



AGD-100

WIRELESS GLASS-BREAK DETECTOR

agd100_en 06/15

The AGD-100 detector enables detection of a break of plate, tempered and laminated glass. It is designed for operation within the ABAX two-way wireless system. This manual applies to the detector with firmware version 5.00, which is supported by:

- ACU-120 / ACU-270 controller,
- ACU-100 / ACU-250 controller with firmware version 4.03 2014-05-15 (or newer),
- ARU-100 repeater with firmware version 2.00 2014-05-15 (or newer),
- INTEGRA 128-WRL control panel with firmware version 1.12 2013-12-20 (or newer).

1. Features

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

2. Specifications

| | |
|--|-----------------------|
| Operating frequency band | 868.0 MHz ÷ 868.6 MHz |
| Radio communication range (in open area) | up to 500 m |
| Battery | CR123A 3 V |
| Battery life expectancy | approx. 2 years |
| Standby current consumption | 80 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 |
| Enclosure dimensions | 26 x 112 x 29 mm |
| Weight | 52 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

3. Description

The detector will report the alarm when a low frequency sound (impact) followed by a high frequency sound (glass-break) are registered. The high-frequency channel is analyzed for

four seconds from receiving the low-frequency sound wave, caused by the impact. Sensitivity of the high-frequency channel is set by radio.

Electronics board

Figure 1 shows the inside of the detector.

- ① CR123A lithium battery.
- ② tamper contact.
- ③ microphone.

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

Alarms

The detector reports alarm in the following cases:

- glass break detection,
- opening the tamper contact (tamper alarm).

Operating modes

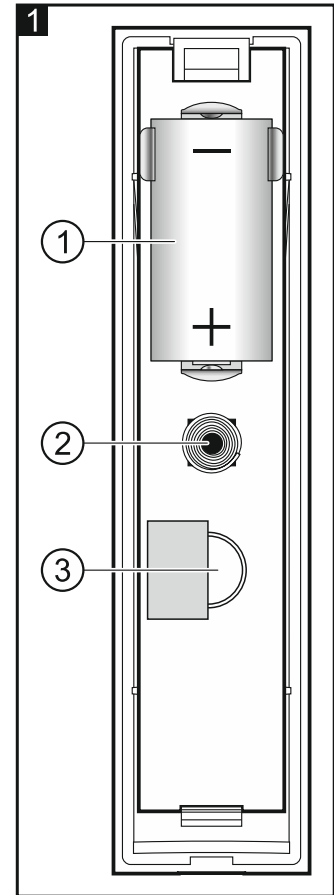
The detector operating mode is defined remotely.

Active – information about each alarm is sent immediately.

Passive – information about tamper alarm is sent immediately, while information about glass break detection only during the polling time. This operating mode prolongs the battery life.

Test mode

If you want to test the detector, you can remotely enter the test mode. When in the test mode, the detector LED is working.



LED

The LED is working for 2 minutes after battery is inserted, as well as in the test mode. The LED indicates:

- polling – short flash (80 milliseconds),
- registering a low-frequency sound – flash (500 milliseconds),
- alarm – registering a high-frequency sound or opening the tamper contact – ON for 2 seconds.

Battery status control

When the battery voltage is below 2.75 V, information about low battery is sent during each transmission.

Note: For additional information about the detector and its configuration please refer to the manual for ABAX wireless system controller.

4. Installation

The detector is designed for indoor installation, attached directly to the wall. The protected glass surfaces must remain within the device detection range.

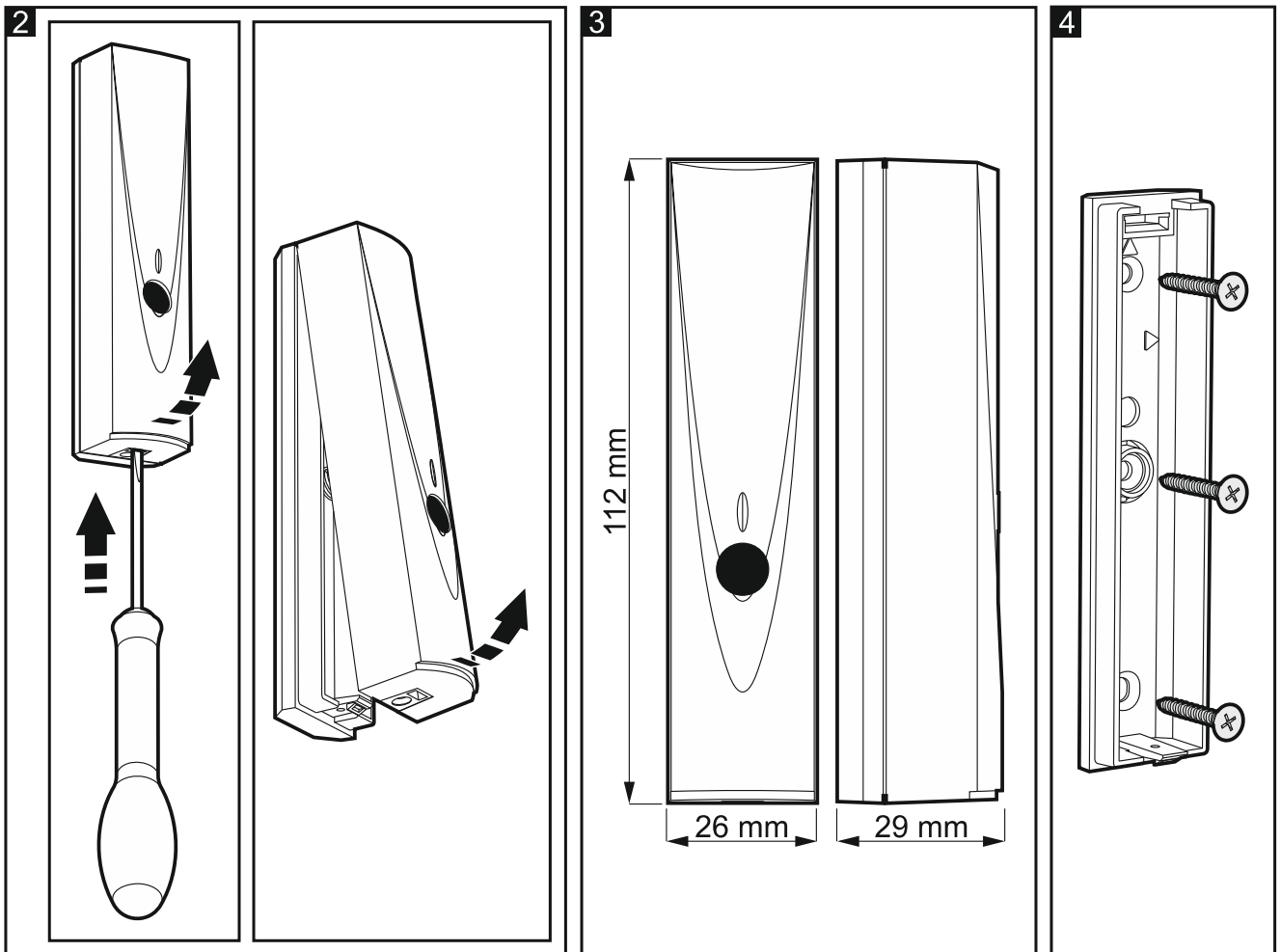


Curtains, drapes, furniture upholstery, acoustic tiles, etc. absorb the sound and adversely affect the detection range.

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 detector enclosure (Fig. 2).



2. Install the battery and add the device to the wireless system (see the ACU-100 / ACU-250 / ACU-120 / ACU-270 controller manual or the INTEGRA 128-WRL / VERSA control panel installer manual). The sticker with 7-digit serial number which shall be entered when registering the detector in the system can be found on the electronics board.
3. Close the enclosure and attach the detector temporarily at the place of its future installation. When choosing the place of installation, take into account both the range of radio communication and the distance to protected glass.
4. Launch remotely the test mode.
5. Check the level of signal received from the detector by the ACU-100 / ACU-250 / ACU-120 / ACU-270 controller or the INTEGRA 128-WRL control panel. If the signal level is lower than 40%, select another place for installation. Sometimes, it is sufficient to shift the device ten or twenty centimeters to obtain a considerable improvement in the signal quality.
6. Perform a detection test. In the test mode the detector reports alarm on registering a high-frequency sound. The INDIGO TESTER is recommended to be used for testing the detector. If necessary, select another installation place or change the high-frequency channel sensitivity (for information on programming sensitivity please refer to the manual for ABAX system controller and the programming manuals for control panels of INTEGRA and VERSA series).
7. Having selected the place which ensures the optimum signal level and glass-break detection capability, quit the test mode.

8. Open the detector enclosure (Fig. 2).
9. Using wall plugs (screw anchors) and screws, fasten the enclosure base to the mounting surface (Fig. 4).
10. Close the enclosure. The detector is now ready for work.