# **RATE-OF-RISE SENSOR**

ITI Part #60-137

(Not investigation by Underwriters Laboratories Inc.) (Not Listed by California State Fire Marshal)

The ITI Rate-of-Rise Sensor is a detector and transmitter in one unit designed to protect spaces of up to 2500 square feet. Like other thermostats, these will initiate an alarm when a fixed temperature has been reached, typically 135°F. In addition, since many fires grow rapidly in intensity, resulting in rapidly rising temperatures, these sensors are designed to sense the rate which the temperature is rising. They will, therefore, respond to an increase in temperature which is 15°F per minute or greater.

# PROGRAM SOCKET

### **BATTERY POWER**

The Rate-of-Rise Sensor is powered by a nine volt alkaline battery. Under normal conditions, the battery will last 12 to 18 months or more. If the battery begins to get low, the CPU

will display and report the sensor number of the Rate-of-Rise with the low battery.

## **INSTALLATION**

The ITI Rate-of-Rise Sensor is a normally open device which closes on alarm. The sensor can be mounted in areas such as; garages, attics and kitchens. Ceiling mounting near the center of the area to be protected is recommended.

**NOTE:** Do not mount Rate-of-Rise too close to something that changes temperature fast, such as above an oven or near a heat duct, furnace or boiler.

- 1 Remove the sensor base and secure to the ceiling. Use screws if securing to wood or anchors if securing to plaster or wallboard.
- 2 If you have not already done so, program the sensor. Choose a sensor number for the heat or fire group, typically 20 27.
- 3 Reattach the sensor to the mounting bracket.

### **TESTING**

Periodic testing of the Rate-of-Rise Sensor is recommended, but should only be done by an installer. Heat from a 1000 watt portable hair dryer is suggested. Place the hair dryer about 12 to 18 inches from the side of the sensor. The Rate-of Rise should trip within 7 to 10 seconds.

NOTE: Rate-of-Rise Sensors should not be tested with a flame since this will necessitate replacing the unit. When tripped by rapid temperature increases, these sensors will reset themselves if the fixed setting is not reached.

Do not use with 190° fixed Rate-Of-Rise sensor. Transmitter will fail before temperature reaches 190°.