

JA-162PC, JA-162PC-GR, JA-162PC-AN Wireless PIR motion detector with a 90° verification camera

Type: 5PIRCAM2202MQ

This device is a wireless 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 photo 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 authorized distributor.

The product is compatible with the JA-102K, JA-103K, JA-107K and JA-152KR control panels.



The photo-verification can be used only after the 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 which quickly change temperature (e.g. heating appliances) or which move (e.g. curtains hanging above a radiator, robotic vacuum cleaners, pets) in the detector's field of sight. It is not recommended installing 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.

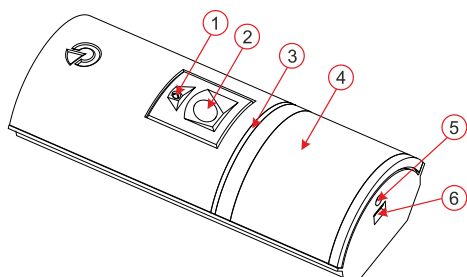


Fig. 1: 1 – Camera flash; 2 – Camera lens; 3 – LED indicator; 4 – PIR detector lens; 5 – locking screw; 6 – cover latch

1. Open the detector cover (by pushing the cover latch (6). Avoid touching the PIR sensor inside (13) – you could damage it.
2. Camera is fixed to the plastic base by right locking screw. Remove the right locking screw (8) and release the PCB by a latch (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 latch facing downwards).
5. Re-insert the PCB and secure it with the latch (14) and supplied locking screw (8).

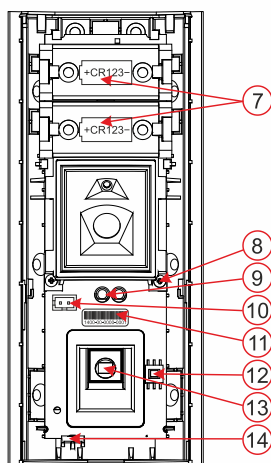


Fig. 2: 7 – battery holder; 8 – camera module locking screw; 9 – LED indicators; 10 – external tamper connector; 11 – serial number; 12 – tamper switch; 13 – PIR sensor; 14 – PCB latch

6. Proceed according to the control panel installation manual.

Basic procedure:

- a. The control panel must contain already enrolled JA-11xR radio module.
- b. Go to the **F-Link** software, select the required position in the **Devices** tab and launch the enrolment mode by clicking on the **Enrol** option.
- c. Insert the batteries (mind the correct polarity). When the second battery has been inserted into the detector, an enrolment signal is transmitted to the control panel and the detector is enrolled to the

selected position. If a battery with not enough charge is inserted into the device, the LED indicator will flash yellow for five minutes at a 2Hz frequency.

- d. If the detector is enrolled as the first PIR camera or the control panel is not connected to MyJABLOTRON, F-Link shows a dialogue window with the 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 only. Then it is impossible to send them to MyJABLOTRON or ARC.

7. Close the detector cover and test its functionality.

Notes:

- When the control panel is in service mode, the detector indicates every movement with the red LED indicator.
- If you want to enrol the detector in the control panel after the battery has already been inserted, remove the battery first and then press and release the tamper contact (12) to discharge the rest of the energy and then enrol the detector.
- The detector can be enrolled by entering the production code (11) 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 order to comply with the EN 50131-2-4 norm, the cover latch (6) must be secured with the supplied screw (5).

Detector internal settings

Settings can be set by **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):

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 alarm: 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, but utilizing this option reduces battery lifetime.

LQ photo quality: *Standard quality uses optimized compression in order to achieve the fastest possible transfer to the ARC or to the end user in MyJABLOTRON. The goal is achieving alarm verification in the fastest time possible. If the quality is switched to **Extended**, the system will use lower image compression which will at least double the time necessary to transfer the image (depends on the conditions of the captured scene). Change the quality only if the LQ image does not have the quality required by the customer – it may depend on the captured space. It is not recommended when there are more verification detectors in the premises which may take images at the same time.

Send pre-alarm photos: *With flash, No flash. 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 2 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 of 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. Utilizing this option reduces battery lifetime.

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

Take a photo: 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).

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

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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.

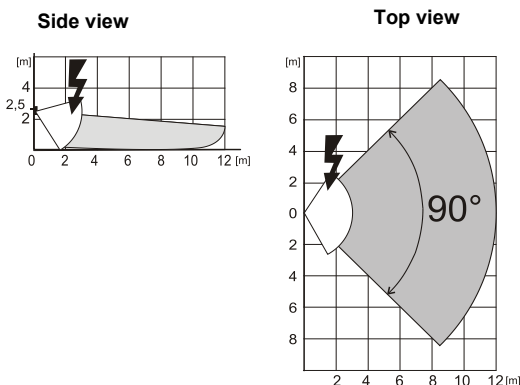
The number of pre-alarm photos taken by a PG output is limited to 40 photos/day/control panel. The photo counter is reset at 00:00 hrs. Alarm photos and photos requested in MyJABLOTRON have no limitation.

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

PIR detector has a 90° / 12 m coverage – see 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.



The white lens detector (JA-162PC) provides standard white light immunity at the level prescribed by the standard (up to 6000 Lux). The detector with a grey (JA-162PC-GR) and black/anthracite (JA-162PC-AN) lens provides enhanced white light immunity well above the prescribed levels of the standard (up to 10,000 Lux).

Saving and browsing the pictures:

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 onto the detector's internal memory. When the memory card's storage capacity is full, the oldest photos will be replaced by new ones.

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*. This file contains 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.

You can also set up MyJABLOTRON SMS/PUSH/email notifications to be sent when a picture is taken on. Furthermore, MyJABLOTRON allows the user to request a new photo without activating the PG output (see the Installation recommendations, cautions section).

MyJABLOTRON respects the photo verification rights of individual users according to the sections to which these users have access (e.g. as a user of section 1 cannot view images from section 2).

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.

Changing the batteries

The detector monitors its own batteries and when they are depleted, it will inform you about this with a brief flash of the LED indicator when the detector is triggered. This information is also delivered to the control panel. We recommend changing the batteries within two weeks from the moment the low battery indication starts. The batteries should be replaced by a service technician with the control panel in Service mode. Always replace both batteries for new ones.

Note: To ensure a proper functionality of the detector we recommend using batteries supplied by Jablotron distributors (BAT-3V0-CR123A) or other quality branded lithium batteries.

Do not throw the batteries in the trash. Deliver them to a civic amenity site instead.

Installation accessories

JA-196PL-L – Detector wall holder

If a design 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.

JA-191PL – Joint bracket holder

Intended for special placement of the detectors, such as 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 which is meant to be connected to the external tamper contact (Fig. 2, 10).

JS-7920 – Grey lens

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

Technical parameters

Power	2x lithium battery, type CR123A (3 V / 1.5 Ah) Please note: Batteries are not included
Typical batteries lifetime	approx. 2 years (1 activation and 1 series of photos a day)
LowBatt voltage	≤ 2,6 V
Quiescent current consumption	90 µA
Maximum current consumption	700 mA
Communication	868,1 MHz, protocol JABLOTRON
Maximum radiofrequency power (ERP)	< 25 mW
Recommended installation height	2,5 m
Communication range	approx. 300 m (open area)
PIR Detection angle / detection coverage:	90° / 12 m
Range of the flash	max. 3 meters
Resolution of the camera	LQ 320 x 240; HQ 640 x 480 pixels
Photo size LQ/HQ (typically)	5-20 kB/5-64 kB
Typical (LQ) photo transmission time to the control panel	up to 30 s (15 s)
Typical (HQ) photo transmission time to the control panel	up to 180 s (90 s)
Typical photo transfer time to the server	15 s/GPRS; 2 s/LAN
Dimensions	150 x 65 x 44 mm
Weight (without batteries)	130 g
Operational temperature range	-10 °C to +40 °C
Environment	indoor general
Average operational humidity	75 % RH, non-condensation
Classification	security grade 2/environmental class II (according to EN 50131-1) Trezor Test s.r.o. (no. 3025)
Certification body	EN 50130-4, EN 50131-1, -2, -2, -5, -3, -6, EN 55032,
In compliance with	ETSI EN 300 220-1, -2, EN IEC 62368-1, EN IEC 63000
Can be operated according to	ERC REC 70-03
Recommended screw	2x  3,5 x 40 mm (countersunk head)



JABLOTRON a.s. hereby declares that 5PIRCAM2202MQ is in a compliance with the relevant Union harmonization 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: 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.

