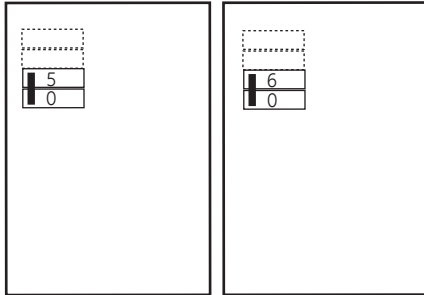


# Spa Panel Technical Data

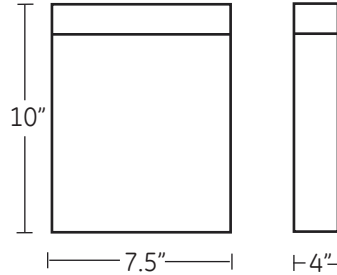
## Models



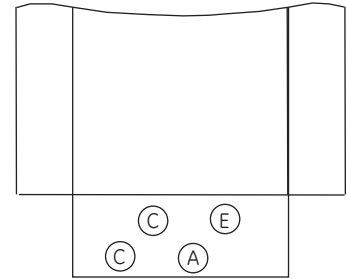
UG412RMW250

UG412RMW260

## Cabinet Dimensions



## Knockouts



A = 1/2"

C = 1/2", 3/4", 1"

E = 3/4", 1 1/4", 1 1/2"

Model Number	Enclosure Rating	GFI Protection Rating	Extra Breaker Spaces	Color	Lug Wire Size Cu/Al	Hub Opening
UG412RMW250	125 Amps	50 Amps	2 or 4	Gray	#6-2/0	N
UG412RMW260	125 Amps	60 Amps	2 or 4	Gray	#6-2/0	N



## INSTRUCTIONS FOR WIRING THE UG412RMW Series SPA PANEL UNIT

These instructions do not supercede any of the information listed on the unit wiring diagram/rating label. In addition, these instructions do not supercede the installer's responsibility for complying with the National Electric Code (NEC) and applicable local electrical code(s). These instructions do not alleviate the installer's responsibility for having the work inspected by a qualified electrical inspector.

If used as service equipment (the unit is to be connected to the load end of service conductors to a building/structure and intended to constitute the main control and cutoff of the building/structure's electrical supply) or additional breakers are to be installed; contact a qualified electrical contractor. The neutral bonding strap provided is to be used when the unit is utilized as service equipment.

### Required Tools/Equipment.

Torque Wrench/Driver (Flat Tip), Phillips and Flat Head Screwdrivers, Oxide Inhibitor (if Aluminum wiring is utilized), Unit Mounting Hardware.

### Basic Instructions.

1. Aluminum Wire Terminations. Thoroughly coat the stripped conductor with a suitable anti-oxidant compound.
2. Torque Values. Torque values for wire terminations are provided on the wiring diagram inside the door of each unit. They are a function of the screw head size and the wire size involved and are detailed in the NEC.
3. Knock Outs (KOs). First knock center KO inward. Outer rings should be alternately pried up or driven in one at a time as necessary.

### Installation Instructions for Subfeed Application Only.

1. **Completely disconnect power from the incoming wires.**
2. Run four wire cable from main breaker panel to Spa Panel unit.
3. Open unit cover and remove deadfront panel by removing the two screws and then lifting the deadfront aside.
4. Mounting.
  - a. Mount unit in an upright position.
  - b. Securely fasten cabinet to wall or post by means of external mounting provisions in the back of the enclosure (mounting hardware not provided).
5. Prepare the unit's knock outs as desired/required.
6. Wire the device to your service entrance panel.
  - a. Pull incoming service wires into the enclosure and fasten using suitable cable connector (not provided).
  - b. Connect line wires to main incoming line lugs as indicated on the wiring diagram provided on the unit door.
  - c. Install incoming neutral wire in the neutral bar provided as shown on the wiring diagram located inside the front door.
7. Ground the unit by terminating ground wire for main breaker panel to the ground lug.
8. Wire the device you want to protect behind your unit's GFI breaker and then wire into your unit as follows:
  - a. Pull load wires into the unit and fasten using suitable cable connector .
  - b. Terminate the load wires to the installed GFI breaker as indicated on the installed breaker.
  - c. Terminate the neutral wire to the GFI breaker as indicated on the installed breaker (if used).
  - d. Terminate the ground wire to the ground lug.
9. Reinstall deadfront cover and close unit door.



10. Reconnect power to the unit.

**Installation Instructions for Service Entrance Application Only.**

1. **Completely disconnect power from the incoming wires.**
2. Run three wire cable from main breaker panel to Spa Panel unit.
3. Open unit cover and remove deadfront panel by removing the two screws and then lifting the deadfront aside.
4. Mounting.
  - a. Mount unit in an upright position.
  - b. Securely fasten cabinet to wall or post by means of external mounting provisions in the back of the enclosure (mounting hardware not provided).
5. Prepare the unit's knock outs as desired/required.
6. Wire the device to your service entrance panel.
  - a. **Bond the neutral using the neutral bonding strap provided as indicated on the unit's wiring diagram.**
  - b. Pull incoming service wires into the enclosure and fasten using suitable cable connector (not provided).
  - c. Connect line wires to main incoming line lugs as indicated on the wiring diagram provided on the unit door.
  - d. Install incoming neutral wire in the neutral bar provided as shown on the wiring diagram located inside the front door.
7. Ground the unit by terminating ground wire for main breaker panel to the ground lug.
  - a. **Ground the panel by connecting your ground lug to a suitable grounding electrode in accordance with the National Electric Code and your area's local code.**
8. Wire the device you want to protect behind your unit's GFI breaker and then wire into your unit as follows:
  - a. Pull load wires into the unit and fasten using suitable cable connector .
  - b. Terminate the load wires to the installed GFI breaker as indicated on the installed breaker.
  - c. Terminate the neutral wire to the GFI breaker as indicated on the installed breaker (if used).
  - d. Terminate the ground wire to the ground lug.
9. Reinstall deadfront cover and close unit door.
10. Reconnect power to the unit.