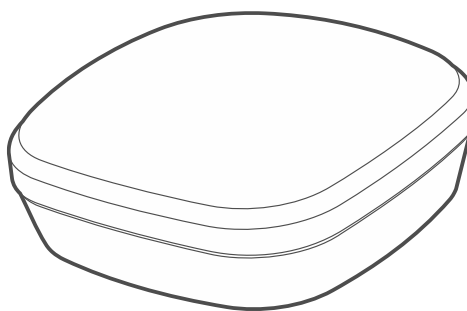be wave

Flood Detector
AFD-200 EN
Firmware version 1.01

CE

Satel®

IMPORTANT

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

Description of symbols on the device:

CE 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 AFD-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.

𝑖 Note – suggestion or additional information.

CONTENTS

The AFD-200 detector (Flood Detector) detects indoor water flooding. The manual applies to the detector installed in the BE WAVE system.

1. Features

- Flooding detection by means of a built-in probe.
- Detection of detector overturn.
- 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 indicators.
- Built-in sounder.
- Powered by CR123A 3 V battery.
- Battery status control.

2. Description

Flooding detection

The detector reports flooding / end of flooding. The information is sent a few seconds after the event occurred.

Detection of detector overturn

When the detector is turned on its side or upside down, the LED indicator and the sounder will indicate trouble after 1 minute. A few seconds after the detector is placed correctly, the trouble signaling will be cleared.
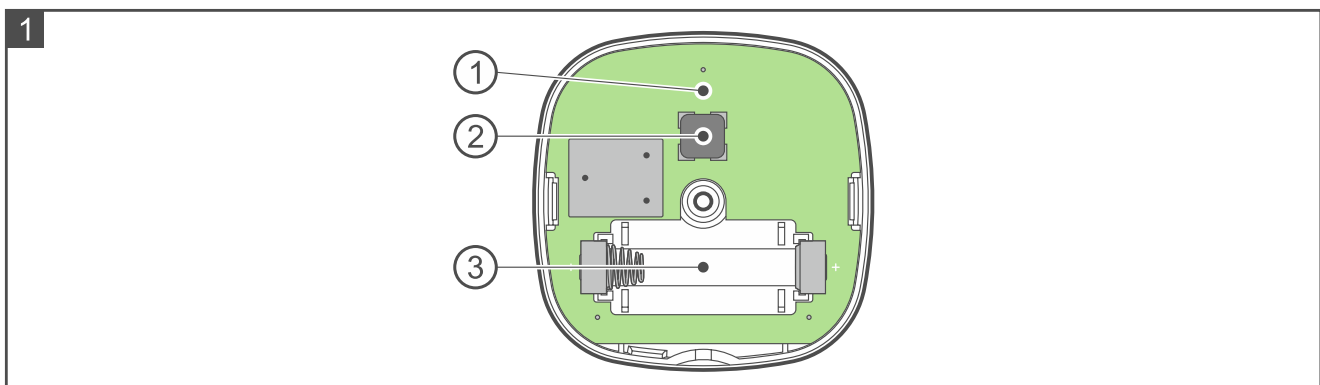
Electronics board

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

① red LED indicator.

② sounder.

③ battery holder (CR123A 3 V).

Signaling

LED indicator and sounder indicate:

- power-up – 1 flash and 1 beep,
- flooding – 1 flash and 1 beep every 5 seconds, when the detector detects flooding,
- overturn – 1 flash and 1 beep every 5 seconds, when the detector is turned over,
- periodical communication – 3 flashes and 3 beeps (only while the diagnostics mode is started in the system – max 5 times).

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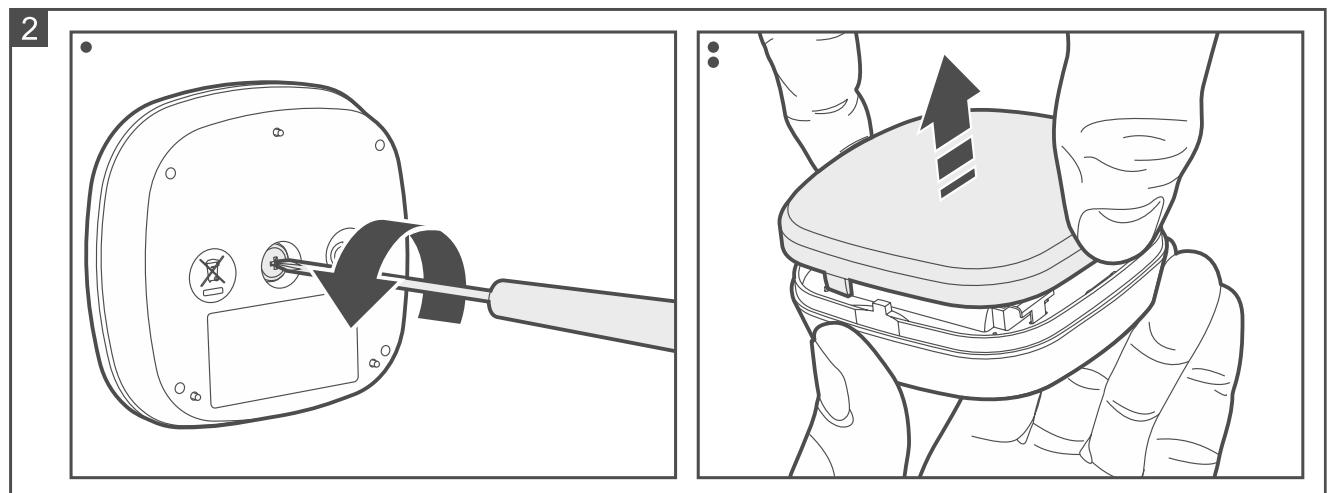
Be particularly careful during installation and replacement of the battery. The manufacturer is not liable for the consequences of incorrect installation of the battery.

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

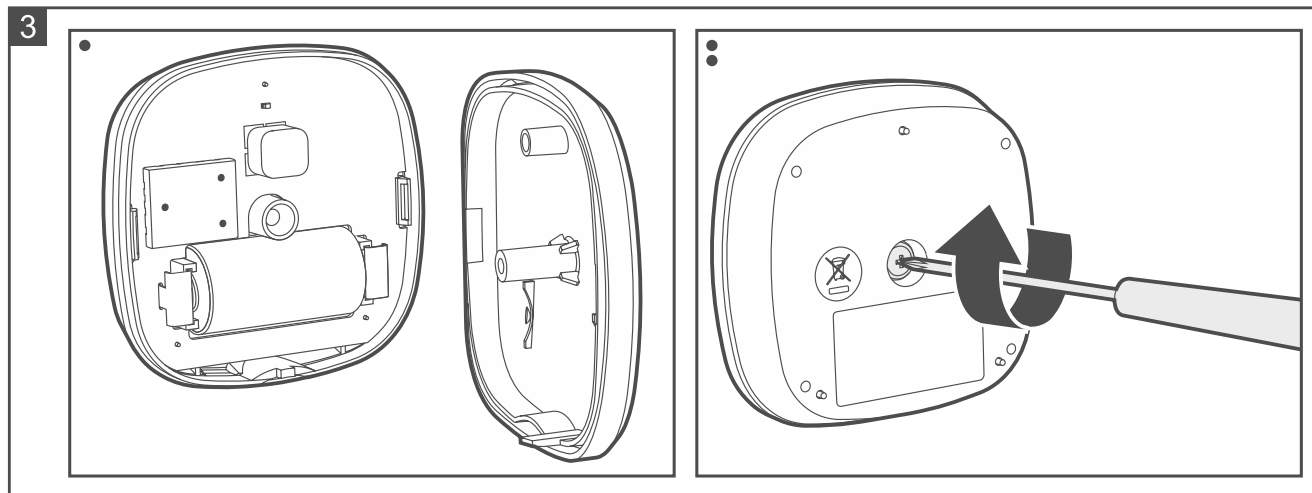## 3.1 Tips for installation

- The detector should be installed indoors, in spaces with normal air humidity.
- Do not use 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.
- Place the detector on the floor in an area prone to flooding.

3.2 Initiating the detector

1. Open the detector enclosure (Fig. 2).
2. 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.
3. Close the detector enclosure (note that the cover only fits in one position) and secure it with a screw (Fig. 3).

4. Place the detector on the floor in the selected area.

4. Test

1. Place the detector in a puddle of water and check if it indicates flooding (1 flash and 1 beep every 5 seconds).
2. Turn the detector on its side or upside down and check if it indicates overturn (1 flash and 1 beep every 5 seconds).

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 5 years

Standby current consumption ....45 µA

Low battery voltage threshold ....2.75 V

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

Temperature measurement accuracy ....±1°C

Environmental class according to EN 50130-5 II

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

Maximum humidity ....93±3%

IP code..X4

Dimensions ....65 x 65 x 24 mm

Weight.. 47 g