



Energy Smart Unit™ Installation Instructions

Enclosed:

- (1) EMS –R220 or EMS-C440
- (1) ¾ Liquid Tight Connector

My Energy Solutions and Energy Smart Unit™ authorized dealers, distributors, and sales agents shall not be responsible for any damages, personal or property, resulting from the installation of this product in a manner which deviates from the instructions specified herein.

My Energy Solutions recommends that the Energy Smart Unit™ should be installed by a licensed electrician.

My Energy Solutions recommends the removal of electrical power to the breaker panel box prior to beginning installation. This is best accomplished by opening the MAIN electrical breaker.

(1) Installation Instructions - Attach Coupling Device:

Note: This section assumes the breaker panel box is flush with the wall (see bottom Picture). If the panel box extends from the wall (i.e. not flush), omit step 1 and step 5.

1. Draw a line above and below the panel box cover. (This will ensure that the Installation will not overlap the panel box cover).
2. Remove panel box cover.
3. Within the panel box, locate an unused, “perforated knock-out” hole (i.e. one that does not have existing wiring).
4. Remove the perforated cover in the knock-out hole. 5. Drill a 7/8” inch hole into the wall approximately ¼” to ½” above the panel box cover pencil line. The 7/8” hole should be located directly above the knock-out Hole, but above the pencil line (or below, if knock-out hole is located on the Bottom of the electrical panel).
6. Place the panel box coupling device through the 7/8” hole, if installed, and into the knock-out hole. Tighten the coupling device by attaching the coupling nut.

(2) Mounting the Unit:

1. Identify location to mount the Energy Smart Unit™, approximately 6” to 8” from the 7/8” hole drilled in wall.
2. Mount the unit on the wall using concrete screws or wallboard screws and anchors, as appropriate. (Take care to mount the unit level so that it will have a neat appearance).

(3) Attach Tubing:

(Optional) Estimate the approximate length of tubing needed to extend from unit to coupling device in 7/8" hole. Cut excess tubing as necessary.

1. Run the red, blue, and yellow green wires through the tubing, and then through the coupling device. (The wires should then be located in the panel box).
2. Attach tubing to the unit and to the coupling device. (You'll have to spread the throngs in order to fit around the unit attachment and coupling device).
3. Thoroughly tighten the tubing to the unit.
4. Thoroughly tighten the other end of the tubing to the coupling device.

(4-A) Wiring the unit: Residential unit (single phase)

1. Estimate the length of **yellow (ground)** wire needed to attach to ground bar.
2. Cut off the unnecessary yellow wire, being sure to leave some "slack".
3. Attach yellow wire securely to grounding bar.

Notes:

(i) If a **20 Amp** breaker is not top breaker, relocate one to the top. In many cases you will need to provide a new 20 Amp breaker and move other breakers down.

(ii) In cases where the panel is full, you may need to either replace a single lug breaker with a double lug breaker of adequate amp rating to handle the current load in addition to the 20 Amp rated Energy Smart Unit™, or create a sub-panel to complete installation.

(iii) If electrical service comes in from the bottom of the panel box, then the remaining instructions apply to the bottom-most 20 Amp breaker.

4. Find the two (i.e. one left side and one right side) breakers closest to the incoming service line, usually at the top of the two columns of breakers.
5. Select either the left side or right side top breaker for coupling to the unit. (Preferably the one with the highest gauge, i.e. thinner, wire).
6. Loosen the two screws in the breaker you've selected. (If this is too difficult, then pry breaker from panel box. You can replace it once you're done).
7. Estimate the amount of red wire need to attach to the breaker.
8. Cut off the unnecessary red wiring being sure to leave some "slack".
9. Slip the **blue (neutral)** and **red (hot)** wires under the screws of the breaker and tighten **thoroughly**.
10. If breaker was removed to access the screws, return it to the panel box now.
11. Replace panel box cover.
12. Restore power to the panel box.

You're done! At this point the unit should be on and working – you will be able to tell this by the hum of the unit as it runs and by the green LED light switching on.

Note: The unit will be on as long as electricity is going to the panel. If the unit is not working after being checked by an electrician, contact the location where the Energy Smart Unit™ was purchased or call customer service at (972)-272-9090.

(4-B) Wiring the unit: Commercial Unit (3-phase)

Exact installation specifications may vary depending on the type of 3-Phase panel you have, these instructions are meant only as a guideline. In the case that these instructions are not exact to your electrical panel, you may need to consult a licensed master electrician. We strongly recommend that you do not attempt to install a commercial unit without a licensed electrician.

1. Estimate the length of **yellow (ground)** wire needed to attach to ground bar.
2. Cut off the unnecessary yellow wire, being sure to leave some “slack”.
3. Attach yellow wire securely to grounding bar.

Notes:

(i) If a **40 Amp** breaker is not top breaker, relocate one to the top. In many cases you will need to provide a new 40 Amp breaker and move other breakers down.

(ii) In cases where the panel is full, you may need to either replace a single lug breaker with a double lug breaker of adequate amp rating to handle the current load in addition to the 40 Amp rated Energy Smart Unit™, or create a sub-panel to complete installation.

(iii) If electrical service comes in from the bottom of the panel box, then the remaining instructions apply to the bottom-most 40 Amp breaker.

4. Find the two (i.e. one left side and one right side) breakers closest to the incoming service line, usually at the top of the two columns of breakers.
5. Select either the left side or right side top breaker for coupling to the unit. (Preferably the one with the highest gauge, i.e. thinner, wire).
6. Loosen the screws in the breaker you've selected. (If this is too difficult, then pry breaker from panel box. You can replace it once you're done).
7. Estimate the amount of red wire needed to attach to the breaker.
8. Cut off the unnecessary red wiring being sure to leave some “slack”.
9. Slip the **blue (neutral)** and **three red (hot) wires** under the screws of the breaker and tighten **thoroughly**.
10. If breaker was removed to access the screws, return it to the panel box now.
11. Replace panel box cover.
12. Restore power to the panel box.

You're done! At this point the unit should be on and working – you will be able to tell this by the hum of the unit as it runs and by the green LED light switching on. Note: The unit will be on as long as electricity is going to the panel. If the unit is not working after being checked by an electrician, contact the location where the Energy Smart Unit™ was purchased or call customer service at (972)-272-9090.

Wiring Illustration (Residential Model Shown)



Indoor/Outdoor Mounting Options



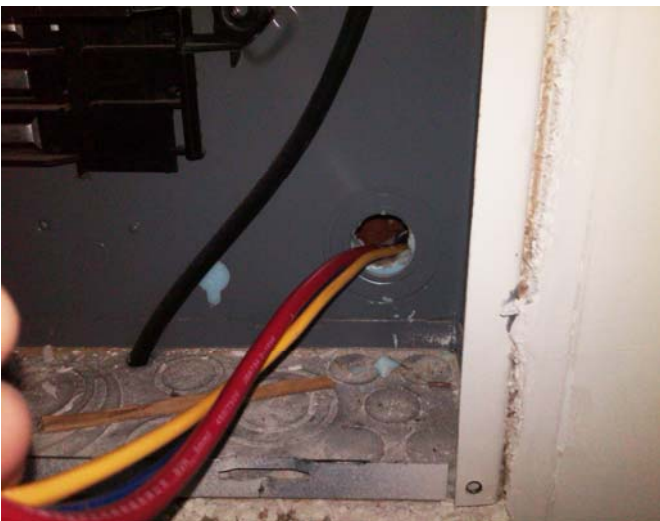
Picture 1 – Outdoor mount



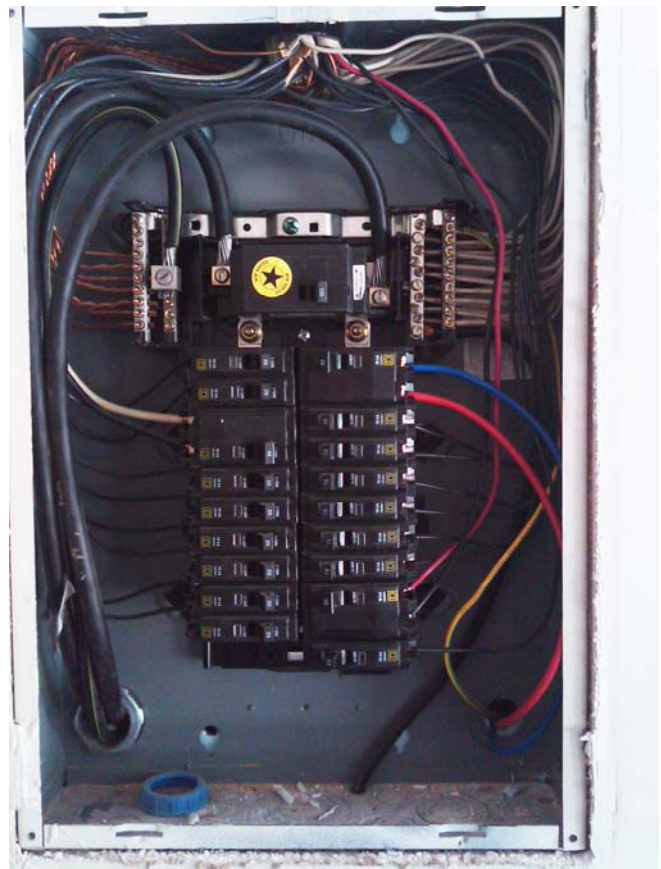
Picture 2 – Indoor above panel mount

Units may also be flush mounted into wall, mounted on either side of panel, or mounted below panel

How to Wire the Unit



Picture 1 – pull the wires through an available pop-out



Picture 2 – Wires shown as they should be connected