

# JA-60N Wireless Magnetic Door Detector

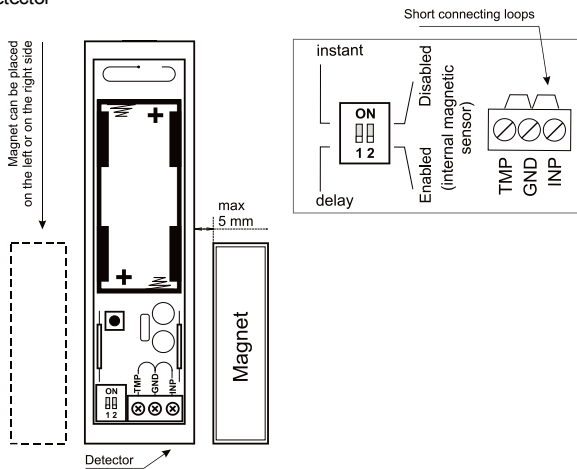
JA-60N magnetic door detector is equipped with a magnet. A movement of the magnet triggers the internal sensor in the detector. It can trigger an Instant or Delayed intruder alarm and it also has built in tamper sensors. There are inputs for external sensors available.

The JA-60N uses a sophisticated radio communication protocol with a high level of data safety. The detector makes regular auto testing and reports its conditions regularly to the system for full supervision. An automatic testing mode makes testing an ease.

## Installation

To detect the opening or closing of a door or window the detector is equipped with a magnet. Movement of the magnet triggers the internal sensor in the detector.

- Open the detector cover by impress the bolt at the lower part of the detector.
- Electronics and batteries is located into the cover.
- Attach the bottom part to the wall or the frame of the door or window using screws.
- Be sure that the antenna is vertical (pointing up or down).
- Attach the magnet with screws to the moving part of the door or window, and put on its cover. The gap between the detector and magnet should not be wider than 5mm when the door is closed.
- It makes no different if the magnet is installed at right or left side of the detector



- Warning: neither the detector nor the magnet should be fixed directly to a metal surface. If there is no other choice, an insulating pad (plastic, wood etc.) 5mm thick or more should be used under the detector and the magnet.
- Use DIP switch no. 1 to select if the reaction of the system to the door opening should be instant (position ON) or delayed (position 1).
- If you do not use input terminals (TMP & INP) they must be connected to the GND terminal with short connecting loops and DIP switch no. 2 must stay in the position 2.
- Leave the JA-60N detector uncovered and without batteries installed.

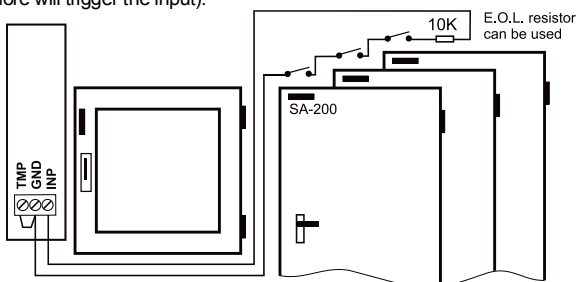
## Use of external sensors with JA-60N

The JA-60N detector can be used to connect external detectors which have contacts on their outputs. For example it can be used to protect multiple doors or windows. The built in magnetic sensor of the JA-60N can also be disabled (DIP switch number 2 to position ON) and then the JA-60N works only as an interface for external sensors. Two input loops (TMP & INP terminals) are activated when disconnected from the GND terminal.

**INP** – when this input is triggered (disconnected from GND), the JA-60N will send the same information as if the built in magnetic sensor is triggered. Reaction of the system can be selected with DIP switch number 1 (ON= instant or 1= delayed).

**TMP** – when this input is triggered (disconnected from GND), the unit will send the same information as if the built in tamper sensor is triggered.

**Balanced loops** – the inputs INP & TMP can also be used as balanced loop inputs for higher security. If you install an End Of Line resistor 10k in the end of the loop (INP or TMP), the JA-60N automatically recognizes this situation and from this moment it will react to a change of the resistivity (changes  $\pm 30\%$  or more will trigger the input).



## Enrollment of the detector to the system

Study the installation manual of the receiver unit (control panel) to learn how to enter the enrolling mode to enroll the detector. Install two AAA batteries into the detector (polarity is marked in the detector) and leave it uncovered. The detector will generate an enrollment signal after the batteries are installed.

## Detector testing

Attach the detector's cover and from this moment the detector will be in a testing mode for 5 minutes and each triggering will be indicated by detector's LED. Five minutes after the cover was closed, the detector will automatically enter the normal mode and its LED indicator will be switched off (battery energy saving function). Open and close the detector's cover to reset the testing mode for an additional 5 minutes if needed.

**Note:** if you change DIP switch's setting, the system accepts the new setting after the detector cover is closed.

## Normal operating mode of the detector

The detector, in normal operating mode, conserves battery energy. It will not indicate triggering with its LED, but each triggering is only transmitted to the system. The detector performs self testing regularly and reports its condition to the system for full supervision.

**Pulse mode** – in the normal mode, when the instant reaction is set, the detector informs system about the door status regularly (open or closed). If the tamper switch is hold pressed during battery inserting, the detector will be in pulse mode, when only door opening is transmitted. This mode prolongs battery life, but it disables option of open door indication while arming. Whenever the delayed reaction is set, the detector works in pulse mode only.

## Battery testing and replacement

The detector checks its batteries conditions automatically. If it is necessary to replace its batteries, the detector will inform the system about the need for new batteries. In this mode the detector works as normal, but each triggering is indicated with a flash of its LED. This way it is possible to recognize, that the replacement of the batteries is requested. If a low battery is indicated, it should be replaced as soon as possible (in a week).

Before the batteries are replaced, the receiver (control panel) must be put into the mode which allows the opening of the detector (User or Programming mode).

Use only high quality alkaline AAA batteries for replacement. After installation of the new batteries the detector will be in testing mode and each triggering will be indicated by detector's LED. Five minutes after the cover is closed, the detector will automatically enter the normal mode and its LED indicator will be switched off (battery energy saving function).

**Note:** Dispose of batteries safely depending on the type of the batteries and local regulation. Although this product does not contain any harmful materials we suggest you to return the product to the dealer or directly to the producer after usage.

## Specifications

power	3 V - 2 x Alkaline battery type LR03 (AAA) 1,5 V
	Please note: Batteries are not included
battery life time	about 1 year
working frequency	433,92 MHz
working range	max. 100 m (open area)
built in sensor	magnetic reed contact
external sensor inputs	INP & TMP (balanced loops)
security	grade 2 EN 50131-1, EN 50131-2-6, EN 50131-5-3
environmental class	EN 50131-1
complies with	Indoor general -10 to +40°C
	ETSI EN 300220, EN 50130-4, EN 55022, EN 60950-1
	Can be operated according to ERC REC 70-03

## Contents of the set: detector, magnet, 4 screws, 2 AAA batteries

Hereby, Jablotron Ltd., declares that this JA-60N is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC and 2011/65/EU. Original of the conformity assessment can be found at the web page [www.jablotron.com](http://www.jablotron.com), section Technical support.

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