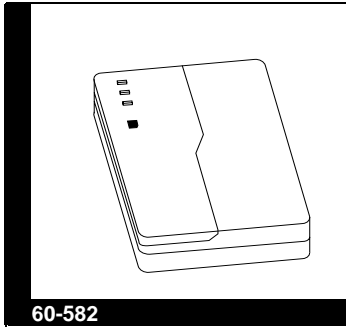


# Sound Sensor - IntelliSense™

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## INSTALLATION INSTRUCTIONS

### Product Summary

The IntelliSense Sound Sensor is a dual technology glass-break detector that features two separate microphones for detecting flex and audio frequencies. Since both microphones must detect and verify glass breakage, false alarms are virtually eliminated.

The sensor detects glass breakage of windows within 25 feet.

### How It Works

Each microphone is sensitive to different frequencies. The flex microphone detects ultra-low frequencies, the kind produced by a blow to a glass window. The audio microphone detects the higher frequencies of breaking glass.

The audio technology remains inactive until the flex microphone detects a blow to the glass. Once this happens, the audio microphone must detect the frequency of breaking glass, within a defined time-window after the flex microphone detects a blow to the glass. Only then does the sensor go into alarm.

The sensor can be used with the glass types and thicknesses shown in Table 1.

Table 1. Glass Types and Thicknesses

Glass Type	Thickness (inches)
Plate	3/32
Tempered	1/8
Laminated	1/8
Wired	1/4

For the sensor to work properly, the glass size must be at least 10-7/8" x 10-7/8".

### Tools Needed

- Small Phillips Screwdriver
- Screws and anchors (included)
- IntelliSense Sound Sensor Tester (ITI part number 13-332)

### Installation Guidelines

Determine the best mounting location for the sensor using the following guidelines:

- Mount the sensor on the ceiling or on a wall at least 7' from the floor, with a direct and unobstructed line-of-sight of the protected glass.
- Mount the sensor within 25 feet of the glass to be protected (see Figure 1).

**Note:** Curtains, blinds, and other window coverings can absorb energy from breaking glass. For example, heavy curtains will effectively block the sound signal. In these cases, mount the sensor behind the window covering next to or above the window.

- Do not mount the sensor next to air ducts, forced air fans, or bells measuring 2" (or larger) in diameter.
- Do not mount the sensor near doors and windows that can be slammed (see Figure 1).
- Do not mount the sensor where furniture may be placed between the glass and the sensor.

- Do not mount the sensor where a door can be closed between the sensor and the glass, or where an open door may obstruct the sensor's line-of-sight (see Figure 1).

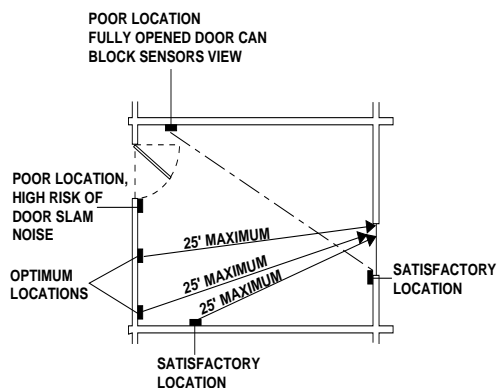


Figure 1. Sensor Mounting Locations

## Mounting the Sensor

Mount the sensor using the following procedure:

- 1) Open the sensor door by grasping it at the top and bottom with one hand and pulling upward (see Figure 2).

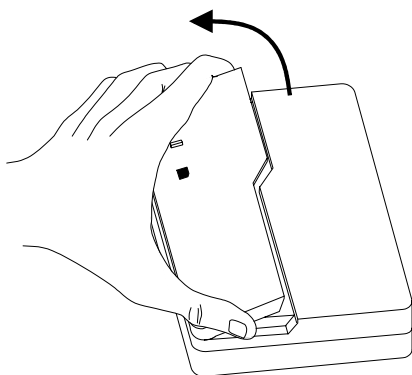


Figure 2. Opening the Sensor Door

- 2) Remove the screw shown in Figure 3, using a Phillips screwdriver.

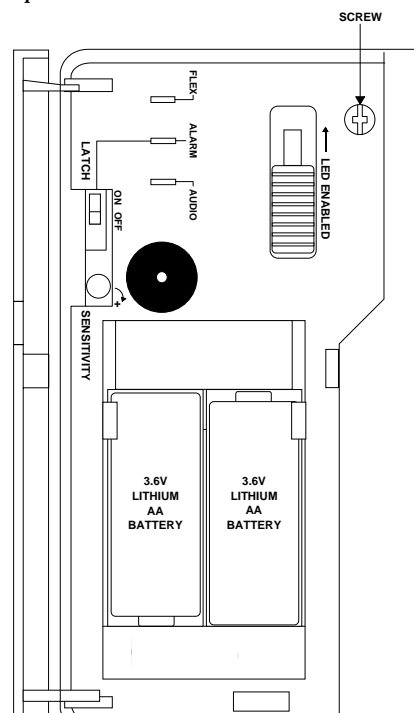


Figure 3. Screw Location

- 3) Remove the sensor cover by first pulling up at the top of the cover, then lift up at the bottom. Set the sensor cover aside.
- 4) Place the sensor base at the desired location on the wall or ceiling and mark the narrow portion of the mounting holes (see Figure 4).

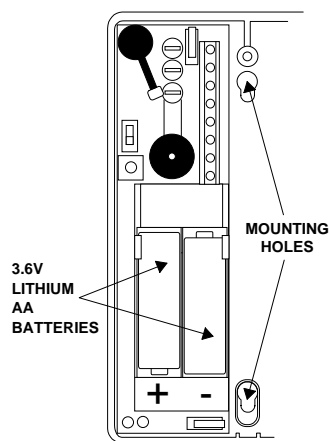


Figure 4. Mounting Hole Locations

- 5) Insert screws part way into anchors (if necessary) or wall.

- 6) Place the sensor base on the screws and slide the narrow portion of the mounting holes onto the screws.
- 7) Gently tighten the screws to secure the sensor in place.

## Adjusting the Flex Sensitivity

Adjust the flex sensitivity using the following procedure:

- 1) Open the sensor door and slide the orange LED ENABLE switch in the direction of the arrow (see Figure 7). An orange tab protrudes from the side of the sensor to indicate the LEDs are active.

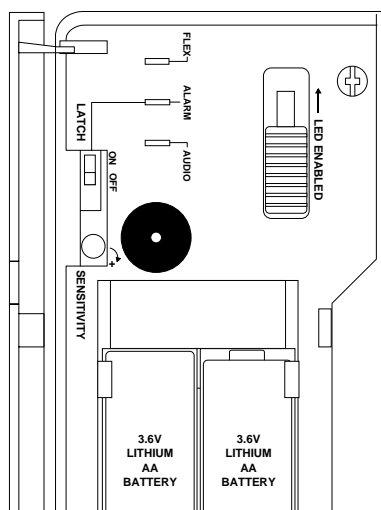


Figure 5. LED Enable Switch Location

- 2) Using a small pocket screwdriver, increase the sensitivity by turning the sensitivity control completely clockwise (maximum).
- 3) Close the sensor door.
- 4) Turn on any heating/air-conditioning system, and any other equipment in the sensor's vicinity. Observe the yellow flex LED for one minute with equipment running. Excessive subsonic (inaudible) noise typically produced by air handling systems may cause the flex LED to flash randomly.
- 5) If the flex LED flashes randomly, decrease the sensitivity by turning the sensitivity control counter-clockwise just until the flashing stops.

## Testing the Audio and Flex Ranges

Use the following procedures with the IntelliSense Sound Sensor Tester (ITI part number 13-332) to test the audio and flex ranges. For additional testing information, refer to the tester's operating instructions.

**Note:** For UL listed systems, the installer should test the unit at least once a year.

### To test the audio range:

- 1) Hold the tester at the farthest point of the glass to be protected (25' maximum).
- 2) Activate the tester in the manual mode. If the green LED on the sensor flashes, the audio microphone will detect breaking glass *at that distance*.

### To test the flex range:

- 1) Set the tester to the flex mode and press the red button to arm the simulator.
- 2) Within 30 seconds of arming the tester, generate a flex signal by striking the glass with your hand or a cushioned tool.
- 3) The tester will automatically generate a burst of glass-break sound, and the sensor's red LED should light indicating an alarm condition.
- 4) Open the sensor door and slide the orange LED ENABLE switch back to its normal position.

## Programming

The following steps describe the general guidelines for programming (learning) the sensor into panel memory. Refer to the specific panel installation instructions or reference manual for complete programming details.

- 1) Set the panel to the program mode.
- 2) Proceed to the LEARN SENSORS menu.
- 3) Select the appropriate sensor group and sensor number assignments.

- 4) When prompted by the panel to trip the sensor, activate the sensor tamper by opening the sensor door.
- 5) Exit program mode.

## Testing

The following steps describe the general guidelines for testing the sensor. Refer to the specific panel installation instructions or reference manual for complete testing details.

- 1) Set the panel to the dealer sensor test mode.
- 2) Activate the sensor by opening the sensor door.

**Note:** You must activate the sensor by opening the sensor door when performing a Dealer Sensor Test. Activating the sensor using the tester or real activation, may result in fewer signals (indicated by siren beeps) than are acceptable.

- 3) Listen for interior siren beeps to indicate how many rounds the panel receives from the sensor. You should hear 6 to 8 beeps.

**Note:** If the sensor response is unacceptable, change the position or location of the sensor and retest.

## Specifications

Compatibility: All Learn Mode panels

Power Source: Two - 3.6 VDC Saft or Tadiran AA Lithium Batteries, one - 9 VDC Alkaline Battery, or one - 9 VDC Ultralife® Lithium Battery

Operating Temperature Range: 32°F - 110°F

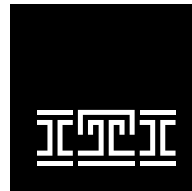
Dimensions: 4.75" x 4.13" x 1.25" (L x W x D)

## Notices

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Interactive Technologies, Inc. can void the users' authority to operate the equipment.



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