

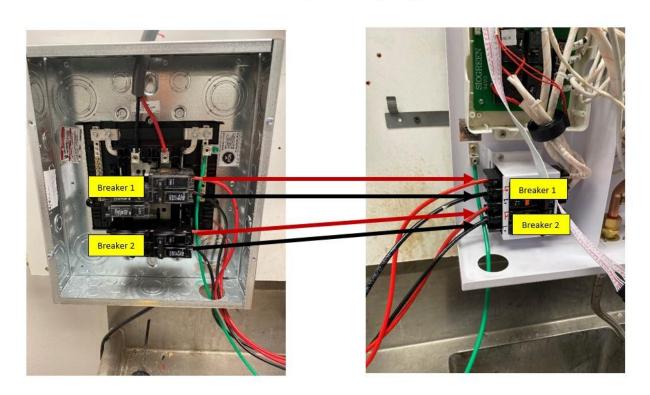
## **SIO 18 Pro Flex Wiring Requirements**

<u>Proper wiring is critical</u> for the SIO 18 Pro Flex to operate correctly. The SIO 18 Pro Flex uses a frequency based electrical system which means the legs of each breaker must be in sequence or "phase" with the corresponding breaker. If you fail to wire the unit properly, it will not activate or function at full power.

To simplify the wiring process, we will refer to the leg/pole as "Line". It is recommended that you use different colored wires to be able to track the lines. This is the proper way to wire the SIO 18 Pro Flex.

- Line 1 (Leg 1) in Panel Breaker 1 (Red) must be connected to the corresponding Line 1 in the SIO 18 Breaker 1
- Line 2 in Panel Breaker 1 (Black) must be connected to the corresponding
   Line 2 in the SIO 18 Breaker 1
- Repeat for Panel Breaker 2 to SIO 18 Breaker 2

#### SIO 18 Pro Flex Proper Wiring Diagram





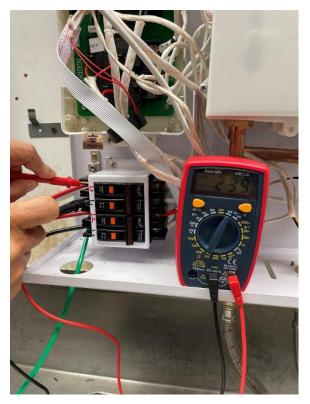
## **SIO 18 Pro Flex Wiring Installation Verification**

To confirm and verify the SIO 18 Pro Flex is properly wired, you should conduct the following tests. The key to confirming a proper installation is to *test and verify the voltage and phase* on each internal breaker in the SIO 18 Pro Flex.

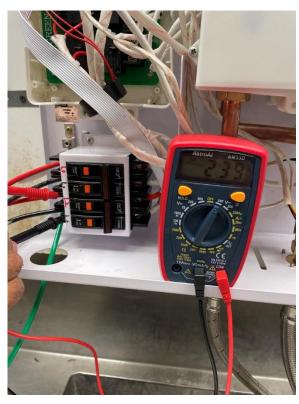
### Test 1 – Voltage

Voltage on Breaker 1 Line 1 (Red) to Breaker 1 Line 2 (Black) - Confirm 240 Volts
Voltage on Breaker 2 Line 1 (Red) to Breaker 2 Line 2 (Black) - Confirm 240 Volts

Breaker 1



#### **Breaker 2**

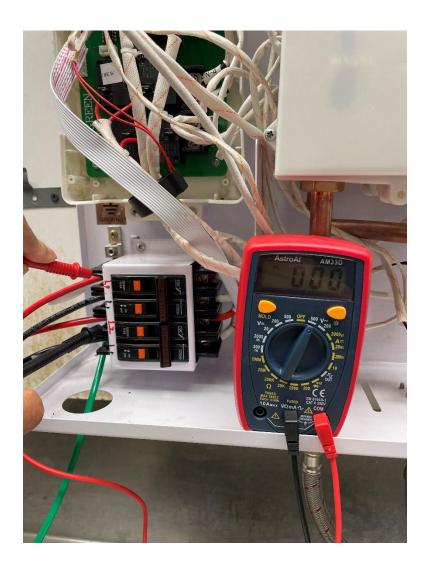


If you do not receive 240 Volts, check the circuit breakers. We have had issues with an old or malfunctioning circuit breaker in the past.



#### Test 2 - Phase

Voltage on Breaker 1 Line 1 (**Red**) to Breaker 2 Line 1 (**Red**) – **Confirm 0 Volts**Voltage on Breaker 1 Line 2 (**Black**) to Breaker 2 Line 2 (**Black**) – **Confirm 0 Volts** 



(If you show positive voltage, the circuit is out of phase and the unit will not activate. Reverse the wires on one of the SIO 18 Pro Flex breakers and retest.)



### **Final Confirmation**

# **Test 3 – Voltage (Optional)**

Voltage on Breaker 1 Line 1 (**Red**) to Breaker 2 Line 2 (**Black**) - **Confirm 240 Volts**Voltage on Breaker 1 Line 2 (**Black**) to Breaker 2 Line 1 (**Red**) - **Confirm 240 Volts** 

