DIGITAL GLASS BREAK DETECTOR
INDIGO

CE

The INDIGO digital glass break detector is designed for use in intruder alarm systems. The detector can be used for detection of breaking plate, laminated or tempered glass. The glass break is signaled on registering a low-frequency tone (impact sound), followed by a high-frequency tone (sound of broken glass). The high-frequency channel is analyzed for four seconds from receiving the low-frequency sound wave, caused by the impact.

The detector monitors the supply voltage. If the voltage drops below 9V (±5%) for more than 2 seconds, the detector will signal a trouble by activation of the alarm relay and by steady light of the LED indicator. Restoration of a minimum 9V (±5%) voltage will turn the trouble signaling off.

Explanations for Figure 1:

1 - terminals:

   NC - relay (NC).

   TMP - tamper contact (NC).

   COM - common ground.

   +12V - power input.

2 - tamper contact.

3 - red color LED to indicate:

   – recording low-frequency sound (short flash);

   – glass breaking (lit up for 2 seconds).

4 - pins for enabling/disabling the LED signaling. The signaling is enabled when the pins are shorted.

Fig. 1. View of the detector PCB.

5 - pins for enabling /disabling the test mode. When in the test mode, the detector will only analyze the high-frequency channel and signal the glass break after it registers a suitable sound. The test mode is enabled when the pins are open. The INDIGO TESTER is recommended for testing the detector.

6 - microphone.

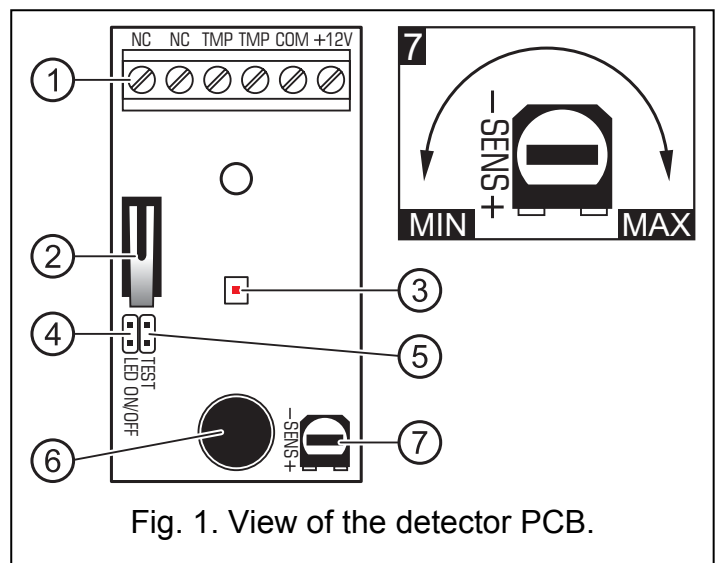7 - potentiometer for adjustment of high-frequency channel sensitivity.

1. Installation

The detector is designed for indoor installation. It should be mounted directly on the wall so that the protected glass surfaces are kept within the detector coverage area. It should be borne in mind that all shades, curtains, furniture upholstery, soundproof tiles etc. will reduce the detector range.

1. Open the housing and remove the electronics board.
2. Make suitable openings for screws and cable in the rear panel of the housing.
3. Pass the cable through the prepared opening.
4. Fasten the housing rear panel to the wall.
5. Fasten the electronics board.
6. Connect the leads to the corresponding terminals.

7. Configure the detector, using jumpers and the potentiometer.
8. Close the housing. The detector is now ready for work.

2. Specifications

Supply voltage	12 V DC ±15%
Average current consumption	12.5 mA
Relay contacts rated load (resistive)	40 mA / 16 V DC
Alarm signaling time	2 s
Detection range	up to 6 m
Environmental class	II
Operating temperature range	-10 °C...+55 °C
Housing dimensions	48 x 78 x 23 mm
Weight	48 g