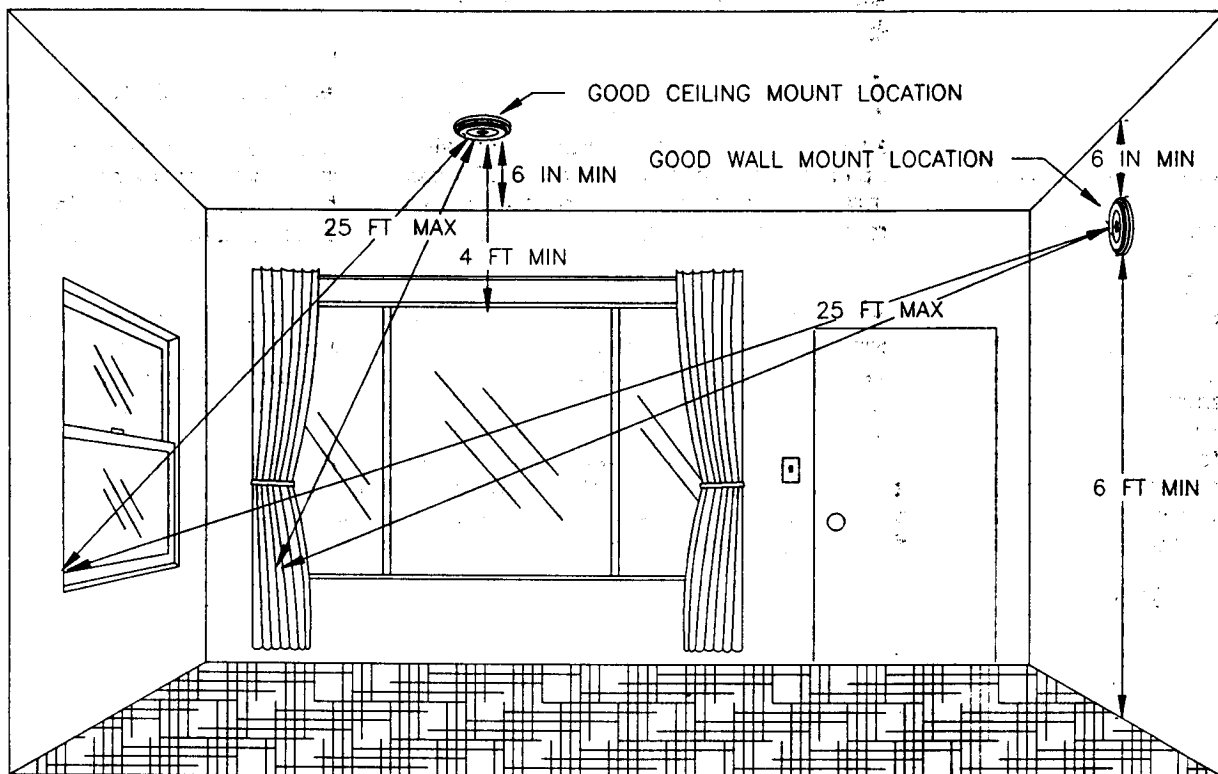


SOLUTION 2000 INTELLIGENT GLASS BREAK DETECTOR

DESCRIPTION: The Solution 2000 uses the latest microprocessor technology to sample the acoustics of the protected area determine when glass breakage occurs. A unique 3 x 3 Technology (patent pending) signal processing algorithm is used so no adjustment is necessary for various types and sizes of glass. A special multi-test mode is provided for verification of operation in upper and lower frequency ranges. A 5 minute timer prevents the detector from being inadvertently left in the test mode. Removable jumpers allow the installer to enable a built-in green power/status LED, and/or red latching alarm LED. The unique low profile round enclosure, with it's acoustic grill not only makes the Solution 2000 perfect for surface mounting on both ceilings and walls, but also acts as an acoustic magnifier.

LOCATION: The proper mounting location for the Solution 2000 will be on a ceiling or wall adjacent to, or across from the glass being protected, away from any direct air flow. Under no circumstances should the detector be mounted on the same wall as the glass being protected. The detector should have a line of sight view of all glass being protected, and the furthest point of the glass must not exceed 25 feet. The minimum distance from the detector and the nearest glass being protected must not be less than 4 feet. The detector should be mounted a minimum of 6 inches from an adjacent wall or ceiling, and no less than 6 feet from the floor. Once a location has been selected, you may choose to temporarily mount the detector and proceed with testing.



TESTING: The Solution 2000 requires no sensitivity adjustment, however, due to many factors including room acoustics, the detector should be tested to ensure proper operation. Remove the cover from the detector, apply power, and momentarily press the test button (SW2 see Figure 2). At this time, the red and green LEDs will alternately flash at a fast rate indicating the detector is in the upper frequency range test mode. Replace the cover on the detector. Aim a commercial glass break tester, such as the Caddx GT-1 at the detector and position it in front of each pane of glass at the furthest point from the detector. If curtains or shades are present, be sure that they are closed and the tester is placed between the glass and the covering. If the glass is in range, each time the tester is activated the green and red LEDs on the detector will light together for 2.5 seconds, opening the normally closed relay contacts so the appropriate zone on the alarm panel will trip. This procedure will continue for 5 minutes, after which the Solution 2000 will automatically exit the test mode and return to normal operation. The detector can be returned to normal operation at any time during the 5 minute test by pressing the test button two more times.

A second test mode is employed for testing the detector's response to the lower frequency range. To enter this mode, press the test button two times if in the normal mode, or one time if already in the upper frequency range test mode. The red and green LEDs will alternately flash at a slower rate, indicating the detector is in the lower frequency range test mode. While the detector is in this mode, a sharp blow of the hand or other firm object to a framed hollow wall, ceiling, or door in the same room, will cause the green and red LEDs to light together for 2.5 seconds, opening the normally closed relay contacts. This test is provided only to verify the detectors ability to detect the lower frequency range, and should not be considered any sort of range check. This test mode will continue for 5 minutes, after which, the Solution 2000 will automatically exit the test mode and return to normal operation. The detector can be returned to normal operation at any time during the 5 minute test by pressing the test button one time.

MOUNTING: After a location has been selected and initial tests have been conducted, the detector should be permanently mounted using 2 or 4 screws. After the detector is mounted, replace the cover and conduct a final test to verify proper operation.

POWER/STATUS LED (J3): When the provided jumper is used to connect the pins on J3 (see Figure 2), the green LED will remain lit whenever power is present to the detector. In addition, the green LED will turn off for one second when a loud sound occurs in the upper frequency range. While there are many sources of sound that will turn off the green LED for 1 second to verify normal operation, they will not cause the Solution 2000 to activate an alarm condition.

ALARM LED (J4): The red LED will normally flash for 2.5 seconds when an alarm occurs. This LED can also be enabled to latch after an alarm by connecting the pins on J4 (see Figure 2) using the jumper provided. When latched, this LED can be reset by removing power for 2-3 seconds, or reset automatically when the alarm panel is "armed" if either Reset input is used. (see Automatic Reset for more details)

AUTOMATIC RESET: When the latching alarm LED is enabled, it may be automatically extinguished when the alarm panel is armed. If the alarm panel has an output that goes negative (close to 0 volts) during arming, make a connection from that point to the Reset(-) terminal on the Solution 2000 (see Figure 2). However, if the alarm panel has an output that goes positive during arming, make a connection from that point to the Reset(+) terminal on the Solution 2000 (see Figure 2). Do not make a connection to both terminals.

TAMPER SWITCH: The Solution 2000 has a built-in tamper switch (SW1), which provides a closed circuit condition when the cover is in place. When the cover is removed, the circuit is opened creating a tamper condition. The supplied spring must be used on the tamper switch to assure proper operation.

FIVE YEAR LIMITED WARRANTY: CADDX-CADDI CONTROLS, INC., guarantees this product against defective parts and workmanship for the first twenty-four (24) months from date of manufacture. If any defect occurs, simply return it to CADDX postage prepaid, and the detector will be repaired and returned. For the remaining thirty-six (36) months of warranty, the unit will be repaired for a fee not to exceed \$5.00, plus shipping and handling. CADDX assumes no liability for the consequential or indirect damage, and accepts no responsibility for repairing damage to the product caused by misuse, careless handling, or where repairs have been made by others. No other guarantee, written or verbal, is authorized by or on behalf of CADDX-CADDI CONTROLS, INC.

SPECIAL NOTES:

- While the Solution 2000 has been found to operate in most 24 hour environments, it is not recommended to be used on a 24 hour zone. It is suggested that it be connected to a perimeter zone to minimize any chance of false alarms.
- Caution should be used when installing this detector where inside wooden shutters, or sound deadening drapes cover the glass.
- Do not attempt to protect glass in multiple rooms with only one Solution 2000, even if the range test indicates proper operation. This is a precaution in case doors or other partitions are placed between rooms.
- This detector has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

SPECIFICATIONS:

Size: Diameter:	4.20" (10.67cm)
Depth:	0.77" (1.96cm)
Case Materials:	Flame Retardant Injection Molded Plastic.
Color:	White
Shipping Weight:	4oz. (114gm.)
Input Voltage:	10-14 volts AC or DC
Current Drain:	
Standby, no Status LED:	32 mA
Standby, with Status LED:	36 mA
Alarm Condition:	24 mA
Standby, with Latched Alarm LED and Status LED:	38 mA
Low Voltage Detect:	6.40 volt (400 mV hysteresis)
Minimum Voltage Level for Reset + Pin:	1.75 VDC
Maximum Voltage Level for Reset - Pin:	1.25 VDC
Relay Contacts:	100 VDC, 10 VA, 500 mA
Sensitivity:	Automatically Adjusted
Maximum Range:	25' radius for all glass types
Operating Temperature:	32°F. to 120°F. (0°C. to 49°C.)
Glass Types and Sizes:	
Plate Glass 12" x 12" or larger:	1/8", 1/4"
Tempered Glass 12" x 12" or larger:	1/4"
Laminated Glass 12" x 12" or larger:	1/4"
Wired Glass 12" x 12" or larger:	1/4"

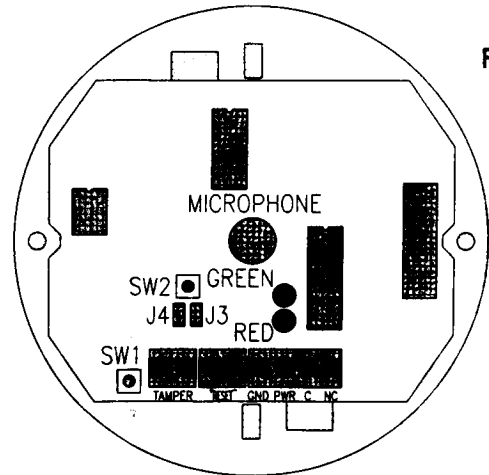


Figure 2



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