



**SANTA-FE™**

**INDOOR AIR QUALITY SOLUTIONS**

**SMARTAIRE™  
REMOTE SENSOR**



**Santa-Fe-Products.com | 800.533.7533**

TS-2145 03/25 Rev A

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**FOR REPAIR & TECH SUPPORT: 1-800-533-7533**  
**(follow prompts) or CONTACT US AT:**  
**[service@santa-fe-products.com](mailto:service@santa-fe-products.com)**

Santa Fe is committed to manufacturing quality products.  
To maintain our standards, product specifications may  
change without notice.



***Therma-Stor***<sup>®</sup> LLC

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[Thermastor.com](http://Thermastor.com) | [Santa-Fe-Products.com](http://Santa-Fe-Products.com)

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## SAFETY INSTRUCTIONS

**READ THE INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS CAREFULLY BEFORE INSTALLING AND OPERATING THIS DEVICE. PROPER ADHERENCE TO THESE INSTRUCTIONS IS ESSENTIAL TO OBTAIN MAXIMUM BENEFIT FROM YOUR SANTA FE WHOLE HOUSE VENTILATING DEHUMIDIFIER.**

### **WARNING!**

**THIS SYMBOL MEANS IMPORTANT INSTRUCTIONS. FAILURE TO HEED THEM CAN RESULT IN SERIOUS INJURY OR DEATH.**

### **CAUTION!**

**THIS SYMBOL MEANS IMPORTANT INSTRUCTIONS. FAILURE TO HEED THEM CAN RESULT IN INJURY OR MATERIAL PROPERTY DAMAGE.**

## SPECIFICATIONS

<b>Operating Voltage:</b>	24 VAC
<b>Switching Current:</b>	1 Amp, 24VAC
<b>Humidity Range:</b>	10 - 95% RH
<b>Auxillary Relay Rating:</b>	5 Amps, 24 VAC
<b>Temp Range:</b>	30°-90° F
<b>Dimensions:</b>	2" W x 2" H x 0.6" D

# INSTALLATION

## Whats Included:

- Remote sensor
- 2 x screws
- 2 x wall anchors
- 1 x adhesive mounting pad

## Tools Needed for Installation:

- Small flat head screwdriver
- 18-22 gauge wire with two available wires
- Drill (optional)
- Hammer (optional)
- Phillips screw driver (optional)

## Placement of the Sensor

Install the sensor in a central area of the structure where it will sense the relative humidity of the structure accurately. Do not install the remote sensor where it may not accurately sense the relative humidity such as near HVAC supply registers, exterior doors and windows, or a pool or spa. Install in accordance with all applicable codes and standards. Up to 100 feet of wire can be used.

## Installation of the Sensor

### **WARNING!**

**THE REMOTE CONTROL OF THE DEHUMIDIFIER OPERATES ON A LOW VOLTAGE CIRCUIT (24 VAC) AND MUST NEVER CONTACT OR BE CONNECTED TO A HIGH VOLTAGE CIRCUIT.**

### **WARNING!**

**UNPLUG THE DEHUMIDIFIER BEFORE WIRING THE SMARTAIRE™ REMOTE SENSOR.**

Wiring is not included. Use 18-22 gauge wire to connect the Santa Fe Dehumidifier with the SmartAire Remote Sensor.

# INSTALLATION

## Sensor Mounting

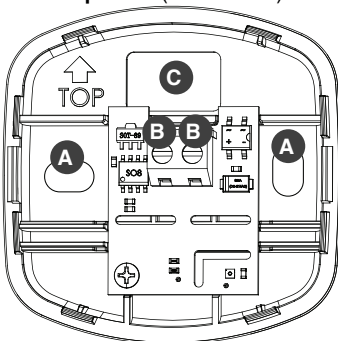
**Option 1:** Use the two screws and wall anchors to mount the sensor. Use the two slotted holes to mount the base of the sensor to the wall and then snap the cover into place. Install anchors into wall.

- A** Mounting Holes
- B** Terminal Connections
- C** Wire Routing
- D** Adhesive Mounting Location

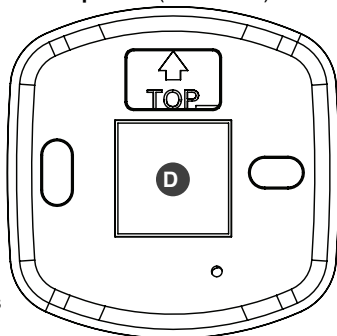
**Option 2:** Use the double-sided adhesive to mount the sensor. Place the adhesive on the back panel in the square area and then mount to desired location.

**NOTE:** The wires can be routed out of the back of the sensor housing or out one of the open areas on the top or bottom. It is preferred that the sensor is oriented such that the Up arrow is pointing up. However, the sensor is designed to work in any orientation on a wall or ceiling.

**Option 1 (Inside View)**



**Option 2 (Back View)**



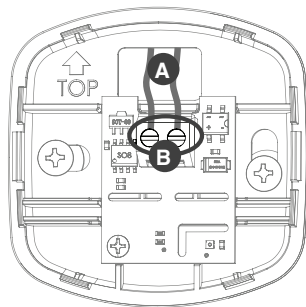
## WIRING

### Wiring the Sensor

1. Remove the front cover of the sensor by gently separating the front cover from the back on the top and bottom.



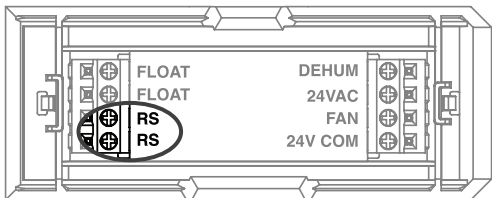
2. Insert two wires into the terminal block on the remote sensor and tighten down the screws. Gently pull on the wires to ensure the wires are fully fastened.



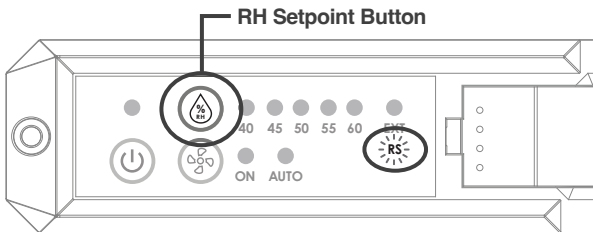
**A** Two Wires      **B** Screws

## WIRING

3. Install the other end of the wires to the terminal block of the Santa Fe dehumidifier using the two RS terminals. **NOTE:** The order of the wires to the RS terminal will not affect the function of the sensor.



4. Once the terminal block is installed back onto the dehumidifier, the RS light will illuminate on the dehumidifier display. This means the sensor was detected and is working properly. Set the Humidity Setpoint using the RH Setpoint Button on the dehumidifier controller.



The dehumidifier will now be controlled based on the relative humidity reading at the sensor.

# OPERATION

## Ventilation & Air Circulation Control

If using the unit for outdoor ventilation or air circulation, the FAN terminal can always be wired to turn the dehumidifier fan on.

## Dew Point Cut Out

If the dew point is below 40F at the on-board sensor the unit will stop dehumidifying. If the Fan Mode is set to ON, the fan will continue to run. If the Fan Mode is set to Auto the Fan will turn off. Dew Point Cut Out is designed to protect the dehumidifier as well as turn the unit off when the total moisture in the air is too low. The unit will sample air intermittently until the dew point at the unit rises above 40F. Once the dew point rises above 40F the unit will resume normal operation.

## Temperature Cut Out

When the temperature of the air after a one minute sampling period is above 120F or below 40F the unit will not dehumidify. If the Fan Mode is in Auto, the unit will turn the fan on for one minute every 15 minutes to measure the temperature. Once the temperature is above 40F or below 120F the unit will resume normal operation.

### **WARNING!**

**THE USE OF SPRAY PAINT ON THE SENSOR HOUSING MAY DAMAGE THE SENSOR AND IS NOT COVERED BY THE PRODUCT WARRANTY.**



## WARRANTY

**Warrantor:**

Therma-Stor LLC  
4201 Lien Road  
Madison, WI 53704  
Telephone: (800) 533-7533

**Who Is Covered:** This warranty extends only to the original residential end-user of the Santa Fe SmartAire™ Remote Sensor, and may not be assigned or transferred.

**First Year Warranty:** Therma-Stor LLC warrants that, for one (1) year the Santa Fe SmartAire™ Remote Sensor will operate free from any defects in materials and workmanship, or Therma-Stor LLC will, at its option, repair or replace the defective part(s), free of any charge.

**End-User Responsibilities:** Warranty service must be performed by a Servicer authorized by Therma-Stor LLC. If the end-user is unable to locate or obtain warranty service from an authorized Servicer, he should call Therma-Stor LLC at the above number and ask for the Therma-Stor LLC Service Department, which will then arrange for covered warranty service. Warranty service will be performed during normal working hours.

The end-user must present proof of purchase (lease) upon request, by use of the warranty card or other reasonable and reliable means. The end-user is responsible for normal care. This warranty only applies to residential applications and does not cover any defect, malfunction, etc. resulting from misuse, abuse, lack of normal care, corrosion, freezing, tampering, modification, unauthorized or improper repair or installation, accident, acts of nature or any other cause beyond Therma-Stor LLC's reasonable control.

## WARRANTY

**Limitations and Exclusions:** If any Santa Fe SmartAire™ Remote Sensor part is repaired or replaced, the new part shall be warranted for only the remainder of the original warranty period applicable thereto (but all warranty periods will be extended by the period of time, if any, that the Santa Fe SmartAire™ Remote Sensor is out of service while awaiting covered warranty service).

UPON THE EXPIRATION OF THE WRITTEN WARRANTY APPLICABLE TO THE SANTA FE SMARTAIRE™ REMOTE SENSOR OR ANY PART THEREOF, ALL OTHER WARRANTIES IMPLIED BY LAW, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL ALSO EXPIRE. ALL WARRANTIES MADE BY THERMA-STOR LLC ARE SET FORTH HEREIN, AND NO CLAIM MAY BE MADE AGAINST THERMA-STOR LLC BASED ON ANY ORAL WARRANTY. IN NO EVENT SHALL THERMA-STOR LLC, IN CONNECTION WITH THE SALE, INSTALLATION, USE, REPAIR OR REPLACEMENT OF ANY SANTA FE SMARTAIRE™ REMOTE SENSOR OR PART THEREOF BE LIABLE UNDER ANY LEGAL THEORY FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION WATER DAMAGE (THE END-USER SHOULD TAKE PRECAUTIONS AGAINST SAME), LOST PROFITS, DELAY, OR LOSS OF USE OR DAMAGE TO ANY REAL OR PERSONAL PROPERTY.

Some states do not allow limitations on how long an implied warranty lasts, and some do not allow the exclusion or limitation of incidental or consequential damages, so one or both of these limitation may not apply to you.

**Legal Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.





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