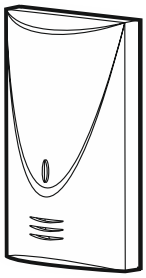
INDIGO

DIGITAL GLASS-BREAK DETECTOR



indigo_en 03/18

The INDIGO detector enables detection of plate, tempered or laminated glass breaking. This manual applies to the detector with electronics version 1.4 (or newer).

1. Features

- Advanced two-path sound analysis.
- Adjustable detection sensitivity.
- Supply voltage supervision.
- LED indicator.
- Tamper protection against cover removal.

2. Specifications

Supply voltage	12 V DC ±15%
Standby current consumption	12.5 mA
Maximum current consumption	15 mA
Relay contacts rating (resistive load)	40 mA / 16 V DC
Alarm signaling period	2 s
Detection range	up to 6 m
Environmental class according to EN50130-5	II
Operating temperature range	-10°C...+55°C
Maximum humidity	93±3%
Dimensions	48 x 78 x 24 mm
Weight	48 g

3. Description

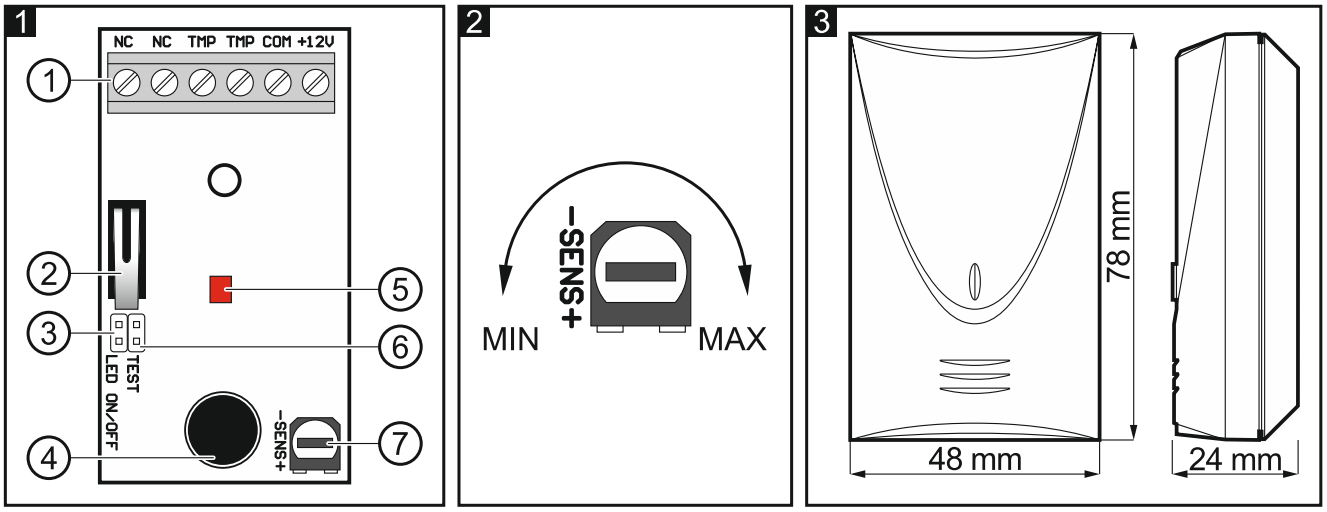
Glass-break detection

The detector will report an alarm when it detects a low frequency sound (impact) followed by a high frequency sound (glass break) in less than 4 seconds. The alarm is signaled by the alarm output for 2 seconds.

Supply voltage supervision

The detector will report a trouble when the supply voltage drops below 9 V (±5%) for more than 2 seconds. The trouble results in turning on the alarm output. The alarm output remains on as long as the trouble exists.

Electronics board



(1) terminal block:

NC - alarm output (NC relay),

TMP - tamper output (NC),

COM - common ground,

+12V - power input.

(2) tamper switch.

(3) LED ON/OFF pins to enable/disable the LED indicator (jumper installed – LED enabled; jumper removed – LED disabled).

(4) microphone.

(5) red color LED to indicate:

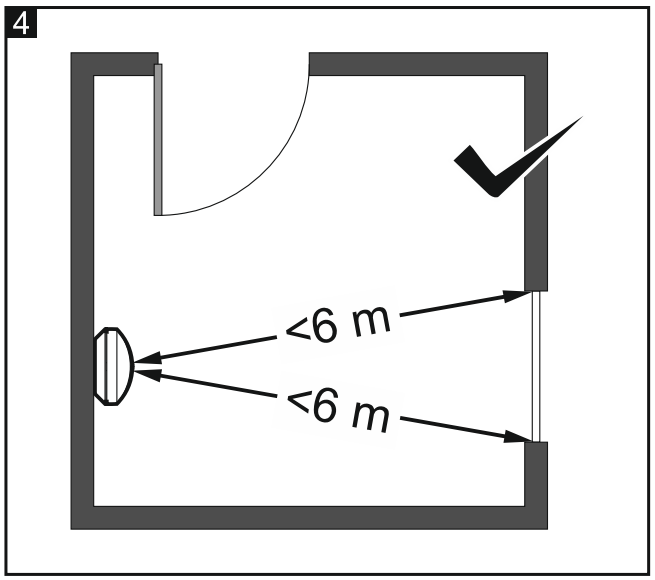
- detection of low-frequency sound – short flash,
- alarm – ON for 2 seconds,
- low supply voltage – ON.

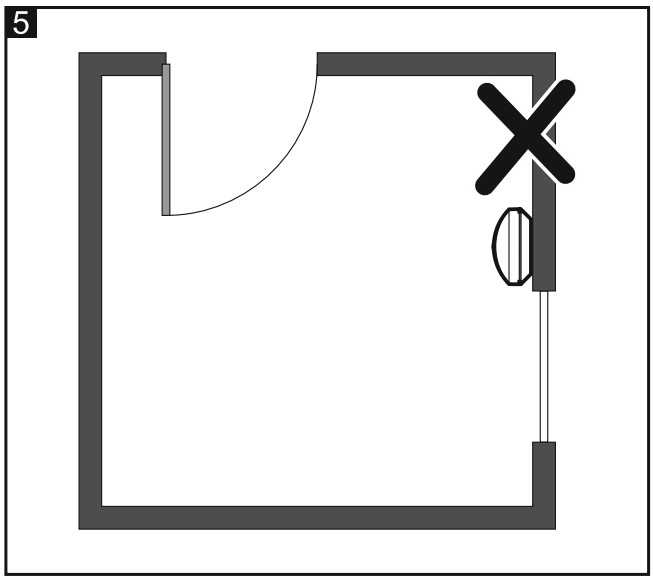
(6) TEST pins to enable/disable the test mode (jumper installed – test mode disabled; jumper removed – test mode enabled). In the test mode, the detector reports an alarm when it detects a high frequency sound (glass break sound).

(7) potentiometer for the adjustment of detection sensitivity (Fig. 2).

4. Selecting a mounting location

- The detector is designed for indoor installation.
- The detector microphone should be directed towards the protected glass, so the best place to mount the detector is the wall opposite the protected glass.
- The distance between the detector and the protected glass must not exceed the detection range (6 m).
- There must be no objects between the detector and the glass.
- The detection range depends on the room acoustics. The shades, curtains, furniture upholstery, acoustic tiles, etc. absorb the sound and adversely affect the detector operating range.
- Do not mount the detector on the same wall as the protected glass.





5. Range test

Check that the detector located in the selected installation location can detect the glass-break. A temporary 12 V DC power supply will be needed for the test.

1. Open the detector enclosure.
2. Remove the electronic board.
3. Make an opening for the wires in the enclosure base.
4. Run wires through the prepared opening to a temporary 12 V DC power source.
5. Secure the electronics board.
6. Connect the power wires to the +12V and COM terminals.
7. Remove the jumper from the TEST pins.
8. Close the detector enclosure.
9. Put the detector at the planned installation place.
10. Power up the detector.
11. Place the INDIGO TESTER close to the protected glass and use it to generate a glass-break sound.
12. If the detector reports an alarm, proceed to the next steps. If the detector fails to report an alarm, increase sensitivity or select another installation location and repeat the test.
13. Power down the detector.
14. Open the detector enclosure.
15. Disconnect the power wires.
16. Place the jumper on the TEST pins.

6. Installation

Disconnect power before making any electrical connections.

1. Remove the electronic board.
2. Make the openings for screws in the enclosure base.
3. Run wires through the opening prepared earlier.
4. Use screws to secure the enclosure base to the mounting surface.

5. Secure the electronics board.
6. Connect wires to the terminals.
7. Close the detector enclosure.

The declaration of conformity may be consulted at www.satel.eu/ce

SATEL sp. z o.o. • ul. Budowlanych 66 • 80-298 Gdańsk • POLAND
tel. +48 58 320 94 00
www.satel.eu