

# NEOVOLTA™

## Emergency Stop Installation and Testing

Starting February 1, 2025, systems will include a new Emergency Stop (E-Stop) function.

This capability eliminates the need for disconnects for inside garage or other locations where Authorities Having Jurisdiction (AHJs) have such requirements. Activation of the E-Stop button will terminate all power connections to the NeoVolta inverter (battery, solar (AC and/or DC), and critical loads. This E-Stop is not a substitute where a lockable disconnect is required by the AHJ or in the Electric Service Requirements (ESR) per the Utility.

Installers must use a UL certified and NEMA Type 3R rated E-Stop. NeoVolta stocks these E-Stop buttons and can provide 10 feet of appropriate wiring upon request. The NeoVolta supplied E-Stop comes with (1) each normally open (NO) and normally closed (NC) contact.

### Installation Process

- Per most AHJs, the E-Stop shall be located within 3 feet of the Main Service Panel.
- Connect the E-Stop to the NeoVolta NV14 cabinet via conduit and two 14-gauge wires.
- Conduit Types: EMT, PVC, Metallic Flex, Non-Metallic Liquid Tight/Flex.
- Conduit Size: There are (3) knockouts on the E-Stop Box (1) on three side of the box. The knockout size is M20 which converts to approximately a three quarter ( $\frac{3}{4}$ " opening.
- For "Push/NC" wiring to keep the system on, in Normal Mode, insert the wires into terminals 1 and 2 (Image 2) in the E-Stop (This is the normally closed (NC) side of E-Stop. This means that the inverter will operate as normal when the E-Stop Button is pushed in. To disengage the E-Stop shutdown of any rapid shutdown transmitter and/or the inverter, a clockwise turn of the RED button/knob is needed. There are arrows showing the direction of the turn, as well.
- To wire the E-Stop, open the bottom panel of the inverter via the 4 hex bolts, insert the wires through a comms opening in the bottom of the inverter and push the wires in to the ports. (1) wire per port.
- Under the battery communications port and under the ports where you connect the Current Transformers, there are four RSD ports (Image 1).
- These are 12V connections. They are labeled B & B. Connect either of the 14-gauge wires to connections B & B.
- Connected wires should look like Image 1 below.
- If additional wire length is needed, then you can splice additional 14-gauge wire up to a maximum length of 100 feet. This is a 12 Volt circuit.

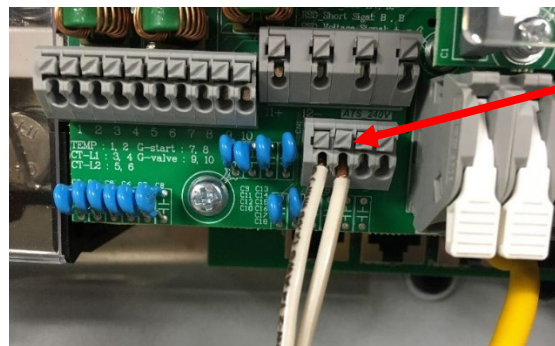


Image 1. E-Stop wires in B Ports

# NEOVOLTA™

The E-Stop button should be mounted to the home within 3 feet of the MSP. You will need to wire the E-Stop and connect the conduit.

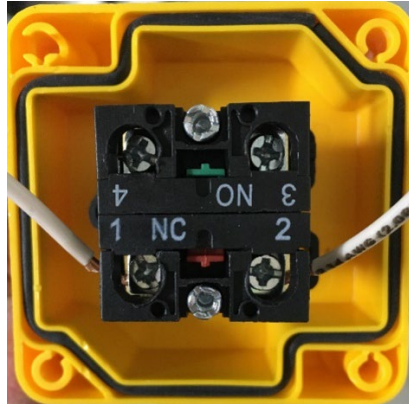


Image 2: Wiring to NC side of E-Stop



Image 3: E-Stop Button/Knob

The Stop Button should be set “IN” and the NeoVolta inverter should have normal power readings and the Normal Light should be on when the E-Stop is wired correctly.

**TESTING:** Disengage the Stop Button (clockwise turn and the button pops out 3/8 inch). You should hear the NV14 inverter click, the Alarm light will come on, there will be an **F22 (Tz\_EmergStop\_Fault) Error Code** (Image 4) in the center of the LCD screen, and there will be no power going into or coming out of the inverter (no AC or DC solar, no grid/utility, no loads, and no battery). Test complete, reset the E-Stop Button (counterclockwise and in). The Inverter will return to normal operations within 2 minutes (Normal light, no alarm light, center of the screen will show ON, and power will be restored).

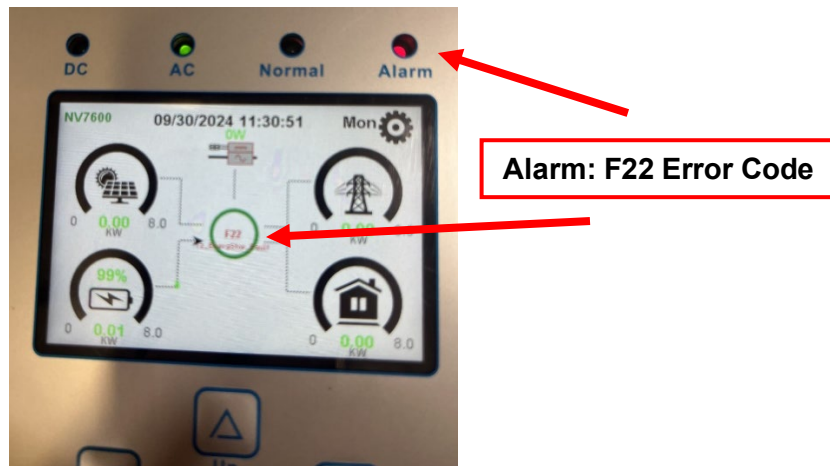


Image 4: F22 Error Code