GE Security

Learn Mode Commercial Rate-of-Rise Heat Sensors

Installation Instructions

www.GE-Security.com

Document Number: 466-1941 Rev. A
April 2004

Product Summary

135°F

60-926-01-95

200°F

60-926-95
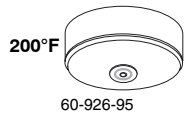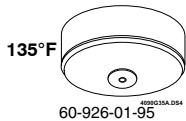
The sensors combine a Chemetron (Model 601 or 602) heat detector and a learn mode wireless transmitter in one unit. A fixed temperature element trips the transmitter when the temperature at the sensor location reaches about 135°F (57°C) or 200°F (94°C), depending on the model installed.

Since many fires grow rapidly in intensity causing a rapid temperature increase, the rate of rise element trips the transmitter if the temperature rises 15°F (8°C) or more, per minute.

A tamper switch detects when the sensor is removed from the base. The sensor then transmits a tamper signal for the panel to receive.

All models are powered by one 3.6-volt lithium battery. When the battery voltage gets low, the sensor transmits a low battery signal for the panel to receive.

Note
Battery life depends on how often the sensor transmits signals, but is more dependent on the temperature of the installation environment. Batteries self-discharge more rapidly when used in high temperature environments.

⚠ **Caution**

SX-V® *Special* panels must have software version 8.0 or later installed for correct response from Learn Mode Rate-of-Rise Heat Sensors. Do not use this sensor if the panel uses an earlier software version. If you need assistance, call GE Security Technical Support at 1-800-777-2624.

Equipment Needed

- Phillips and flathead screwdriver.

- Appropriate learn mode control panel/receiver installation instructions (for programming information).

Installation

Guidelines

- Heat sensors should be installed to provide property protection. Reliance should not be placed only on heat detectors for life safety. Where life safety is involved, smoke sensors must also be installed.

- The sensor allows for normal temperature fluctuations; however, ceiling temperatures should not exceed 100°F (37°C) when installing 135°F models, or 150°F (66°C) when installing 200°F models.

- Mount the sensor in a central location of the area to be protected, either on the ceiling or on a wall.

- If mounting on a ceiling, the sensor must be at least 4 inches (10 cm) away from any walls.

- If mounting on a wall, the top of the sensor must be within 4 to 6 inches (10 to 15 cm) of the ceiling.

- The UL maximum spacing allowance of the sensor is 50' x 50' (15 m x 15 m). Refer to NFPA Standard 72 for application requirements.

- Do not mount the sensor close to devices that change temperature rapidly, such as ovens, heat vents, a furnace, or boilers.

Programming

The panel must learn the sensor ID code in order to respond to sensor signals. For complete programming information, refer to the specific panel *installation instructions*.

You must be free of static electricity before handling circuit boards. Wear a grounding strap or touch a grounded, bare metal surface to discharge static electricity.

Static

1. Separate the sensor from the base by twisting the sensor counter-clockwise and pulling it off the base. Set the base aside.

2. Place the panel in program mode.

3. Proceed to the **LEARN SENSORS** menu.

4. When the panel prompts you for a sensor group number, enter the fire group number (26).

5. Select the desired sensor number.

6. When the panel prompts you to trip the sensor, press and release the tamper switch on the sensor (Figure 1). System sirens beep indicating successful programming.
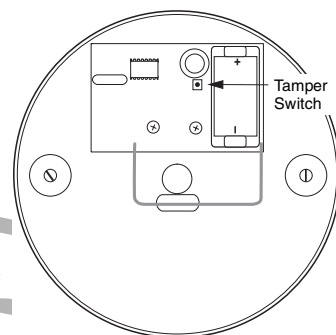
7. Exit program mode.

Figure 1. Tamper Switch Location

Testing

Before permanently securing the sensor to the wall or ceiling, test the sensor from the area it will be located, using one of the two methods below.

The test methods described below only test rate-of-rise detection. These sensors cannot be field-tested for their fixed temperature limits (135°F and 200°F) without being destroyed. When used with care, the heat from a portable hair dryer (Method 2) can be used for testing. Do not aim the hair dryer directly at the round disc on the sensor as this can cause it to pop off. If this happens, the sensor must be replaced.

Caution

➢ **Method 1:**

1. Place the panel in the sensor test mode.

2. Rub your hands together vigorously, until they feel hot.

3. Place the palm of one hand on the round disc of the sensor, for about 7 to 10 seconds.

4. Listen for the appropriate number of beeps from interior sirens and speakers (refer to the specific panel *installation instructions*).

5. Exit sensor test.

The sensor should reset in less than 1 minute.

➢ **Method 2:**

1. Plug in a portable hair dryer.

2. Hold the hair dryer about 12 to 18 inches away from the sensor, aiming it at the side of the sensor.

3. Listen for the appropriate number of beeps from interior sirens and speakers (refer to the specific panel *installation instructions*).

4. Exit sensor test.

The sensor should reset in less than 1 minute.

Mounting the Sensor

Secure the sensor at its permanent location as follows:

1. Locate the base mounting holes (inner pair and outer pair) and mount the base to the wall or ceiling with the appropriate hardware (see Figure 2).
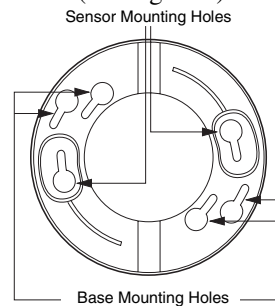
Sensor Mounting Holes

Base Mounting Holes

Figure 2. Sensor and Base Mounting Hole Locations

2. Attach the sensor to the base.

Replacing Batteries

When the sensor battery gets low, the sensor transmits a low battery signal. The panel receives this signal and sounds trouble beeps through system sirens. Pressing the STATUS button identifies the sensor with the low battery.

Replace the battery immediately when this condition occurs, using only Saft LS 14250 C 3.6 volt lithium battery.

Battery Disposal

Batteries that are no longer usable are considered hazardous waste. Be sure to properly dispose of the old batteries. Contact your local city government for hazardous waste disposal laws.

Specifications

Compatibility: .... Commander 2000 and Custom Versions, CareTaker *Plus* and Custom Versions, SX-V *Special* (software versions 8.0 and later), Concord (software versions 3.0 and later), Concord Express, Simon 2, Simon 3 (software versions 3.6 and later)

Frequency: .... 319.5 MHz.

Power Requirements: .... One Saft LS 14250 C 3.6 volt lithium battery

Operating Temperature Range: .. (60-926-01-95) 40° to 100°F /4° to 37°C
(60-926-95) 32° to 150°F / 0° to 66°C

Storage Temperature: .... (60-926-01-95) -30° to 120°F / -34° to 48°C
(60-926-95) -30° to 140°F / -34° to 60°C

Maximum Humidity: .... 90% relative humidity, non-condensing

Dimensions: .... 4.40" (11.18 cm) diameter
2.20" (5.59 cm) depth

FCC Notice

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

• This device may not cause harmful interference.

• This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by GE Security can void the user's authority to operate the equipment.

FCC ID: B4Z-759-ROR

Listings

UL 985 Household Fire Warning System Units (applied for)
UL 521 Heat Detectors for Fire Protective Signalling Systems (applied for)
UL 864 Commercial Fire Warning System Units (applied for)

PRELIMINARY

GE Security

Learn Mode Commercial Rate-of-Rise Heat Sensors Installation Instructions