

Instruction for improvement of Enginer BMS

一、 Improvement of Enginer PHEV BMS

1、 The difference between new version and old version

Old version:

One single BMS can only detect voltage value of 8 batteries

Equilibrium current is 300MA; high-voltage battery discharges out-oriented

It alarms when the voltage of one single cell is too high or too low

New version:

A single BMS can detect voltage value of all 16 batteries

The BMS stops charging if the voltage of any individual cell is over 3.8V

The BMS stops recharging if the voltage of any individual cell is below 2.5V

The BMS goes into dormant automatically and prevents batteries from discharging if any individual cell is below 2V

2、 Manual for new BMS



Monitor:

Page 1 displays input/output voltage and input/output current of the converter.

Page 2 displays voltage from No. 1 to No. 4 cells of Enginer PHEV Li-Ion battery.

Page 3 displays voltage from No. 5 to No. 8 cells of Enginer PHEV Li-Ion battery.

Page 4 displays voltage from No. 9 to No. 12 cells of Enginer PHEV Li-Ion battery.

Page 5 displays voltage from No. 13 to No. 16 cells of Enginer PHEV Li-Ion battery.

Button:

Use for turn over pages on monitor

“>>” means page down

“ ‹‹ ” means page up

Back to Page 1 and dimm in 30 seconds automatically.

LED:

4 groups of lights corresponds with 4 groups of batteries: W1 P1 (battery No.1-No. 4); W2 P2 (battery No.5-No.8); W3 P3 (battery No.9-No.12); W4 P4 (battery No.13-No.16)

W red LED flashing indicates at least one of four batteries is low-voltage (<2.5V)

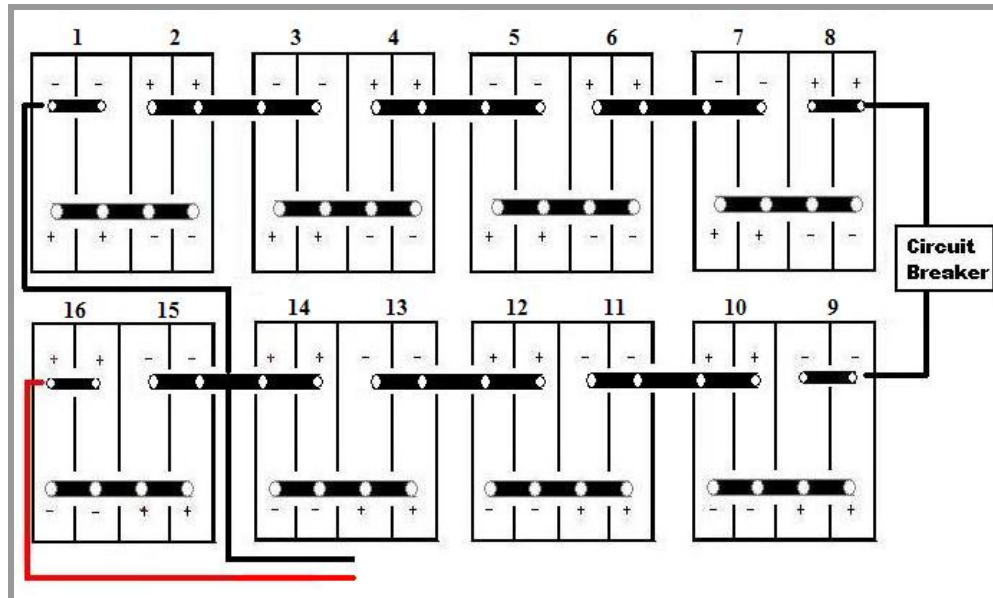
W red LED lighting constantly indicates

Attention: Please charge the battery if the battery is out of power, and disconnect the BMS to batteries if it is not used for over 10 days to avoid battery drained.

二、 Improvement for Enginer PHEV Installation Structure

1、 Battery connection method updating

- Two batteries: parallel connect first and then multiple-connect (BMS displays voltage value corresponding with the numbers on the figure as follows)

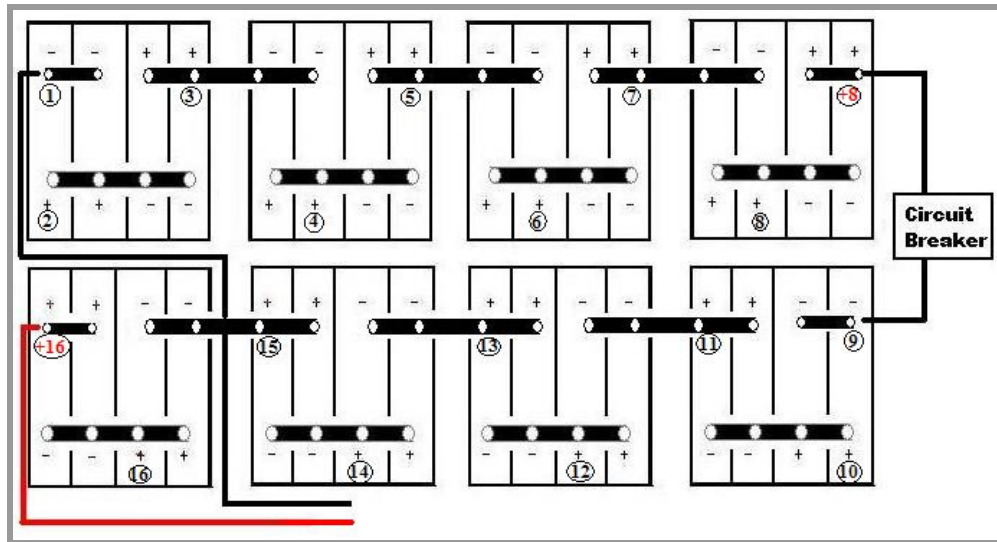


- Connection of BMS voltage sampling wires

Note: every wire marked with numbers; please connect wires on proper position.

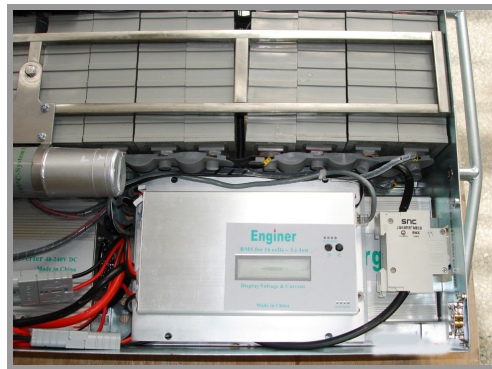
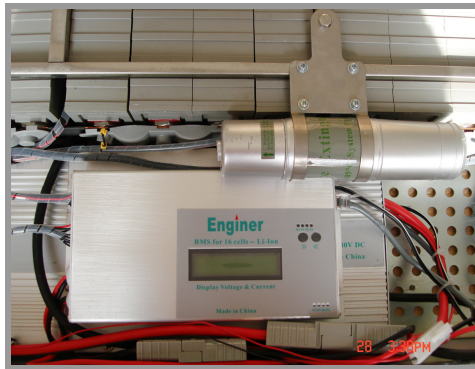
Port 1 is for lower bank cells (1-8)

Port 2 is for high bank cells (9-16)



2、 New installation guide and connection method

① Installation guide: connect the BMS and the converter with a long screw. Put a flat plate to insulate heat between BMS and Converter. If there is a bracket installed on Charger, fasten the BMS to the charger directly and reinforce it with screws. No changes to connecting wires between the BMS and batteries.



② Connecting with batteries: plug battery voltage sampling wire of No.1 to No.8 into a socket marked with "1" on BMS; plug battery voltage sampling wire of No.9 to No.16 into a socket marked with "2" on BMS.

Attention: DO NOT plug wrongly between two sockets to avoid incorrect display.

- For older 3000W converter, there is no cut-off signal. Please connect with Converter: 8 pin cable only.
- Connecting with Charger: Insert BMS output into Charger output.

