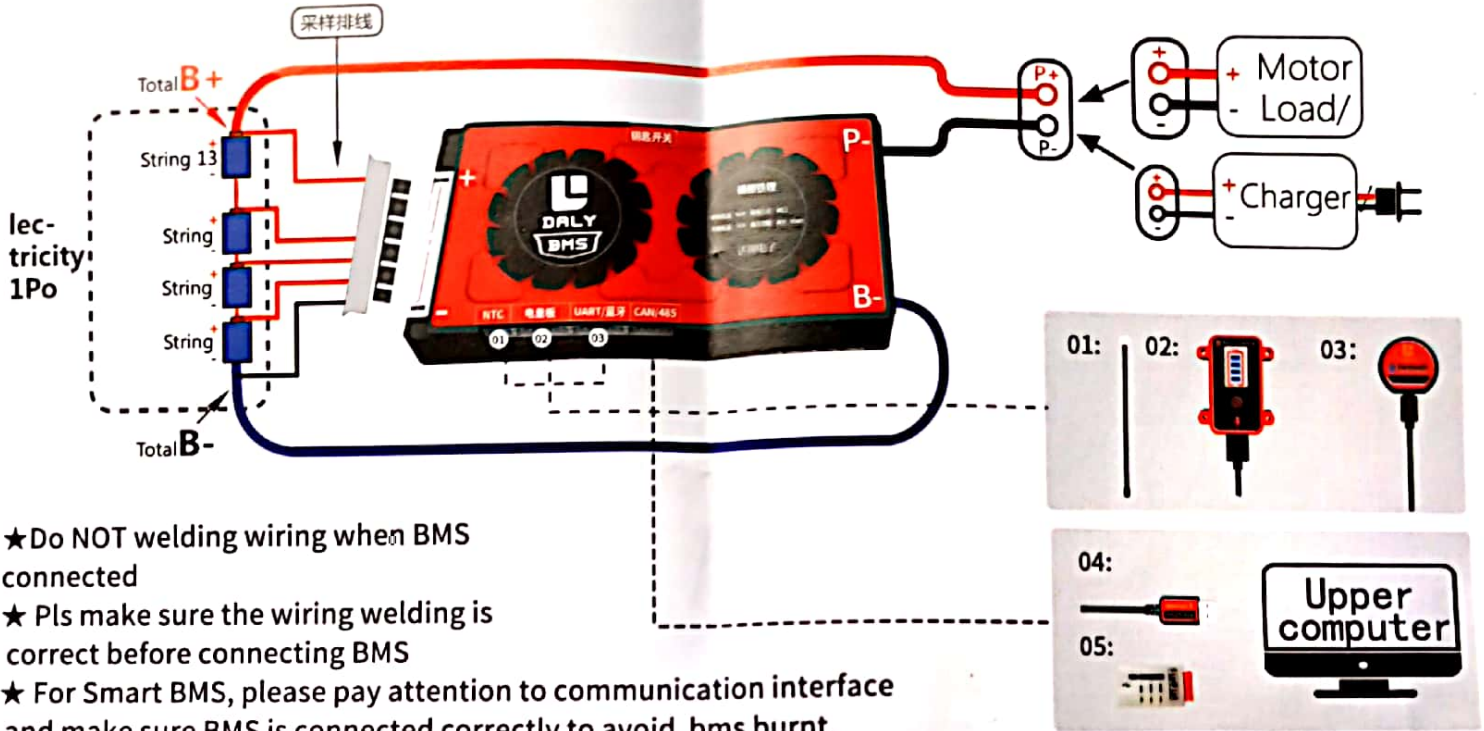


Diagram of connection of lithium BMS

(13series 40 A BMS as)



- ★ Do NOT welding wiring when BMS connected
- ★ Pls make sure the wiring welding is correct before connecting BMS
- ★ For Smart BMS, please pay attention to communication interface and make sure BMS is connected correctly to avoid bms burnt.

Smart BMS Operation Attention:

I. Smart bms connections sequence

The wiring sequence is the same as that of the hardware bms . After that the wiring is welded correctly, and the accessories (such as temperature control stand / power board / Bluetooth GPS screen / custom communication interface) are installed on the BMS. Then insert the wiring into BMS connector.

II. Requirement for first use of the Smart BMS

- Method 1: Make the battery board is activated by clicking an activation button on the BMS.
- Method 2: charging activation.

III. Parameter modification the number of strings and protection parameters (lifepo4 , li-ion, LTO) of the BMS have default values when the BMS shipped out from factory. but the capacity of the battery pack needs to be set according to the actual capacity AH of the battery pack. if the capacity AH is not set correctly, SOC information will not be accurate. Other protection parameters can also be set according to the customer's requirement but it is not recommended to modify the parameters randomly.

Note: wiring method refers to the back page of the hardware BMS wiring process, Smart BMS APP modification parameters original password :123456



Bluetooth APP Download



Bluetooth APP Download (tMS)

Bluetooth Android system APP download path:
<https://appgallery1.huawei.com/#/app/C102450269>

Bluetooth IOS system APP download link:
<https://apps.apple.com/cn/app/smart-bms/id1519968339?l=en>



Bluetooth IOS system



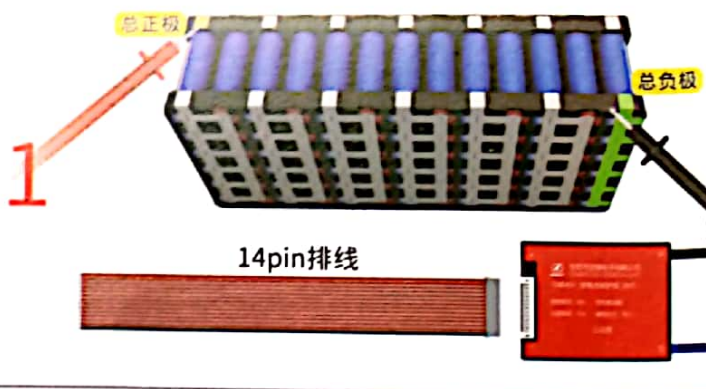
APP download link:

Smart BMS PC software download link:
<https://www.dalyelec.cn/daly/PCdalyBMS.zip>
 Zhongying PC Software download link:
<https://dalyelec.cn/daly/zytool.zip>

Note: The BMS belongs to accessories with high precision. If DIY users who weld the BMS B-/P-line , Daly will not accept return and customer will pay the repair cost for damaged part repair. Pls read operation step of back page carefully before the BMS connection.. there is instruction to detect the BMS status (GOOD or NG) before welding BMS B-/P- line and make sure the BMS is in good condition before wiring welding.

Wiring instructions

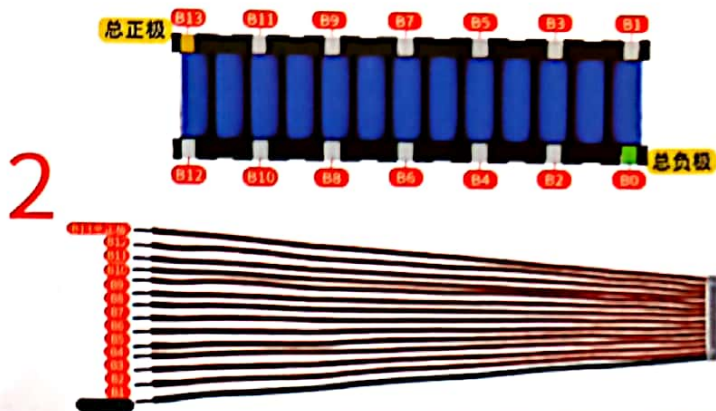
(Take 13s BMS wiring as an example)



Step 1: Preparation for wiring

- Understand the structure of our battery pack and find the total negative and total positive poles. Total negative pole: for the first string, it is not connected to any other positive pole. Total positive pole: is the last string, it is not connected to any other negative pole.
- Find the B- pole of the BMS, and the P- pole. (B- the total negative electrode of the electrode-connected battery pack, P- the negative electrode of the electrode-connected output)

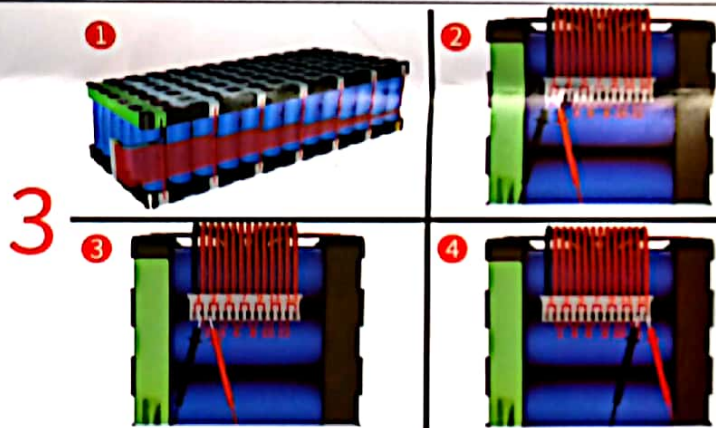
Note: the voltage displayed by the multimeter is positive when the red meter pen is placed on the positive pole, and the voltage displayed by the multimeter is negative if the red meter pen is placed on the negative pole.



Step 2: Welding wiring

- Determine the number of batteries, starting from the total pole of the battery pack-the first string, and so on, the total positive pole -the last string.
- The first black wire is welded to the total negative pole, the second red line is connected to the first battery positive pole, the third line is connected to the second battery positive pole, and so on, until the last red wire is welded to the total positive pole.
- Welding must be in accordance with the required sequence, can not jump, this is the most critical step to avoid the bms damage.

Note: Do not connect BMS when you weld wiring



Step 3: Check after wiring

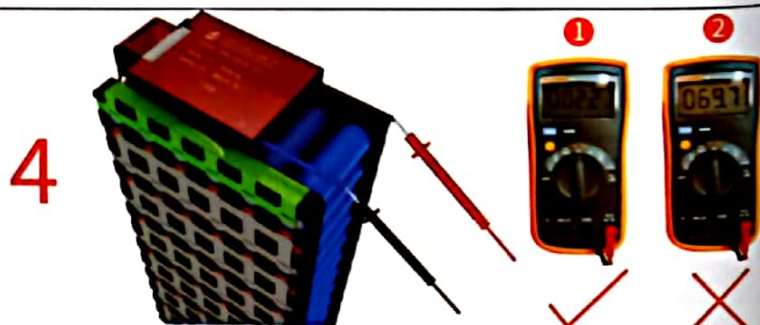
- After welding, visual inspection to see if there is cross welding or poor welding.

- The multimeter is adjusted to the DC voltage setting to test the voltage between the two rows of corresponding series. (If battery show voltage value of two or more series added, which means the BMS was wrong connection)

Through the line port detection, it will show

The voltage of the first string is 3.61 V, the voltage of the second string is V 3.61
The voltage of the third string is 3.61 V, the voltage of the fourth string is V 3.61
The voltage of the fifth string is 3.61 V, the voltage of the sixth string is V 3.61
The voltage of the 7th th string is the voltage of 13th string is V 3.61
Based on this information, it is concluded that the wiring is right, the battery consistency is less than 0.05 V and it's good for next operation.

Note: To complete wiring sequence checking, it's okay to use a lithium-specific light detection BMS from Daly or you can use a wiring detector or other auxiliary equipment.



Step4 : Make sure the circuit is No Short

- After confirmation, the BMS can be connected.

- If the multimeter is adjusted to the resistance setting, the resistance between the wires of the BMS is detected between 0.0 Q-5Q to indicate the conduction or to the buzzer setting to measure the resistance. At this moment, if bms is conductive, the buzzer will ring for somelong, then and the next operation can be carried out, if BMS is non conductive, Pls contact Daly customer service, instead of welding.

Note: if the operation result is similar to figure 2, please stop welding operation and contact Daly customer Service for help.



Step 5: Measure the output voltage

- weld BMS B- blue wire to the total negative pole of the battery.

- Measure the total voltage of the battery pack, and check if the total voltage through the BMS P- line to the total positive pole of the battery pack is equal. If yes, it means BMS output voltage is normal.

Note: After Lithium Battery PACK assembly with BMS, Pls perform overcharge test first, if testing result

is successfully, then install the battery pack into the different application! !