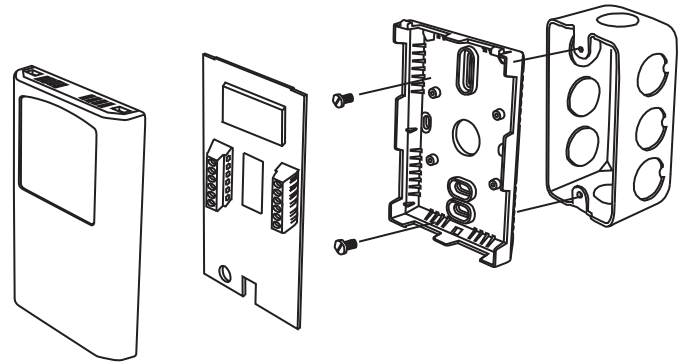




The HATSRC series is an attractive, low profile enclosure that incorporates a high accuracy temperature sensor used to monitor room temperatures. Additional options are available that include setpoint adjustment, manual override, fan speed, handset communication port, and LCD

Installation

Mount the unit directly on a wall or to a wall box. For the most accurate results, units should be mounted on an inside wall to a wall box, away from any supply air exhausts and other sources of heat or cold. The enclosure cover is held in place with locking tabs located each side of the bottom of the enclosure. After installation the cover can be locked on with the #1 Phillips head set screw at the bottom of the enclosure.

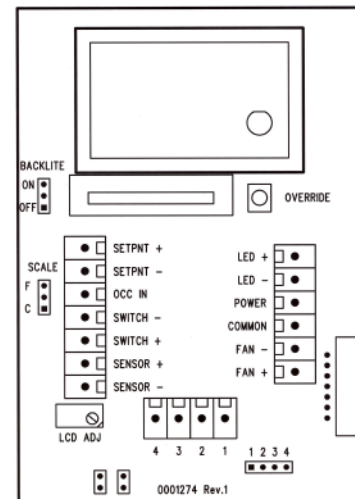


Wiring

All terminals are marked on the board as to their function. They are as follows:

- POWER/Common - LCD Power Connections
- SETPNT(+/-) - Setpoint Resistance Output
- SENSOR(+/-)/ - Temperature Sensor Output
- SWITCH(+/-) - Override Output
- FAN(+/-) - Fan Switch Resistance Output
- LED(+/-) - Override Status LED Power Input
- Comm Jack - Communication Connections for Handset
- OCC IN - Active Low, Digital Input for OCC indicator on LCD

If the unit is only equipped with a sensor, then the sensor is wired with the pig tail connections. Do not use wire-nuts for the connection. Place the provided clip near the bottom of the enclosure and place the sensor head-down in the clip.

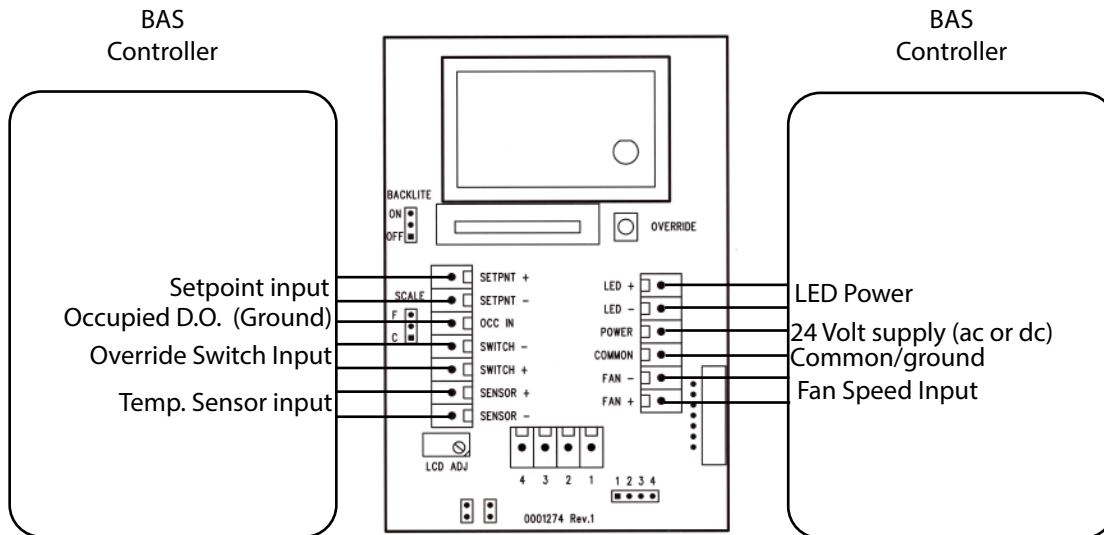


The HATSRC can be customized to work with any building automation system. Because of this there are many possible connection configurations. The above represents the standard configuration. However, other possible combinations include a shared common for all options and/or the override switch shorting temperature sensor (switch in parallel with the sensor).

If the unit has the LCD option then the scale can be set to either °C or °F via the Scale jumper. If the unit is also equipped with the backlight option it can be enabled/disabled via the Backlight jumper.

The LCD display can be calibrated by adjusting the LCD ADJ pot.

Room Temperature Sensor HATSRC Installation Instructions



SPECIFICATION:

Sensing ElementVarious thermistors and RTDs
 Accuracy**RTD Class A:** $\pm 0.15^{\circ}\text{C}$ @ 0°C
 RTD 1/3 DIN: $\pm 0.1^{\circ}\text{C}$ @ 0°C
 RTD 1/10 DIN: $\pm 0.03^{\circ}\text{C}$ @ 0°C
 NTC Thermistor Type 39 : $\pm 0.05^{\circ}\text{C}$, $0\text{-}70^{\circ}\text{C}$
 NTC Thermistor Type 40/46 : $\pm 0.1^{\circ}\text{C}$, $0\text{-}70^{\circ}\text{C}$
 Operating Conditions $0\text{-}50^{\circ}\text{C}$ ($32\text{-}122^{\circ}\text{F}$),
 $0\text{-}95\%$ RH non-condensing
 Wiring ConnectionsScrew terminal block (14 to 22 AWG)
 Sensor only - Pigtail, 2 or 3 wire
 EnclosureWall mount enclosure,
 White ABS - IP30 (NEMA 1)
 84 w x 119 h x 29 d mm (3.3" x 4.7" x 1.15")

OPTIONS:

Override Switch

Switch TypeFront panel, momentary push-button,
 N.O., SPST, 50 mA @12 Vdc

Fan Speed Switch

RangeAuto, Off, Low, Medium, High
 SignalResistance: 2K, 4K, 6K, 8K and 10K Ω
 standard (Custom ranges available)

Setpoint Slide Pot

RangeFront panel pot as resistive output,
 20-30 K Ω standard
 Custom spans available..1K, 2K, 5K, 10K or 20K Ω

Occupied Input

Signal TypeDigital input, 0/5 Vdc standard, active low
 ActionCauses "OCC" segment to light on LCD

LED Input

Signal TypeActive high, low or 2-wire,
 5 V current limit standard
 LED ColorsRed, Green or Yellow
 Power Supply5 Vdc standard, 10 Vdc or 24 Vdc optional

LCD Display

Power Supply12-24 Vdc / 24 Vac $\pm 10\%$
 (non-isolated half-wave rectified)
 Consumption @ 24 Vdc ..13 mA max (no backlight),
 23 mA max (with backlight)
 Protection CircuitryReverse voltage protected
 Range $0.0\text{-}35.0^{\circ}\text{C}$ or $32.0\text{-}95.0^{\circ}\text{F}$
 jumper selectable
 Resolution $0.1^{\circ}\text{C}/^{\circ}\text{F}$
 Display Size38.1 w x 16.5 h mm (1.5" x 0.65")
 Digit Height11.43 mm (0.45")
 Symbols $^{\circ}\text{C}$, $^{\circ}\text{F}$, OCC
 BacklightEnable or disable via jumper