abax2

Wireless glass-break detector

AGD-200 EN
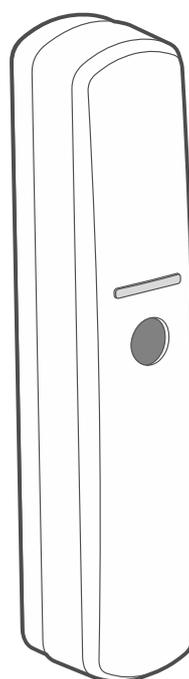
Firmware version 1.00

CE

IMPORTANT

The device should be installed by qualified personnel.

Prior to installation, please read carefully this manual.

Changes, modifications or repairs not authorized by the manufacturer shall void your rights under the warranty.

The rating plate of the device is located on the enclosure base.

CE The device meets the requirements of the applicable EU directives.

The device is designed for indoor installation.

The device must not be disposed of with other municipal waste. It should be disposed of in accordance with the existing rules for environment protection (the device was placed on the market after 13 August 2005).

EAC The device meets the technical regulations of the Eurasian Customs Union.

SATEL aims to continually improve the quality of its products, which may result in changes in their technical specifications and software. Current information about the changes being introduced is available on our website.
Please visit us at:
https://support.satel.pl

Hereby, SATEL sp. z o.o. declares that the radio equipment type AGD-200 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.satel.pl/ce

In the EU, this radio equipment is only permitted to operate in the 868 MHz frequency band.

The following symbols may be used in this manual:

i - note,

⚠ - caution.

CONTENTS

The AGD-200 detector is used to detect a break of plate, tempered and laminated glass. It is designed for operation within the ABAX 2 / ABAX two-way wireless system. This manual applies to the detector with firmware version 1.00 (or newer), which is supported by:

- ABAX 2:
  - ACU-220 / ACU-280 controller,
  - ARU-200 repeater.
- ABAX:
  - ACU-120 / ACU-270 controller (firmware version 5.04 or newer),
  - ARU-100 repeater (firmware version 2.02 or newer),
  - INTEGRA 128-WRL control panel (firmware version 1.19 or newer and firmware version of processor used to operate ABAX system 3.10 or newer).

1. Features

- Advanced two-path sound analysis.
- Adjustable detection sensitivity.
- Encrypted two-way radio communication in the 868 MHz / 915 MHz frequency band (AES standard for the ABAX 2 system).
- Transmission channel diversity – 4 channels for automatic selection of the one that will enable transmission without interference with other signals in the 868 MHz /915 MHz frequency band (ABAX 2 system only).
- Remote update of detector firmware (ABAX 2 system only).
- Remote configuration.
- Built-in temperature sensor (temperature measurement range from -10°C to +55°C).
- "ECO" option for longer battery life (ABAX 2 system only).
- Battery status control.
- LED indicator.
- Tamper protection against enclosure opening and removal from mounting surface.

2. Description

Radio communication

The detector connects to the controller / control panel at regular time intervals to provide information about its state (periodical communication). Additional communication may take place as a result of alarm (see "Operating modes").

Alarms

The detector will report alarm:

- after detecting a glass break (registering successively a sound of low frequency (impact) and a sound of high frequency (glass break) within less than 4 seconds),
- after opening the tamper switch (tamper alarm).

Operating modes

Active – information about each alarm is sent immediately.

Passive – only information about tamper alarm is sent immediately. This operating mode prolongs the battery life.

The detector operating mode is turned on remotely. If the detector is used in the INTEGRA / VERSA / PERFECTA 64 M alarm system, the operating mode may depend on the partition state (partition disarmed – passive mode; partition armed – active mode). For more information, refer to the ABAX 2 / ABAX controller manual / the INTEGRA 128-WRL control panel manual.

Energy saving mode (ECO)

If you want to prolong the battery life, you can enable in the detector the "ECO" option. When the "ECO" option is enabled, the periodical communication takes place every 3 minutes. Thus the battery life can be increased as much as fourfold. The option is only available in the ABAX 2 system.

Test mode

The test mode makes the detector testing easier, because the LED indicator is enabled, and the alarm is triggered by the glass breaking sound alone (the high-frequency sound). How to start and end the test mode is described in the ABAX 2 / ABAX controller manual / the INTEGRA 128-WRL control panel manual.

LED

The LED is flashing for about 3 seconds from inserting the battery, thus signaling the warm-up of the detector. The LED also works in the test mode, in which it indicates:

- periodical communication – short flash (80 milliseconds),
- registering a low-frequency sound – flash (500 milliseconds),
- alarm – 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.

Electronics board

⚠ **Do not remove the electronics board from the enclosure to avoid damage to the components on the board.**

Fig. 1 shows the detector inside after opening the enclosure.

① tamper switch.

② CR123A lithium battery.
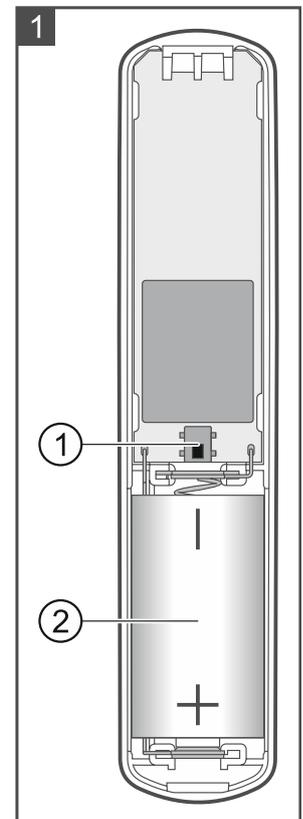
3. Selecting a mounting location

- 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).
- 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.

- It is not advisable to install the detector on the same wall on which the protected glass pane is located, or in the vicinity of sound emitting devices, such as loudspeaker, bell, air conditioner, etc.
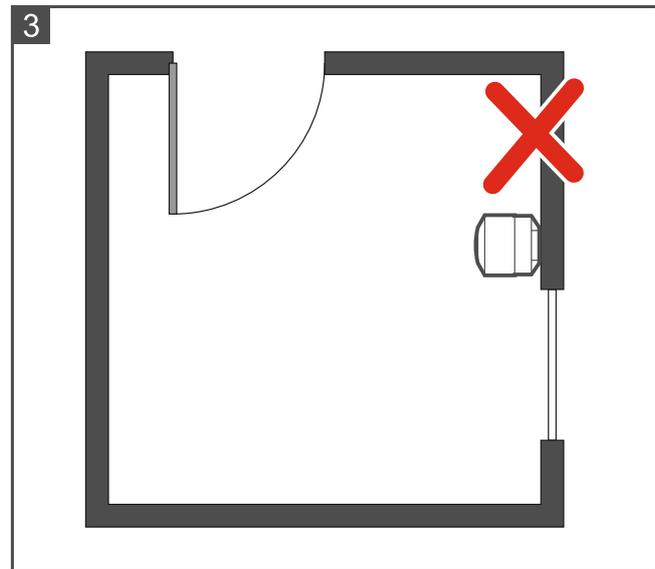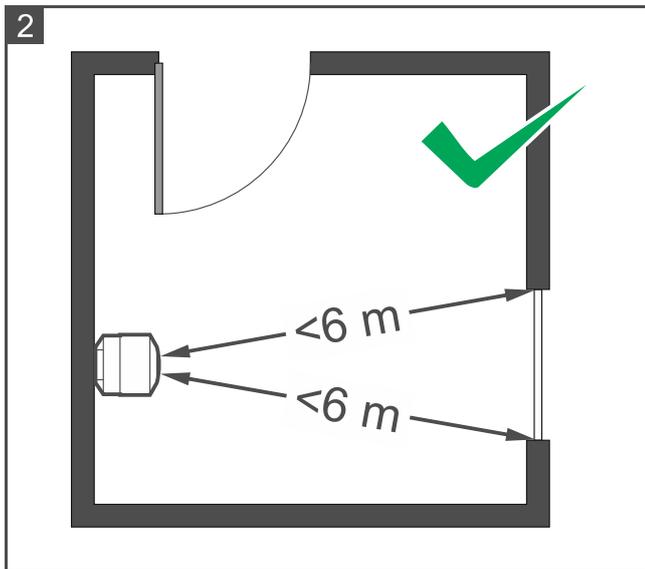
4. Installation

⚠ **There is a danger of battery explosion when using a different battery than recommended by the manufacturer, or handling the battery improperly. Do not crush the battery, cut it or expose it to high temperatures (throw it into the fire, put it in the oven, etc.).**

Do not expose the battery to very low pressure due to the risk of battery explosion or leakage of flammable liquid or gas.

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. 4). The enclosure opening tool, shown in the illustration, is included in the detector delivery set.
2. Install the battery and add the detector to the wireless system (see the ABAX 2 / ABAX controller manual or the INTEGRA 128-WRL control panel installer manual). The sticker with serial number which shall be entered when registering the detector in the system can be found on the electronics board.

ℹ *In the INTEGRA / VERSA alarm system, the detector is identified as AGD-100.*

Simultaneous operation of the detector by the ABAX 2 and ABAX controller / INTEGRA 128-WRL alarm control panel is not possible.

3. Close the detector enclosure.
4. Put the detector at the place of its future installation.
5. Check the level of signal received from the detector by the ABAX 2 / ABAX 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. You can also try to turn the enclosure to check what effect the change of antenna position will have on the signal strength.

| i | *The ARF-200 tester makes it possible to check the radio signal strength at the place of future installation without having to put the detector there.* |

6. Start the test mode (see the ABAX 2 / ABAX controller manual / the INTEGRA 128-WRL control panel manual).

7. Place the INDIGO TESTER close to the protected glass and use it to generate a glass-break sound. If the detector LED comes on, continue the installation. Otherwise, change the detection sensitivity (see the ABAX 2 / ABAX controller manual / the INTEGRA 128-WRL control panel manual) or select another installation location and repeat the test (the level of signal received from the detector must be rechecked).
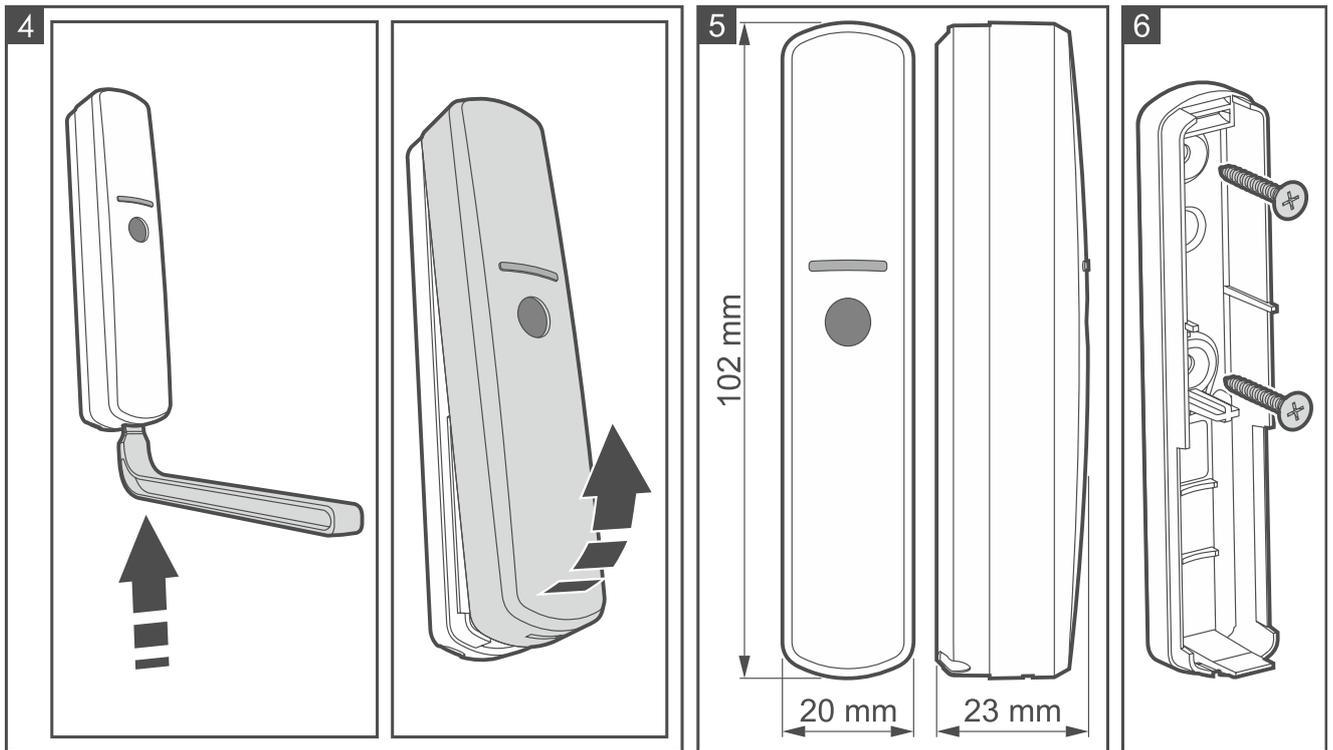
8. End the test mode.
9. Open the detector enclosure (Fig. 4).
10. Use wall plugs (anchors) and screws to secure the enclosure base to the mounting surface (Fig. 6). The wall plugs delivered with the device are intended for concrete, brick, etc. For other types of surface (drywall, styrofoam), use the appropriately selected wall plugs.
11. Close the detector enclosure.
12. Configure the detector settings (see the ABAX 2 / ABAX controller manual / the INTEGRA 128-WRL control panel manual).

5. Specifications

Operating frequency band .... 868.0 MHz ÷ 868.6 MHz / 915 MHz – 928 MHz

Radio communication range (in open area)

    ABAX 2

        ACU-220 .... up to 2000 m

        ACU-280 .... up to 1200 m

ABAX .... up to 500 m

Battery...CR123A 3 V

Battery life expectancy .... up to 2 years

Temperature measurement range ....-10°C...+55°C

Temperature measurement accuracy ....±1°C

Standby current consumption .... 90 µA

Maximum current consumption ....25 mA

Detection range.. up to 6 m

Complied with standards...........................EN 50130-4, EN 50130-5, EN 50131-5-3

Environmental class according to EN50130-5 II

Operating temperature range..-10°C...+55°C

Maximum humidity ....93±3%

Dimensions .... 20 x 102 x 23 mm

Weight...39 g