

Dedicated Circuit:

Advanced setup for 240V/120V loads

Safety Precautions

Electrical equipment should be installed, operated, serviced and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70, CSA Z462, or NOM 029-STPS.

This equipment must only be installed and serviced by qualified electrical personnel.

Turn off all power supplying this equipment before working on or inside equipment.

Always use a properly rated voltage sensing device to confirm power is off.

Replace all devices, doors, and covers before turning on power to this equipment.

Beware of potential hazards, and carefully inspect the work area for tools and objects that may have been left inside the equipment.

Failure to follow these instructions will result in death or serious injury.

The Wiser Energy System has been tested and certified for use with Square D™ circuit breakers, load centers and combination service entrance devices (CSEDs) as installed per this manual.

For use in non-Square D load centers and CSEDs please consult with the manufacturer for compatibility.

Instructions

Wiser Energy can use a single CT, per load, to monitor up to two dedicated 240V circuits if the load is not connected to the neutral bus (balanced 240V-only). However, in some cases, it's also possible to monitor a 240V circuit connected to neutral (240V/120V) with just a single CT.

The following installation instructions are advanced and an electrician is required.

Please be advised that the method described below may not work in all electrical panels, depending on various physical factors such as the gauge of the wires, whether they are stranded or solid core, available cable slack, and available space within the electrical panel.

If the following method will not work for you, in many cases you'll still be able to monitor a single 240V/120V device via the [single 240V load](#) method. 240V/120V loads should not be monitored with the 240V-only method, as both accuracy and broad device disaggregation issues can result.

Please ensure your dedicated circuit sensor cable is plugged into your Wiser Energy monitor before installing your sensors.

Monitoring a 240V/120V load with a single sensor

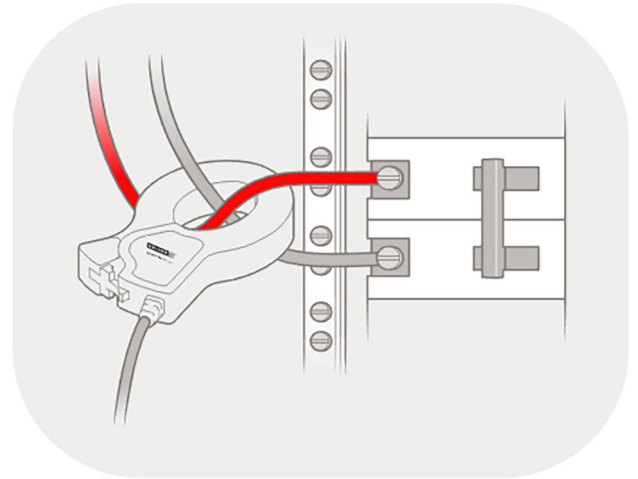
This method should only be used if you are monitoring two loads, either both 240V or 240V and 120V. If you're attempting to monitor a single load and it's a 240V load, please use the [single 240V](#) method.

Instructions:

1. Find the [240V/120V load](#) you want to monitor in your electrical panel and turn off the breaker to the load.
2. Clamp one sensor around both ungrounded conductors in such a way that one conductor goes through the sensor in reverse direction. Sensor orientation does not matter, provided one conductor enters the sensor via the reverse side. Refer to the included illustrations to show two possible methods.

Once placed in the final orientation, if your sensor has locking capabilities, push the sensor lock until you hear a click.

NOTE: GFCI and AFCI breakers may be connected directly to the neutral bus with an additional wire. That wire should be ignored for the purposes of this installation.



You can install with the sensor in horizontal or vertical orientation. Horizontal orientation may help to reduce lead tension and prevent the sensor from opening, while vertical orientation will work better in tight spaces, but requires more flexible conductors.

3.

If your second load is a 240V/120V load: Repeat steps 1 and 2 for that load.

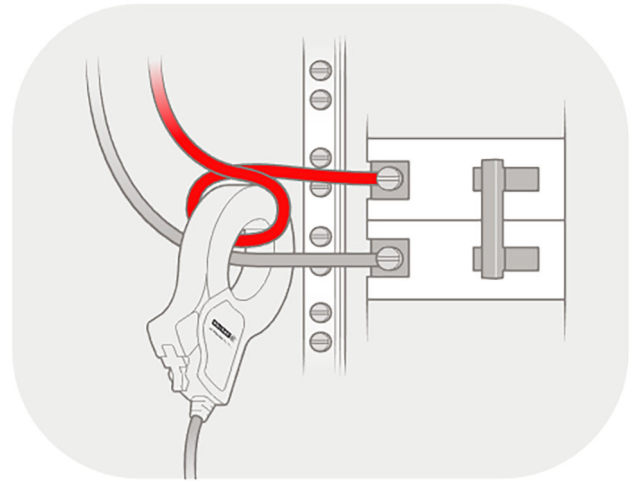
If your second load is a 240V-only load: Find the load. Clamp one sensor around either ungrounded conductor attached to the breaker. It does not matter which conductor the sensor is attached to. The direction of the Wiser Energy logo sticker on the sensor must face the circuit breaker. Once placed in the final orientation, if your sensor has locking capabilities, push the sensor lock until you hear a click.

If your second load is a 120V load: Find the load. Clamp one sensor around the single ungrounded conductor attached to the breaker. The direction of the Wiser Energy logo sticker on the sensor must face the circuit breaker. Once placed in the final orientation, if your sensor has locking capabilities, push the sensor lock until you hear a click.

4. Write down the names and type (120V, 240V-only, or 240V/120V) of the devices you'll be monitoring. You'll need this information during in-app setup.

Important: The sensors must remain fully closed after installation. If the sensor is forced open, even slightly, by the conductors, this will result in inaccurate wattage readings.

Ensure both breakers are still in the 'off' position before returning to the core installation guide



[Return to the Dedicated Circuit installation guide.](#)