Instruction on how to wire a PCB, PCM and CMB

This instruction applies to most of the PCB, PCM, and CMB that we sell. It is best that you check the wiring instruction that ship with each PCB, PBM or CMB to have the most updated wiring instruction.

**Warning:** You must follow the steps stated below. If you do not, you could potentially damage the PCB, PCM or CMB.

The following apply to PCB/PCM/CMB that does **NOT** have a connector for the sensor wires:

**Steps to solder the wires to the PCB/PCM:**

1. Solder the Negative of your battery pack to B- of PCB, PCM or CMB.
2. Solder the closest sensor wire (Bx) to B- first (see below a 14.8V PCM will be B3.) continue till all sense wires are connected.
3. Now measure voltage between each connection. Ex: B- and B3, B3 and B2, B2 and B1. Each should read the voltage of the individual cell. If the voltage is > 1 cell’s voltage, you have wire something wrong, please recheck all connections.
4. Before solder the Positive wire of battery pack to B+, touch the wire to B+ of PCB, PCM or CMB. If there is NO sparks, then solder the wire and your PCB is connected correctly and should read the same voltage (between B+ and B-) of the battery pack.
5. You should also read same voltage and P- and P+. If not, then connect the charge to P+ and P- should reset the PCB/PCM and your PCB/PCM/CMB is ready to use.

Example: 14.8V 10A PCM
The following apply to PCB/PCM that **DOES** have a connector for the sensor wires:

**Steps to solder the wires to the PCB/PCM:**

1. Before insert sensor wire connector to the PCB/PBM, solder the sensor wire B1 to Bx (see below for a 37V PCM will be B1.) to the individual cells of the battery pack.
2. Now measure voltage between each connection on the connector. Ex: BAT- and B1, B2 and B3, B3 and B4 … B9 and BAT+. Each should read the voltage of the individual cell. If the voltage is > 1 cell's voltage, you have wire something wrong, please recheck all connections.
3. If all voltage is correct, now insert the connector to the PCM board.
4. Before solder the Negative wire of your battery pack to PCB/PCM, touch this wire to BAT- of PCB/PCM. If there is NO sparks, then solder the wire to BAT- of PCB/PCM.
5. Repeat step 4 for the Positive wire of the battery pack. If there is NO sparks, then solder the wire and your PCB is now connected correctly and should read the same voltage (between BAT+ and BAT-) as the battery pack.
6. Now check voltage at P- and P+, it should read same voltage as BAT+ and BAT-. If not, then connect the charger to P+ and P- and that should reset the board and your PCM is ready for use.

**Note:** if you see sparks during any part of the instruction, recheck all connections!

![Diagram of PCB/PCM connections](image-url)