INF-GLASS

The INF-GLASS is a low current acoustic glassbreak sensor with an incorporated wireless transmitter. This unit is designed for use with the infinite alarm system. The INF-GLASS sends a status transmission to the receiver every hour to indicate that the transmitter is functional.

Mounting Considerations

The INF-GLASS acoustic sensor is omni-directional, providing 360º coverage. The coverage is measured from the sensor to the point on the glass farthest from the sensor. The sensor can be mounted as close as 1m (3.3') from the glass.

Sensor range:

- If mounting on the ceiling, the opposite wall or adjoining walls, the maximum range is 6m (20') for plate, tempered, laminated and wired glass.
- For armor-coated glass, the maximum range is 3.65m (12').

Minimum recommended glass size:

- 0.3m x 0.6m (1' x 2')

Glass thickness:

- Plate: 2.4mm to 6.4mm (3/32" to 1/4")
- Tempered: 3.2mm to 6.4mm (1/8" to 1/4")
- Wired: 6.4mm (1/4")
- Laminated: 3.2mm to 6.4mm (1/8" to 1/4")

For best detection:

- The sensor must always be in direct line of sight of all windows to be protected.
- If mounting on the wall, try to install the sensor directly opposite the protected window. If this is not possible, adjoining side walls are also a good location.
- If mounting on the ceiling, install the sensor 2-3m (6-10') into the room.
- Avoid installing in rooms with lined, insulating or sound deadening drapes.
- Avoid installing in rooms with closed wooden window shutters inside.
- Avoid installing in the corners of a room.

The INF-GLASS is best suited to rooms with moderate noise.

Note: The sensor may not consistently detect cracks in the glass, bullets which break through the glass or glass breaking around corners and in other rooms. Glassbreak sensors should always be backed up by interior protection.

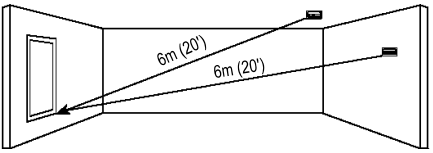


Figure 1: Acoustic Sensor Range Measurement (plate, tempered, laminated and wired glass)

For best false alarm immunity:

- Locate the sensor at least 1.2m (4') away from noise sources (televisions, speakers, sinks, doors, etc.).
- Avoid rooms smaller than 3m x 3m (10' x 10') and rooms with multiple noise sources.
- Do not use where white noise, such as air compressor noise, is present (a blast of compressed air may cause a false alarm).
- Do not define the zone as 24hr. It is recommended to register the INF-GLASS to a perimeter arming group that arms the perimeter doors and windows of the premises.
- Avoid humid rooms – the INF-GLASS is not hermetically sealed. Excess moisture can eventually cause a short and a false alarm.

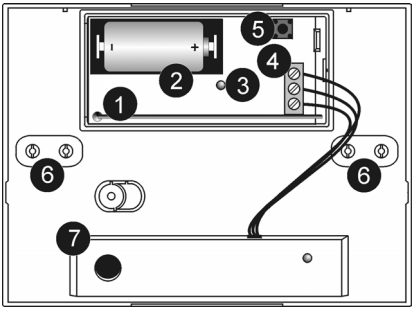
Areas to avoid:

- Glass airlocks and glass vestibule areas
- Noisy kitchens
- Residential car garages
- Small utility rooms
- Stairwells
- Small bathrooms
- Other small acoustically live rooms

For glass break protection in such applications, use shock sensors on the windows or window frames.

Installation Instructions

1. Open the housing using a small flat-head screwdriver to separate the base from the cover.
2. Remove the divider separating the battery from the contacts on the battery holder. When you apply power and the Tamper switch is open, the INF-GLASS enters Radio Test mode during which a transmission is sent every few seconds. You can terminate Radio Test mode by closing the Tamper switch. Radio Test mode is automatically terminated after approximately five minutes. ***Note: Due to the occurrence of voltage delay in lithium batteries that have been in storage, the batteries may initially appear to be dead. In this case, leave the unit in Radio Test mode for a few minutes until the battery voltage level is stabilized.***
3. While the INF-GLASS is in Radio Test mode, set the receiver to Registration mode and make sure that the transmitter's LED lights up at least twice. After registration, momentarily close the Tamper switch to terminate Radio Test mode. Write the number of the zone and the transmitter number (where applicable) on the sticker provided. Affix the sticker inside the front cover for future reference.



1. Antenna
2. Battery Holder
3. LED Indicator
4. Terminal Block
5. Tamper Switch
6. Mounting Knockouts
7. Acoustic Sensor

Figure 2: INF-GLASS (cover off)

Note: Alternatively, the INF-GLASS can be registered to the receiver by manually entering the transmitter's serial number.

4. Choose a suitable mounting location according to the guidelines in the previous section.
5. Before permanently mounting the unit, test the acoustic sensor and the transmitter from the exact mounting position. For further information on testing the acoustic sensor, refer to the following section, Testing Procedures.
6. Knock out the required mounting holes on the back cover.
7. Mount the unit to the wall using the mounting screws provided.
8. Close the front cover making sure that it snaps shut.

Testing Procedures

The Pattern Recognition Technology™ of the INF-GLASS ignores most of the sounds that could cause a false alarm (including glass-break testers). In order to test the INF-GLASS, you must set the unit to Test mode. In Test mode, processing of the upper and lower frequencies is disabled. This means that the INF-GLASS is only listening for mid-range frequencies reproduced by the glassbreak tester. It's these mid-range frequencies that determine the sensor's range. ***Note: In Normal mode, the tester will not activate the sensor unless held directly over the sensor.***

Test the sensor using the Electronics Line GBS-7 or Sentrol 5709C hand-held tester.

To test the sensor:

1. If using the 5709C tester, set the tester to tempered glass. The 5709C tester has a different setting for each type of glass. The tester should always be set for tempered or laminated glass (either is correct and both have the same range) unless the installer is certain that all the glass to be protected is plate glass.
2. Hold the tester speaker directly on top of the sensor and activate the tester; the sensor generates an alarm and then enters test mode for one minute. When in test mode, the LED on the sensor flashes continuously. You can extend the test mode time by firing the tester at the sensor at least once a minute. ***Note: Each time the sensor generates an alarm, it also goes into Test mode for one minute.***

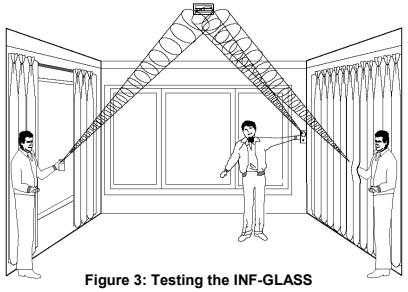


Figure 3: Testing the INF-GLASS

3. Hold the tester near the surface of the glass and aim the tester at the INF-GLASS. If drapes or blinds are present, test with the hand-held tester behind the closed drapes or blinds.
4. Hold down the test button. When the LED on the sensor goes solid momentarily, the glass is within detection range.

   If the LED does not go solid, but simply continues blinking, re-position the sensor closer to the protected windows and retest. This may require adding additional sensors in order to achieve adequate coverage. It is very rare that the sensor will not activate within its stated range of coverage. In this case check the battery in the hand-held tester. A new tester battery is likely to restore the range.
5. Test mode automatically terminates approximately one minute after the last activation of the hand-held tester.

Note: Room acoustics can artificially extend the range of a glassbreak sensor. The specified range of the INF-GLASS has been established for worst-case conditions. While the sensor is likely function at the extended range, it may miss a minimum output break or room acoustics may be changed at some future time bringing sensor range back into normal 6m (20') conditions. Do not exceed the rated range of the sensor regardless of what the tester shows!

Hand Clap Test

The Hand Clap test enables you to test the INF-GLASS while in Normal mode. This test checks the sensors power supply, microphone and circuit board.

To perform a Hand Clap test

- Clap your hands loudly under the sensor; the LED flashes twice but an alarm is not generated.

Technical Specifications

Antenna: Built-in Internal Whip
Frequency: 868.35MHz FM
Power: 3.6V ½ AA Lithium Battery
Caution: Fire, explosion and severe burn hazard!
Do not recharge, disassemble or heat above 100°C.

Current Consumption: 25mA (transmission) 30μA (standby)
Microphone: Omni-directional electret
RFI Immunity: 20V/m
Operating Temperature: 0-50°C

ESP- Electronics Line UK
Unit 7, Leviss Trading Estate, Station Road, Stechford, Birmingham B33 9AE.
Tel: (44-121) 789-8111, Fax: (44-121) 789-8055

IF YOU REQUIRE FURTHER ASSISTANCE
PLEASE CALL OUR HELPLINE **0121 786 1881**,
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