

**CONNECTICUT ELECTRIC
& SWITCH MFG. CO.**

**Spa Disconnect Panel
#SPA-250**

OWNER'S MANUAL

**PLEASE READ THIS MANUAL IN ITS ENTIRETY BEFORE INSTALLING
AND/OR OPERATING YOUR SPA DISCONNECT PANEL.
RETAIN THIS MANUAL FOR FUTURE REFERENCE.**

The SPA-250 Spa Disconnect Panel you have purchased is the finest available anywhere and, with proper installation, will provide you with years of dependable service.

Follow instructions carefully. For questions or assistance, contact your qualified electrical contractor or our Toll-Free Assistance number: 1-800-730-2557. Before you start on a wiring installation or addition, contact your local building inspector for current local and National Electrical Code information. Local codes vary but are adopted and enforced to promote safe electrical installations. You may need a permit to do electrical work and codes could require your work be checked for safety by an electrical inspector.

This panel is engineered to meet the requirements of spas, fountains, swimming/lap pools, submersible devices and therapeutic equipment but is not limited to these applications.

IMPORTANT SAFETY INSTRUCTIONS

- 1) READ AND FOLLOW ALL INSTRUCTIONS.
- 2) **WARNING** - To reduce the risk of injury, do not permit children to use this product, unless they are closely supervised at all times.
- 3) **WARNING** - This product is provided with a ground-fault circuit interrupter. The GFCI must be tested before each use. With the product operating, push the test button on the GFCI. The product should not operate. Now, push the reset button on the GFCI. The product should now operate normally. If the product fails to operate in this manner, there is a ground current flowing, indicating the possibility of an electric shock. Disconnect the power until the fault has been identified and corrected.
- 4) SAVE THESE INSTRUCTIONS.

STEP 1: Determine Location

The SPA-250 disconnect panel should be placed between 5 feet (minimum) and 10 feet away from your spa (or other equipment). The disconnect can be mounted on a wall or stand alone on bracketed posts.

STEP 2: Select Wire Size

The following are typical amperage/wire sizes:

50 Amps = #6 Copper
40 Amps = #8 Copper
30 Amp = #10 Copper

Note: Four conductors are required to properly power this unit for 120/240 volt applications. Check codes to see which wire can be used.

The SPA-250 disconnect panel can be used on loads up to 50 amps @ 240 volts. If you have a lesser load, you would have no need to pull the maximum sized wires. The panel is manufactured to work fine with mixed 120 and 240 Volt loads. Be sure to check the load requirement of the item(s) you will be hooking up to ensure adequate power. All SPA-250 disconnects require a minimum 12 AWG Neutral to be run from your main electrical source to the Line side Neutral of the disconnect, including a ground.

STEP 3: Wiring Preparation

- 1) Turn off the main electrical service.
- 2) Pull out the disconnect handle from the SPA-250 and set aside.
- 3) Remove the two interior cover screws and set aside.
- 4) Remove the appropriate knockout(s) for your application.
 - a) Drive center knockout inward.
 - b) Alternately drive in or pry up the knockout rings, one at a time.

STEP 4: Wiring

- 1) Pull the conductors coming from your power source (house panel) into the enclosure. To prevent damage to conductor insulation, use approved wire clamps, conduit bushings and/or other methods approved for this purpose.
- 2) Install the two hot wires (usually red and black) into the lugs marked L1 and L2. Place the neutral (white) into the neutral bar marked N and the ground wire (green or bare) into the ground bar marked GRD.
- 3) After the above has been completed, you are ready to wire from the contactor to your spa. Using the same wire size.
 - a) Install the two hot wires (RED into T3 and BLACK into T2) into the two lugs marked, at the bottom of the contactor.
 - b) Install the white neutral wire into the lug marked T1(N), at the bottom of the contactor.
 - c) Install the green (or bare) ground wire into the ground bar marked GRD.

Your SPA-250 Disconnect has a factory installed 1 pole 15 amp circuit breaker which can be used as needed or desired. Route the appropriate wiring to this load, out through the ½" knockout. When wiring this circuit:

- The black wire is installed into the lug at the bottom of the 15 Amp circuit breaker;
 - the white wire is installed into the lug at the bottom of the contactor, and the ground wire (green or bare) into the ground bar marked GRD.
- 4) With the disconnect handle removed and the circuit breaker in the house panel turned off, you may now make your connection at the spa (or other equipment).
 - 5) After the spa has been wired and filled with water, turn the circuit breaker to the on position and reinstall the disconnect handle.

STEP 5: Replace Cover

Replace the interior cover making sure you adequately tighten the two mounting screws holding it.

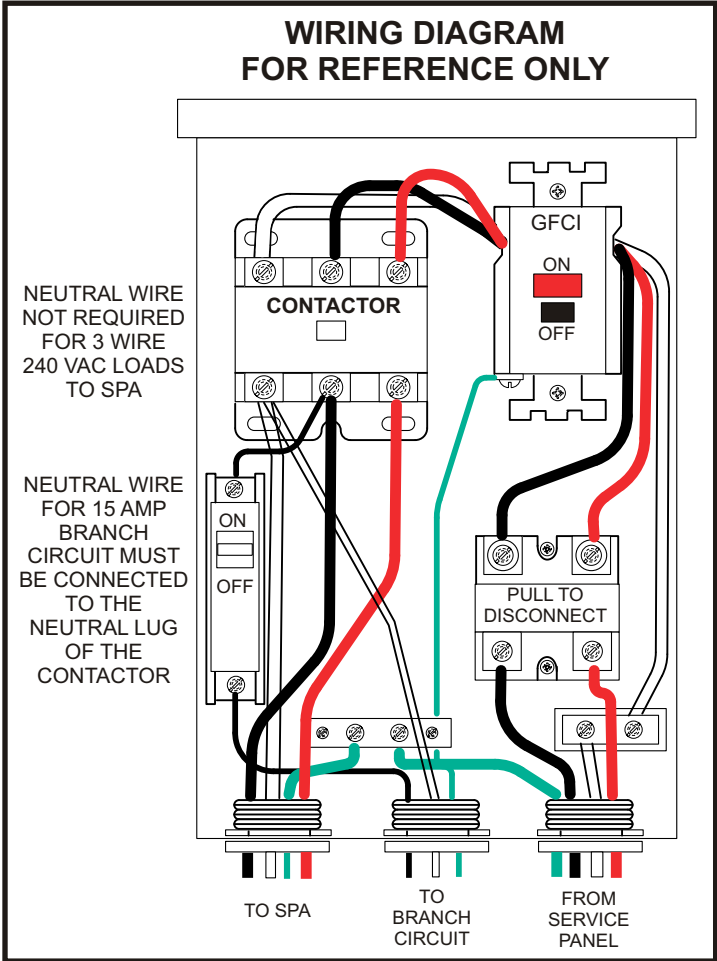
STEP 6: Close Outer Door

Lift and close the outer door. Under normal operating conditions, this outer door should remain unlocked. A lock can be used on the door latch for times when the spa (or other equipment) is not in use.

WARNING

Failure to install and use the product in accordance with all applicable ratings, instructions and the National Electrical Code, could result in death or serious injury to the installer or other persons, or substantial property damage.

Only persons familiar with the construction and operation of the equipment and the hazards involved should install this product. If there are any ratings, instructions or Code requirements, which you do not understand, consult a qualified electrical contractor or inspector before installing this product.



ONE YEAR WARRANTY

To all original purchasers of its products, Connecticut Electric & Switch MFG. Co., 5508 - 128th Street E., Puyallup, WA 98373, warrants its products free from defects in materials and workmanship for the period of one year from the date of purchase. Products that fail or become defective during the warranty period shall be repaired or replaced at Connecticut Electric's option without charge within 30 days of receipt of the defective product.

To obtain warranty replacement or repair, contact Connecticut Electric's customer service department at (800) 472-3819 to obtain a return goods authorization number (RGA) and return the product transportation paid. Connecticut Electric shall not be responsible for shipping, removal, and/or reinstallation labor or any other associated costs incurred in obtaining warranty replacement.