

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 Duct Sensor measures air temperature in the supply or return air duct with a range of -40° to 127° F. When used as a supply duct temperature sensor, the sensor will read supply duct temperature and display this information at the thermostat. When used as a return duct temperature sensor, this sensor may be used to control heating or cooling based on return duct temperature information.

1 Sensor Location

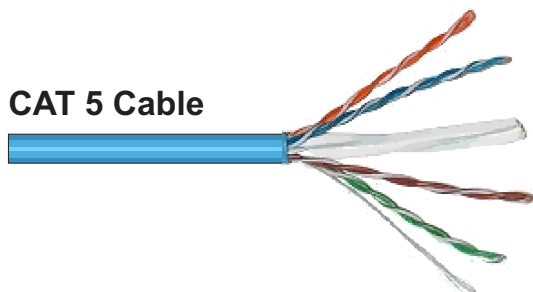
CORRECT LOCATION — When used as a supply or return duct sensor, this sensor must be mounted in the center of the supply or return air stream. When used as a remote indoor room temperature sensor, this sensor should be mounted in a location approximately five feet from the floor, close to or in a frequently used room, preferably on an inside partitioning wall.

INCORRECT LOCATIONS — The Duct 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 radiated heat which may cause a false reading. Finally, do not mount the sensor in an area with poor air circulation.

2 Wiring Requirements

The Duct Sensor should be connected to the thermostat using 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; *DO NOT use stranded cable*. The cable length should not exceed 250 feet. If less than 75 feet of cable is required to connect the thermostat to the Duct Sensor, a two conductor thermostat cable (18-24 gauge) may be used; this cable is *NOT* suitable for any length greater than 75 feet.

IMPORTANT: Do not use shielded wire. 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.



Thermostat Cable



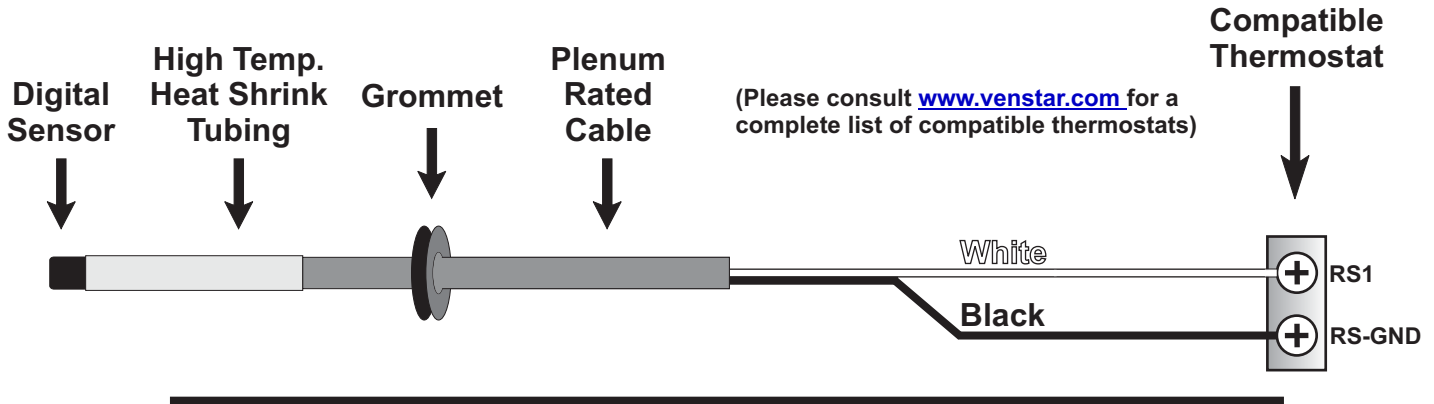
NOTE: All sensor wiring must be in compliance with all applicable local and national codes.

3 Sensor Wiring

⚠ WARNING

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

The connection between the Duct 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.



4 Sensor Installation

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

1. Select a location in the supply or return air ductwork for the sensor. Mark this location in the center of the duct.
2. Drill a 1/4-in. mounting hole in the ductwork at the marked location.
3. Push the rubber grommet into the hole in the ductwork until the grommet snaps into place.
4. Push the Duct Sensor through the grommet into the supply or return air duct.

