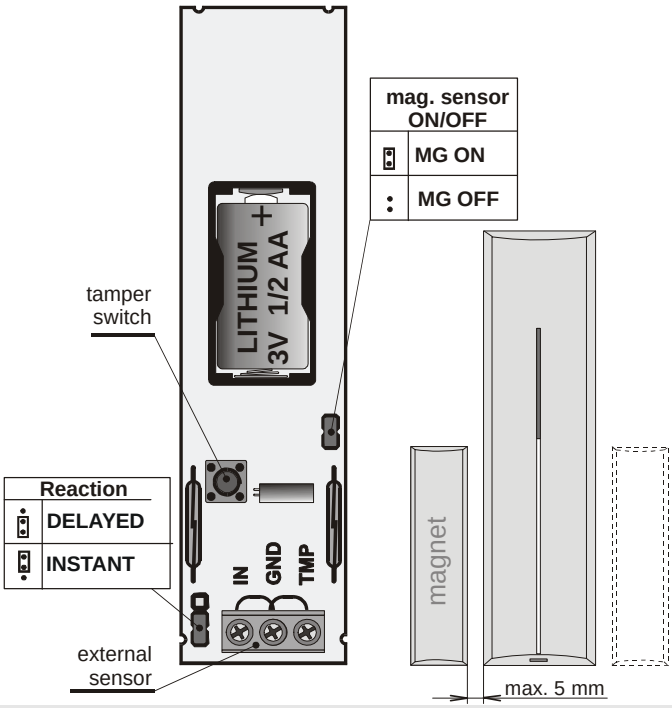
The JA-80M wireless magnetic door detector

The JA-80M is a component of Jablotron's Oasis 80 alarm system. It is designed to detect the opening of doors, windows etc. It can also be extended by a normally closed sensor. The battery-powered detector communicates via OASIS radio protocol.



Installation

Installation shall only be undertaken by technicians holding a certificate issued by an authorized distributor.

This detector reacts to the removal of its magnet unit. The electronics should be installed onto the non-moving part of windows or doors, and the magnet onto the moving part. The detector should be installed vertically. Avoid locating it directly on a metal frame as metal influences the functioning of the magnetic sensor and radio communication. If the door or window is made of metal, we recommend installing the detector unit away from the metal and wiring up an external wired magnetic sensor which is connected to the detector. See the following instructions:

1. **Open the detector cover** by pressing the tab in**.**
2. **Screw the rear cover to the solid part** of the door/window.
3. **Attach the magnet to the moving part** of the window. Its distance from the detector should not exceed 5mm when the door/window is closed. The lower edge of the magnet should be aligned with the lower edge of the detector. Only a single magnet can be installed, either on the left side or the right side of the detector.
4. **Leave the battery disconnected and the cover open** and then follow the control panel or receiver manual. The basics of enrollment are:
   1. Enter enrollment mode on the control panel by keying in "1" in Service mode.
   2. Install a battery into the detector to activate enrollment.
   3. Exit enrollment mode by pressing "#"

To enroll a detector after having already connected a battery, first disconnect the battery, and press and release the tamper sensor to discharge any remaining charge to ready the device for enrollment.

DIP switches

MG ON / MG OFF Allows the internal magnetic **sensor inside** the detector to be **disabled** when the detector is only to be used with external sensors wired to its terminals.

INS / DEL DEL provides entrance & exit delays for detectors installed in a building entrance. INS allows the detector to instantly trigger alarm activation if the control panel is armed. *This DIP switch (INS/DEL) only has an effect if the detector has a **natural reaction assigned** to its address in the Oasis control panel. It also has no effect when used with a UC-8x or AC-8x receiver.*

Opening the cover makes the detector react with a tamper signal.

Open/closed status detection

The detector is factory-set to indicate both opening and closing so that the control panel knows the status of doors/windows. If a pulse mode is desired to indicate only opening, keep the tamper switch pressed while installing the battery. Not pressing the tamper switch gives open and closed status signals.

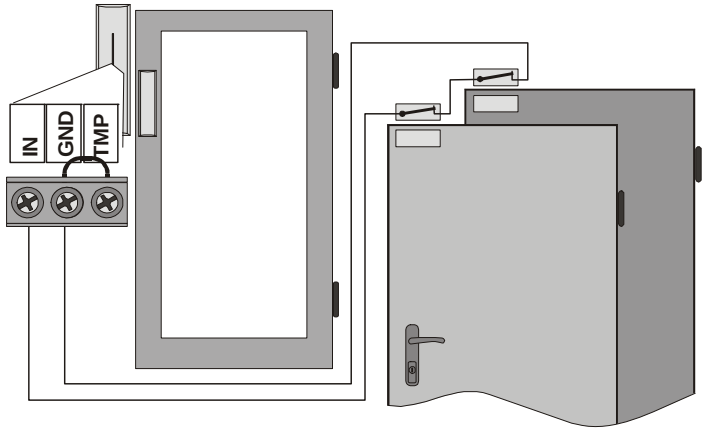
Wiring up the external sensor

External sensors can be wired to the detector. It is possible to protect more doors/windows or to wire in other types of wired detectors. There are two inputs, **IN** and **TMP** which react when disconnected from the **GND** common terminal.

IN: If the IN terminal is disconnected from GND it sends the same **signal** to the control panel **as if the magnet had been removed** from the detector. The internal magnetic sensor can be disabled by DIP switch if desired.

TMP: The TMP terminal sends a **tamper signal** to the control panel if disconnected from GND.

Note: If any of these two inputs is not used, it must be shorted to the **GND** terminal.



Wiring example

Testing the detector

15 minutes after closing the detector cover, the LED indicates detector triggering. The strength and quality of detector signals can be measured by the control panel in Service mode.

Battery replacement

The detector monitors its battery voltage and if too low, a transmission is sent to the control panel to inform the installer or user. The detector continues to function and shows each triggering of the detector with a flash of its LED. Battery replacement should not be delayed by more than two weeks. This should be done by a qualified technician with the control panel in Service mode.

Expired batteries should not be thrown into the garbage, but disposed of according to local regulations.

Removing the detector from the system

If a detector is removed, the control panel announces the removal. The detector has to be deleted in the control panel before intentional removal.

Technical parameters

Voltage:	*Lithium battery type CR14250SL (1/2AA 3.0V)*
Typical battery lifetime:	*approx. 3 years for 20 daily activations maximum*
Communication band:	*868 MHz, Oasis protocol*
Communication range:	*approx. 300m (open area)*
Typical sensitivity range of the built-in magnetic sensor	*45/25mm*
Inputs for external sensors	*IN and TMP = normally closed loops*
Dimensions	*110 x 31 x 26 mm*
	magnet: 56 x 16 x 15 mm
Operational environment according to EN 50131-1	*II. internal space*
Operational temperature range	*-10 to +40 °C*
EN 50131-1,CLC/TS 50131-2-6, EN 50131-5-3 classification:	*grade 2*
Complies with ETSI EN 300220, ETS 300683, and EN 60950	
Can be operated according to VO-R/10/08.2005-24	

CE Jablotron Ltd. hereby declares that the JA-80M is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The original of the conformity assessment can be found at _____, Technical Support 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.

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