

CE magenta\_en 03/18

The MAGENTA detector enables detection of plate, tempered or laminated glass breaking. This manual applies to the detector with electronics version 1.1 (or newer).

### 1. Features

- Advanced two-path sound analysis.
- Adjustable detection sensitivity.
- Supply voltage supervision.
- LED indicator.
- Tamper protection against cover removal and tearing enclosure from the wall.

### 2. 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 ( $\pm$ 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.

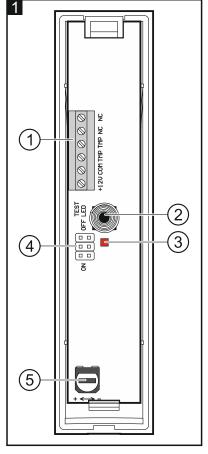
#### **Electronics board**

(1) terminal block:

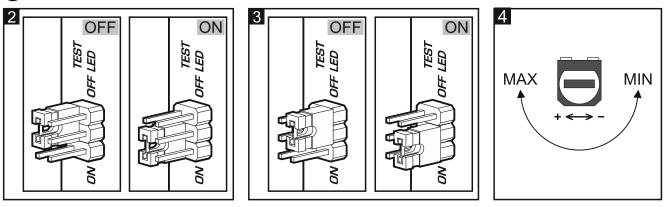
- +12V power input,
- COM common ground,
- TMP tamper output (NC),
- NC alarm output (NC relay).
- tamper contact.
- 3) red color LED to indicate:
  - detection of low-frequency sound ON for 0.5 seconds,
  - alarm ON for 2 seconds,
  - test mode short flash every 3 seconds,
  - low supply voltage ON.

(4) detector configuration pins:

TEST – enabling/disabling the test mode. In the test mode, the detector reports an alarm when it detects a high frequency sound (glass break sound). The test mode is enabled when the jumper is set in ON position (Fig. 2).

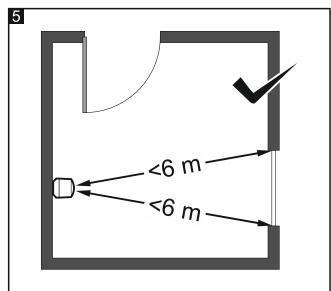


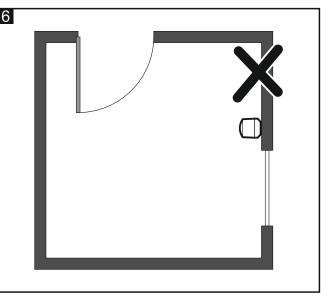
- LED enabling/disabling the LED indicator. The LED indicator is enabled when the jumper is set in ON position (Fig. 3).
- 5 potentiometer for the adjustment of detection sensitivity (Fig. 4).



# 3. 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.



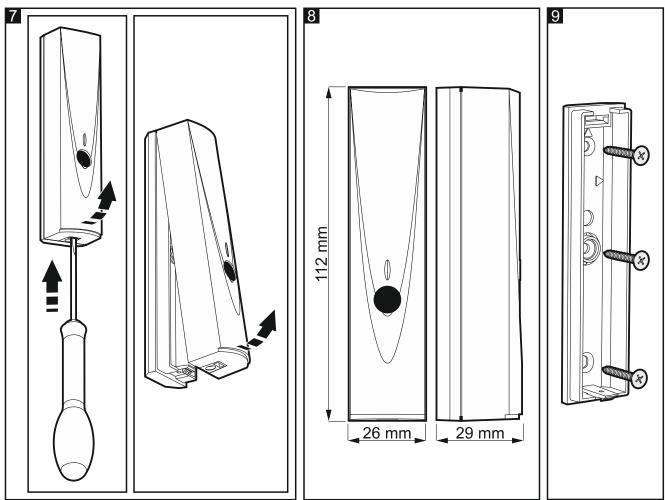


# 4. Range test

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

- 1. Open the detector enclosure (Fig. 7).
- 2. Make an opening for the wires in the enclosure base.

- 3. Run wires through the prepared opening to a temporary 12 V DC power source.
- 4. Connect the power wires to the +12V and COM terminals.
- 5. Place the jumper on the TEST pins in the ON position (Fig. 2).
- 6. Close the detector enclosure.
- 7. Put the detector at the planned installation place.
- 8. Power up the detector.
- 9. Place the INDIGO TESTER close to the protected glass and use it to generate a glassbreak sound.
- 10. 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.
- 11. Power down the detector.
- 12. Open the detector enclosure.
- 13. Disconnect the power wires.
- 14. Place the jumper on the TEST pins in the OFF position (Fig. 2).



## 5. Installation

#### Disconnect power before making any electrical connections.

- 1. Run wires through the opening prepared earlier.
- 2. Use screws to secure the enclosure base to the mounting surface (Fig. 9). Wall plugs (screw anchors) and screws are included in the detector delivery set.
- 3. Connect the wires to the corresponding terminals on the electronics board.

- 4. Configure the detector using jumpers and the potentiometer.
- 5. Close the detector enclosure.

# 6. Specifications

Supply voltage	12 V DC ±15%
Standby current consumption	5 mA
Maximum current consumption	10 mA
Relay contacts rated load (resistive)	
Alarm signaling time	2 s
Detection range	up to 6 m
Environmental class according to EN50130-5	
Operating temperature range.	10°C+55°C
Maximum humidity	93±3%
Enclosure dimensions	26 x 112 x 29 mm
Weight	40 g

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

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