



Warning: BMU installation must only be performed by authorized personnel.

Note: Access Wireless Gateway device and Service Tool software required for BMU Pro installation and programming.

BMU Pro Installation Instructions

- 1) Using a 7/32" drill bit, carefully drill one hole 3/8" to 1/2" deep into the positive and negative lead "head" connectors.
- 2) Consult figures 1, 2 or 3 to determine best intercell connector to locate the current sensor on for your battery cell count and tray layout. **Note that it is recommended to install the current sensor at least 9 cells from the positive cable connection.**
- 3) Using the "2 terminal" current sensor lead as a guide for fit, mark the hole locations in the intercell connector that best suits your battery cell count and tray layout.
- 4) Using a 7/32" drill bit, carefully drill one hole 3/8" to 1/2" deep into **each end of the chosen (see #2 & #3) intercell strap.**
- 5) Carefully insert the included brass inserts into the holes drilled in step 1 and 2. Gently tap them into the holes with a mallet or hammer until they are flush with the surface of the lead head.
- 6) Using the included screws and washers, fasten the BMU Pro current sense lead that is at the end of the lead wires to the most negative side of the chosen intercell strap, and the lead which is 3" further up leads to the most positive side of the chosen intercell strap. Torque to 25 in-lbs
- 7) Using the included screws and washers, fasten the BMU Pro black lead to the negative battery terminal, and the red BMU lead to the positive battery terminal. Torque to 25 in-lbs.

Warning: Torque battery connections to recommended torque value for all battery connections. Incorrect connections can result in fire or damage to the battery.

- 8) Using the included tie wraps, secure the BMU body to an intercell connector strap or battery cable.
- 9) Consult figures 1, 2 or 3 to determine best cell in which to locate the electrolyte/temperature sensor on for your battery cell count and tray layout
- 10) Drill a 7/16" hole in a cell cover **4 cells or more** away from the intercell strap that is used to sense current (step 3 above) of the battery and insert the electrolyte/temperature probe.

BMU Current Calibration.

Note: When using Access Chargers BMU calibration is automatic and not required. If using the BMU exclusively on other charger types calibration is required for accurate current sensing.

- 1) Open the Access Service Tool software.
- 2) In the Tools Tab, Advanced Menu, choose Calibrate BMU.
- 3) Select Start to scan for the BMU and connect to the BMU.

- 4) With no current flowing into or out of the battery, program shunt current point one to 0 milliamps.
- 5) Connect a charger to the battery, and while at a stable charge current, program point two to the measured current (use charger output current reading from charger or calibrated clamp-on meter).
- 6) Select Close
- 7) Alternatively when using an Ecotec Access charger with firmware of Rev 12 or higher connect the battery with the BMU installed to the charger for at least 6 minutes.
- 8) Disconnect the battery with the BMU installed briefly, then reconnect it to the Access charger. The BMU will calibrate automatically.

Connecting BMU to ACCESS charger network.

- 1) On one of the ACCESS chargers, in the Radio Menu, set the Function item to Enabled. (Note level 1 password = 2451).
- 2) In the Service Menu navigate to the Charging Parameter menu. Set the "Source" menu item to BMU or Dual
- 3) In the Radio Menu select Join Enable.
- 4) Connect the battery with the newly installed BMU to the charger.
- 5) If charging starts, the BMU has successfully connected to the network. If the connection fails, see "Connect to a new network without MP ACCESS chargers" in the MP ACCESS BMU manual included in the original BMU packaging.

Tool List

7/32" drill bit

7/16" drill bit (step bit is recommended)

Drill/Driver

Hammer/Mallet

Phillips screw driver or bits for driver

Diagonal Side cutter (for trimming wire ties)

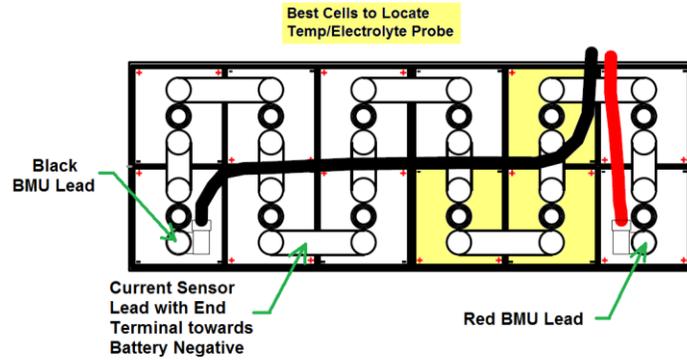


Figure 1

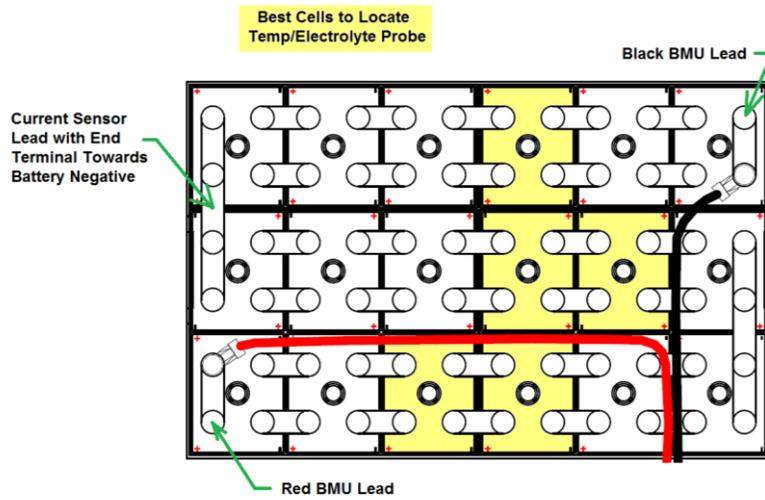


Figure 2

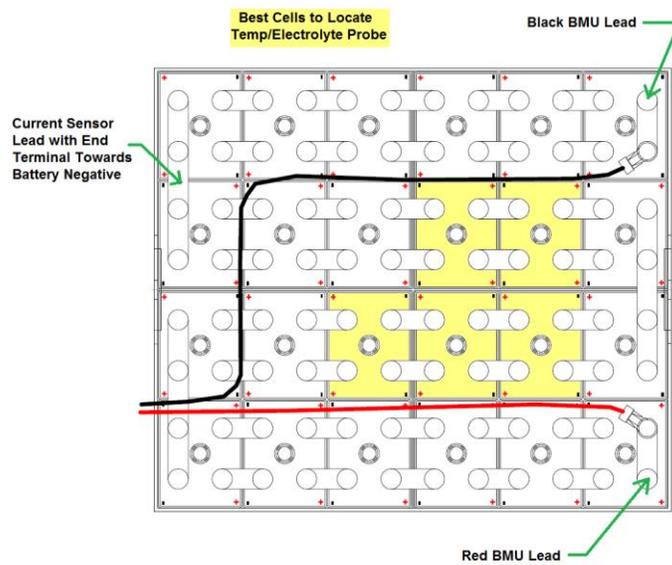


Figure 3