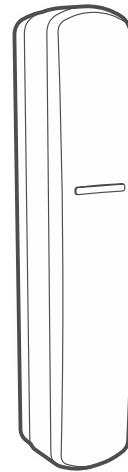




Opening Detector
AXD-200 Lite

Firmware version 1.07

EN



CE

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Satel®

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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.

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 AXD-200 Lite 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.

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The AXD-200 Lite detector (Opening Detector) detects the opening of a door or window. You can connect a wired NC detector to it (e.g. a wired opening detector). The built-in opening sensor can be disabled. The manual applies to the detector installed in the BE WAVE system.

1. Features

- Detecting open door, window etc.
- Input for connecting an NC type wired detector.
- Capability to disable the built-in opening sensor.
- 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.
- LED indicator.
- Powered by CR123A 3 V battery.
- Battery status control.
- Tamper protection against enclosure opening and removal from mounting surface.
- A magnet for surface mounting and a magnet for flush mounting provided.

2. Description

Alarms

The detector reports alarm after:

- moving the magnet away from the detector (opening the door or window),
- opening the M1 input (violating the detector connected to the M1 input),
- 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.

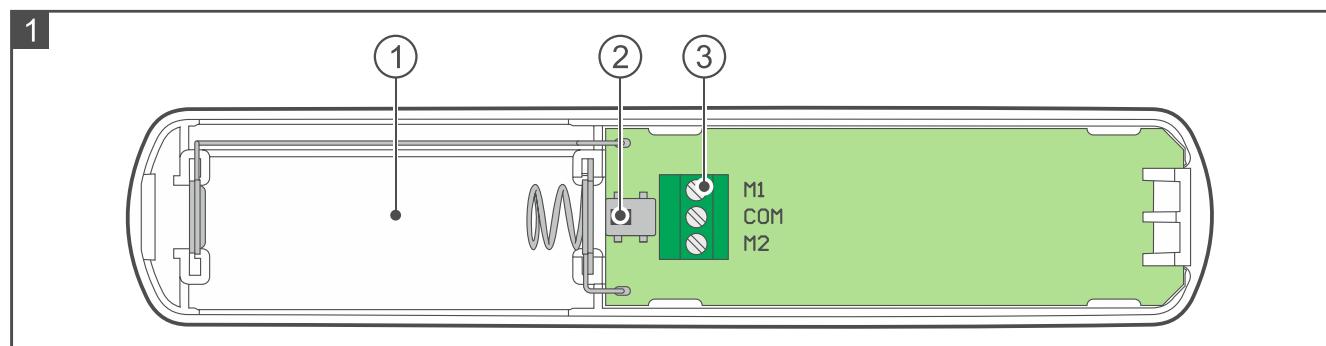


Figure 1 shows the inside of the detector after opening the enclosure.

- ① battery holder (CR123A 3 V).
- ② tamper switch.

③ terminals:

M1 - terminal for connecting a wired NC detector.

COM - common ground.

M2 - terminal for disabling the built-in opening sensor. If you want to disable the built-in opening sensor, connect the M2 terminal to the COM terminal.



By default, the M1 and COM terminals are shorted with a wire. Do not remove the wire if you are not planning to connect a wired detector to the terminals.

LED indicator

The LED indicator is flashing for about 10 seconds after inserting the battery. After that, it is only enabled while the diagnostics mode is started in the system. It indicates:

- periodical communication – short 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

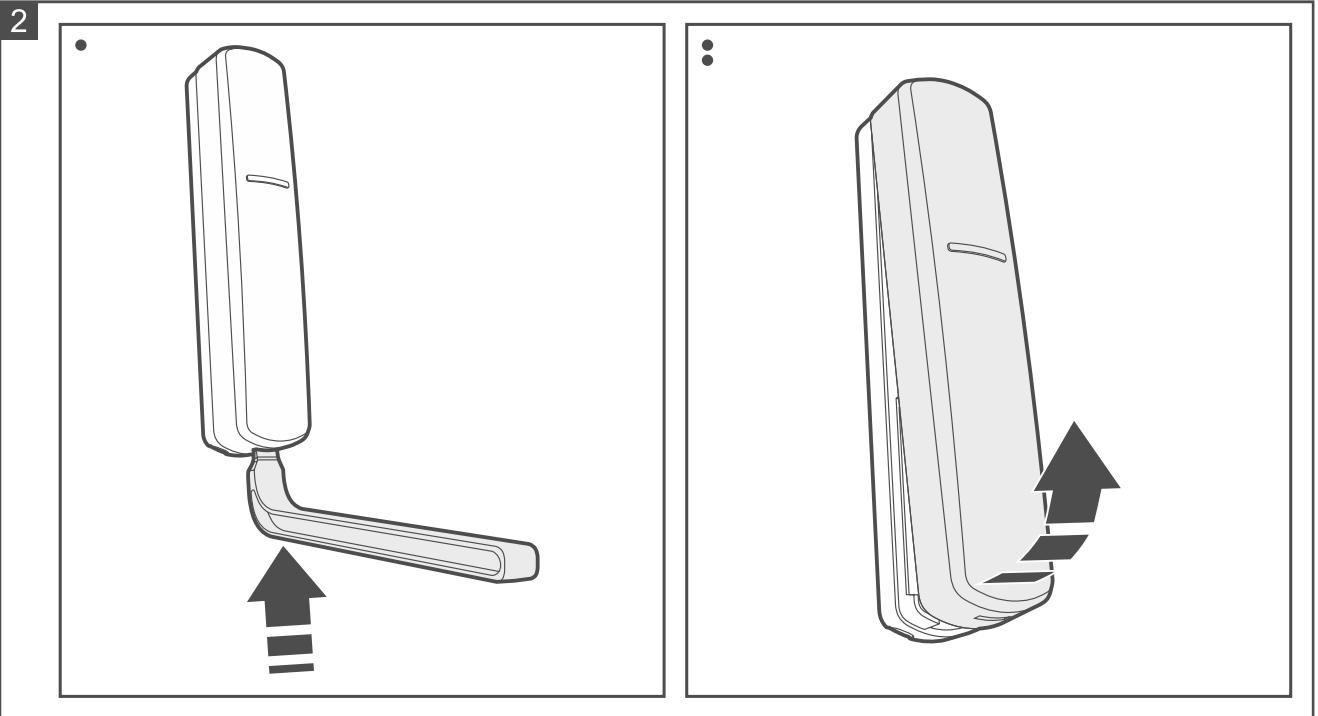
- The detector should be installed indoors, in spaces with normal air humidity.
- Do not install the detector outdoors.
- When selecting a place of installation, consider the radio communication range.
- Thick walls, metal partitions, etc. reduce the range of the radio signal.
- Install the detector on the window / door frame (fixed surface). Install the detector in the upper part of the window frame. This will reduce the risk of flooding the detector when the window is tilted or open during rain.
- Install the magnet on the window / door (moving surface).
- Do not install the detector on ferromagnetic surfaces or in the vicinity of strong magnetic or electric fields.
- To connect a wired NC detector, use wires with a cross-section of 0.5-0.75 mm². The length of the wires should not exceed 3 m.
- 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



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.

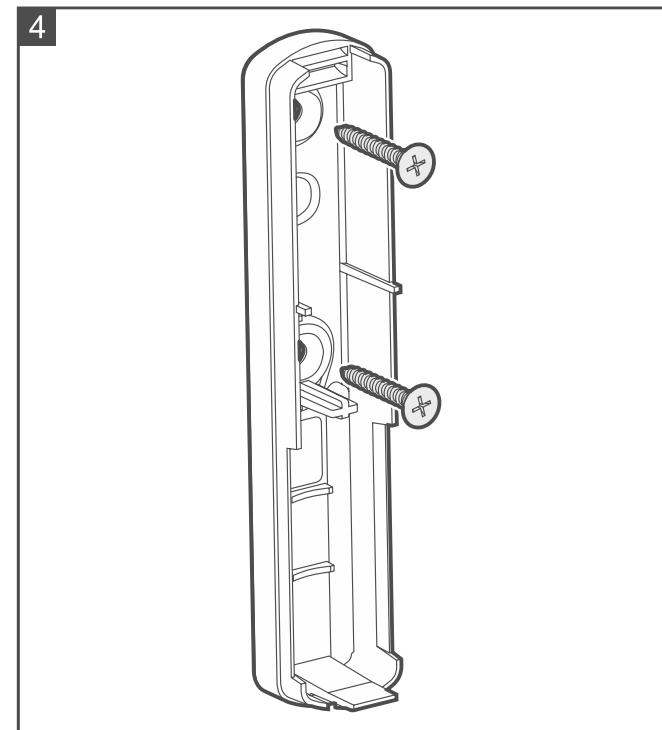
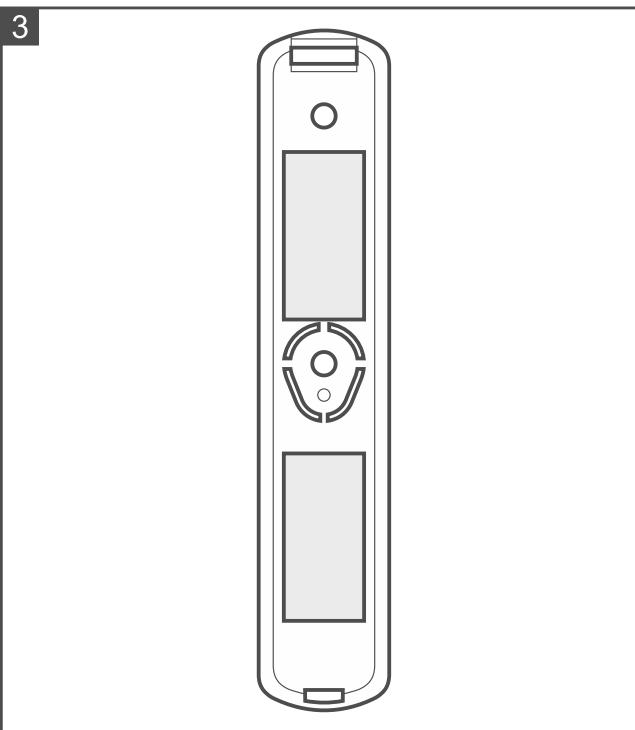


2. If you want to connect a wired NC detector:
 - make the opening for a cable in the enclosure base.
 - run the detector cable through the opening.
3. If the detector is to be mounted on the surface using a double-sided mounting tape (Fig. 3):
 - stick the tape to the enclosure base.
 - stick the enclosure base to the surface.
4. 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).

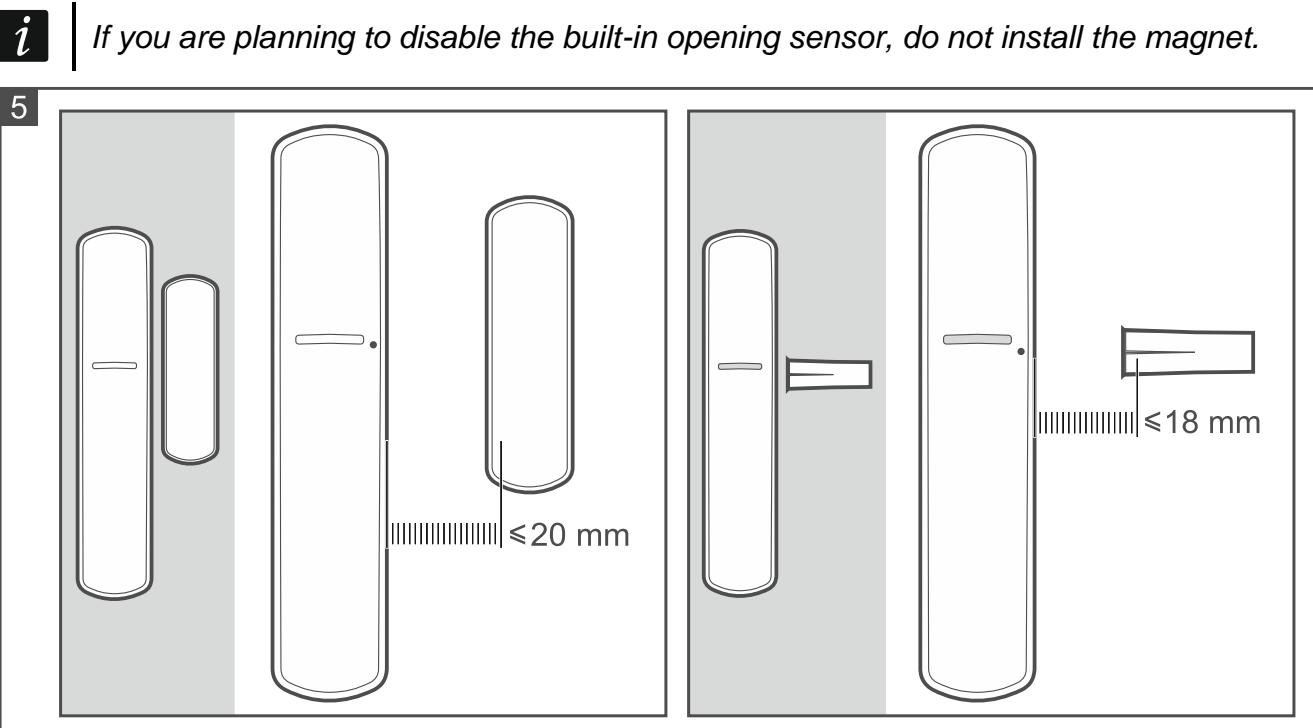


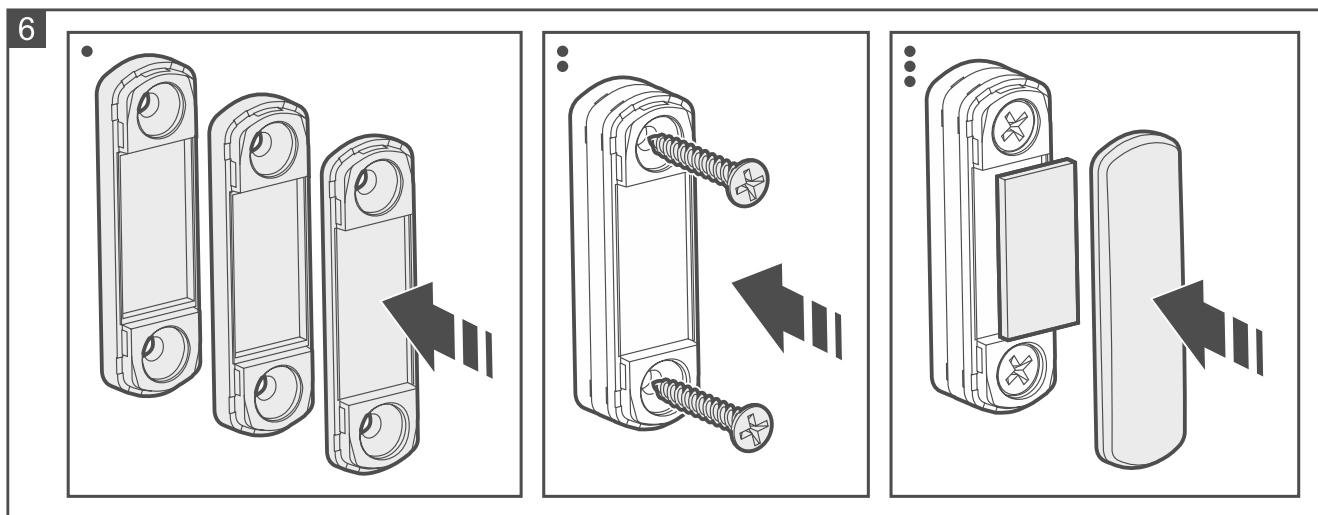
If the detector is to detect removal from the surface, secure the detector with screws.

The detector must detect removal from the surface if it is to meet the requirements of Standard EN 50131 for Grade 2.



5. Install the magnet as shown in Fig. 5. You can secure the surface magnet using a double-sided mounting tape or screws. You can use several spacers (Fig. 6). To make a hole for the flush magnet, use the $\varnothing 9$ mm drill bit.





6. If you are connecting a wired NC detector, screw the detector wires to the COM and M1 terminals on the electronics board.
7. If you want to disable the built-in opening sensor, use a wire to connect the M2 and COM terminals.
8. 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.
9. Close the detector 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. Check if the LED indicator turns ON:
 - after moving the magnet away (opening the door or window),
 - after violating the detector connected to the M1 input.
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 detector 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	48 µA
Low battery voltage threshold	2.75 V
Maximum gap	
surface magnet	20 mm
flush magnet	18 mm
M1 input (NC) sensitivity	240 ms
Complied with standards.....	EN 50130-4, EN 50130-5, EN 50131-1, EN 50131-2-6, EN 50131-5-3
Security grade according to EN 50131-2-6	Grade 2
Environmental class according to EN 50130-5	II
Operating temperature range.....	-10°C...+55°C
Maximum humidity	93±3%
Enclosure dimensions.....	20 x 102 x 23 mm
Surface mounted magnet enclosure dimensions	15 x 52 x 6 mm
Surface mounted magnet spacer dimensions.....	15 x 52 x 6 mm
Flush mounted magnet enclosure dimensions.....	ø10 x 28 mm
Weight.....	59 g