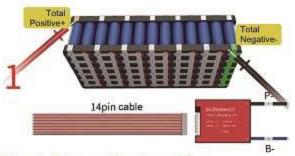
# Wiring Instructions

Take 13s BMS wiring as an example



### Step 1: Preparation for wiring

1-1: Figure out the structure of the battery pack and find the total negative pole and total positive pole.

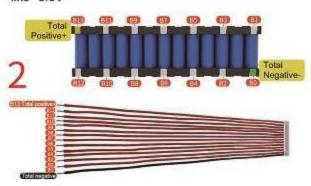
Total negative pole: for the first string. Don't connect to any other positive pole.

Total positive pole: for the last string. Don't connect to any other negative pole.

1-2: Find the B- pole of the BMS, and the P-pole. (B- the total negative pole of the battery pack)

The negative pole of charger or the load.

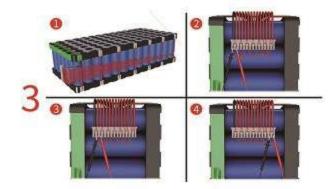
Note: the red probe of the multimeter touch positive + pole, the black probe should touch the negative pole of battery. In this case the voltage will be shown normally. If doing oppositely the value will show like "-3.3V"



#### Step 2: Welding wiring

- 2-1 Mark the number of batteries, starting from total negative pole of the battery pack B0, then B1....B13.
- 2-2 The first black wire is welded to the total negative pole ,then the follow red wires are B1, B2 ...till B13. Each wire should connected to positive+pole of string of batteries.
- 2-3 You need to connect the wires in terms of the sequence as above, no jump, no opposite. Or it might be risky to damage the BMS.

Note: Don't connect BMS when you weld the wires



### Step3: Check after wiring

- 3-1: Double check if all wires are firmly connected. Make sure no poor welding or cross welding.
- 3-2: Set the multi meter to "DC" volt. Test the volt between each two pins nearby, each two pin voltage should be approximately equal to voltage of the battery cell.

Suppose the value is different, it means the wiring is not correct.



### Step 4: Be aware of short circuit.

- 4-1:After the wires are connected properly, you can plug the BMS in.
- 4-2: Measure the resistance. If the data is between  $0.0\Omega\sim5\Omega$ , this is normal. The BMS will send alarm for some seconds. Above  $5\Omega$ , the wiring is incorrect.

Note: If the resistance is above  $5\Omega$ , please stop welding, re-check the wiring steps above and find out where is wrong. If not solved, please contact Deligreen customer service.



#### Step5:Measure the output voltage

- 5-1:Weld BMS B- blue wire to the total negative pole of the battery pack.
- 5-2:Measure the total volt of the battery pack, and check if the total volt through the BMS P- wire to the total positive pole of the pack is equal or not.If it is equal, it means BMS output volt is normal.

Note:After finishing the assembling the pack with BMS, please do over charge test first. If the test result is fine, congratulations! You made it! you can use the battery pack for your application.

- ★ Don't weld wiring when BMS connected
- ★ Pls make sure the wiring welding is correct before plug in the main board of the BMS
- ★ For smart BMS,please pay attention to communication interface and make sure all the wiring is correct.

## Attention of smart BMS Operation:

- First, Smart BMS connection sequence
- 1-1, The wiring sequence is the same as that of the non-smart version.
- 1-2, Connect the accessories (temperature control/power board/Bluetooth GPS Screen/Custom communication interface)
- Second, activate the BMS for the first time of usage, there are two ways:

Long press the led light board; or charging the batteries.

Third:Parameter modification

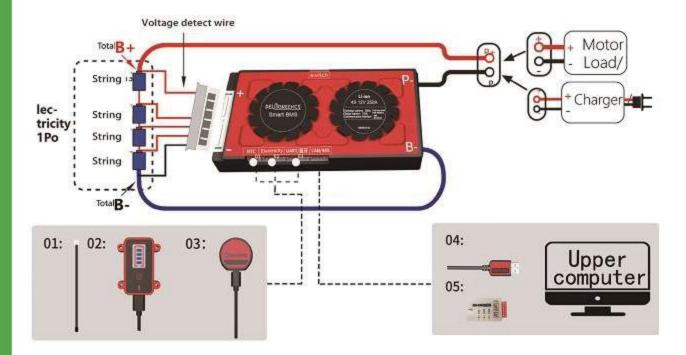
All parameters are set in the factory.But the real capacity of the battery will change as time passing by.If the capacity is not accurate, SOC will be inaccurate either.

You can adjust the parameter cautiously rather than randomly.



# Diagram of connection of lithium BMS

(Take 4S BMS wiring as an example)



- Note: Wiring method refers to the back page of the non-smart BMS wiring ,smart BMS APP modification parameters original password:123456
- Note: The BMS belongs to accessories with high precision. If DIY lovers who weld the BMS B-/P-wire, Deligreen won't accept return.
- Contact us: info@deligreenpower.com www.lithium-solarbattery.com



Bluetooth APP Andriod



Bluetooth APP IOS