



Mini-red Smart BMS Instruction Manual



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H/K/M/S (软件/Smart)

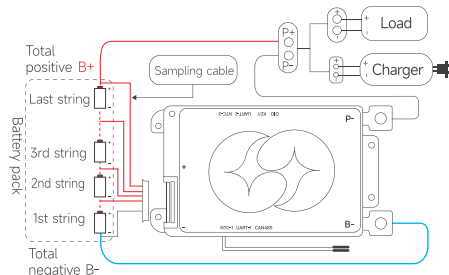
东莞市达锂电子有限公司
Dongguan DALY Electronics Co., Ltd.

www.dalybms.com

I Product Catalog

Product photo				
Model	H	K	M	S
Strings	3-16S	3-24S	3-24S	3-24S
Current	40A/60A	40A/60A/100A	150A	200A
				250A/300A/400A/500A

II Wiring Instructions



Note: This wiring diagram takes the K series BMS as an example.

1. Wiring sequence of battery

Attention:

- Wires of different BMS suppliers are different, please make sure to use the matching wire; different BMS suppliers' B- and P- cables have different colors, please pay attention to B- and P- logo;
- When welding sampling wires, be sure not to plug the wires to the BMS;

- 1.1 The sampling wires starts from the thin black wire to the total negative electrode B-, the second wire (red wire) connects the positive electrode of the first string of battery, followed by the positive electrode of each string of battery, until finish connecting the last string of total positive electrode B+;

- 1.2 After the sampling wires are connected, do not directly plug them to the BMS. First check that the sequence is correctly connected. If the voltage of NMC(Li-ion) battery should be between 3.0-4.15V; the voltage of LFP(LiFePO4) battery should be between 2.5-3.6V; the voltage of LTO(Lithium-titanate battery) should be between 1.8-2.8V. Please make sure that the voltage is correct before the next operation;

- 1.3 Plug the NTC (ensure that the temperature sensor is inserted at the NTC port);

- 1.4 Connect B- on the BMS to the total negative electrode of the battery (the length of the B-wire should not exceed 40cm);

- 1.5 Insert the sampling wire into the BMS;

- 1.6 Measure whether the battery voltage between B+ & B- and voltage between B+ & P- are the same (The voltage of the battery pack is the same as the voltage after pass through the BMS). If voltage are the same, that means the BMS works normally. If not, please check wiring sequence according to the above.

- 1.7 Plug the optional Bluetooth module into the UART port (without Bluetooth module, the battery data cannot be viewed through mobile APP. In this way battery data can only be viewed through the PC software.

2. Connect to the load and the charger

- 2.1 Connect the P- wire to the negative of the load and to the negative of the charger.

- 2.2 Connect positive electrode wire of load power supply to the total positive electrode of the battery pack; the positive electrode wire of the charger connect to the total positive electrode of the battery pack.

III Software Download and Setup

- 3.1 APP download method:

- ① Use the browser to scan the QR code on the manual;
- ② Search for "DALYBMS" in the Apple or Google App stores;



Scan the code
to download APP



Scan the code to
download PC Mater

3.2 APP Use: Open the bluetooth and the mobile phone set information and enter the APP, the APP will search for the bluetooth SN, check the SN on the BMS without error, and then click the SN to enter the management interface. On the first interface, you can select "single", "parallel" or "serial", then select the bluetooth string number (same as the string number on the bluetooth substance), click the bluetooth string number to enter;

3.3 Set the correct battery capacity through the mobile phone APP or the PC Master. Once the capacity is set correctly, charging can begin. In the parameter setting interface, non-professionals are not allowed to modify other parameters. Wrong parameter settings will cause the product to not work properly. Customers can modify the "protection parameters" and "temperature protection" according to their own needs.

IV Operating Indicator Light Description



• The lights flash

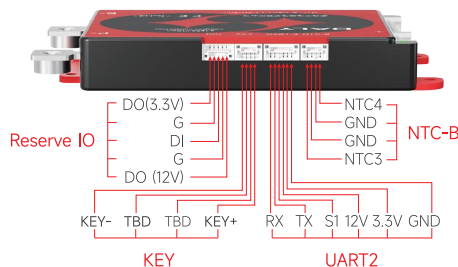
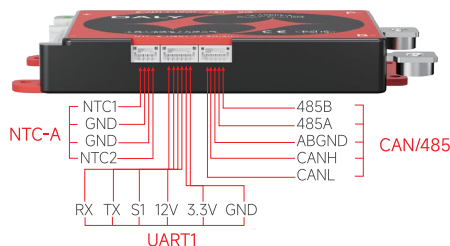


• The lights out

Status description of the operating light

No.	State	Explanation
1	The light out	Shutdown/power off /sleep mode
2	The lights flash, 0.5s on, 2.5s off, 3s for a cycle	Discharging
3	The lights flash, 0.5s on, 0.5s off, 1s for a cycle	Charging
4	The light flash, 0.5s on, 9.5s off, 10s for a cycle	No charging or discharging

V Interface Definition



VI Precautions

- 1.Recommended screw torque of 8-10N·m(nm).
- 2.The default sleep time of the APP is 3600S, which is 1 hour, If you want to cancel sleep mode, you can set the sleep time as: 65535.
- 3.When the BMS is used in a solar charging system, you need to wait for the BMS to detect the battery voltage before charging. A small charging board must be selected for use in order to make the whole system work properly.

4.After confirming that the wire is welded correctly, insert the wire into the BMS (Note: the blue B-wire on the BMS is connected to the total negative electrode of the battery, and the black P-wire is connected to the negative electrode of the charge and discharge), and then install the accessories with the product (such as: standard temperature control/optional power board/optional Bluetooth/optional GPS/ optional display screen/ optional customized communication interface) on the BMS.

5.When the NTC is not inserted, the BMS cannot perform normal and will cut off charge and discharge.

6.The number of battery strings and protection parameters (NMC, LFP) at the factory is a default value, but the rated capacity of the battery should be set according to the actual capacity of the battery pack AH. If the capacity AH is not set correctly, the SOC will be inaccurate. When using BMS for the first time, the battery needs to be charged to 100% to calibrate the SOC.

7.DALY BMS APP password of setting parameters : 123456.

8.If the BMS is damaged unnormally, we will only provide paid repairs.Property losses caused by battery failure will be borne by the user. Our company only provides maintenance and after-sales service for the BMS.

VII Contact Us

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