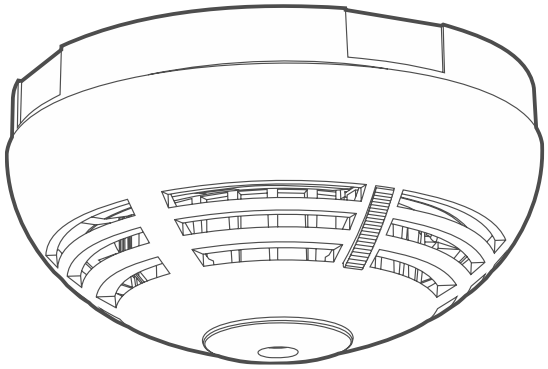
Fire Detector Pro

ASD-250

Firmware version 2.03

EN



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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 ASD-250 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 ASD-250 detector (Fire Detector Pro) detects the presence of smoke (early signs of fire). It meets the EN 14604 requirements. The manual applies to the detector installed in the BE WAVE system.

1. Features

- Visible smoke sensor.
- Detection of dirty smoke chamber.
- 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.
- Built-in sounder.
- Detector test / reset button.
- Powered by CR123A 3 V battery.
- Battery status control.
- Tamper protection against cover removal.

2. Description

Alarms

The detector reports alarm after:

- detecting visible smoke (fire alarm),
- opening the tamper switch (tamper alarm).

Smoke detection

The optical method is used for the detection of visible smoke. When the concentration of smoke in the smoke chamber exceeds a given threshold, a fire alarm is generated. The detector automatically compensates for gradual changes in the smoke chamber caused by deposition of dust.

Fire alarm signaling

The alarm is signaled by a steady light of the LED indicator and a beep emitted continuously for up to 5 minutes. The alarm signaling will stop when the alarm is cleared.

Clearing the fire alarm

The alarm will be cleared after:

- the test / reset button is pressed (Fig. 1),
- alarm is cleared in the system.

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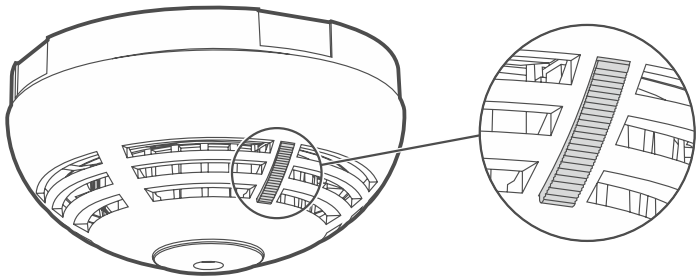


LED indicator

The LED indicates:

- low battery – 3 short flashes every 30 seconds,
- alarm – ON (for up to 5 minutes).

Additionally, when the diagnostics mode is started in the system, the LED indicator indicates:

- periodical communication:
  - 1 short flash when the smoke chamber is clean,
  - 2 short flashes when the smoke chamber is dirty.
- fire alarm memory – flashing rapidly.

Sounder

The sounder indicates:

- low battery – 3 short beeps every 30 seconds,
- alarm – continuous beep (for up to 5 minutes).

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.

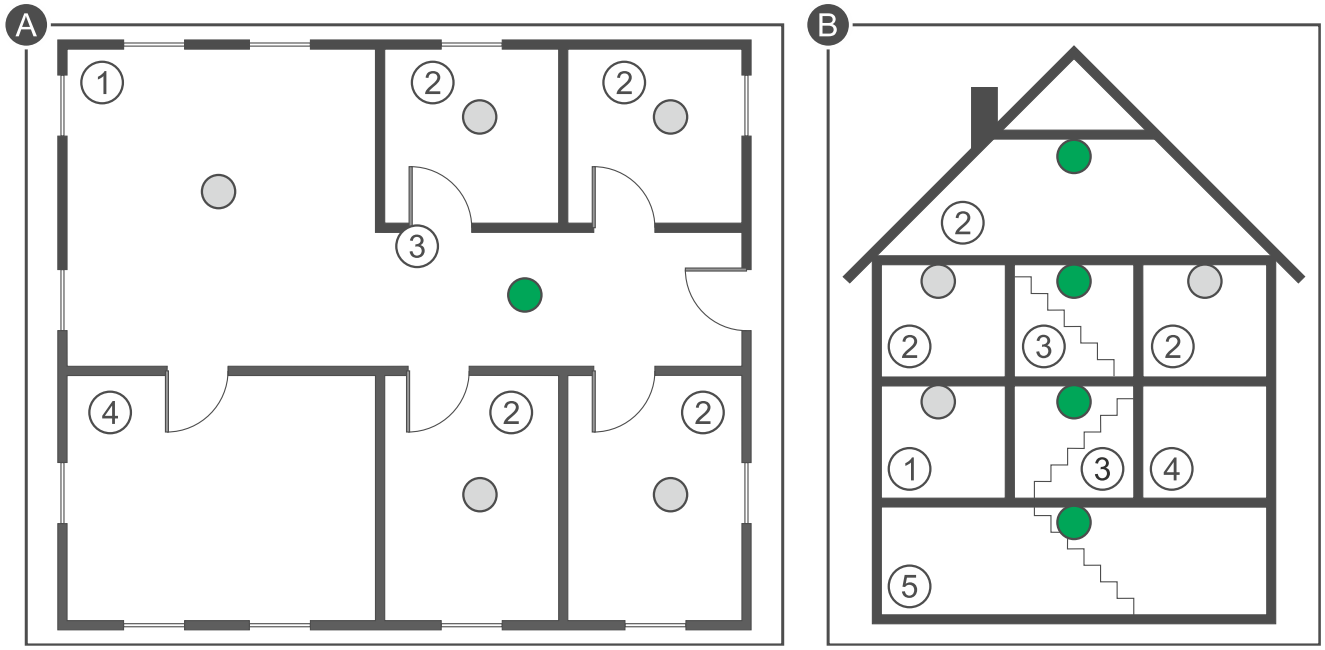
Be particularly careful during installation and replacement of the battery. The manufacturer is not liable for the consequences of incorrect installation of the battery.

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.

- The detector should be installed on the ceiling, as close as possible to the center of the room.
- Do not install the detector in places with high concentration of dust and/or formation and condensation of water steam.
- Do not install the detector near heaters, cookers, fans or air-conditioner outlets.
- Do not install the detector in places where there is no unobstructed movement of air (e.g. in recesses, niches, 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.



Explanations for figures A and B:

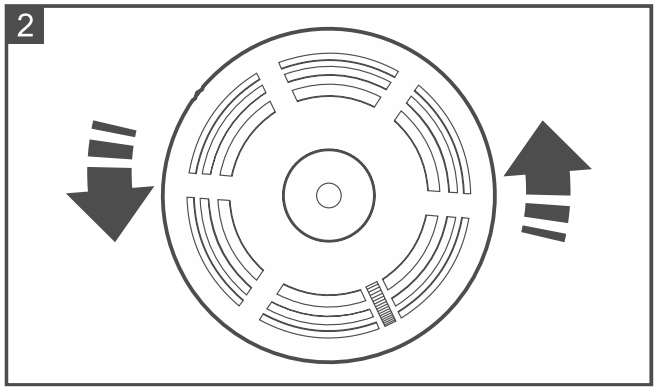
① living room.
② bedroom.
③ hall, lobby, etc.
④ kitchen.
⑤ basement.
primary location for detector installation.
additional location for detector installation.

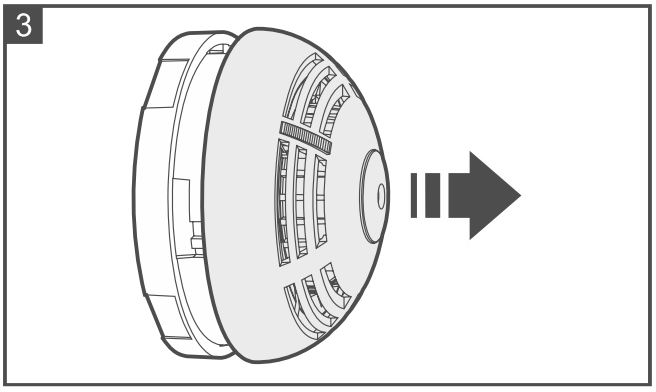
3.2 Mounting

Do not remove the jumper from the pins on the detector electronics board.

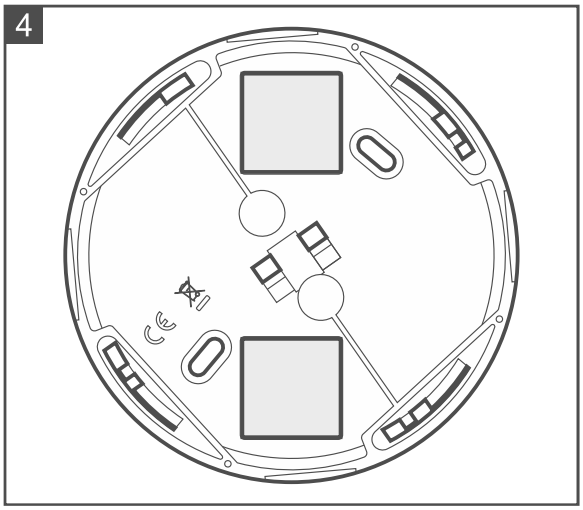
1. Remove the plastic dust cover.

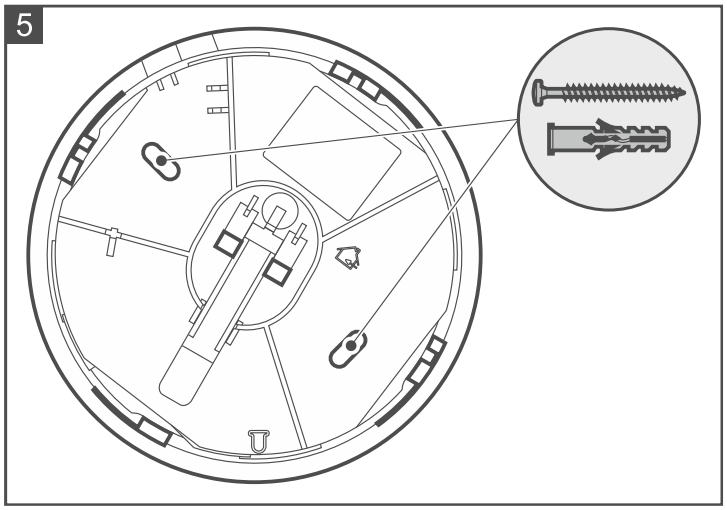
2. Turn the cover counter-clockwise (Fig. 2) and remove it (Fig. 3).





3. If the detector is to be mounted on the ceiling using a double-sided mounting tape (Fig. 4):
   – stick the tape to the enclosure base.
   – stick the enclosure base to the ceiling.
4. If the detector is to be mounted on the ceiling with screws:
   – place the enclosure base against the ceiling and mark the location of the mounting holes (Fig. 5).
   – drill the holes in the ceiling 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 ceiling with screws.





5. 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.
6. Replace the detector cover and lock it with a screw. The screw is provided in the bag together with the wall plugs and screws for mounting.

The cover cannot be replaced when there is no battery inside the detector.

If in the premises where the detector is installed, any work is being carried out that may cause dirt to build up in the smoke chamber, put a plastic dust cover on the detector. Remove it after the work is finished.

4. Test

1. Press the test / reset button (Fig. 1). A fire alarm should be generated soon after. The alarm will be signaled by the detector (continuous beep, indicator ON). You will receive a notification from the Be Wave app.
2. Press again the test / reset button to clear the alarm.

5. Maintenance

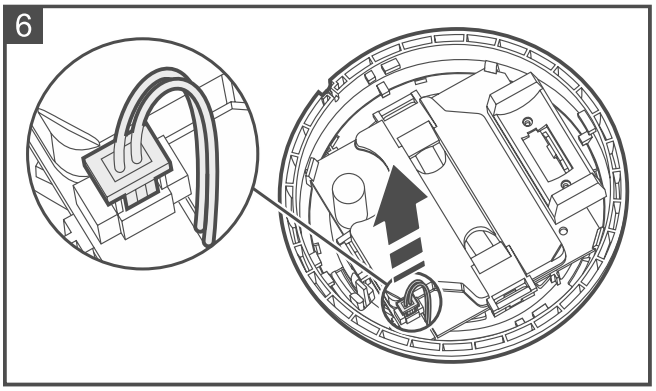
The detector should be subject to regular checks to ensure it is working correctly. The periodic checks should be carried out at least every 6 months. To check whether the detector is working correctly, press the test / reset button (Fig. 1). A fire alarm should be generated.

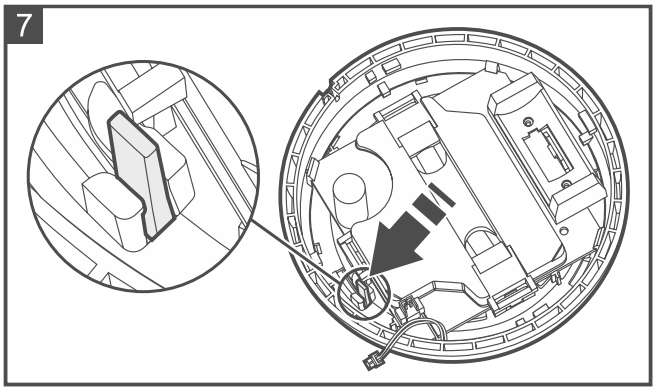
6. Cleaning the smoke chamber

It is recommended to clean the smoke chamber at least once a year.

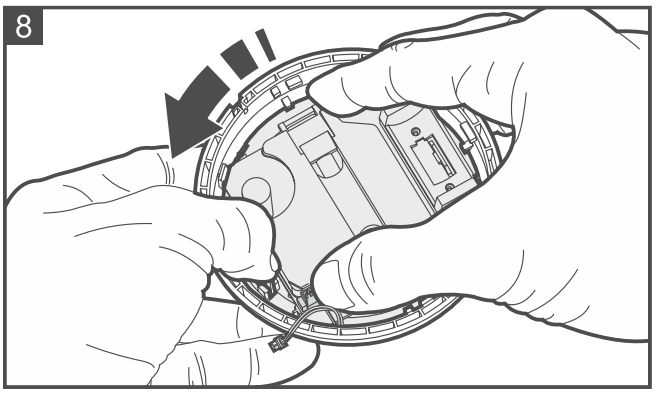
The Be Wave app will notify you when the smoke chamber is dirty and needs to be cleaned.

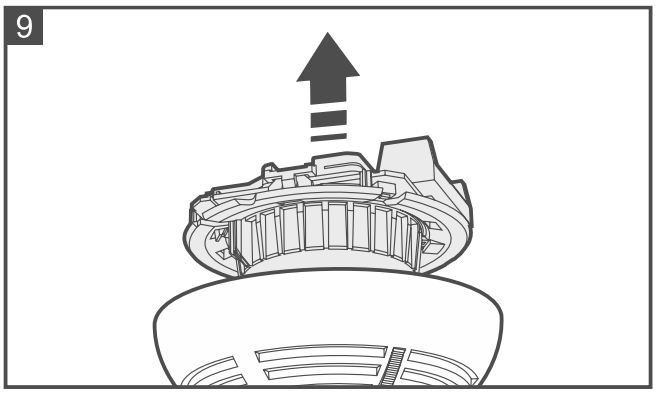
1. Start the diagnostics mode in the system (see the manual for the BE WAVE system controller or the BE WAVE Hybrid system control panel).
2. Remove the cover locking screw and open the detector enclosure.
3. Remove the battery.
4. Disconnect the plug connecting the sounder wires with the electronics board (Fig. 6).
5. Pull the release lever (Fig. 7) to unlock the electronics module and turn it counter-clockwise (Fig. 8).





6. Remove the electronics module with the smoke chamber (Fig. 9).





7. Release the mounting catch (Fig. 10) and remove the smoke chamber cover (Fig. 11).

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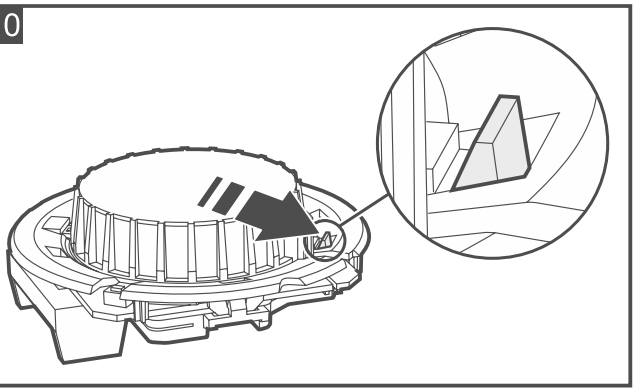

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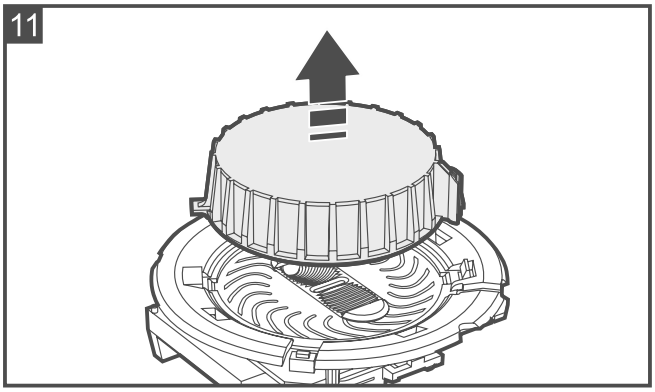

8. Using a soft brush or compressed air, clean the labyrinth in the cover, as well as the base of the smoke chamber. Pay attention to the recesses where LEDs are installed.
9. Replace the smoke chamber cover.
10. Lay the sounder wires in the appropriate grooves.
11. Secure the electronics module with the smoke chamber in the cover and turn it clockwise.
12. Reconnect the plug connecting the sounder wires with the electronics board.
13. Install the battery.
14. Replace the detector cover and lock it with a screw.
15. Press the test / reset button. A fire alarm should be generated soon after. The alarm will be signaled by the detector (continuous beep, LED indicator ON). You will receive a notification from the Be Wave app.
16. Press again the test / reset button to clear the alarm.
17. Close the diagnostics mode.

7. Battery replacement

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

When the detector battery is low:

- the LED indicator and sounder indicate low battery (3 short flashes of the LED indicator and 3 short beeps every 30 seconds),
- 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.

8. Specifications

Operating frequency band ..... 868.0 MHz ÷ 868.6 MHz
Radio communication range (in open area) ..... up to 1200 m
Battery ..... CR123A 3 V
Battery life expectancy ..... up to 2 years
Standby current consumption ..... 90 µA
Low battery voltage threshold ..... 2.75 V
Operating temperature range ..... 0°C...+55°C
Maximum humidity ..... 93±3%
Dimensions ..... ø108 x 54 mm
Weight ..... 170 g

The ASD-250 wireless smoke detector conforms to the essential requirements of the EU Regulations and Directives:

CPR 305/2011 Regulation of the European Parliament and of the Council of 9 March 2011 laying down harmonized conditions for the marketing of construction products and repealing the Council Directive 89/106/EEC on construction products;

RED Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC.

The CNBOP-PIB Certification Body in Józefów issued the Certificate of Constancy of Performance 1438-CPR-0645 for the construction product ASD-250 Wireless Smoke Detector, confirming its compliance with the requirements of EN 14604:2006.

The CNBOP-PIB Certification Body in Józefów has tested the ASD-250 Wireless Smoke Detector confirming its compliance with the EN 14604 Standard, within the scope of Appendix L (approved for the use in caravans and camper vans).

The Certificate and the Declaration of Performance can be downloaded from the **www.satel.pl** website.

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1438-CPR-0645

DOP/CPR/0645

EN 14604

Fire safety. ASD-250 wireless smoke detector, stand-alone, capable of interacting over the air with the intruder alarm system, based on scattered light principle, designed for indoor use.

Declaration of Performance DOP/CPR/0645

Application – fire safety.

Technical specifications – see this manual.