JA-151M Wireless magnetic door detector - Mini

*The JA-151M is a component of the **JABLOTRON 100+** system. It is used to detect the opening of doors, windows etc. The miniature battery powered detector has an optional reaction (pulse or status). The detector should be installed by a trained technician with a valid certificate issued by an authorized distributor.*

Installation

Choose a suitable place for the detector's installation. The detector reacts to the removal of its permanent magnet. The magnet can be installed on the left or on the right side of detector. The electronics should be installed onto the non-moving part of windows or doors and the magnet onto the moving part. Avoid direct detector and magnet installation on a metal frame as metal influences the functioning of the magnetic sensor and radio communication.

If it is necessary to install the detector on metal, use the supplied separation plates (1), which can improve both, magnetic sensor functioning and also radio communication range.

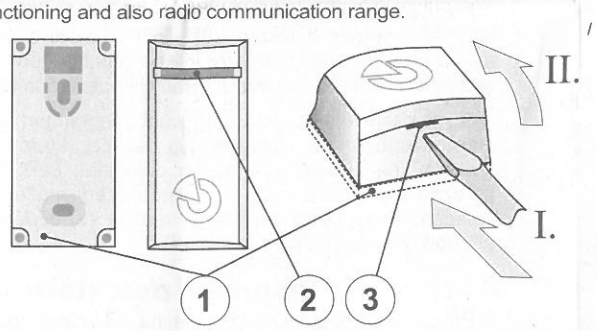

Figure 1: 1 – separation plate; 2 – red activation indicator; 3 – cover tab

1. **Open the detector cover** by pushing the tab (3).
2. Screw the rear cover to the solid part of the door (window).
3. Attach the permanent magnet to the moving part of the door (window) with screws. The distance between the electronic part and the magnet should be as small as possible. The distances between the magnet and the sensor which activate the detector are shown in the following figure.

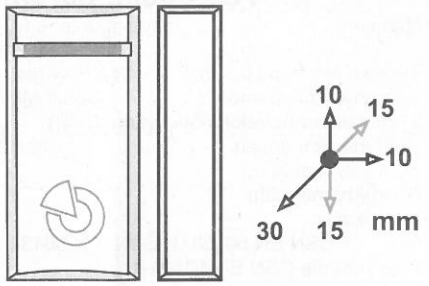

Figure 2

4. Enroll the detector to a control panel (receiver). There must be a JA-11xR radio module present in the system for the detector to be enrolled. Go to the F-Link program, select the required position in the **Devices** window and launch enrollment mode by clicking on the Enroll option. The enrollment signal is transmitted as soon as the battery is inserted into the detector.
5. When the detector has been enrolled, insert it into the base.
6. Use the ***F-Link*** program to set the detector's functions.
7. Test the detector's correct functioning.

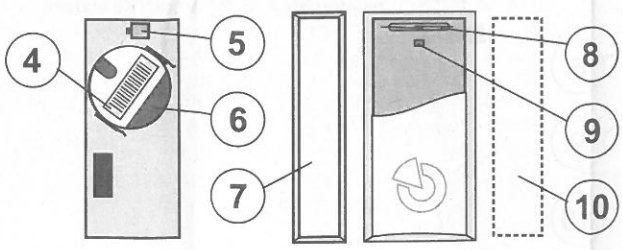

Figure 3: 4 – production code; 5 – tamper contact; 6 – battery; 7 – permanent magnet; 8 – magnetic sensor; 9 – red detector activation indicator; 10 – alternative location of the permanent magnet

Note:

If you want to enroll a detector which has already been connected to a battery, first disconnect the battery, then press and release the tamper contact in the cover (5) in order to release the remaining charge and then you can proceed with the enrollment.

The detector can also be enrolled into the system by entering its production code (4) in the F-Link program or on a keypad (or using a bar code scanner). All numbers stated under the bar code shall be entered (1400-00-0000-0001).

Setting the detector properties

The detector has two function modes which are indicated with either one or two flashes of the LED indicator when the battery is inserted.

- One flash means the detector will report both opening and closing of the door (window) - status reaction.
- Two flashes indicate a pulse reaction, i.e. the detector will report activation (door or window opening) only.

The function modes can be set by holding the tamper contact in the detector cover, inserting the battery and releasing the tamper contact after 3 - 5 seconds. The detector then flashes either once or twice to indicate the currently selected mode.

Other functions can be set in the ***Devices*** window in the ***F-Link*** program. Here you can set the type of reaction of the system to the activation of the enrolled detector, section to which the detector should be enrolled and also a PG output which can be controlled by the detector. The default setting is a ***Basic*** reaction (Delayed A = provides entrance and exit delay).

Detector testing

When you close the detector cover, a detector testing mode is triggered for 15 minutes and each activation is indicated by the LED indicator on the detector cover. The detector signal and its activation can be monitored in the control panel service mode in the *Diagnostics* window in the ***F-Link*** program.

Battery replacement

The detector monitors its battery voltage and if it is low, a report is sent to the control panel to inform the user. The detector continues to function. Battery replacement should be done by a qualified technician with the control panel in Service mode within 14 days of the report. Test the correct function of the detector after each battery replacement.

Technical specifications

Voltage	Lithium battery type CR2032 (3.0 V/0.2 Ah)
	Please note: Battery is not included
Typical battery lifetime	cca 2 years (max. 20 activation daily)
Communication band	868.1 MHz, protocol JABLOTRON
Maximum radio-frequency power (ERP)	3 mW
Communication range:	approx. 200 m (open area)
Dimensions: transmitter part	55 x 26 x 16 mm
magnet part	55 x 16 x 16 mm
Operational environment according to EN 50131-1:	II. Indoor general
Operational temperature range:	-10 °C to +40 °C
Classification:	grade 2
according to:	EN 50131-1, EN 50131-2-6, EN 50131-5-3
Complies with:	ETSI EN 300 220-1, EN 50130-4, EN 55022, EN 60950-1
Can be operated according to:	ERC REC 70-03

JABLOTRON ALARMS a.s. hereby declares that the JA-151M is in a compliance with the relevant Union harmonisation legislation: Directives No: 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU. The original of the conformity assessment can be found at www.jablotron.com - Section Downloads.

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.

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