



A Division of Pittway
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1-800-SENSOR2, FAX: 630-377-6495

5551 Plug-in Intelligent Fixed Temperature Sensor with Communications

Specifications

Diameter:	6.1 inches (15.5 cm) installed in B501B 4.1 inches (10.4 cm) installed in B501
Height:	1.6 inches (4.1 cm)
Weight:	5 ounces (150 g)
Installation Temperatures:	32° to 100°F
Operating Temperature Range:	0° to 38°C (32° to 100°F)
Operating Humidity Range:	10% to 93% Relative Humidity
Mounting:	B501B flanged base B501 flangeless base B501 with RMK recessed mounting kit
Voltage Range:	15 to 32 Volts DC Peak
Standby Current:	200 μ A @ 24 VDC
LED Current:	7 mA @ 24 VDC
Fixed Temperature Thermal:	135°F (57°C)

Before Installing

Please thoroughly read the system wiring and installation manual, which provides detailed information on sensor spacing, placement, zoning, and special applications. Copies of these manuals are available from System Sensor.

NOTICE: This manual should be left with the owner/user of this equipment.

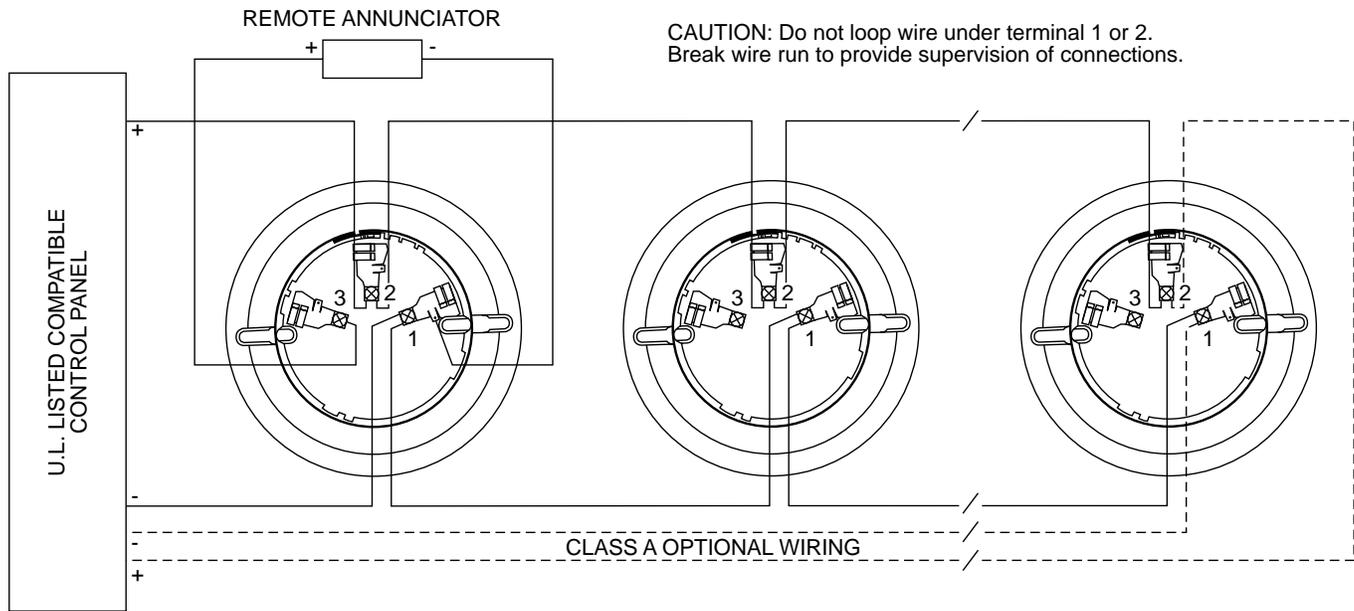
IMPORTANT: This sensor must be tested and maintained regularly following NFPA 72 requirements. This sensor should be cleaned at least once a year.

General Description

The model 5551 is a fixed temperature intelligent sensor utilizing a state-of-the-art dual thermistor sensing circuit for fast response. These sensors are designed to provide open area protection with 50 foot spacing capability, and are to be used with compatible control panels only. (For installation in Canada, refer to ULC-S530-1978.)

Two LEDs on each sensor light to provide 360° visibility of the sensor indication. The LEDs can be latched ON by code command from the panel for an alarm indication. The LEDs can also be unlatched to the normal condition by code command. Remote LED annunciator capability is available as an optional accessory (Part No. RA400).

Figure 1. Wiring diagram:



A78-1253-01

Wiring Guide

Refer to the installation instructions for the particular plug-in base being used: 1) for the B501B base (D550-01-01); 2) for the B501 base (D550-02-00); 3) for the RMK400 used with the B501 base (D450-07-00). Bases are provided with screw terminals for power, ground, and remote annunciator connections.

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations.

NOTE: Verify that all Sensor Bases are installed and that the wiring polarity is correct at each base.

3. After all sensors have been installed, apply power to the control unit.
4. Test the sensor by placing a small magnet against the sensor plastic directly opposite the test meter socket (Figure 2). The alarm level will be recognized in the panel and the LED controlled by communication command from the panel.
5. The reset of the sensor LED is controlled by communication command from the panel.

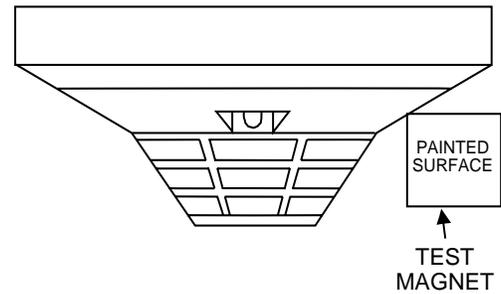
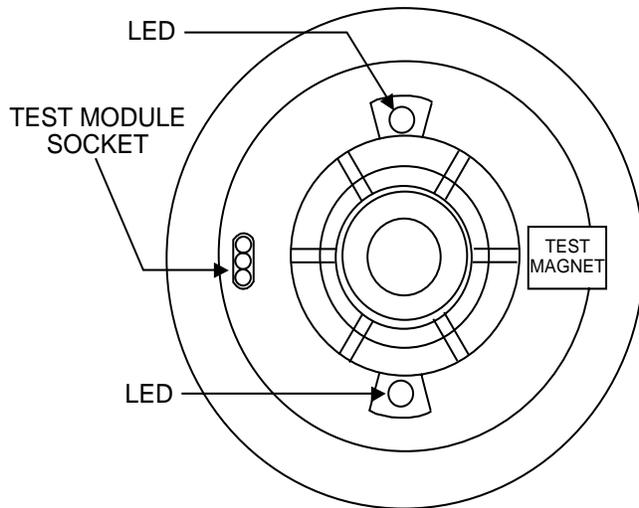


Remove power from the loop before installing sensors.

1. Install Sensors:
 - a. Verify that the sensor type matches the type written on the label in the base.
 - b. Set the sensor to a desired address and then write the address on the label on the base.
 - c. Place the sensor into the sensor base.
 - d. Turn the sensor clockwise until it drops into place.
 - e. Continue turning the sensor clockwise to lock it in place.
2. Tamper-proof feature:

The sensor bases include a tamper-proof feature that, when activated, prevents removal of the sensor without the use of a tool. See the installation instruction manual for the sensor base for details in using this feature.

Figure 2. Views showing position of test magnet:



A78-1478-00

Testing the 5551 Sensitivity

Sensors must be tested after installation and periodic maintenance. The sensitivity of the 5551 may be tested in the two following ways.

A. Test Magnet (Model No. M02-04)

1. Place the magnet against the cover opposite the test module slot as shown in Figure 2 to activate the test feature.
2. The LEDs should latch ON within 10 seconds, indicating alarm and annunciating the panel.

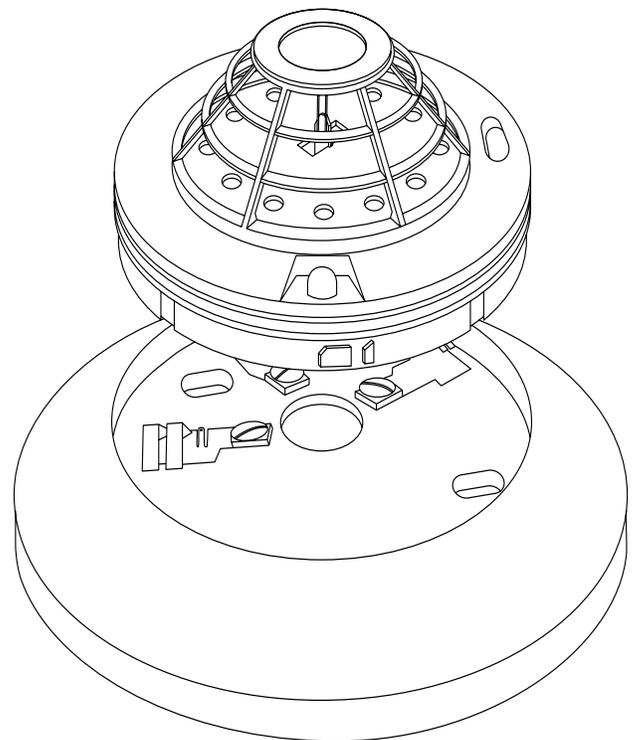
B. Test sensitivity from the control panel.

Cleaning the Model 5551 Sensor

NOTE: Before cleaning, notify the proper authorities that the system is undergoing maintenance, and therefore the system will temporarily be out of service. Disable the loop or system undergoing maintenance to prevent unwanted alarms.

It is recommended that the sensor be removed from its mounting base for easier cleaning, and that sensors be cleaned at least once a year. Use a vacuum cleaner to remove dust from the sensing chamber.

Figure 3:



A78-1944-00



The Limitations of Property Protection Heat Detectors

This heat detector is designed to **activate and initiate** emergency action, but will do so only when it is used in conjunction with an authorized fire alarm system. This detector must be installed in accordance with NFPA standard 72.

Heat detectors will not work without power. AC or DC powered smoke detectors will not work if the power supply is cut off for any reason.

Heat detectors are designed to protect property, not life. They do not provide early warning of fire and cannot detect smoke, gas, combustion particles, or flame. They alarm when temperatures at the heat detector reach 57°C (135°F). Given the rapid growth of certain types of fires, heat detectors cannot be expected to provide adequate warning of fires resulting from smoking in bed, inadequate fire protection practices, violent explosions, escaping gas, improper storage of flammable liquids like cleaning solvents, other safety hazards, or arson.

Heat detectors do not always detect fires because the fire may be a slow-smoldering, low-heat type (producing smoke), or because they may not be near where the fire occurs, or because the heat of the fire may bypass them. Heat detectors will not detect smoke, gas, flames, or combustion particles.

Heat detectors are components in professionally installed fire alarm systems. **They will not function if they have been improperly wired into the fire alarm system or if power to them is cut off for any reason.**

Heat detectors cannot last forever. They should be tested and maintained following the instructions in this manual. To be safe, they should be replaced after they have been installed for 15 years.

Refer to NFPA 72 for application.

Three-Year Limited Warranty

System Sensor warrants its enclosed heat detector to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for this heat detector. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the repair or replacement of any part of the heat detector which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: System Sensor, Repair Depart-

ment, RA # _____, 3825 Ohio Avenue, St. Charles, IL 60174. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.