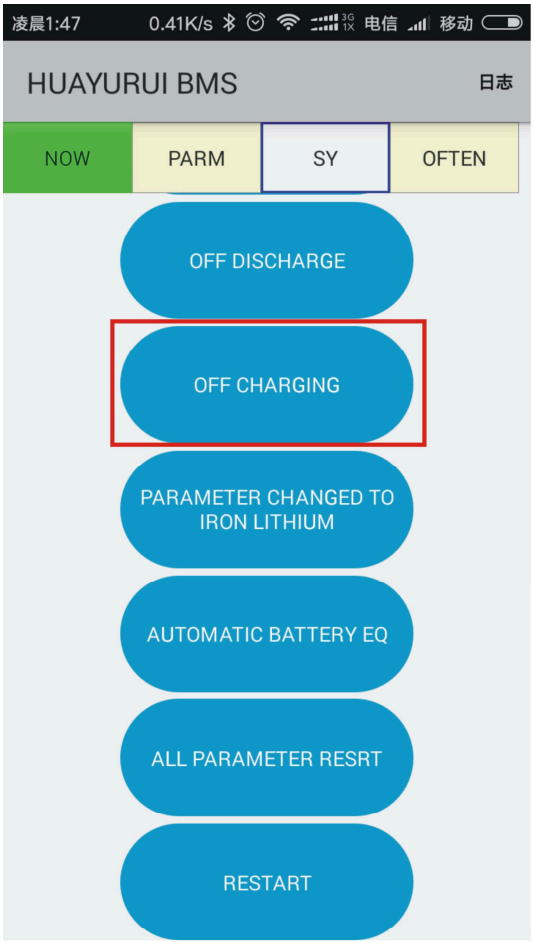
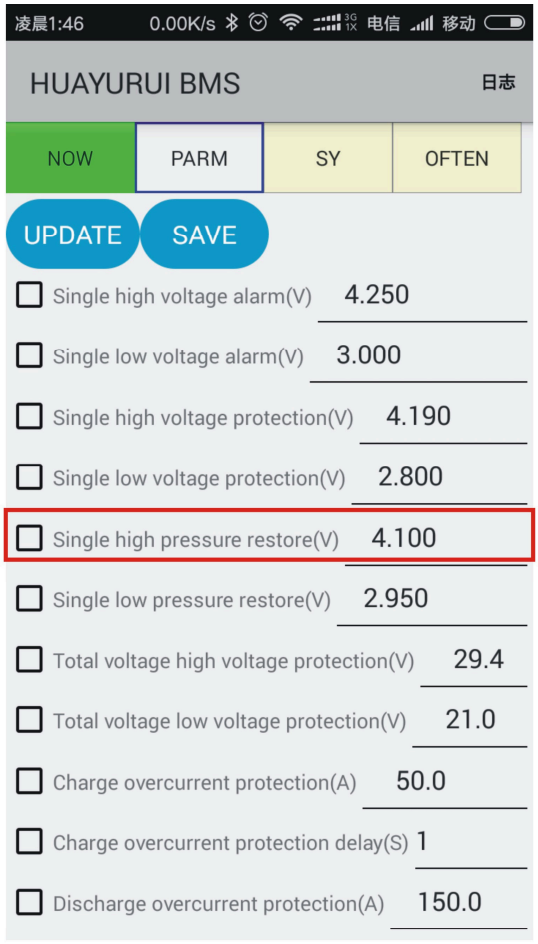
APP Common problem



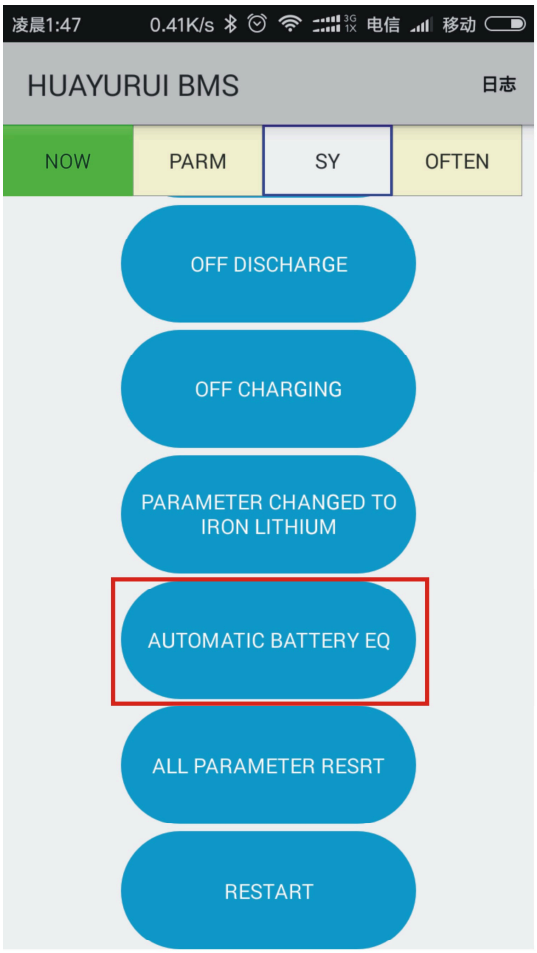


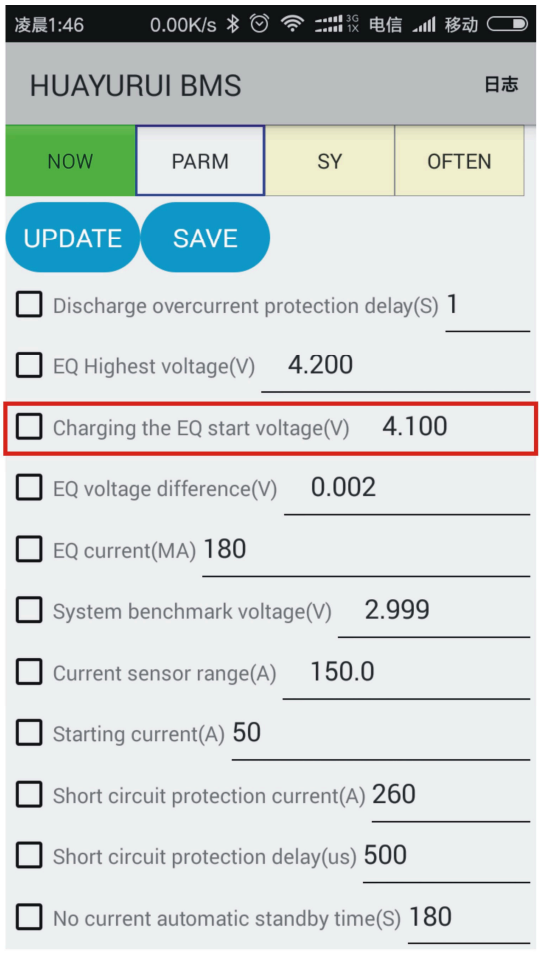
BMS can not charge:
When the battery inside one of the single cell voltage is higher than the set value, APP can not click to open the charging function.
Please discharge the battery pack, when the battery voltage is lower than the set value when you can open the charging function.
For example: the above figure set value of 4.1V.

BMS can not charge:
When the battery inside one of the single cell voltage is higher than the set value, APP can not click to open the charging function.Please discharge the battery pack, when the battery voltage is lower than the set value when you

can open the charging function.

For example: the above figure set value of 4.1V.





BMS can not automatically EQ:

When the battery inside one of the single cell voltage is lower than the set value, APP can not click to open the automatic equalization function.

Please charge the battery pack, When the unit battery voltage is higher than the set value, you can turn on the automatic equalization function.

For example: the above figure set value of 4.1V.

BMS can not automatically EQ:

When the battery inside one of the single cell voltage is lower than the set value, APP can not click to open the automatic equalization function.Please charge the battery pack, When the unit battery voltage is higher than the set value, you can turn on the automatic equalization function.

For example: the above figure set value of 4.1V.