The JA-152A Wireless internal siren to an AC socket

The JA-152A is a wireless device of the JABLOTRON 100+ system. It is used for alarm indication inside a building with an option to distinguish the alarm type according to the type of signalling. It can also be used for other acoustic indication (PG outputs, entry/exit delays, doorbell). Pressing the siren can silence an alarm (= confirmation of a person's presence in the building) or trigger a panic alarm (optional function). The siren is equipped with a backup battery for cases of AC dropouts. It has also got a built-in tamper sensor for the detection of disconnection from an electrical socket. The siren takes one position in the system and it should be installed by a trained technician with a valid certificate issued by an authorized distributor.



Figure 1: 1 – transparent control button

Installation and enrollment to the system

When enrolling the siren to the system, the system has to be in service mode and equipped with a JA-11xR radio module. The battery is already connected as default.

- Plug the siren into the required electrical socket within RF range of the control panel. The control button (1) lights with a yellow colour indicating that the siren is ready to be enrolled.
- Proceed by following the control panel installation manual. Basic instructions:
 - a. Open the *F-Link* software, select the required position in the *Devices* tab and click on the *Enroll* button to enter the *Enrollment mode*.
 - b. Press the control button (1). The yellow LED goes off and the siren is enrolled to the required position.
 - c. Set the siren properties (see the Internal settings chapter).

Warning:

In case of unplugging the siren from the electricity, the siren is powered by the backup battery and is able to work for at least 24 hrs. When the backup battery voltage reaches critical level, the battery is disconnected to protect it against damage; the siren is out of service from this moment.

Internal settings of the siren

Go to the **Devices** tab in the **F-Link** software. When you are at the siren position, use the **Internal settings** option to open a dialog window where you can set: (* indicates default settings).

The setting tab:

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Tamper detection: with its built-in accelerometer the siren detects its removal from the electrical socket. Options DISABLED, ALWAYS*, DURING ALARM.

Acoustic indication from sections: determines for which sections the siren should indicate an alarm. The default is indication for all sections.

Reaction: defines whether the siren should indicate an IW^* (internal warning) or an EW (external warning) signal. Alarm indication with this siren can also be completely disabled (other functions remain active).

Siren sound: intermittent*, continuous.

Maximum siren time: 1, 2, 3*, 4, 5 minutes and **OFF** – if the OFF option is selected the acoustic indication corresponds to the *Alarm length* parameter in the *Parameters* tab in the *F-Link* software

Different fire alarm indication: YES/NO* – determines whether the siren will differentiate between acoustic indications of fire and standard alarms. The acoustic indication of a fire alarm is identical to smoke detectors with an internal siren – fast beeping.

Other acoustic indication from sections: determines for which sections the siren will indicate other types of alarm. The default is indication for all sections.

When controlled by a section: YES/NO* – if enabled, the siren beeps 1x after setting, 2x after unsetting and 3x when unsetting after an alarm. Valid only for the selected sections.

During warning: YES/NO* – if enabled, the siren reacts with three beeps to the inability to set the system, unsuccessful setting and unsetting with an active alarm memory.

Entry delay: YES/NO * – if enabled, the siren indicates the entrance delays of the selected sections.

Exit delay when partially set: YES/NO* – if enabled, the siren indicates the exit delays of the selected sections when the system is partially set. This option is available only when the exit delay of fully set sections is enabled.

Exit delay when fully set: YES/NO* – if enabled, the siren indicates the exit delays of the fully set selected sections.

Level of volume of supplementary acoustic indication: Standard*, Increased, By button, Programmable – Applies only to other acoustic indication and the acoustic indication of PG outputs. It has no influence on the volume of alarm indication. If the "By button" option is selected, the volume can be changed by a user by pressing the button for 3 seconds (when the system is out of service mode) – the change of volume is confirmed by a beep and in the volume of the new selected volume. The "Programmable" option displays a time slider which sets a period of time to switch between the standard and increased loudness during the day.

The Signalling PG tab:

LED *indicates sounding* **PG** *output:* If enabled, an acoustic indication triggered by an active PG output is continuously indicated by LED.

Sound indication can be set for each PG output:

Slow beeping – beeps 1x per second (as long as the PG output is active)

 $\ensuremath{\textbf{Quick beeping}}$ – beeps 2x per second (as long as the PG output is active)

1x ON / 2x OFF – beeps 1x when the PG output is activated, beeps 2x when the PG output is deactivated

20 s of beeping – beeps continuously for 20 s when a PG output is activated.

Melodies 1 to 4 - four available doorbell melodies.

Test – by pressing the Test button you can test the siren function. The siren responds with 3 s alarm sound.

System reaction to pressing the siren button

The default setting is that pressing the siren button during an alarm mutes the siren and at the same time confirms a person's presence in the building (a report is sent). In the *Devices* tab in the *F-Link* software *Reaction* option, you can change the siren button reaction to another function, for example a panic alarm. In such a case the system responds to the pressing with a panic alarm in the section to which the siren has been assigned.

Setting to comply with security grade 2

If this setting is required, use the *F-Link* software, *Parameters* tab, *System profiles* option. There you can choose the required security profile (EN 50131-1, gr. 2). The siren will be configured accordingly.

Siren signalling priorities

The highest priority is given to a fire alarm indication, followed by IW and EW alarm indication. Control indication has a lower priority and PG output activation indication has the lowest priority. Indication with a higher priority always terminates an indication with a lower priority.

The list of acoustic indication priorities in descending order: Fire alarm, IW and EW alarm, warning indication, unsetting the system with an active alarm memory, setting/unsetting, entrance, exit, alarm memory, PG output indication (PG1 has a higher priority than PG2 etc.) and lastly LED flashing when the status of tamper sensor changes.

Backup battery replacement

The siren checks the backup battery status automatically. The current status can be checked in the *Diagnostics* tab in the *F-Link* software, where the current battery status is displayed and also its voltage when loaded and unloaded. When a backup battery fault is triggered it is necessary to replace it as fast as possible to avoid a complete malfunction of the siren in the case of an AC dropout.

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Figure 2: 2 – backup battery, 3 – battery connector, 4 – rear tamper sensor, 5 – front cover screws



Battery replacement can be only done by a person with an adequate electrotechnical qualification when the system is in service mode and when the siren is removed from its electrical socket.

Before changing the battery, the system must be in service mode (see the control panel manual), then it is possible to open the siren cover. Use only 3.2 V, 400 mAh (BAT-3V2-CR2) battery.

- Unplug the siren from the AC socket, unscrew the locking screws 1. on the rear side of the siren (5) and open the cover.
- 2. Now it is possible to remove the old battery. Connect the new battery via the connector (3) to the PCB.
- Do not dispose of the used battery into the trash, but take it to a waste collection point.

3. Close the cover and tighten the locking screws (5).

Notes:

- If the battery is discharged (reporting low battery to the control panel) but the siren is powered by the mains power grid, it is still fully functional. Only in the case of a power outage will the siren be unable to operate.
- It is guaranteed to recharge the battery to 80 % of its capacity in 12 hrs.

Technica	l specifica	tions

Power 230	V AC, 50-60 Hz; protection class II	
Supply voltage range	<i>i i i i</i>	
Nominal current	4 mA	
Maximum current	13 mA	
Backup battery / lifetime 3.2 V,	400 mAh (BAT-3V2-CR2) / 3 years	
/ minimum voltage when loaded 3.0 V		
/ maximum voltage when unloaded		
/ low battery voltage		
/ maximum current	308 mA	
Power supply	type A	
Communication band	868.1 MHz, JABLOTRON protocol	
Maximum radio-frequency power (ERP) 7 mW		
RF range approx. 300 m (open are		
Backup power supply	type Y / 24h backup	
Sounds (melodies)	8 optional for PG output indication	
Alarm acoustic level	100 dB / 1 m	
Dimensions (without the electric plug)		
Weight	150 g	
Classification	Grade 2 / Environmental Class II	
.	(According to EN 50131-1)	
Operational environment	indoor general	
Operational temperature range	-10 °C to +40 °C	
Average operational humidity	75 % RH, non-condensing	
Certification body	Trezor Test s.r.o. (no. 3025)	
Degree of protection	IP40 according to EN 60529	
Mechanical impact protection	IK08 according to EN 50102	
Complies with	EN 50131-1, EN 50131-4,	
EN 50131-5-3, EN 50131-6, ETSI EN 300 220-1,-2,		
EN 50130-4, EN 55032, EN 62368-1, EN 50581 Can be operated according to ERC/REC 70-03		
Can be operated according to	ERU/REU / 0-03	



JABLOTRON ALARMS a.s. hereby declares that the JA-152A is in compliance with the relevant European Union harmonisation legislation: Directives No: 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU, when used as intended. The original of the conformity assessment can be found at www.jablotron.com - the Downloads section.

Note: Although this product does not contain any harmful materials we suggest you return the product to the dealer or directly to the producer after use.