

### IMPORTANT: READ ALL OF THESE INSTRUCTIONS BEFORE INSTALLING THE SENSOR.

#### SAFETY CONSIDERATIONS

Read and follow the manufacturer instructions carefully. All wiring must conform to local and national electrical codes. Improper wiring or installation may damage the sensor.

Recognize safety information. This is the safety alert symbol . When the safety alert symbol is present on equipment or in the instruction manual, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety alert symbol. DANGER identifies the most serious hazards which will result in severe personal injury or death. WARNING signifies a hazard which could result in personal injury or death. CAUTION is used to identify unsafe practices which may result in minor personal injury or property damage.

#### GENERAL

The Remote Sensor measures indoor air temperature and will send this information to the thermostat. The sensor measures temperature with a range of -20° to 120° F. The sensor also has an OVERRIDE button which will place the thermostat into the override mode for two hours. For information on override operation please consult the Owner's Manual of your thermostat.

### 1 Sensor Location

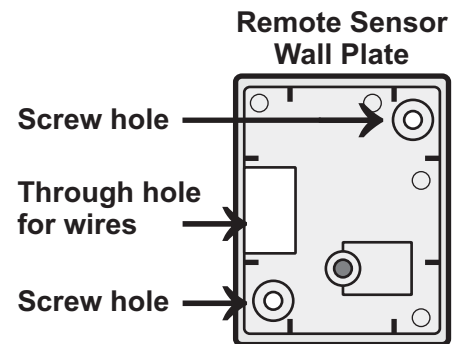
**CORRECT LOCATIONS** — The Remote Sensor should be mounted approximately five feet from the floor, close to or in a frequently used room, preferably on an inside partitioning wall or on a section of wall without pipes or ductwork. Mount the sensor where temperature operating limits are within -20° to 120° F and the humidity operating range is within 0 to 95% relative humidity, non-condensing.

**INCORRECT LOCATIONS** — The Remote Sensor should *NOT* be mounted close to a window, on an outside wall, or next to a door leading to the outside. Do not mount the sensor in a location where it would be exposed to direct light and heat from a lamp, the sun, a fireplace, or any other temperature-radiating object which may cause a false reading. Finally, do not mount the sensor close to or in direct airflow from supply registers or return air grilles and in areas with poor air circulation (such as behind a door or in an alcove).

### 2 Sensor Installation

**INDOOR INSTALLATION** — Perform the following procedures to install the sensor:

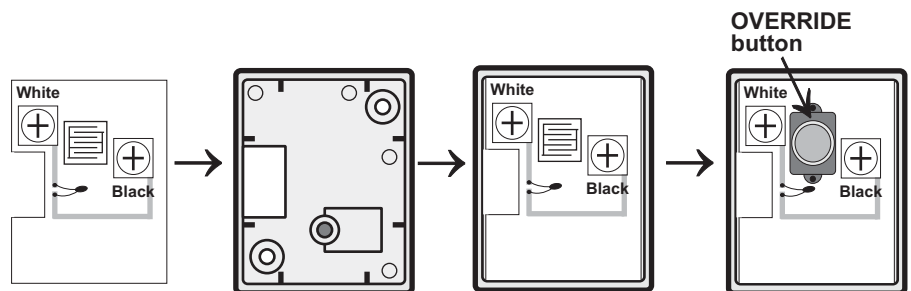
1. Place the Remote Sensor wall plate on the wall. Mark the mounting screw holes on the wall through the holes in the wall plate.
2. Drill two 3/16-in. mounting holes in the wall at the location marked in Step 1.
3. Mount the Remote Sensor wall plate to the wall with the screws provided.



### 3 Sensor Assembly

Align and press the Remote Sensor circuit board onto the wall plate as shown. Install the button onto the circuit board.

*Note: The OVERRIDE button can be disabled by putting non-conductive tape over the switch pad before installing the OVERRIDE button onto the circuit board.*

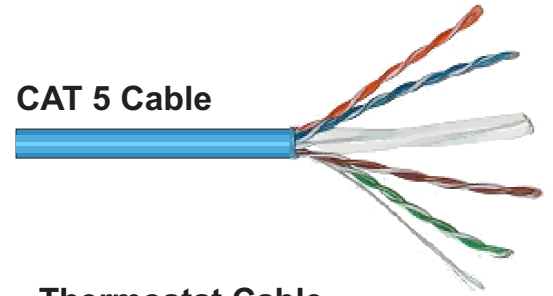


### 4 Wiring Requirements

The Remote Sensor should be connected to the thermostat using two conductor thermostat cable (18-24 gauge) or solid conductor CAT 5, CAT 5e, or CAT 6 type network communication cable. This is an unshielded cable with four twisted pairs of 24 gauge solid wire. The cable length should not exceed 250 feet.

**IMPORTANT:** Do not run sensor wiring in the same conduit as the 24VAC thermostat wiring. Electrical interference may cause the sensor to give incorrect temperature readings.

CAT 5 Cable



Thermostat Cable



### 5 Sensor Wiring

#### ! WARNING

Turn off power to the thermostat before wiring. Death or injury from electric shock could result.

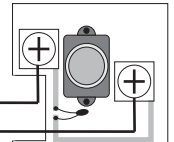
The connection between the Remote Sensor and the thermostat must be wired per the connection diagram. Only two conductors are used, therefore the extra conductors should be cut from each end of the cable to prevent shorting. Follow the color coding as shown.

Thermostat

Remote Sensor  
Circuit Board

REMOTE/  
OUTDOOR

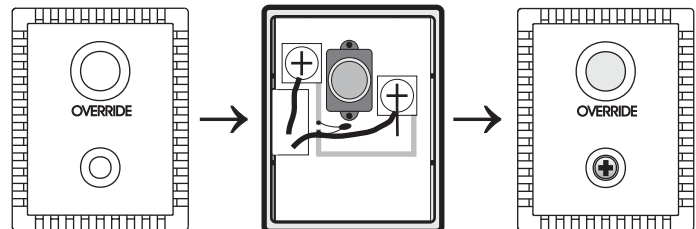
White +



Black -

### 6 Sensor Assembly

Secure the Remote Sensor top cover to the wall plate using the supplied standard or tamper proof screws.



### 7 Air Temperature vs. Temperature Resistance

*NOTE: All sensor wiring must be in compliance with all applicable local and national codes.*

Air Temperature		Resistance in Ohms
°F	°C	
-20	-28.9	106926
-10	-23.3	80485
0	-17.8	61246
10	-12.2	47092
20	-6.7	36519
30	-1.1	28558
40	4.4	22537
50	10	17926
60	15.6	14356
70	21.1	11578
80	26.7	9398
90	32.2	7672
100	37.8	6301
110	43.3	5203
120	48.9	4317