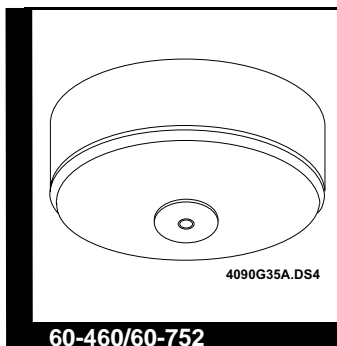


# Learn Mode Rate-of-Rise Heat Sensor

Document Number: 46-547 Rev. E  
March 1998



## INSTALLATION INSTRUCTIONS

### Product Summary

The Learn Mode Rate-of-Rise Heat Sensor combines a Chemtron Model 601 detector and an ITI learn mode wireless transmitter in one unit. A built-in thermostat trips the transmitter when the temperature at the sensor's location reaches about 135°F.

Since many fires grow rapidly in intensity causing a rapid temperature increase, the thermostat also trips the transmitter if the temperature rises 15°F or more, per minute.

The sensor is powered by a 9-volt battery (see note), either alkaline or lithium type. The alkaline battery can last 12 to 18 months. The lithium battery can last twice as long as the alkaline type.

When the battery voltage gets low, the sensor sends a low battery signal to the panel. The panel then activates sirens that emit trouble beeps to notify the customer that the sensor's battery must be replaced.

#### Note

Battery life depends on how often and length of time battery is used.

**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 install Learn Mode Rate-of-Rise Heat Sensors if the panel uses an earlier software version. If you need assistance, please call ITI Technical Services at 1-800-777-2624.

## Equipment Needed

- Phillips or flathead screwdriver
- Appropriate learn mode control panel installation instructions (for programming information)

## Installation Guidelines

Use the following guidelines when installing the Learn Mode Rate-of-Rise Heat Sensor:

- 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.
- 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 away from any walls. If mounting on a wall, the top of the sensor must be within 4 to 6 inches of the ceiling.
- The UL maximum spacing allowance of the sensor is 50' x 50'. 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.

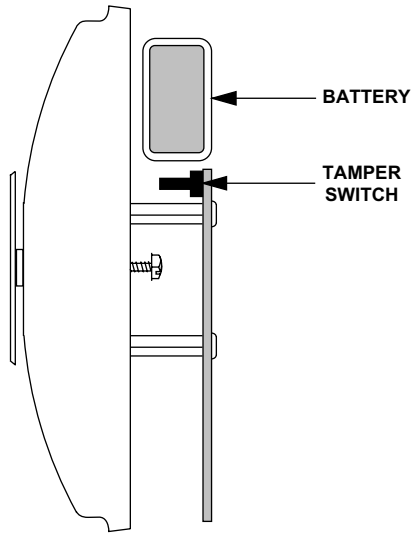
## Programming

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

#### To add the sensor to panel memory:

- 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) Enter the **LEARN SENSORS** mode.
- 4) When the panel prompts you for a sensor group number, enter the number for the fire group.
- 5) Select the desired sensor number.

- When the panel prompts you to trip the sensor, press and release the tamper switch on the sensor (see Figure 1).



1036G02D.DS4

Figure 1. Tamper Switch Location

- Exit program mode.

## 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.

**CAUTION:** The Learn Mode Rate-of-Rise Heat Sensor is a one-time device that prolonged heat can destroy. When used with care, the heat from a portable hair dryer (method 2) can be used to test the sensor. If the round disc on the sensor ever pops off, the sensor must be replaced.

### Method 1

- Place the panel in the dealer sensor test mode.
- Rub your hands together vigorously, until they feel hot.
- Place the palm of one hand on the round disc of the sensor, for about 7 to 10 seconds.
- Listen for interior sirens and speakers to emit 7 to 8 beeps.
- Exit sensor test.

The sensor should reset in less than 1 minute.

### Method 2

- Plug in a portable hair dryer.
- Hold the hair dryer about 12 to 18 inches away from the sensor, aiming it at the side of the sensor.

**CAUTION:** Do not aim the hair dryer directly at the round disc on the sensor; otherwise, you must replace the sensor.

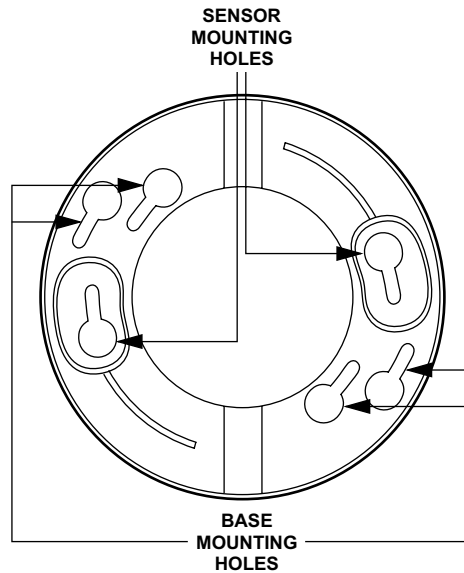
- Listen for interior sirens and speakers to emit 7 to 8 beeps.
- Exit sensor test.

The sensor should reset in less than 1 minute.

## Mounting the Sensor

Secure the sensor to its permanent location as follows:

- 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).



1036G01D.DS4

Figure 2. Sensor and Base Mounting Hole Locations

- Attach the sensor to the base.

## Specifications

**Compatibility:** Learn mode family of control panels

**Frequency:** 319.5 MHz. (60-460), 433 MHz. (60-752)

**Power Requirements:** One 9-volt battery (alkaline or lithium)

**Operating Temperature Range:** 40° to 120°F

**Dimensions:** 4.40" x 2.20" (Diameter x Depth)

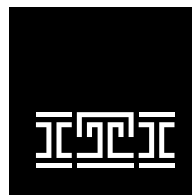
## FCC Notice

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 Interactive Technologies, Inc. can void the user's authority to operate the equipment.



WIRELESS

Security  
Automation  
Access Control

**INTERACTIVE TECHNOLOGIES, INC.**

2266 SECOND STREET NORTH

NORTH SAINT PAUL, MN 55109

T: 612/777-2690

F: 612/779-4890

ITI is a registered trademark of Interactive Technologies, Inc. Learn Mode is a trademark of Interactive Technologies, Inc.