

# JS-20 „LARGO“ P.I.R. detector

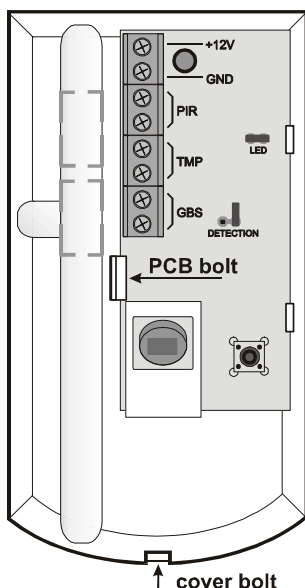
This P.I.R. motion detector is used to protect interiors. It detects any movement of objects with a temperature close to that of the human body.

The signal from the sensor is electronically analyzed. This ensures that the detector provides excellent sensitivity and at the same time false alarms are basically eliminated. The detection analysis rate can be adjusted to increase its immunity if the JS-20 is installed in a problematic location.

The standard lens in the detector can be replaced with an optional corridor or pet immune lens. Extra terminals (GBS) can be used to facilitate wiring of the detector.

The JS-20 distinguishes itself with excellent RF immunity.

It can be mounted on a flat wall or in a corner.



## Installation

This detector is designed for indoor applications. It can be mounted on a flat wall or in a corner. Do not place the detector close to any heating/cooling vents or near any other object that often change temperature. The detector must have an unobstructed view of the protected area.

1. **Open the cover of the detector** (press in the plastic tab on the bottom part of the detector's housing with a screwdriver).
2. **Remove the PCB** by pressing the flexible tab inside the housing.
3. **Punch through the pre-formed holes** for cables and screws.
4. **Attach the housing to the wall** (2.5 meters above the floor).
5. **Return the PCB into the rear housing** and connect the cable wires to the terminals.
6. **Attach the cover.**

*Note: Avoiding touching or scratching the PIR sensor!*

## Terminals

<b>+12V, GND</b>	power supply
<b>PIR, PIR</b>	PIR alarm output (normally closed)
<b>TMP, TMP</b>	TAMPER output (normally closed)
<b>GBS, GBS</b>	auxiliary terminals – useful when wiring (see examples)

## Jumpers

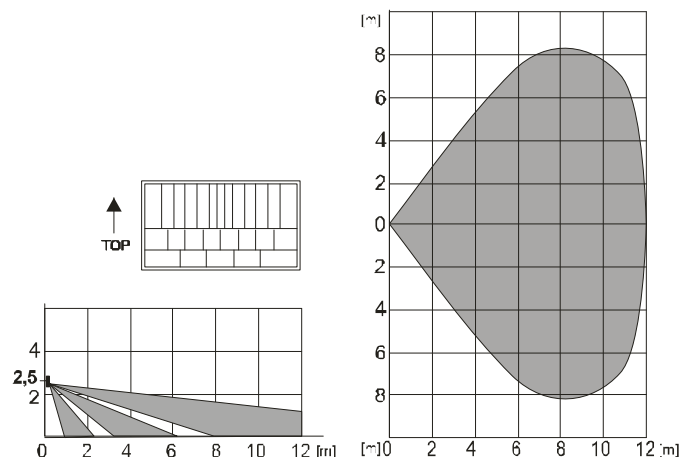
<b>LED</b>	the LED indicator can be disabled by opening this jumper
<b>DETECTION</b>	by opening this jumper you can set a higher rate of analysis and increase the immunity of the detector. This setting is suitable for problematic locations with sudden temperatures changes or electromagnetic interference. Reaction of the detector will be slightly slower in this setting.

## Detector testing

- After switching on the power, wait for 1 minute. During this period the detector initializes and stabilizes its parameters (LED will be on if not disabled).
- Each detected movement will be indicated by the detector's LED (if not disabled)
- Confirm that the detector covers the protected area as you expected.

## Lenses

**Standard lens** that is supplied with the JS-20 Largo detector covers an area of 120 degrees / 12 meters.



For special applications other lenses can be used. Optional lenses for long corridors and areas with small animals are supplied separately.

**The Pet lens** is marked **JS-7910**. This lens prevents animals smaller than 40 cm to be detected by the detector. The working range of this lens is reduced to 7 meters. It is recommended to test this lens carefully with the animal when installing the system, in order to prevent false alarms.

**The Corridor lens** is marked **JS-7904**. The working range of this lens is 25 meters long and only 3 meters wide. It is recommended to test the detector's sensitivity carefully when installing it into a corridor.

**The curtain lens** is marked **JS-7902**. By using this lens the PIR detector's working range is restricted to a "curtain". After using this lens, it is for example possible to secure part of a room etc. During the installation it is necessary to test the working range very carefully.

Lens characteristic diagrams can be seen in documents supplied with the lens or on the Jablotron website [www.jablotron.com](http://www.jablotron.com).

**Note:** Although this product does not contain any harmful materials we suggest you to return the product to the dealer or directly to the producer after usage.

## Specification

<b>Power supply:</b>	12 V DC $\pm$ 25%
<b>Power consumption (LED off):</b>	max. 10 mA
<b>Maximum consumption (LED on):</b>	max. 35 mA
<b>Terminals size:</b>	max. 1 mm <sup>2</sup>
<b>Mounting height:</b>	2.5 m above floor
<b>Detection range:</b>	120° / 12 m (standard lens)
<b>Initialization:</b>	aprox. 1 minute
<b>Alarm output:</b>	normally closed, max. 60V / 50 mA, internal resistance max. 30 Ohm
<b>Tamper output:</b>	normally closed, max. 60 V / 50 mA, internal resistance max. 16 Ohm
<b>Environment - class</b>	II. – general indoor, (EN 50131-1)
<b>Operating temperatures</b>	-10 to +40 °C
<b>Security level</b>	grade 2, EN 50131-1, EN 50131-2-2
<b>EMC</b>	EN 50130-4, EN 55022

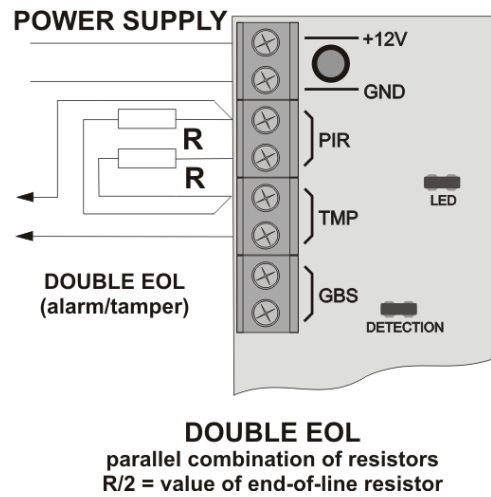
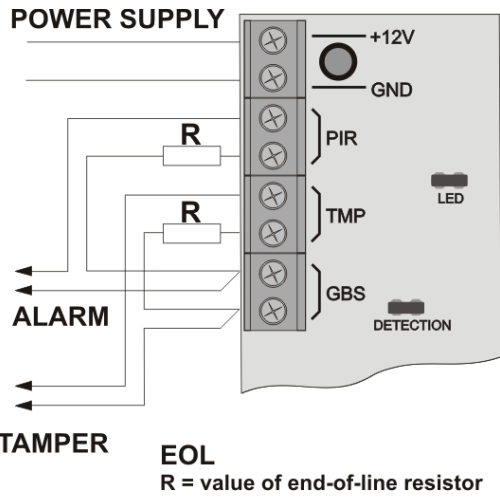


JABLOTRON ALARMS a.s. hereby declares that the JS-20 is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC. The original of the conformity assessment can be found on the web site [www.jablotron.com](http://www.jablotron.com), Technical Support section.

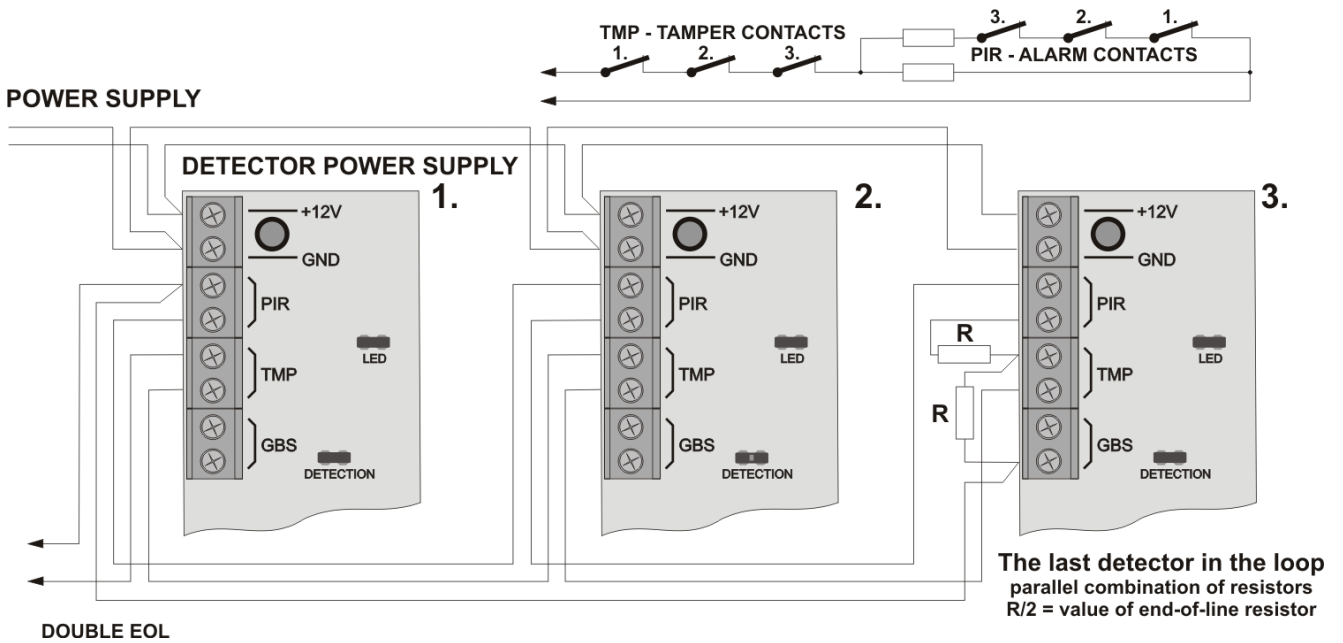
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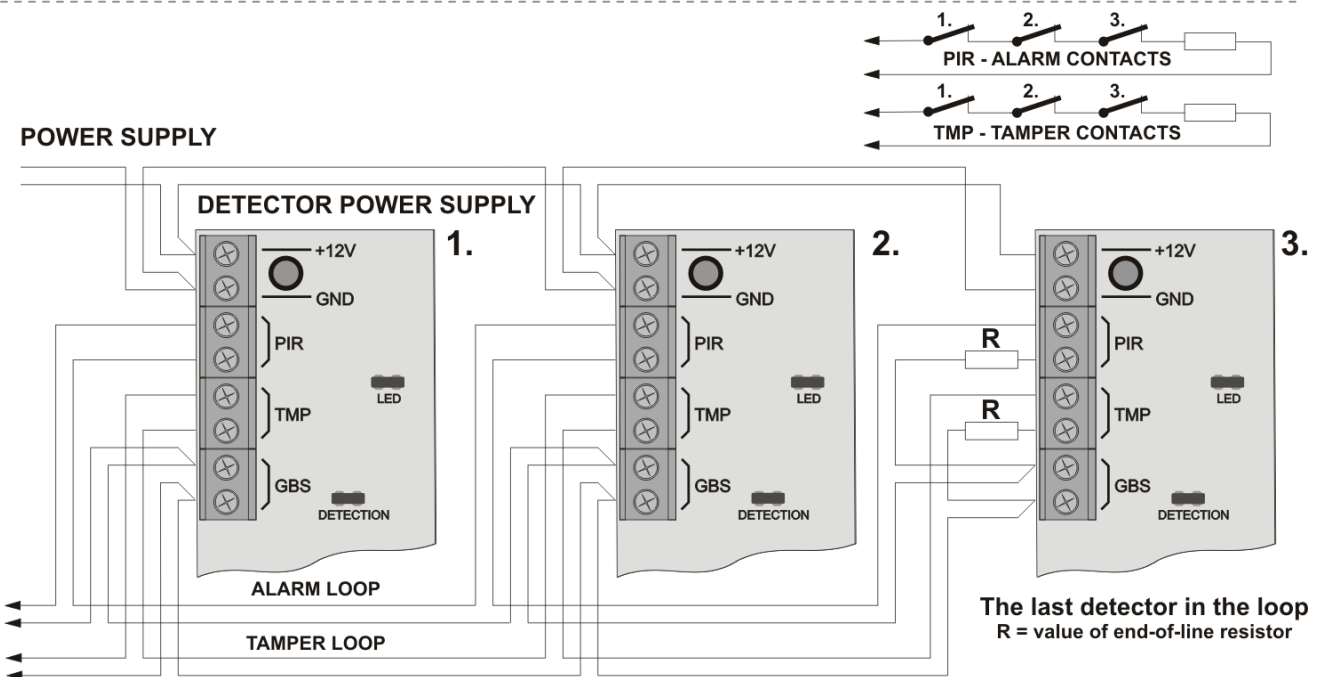
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Examples of wiring the JS-20 Largo detector using end-of-line resistors and double end-of-line resistors (Auxiliary GBS terminals are used to facilitate the wiring)



Example of wiring of several JS-20 Largo detectors into the double EOL loop (Auxiliary GBS terminals are used to facilitate wiring)



Example of wiring of several JS-20 Largo detectors into the EOL loop (Auxiliary GBS terminals are used to facilitate the wiring)