be wave
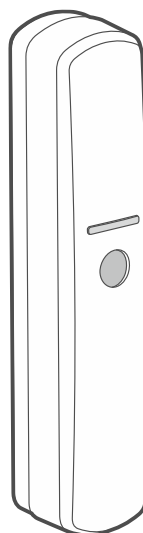
Glass Break Detector

AGD-200 EN

Firmware version 1.01

CE

IMPORTANT

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

Description of symbols on the device:

The device meets the requirements of the applicable EU directives.

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).

The device is designed for indoor installation.

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

Signs in this manual

Caution – information on the safety of users, devices, etc.

Note – suggestion or additional information.

CONTENTS

The AGD-200 detector (Glass Break Detector) detects a glass break. The manual applies to the detector installed in the BE WAVE system.

1. Features

- Advanced, two-factor sound analysis (the sound of breaking glass must be preceded by a thump).
- Operation in the 868 MHz frequency band.
- AES encrypted two-way radio communication.
- Transmission channel diversity – 4 channels for automatic selection of the one that will enable transmission without interference with other signals.
- Remote settings programming.
- Remote firmware update.
- Built-in temperature sensor (measuring range: -10 °C...+55°C).
- LED indicator.
- Powered by CR123A 3 V battery.
- Battery status control.
- Tamper protection against enclosure opening and removal from mounting surface.

2. Description

Alarms

The detector reports 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,
- opening the tamper switch (tamper alarm).

Electronics board

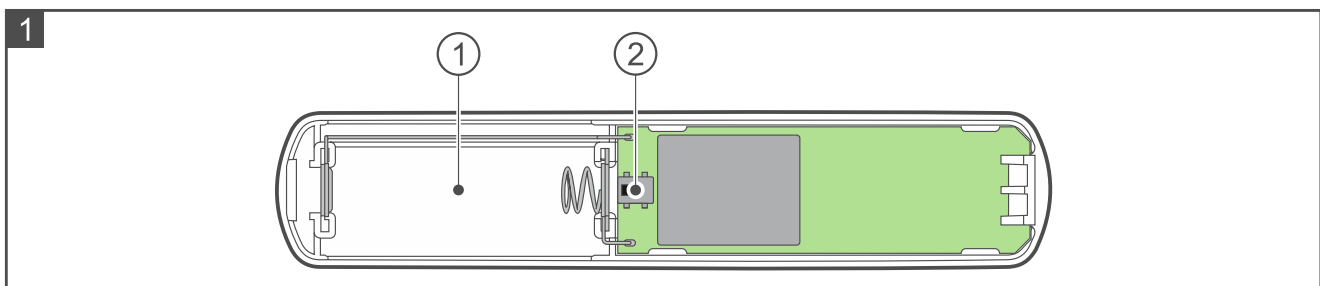⚠ **Do not remove the electronics board from the enclosure to avoid damage to the components on the board.**

Figure 1 shows the inside of the detector after opening the enclosure.

① battery holder (CR123A 3 V).

② tamper switch.

The LED indicator is placed on the other side of the electronics board. The indicator is flashing for about 3 seconds after inserting the battery (detector warm-up). After that, it is only enabled while the diagnostics mode is started in the system. It indicates:

- periodical communication – short flash.

- registering a low-frequency sound – flash.
- alarm – ON for 2 seconds.

3. Installation

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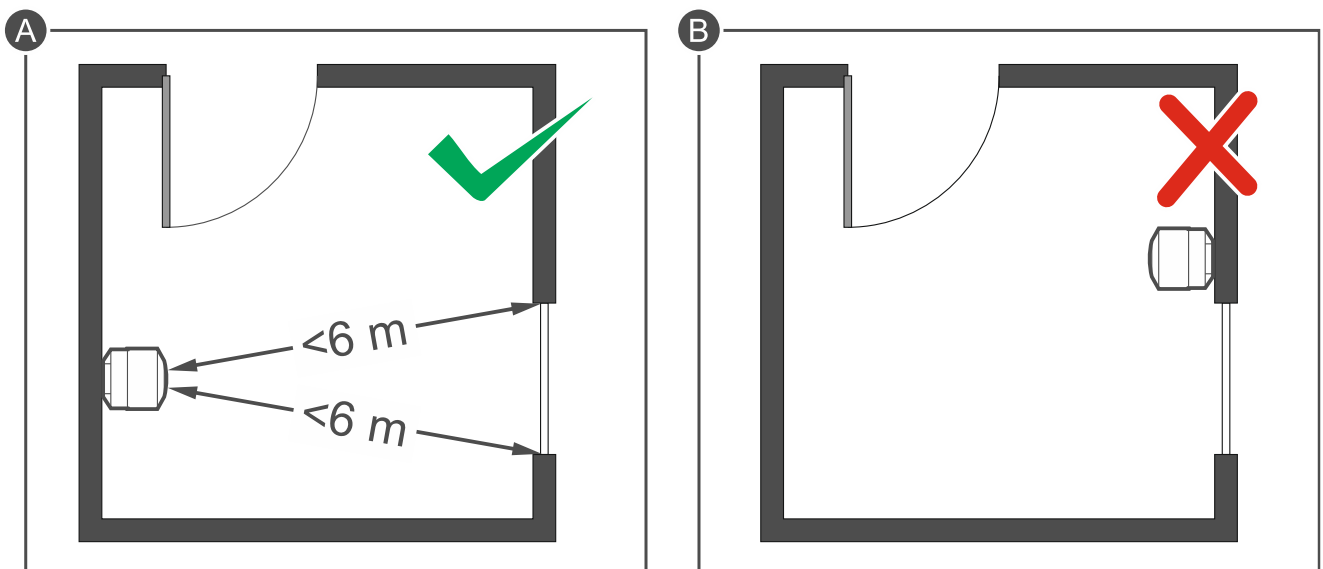
Do not crush the battery, cut it or expose it to high temperatures (throw it into the fire, put it in the oven, etc.).

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.

If the detector is mounted higher than 2 meters above the ground, it may cause harm if it falls off.

3.1 Tips for installation

- The detector should be installed indoors, in spaces with normal air humidity.
- Do not install the detector outdoors.
- When selecting a place of installation, consider the radio communication range.
- Thick walls, metal partitions, etc. reduce the range of the radio signal.
- Direct the detector microphone towards the protected glass pane – the best place to mount the detector is the wall opposite the protected glass pane.
- The distance between the detector and the protected glass pane must not exceed the detection range (6 m).
- The detection range depends on the room acoustics. Shades, curtains, furniture upholstery, acoustic tiles, etc. reduce the detection range.
- Do not install the detector on the same wall as the protected glass pane.
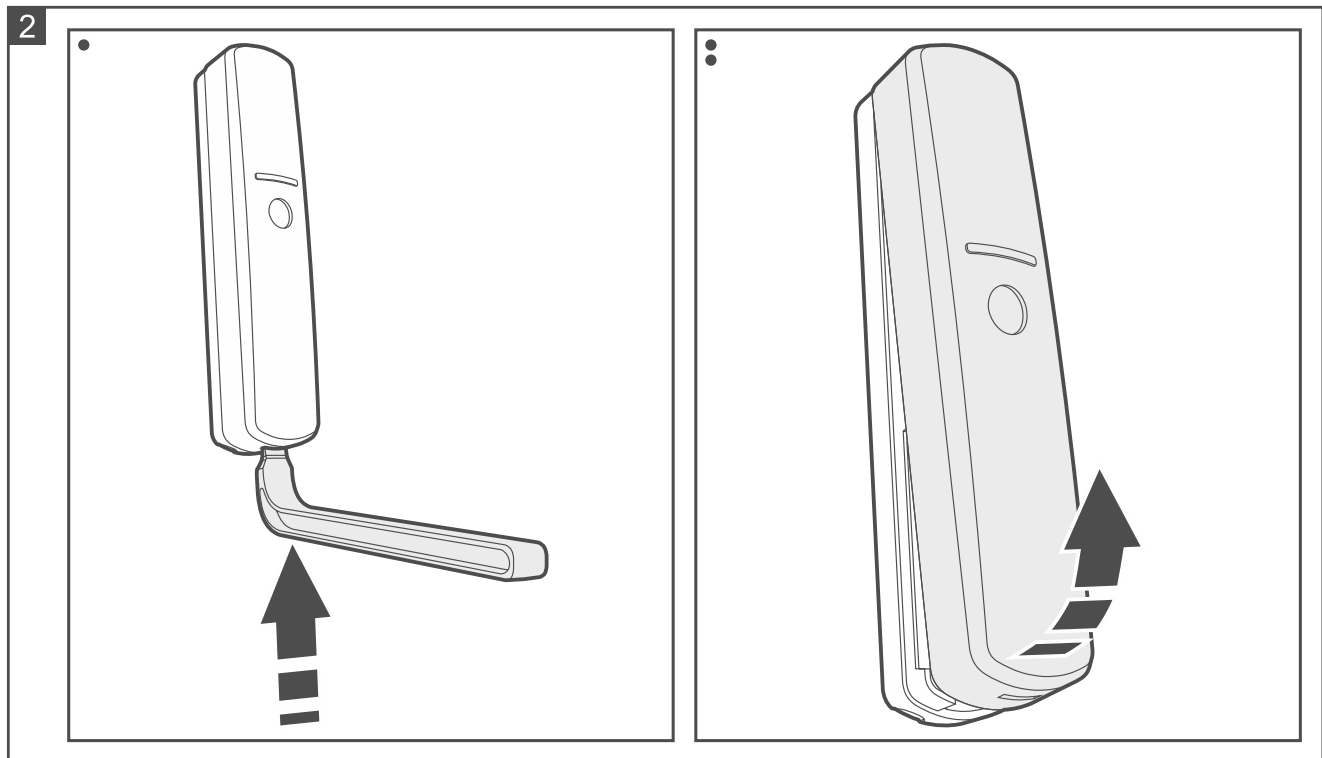
- Do not install the detector in the vicinity of sound emitting devices (loudspeaker, bell, air conditioner, etc.).
- If you are using a double-sided mounting tape, remember to press it properly. Stick the tape to the device and keep pressing for several seconds, then stick the device to the surface and keep pressing for several seconds.

3.2 Mounting

i *The figures show the detector mounted vertically, but it may be mounted in any position (it has no effect on its operation).*

1. Open the detector enclosure (Fig. 2). The enclosure opening tool, shown in the figure, is provided with the detector.

2. If the detector is to be mounted on the surface using a double-sided mounting tape (Fig. 3):
   – stick the tape to the enclosure base.
   – stick the enclosure base to the surface.
3. If the detector is to be mounted on the surface with screws:
   – place the enclosure base against the surface and mark the location of the mounting holes.
   – drill the holes in the surface for wall plugs (anchors). The wall plugs provided with the detector are intended for concrete or brick. For other types of surface (drywall, styrofoam), use other appropriately selected wall plugs.
   – secure the enclosure base to the surface with screws (Fig. 4).

i *If the detector is to detect removal from the surface, secure the detector with screws.*

4. Add the detector to the system (see the manual for the BE WAVE system controller or the BE WAVE Hybrid system control panel). When a request to turn on the device will be displayed, install the battery in the detector.

5. Close the enclosure.

4. Test

1. Enable the diagnostics mode in the system (see the manual for the BE WAVE system controller or the BE WAVE Hybrid system control panel).

2. Make sure the LED indicator flashes at the sound of breaking glass (high-frequency sound). You can generate the sound of breaking glass using the INDIGO tester by SATEL.

3. Disable the diagnostics mode.

5. Battery replacement

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

The Be Wave app will indicate that the battery in the detector is low. The low battery should be replaced as soon as possible.

1. In the Be Wave app / BE WAVE Soft program, tap / click the room in which the detector is installed.

2. Tap / click the detector name.

3. Start the *Battery replacement* function.

4. Open the detector enclosure.

5. Remove the low battery.

6. Wait 1 minute.

7. Install the new battery.

8. Close the enclosure.

9. Start the *Unbypass device* function in the Be Wave app / BE WAVE Soft program.

6. Specifications

Operating frequency band... 868.0 MHz ÷ 868.6 MHz
Radio communication range (in open area) .... up to 1300 m
Battery.. CR123A 3 V
Battery life expectancy .... up to 2 years
Standby current consumption .... 90 µA
Low battery voltage threshold .... 2.75 V
Temperature measurement range .... -10°C...+55°C
Temperature measurement accuracy .... ±1°C
Detection range.. up to 6 m
Complied with standards...EN 50130-4, EN 50130-5, EN 50131-5-3
Environmental class according to EN 50130-5 II
Operating temperature range... -10°C...+55°C
Maximum humidity .... 93±3%
Dimensions .... 20 x 102 x 23 mm
Weight... 39 g