

JA-122PC, JA-122PC-GR, JA-122PC-AN Bus combined PIR motion detector with 90° photoverification camera

Type: 1PIRCAM2201MP

This device is a component of the **JABLOTRON** system. It serves for the detection of human movement in building interiors and visual alarm confirmation. The camera takes colour photos with a resolution of up to 640x480 pixels. The camera is equipped with a visible flash for taking photos in the dark. The images are saved in the internal memory of the detector and then they are forwarded to the control panel and from the control panel they can be sent to MyJABLOTRON or ARC. The detector can also take a picture by request. The detector takes one position in the system and should be installed by a trained technician with a valid certificate issued by an authorised distributor.

The product is compatible with the control panels JA-102K, JA-103K, JA-107K or above.



The photo-verification can be used only after registration of the system to MyJABLOTRON or with subsequent ARC service.

Installation

The detector can be installed on the wall or in the corner of a room. There should be no objects that can quickly change temperature (e.g. heating appliances) or which move (e.g. curtains hanging above a radiator, robotic vacuum cleaners) or pets in the detector's field of sight. It is not recommended to install the detector opposite windows or in places with intense air circulation (close to ventilators, heat sources, air conditioning outlets, unsealed doors, etc.). There should be no obstacles in front of the detector which might obstruct its view of the protected area.



Always switch the system power off before connecting the detector to the system BUS.

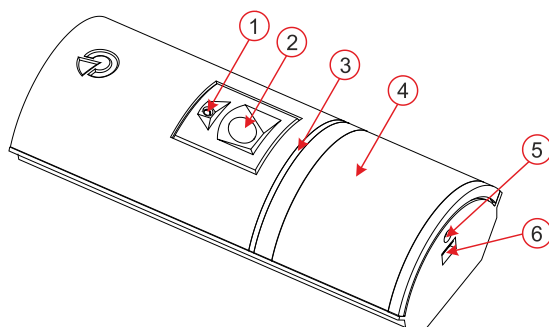


Figure: 1 – flash for illumination; 2 – camera lens; 3 – LED indicator; 4 – PIR detector lens; 5 – locking screw; 6 – cover tab

1. Open the detector cover (by pushing the cover tab (6)). Avoid touching the PIR sensor inside (13) – you could damage it.
2. Remove the locking screw (9) Take out the PCB – it is held by a tab (14).
3. The recommended installation height is 2.5 m above the floor.
4. Attach the plastic base to the wall using screws (vertically, with the cover tab facing downwards).
5. Re-insert the PCB and secure it with a tab (14) and a locking screw (9) and connect the BUS connector (8).
6. Proceed according to the control panel installation manual.

Basic procedure:

- a. When the device is switched on, the yellow LED indicator (10) 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 the enrollment mode by clicking on the **Enroll** button.
- c. Press the **Scan/add new BUS devices** button, select the JA-122PC detector and confirm by double clicking on it. The detector will be enrolled and the yellow LED indicator (10) will go off.
- d. If the detector is enrolled as a first camera PIR or a control panel is not connected to MyJABLOTRON, F-Link shows a dialogue window with a question about enabling data transfer. We recommend enabling this option with the agreement of the customer and confirming this acceptance by recording it in the system service log with his signature.

Note: If the transmission is not enabled, images will be saved in the internal memory of the detector and the control panel. Then it won't be possible to send the photos to MyJABLOTRON or ARC.

7. Close the detector cover and test its functionality.

Notes:

- The detector can also be enrolled into the system by pressing the cover tamper contact (12).

- 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 (11) inside the detector. All numbers under the bar code must be entered (1400-00-0000-0001).
- If you wish to remove the detector from the system, erase it from its position in the control panel.
- 8. In order to be compliant with EN 50131-1, the cover tab (6) must be fixed with in place with the use of locking screw (5).

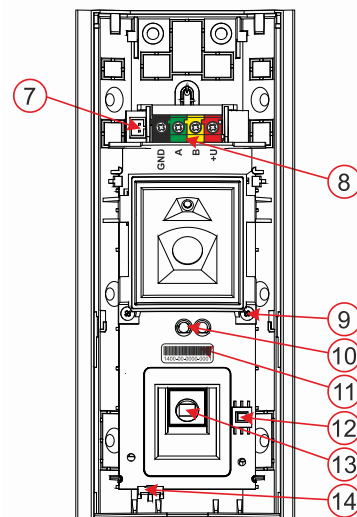


Fig: 7 – External bus connector; 8 – BUS;
9 – camera module locking screw; 10 – LED indicators;
11 – serial number; 12 – tamper contact; 13 – PIR sensor; 14 – PCB tab

Detector internal settings

Settings can be made using **F-Link** software. In the **Devices** tab use the **Internal settings** option on the detector's position to open a dialog window where you can configure the settings (* default settings):

LED indication: *Disabled; allows for the enabling of movement detection indication outside of service mode.

PIR immunity level: Defines false alarm immunity. The ***Standard** level combines basic immunity with a rapid reaction. The **Increased** level provides higher immunity but the detector reaction is slower.

Taking photos during alarms: No flash, *With flash

Flash intensity: Low, *Medium, High – if the captured scene is over-exposed (e.g. in a small room), the intensity of the flash can be decreased. It can be increased for larger spaces. **Note:** If there are multiple detectors in an installation that can take photos at the same time with high flash intensity (for example, on PG activation), there is a risk of a single high bus power draw, which may cause a short-term bus failure. It is therefore recommended to check and calculate the total consumption.

Send pre-alarm photos: This option is not available when the **Extended LQ** photo quality is selected due to more than double size of the photo and therefore longer transmission time. When this parameter is enabled, the detector will send photos even when the detector is configured with repeated or confirmed reaction and the alarm has not been confirmed. During every entrance delay, up to two photos can be taken when the detector is triggered even when the system has been unset properly.

This option will noticeably increase the volume of data transferred to MyJABLOTRON. If the system is not unset (alarm is triggered), the images taken during the entrance delay will be sent automatically regardless this option.

PG output reaction: You can select PG outputs, whose activation will trigger taking a picture (* No, camera does not react to PG). For further info see *Installation recommendations, cautions*.

Taking a photo by PG activation: No flash, *With flash

Increased number of photos during alarm: When enabled, 3 photos are sent instead of 2 during each alarm event, that means more data transfer between the detector and the control panel and between the control panel and MyJABLOTRON or ARC. This option is for specific markets, so we don't recommend enabling by default.

Sensor of tearing-off from the wall: Enables the option to utilize an external tamper connector if the JA-191PL joint bracket.

Test: takes a test photo (LQ) with a flash and F-Link displays it. When the **Detail** button is pressed, the F-Link software shows the picture in a 640x480 px resolution. Photos are sent to MyJABLOTRON (provided that transferring is enabled).

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Camera and basic reactions:

The process of how the camera takes pictures depends on the settings in the **F-Link** software – the **Devices** tab. Choose a type of **Reaction** on the detector's position.

Instant: During an alarm triggered by the detector, the camera can be activated up to 3 times (then it will be auto-bypassed). Each activation, depending on the detected movement and settings, takes 3 photos maximum. Photos are sent to the control panel (9 photos maximum).

Delayed: The first activation (entrance delay) takes up to 2 photos according to the detected movement and saves them into the internal memory (**Send pre-alarm image** disabled). When alarm is triggered, photos are sent from the internal memory to the control panel. Then the behaviour is the same as with an instant reaction (11 photos maximum).

Warning: When the **Device autobypass / 3rd alarm** is enabled (located in **Settings/Parameters**), then taking photos is blocked after the 3rd alarm. During each alarm the detector can be triggered up to three times. This way, the number of taken and transferred photos can be tripled (18/24 photos). Applies to Instant/Delayed reactions.

Installation recommendations, cautions

Several detectors can be installed in the system. However, triggering several detectors at the same time will extend the transmission time of photos to the control panel and to MyJABLOTRON. Complete transmission can take a few minutes.

In order to take a photo using a PG output, use the **F-Link** software and set the **Impulse** parameter in the **PG outputs / Function** menu to a time of at least 1 min. The PIR is limited to taking 1 requested photo by PG status per minute.

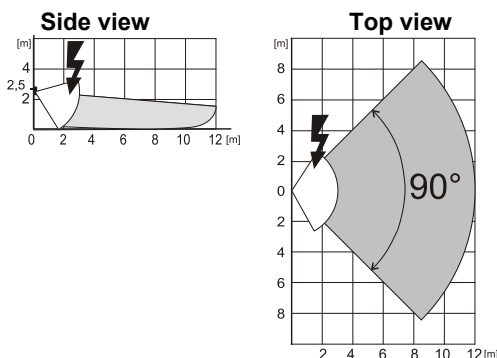
The number of pre-alarm photos taken by a PG output is limited to 40 photos/day/control panel. The photo counter is reset at 00:00 hrs. Alarm photos and photos requested in MyJABLOTRON have no limitation.

In the MyJABLOTRON **Photo gallery / Sending notifications** and in JA-100-Link software all users have access to the photos from all the system sections.

Installation in the corner of a room requires more attention during testing due to possible reflection of flash in the photographed scene (especially in the dark).

Detection characteristics

The PIR detector has a 90°/12m coverage – see the picture below. The detection characteristics of the PIR part has no influence on the camera part of the detector. The lens cannot be changed for other types. The camera has a viewing angle of 90°, the camera flash has a range of 3 m.



Detector with a white lens (JA-122PC) offers standard white light protection as dictated by legislature (up to 6000 Lux). Detectors with a grey (JA-122PC-GR) and black (JA-122PC-AN) lens offer superior white light resistance (up to 10000 Lux).

Saving and browsing the photos

Every photo is taken twice: the first in low resolution (LQ = 320x240 pixels), the second with high resolution (HQ = 640x480 pixels).

All of the exposures are saved into the independent folders Foto_LQ and Foto_HQ on the Micro SD card. When the card's capacity is full, the oldest photos will be replaced by new ones. Photos saved on the Micro SD card can be browsed in a photo browser on a PC.

Note: Some antivirus software may write their own data on the Micro SD card. The detector will automatically format the SD card marked this way. SD card formatting erases all data which has been saved. For more information about formatting see **Formatting the Micro SD card**.

Photos are sent to the control panel in LQ. You can browse through these images in **F-Link** and **JA-100-Link** software **event memory** by clicking on an event called **New image**. Photos are displayed in LQ, if you click on **Detail** you can get second-exposure pictures (HQ). Images can be searched and browsed by a file manager or picture browser. In order

to display the photos this way it is necessary to start **F-Link (JA-100-Link)** software, be logged into the control panel as a service technician or Administrator and then load the control panel memory. **Disc: Flexi_log /Foto.** Here are all the photos which have been sent to the control panel (LQ) and photos which have been requested in **Detail** (HQ).

Transfer photos to MyJABLOTRON

When the SIM card supplied by a device manufacturer (**distributor**) is used and the customer uses MyJABLOTRON services, then the customer has direct access to the photos from this service. Parameter settings of the transfer of pictures are done during the panel registration. All the photos are delivered and visible in MyJABLOTRON. Every single photo can be requested in HQ resolution.

There you can also choose telephone numbers (for SMS) or e-mail addresses which will receive a message when a new picture is taken. MyJABLOTRON can request a new picture without PG output activation (see **Installation recommendations, cautions**).

WARNING: This detector allows you to take photos by PG output reaction or from MyJABLOTRON even when the system is unset. The manufacturer strictly warns the user that the detector has to be used within the limits given by particular laws or norms, especially laws about the protection of personal privacy.

The use of the detector is also subject to regulations on the protection of personal data. The manufacturer recommends the users to familiarize themselves with these regulations as well as with the regulations governing the operation of CCTV before the use of the detector. Furthermore, the manufacturer recommends the users to familiarize themselves with General Terms and Conditions of Cloud JABLOTRON and with Privacy Policy (<https://gdpr.jablotron.cz/>).

According to these regulations users have an obligation to ensure the approval of persons in range of the detector during the acquisition of video recordings or the obligation to indicate the image capture area by information tables.

Installation accessories

JA-196PL-S – Detector wall holder

Should an aesthetic installation be required, it is possible to utilize this installation box which we supply in two colors, white and grey. Using this holder will result in the detector being partially hidden by the wall.

JA-191PL – Joint bracket holder

Intended for special placement of the detectors, such a ceiling or a sloped surface or a greater installation height, the JA-191PL joint bracket holder is a certified accessory which also includes a tamper contact.

JS-7920 – Grey lens


Used to increase the immunity of the PIR detector to white light.

JA-196PL-L – Detector wall holder

If a more aesthetic installation is required, it is possible to use the JA-196PL-L wall bracket, it is supplied in two colours – white and grey. With the use of this bracket it is possible to partially put the detector in a wall or plasterboard wall.

Technical parameters

Power	12 V BUS (8... 15 V)
Current consumption:	
- nominal for the backup supply calculation	5 mA
- maximum for cable choice	250 mA (high flash intensity)
Recommended installation height	2,5 m above floor level
PIR detection angle/detection coverage:	90°/12 m
Horizontal camera capture angle	90°
Range of the flash	max. 3 meters
Camera resolution	LQ 320 x 240; HQ 640 x 480 pixels
Photo size LQ/HQ	5-20kB/5-64kB
Typical (LQ) photo transmission time to the control panel	up to 20 sec. (10 sec.)
Ideal (HQ) photo transmission time to the control panel	up to 130 sec. (60 sec.)
Typical photo transfer time to server	15 s/GPRS; 2 s/LAN
Dimensions, weight	150 x 65 x 44 mm, 125 g
Classification	Security grade 2/Environmental class II (EN 50131-1)
Operational temperature range	-10 °C to +40 °C
Environment	indoor general
Average operational humidity	75% RH, without condensation
Certification body	Trezor Test s.r.o. (no. 3025)
In compliance with	EN 50131-1, EN 50131-2-2, EN 50130-4, EN 55032, EN IEC 63000.

Recommended screw 2 x  3.5 x 40 mm (countersunk head)



JABLOTRON ALARMS a.s. hereby declares that the 1PIRCAM2201MP DEVICE is in a compliance with the relevant Union harmonisation legislation: Directives No: 2014/30/EU, 2011/65/EU. The original of the conformity assessment can be found at www.jablotron.com - Section Downloads.



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.

