

Installer's Guide

SENS-IN-13C
18-HD60D41-3

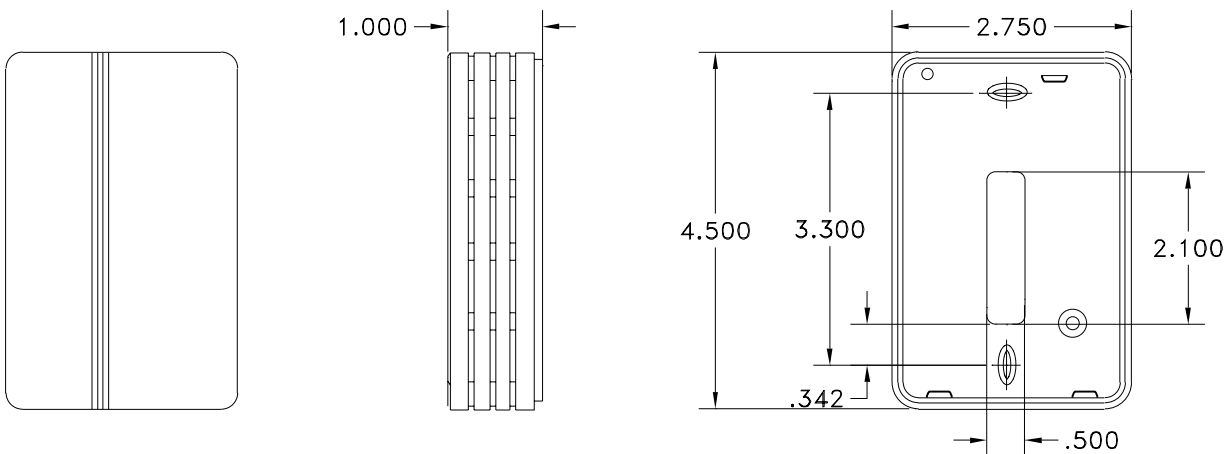
Customer Property: Contains wiring and service information. Please retain.

Library	Service Literature
Product Section	Unitary
Product	Unitary Accessory
Model	T'Stats, Panels, Timers, Relays
Literature Type	Installation Instructions
Sequence	13C
Date	January 2001
File No.	SV-UN-ACC-SENS-IN-13C 1/01
Supersedes	SENS-IN-13B

Models :

BAYSENS017B
ASYSTAT669A

Remote Zone Sensor



Description

This Zone Sensor Module is for use with Cooling, Heating, and Heat Pump units. It provides the following features and system control functions:

- Remote temperature sensing in the zone

When used as a remote sensor for std zone sensor, the thermistor sensor must be disabled.

- Morning warm-up sensor(Large Commerical only)
- Zone sensor for ICS™ systems
- Zone temperature averaging

Application

- Cooling, Gas/Electric, or Heat Pump packaged rooftops (2-25 ton)
- Large Commercial Rooftop UCM units (20-130 tons) with Constant or Variable Air Volume controls 5U57, 5U61, 5U69, and 5RT16
- Commercial Self-Contained units with Intellipak controls 5U23, 5U26, 5U30 and 5RT5.

Since the manufacturer has a policy of continuous product improvement, it reserves the right to change design and specifications without notice.

Inspection

Check packaging and contents for damage. Check for concealed damage before storing. Report any damage immediately to the transportation company, and make any appropriate claims.

Installation Steps

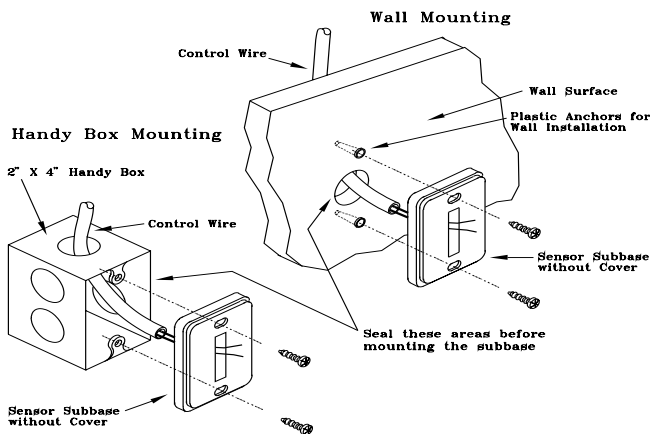
- 1. Mounting location.** Choose a spot on an interior wall near the return air grille, about five feet above floor level, where air circulates freely and is of average temperature for the zone.

Avoid areas such as:

- behind doors;
- on outside walls, or any walls with unheated or uncooled areas behind the zone sensor;
- in direct sunlight, or any source of radiant heat that could affect the temperature measurements; or
- in line with the discharge air from the unit being controlled.

- 2. Mount subbase.** Remove the front cover from the subbase, and mount subbase on the wall or in a 2 x 4 handy box. (See Figure 1) Seal the hole in the wall behind the subbase.

Figure 1 - Zone Sensor Mounting (typical)



Wiring

⚠ WARNING

HAZARDOUS VOLTAGE!

DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.

Failure to disconnect power before servicing can cause severe personal injury or death.

Note: Guidelines for wire sizes and lengths are shown in Table 1. The total resistance of these low voltage wires must not exceed 2.5 ohms per conductor. Any resistance greater than 2.5 ohms may cause the control to malfunction due to excessive voltage drop.

Note: Do Not run low-voltage control wiring in same conduit with high-voltage power wiring.

- 1. Run wires.** Run wires between the unit control panel and the zone sensor subbase. To determine the number of wires required, refer the Unit IOM for Wiring Connections.
- 2. Connect wires.** Connect the wiring to the appropriate terminals at the unit control panel and at the Zone Sensor subbase. In general, zone sensor connections to the unit use the convention of connecting Zone Sensor terminals to like numbered Unit terminals (1 to 1, 2 to 2, etc.). The connection detail is shown on the unit wiring diagrams which can be found in the unit service literature and on the unit.
- 3. Replace cover.** Place zone sensor cover back on the subbase, snap securely into place.

Table 1
Zone Sensor Maximum Lengths and Wire Size

Distance from Unit to Control	Recommended Wire Size
000 - 150 feet	22 gauge
151 - 240 feet	20 gauge
241 - 385 feet	18 gauge
386 - 610 feet	16 gauge
611 - 970 feet	14 gauge