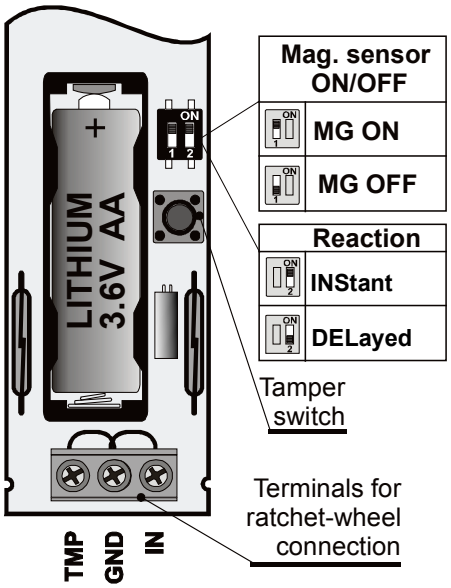
The JA-80MI wireless roller-blind motion detector

The JA-80MI is a component of Jablotron's Oasis 80 alarm system. It is designed to detect the handling of roller blinds. This is achieved by detecting ratchet-wheel movements. Small movements are filtered out so that wind blasts do not cause false alarms.

A built-in magnetic door-sensor is included which can be used for the detection of window/door opening.

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.

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.

Should the magnetic door-opening sensor be used, the electronics should be installed onto the non-moving part of windows or doors, and the magnet onto the moving part. However, do not use the door-opening sensor if you cannot avoid locating it directly on a metal frame.

1. **Open the detector cover** by pressing the tab in.
2. **Route the cables** from the ratchet-wheel through the rear plastic cover and **screw the cover** onto the chosen location.
3. **Leave the battery disconnected and the cover open** and then follow the control panel or receiver manual. The basics of enrollment are:
   a) Enter enrollment mode on the control panel by keying in "1" in Service mode.
   b) **Install a battery** into the detector to activate enrollment.
   c) Exit enrollment mode by pressing **#**.
4. Remove the jumper between IN and GND and wire these terminals to the ratchet-wheel.

After installing a battery into the detector, allow up to 30 seconds for stabilisation. During this period the LED is continuously lit.

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

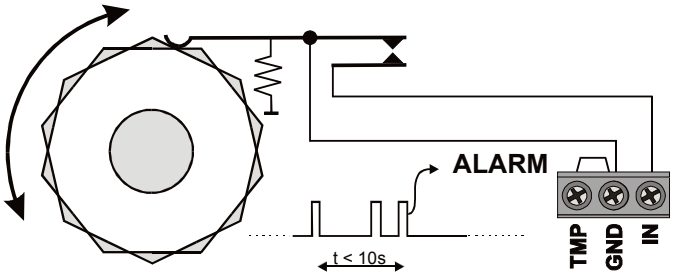
MG ON / MG OFF – magnet ON/OFF. This switch should be **normally OFF**. Only set the switch to ON if the magnetic door-sensor is to be used,.

INS / DEL – Instant / Delayed reaction. This switch should be **normally set to INS** – this corresponds to **building perimeter protection**. **DEL** provides entrance & exit delays for detectors installed in a building entrance. *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.

Function

The **INP** input terminal **receives signals from the ratchet-wheel.** Alarm signals are then only transmitted when the ratchet contact is opened at least three times within 10 seconds. This filters out disconnections caused by accidental ratchet-wheel shifts which are due to wind blasts.



Ratchet-wheel function scheme

The **TMP** input terminal, when disconnected from GND, causes the detector to send a **tamper signal**.

Magnetic sensors work the same way as with the **JA-80M** detector.

Note: If the TMP input is not used, it must be shorted to the GND terminal.

Testing the detector

15 minutes after closing the detector cover, the LED indicates detector triggering. As mentioned above, three activations on the IN input within 10 seconds are required for the detector to be triggered. The strength and quality of the detector's radio 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. We recommend testing the detector immediately after its battery has been replaced.

*Inserting a battery with a **low voltage results in the LED indicator flashing for approx. 1 minute**. Subsequently, the detector will switch to normal operation including low battery indication of the kind described above.*

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 LS(T)14500 (3.6V AA)*
Typical battery lifetime:	*approx. 3 years for 20 daily activations maximum*
Communication band:	*868 MHz, Oasis protocol*
Communication range:	*approx. 300m (open area)*
Maximum wire length for the INP input	*1 m*
Dimensions	*110 x 31 x 26 mm*
Operational environment according to EN 50131-1	*II. Indoor general*
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, EN50130-4, EN55022, and EN 60950-1*
Can be operated according to	*ERC REC 70-03*

Jablotron Ltd. hereby declares that the JA-80MI 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 on the web site www.jablotron.com, Technical Support section.

Note: Dispose of batteries safely depending on battery type and local regulations. Although this product does not contain any harmful materials we suggest you return the product to the dealer or directly to the manufacturer after use.

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