

JA-113A RB – Bus external siren

The product is a bus component of the **JABLOTRON** system. It is intended for acoustic and optical alarm signalling and additional acoustic indication outside the guarded object. It can also serve as a pre-sensing sabotage detector. The siren can include a backup battery in case the perpetrator cuts the bus cable. The product occupies one position in the system and is designed for installation by a trained technician with a valid certificate Jablotron. **This product is compatible with JA-100K, JA-101K, JA-102K, JA-103K, JA-106K and JA-107K control panels.**

The **JA-113A RB** siren is built by assembling two parts, the base **JA-113A-BASE-RB** and one of the optional covers **JA-1xxA-C-xx-x**. These are available in several combinations of colours for the cover itself and the strobe. The base part must not be used alone; it must always be combined with one of the covers

The combination of colours and materials cover is shown in the table:

cover type	colour and cover material	strobe colour
JA-1X2A-C-WH	white plastic	transparent
JA-1X2A-C-GR	grey plastic	
JA-1X2A-C-AN	anthracite plastic	
JA-1x1A-C-ST	stainless steel sheet	red
JA-1X1A-C-ST-B	stainless steel sheet	blue

Note: The siren is also compatible with older JA-1x1A-C-xx-x covers.

Installation

The siren is mounted on a vertical wall, with the strobe facing downwards. Avoid mounting near gutters and where there is a risk of ice formation.

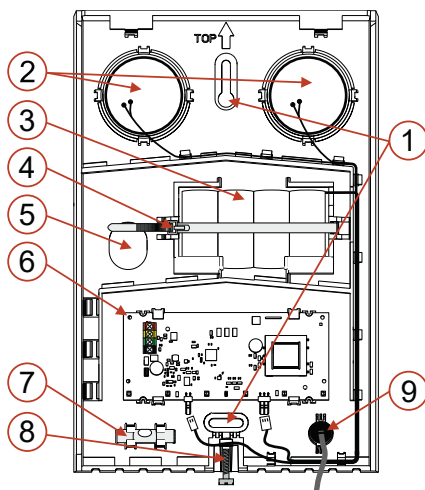


Figure 1: Description of internal parts of the product

1 – mounting hole; 2 – piezo sirens; 3 – backup battery; 4 – reusable battery strap; 5 – hole for cable; 6 – printed circuit board; 7 – spirit level; 8 – locking screw; 9 – string with clip connecting the front cover (can be disconnected by pressing the latch)

1. Thread the bus cable through the hole (5). Crimp the cable into the prepared clips.
2. Screw the siren to the selected location with the two screws in the holes (1). The integrated spirit level (7) can be used to precisely fix the siren in a vertical position.

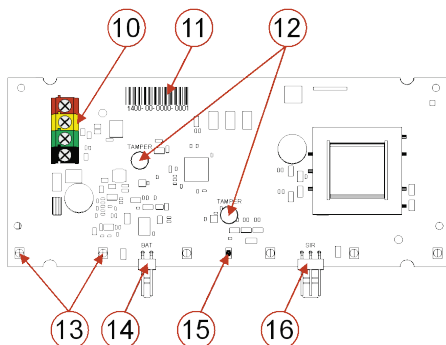


Figure 2: Description of printed circuit board

10 – bus terminal block; 11 – serial number; 12 – tamper sensors; 13 – LED indicators; 14 – backup battery connector; 15 – yellow LED fault indicator; 16 – piezo siren connector (please note: high voltage)

Always connect the bus when the system power is completely off.



Exercise caution when handling the siren, as its acoustic output may damage your hearing.

3. Plug the bus cable into the terminal block (10).
4. Connect the backup battery to the connector (14) if used.
Note: To comply with EN 50131-1, the connection of a backup battery is required
5. When the system is switched on, the yellow LED (15) flashes to indicate that the siren is not enrolled to the system.
6. **Please also refer to the installation manual of the control panel.** Basic procedure:
 - a. In **F-Link**, select in the **Devices** tab unused position and press the **Enrol** button to turn on **Enrolment mode**.
 - b. Select the siren from the list using the **"Scan/add new bus devices" option** and confirm the selection by double-clicking. The yellow LED goes off.
7. Check the connection of the electroacoustic transducers (2) to the electronics board connector (16) - plug it in if necessary.
8. Attach the cover wire with clip (9) to the bottom of the siren and then fit the selected siren cover and secure with the screw (8).

Notes:

- The magnetic tamper sensor of the front cover is automatically calibrated after calming down. After installing the cover, it must be closed completely and secured with a screw. If you leave the cover only partially closed for a long time, the siren may calibrate the sensor and subsequent complete closure may cause tampering
- The siren can also be enrolled into the control panel by entering the serial number with the **F-Link** program. The serial number is on a bar code label (11) located near the bus terminal. All digits are entered (serial number pattern: 1400-00-0000-0001).
- To remove a siren from the system, delete it from the appropriate position in the control panel.
- The rear tamper sensor is calibrated two minutes after connection
- When installing without a backup battery, we recommend always performing a function test (using the **Test** button in **F-link**) after setting the siren parameters. If a power supply error is detected, use an installation with a backup battery. Similarly, when installing on a line with a greater power supply voltage drop (longer lines, more peripherals), we recommend using a backup battery.

Setting properties

It is performed by the program **F-Link** – tab **Periphery**. Use the option on the siren position **Internal settings**. A dialog will appear in which the following settings can be made: (* indicates factory settings)

Settings tab:

Installation without backup battery: YES / NO*

Acoustic indication of an intrusion alarm from sections: determines for which sections the siren will indicate an alarm via the siren. It is factory set to sound for all sections.

Reaction: determines whether the siren will sound on the signal **IW** (internal warning) or **EW*** (external warning). The alarm horn can also be turned off completely (all other functions are retained).

Siren sound: intermittent*, continuous

Maximum siren time: during the alarm period, 1, 2, 3*, 4, 5 minutes and Off - off means respecting the acoustic signalling according to the alarm duration set in the control panel parameters.

Different fire alarm indication: YES / NO* - determines whether the acoustic interpretation of the fire alarm and the standard alarm will be differentiated. The interpretation of the fire acoustic alarm is identical to smoke detectors with an internal siren, i.e. fast beeping.

Other acoustic indication from sections: determines for which sections the siren will indicate the other acoustic types. The factory setting is to indicate for all sections.

Higher volume: YES / NO* - this parameter only affects on other acoustic indication and sounding of PG outputs. It does not affect on the volume of the alarm indication.

With sections fully set and unset: YES / NO* - if enabled, the siren will beep once when set, twice when unset and 3 times after an alarm.

With partial set of sections: YES / NO* - if enabled, the siren will beep once when set, twice when unset and 3 times when unset after an alarm.

During warning: YES / NO* - if enabled, the siren responds with a triple beep on a setting failure, on a failed setting and on an setting with alarm memory.

Entry delay: YES / NO* - if enabled, the siren indicates an entry delay of the length set in the system parameters.

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Exit delay when partially set: YES / NO* - if enabled, the siren indicates the exit delay with the length set in the system parameters when partially set. This option is available only when the entrance delay of fully set sections is enabled.

Exit delay when fully set: YES / NO* - if enabled, the siren indicates the exit delay with the length set in the system parameters when fully set.

Optical signalling:

Flashes every: 10, 20, ..., 60*, ..., 120 seconds and Off. The parameter sets the optical indication in the time interval 10-120 s, adjustable every 10 s. It can serve as a warning that there is a functional alarm system in the building.

During warning: YES / NO* - if enabled, the siren reacts with three flashes to:

- 1) An inability to set the system (there is a condition in the system preventing the setting, e.g. fault or an active detector).
- 2) An unsuccessful setting (during an exit delay an event occurs that causes the exit to fail, e.g. detector activation).
- 3) An unsettling with an active alarm memory (there was an alarm in the system).

When controlled by a section: YES / NO* - if enabled, the siren indicates visually when setting and unsettling sections. When setting - 1 flash, when unsettling - 2 flashes and when unsettling after an alarm - 3 flashes.

LED indication: red* / blue, Sirens are equipped with dual-colour LEDs. Depending on the colour of the strobe on the purchased siren top cover, it is necessary to select the same colour LED.

After alarm: during alarm, 1 min after alarm, 2 min after alarm, 3 min after alarm, 5 min after alarm, *30 min after alarm, 1 hour after alarm. In general, the length of alarm indication on all sirens in the system is determined by the setting in the control panel parameters - alarm length. However, there may be cases when it is necessary to indicate visually even after the alarm has ended, e.g. to orient the ARC emergency vehicle more quickly.

Signalling PG tab:

LED indicates sounding PG output: if enabled, the LED on the siren indicates together with the acoustic speech by a continuous light for the duration of sounding of any PG that is activated.

Each PG output can be set to sound:

Slow beep - beeps 1x per second (for the entire time the PG is on)

Fast beep - beeps 2x per second (for the entire time the PG is on)

1x On/2x Off - beeps 1x when PG is switched on, 2x when PG is switched off

20 sec of beeping - long beep for 20 sec when PG is switched on

Siren function priorities:

The highest priority is the siren sound, the lower priority is the control beep, the lowest priority is the PG output activity indication (PG1 higher than PG2 etc). The higher priority sound will always terminate the lower priority sound.

Loss of connection to the control panel:

The siren can signal loss of connection to the control panel when used with a backup battery. If the bus cable is cut or communication is lost with the control panel, the siren will sound and flash for 3 minutes (this will not occur if the system is in service mode). If the bus voltage is lost by shutting down the system (long term power failure and dead back-up battery) the siren will not beep or flash.

Back-up battery replacement

The system automatically reports when the back-up battery is close to running out of power (main bus power supply not working) or the battery no longer passes the operational battery load test (continuous testing with main power supply working). Before replacing the battery in the siren, the system must be switched to Service mode (otherwise a tamper alarm will be triggered). Use only **BAT-4V8** or **BAT-4V8-LH1800** battery pack.

Technical parameters

Power	from the control panel bus 12 V (8–15 V)
Back-up battery	NiMH, type BAT-4V8-LH1800 / 4.8 V / 1800 mA (NiCd type BAT-4V8 / 4.8 V / 1800 mA can be connected also) Note: Back-up battery is not included, optional fitting
Typical back-up battery lifetime	approx. 5 years
Low back-up battery voltage	<4.6 V
Quiescent current consumption from the bus	2.5 mA
Maximum current consumption from the bus	450 mA
Quiescent current consumption from the back-up battery	3.6 mA
Maximal current consumption from the back-up battery	800 mA
Type of warning device	type Z
Acoustic siren performance	100 dB/m (new back-up battery)
Dimensions with cover type JA-1X1A-C-XX-X	200 x 300 x 72 mm
Dimensions with cover type JA-1X2A-C-XX	200 x 300 x 62 mm
Weight (without back-up battery)	413 g
Classification	security grade 2 / environmental class IV (according to EN 50131-1)
Environment	outdoor general
Operating temperature range	-25 °C to +60 °C
Certification body	Trezor Test s.r.o. (no. 3025), Kiwa Nederland b. v.
Average operating humidity	75 % RH, non-condensation
Complies with	EN 50130-4, EN 55032, EN IEC 62368-1, EN IEC 63000, EN 50131-1, -4, T 031
Recommended screw	2x  ø 4.5 x 50 mm (countersunk head)



JABLOTRON a.s. hereby declares that the JA-113A RB is in a compliance with the relevant Union harmonisation legislation: Directives No.: 2014/35/EU, 2014/30/EU, 2011/65/EU, if it is used as intended. The original of the conformity assessment can be found at www.jablotron.com Section Downloads.

Note: Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please return the product to the dealer or contact your local authority for further details of your nearest designated collection point.