

7330 Wireless Remote Humidity Sensor

Please read all instructions before proceeding.

The wireless remote humidity sensor monitors the humidity passing through the return air plenum and transmits the humidity data wirelessly to the thermostat. The sensor can be used to view the current humidity level or to control external humidification or dehumidification equipment. One wireless remote humidity sensor can be connected.

1 Specifications

Operating Temperature: 14 - 140 °F

Storage Temperature: 14 - 140 °F

Operating Humidity: 5 - 95% Rh

AC Power: 24 Volt AC

Terminations: Rc, C, H1, H2, D

Blue LED Indicator

- 1 flash every 30 seconds: Normal operation
- 3 flashes every 10 minutes: 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

- 1 flash every 10 seconds: Lost communication with thermostat

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

2 Installation

The remote humidity sensor should be mounted in an accessible location on the RETURN air duct at least 15 inches from any duct bends. Wiring is typically run through the return air ductwork to the sensor.

1. Drill a 1 inch diameter hole in the center of your desired mounting location on the return air plenum.
2. Remove front cover of the remote humidity sensor by placing a small flat blade screwdriver in the slot at the bottom of the cover. Push in on the latch and turn the screwdriver slowly to separate the cover from the sub-base.
3. Using the base as a template, mark two mounting holes and the rectangular opening for wires (See Figure 1).
4. Using a 1/8 inch drill bit, drill two mounting holes. Cut or drill out opening for wires.
5. Secure base to the duct with supplied sheet metal screws. Pull wires through opening.
6. After wiring the sensor, attach sensor cover to the installed base.

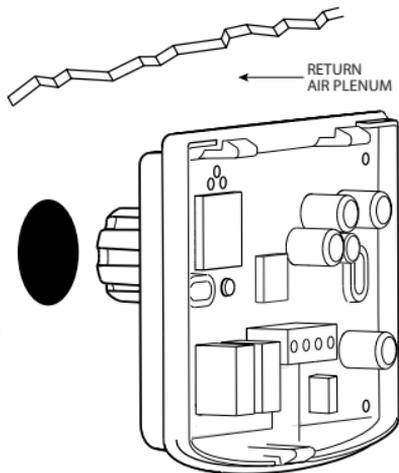
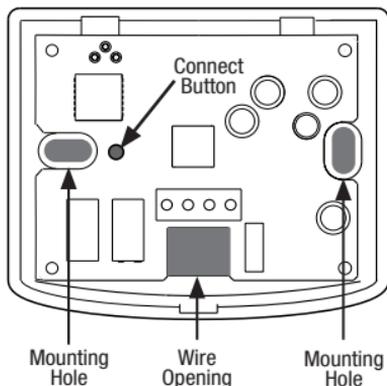


Figure 1



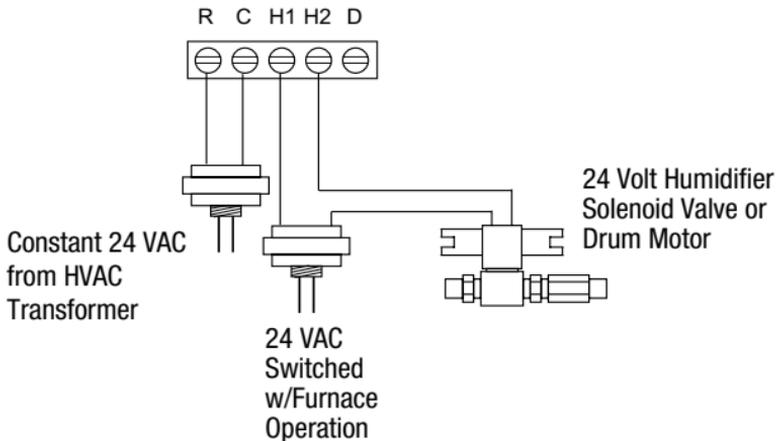
3 Wiring Remote Sensor

The wireless remote humidity sensor communicates wirelessly with the thermostat, however it requires 24 VAC for power and also requires wires to connect to your humidification or dehumidification equipment. Connect your wires as shown.

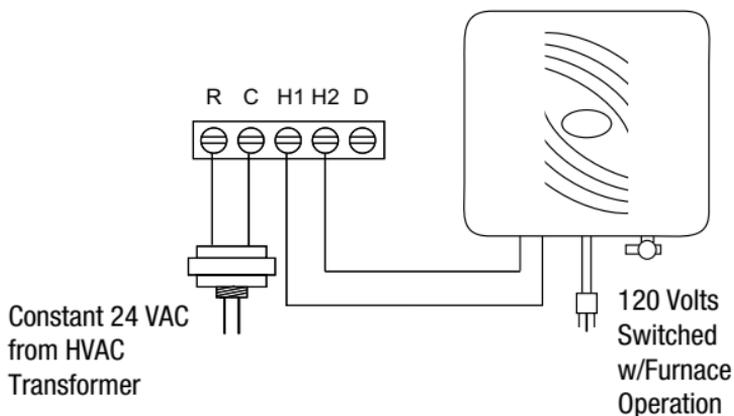
NOTE: The thermostat needs to be configured to control the humidification and/or dehumidification equipment connected to the humidity sensor. See *Installer Settings in thermostat Installer Guide*.

Terminal	Description
R	Connection for 24 VAC hot side of transformer
C	Connection for 24 VAC common side of transformer
H1	Humidification dry contact relay
H2	Humidification dry contact relay
D	Connection for dehumidification equipment

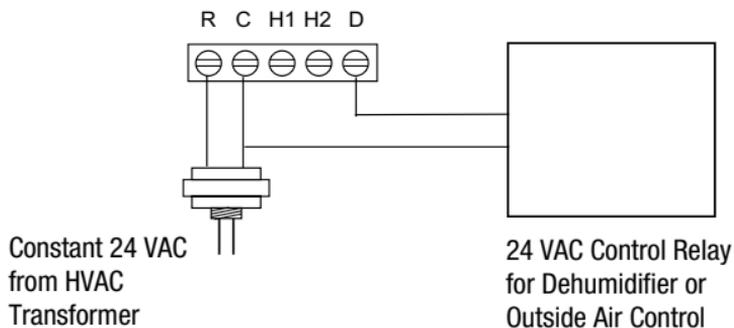
Bypass Humidifier



Fan Powered Humidifier



Dehumidifier



4 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 that the remote humidity sensor is properly installed and power is applied and then press and hold the **CONNECT** button for 3 seconds (see Figure 1).
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 HMS indicating that the wireless remote humidity 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.

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



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

5 Replacing a Thermostat or 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 your 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 thermostats remote sensor settings before pairing the new wireless remote sensor.

1. Install your 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.

6 Communication Loss

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.*

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.

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