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CREATING ALARMS

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JA-121PB (JABLOTRON 100+)

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Bus combined motion and glass-break detector

type: 1PIRGBS2305MU

switch to the manual for the JABLOTRON Mercury system

*The product is a bus component of **JABLOTRON** system. It is used for human motion detection in the interior of buildings and for detection of breakage of glass surfaces forming the building. It contains two independent detectors (it occupies 2 positions in the control panel). It uses a PIR detector to detect the motion and a GBS detector to detect the breakage of glass surfaces. The GBS alarm is evaluated based on changes in air pressure and the characteristic sounds of glass breaking. The detector has to be installed by a trained technician with a valid Jablotron certificate. The device is compatible with control panels JA-103K and JA-107K.*

Installation

During the installation pay attention that there should be no obstacles in the detector's view, such as:

- items that change temperature quickly (electric stove, gas appliances etc.)
- objects that move (e.g. waving curtains over the heating, robotic vacuum cleaner)
- no obstacles obstructing the view of the protected area
- moving pets

We do not recommend installing the detector:

- against the windows or spotlights
- in places where air flows (ventilation, air conditioning, vents, leaky doors etc.)
- near air outlets, fans, or other sources of air pressure changes or intense sounds
- In a protected area where there are sources of vibrations or shocks.

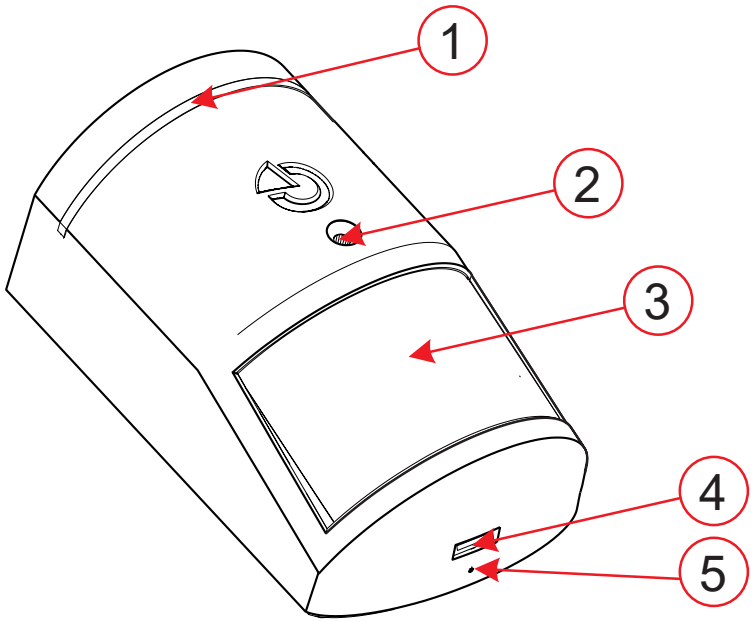

Fig. 1: Description of external parts of the product

***1** – LED indicator; **2** – GB sensor; **3** – PIR lens; **4** – cover latch; **5** – hole for locking screw*

1. Open the cover of detector by using the latch (4), Do not touch the PIR sensor inside (12) – it could be damaged.
2. Release the PCB located in the rear cover by pressing the latch (7) at the top of the cover.
3. In the rear part, break out the cover for bus cable. Recommended installation height is 2.2–2.5 m above the floor level.
4. Push the bus cable through the plastic base and attach it to the selected place (vertically, cover latch down).

5. Insert into the rear plastic of the PCB detector using the electronics latch (7) and connect cable wires to the bus terminals (8).

When connecting the detector to the system bus, always switch the power off.

6. Proceed according to the control panel installation manual.
   Basic procedure:
   a. When the device is switched on, the yellow LED (6) starts flashing repeatedly to indicate that the module has not been enrolled into the system.
   b. Go to the F-Link software, select the required position in the Devices tab and launch enrolment mode by clicking on Enrol option.
   c. Press Scan/add new bus devices and select the detector JA-121PB from the list and confirm by doubleclick – yellow LED (6) turns off.
7. Close the detector cover to test its functionality.

Notes:

- The detector can also be enrolled into the system by pressing the cover tamper switch (11).
- The detector can be enrolled by entering the serial number (10) in the F-Link software (or a bar code reader). Enter all digits located below the bar code (1400-00-0000-0001).
- If you want to remove the detector from the system, erase it from its position in the control panel. In case that only the GBS part (B) is removed, the PIR remains functional.
- In order to comply with EN 50131-2-4, the front cover latch (4) must be secured with the supplied locking screw (5).

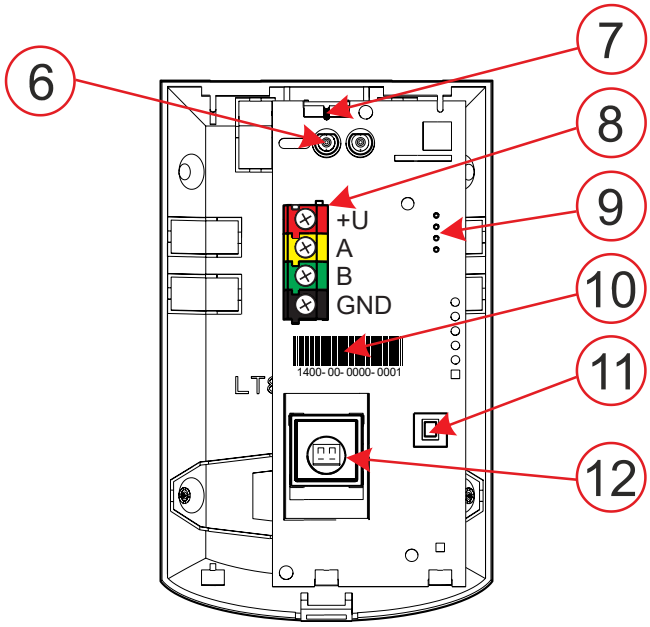

Fig. 2: Description of internal parts of the product
***6** – LED indicators; **7** – PCB latch; **8** – bus terminals; **9** – connector for GBS; **10** – serial number; **11** – tamper switch; **12** – PIR sensor*

Properties

Open the F-Link software, go to the Devices tab. Click on the Internal settings option at the device´s position to open a dialogue window where you can set the following options: (* indicates default settings).

LED indication: **Disables* / Enables**; Allows to select whether the LED indicator will indicate the activation of the PIR and GBS detector. It always signals in service mode.

PIR Immunity level: Determines immunity to false alarms. The **Standard*** level combines basic immunity with a rapid reaction. The **High** level provides increased immunity, but the detector reaction is slower.

Glass break sensitivity: adjusts the sensitivity to pressure change may be adjusted by a slider.

Detection characteristics

The standard lens that is supplied with the JA-121PB detector covers an area of 110 °/ 12 m– see the following figure 3.

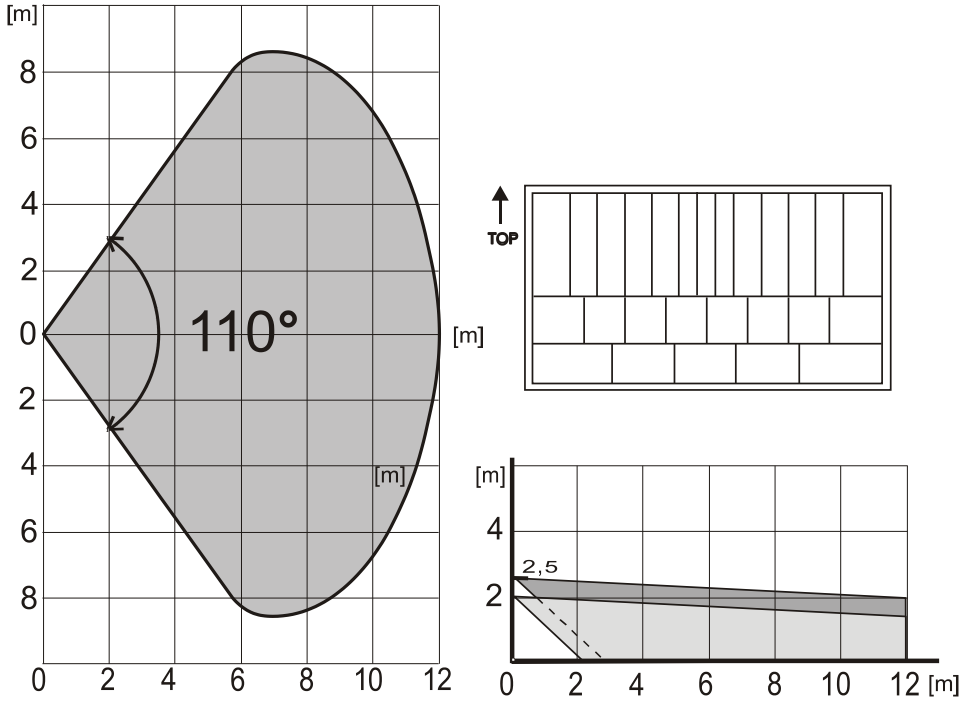

Fig. 3: Detection characteristics of PIR.

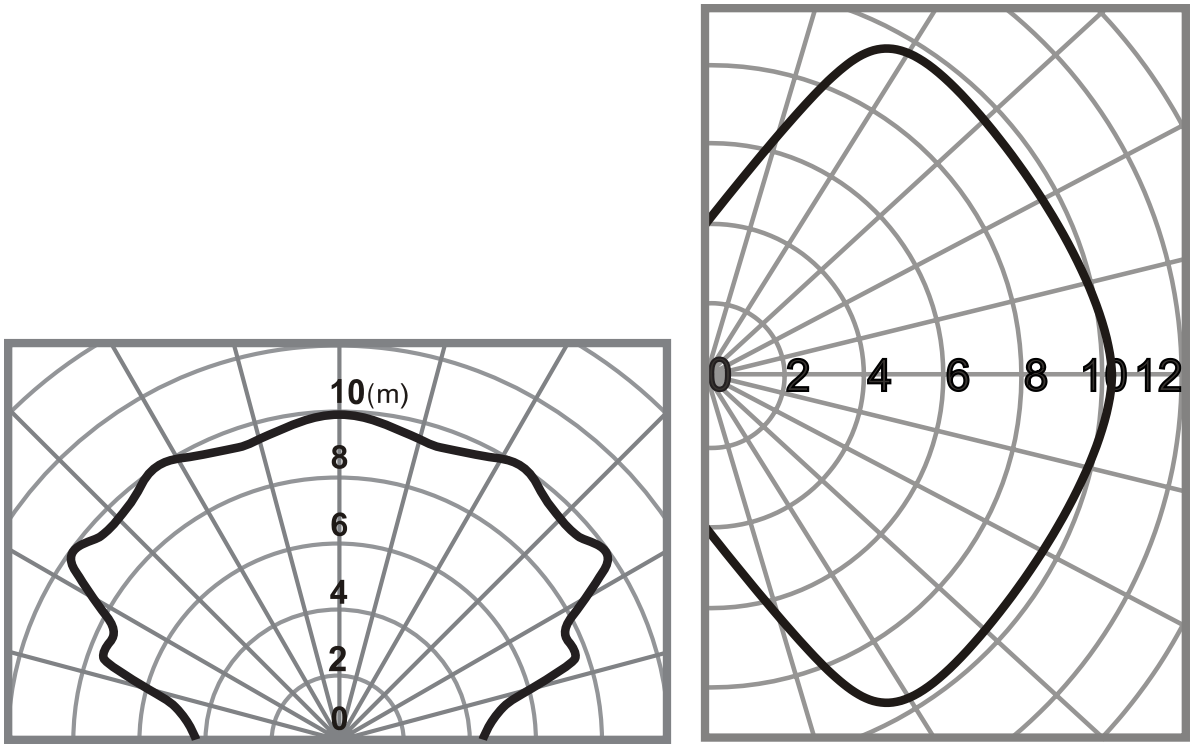

Fig. 4: Detection characteristics of GBS.

The properties can be changed by using an alternative lens:

JS-7904	Designed for long corridors – with a working range of up to 20 m. **Increased immunity cannot be used with this lens!**
JS-7910	Equipped only with the upper beam covering 110 °/ 12 m and not covering the floor (can eliminate the motion detection of small pets on the floor)
JS-7902	Vertical curtain – it does not cover an area but creates a detection wall (can be used to create a barrier and report its breach)

Note: When utilizing an alternative lens, test whether the detector covers the area correctly (an incorrectly installed lens can cause detection errors).

Detector testing

During in the service mode, the detector indicates each activation with its LED indicator. Once service mode is exited, the device enters normal operation configured by properties. Each activation may be also viewed by the **F-Link** software, within the **Diagnostics** tab.

Technical specifications

Power	from control panel bus 12 V DC (8–15 V)
Quiescent current consumption	4.2 mA
Maximal current consumption	40 mA
Recommended installation height	2.2–2.5 m
Detection angle / coverage (PIR)	110 ° / 12 m
Detection angle / coverage (GBS)	90 ° / 9 m
Detection type	acoustic

Dimensions	60 x 98 x 52 mm
Weight	81 g
Classification	security grade 2 / environmental class II (according to EN 50131-1)
Environment	indoor general
Operating temperature range	-10 °C to +40 °C
Average operating humidity	75% RH, non-condensation
Certification body	Trezor Test s.r.o. (no. 3025)
In compliance with	EN IEC 63000, EN 50130-4, EN 55032, EN 50131-1, EN 50131-2-2, EN 50131-2-7-1
Recommended screw	2 x  ø 3.5 x 40 mm (countersunk head)

JABLOTRON a.s. hereby declares that the 1PIRGBS2305MU product is in a compliance with the relevant Union harmonisation legislation: Directives No.: 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: Note: Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please return the product to the dealer or contact your local authority for further details of your nearest designated collection point.

JA-121PB

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