Satel® CE 1471

MGD-300

## WIRELESS GLASS-BREAK DETECTOR

mgd300_en 11/13

The MGD-300 detector enables detection of a break of plate, tempered and laminated glass. It works with the MICRA alarm module (firmware version 3.00 or later) and VERSA-MCU controller (firmware version 1.02 or later). 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.
- Tamper protection in 2 ways – cover removal and tearing enclosure from the wall.

2. Electronics board

1 microphone.

2 potentiometer for adjustment of detection sensitivity (Fig. 3).

3 pins to enable/disable the test mode. In the test mode:

- the detector reports an alarm when it detects a high frequency sound (glass break sound).
- the LED indicates alarms and periodic transmissions.

The test mode is enabled when the jumper is set as shown in Fig. 2.

4 tamper contact.

5 CR123A battery. The detector checks the battery status. When the voltage is lower than 2.6 V, the low-battery information is sent during each transmission.
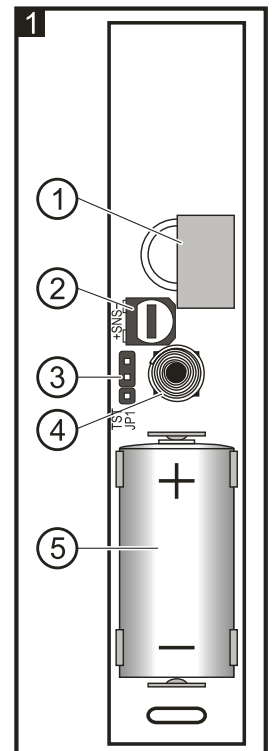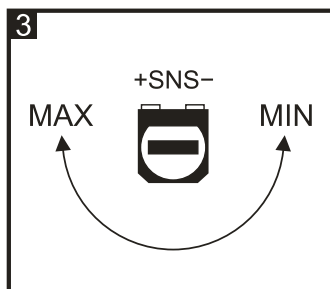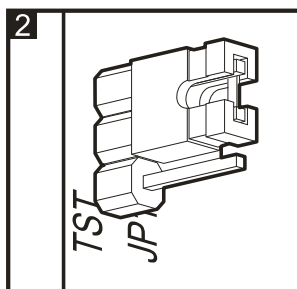
3. Operation description

The detector will trigger an alarm when a low frequency sound (impact) followed by a high frequency sound (glass break) are registered in less than 4 seconds. The alarm is also triggered in the case of opening the tamper contact. Information on the alarm is sent by radio to the MICRA alarm module or VERSA-MCU controller.

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.

In the test mode and for 20 minutes after inserting the battery or opening the tamper contact the LED indicates:

– alarms: ON for 2 seconds;

– periodic transmissions: ON for 80 milliseconds;

– test mode: short flash every 3 seconds.

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.

The detector is designed for indoor installation. The protected glass surfaces must be within the detection range. Please note that shades, curtains, furniture upholstery, acoustic tiles, etc. absorb the sound and adversely affect the detector operating range.

1. Open the detector enclosure (Fig. 4).
2. Adjust the detection sensitivity using the potentiometer
3. Set the jumper as shown in Fig. 2 to enable the test mode.
4. Install the battery and register the detector in the MICRA alarm module or VERSA-MCU controller (see the manual for MICRA alarm module or VERSA-MCU controller).
5. Close the detector enclosure.
6. Select the mounting location. It is recommended that the detector be mounted high up. This will enable a better radio communication range to be achieved, while avoiding the risk of the detector being accidentally covered by personnel moving around the premises. Make sure that transmissions from the detector placed at the selected location reach the MICRA alarm module / VERSA-MCU controller. Close and open the tamper contact to send a transmission. If the alarm transmission is received, continue the installation. If the alarm transmission is not received, select a different mounting location and repeat the test.
7. Check that the LED comes on after using the device which generates glass break sound (INDIGO TESTER) within the detection range.
8. Open the detector enclosure (Fig. 4).
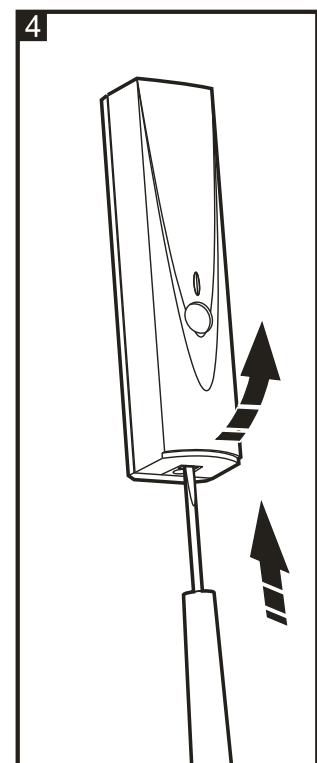
9. Change the position of the jumper to disable the test mode.
10. Using wall plugs (screw anchors) and screws, fasten the enclosure base to the mounting surface.
11. Close the detector enclosure.

5. Specifications

Operating frequency band ....433,05 ÷ 434,79 MHz
Radio communication range (in open area).. up to 200 m
Battery .... CR123A 3 V
Battery life expectancy.. approx. 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..25 x 111 x 28 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

SATEL sp. z o.o. • ul. Schuberta 79 • 80-172 Gdańsk • POLAND
tel. 58 320 94 00
info@satel.pl
www.satel.eu