

TALON® Room Sensor

Product Description

These sensors work with the Predator Controllers, which are part of the offering within the TALON Control System. The Predator sensors use a 10K ohm Type 2 thermistor, and the Raptor sensors use a 1K ohm (385) Platinum RTD to detect temperature. The effective sensing range is 55°F to 95°F (13°C to 35°C).

Product Numbers

Description	Product Number
	Predator
Sensing only	587-180
Sensing with override, setpoint	587-184
Sensing with override, setpoint, temperature display*	587-187
Sensing with cooler/warmer setpoint, terminal blocks	587-188
Sensing with cooler/warmer setpoint, Digital Input override, terminal blocks	587-189
Sensing with cooler/warmer setpoint, Digital Input override, terminal blocks, temperature display*	587-196
Sensing with setpoint, override, RJ-11 jack	587-204
Sensing with setpoint, override, LCD, RJ-11 jack	587-207



* Sensor will display Fahrenheit or Celsius temperature.

Accessories

192-495 Electrical Box Adapter Plate (also included in 544-872B).

544-782B Adapter Base, white (includes 192-495).

Warning/Caution Notations

WARNING:		Personal injury/loss of life may occur if you do not follow the procedures as specified.
CAUTION:		Equipment damage or loss of data may occur if you do not follow the procedures as specified.

Required Tools

- Allen wrench, 1/16-inch (1.6 mm)
- Electric drill, medium-duty with 3/16-inch (4.8 mm) bit and 1-inch (24.5 mm) hole saw
- Hammer
- Pencil or marker
- Screwdrivers—Phillips, size 1 or 2; flat-blade, small and medium
- Small level
- Utility knife
- Wire cutters

NOTE: For sensors used with Predator Controllers—if using non-terminated cables (or if cables are damaged), you also need:

- Room sensor connector tool (P/N 540-140, ordered separately)
- Room sensor connectors (P/N 540-141, pkg. of 100, ordered separately)

Expected Installation Time

20 minutes

Prerequisites

Room sensor cable(s) are installed and available for connecting to the sensor.

NOTE: All wiring must comply with National Electric Code (NEC) and local regulations.

Installation

Mounting on Drywall (No Rough-in)

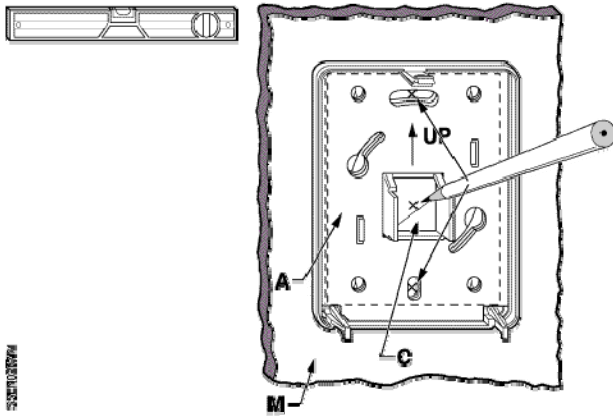


Figure 1. Drywall Mounting.

1. Place sensor base plate (A) against mounting surface (M). Align with level.
2. Using sensor base plate (A) as a template, mark holes as shown, pressing pencil through rubber insulator (C).

NOTE: For drywall mounting, use the center top and bottom holes as shown.

3. Drill holes as shown in Figure 2.

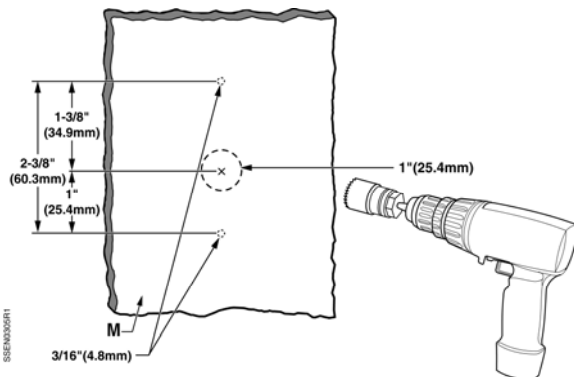


Figure 2. Mounting and Center Hole Locations.

4. If necessary, use a utility knife to cut a slit through the rubber insulator (C) in the center hole of the sensor base plate (A).
5. Pull about 3 inches (76.2 mm) of sensor cable (D) through the center hole.

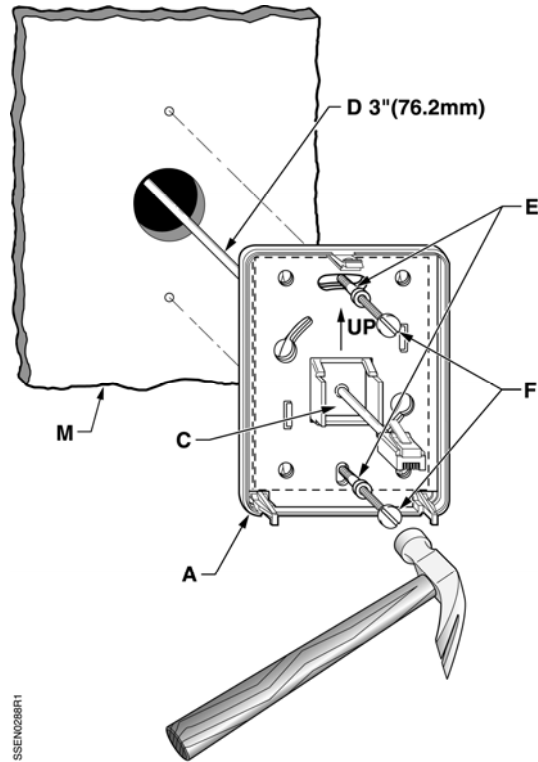


Figure 3. Mounting the Sensor Base Plate.

6. Insert the anchor/screw assembly (E, F) through the sensor base plate (A).
7. Align the sensor base plate (A) with the mounting holes. Tap into place with a hammer.

NOTE: For sensors with an analog temperature display, snip jumper (G) as shown to display temperature in degrees Celsius ($^{\circ}\text{C}$).

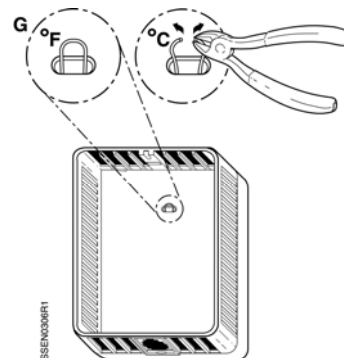


Figure 4. Jumper Location.

Option A: Connecting to a Predator Controller

NOTE: Ensure that there is enough slack in the room sensor cabling to allow removal of the sensor cover after installation.

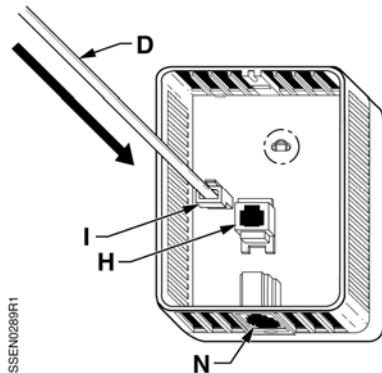


Figure 5. Connection from a Predator Controller to a TALON Room Sensor.

Option B: Connecting to a Predator Controller (Warmer/Cooler Setpoint Models Only)

Use the Network Room Temperature Sensor six-wire cable to connect the room sensor to the Predator controller when specifications require network access at the room sensor level. All cables are pre-terminated with RJ-11 connectors at both ends and are rated for plenum use.

Pin	Color	Wire	Terminal Block
1	LonNetwork Green	Twisted Pair	1
2	LonNetwork White/Green		2
3	Service Pin/LCD Power Blue	Twisted Pair	3
4	Common White/Blue		4
5	Setpoint Orange	Twisted Pair	5
6	Room Temp White/Orange		6

8. Attach sensor cover (O) to sensor base plate (A).
9. Using an Allen wrench (Q), secure cover with retaining screw (J).

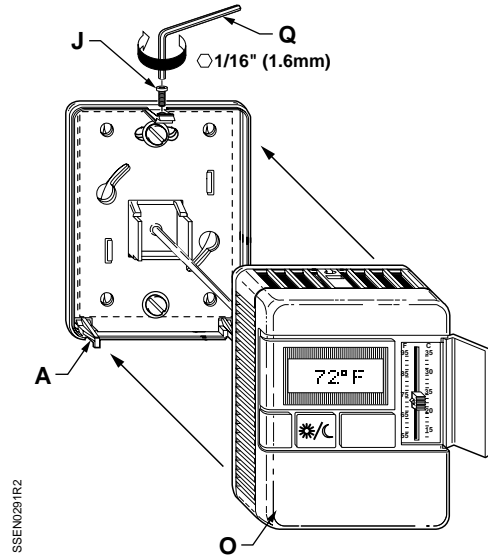


Figure 6. Replacing the Sensor Cover.

The installation is now complete.

Replacing an RJ-11 Connector (Optional)

If the connector (I) is not present or it is damaged, attach a new connector. Connect Pin 1 (P) to the same wire at each end of the cable.

CAUTION: For retrofits, ensure the cable is disconnected from the room sensor port on the Predator controller before cutting the cable to attach connector (I).

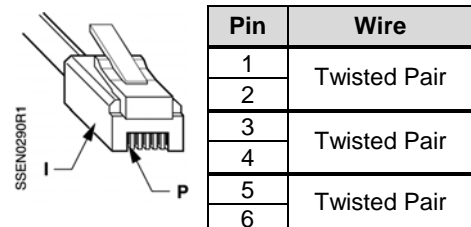


Figure 7. RJ-11 Connector.

