JA-150P PET Wireless PIR motion detector with basic pet immunity

The JA-150P PET is a wireless device of the **JABLOTRON 100+** system. It is used to detect movement of persons in interiors of buildings. Unlike the standard PIR motion detectors form the JABLOTRON 100+ series, this detector has a modified detection characteristic and it is equipped with basic pet immunity. The detector eliminates the effect of the movement of small animals on the floor (animals with a weight of up to approx. 25 kg and a maximum height of 40 cm). The detector has a pulse reaction and it takes one position in the system. The detector should be installed by a trained technician with a valid certificate issued by an authorized distributor.

⚠️ **The detector eliminates only the effects of movement of animals on the floor according to the detection characteristics.**
It is not suitable for guarding areas where animals can move freely at height!

Installation

The detector can be installed onto a wall or in a corner of a room. Bear in mind that the detector's field of vision should not include any objects which quickly change temperature (electrical heaters, gas appliances, etc.) or which move (curtains hanging above a radiator, robotic vacuum cleaner, etc.). Although the detector is very resistant to false alarms, it is not recommended to install the detector in places with intense air circulation (close to ventilators, air conditioning, vents, unsealed doors etc.). There should not be any obstacles in the detector's field of vision that would obstruct its view into the guarded area.

The recommended detector installation height is 2 m, maximum height 2.2 m.
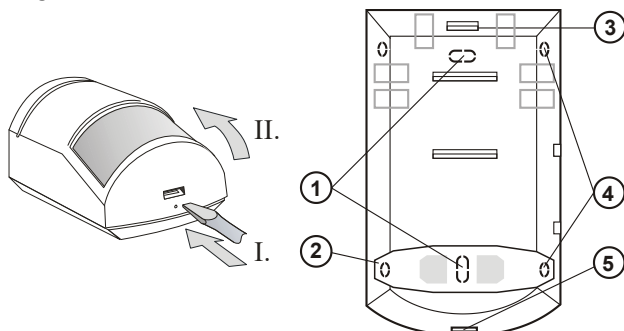

Figure 1.: 1 – holes for installing on a flat wall; 2, 4 – holes for installing at an angle (in a corner); 3 – PCB tab; 5 – cover tab

1. Open the detector cover by pressing the cover tab (5). Avoid touching the PIR sensor inside (10) – you could damage it.
2. Take out the PCB – it is held by a tab (3).
3. Punch through the holes for screws in the plastic base and attach it to the wall. The recommended detector installation height is 2 m above the floor.
4. Insert the PCB back and proceed by following the control panel installation manual. Basic instructions:
   a. Open the **F-Link** software, select an unused position in the **Devices** tab and click on the *Enroll* button to enter the *Enrollment mode*.
   b. Insert both batteries into the detector (mind the correct polarity). After the second battery is inserted into the detector the enrollment signal is transmitted to the control panel and the detector is enrolled to the selected position. This is followed by up to a three-minute detector stabilization phase indicated with a flashing LED.
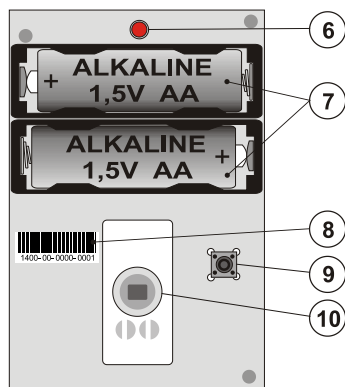5. Close the detector cover and test the detector's function.

Figure 2.: 6 – red activation LED; 7 – batteries; 8 – production code; 9 – cover tamper sensor; 10 – PIR sensor

Notes:
- The detector can also be enrolled into the system by entering its production code in the F-Link software. You can find the production code on the sticker (8) placed on the detector board. All numbers under the bar code must be entered (1400-00-0000-0001).
- If you want to remove the device from the system, erase it from its position in the F-Link software.
- Should you enroll the detector into the control panel after the batteries have been inserted, first take them out, then press and release the tamper sensor (9) to consume the residual energy and after that enroll the detector to the control panel.
- To meet the EN 50131-3 standard it is necessary to secure the cover tab (5) with the supplied screw.

Detector function modes

The detector can work in two modes that are indicated with one or two flashes when inserting the batteries.

To change the mode, during battery insertion, press and hold the tamper sensor (9). After inserting the second battery hold the tamper sensor for approx. 3 s before releasing. The detector then flashes either once or twice to indicate the currently selected mode. The default setting is **Smartwatch**.

One flash indicates **Smartwatch** mode that is intended for the permanent monitoring of movement in the guarded area. If permanent movement is detected, three reports are sent every 20 s. The next report is then sent after 2 minutes. If the detector does not detect any movement for 10 minutes, the mode with three reports every 20 s is used again.

Two flashes indicate **one-minute interval** mode. When a movement is detected, it sends a report and goes into standby mode for 1 minute. When the time is over, the detector wakes up and remains active until the next detection of movement.

Detector testing

For a period of 15 minutes after closing the detector cover, the LED (6) indicates all movement and reports it to the control panel. After this time the detector switches to the mode selected during battery insertion.

Individual activations of the detector can also be monitored in the **Diagnostics** tab in the **F-Link** software.

Battery replacement

The system automatically reports a low battery status. We recommend replacing the batteries within two weeks from the low battery report. It is done by a service technician in service mode. Always replace both batteries at the same time!

Before inserting new batteries, it is necessary to wait for 10 s or to press the tamper sensor (9) to consume the residual energy.

Detection characteristics

The detector is fitted with a lens covering 90° / 12 m as standard, see the following figure. In the white part of the diagram the detector eliminates the effects of movement of small animals with a weight of up to approx. 25 kg and a maximum height of 40 cm, in the grey part of the diagram there is standard detection.
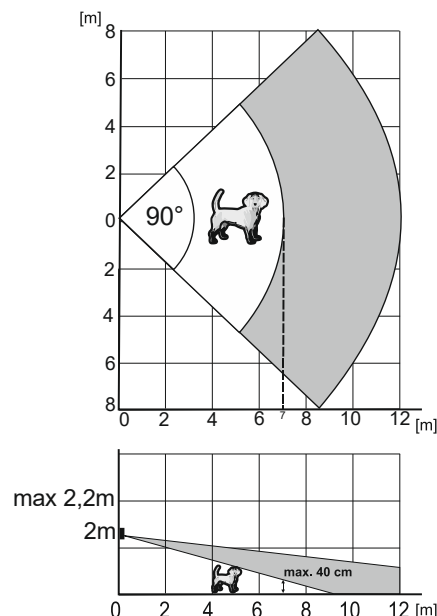

Figure 3.: Detection characteristics

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Technical specifications

Power	2x Alkaline battery, type LR6 (AA) 1.5 V/2.4 Ah
	Please note: Batteries are not included.
Typical lifetime of batteries	about 2 years
	(the longest lifetime is achieved in Smartwatch mode)
Low Battery Threshold	< 2.5 V
Quiescent current consumption	25 µA
Maximum current consumption	50 mA
Communication frequency	868.1 MHz, JABLOTRON protocol
Maximum radio-frequency output (ERP)	25 mW
Communication range	approx. 300 m (unrestricted area)
Recommended installation height	2 m above the floor
Detection angle/detection coverage	90 degrees/12 m
Pet immunity (angle/coverage) – pet immunity	90°/up to 7 m
Dimensions	60 x 95 x 55 mm
Weight (without batteries)	125 g
Classification	Grade 2/II. indoor general (According to EN 50131-1)
Operational environment	Indoor general
Operating temperature range	-10 °C to +40 °C
Average operating humidity	75 % RH, without condensation
Certification body	Trezor Test s.r.o. (no. 3025), Telefication B.V.
Complies with	ETSI EN 300 220-1,-2, EN 50130-4, EN 62368-1,
	EN 50581, EN 50131-1, EN 50131-2-2, EN 50131-5-3, T 031.
Recommended screw	2x ø 3.5 x 40 mm (countersunk head))

CE

JABLOTRON ALARMS a.s. hereby declares that the JA-150P PET product is in a compliance with the relevant Union harmonisation legislation: Directives No.: 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU if it is used as intended. 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.