HT SERIES

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LCD Wall Mount with Analog Setpoints
1% NIST, 2% NIST, 2%, 3%, 5%

CE

NOTICE

- **This product is not intended for life or safety applications.**
- **Do not install this product in hazardous or classified locations.**
- **Read and understand the instructions before installing this product.**
- **Turn off all power supplying equipment before working on it.**
- **The installer is responsible for conformance to all applicable codes.**

PRODUCT IDENTIFICATION

	Accuracy	NIST	Setpoint	Temp Cal Certificate	Option
HT	☐	☐	**A**	**S**	☐	☐

Accuracy	NIST	Setpoint	Temp Cal Certificate	Option
1 = 1%	N = NIST	= Analog	= CE	0 = None	B = 100R Platinum, RTD
2 = 2%	(1 & 2% only)			1 = 1 point Cal	C = 1k Platinum, RTD
3 = 3%	X = No			Validation	D = 10k T2, Thermistor
5 = 5%	(2, 3, 5% only)			2 = 2 point Cal	E = 2.2k, Thermistor
				Validation	F = 3k, Thermistor

- G = 10k CPC Thermistor
- H = 10k T3, Thermistor
- J = 10k Dale, Thermistor
- K = 10k w/11k with Shunt, Thermistor
- M = 20k NTC, Thermistor
- N = 1800 ohm TAC, Thermistor
- Q = 1uA/C, Linitemp
- R = 10k US, Thermistor
- S = 10k 3A 221
- T = 100k, Thermistor
- U = 20k "D", Thermistor

Installer's Specifications

Input Power*	15 to 30VDC/24VAC, 100mA max.
Outputs	Switch-selectable 4-20mA or 0-10V/0-5VDC (switch affects both outputs)
RH Sensor	Digitally profiled thin-film capacitive (32-bit mathematics) U.S. Patent 5,844,138
Accuracy at 25°C from 10-80% RH**	±2%, 3%, or 5% models ±1% at 20-50% RH (Multi-point calibration NIST traceable)
Reset Rate***	24 hours
Stability	±1% @ 20°C (68°F) annually, for two years
Linearity	Included in Accuracy spec.
Operating Humidity Range	0-100% RH (non-condensing)
Temperature Coefficient	± 0.1%RH/°C above or below 25°C (typical)
Operating Temperature Range	10°-35°C (50°-95°F)
Temperature Accuracy	± 1.0°C (± 1.8°F)
Scaling	RH: 0-100% RH; Temp: 10°-35°C (50°-95°F) or 0°-50°C (32°-122°F) menu selectable
Calibration Offset	RH: Adjustable ±9.9% in 0.1% increments; Temp: Adjustable ±5.0°C (±9.9°F) in 0.1° increments
Setpoint Range	RH: 10-80% RH in 1% increments; Temp: Minimum to Full Scale in 1° increments

One side of transformer secondary is connected to signal common, so an isolation transformer or dedicated power supply may be required.
*** Specified accuracy with 24VDC supplied power with rising humidity*
****Reset Rate is time required to recover to 50% RH after exposure to 90% RH for 24 hours*
RTD/Thermistors in wall packages are not compensated for internal heating of product.

QUICK INSTALL

1. Select a mounting location away from ventilation sources. The sensor should be mounted on a vertical wall, about 4 ½ feet above the floor.
2. Affix the backplate to the wall.
3. Wire the device. Refer to wiring diagram.
4. Install Cover.

DIMENSIONS

4.75" (121 mm)

Enter
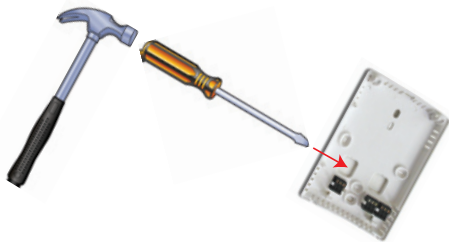
3.5" (89 mm)

1.2" (29 mm)
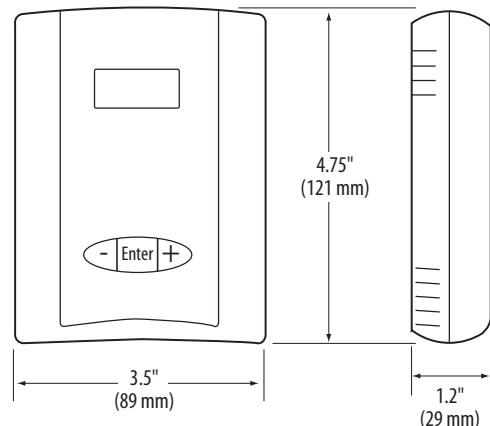
INSTALLATION

1. Remove the cover by pressing the tab at the top of the sensor while pulling outward from the top of the cover.

2. Remove the backplate by unfastening the sensor from the bottom of the backplate and pivoting the sensor outward.
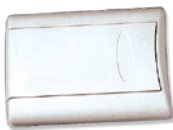
3. Punch out openings in the backplate.

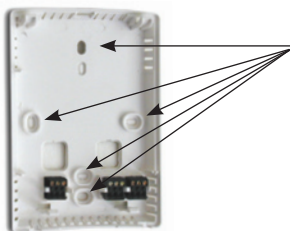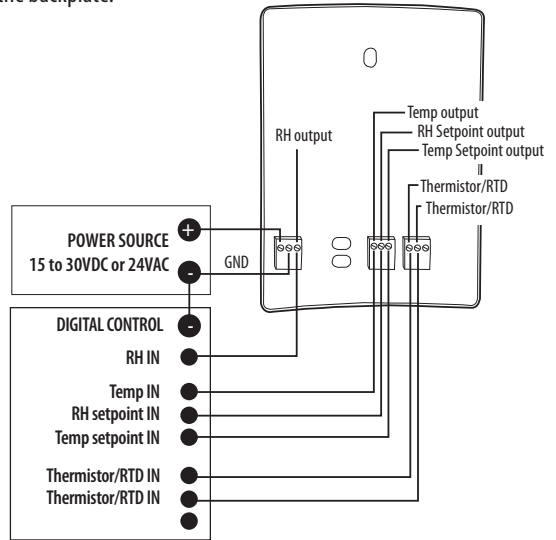4. Position the sensor vertically on the wall, 4 ½ feet above the floor.

correct   *incorrect*

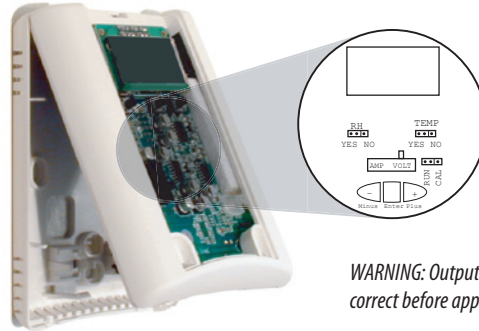5. Mount the backplate onto the wall using the screws provided.

Five screwholes available; use a minimum of two for secure mounting.

6. Wire the backplate.

RH output
Temp output
RH Setpoint output
Temp Setpoint output
Thermistor/RTD
Thermistor/RTD

POWER SOURCE 15 to 30VDC or 24VAC   + / −   GND

DIGITAL CONTROL   −
RH IN
Temp IN
RH setpoint IN
Temp setpoint IN
Thermistor/RTD IN
Thermistor/RTD IN

7. Install and configure the sensor.

WARNING: Output select must be correct before applying power.

RH — YES NO   TEMP — YES NO
AMP   VOLT   RUN CAL
Minus   Enter   Plus

RH YES/NO JUMPER:
YES - allows user to change RH setpoint
NO - user can NOT change RH setpoint

TEMP YES/NO JUMPER:
YES - allows user to change TEMP setpoint
NO - user can NOT change TEMP setpoint

RUN/CAL JUMPER:
CAL Mode - allows full access to all features.
RUN Mode - allows access to relay setpoints ONLY.

RH SENSOR   TEMP SENSOR
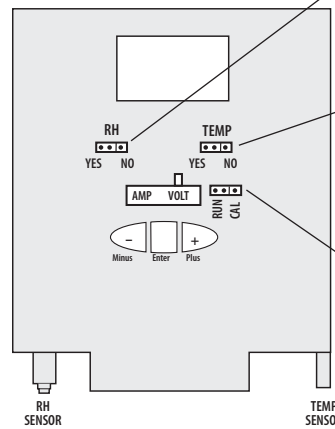
8. Install the cover and snap into place.

HT CALIBRATION INSTRUCTIONS

1. Temperature calibration allows for calibration offset of ±10º F, user discretion. RH and TEMP can be field calibrated by moving RUN/CAL jumper to CAL position.

2. Relative humidity allows for calibration offset of ±10% RH, user discretion.

HT OPERATION INSTRUCTIONS

Display screen
Scroll down
Select
Scroll up

− Enter +
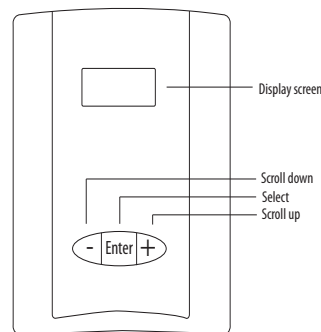
Normal Operation

NORMAL MODE

4	5	.	5		%	R	H
6	8	.	5			º	F

Temperature Selection

Use the (+) and (−) buttons to scroll to the Thermostat mode:

S	E	T	P	O	I	N	T
		7	0				F

press ± to change, press * to select;
setpoint in ˚C if Celsius units are selected

Humidity Selection

Use the (+) and (−) buttons to scroll to the Humidistat mode:

S	E	T	P	O	I	N	T
		4	5		%	R	H

press ± to change, press * to select

MENU

NORMAL MODE

4	5	.	5		%	R	H
6	8	.	5			º	F

↓

CONFIG/CAL MODE
(Enter by any keypress when
Run/Cal jumper is in CAL position)

↓

U	N	I	T	S			
*	º	F				º	C

press ± to change, press * to select

↓

S	E	T	P	O	I	N	T
		7	0				F

press ± to change, press * to select;
setpoint in ˚C if Celsius units are selected

↓

S	E	T	P	O	I	N	T
		4	5		%	R	H

press ± to change, press * to select

↓

C	A	L		T			
+	0	.	0				F

press ± to change, press * to select;
setpoint in ˚C if Celsius units are selected

↓

C	A	L		R	H		
+	0	.	0				%

press ± to change, press * to select

↓

Output scaling
(does not affect LCD display)

T	E	M	P		S	E	T
+	5	0			+	9	5

press ± to change, press * to select;
options are 50-95˚F (10-35˚C) or 32-122˚F (0-50˚C)

↓

Only for switch in
Volts position

	O	U	T	P	U	T	
	0	-	1	0	V		

press ± to change, press * to select