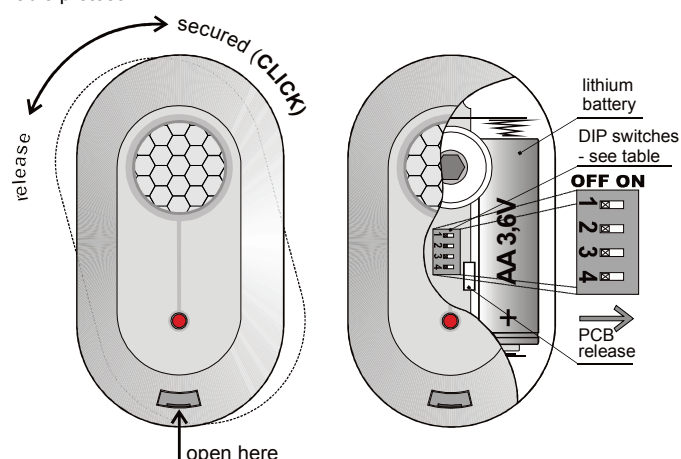# The JA-85P mini-size wireless motion detector

The JA-85P is a component of Jablotron's Oasis 80 alarm system. The mini-size motion detector uses a PIR sensor and it is designed for indoor use in buildings or in cars. 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 can be installed on a wall or on a ceiling. In a car it can be installed high on the interior vertical surface between the front and rear doors. Within the detection range of the PIR sensor avoid the presence of objects rapidly changing in temperature, such as electrical heaters, gas appliances etc. Moving objects with a temperature close to that of humans such as curtains moving above a radiator, and pets should also be avoided. Detectors should not be near fast-moving air e.g. near ventilation fans or open windows or doors. There should also be no obstacles blocking the detector's "view" of the protected area. Keep the detector away from metal objects which could interfere with radio communication.

Warning: The most frequent cause of false alarms is bad detector-positioning.

Do not set (arm) this detector if there are any people or pets moving within the protected area.

1. **Release the detector** installation bracket (by turning it clockwise).
2. **Attach the bracket** to a desired place and reinstall the detector onto the bracket.
3. **Open the detector cover** by pressing the tab.
4. **Remove the internal PIR module** held by an internal tab.
5. **Set the detector DIP switches** (see the "DIP switches" section below).
6. **Return the PIR module** into the plastic cover.
7. **Leave the battery** disconnected and the detector open and then follow the receiver (or control panel or car alarm) manual. The detector enrolls by connecting up its battery while the receiver is in enrollment mode.
8. After detector enrollment, **close its cover**, wait until its indicator turns off and then **test its functionality**.

To enroll a detector after having already connected a battery, first disconnect the battery, wait 30 seconds and reconnect it. **Allow two minutes to stabilise** during which the LED is permanently lit.

The detector can also be installed without the rear holder. In this case remove the magnet from the holder (push it out using a thin tool) and push it into a prefabricated hole in the detector's rear plastic cover.

DIP switches

#	OFF	ON
1	**Increased immunity** with a slower reaction (car use)	**Normal immunity** to false alarms (indoor use)
2*	**Delayed** natural reaction	**Instant** natural reaction
3**	Radio supervision **off**	Radio supervision **on**
4***	**5 minute** sleep time	**1 minute** sleep time

*   This DIP switch has an effect if the detector is used with a CA car alarm or with an Oasis control panel which has a natural reaction assigned to the JA-85P's address. It also has no effect when used with a UC-8x or AC-8x receiver.

** Radio communication supervision should be switched off if a detector installed in a car is enrolled to an Oasis control panel in a house (to avoid lost detector indication when the car drives away).

*** To save battery energy, the detector switches to battery-save mode 15 minutes after the cover is closed. During battery-save mode the PIR sensor still always watches out for movement. The first movement detected is then transmitted instantly, and for the next 5 minutes or 1 minute the PIR sensor ignores any further movement. After this period, the PIR sensor then returns to watching out for movement until re-triggered.

Testing the detector

15 minutes after closing the detector cover, the LED shows detector triggering. The strength and quality of detector signals can be measured by an Oasis control panel in Service mode. If the detector is enrolled to a car alarm and the ignition key is turned off then detector triggering is indicated by a short flash of the LED.
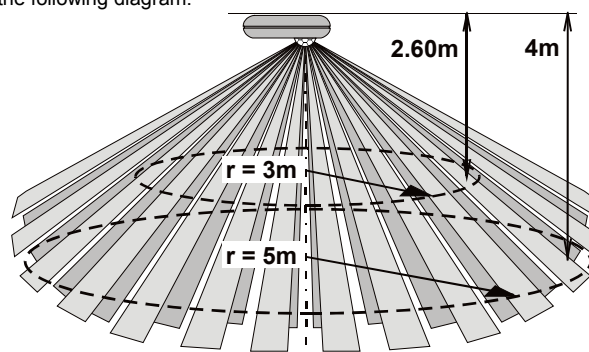
Battery replacement

The detector battery is regularly checked. If the battery has expired, then the user or installer is informed. The detector continues to work and each movement in front of the detector is shown by a brief LED flash. The battery should be replaced within two weeks by a qualified technician.

After battery replacement the detector needs two minutes to stabilise during which the LED is permanently lit. After battery replacement test the functioning of the detector. An expired battery should not be thrown into the garbage, but disposed of according to local regulations.

Detection characteristics

The detector can react to movements within a distance of up to 5 meters, see the following diagram.

Car alarm co-operation

Several types of Jablotron's car alarms allow for wireless detector enrollment. A JA-85P detector, if enrolled, should be placed in the upper part of car's interior – e.g. fixed to the plastic part of the ceiling light, to side posts or to the ceiling upholstery (this does not require the bottom handle to be used). Always take the detection characteristic into consideration when positioning the detector. Keep in mind that the spots behind mechanical obstacles (seats, props) are invisible to the detector. Multiple detectors can be used simultaneously – a detector has no effect to other detectors function.

The detector should **not be exposed to direct sunlight**. When arming a car with a JA-85P enrolled **all windows must be closed** to prevent false alarm caused by strong hot air blasts or by passing-by persons. *However, this rule can be omitted when partial arming is used and the detector belongs to the INT group.*

DIP switches No. 1 and 3 must be OFF.

Technical specifications

Voltage	*Lithium battery type LS(T)14500 (3.6V / 2.4 Ah AA)*
Calculated battery lifetime	*approx. 3 years (sleep time 5 min.)*
Communication band:	*868 MHz, Oasis protocol*
Communication range:	*approx. 100m (open area)*
PIR sensor detection angle/detection range:	*360° / 5 m*
Operational environment according to EN 50131-1	*II. internal space*
Operational temperature range	*-10 to +40 °C*
Dimensions, weight	*88 x 46 x 27mm, 60 g*
EN 50131-1, EN 50131-2-2, EN 50131-5-3 classification:	*grade 2*
Dimensions, weight	*110 x 60 x 55 mm, 120 g*
Complies with	*ETSI EN 300220, EN 50130-4, EN 55022, EN 60950-1*
Can be operated according to	*ERC REC 70-03*
FCC ID VL6JA85P	

JABLOTRON ALARMS a.s. hereby declares that the JA-85P 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: 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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