

## 7490 Wireless Remote Outdoor Sensor

### *Please read all instructions before proceeding.*

The wireless remote outdoor sensor monitors temperature at a remote outdoor location and transmits the temperature data wirelessly to the thermostat. The sensor can be used to view the outdoor temperature or for heat pump systems requiring the use of balance points. One wireless outdoor remote sensor can be connected.

## 1 Specifications

**Operating Temperature:** 40 - 120 °F

**Storage Temperature:** 40 - 120 °F

**Operating Humidity:** 5 - 95% Rh

**Battery Power:** 3.0 Volt DC

**Accuracy:** +/- 1°F

### Blue LED Indicator

- 1 flash every 30 seconds: Normal operation
- 3 flashes every 30 seconds: Sending sensor data to thermostat
- 1 flash every 2 seconds: Sensor is in pairing mode
- Solid for 60 seconds: Successfully paired remote sensor

### Red LED Indicator

- 3 flashes every 30 seconds: Low battery
- 1 flash every 10 seconds: Lost communication with thermostat

**NOTE:** LED indicators are only visible with the sensor cover off.

**IMPORTANT:** Before mounting the remote sensor, you should verify there is good wireless communication in the area you wish to mount it by first pairing it in that location. If you are having trouble pairing in that location, try moving the remote sensor to a location closer to the thermostat.

## 2 Pairing Remote Sensor

See **thermostat Installer Guide** for additional information on pairing sensors.



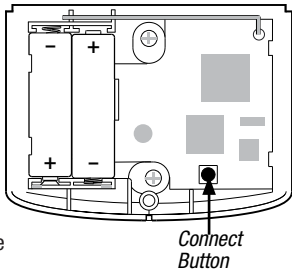

1. Enter the wireless setup mode on the thermostat you wish to pair with the remote sensor. Proceed until you see the word **SENS** in the display with a flashing  symbol.
2. Make sure batteries are properly installed in the remote sensor and then press and hold the **CONNECT** button for 3 seconds.
3. The remote sensor will enter pairing mode for 60 seconds. During this time the blue LED will flash once every 2 seconds.
4. The thermostat will display **ODS** indicating that the wireless remote outdoor sensor was successfully paired. The  symbol will stop flashing and the blue LED on the remote sensor will turn on for 60 seconds.
5. You can repeat this process to pair additional wireless remote sensors or exit the wireless setup mode on the thermostat.

Figure 1



**NOTE:** Sensors that have already been paired will appear in the thermostat display first, with a solid  symbol.



A maximum of 1 wireless remote **outdoor** sensors can be connected.  
A maximum of 4 wireless remote sensors **total** can be connected.

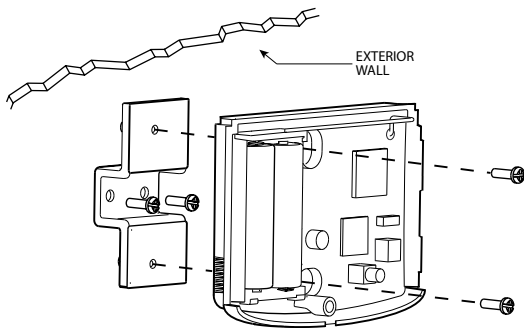
## 3 Installation

The outdoor remote sensor should be mounted on an exterior wall, approximately 3 feet from any exhaust fans. For a more accurate temperature reading, mount the sensor on a wall that does not receive direct sunlight and is above the expected snow line.

**NOTE:** Test location by pairing your thermostat before mounting (see section 2).

### 3 Installation

1. Place the small bracket against the wall in the desired location and mark placement of the two mounting holes. Remove bracket and carefully drill your marked areas with a 3/16" drill bit.
2. If needed, gently tap supplied plastic anchors into the holes in the wall and fasten the bracket to the wall using the two supplied screws.



3. Remove the front cover of the remote sensor. Using a small phillips blade screwdriver, loosen the screw located in the bottom center portion of the sensor housing. Gently squeeze in the ribbed portion of the sides of the housing and slide the cover up to remove.
4. Line up the 2 mounting holes on the remote sensor sub-base up with the 2 holes on the wall bracket. Using the remaining 2 screws, mount the sub-base to the wall bracket.
5. Install the 2 supplied AA lithium batteries into the sensor housing. The blue and red LED will each flash once to indicate the sensor has powered up successfully. If the red LED blinks 3 times every 30 seconds the batteries need to be replaced.
6. Attach cover of remote sensor to the sub-base by sliding the cover on from the top down. Reinstall the small screw to secure the sensor housing.

## 4 Replacing a Thermostat or a Sensor

**Replacing a Thermostat** – If you are replacing a thermostat that is paired with an existing wireless sensor, you will need to clear the remote sensor and pair it again with the newly installed thermostat.

1. Install the new thermostat.
2. On the wireless remote sensor you want to clear, press and hold the **CONNECT** button for 10 seconds (see Figure 1) until the red LED turns on solid.
3. Release the **CONNECT** button and the blue and red LED will each flash once to indicate the sensor was successfully cleared.
4. Pair the sensor again.

**Replacing a Sensor** – If you are replacing a wireless remote sensor that is paired with an existing thermostat, you will need to clear the thermostat's remote sensor settings before pairing the new wireless remote sensor.

1. Install the new wireless remote sensor.
2. Thermostat remote sensor settings are cleared in the Installer Settings. Refer to the Installer Settings section of the thermostat Installer Guide.
3. Once the remote sensor settings are cleared you will need to pair your new wireless remote sensor. You will also need to pair any other existing wireless remote sensors that were previously connected.

## 5 Communication Loss and Low Battery

**Communication Loss** – If communication between the remote sensor and thermostat is lost, the red LED on the remote sensor will begin to flash once every 10 seconds. The thermostat display will also indicate which wireless remote sensor has lost communication. The sensor will attempt to reconnect to the thermostat several times automatically.

**NOTE:** To reconnect manually, press and hold the **CONNECT** button for 3 seconds.

**Remote Sensor Low Battery** – If the batteries in a wireless remote sensor are low, the red LED will flash 3 times every 30 seconds. The thermostat display will also indicate which wireless remote sensor has a low battery. Replace the remote sensor batteries as soon as possible. Be sure to maintain battery “+” and “-” polarity. Use only 2 “AA” lithium batteries to maintain operation in most weather conditions.

**NOTE:** After replacing batteries, allow up to 15 minutes for the wireless connection to re-establish.

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## **FCC Compliance Statement (Part 15.19) (USA only)**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interference received, including interference that may cause undesired operation.

## **FCC Warning (Part 15.21) (USA only)**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **FCC Interference Statement (Part 15.105 (b)) (USA only)**

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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **Equipment interface module, thermostats and outdoor sensor**

To comply with FCC and Industry Canada RF exposure limits for general population/ uncontrolled exposure, the antenna(s) used for these transmitters must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna.

## **Portable Comfort Control**

This portable transmitter with its antenna complies with FCC and industry Canada RF exposure limits for general population/uncontrolled exposure. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

## **Section 7.1.2 of RSS-GEN**

Under industry Canada regulations, this radio transmitter may only operate using an antenna of type and maximum (or lesser) gain approved for the transmitter by industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

## **Section 7.1.3 of RSS-GEN**

Operation is subject to the following two conditions:

- 1 This device may not cause interference, and
- 2 This device must accept any interference, including interference that may cause undesired operation of the device.

**This sensor contains a Lithium battery which may contain Perchlorate material.**  
Special handling may be required. See [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate).

### **Limited Warranty**

When installed by a professional contractor, this product is backed by a 5 year limited warranty. Limitations apply. For limitations, terms and conditions, you may obtain a full copy of this warranty:

- Visit us online: [www.braeburnonline.com/warranty](http://www.braeburnonline.com/warranty)
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