

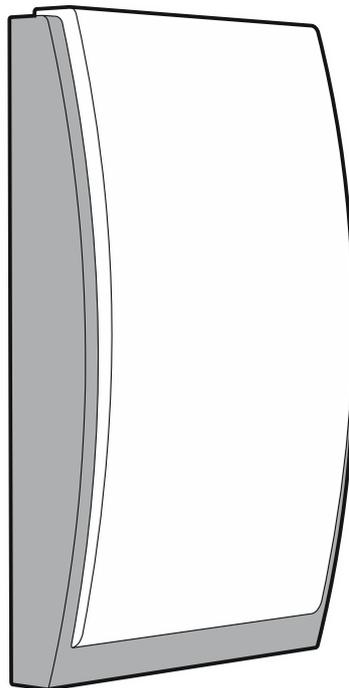
**Satel**®

**abox2**

# ASP-200

**Wireless outdoor siren**

CE



Firmware version 1.00

asp-200\_en 01/19

SATEL sp. z o.o. • ul. Budowlanych 66 • 80-298 Gdańsk • POLAND  
tel. +48 58 320 94 00  
[www.satel.eu](http://www.satel.eu)

## 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.

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:  
<http://www.satel.eu>

**Hereby, SATEL sp. z o.o. declares that the radio equipment type ASP-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.eu/ce](http://www.satel.eu/ce)**

The following symbols may be used in this manual:



- note,



- caution.

The ASP-200 siren provides information about alarm situations by means of optical and acoustic signaling. It is designed for operation within the ABAX 2 / ABAX two-way wireless system. This manual applies to the siren with firmware version 1.00 (or newer), which is supported by:

- ABAX 2: ACU-220 / ACU-280 controller,
- ABAX: ACU-120 / ACU-270 controller (firmware version 5.04 or newer).



*Up to 8 ASP-200 sirens can be registered in the ABAX 2 / ABAX controller.*

*The siren is not supported by the ACU-100 and ACU-250 controllers, ARU-200 and ARU-100 radio signal repeaters and INTEGRA 128-WRL control panel.*

The siren occupies two positions on the list of wireless devices.

## 1 Features

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- Acoustic signaling by means of piezoelectric transducer.
- Optical signaling by means of LEDs.
- Encrypted two-way radio communication in the 868 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 frequency band (ABAX 2 system only).
- Remote update of siren firmware (ABAX 2 system only).
- Remote configuration.
- Power supply from 3.6 V lithium thionyl chloride battery.
- “ECO” option for longer battery life (ABAX 2 system only).
- Battery status control.
- Weatherproofed electronic circuit.
- Tamper protection against enclosure opening and removal from mounting surface.
- Built-in spirit level to facilitate installation.
- High-impact polycarbonate enclosure, featuring a very high mechanical strength.

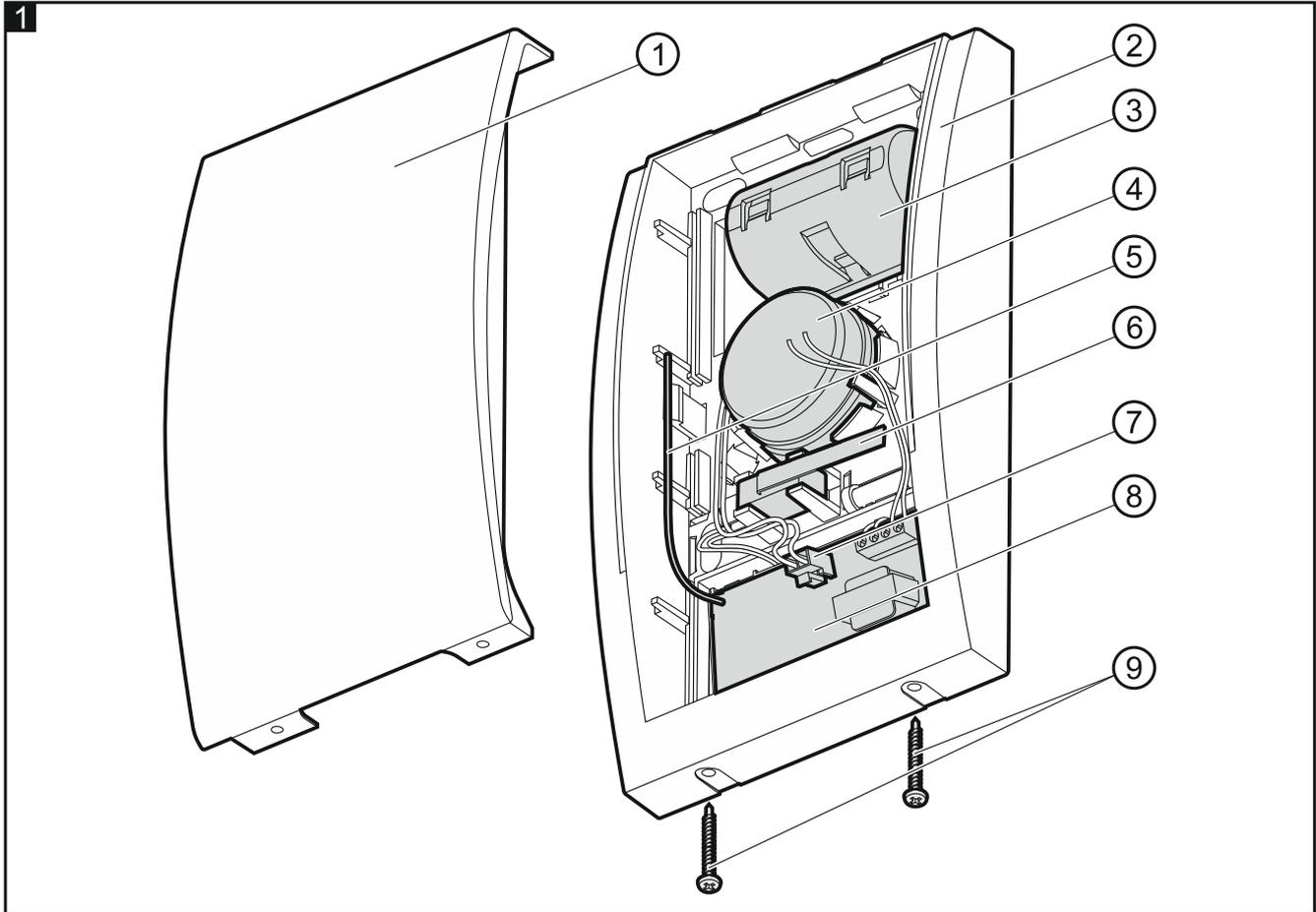
## 2 Specifications

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Operating frequency band .....	868.0 MHz ÷ 868.6 MHz
Radio communication range (in open area)	
ABAX 2	
ACU-220 .....	up to 2000 m
ACU-280 .....	up to 1600 m
ABAX.....	up to 500 m
Battery .....	ER34615 3.6 V / 13 Ah
Battery life expectancy .....	up to 2.5 years
Standby current consumption .....	650 µA
Maximum current consumption .....	480 mA
Sound pressure level (at 1 m distance) .....	up to 105 dB
Complied with standards..	EN 50130-4, EN 50130-5, EN 50131-1, EN 50131-4, EN 50131-5-3
Security grade according to EN 50131-1 .....	Grade 2

Environmental class according to EN50130-5 .....	IV
Operating temperature range .....	-40°C ...+55°C
Maximum humidity .....	93±3%
Dimensions .....	148 x 254 x 64 mm
Weight.....	860 g

### 3 Description



- ① enclosure cover.
- ② enclosure base.
- ③ battery cover.
- ④ piezoelectric transducer.
- ⑤ antenna.
- ⑥ tamper switch.
- ⑦ battery connector.
- ⑧ electronics module.
- ⑨ cover locking screws.

#### Radio communication

The siren connects to the controller at regular time intervals to provide information about its state (periodical communication). Additional communication takes place when:

- the siren informs the controller about tamper (the tamper information is sent immediately),

- the controller sends a command to the siren (starting / stopping the signaling; blocking / unblocking the tamper signaling).

**ABAX 2**

The siren connects to the controller at intervals defined by the “Communication period” parameter or by using the “ECO” option.

**ABAX**

The siren connects to the controller every 15 minutes.

**i** *If any value different from 0 is programmed for the “Filter” parameter for the ASP-200 siren, the lack of presence will be reported if no transmission from the siren is received within one hour.*

**Triggering the signaling**

The signaling is triggered:

- on receiving a radio command from the controller – optical and acoustic signaling are controlled independently.
- on opening the tamper switch – both optical and acoustic signaling is triggered.

The signaling parameters can be configured remotely (see the ABAX 2 / ABAX controller manual).

<b>1</b>	Two sound frequencies (1450 Hz/2000 Hz) alternating within 1 second.	
<b>2</b>	Sound with rising frequency (from 1450 Hz to 2000 Hz) within 1 second.	
<b>3</b>	Sound with smoothly rising and falling frequency (1450 Hz – 2000 Hz – 1450 Hz) within 1 second.	
<b>4</b>	Sound with falling frequency (from 2000 Hz to 1450 Hz) within 1 second.	

Table 1. Tone types for acoustic signaling.

**Blocking the tamper signaling**

Opening the tamper switch will not trigger the alarm in the following cases:

- for 10 minutes after connecting the battery,
- when the ABAX 2 / ABAX system is running in the test mode (the way of starting / ending the test mode is described in the ABAX 2 / ABAX controller manual),
- when the control panel is running in the service mode (the way of starting / ending the service mode is described in the INTEGRA / VERSA control panel manual).

A few seconds delay may occur between starting the test mode / service mode and blocking the tamper signaling.

When the tamper signaling is blocked, the leftmost LED is flashing every 3 seconds.

**Energy saving mode (ECO)**

If you want to prolong the battery life, you can enable in the siren 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. The siren with “ECO” option enabled meets requirements of the EN 50131-1 standard for Grade 2.

## Power supply

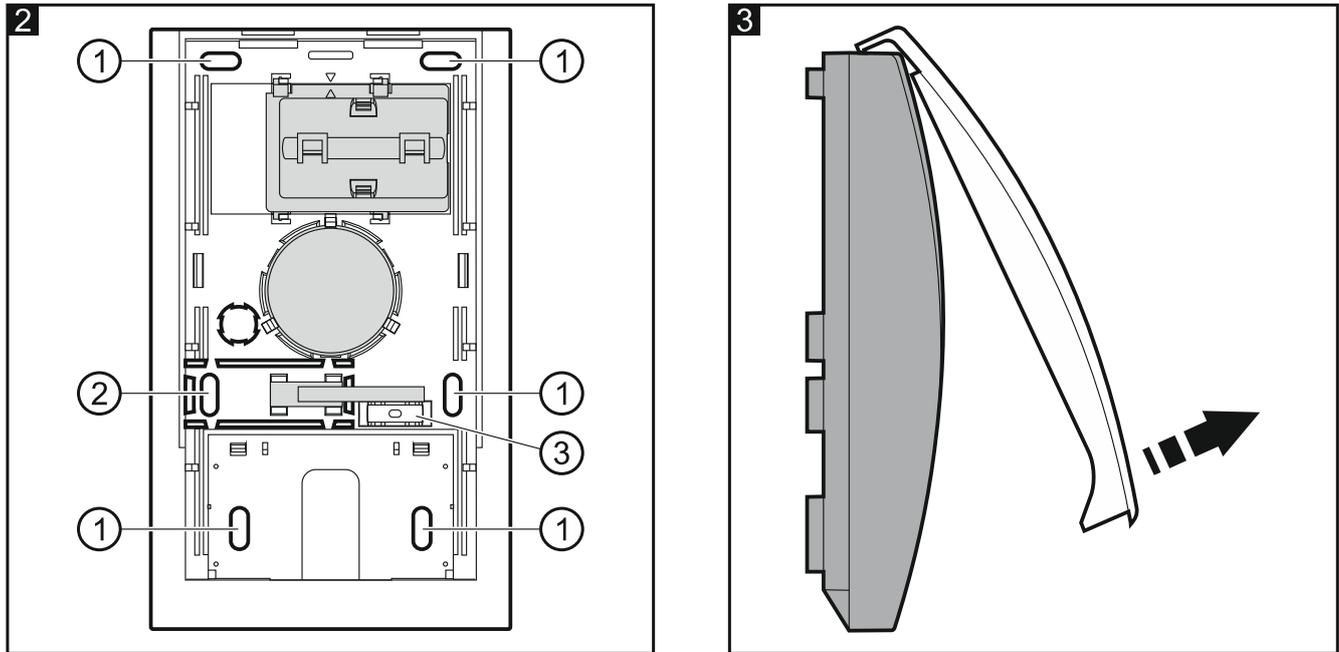
The siren is powered from a 3.6 V lithium thionyl chloride battery. It is a high-current battery, characterized by high capacity. The battery is offered by SATEL.

The siren provides information about battery condition during each transmission.



*If you want to replace the low battery with a fresh one, follow the procedure described in the "Battery replacement" section (p. 5).*

## Enclosure base



Explanations for Fig. 2:

- ① mounting hole.
- ② mounting hole for tamper protection.
- ③ spirit level.

## 4 Installation and start-up



**Never shorten or deform the antenna.**

**There is a danger of battery explosion when using a different battery than recommended by the manufacturer, or handling the battery improperly.**

**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 siren must be installed on the wall, high above the floor, at a hard to access location, so as to minimize the risk of tampering. Make sure that some free space is left above the siren (at least 2.5 cm). Otherwise, it will be impossible to replace the cover.

1. Remove the cover locking screws.
2. Lift up the enclosure cover by approx. 60° and remove it (Fig. 3).
3. Connect the battery. The leftmost LED will start flashing every second to indicate that the battery initialization procedure has begun. Given the specific character of the battery, it must be properly initialized to reach the required power supply parameters. When the

battery is being initialized, you can add the siren to the wireless system but the siren will not be ready for normal work until the LED stops flashing.

4. Add the siren to the wireless system (see the ABAX 2 / ABAX controller manual). The sticker with serial number which shall be entered when registering the siren in the system can be found on the electronics module.



*In the INTEGRA / VERSA alarm system, the siren is identified as ASP-100.*

*Simultaneous operation of the siren by the ABAX 2 and ABAX controller is not possible.*

5. Replace the siren cover.
6. Place the siren in the location intended for its installation.
7. Check the level of signal received from the siren by the ABAX 2 / ABAX controller. 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 to obtain a considerable improvement in the signal quality.



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

8. Remove the siren cover.
9. Disconnect the battery.
10. Move aside the catches holding the electronics module and remove it.
11. Place the enclosure base on the wall and mark the location of mounting holes (Fig. 2). Remember to take into account the mounting hole for tamper protection.
12. Drill the holes for wall plugs (anchors).
13. Use wall plugs (anchors) and screws to secure the enclosure base to the mounting surface. Remember about the mounting hole for tamper protection. 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.
14. Secure the electronics module in the enclosure base.
15. Connect the battery.
16. Replace the siren cover and fasten it with screws.
17. Configure the siren settings (e.g. the signaling parameters – see the ABAX 2 / ABAX controller manual).

## 5 Battery replacement

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**The new battery must be connected as described below to run the battery initialization procedure. The required power supply parameters are only possible with the properly initialized battery.**

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

1. Start the service mode in the control panel (if the ABAX 2 / ABAX controller is connected to a SATEL alarm control panel) or the test mode in the ABAX 2 / ABAX system.
2. After the leftmost LED on the siren starts flashing every 3 seconds, you can open the siren enclosure.
3. Disconnect the battery.

4. Remove the battery cover (grasp the upper part of the cover with your fingers and pull it down).
5. Remove the old battery and place the new one in the battery cover.
6. Install the battery cover in the siren enclosure.
7. Press and hold down the tamper switch.
8. Connect the new battery.
9. When the leftmost LED on the siren starts flashing every second, release the tamper switch. The flashing LED indicates that the battery is being initialized. The siren will not be ready for normal work, until the LED stops flashing.