



Uponor

RADIANT HEATING SYSTEMS

UPONOR CLIMATE
CONTROL™ NETWORK
SYSTEM WALL SENSOR

INSTRUCTION SHEET

Wall Sensor Thermostat

The Wall Sensor (A9010540) is a thermostat that can be used with the Uponor Climate Control™ Network System. It is a fully communicating thermostat similar to the other thermostats on the Network System.

The Wall Sensor is not equipped with buttons or a display and requires the Touch Panel Interface (A9070000) for adjusting setpoints, changing modes, etc. or the Uponor Configuration Tool software (A9090000) for setting up or changing the system configuration.

The Wall Sensor is installed flush with the wall surface and can be painted to match the wall if desired.

Getting Started

Check the contents of this package. If the contents are damaged, please contact your Uponor sales representative or distributor for assistance.

The package includes:

- Wall Sensor (A9010540)

Tools and Parts Required

- Wire cutter and stripper
- Small-blade screwdriver
- 1 3/4" hole saw and drill
- Utility knife

Installation Mounting the Unit



Important: A minimum depth for installation in any hollow wall is 2-1/2 inches, measured from the finished wall surface.

Use a 1 3/4" hole saw and cut a hole in the surface of the hollow wall, typically drywall or wood. Pull the wire through the hole. When installing into drywall, it may be necessary to trim the front edge of the hole with a utility knife to remove any excess drywall paper so that the sensor sits flush against the wall.

Note: When trimming, do not cut away more paper than the flange on the Wall Sensor can cover.

Wire the Wall Sensor as described below.

Press the Wall Sensor into the hole until the flange makes contact with the wall.



Caution: Before performing any wiring, disconnect the electrical power to the system to prevent electrical shock and damage to the device.

Note: Ensure all wiring complies with local electrical codes.



Figure 1: Back of Wall Sensor

Wiring the Wall Sensor

The following steps outline how to wire the Wall Sensor thermostat.

Note: All wiring must comply with local electrical codes and specifications. Uponor recommends 18 AWG LVT or similar wire for all thermostat connections. Strip all wires to ¼ inch (6.3 mm) to ensure proper connection to thermostat terminal blocks. If an optional sensor is used (e.g., a slab sensor), run a single-pair, 18 AWG wire from the sensor to the control.

Tools Required

- Small, flat-head screwdriver
- Phillips screwdriver
- Wire cutter and stripper



Caution: To prevent damage to the thermostat, do not connect it to 24-volt control systems or devices other than the Digital Zone Control Module.

Power and Data Wiring

1. Run a single-pair, 18 AWG LVT wire from the Digital Zone Control Module to the thermostat.
2. Attach the wires to the Pwr/Comm terminals shown in **Figure 3**.

Note: Be sure to observe the thermostat's polarity and wire color. Use the red wire to connect the positive terminal on the thermostat to the positive terminal on the controller.



Figure 2: Wall Sensor Terminal

Placing the Slab Sensor

The following steps outline how to install a slab sensor.

1. Place the slab sensor between two PEX tubes in the floor.
2. If the floor is wood construction, place the sensor as close to the floor surface as possible. If the floor is concrete or like construction, place the sensor no deeper than the mid-point of the slab.
3. Uponor recommends placing the sensor wire in a conduit for easy replacement. Ensure the sensor is in direct contact with the floor material (wood, concrete, gypcrete, etc.).

Connecting a Slab Sensor (Optional)

Connect the two wires from the sensor to the slab sensor terminals on the thermostat as shown in **Figure 3**. In this case, polarity does not matter.

Operation

Since there are no buttons or display on the Wall Sensor, all configuration and setpoint adjustments must be done through either the Touch Panel Interface (A9070000) or through the Uponor Configuration Tool software. See the Help documentation for these products for information regarding thermostat configuration and setpoint adjustment.

Specifications

Storage Temperature:
14 to 160°F (-10 to 70°C)

Operating Temperature:
32 to 105°F (0 to 40°C)

% Relative Humidity:
10 to 90% non-condensing

Slab Sensor Input:
10k NTC

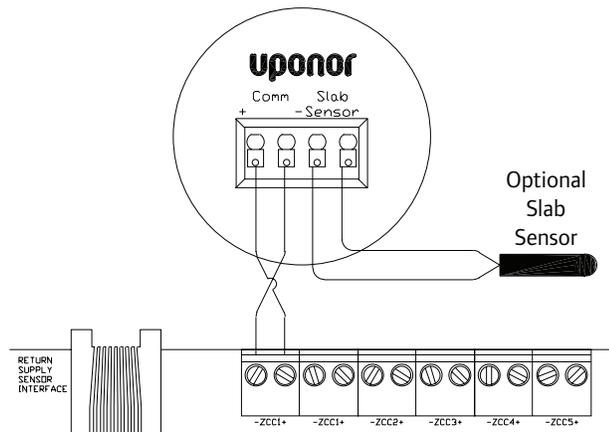


Figure 3: Wall sensor connection to slab sensor

Uponor, Inc.
5925 148th Street West
Apple Valley, MN 55124 USA
Phone: (800) 321-4739
Fax: (952) 891-2008
www.uponor-usa.com

Uponor Ltd.
655 Park Street
Regina, SK S4N 5N1 CANADA
Phone: (888) 994-7726
Fax: (800) 638-9517
www.uponor.ca

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