

## Instructions

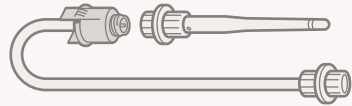
1. Install the Sense monitor
2. Install app at [sense.com/app](https://sense.com/app)
3. Tap “Get Started” in the app
4. Use the app to complete setup



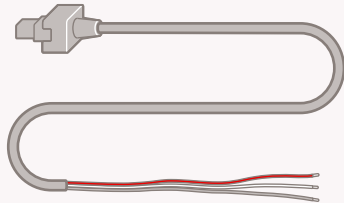
Sense monitor



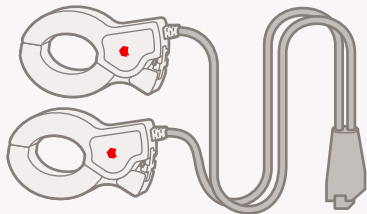
External mounting kit\*  
Screws only for external use



Antenna assembly



Power cable



Current sensors

**Caution: The Sense monitor should be installed by a qualified professional. Before installing, please read and review the safety warnings.**



### **Technical Specifications**

Sense is a home energy monitoring device. It is used to measure the current and voltage on the service mains. It monitors two phases of 110/120VAC. If the electrical panel location is outside the house, then the monitor must be installed inside the panel to ensure it is not exposed to external weather elements, and maintained within temperature ranges.

### **Current Sensor Specifications**

CAT IV 250V 200A / 333mV max  
Cable length: 46" | Inside measurement:  
Oval 1.083" x 1.565"  
May be used on uninsulated conductors

### **Monitor Specifications**

Compatibility: 120VAC (90V-130V)  
Power Use: < 5 Watts, 0.1 amps  
Wi-Fi: 2.4 GHz 802.11b/g/n  
Size: 137mm x 66mm x 32mm  
Weight: 200g

### **Climate Specifications**

RH <90%; IPx0 rating  
Temperature: 32 - 158°F (0-70°C)  
Elevation < 9,842 ft (<3,000m)

## Warning

Sense is connected to dangerous voltages. Improper use or installation can be dangerous or even fatal. Please make sure to follow these guidelines:

1. The installation should be conducted by a qualified professional, according to local electrical codes.
2. Personal protective equipment should be worn when installing a current sensor on a conductor exposing hazardous live voltages. If the current sensors are used in a manner other than specified, the safety protection provided may be impaired.
3. Do not try to open the Sense monitor, touch any internal parts, or try to repair it.
4. If you believe the monitor, sensors, or cables may have been damaged, do not try to use them.
5. Use the Sense monitor only in the United States and Canada, and only with a 60Hz 120V/240V split phase system.
6. Install the Sense monitor where it will not be exposed to direct sunlight or extremely low or high temperatures. No exposure to water. RH < 90%; Elevation < 3,000 meters; Temperature 0 - 70°C.

## Legal

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. Operation is subject to these conditions:

1. It may not cause harmful interference.
2. It must accept any interference received, including interference that may cause undesired operation. If it is not installed and used as per the instructions, it may cause interference which is harmful to wireless communications. There is no guarantee that interference will not occur in a particular installation. If it does cause interference we recommend: reorienting or relocating the receiving antenna, or increasing the separation between the device and the receiver.
3. Patents: [sense.com/patents](http://sense.com/patents)

## Questions?

Contact [help.sense.com](mailto:help.sense.com).

Designed by Sense in Cambridge, MA  
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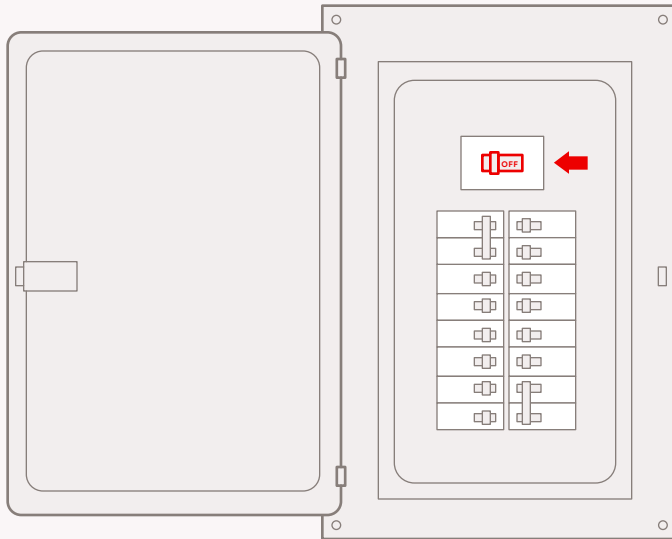


Certified to CSA STD C22.2 No. 61010-1  
Conforms to UL STD 2808  
Conforms to UL STD 61010-1  
Conforms to UL STD 61010-2-032  
Conforms to CAN ICES-3(B)/NMB-3(B)

## 01 Turn off power

Open your electrical panel and turn off your main breaker. This helps protect you during installation. Don't forget your flashlight!

If you have solar, turn off your inverter. Refer to the solar installation guide for setup instructions.

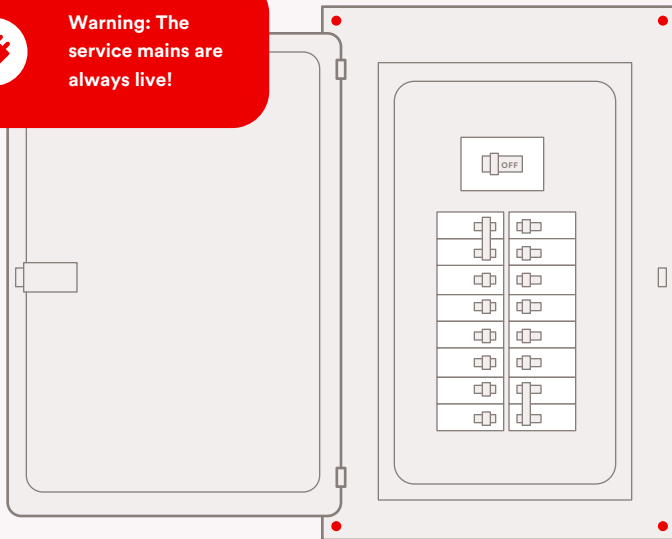


## 02 Remove panel cover

Remove the screws securing the panel cover to access the circuit breakers.



**Warning:** The service mains are always live!



### 03 Find a spot for your Sense

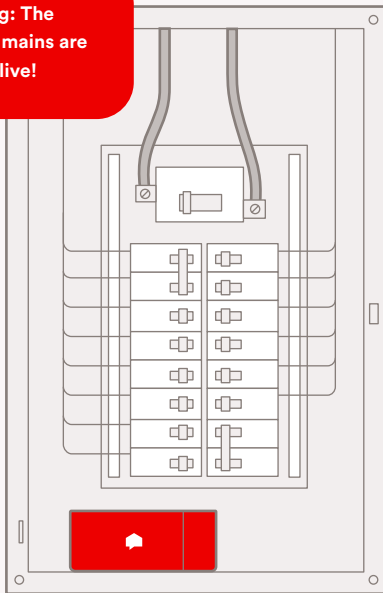
The Sense monitor is designed to fit within your main panel. Find an open spot that works for you.

### What if there is no room?

Use the mounting bracket provided. See more installation configurations at [help.sense.com](http://help.sense.com).



**Warning: The service mains are always live!**





## 04 Install the antenna

Using the back of a screwdriver, punch out the knockout cover in the electrical panel. Then, insert the antenna.

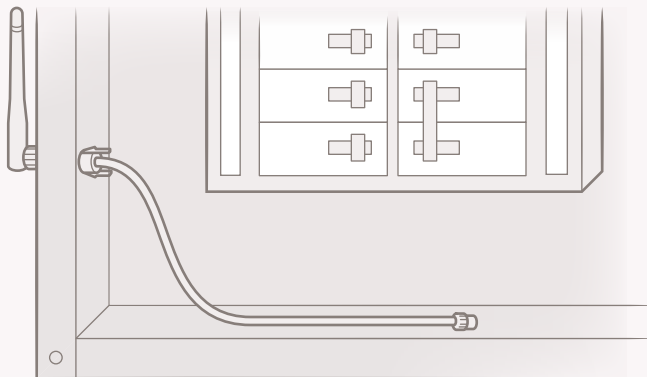
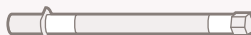
Antenna

Knob

Insert

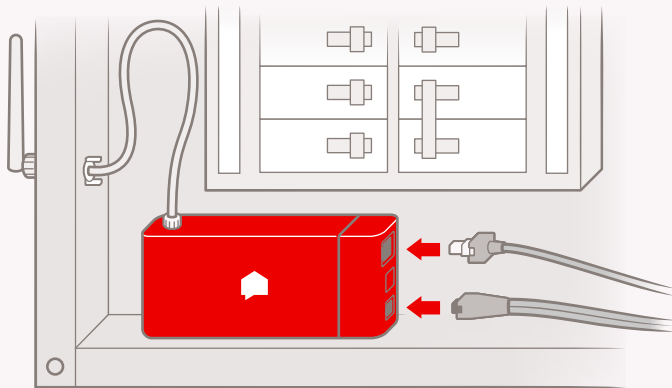
Extension cable

Extension cable knob



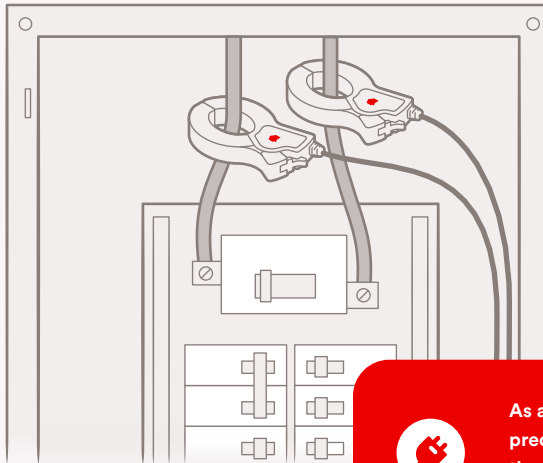
## 05 Connect

Connect the power cable, current sensors, and antenna to the Sense monitor. Be sure to insert the sensor into the outer port. The middle port is for solar sensors.



## 06 Connect the current sensors

Clamp the sensors around the service mains so that both labels are facing the same direction. The direction of the labels on the sensors should be relative to the power source. Once placed in the final orientation, push the sensor lock in until you hear a click.



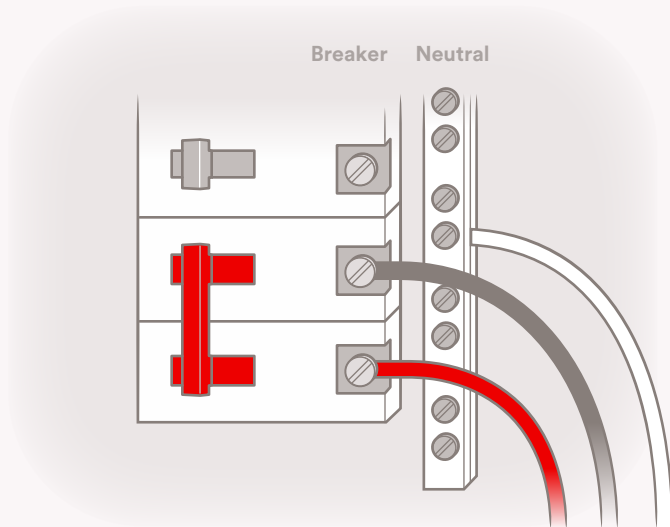
As a safety precaution, first plug the sensors into the Sense monitor.

## 07 Connect the power

Connect the **black wire** and the **red wire** to an empty 240V breaker and the white wire to the neutral bus bar. Sense draws less than 0.1A, so you should use the smallest 240V breaker available for your panel.

## Don't have an empty breaker?

Connect to an existing or add a new 240V breaker. Do not use a tandem breaker, unless it is 240V. Learn more at [help.sense.com](http://help.sense.com).

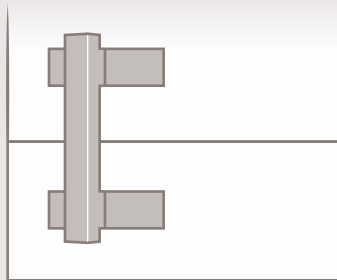


## 08 Close the panel

Replace the panel cover carefully to ensure that there is no pressure on the sensor clamps that would cause them to open. Label the Sense breakers with the sticker.

## Doing electrical work?

Reattach each sensor to the same service main as before to avoid disrupting device detection.



## 09 Turn power on, wait for chime

Once the panel is closed, turn the main breaker back on, and listen for one of the sounds listed below. It will take about a minute before hearing a sound. Visit [help.sense.com](http://help.sense.com) for sound samples and troubleshooting information.

## Moving? Take Sense with you.

Using the app, reset your data. Follow all safety precautions. Turn off power to the main breaker. Disconnect the sensors from the service mains. Disconnect all cables from the monitor. Remove the antenna and disconnect the power cable.



### Success Chime

Installation looks good!  
Sense is ready for setup.



### Repeating Beep

There is an installation problem.  
Check cable connections.

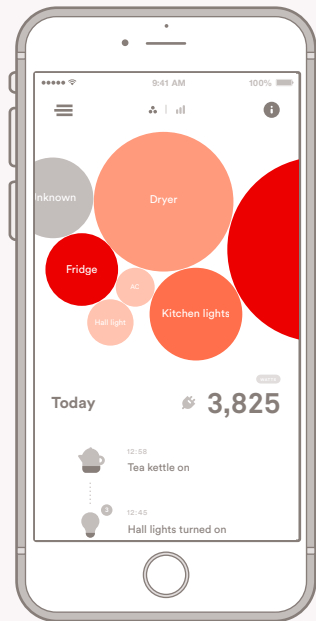


### No Sound

The Sense monitor cannot start.  
Check power cable connections.

## 10 Use the app to complete setup

Install the Sense app by visiting [sense.com/app](https://sense.com/app). Click “Get Started” and follow the on-screen instructions. The app will guide you through the Wi-Fi setup and account creation process.



**See what's up. Know what's on.™**





See what's up. Know what's on.™

