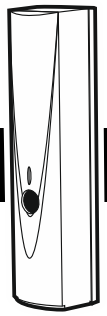
Satel®

CE 1471

MGD-300

WIRELESS GLASS-BREAK DETECTOR



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The MGD-300 detector enables detection of a break of plate, tempered and laminated glass. The detector is supported by:

- PERFECTA 16-WRL and PERFECTA 32-WRL control panels,
- MICRA alarm module (firmware version 3.00 or newer),
- VERSA-MCU controller (firmware version 1.02 or later),
- MTX-300 controller.

This manual applies to the detector with electronics version 1.2 or later.

1. Features

- Adjustable detection sensitivity.
- Advanced two-path sound analysis.
- LED indicator.
- Battery status control.
- Tamper protection against cover removal and tearing enclosure from the wall.

2. Description

Alarms

The detector reports alarm in the following cases:

- glass break detection (registering a low frequency sound (impact) followed by a high frequency sound (glass break) in less than 4 seconds),
- opening the tamper contact (tamper alarm).

Test mode

Placing a jumper across the TST pins as shown in Fig. 2 will activate the test mode. When the detector is running in the test mode, the LED indicator is enabled and the detector will report an alarm on registering a glass-break sound (high frequency sound).

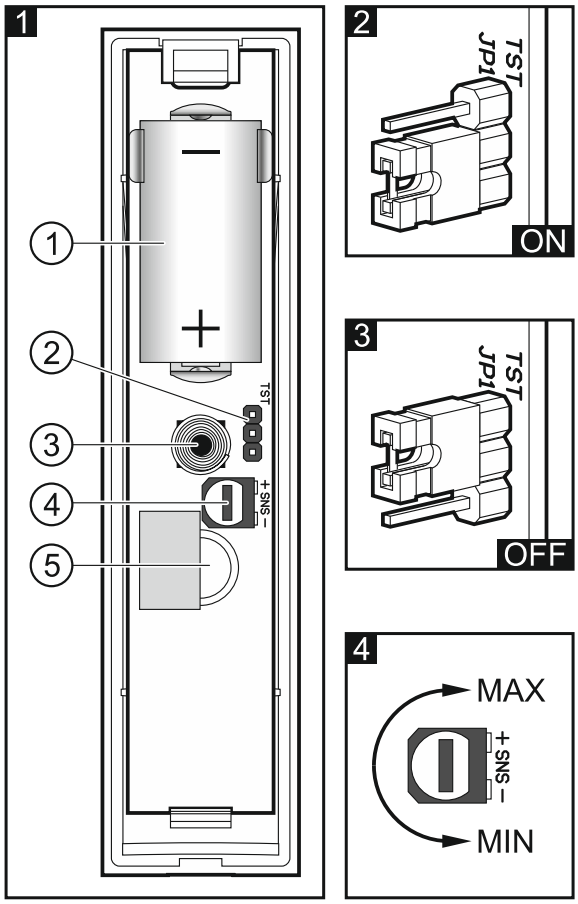
Periodic transmissions

Every 15 minutes, the detector sends a transmission containing information on the status of the tamper contact and battery. Periodic transmissions are used to monitor presence and operation of the detector.

Electronics board

1. CR123A lithium battery.
2. TST pins to enable/disable the test mode. The test mode is enabled when the jumper is set as shown in Fig. 2.
3. tamper contact.
4. potentiometer for adjustment of detection sensitivity (Fig. 4).
5. microphone.

The LED is placed on the other side of the electronics board.



LED

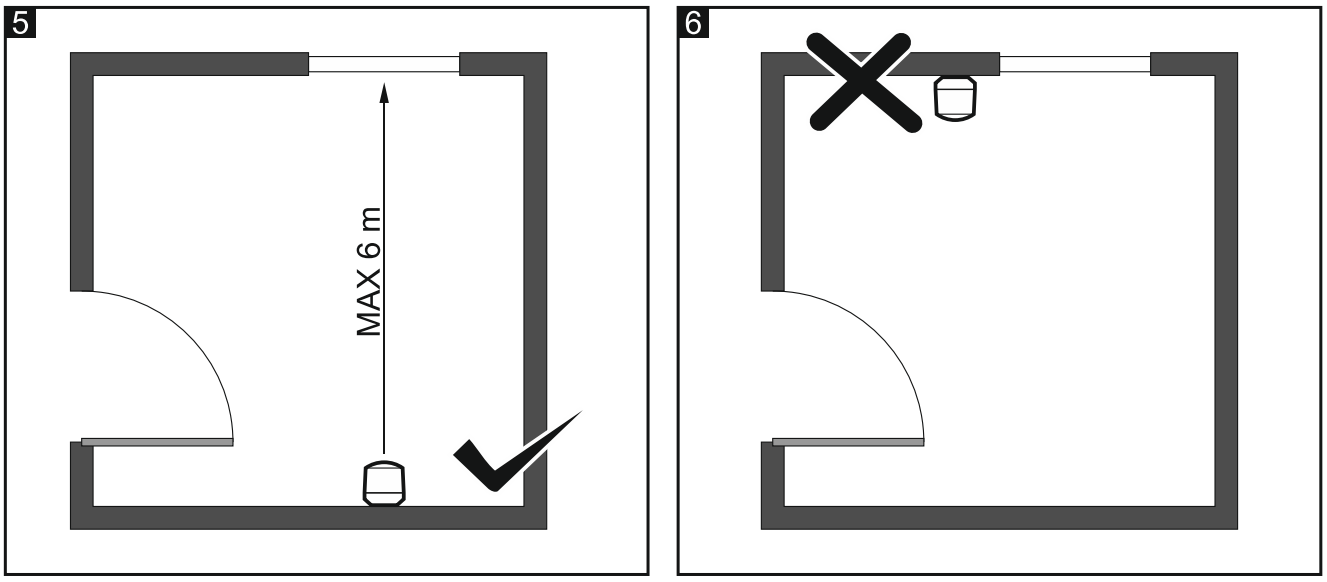
The LED is working for 20 minutes after battery is inserted or tamper contact is opened, as well as in the test mode. The LED indicates:

- periodic transmission – short flash (80 milliseconds),
- test mode – short flash every 3 seconds,
- alarm – ON for 2 seconds.

Battery status control

When the battery voltage is below 2.6 V, information about low battery is sent during each transmission.

3. Selecting a mounting location



- The detector is designed for indoor installation.
- The preferred location to install the detector is the wall situated opposite to the protected glass pane.
- The distance between the detector and the protected glass pane must not exceed the detection range.

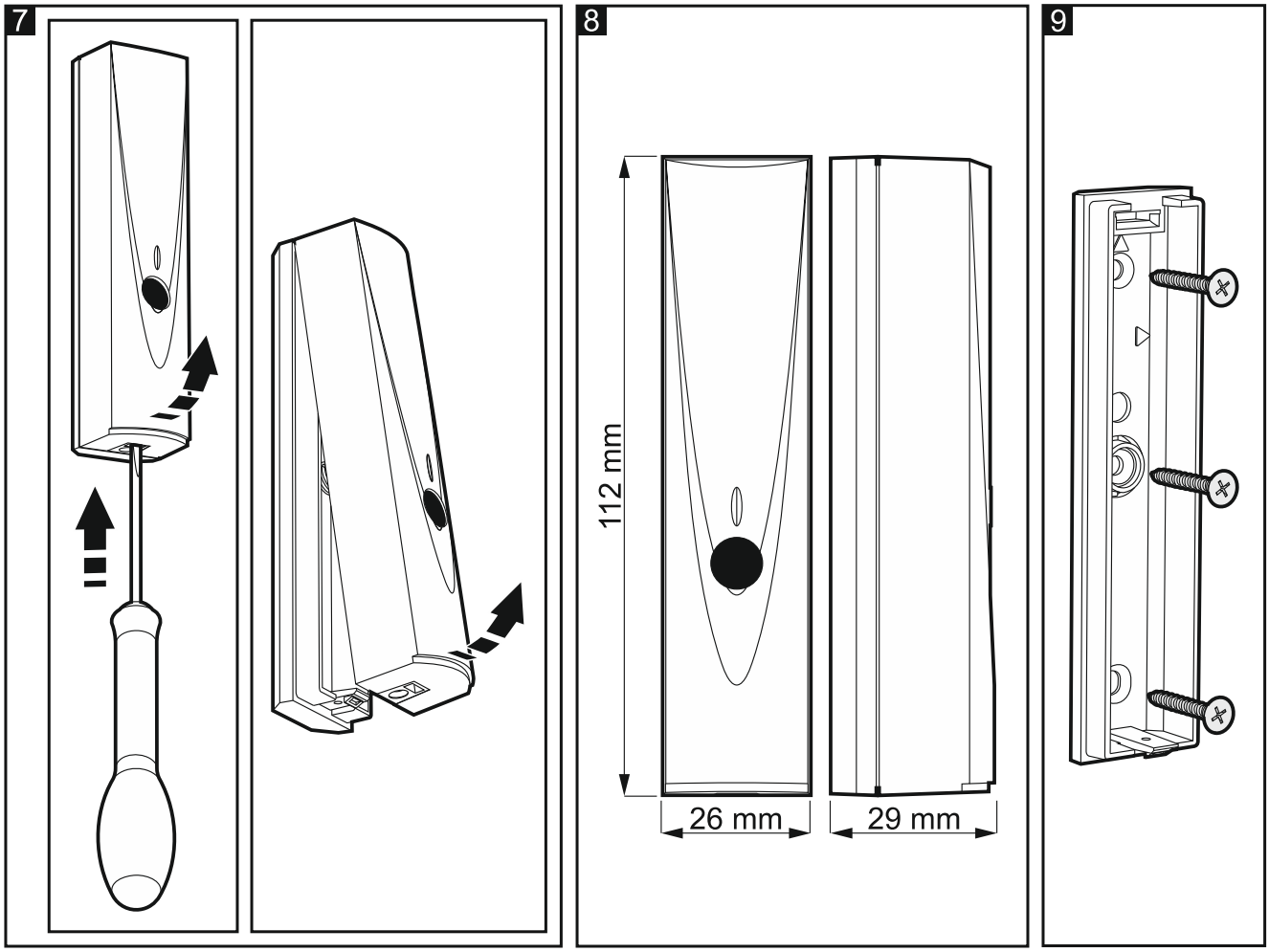
- The detection range depends on the room acoustics. The shades, curtains, furniture upholstery, acoustic tiles, etc. absorb the sound and adversely affect the detector operating range.
- Do not install the detector on the same wall on which the protected glass pane is situated.

4. Installation

There is a danger of battery explosion when using a different battery than recommended by the manufacturer, or handling the battery improperly.

Be particularly careful during installation and replacement of the battery. The manufacturer is not liable for the consequences of incorrect installation of the battery.

The used batteries must not be discarded, but should be disposed of in accordance with the existing rules for environment protection.



1. Open the enclosure (Fig. 7).
2. Using the potentiometer set the detection sensitivity.
3. Set the jumper on the TST pins as shown in Fig. 2 to enable the test mode.
4. Install the battery in the detector.
5. Enroll the detector in the system (see the PERFECTA / VERSA / VERSA IP / VERSA Plus control panel installer manual, MICRA module manual or MTX-300 controller manual).
6. Close the enclosure.

7. Put the detector at the place of its future installation.
8. Close and open the tamper contact. If the alarm transmission is received, continue with the installation. If the alarm transmission is not received, select a different mounting location and repeat the test.
9. Place the INDIGO TESTER close to the protected glass pane and use it to generate a glass-break sound. If the detector LED comes on, proceed with the installation. If the LED does not come on, change the detection sensitivity or select another installation place and repeat the test (you must repeat the radio communication test as well).
10. Open the enclosure (Fig. 7).
11. Set the jumper on the TST pins as shown in Fig. 3 to disable the test mode.
12. Using wall plugs (screw anchors) and screws, fasten the enclosure base to the mounting surface (Fig. 9).
13. Close the enclosure.

5. Specifications

Operating frequency band ..... 433,05 ÷ 434,79 MHz
Radio communication range (in open area)
MICRA / VERSA-MCU / MTX-300 ..... up to 200 m
PERFECTA ..... up to 400 m
Battery ..... CR123A 3 V
Battery life expectancy ..... up to 3 years
Standby current consumption ..... 30 µA
Maximum current consumption ..... 18 mA
Detection range ..... up to 6 m
Environmental class according to EN50130-5 II
Operating temperature range ..... -10°C...+55°C
Maximum humidity ..... 93±3%
Enclosure dimensions ..... 26 x 112 x 29 mm
Weight ..... 40 g

Hereby, SATEL sp. z o.o., declares that this detector is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The declaration of conformity may be consulted at www.satel.eu/ce