

BEFORE YOU BEGIN

Read the provided safety sheet before you begin to set up your Orion Jr. 2 BMS.

As you wire the various connectors, please keep them DISCONNECTED from the BMS until you are instructed to connect the BMS.

1 Determine how to control load and charger

Before you wire the BMS, it is important to figure out how you will control the load and the charger. See the “Interfacing the Load and Charger with the BMS” section of the wiring manual for assistance in how to determine this for your specific BMS application.

2 Wire Main I/O Harness

Use the provided pin-out diagram to wire the Main I/O Harness

See the wiring manual for detailed instructions on wiring this connection.

3 Wire Batteries / Voltage Taps

Read the entire “Wiring Voltage Taps” section of the wiring manual before you begin wiring your cells.

Keep the wiring harness UNPLUGGED from the BMS while you wire the batteries.

DO NOT plug the BMS into the batteries yet.

4 Verify Battery Wiring

Verify the wiring of your batteries using the tap validation tool (can be purchased or rented from Ewert Energy) or using a multimeter.

See “Verifying Cell Voltage Tap Wiring” in the wiring manual for more information.

5 Download Orion Jr 2 BMS Utility

Use the provided disc to download the Orion Jr. 2 BMS Utility to your computer.

6 Connect BMS to computer and to all wiring harnesses.

7 Program BMS using the Profile Set Up Wizard

Things to know when you begin the Set Up Wizard:

- Battery configuration (chemistry, number of cells in series/parallel, location of fuses and long cables (if used))
- Size of current sensor used
- What other devices are being used (charger, motor controller, etc.)

Things to check after completing the Set Up Wizard:

- Maximum/minimum voltage settings
- Maximum current limits

Upload the settings to the BMS after making your profile. See the software manual for more information about programming your BMS.

8 Test the BMS

Before putting the BMS into regular use, watch it closely for one full charge and discharge cycle to ensure that wiring and profile are correct.

Make sure the BMS correctly turns off the charger when cell voltage hits the maximum or shuts off the load when the cell voltage hits the minimum. If there are any problems, please correct before putting the BMS into regular use.

Your BMS should be ready to use. Please follow all guidelines in the safety instructions and manuals to avoid damaging the BMS or the batteries.