# MotionCam (PhOD) Jeweller user manual

Updated May 26, 2026



**MotionCam (PhOD) Jeweller** is a wireless IR motion detector supporting **Photo by alarm, Photo on demand, Photo by scenario, Photo by schedule**, and **Photo by arming/disarming features**. Intended for indoor installation. It can recognise movement at a distance of up to 12 meters. Ignores pets when installed and set up correctly.

⚠ A hub is required for the detector to operate.

List of compatible hubs and range extenders

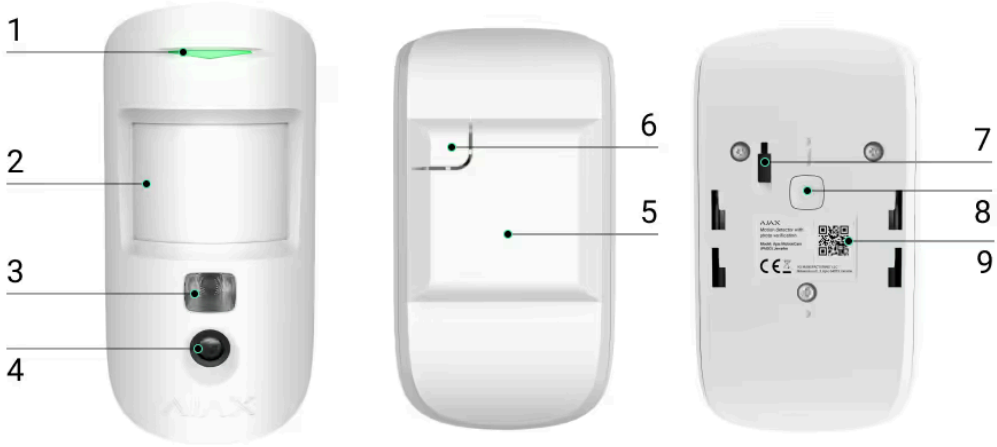
MotionCam (PhOD) Jeweller works as part of the Ajax system, communicating with the hub over two secure radio protocols: the detector uses Jeweller to transmit alarms

and events, and Wings to transmit photos. The hub communication range is up to 1,700 meters in an open space.

**Buy MotionCam (PhOD) Jeweller motion detector**

A version of the detector without the support of **Photo on demand**, **Photo by scenario**, **Photo by schedule**, and **Photo by arming/disarming** features is also available.

## Functional elements




1. LED indicator.
2. Motion detector lens.
3. Infrared backlight. Used to take photos in dark and low-light conditions.
4. Camera.
5. SmartBracket mounting panel. To remove the panel, slide it down.
6. Perforated part of the mounting panel. Necessary to trigger a tamper in case of any attempt to detach the detector from the surface. Do not break it off!
7. Tamper button. Triggers when an attempt is made to detach the detector from the surface or remove it from the mounting panel.
8. Power button of the detector.
9. Detector QR code. Used to connect to the Ajax system.

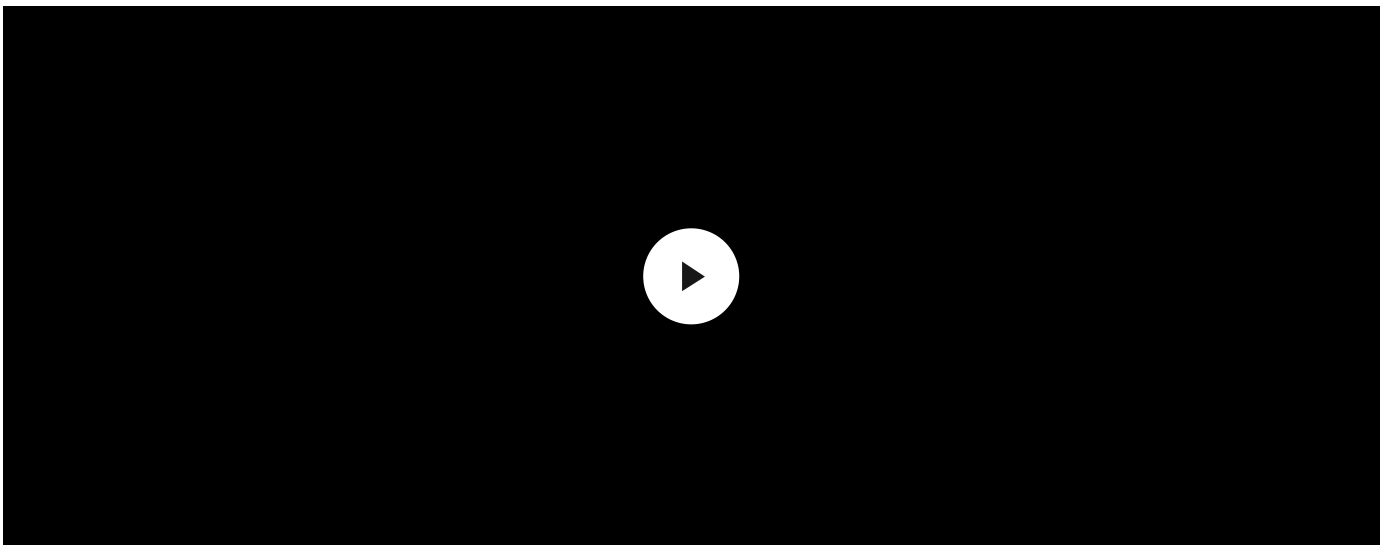
## Compatible hubs and range extenders

MotionCam (PhOD) Jeweller requires a hub to operate.

Check devices compatibility

Connection to other hubs, radio signal range extenders, ocBridge Plus and uartBridge is not provided.

## Operating principle



MotionCam (PhOD) Jeweller is a wireless motion detector supporting photo verification. It detects movement in the secure area with an infrared sensor by capturing moving objects with a temperature close to the human body. After a motion is detected, the built-in camera takes a series of photos, allowing you to dynamically assess what is happening at the site, saving users from unnecessary anxiety and security companies from false calls of patrol.

When an armed detector identifies motion, it instantly sends an alarm to the hub, which activates the sirens connected to the system, triggers scenarios, and notifies users and the security company. All MotionCam (PhOD) Jeweller alarms and events are recorded in the notification feed of the Ajax app.

Users know exactly where motion is detected. The notifications contain the hub name (name of the secured facility), name of the device, and virtual room to which the detector is assigned.

How does Ajax notify users about alarms

Learn more about Ajax motion detectors

# Photo verification

Photo verification allows you to assess what is happening in the secured facility with a built-in camera, which can take from 1 to 5 images with a resolution of 160 × 120 and 320 × 240, as well as up to 3 images with a resolution of 640 × 480 pixels.

The **HDR image** feature improves the accuracy of detail in bright and dark scenes, allowing you to capture detailed images regardless of the lighting level. To do this, MotionCam (PhOD) Jeweller takes two shots with different shutter speeds, and a special algorithm combines them to select the best combination of light and shadow.

The **HDR image** feature is available for devices with the 16.59.36.5 firmware version or later[1].

[1] Contact your Ajax supplier or authorized partner to check the availability in your region.

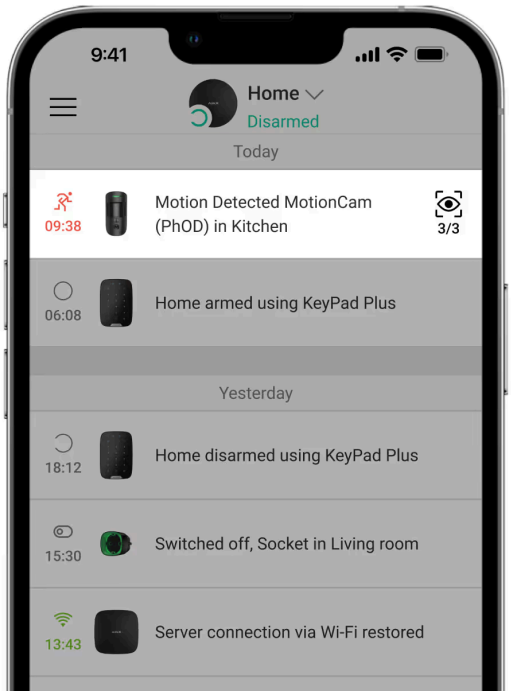
With photo verification, you can receive visual confirmations of alarms from MotionCam (PhOD) Jeweller and other Ajax devices. You can also check the situation: find out what the children are doing, check if your pet is OK, or simply monitor the situation at home.

The detector has an infrared backlight for shooting in the dark, which activates with insufficient light. MotionCam (PhOD) Jeweller takes black and white photos when shooting in these conditions.

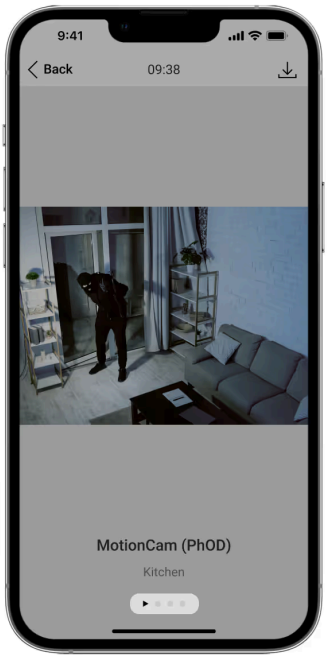


There are several types of photo verification: photo by alarm, photo by scenario, photo on demand, photo by schedule, and photo by arming/disarming.

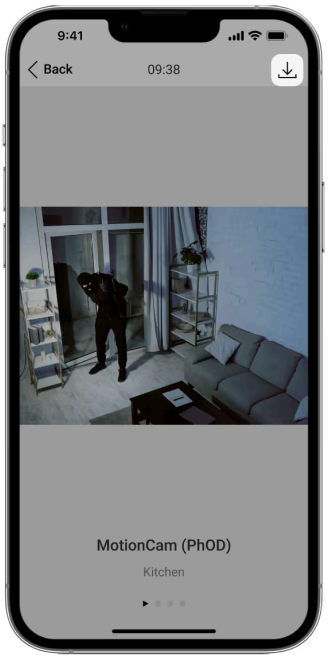
The photos can be displayed in the app as an image or animated series (if more than 1 photo is taken). The number of images in the series can be set up in Ajax apps. To view the received photos, click on the corresponding MotionCam (PhOD) Jeweller notification in the event feed.



The images from the animated series can be viewed frame by frame by clicking the icon at the bottom of the screen.




A photo verification can be saved as a video or photo by clicking the download icon.



# Photo by alarm

MotionCam (PhOD) Jeweller alarms can be accompanied by an image or an animated series in Ajax apps. The detector takes photos only in armed mode.

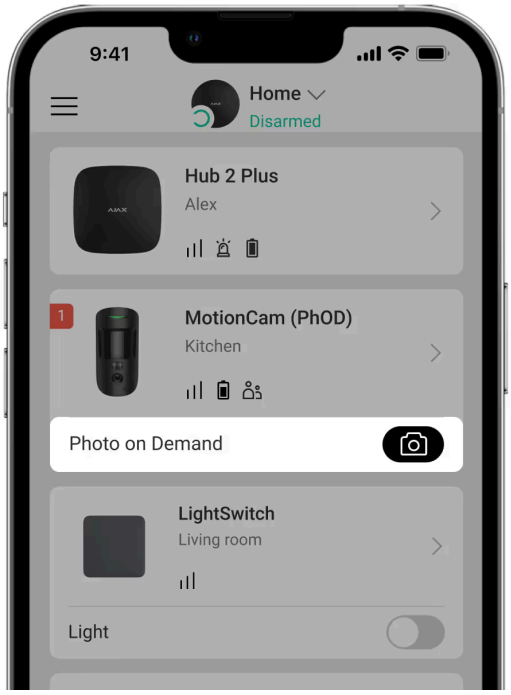
The **Photo by alarm** feature is enabled for all detectors by default. The first ten alarms are accompanied by an animated series of three images with a 320 × 240 pixels resolution. The number of images and their resolution can be changed in the detector's settings. Photos by alarm are available to all users with access to the event feed.

The detector does not switch to the armed mode instantly. The switching time depends on two factors: the exit delay (specified in the detector settings) and the hub–detector ping interval (hub settings, **Jeweller** section).

In the first case, the delay is set by an administrator or a PRO user with system configuration rights. In the second case, the delay occurs because the hub takes one ping interval to notify the detector about the security mode changing.

Features of alarm photo verification

# Photo on demand




The **Photo on demand** feature allows users to take pictures with the built-in cameras of detectors with photo verification. With this feature, you can check the situation at the facility: find out what the children are doing, check if your pet is OK, or simply monitor the situation at home. Depending on the settings, photos can be taken at any time or when MotionCam (PhOD) Jeweller is armed.

By default, the **Photo on demand** feature is disabled for all users. Users with the right to manage privacy settings (hub settings, **Privacy** section) determine who can take and view photos on demand and which detectors with photo verification can take pictures. PRO users cannot manage privacy settings, but they can take photos on demand if granted such permission.

### Learn more about privacy settings in an Ajax system

Privacy settings do not apply to photos taken by detectors triggered in case of an alarm. All system users who have access to the hub event feed can view the photos taken in case of an alarm.

Photos on demand are not sent to the security company monitoring station.

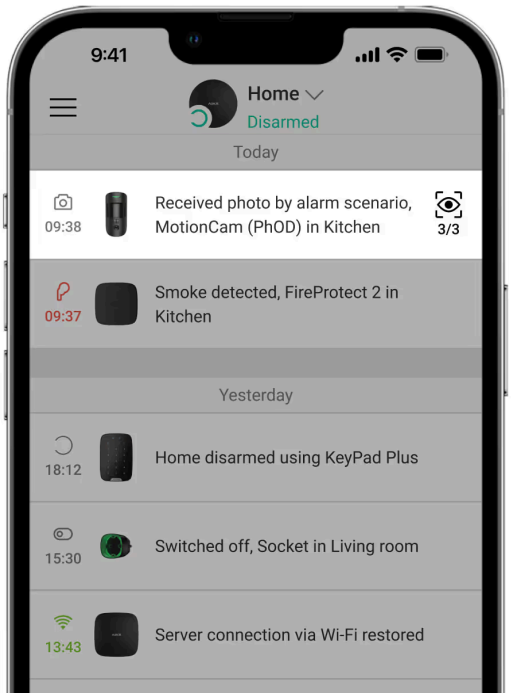
PRO Desktop users can take and view photos on demand only from a personal account if a hub administrator has granted them the appropriate access rights. Taking

and viewing photos on demand is not available for a security company profile in the PRO Desktop app.

More about the Photo on demand feature

How to set Photo on demand

## Photo by scenario




The **Photo by scenario** feature allows you to create a scenario for motion detectors with photo verification. These detectors will take pictures in case of alarms from specified Ajax devices.

By default, the **Allow photos by scenarios** option is disabled for all detectors. A hub admin or a user with access to privacy settings can enable it.

In the system settings, you can also set exactly when a detector with photo verification can take pictures according to a scenario: always or when MotionCam (PhOD) Jeweller is armed.

Photos by scenario are available to all users of the system with access to the event feed. The event of taking a photo after the alarm from specified devices is sent to the

security company monitoring station via **SIA DC-09** (**SIA-DCS**) and other proprietary protocols. The event code is 730.

The photos taken by scenario are available to the CMS engineers if the CMS software supports photo verification. Photos by scenario are also available in the PRO Desktop app.

⚠ Photos by scenario will not be sent to the CMS if only a direct connection with the monitoring station is used.

More about the Photo by scenario feature

How to set up Photo by scenario

## Photo by schedule

The **Photo by schedule** feature allows you to create a scenario for motion detectors with photo verification. These detectors will take pictures by schedule.

Enable the Allow photos by scenarios option before creating a scheduled scenario. A hub admin or a user with access to privacy settings can enable this option.

You can precisely set when a detector with photo verification can take pictures according to a scheduled scenario: always or when it is armed.

Photos taken by schedule are available to all system users with access to the event feed. The event of taking a photo is sent to the CMS via **SIA DC-09** (**SIA-DCS**) and other proprietary protocols. The event code is 731.

If the CMS software supports photo verification, photos taken by schedule are available to the CMS engineers. These photos are also available in PRO Desktop.

⚠ Photos taken by schedule are not sent to the CMS if only a direct connection with the monitoring station is used.

How to set up photo by schedule

## Photo by arming/disarming

The **Photo by arming/disarming** feature allows users to receive photos from a built-in camera when the security state changes. With this feature, you can check the situation at the facility when the system is armed, disarmed, or switched to **Night mode**.

Before creating an arming/disarming scenario, enable the Allow photos by scenarios option. A space admin or a user with access to privacy settings can enable this option.

The **Photo by arming/disarming** scenario is available in the hub's settings with OS Malevich 2.29 and later. The feature allows you to configure conditions under which the selected detectors take photos: when arming, when disarming, when Night mode is enabled, or when Night mode is disabled. Also, you can set up whether to consider or ignore entry/exit delays.

Photos by arming/disarming are available to all system users with access to the event feed. The event of taking a photo is sent to the CMS via **SIA DC-09 (SIA-DCS)** and other proprietary protocols. The event code is 732.

If the CMS software supports photo verification, the CMS engineers can access photos by arming/disarming. These photos are also available in PRO Desktop.

⚠ Photos by arming/disarming will not be sent to the CMS if only a direct connection with the monitoring station is used.

How to set up Photo by arming/disarming

## Jeweller and Wings data transfer protocols

Jeweller and Wings are two-way wireless data transfer protocols that provide fast and reliable communication between hub and devices. The detector uses Jeweller to transmit alarms and events. Wings are used to transmit photos.

Both protocols support encryption and authentication to prevent forgery. Connection with devices is monitored via a system of hub–detector polls. Their statuses are

displayed in real-time in the Ajax apps. The polling frequency is set by a user or a PRO with system configuration rights.

Learn more

## Photo delivery time

The photo delivery time to Ajax apps depends on the selected resolution, detector connection to the radio signal range extender, Wings signal strength, and the Internet connection speed. The alarm messages are delivered immediately.

| Photo resolution | Delivery time[1] | | |
|---|---|---|---|
| | When connected directly to the hub[2] | When connected to the hub using ReX 2 (ReX 2 transmits photos via Wings)[3] | When connected to the hub using ReX 2 (ReX 2 transmits photos via Ethernet)[4] |
| 160 × 120 pixels | up to 7 seconds | up to 8 seconds | up to 6 seconds |
| 320 × 240 pixels (default) | up to 9 seconds | up to 18 seconds | up to 10 seconds |
| 640 × 480 pixels | up to 20 seconds | up to 31 seconds | up to 16 seconds |

*[1] The detector needs up to 3 seconds to start the Photo on Demand shooting.*
*[2] The delivery time of one photo when the signal strength between the hub and MotionCam (PhOD) Jeweller is 2–3 bars and the hub is connected via Ethernet, Wi-Fi or 4G.*
*[3] Values were calculated with a signal strength of 3 bars between ReX 2 and the detector or between the hub and ReX 2. The hub works via Ethernet, Wi-Fi or 4G.*
*[4] Values were calculated with a signal strength of 3 bars between ReX 2 and the detector. The hub is connected via Ethernet, Wi-Fi or 4G.*

## Temperature compensation

The detector perceives people and other objects as heat spots. The device monitors these heat spots and, if they move, registers an alarm. Under ideal conditions, the human body temperature (36.6°C on average) differs from the ambient temperat and their contrast allows the motion detector to accurately record the movement of a person.

In situations where the ambient temperature is very close to the human body temperature, the detector may not work properly and may give false alarms. Temperature compensation is used in all Ajax motion detectors, so MotionCam (PhOD) Jeweller detects motion over the entire operating temperature range.

Learn more about temperature compensation

## Pet immunity

When properly installed and configured, MotionCam (PhOD) Jeweller does not react to animals up to 50 centimeters tall and weighing up to 20 kilograms.



The detector is installed **at a height of 2.4 meters** without any obstruction to its view — for example, in the corner of the room, where the view won't be blocked by closets or other furniture.

The correct setting also requires a proper choice of the detector sensitivity:

- **High** — the detector does not respond to cats (up to 25 cm tall).
- **Medium** — it does not respond to small dogs (up to 35 cm tall).
- **Low** — it does not respond to animals up to 50 cm tall.

If MotionCam (PhOD) Jeweller is installed below the recommended height, then the animals will move in the hypersensitive zone. The detector can raise the alarm if a dog

walks on its hind legs or jumps on an armchair. It will also raise the alarm if the animal can jump to the level of the detector or move near it.

Why motion detectors react to animals and how to avoid this

How to install MotionCam (PhOD) Jeweller correctly

## Sending events to the monitoring station

The Ajax system can transmit alarms to the Ajax PRO Desktop monitoring app as well as the central monitoring station (CMS) in the formats of **SurGard (Contact ID), SIA DC-09 (SIA-DCS), ADEMCO 685**, and other proprietary protocols. A complete list of supported protocols is available here.

More about the Ajax PRO Desktop monitoring app

Which CMSs can the Ajax system be connected to

**MotionCam (PhOD) Jeweller can transmit the following events:**

1. Motion alarm.
2. MotionCam (PhOD) visual alarm verifications.
3. Photo by scenario.
4. Photo by schedule.
5. Photo by arming/disarming.
6. Tamper alarm / recovery.
7. Loss / restoration of connection with the hub.
8. Deactivation / activation of the detector.
9. Unsuccessful attempt to arm the security system (with the system integrity check enabled).

Photos on demand are not sent to the security company monitoring station.

PRO Desktop users can take and view photos on demand only from a personal account if a hub administrator has granted them the appropriate access rights. Taki and viewing photos on demand is not available for a security company profile in the PRO Desktop app.

When an alarm is received, the operator of the security company monitoring station knows exactly what happened and where to send the rapid action team. The addressability of each Ajax device allows you to send not only events to PRO Desktop or CMS but also the type of the device, its name, and the virtual room to which the detector is assigned. Note that the list of transmitted parameters may differ depending on the type of CMS and the selected protocol for communication with the monitoring station.

The ID and the number of the device can be found in its states in the Ajax app.

Photos are sent to the security company monitoring station if the CMS software supports photo verification. A list of such CMSs is available here. At the same time, Ajax PRO Desktop supports receiving photo verification without additional setup.

## Adding to the system

## Before adding a device

1. Install an Ajax app.
2. Log in to an account or create a new one.
3. Select a space or create a new one.

   What is a space

   How to create a space
4. Add at least one virtual room.
5. Add a compatible hub to the space. Ensure the hub is switched on and has internet access via Ethernet, Wi-Fi, and/or mobile network.
6. Check the statuses in the Ajax app to ensure the space is disarmed, and the hub is not starting an update.

## How to add MotionCam (PhOD) Jeweller

Only a user or a PRO with administrator rights can connect MotionCam to the hub.

1. Open the Ajax app. Select the space to which you want to add the device.
2. Go to the **Devices** tab and click **Add Device**.
3. Name the detector, scan, or type in the **QR code** (placed on the detector enclosure and the package box), select a room and a group (if Group mode is enabled).



4. Press **Add**.
5. Switch on the device by holding the power button for 3 seconds.

To connect MotionCam (PhOD) Jeweller to the hub, the detector must be located at the same secured facility as the system (within the range of the hub radio network). For the detector to work via the ReX 2 radio signal range extender, you must first add the detector to the hub, then connect it to ReX 2 in the settings of the range extender.

How to connect a device to ReX 2

The detector connected to the hub will appear in the list of hub devices in the Ajax app. Updating the statuses of devices in the list depends on the **Jeweller** (or **Jeweller/Fibra**) settings; the default value is 36 seconds.

If the connection fails, turn the detector off and try again in 5 seconds. Note that if the maximum number of devices has already been added to the hub (depending on the hub model), you will be notified when you try to add a new one.

The hub and the device operating at different radio frequencies are incompatible. The radio-frequency range of the device may vary by region. We recommend purchasing

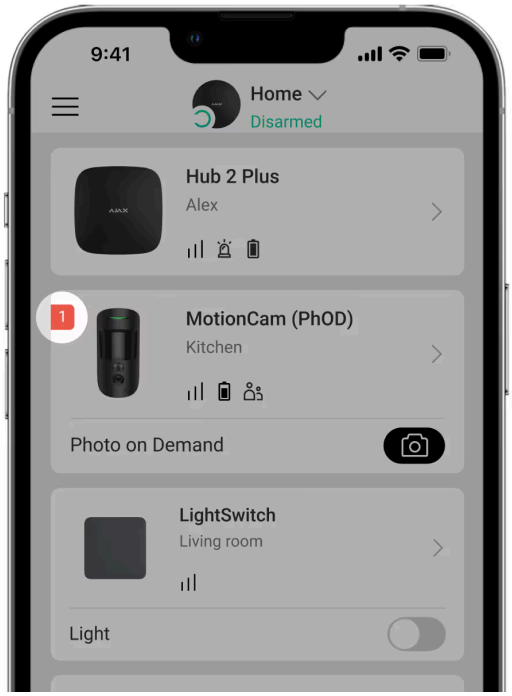
and using Ajax devices in the same region. You can check the range of operating radio frequencies with the technical support service.

MotionCam (PhOD) Jeweller only works with one hub. When connected to a new hub, the detector stops sending commands to the old one. When added to a new hub, the detector is not removed from the device list of the old hub. This must be done through the Ajax app.

## Malfunctions

When a malfunction is detected (for example, there is no connection via Jeweller), the Ajax app displays a malfunction counter on the device icon.

All malfunctions are shown in the detector states. Fields with malfunctions will be highlighted in red.




**A malfunction is displayed if:**

- The detector temperature is out of acceptable limits: below –10°C and above +40°C.
- The detector enclosure is open (tamper is triggered).

- No connection with the hub or radio signal range extender via Jeweller.
- No connection with the hub or radio signal range extender via Wings.
- The detector battery is low.

## Icons

The icons display some of MotionCam (PhOD) Jeweller states. You can view them in the Ajax app in the **Devices** tab.

| Icon | Meaning |
|---|---|
|  | Jeweller signal strength. Displays the signal strength between the hub and the detector. The recommended value is 2–3 bars.<br><br>Learn more |
|  | Battery charge level of the detector.<br><br>Learn more |
|  | The detector has a malfunction. The list of malfunctions is available in the detector states.<br><br>Learn more |
|  | Displayed when the detector is operating via a radio signal range extender. |
|  | The detector operates in the **Always Active** mode.<br><br>Learn more |
| <br> | Entry and/or exit delay is enabled.<br><br>Learn more |
|  | MotionCam (PhOD) Jeweller will be armed when **Night Mode** is enabled.<br><br>Learn more |
|  | MotionCam (PhOD) Jeweller has detected motion. The icon is displayed when the detector is armed. |
|  | The device is in the signal attenuation test mode.<br><br>Learn more |
|  | MotionCam (PhOD) Jeweller is disabled.<br><br>Learn more |

| | |
|---|---|
| | MotionCam (PhOD) Jeweller has been deactivated due to exceeding the preset number of alarms.<br><br>Learn more |
| | MotionCam (PhOD) Jeweller has tamper triggering events deactivated.<br><br>Learn more |
| Offline | The device has lost connection with the hub or the hub has lost connection with the Ajax Cloud server. |
| Not transferred | The device has not been transferred to the new hub.<br><br>Learn more |

## States

The states include information about the device and its operating parameters. The states of MotionCam (PhOD) Jeweller can be found in the Ajax app:

1. Go to the **Devices** tab.
2. Select **MotionCam (PhOD) Jeweller** from the list.

| Parameter | Value |
|---|---|
| Data import | Displays the error when transferring data to the new hub:<br><br>• **Failed** — the device has not been transferred to the new hub.<br><br>Learn more |
| Malfunction | Clicking on (i) opens the MotionCam (PhOD) Jeweller malfunctions list.<br><br>The field is displayed if a malfunction is detected. |
| Temperature | Detector temperature. It is measured on the processor and changes gradually.<br><br>The acceptable measurement error between the value in the app and the ambient temperature is 2°C.<br><br>The value is updated as soon as the detector identifies a temperature change of at least 2°C.<br><br>You can configure a scenario by temperature to control automation devices<br><br>Learn more |

| | |
|---|---|
| Jeweller Signal Strength | Signal strength between the hub or range extender and the detector on the Jeweller channel. The recommended value is 2–3 bars.<br><br>Jeweller is a protocol for transmitting MotionCam (PhOD) Jeweller events and alarms. |
| Connection via Jeweller | Connection status on the Jeweller channel between the hub or the range extender and the detector:<br><br>• **Online** — the detector is connected to the hub or the range extender.<br>• **Offline** — the detector is not connected to the hub or the range extender. |
| Wings Signal Strength | Signal strength between the hub or the range extender and the detector on the Wings channel. The recommended value is 2–3 bars.<br><br>Wings is a protocol for transmitting MotionCam (PhOD) Jeweller photo verifications. |
| Connection via Wings | Connection status on the Wings channel between the hub or the range extender and the detector:<br><br>• **Online** — the detector is connected to the hub or the range extender.<br>• **Offline** — the detector is not connected to the hub or the range extender. |
| Transmitter power | Displays the selected power of the transmitter.<br><br>The parameter appears when the **Max** or **Attenuation** option is selected in the **Signal attenuation test** menu.<br><br>Learn more |
| Battery Charge | The battery charge level of the device:<br><br>• **OK**<br>• **Battery low**<br><br>When the batteries are low, the Ajax apps and the security company will receive appropriate notifications.<br><br>After sending a low battery notification, the detector can work for up to 2 months.<br><br>How the battery charge is displayed<br><br>Battery life calculator |
| Lid | The status of the detector tamper that responds to detachment or opening of the device enclosure:<br><br>• **Open** — the detector was removed from the SmartBracket or its integrity compromised.<br>• **Closed** — the detector is installed on the SmartBracket mounting panel. The integrity of the device enclosure and the mounting panel is not compromised. Normal state. |

| | |
|---|---|
| | Learn more |
| Always Active | When this option is enabled, the detector is constantly armed, detects motion, and raises alarms.<br><br>Learn more |
| Sensitivity | Sensitivity level of the motion detector:<br><br>• **Low** — it does not respond to animals up to 50 cm tall.<br>• **Normal** (by default) — it does not respond to small dogs (up to 35 cm tall).<br>• **High** — the detector does not respond to cats (up to 25 cm tall). |
| Permanent Deactivation | Shows the status of the device permanent deactivation function:<br><br>• **No** — the device works in the normal mode.<br>• **Lid only** — the hub administrator has disabled notifications about triggering of the device tamper.<br>• **Entirely** — the detector is entirely excluded from the operation of the system. The device does not execute system commands and does not report alarms or other events.<br>• **By number of alarms** — the device is automatically disabled when the preset number of alarms is exceeded (specified in the Devices Auto Deactivation settings).<br><br>Learn more |
| Photo on Demand | Displayed if **Photo on Demand** is enabled in the hub settings in the **Privacy** section.<br><br>Learn more |
| **Alarm Reaction** | |
| Operating Mode | Shows how the detector reacts to alarms:<br><br>• **Instant Alarm** — the armed detector immediately reacts to a threat and raises the alarm.<br>• **Entry/Exit** — when a delay is set, the armed device starts the countdown and doesn't raise the alarm even if triggered until the countdown ends.<br>• **Follower** — the detector inherits the delays from Entry/Exit detectors. However, when the Follower is triggered individually, it immediately raises the alarm. |
| Delay When Entering, sec | Delay time when entering: from 5 to 120 seconds.<br><br>Delay when entering (alarm activation delay) is the time the user has to disar… security system after entering the secured area.<br><br>Learn more |

| | |
|---|---|
| Delay When Leaving, sec | Delay time when leaving: from 5 to 120 seconds.<br><br>Delay when leaving (arming delay) is the time the user has to leave the secured area after the security system arming.<br><br>Learn more |
| Night Mode Delay When Entering, sec | Delay time when entering in the **Night Mode**: from 5 to 120 seconds.<br><br>Delay when entering (alarm activation delay) is the time the user has to disarm the security system after entering the premises.<br><br>Learn more |
| Night Mode Delay When Leaving, sec | Delay time when leaving in the **Night Mode**: from 5 to 120 seconds.<br><br>Delay when leaving (arming delay) is the time the user has to leave the premises after the security system arming.<br><br>Learn more |
| Firmware | Detector firmware version. |
| ID | Detector ID. Also available on the QR code on the detector enclosure and its package box. |
| Device № | Number of the device loop (zone). |

## Settings

To change MotionCam (PhOD) Jeweller settings in the Ajax app:

1. Go to the **Devices** tab.
2. Select **MotionCam (PhOD) Jeweller** from the list.
3. Go to **Settings** by clicking on the gear icon.
4. Set the required parameters.
5. Click **Back** to save the new settings.

An Ajax system enables PROs to apply multiple preconfigured settings to a group of devices simultaneously via setting templates.

Learn more about settings templates

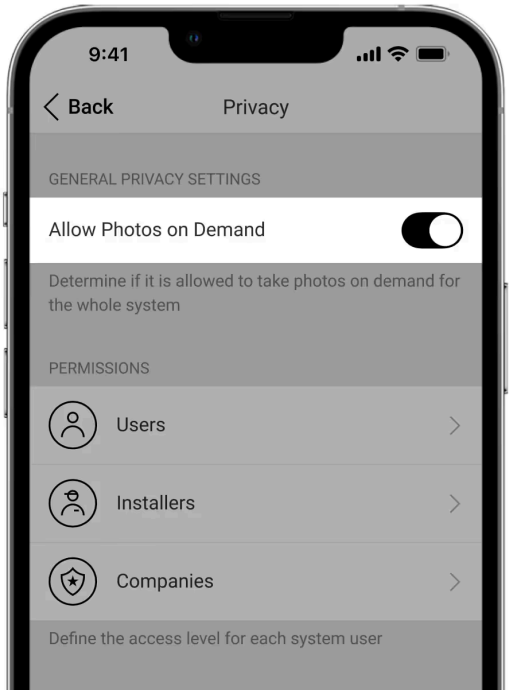
| Settings | Value |
|---|---|
| Name | Detector name. Displayed in the list of hub devices, SMS text, and notifications in the event feed.<br><br>To change the detector name, click on the pencil icon .<br><br>The name can contain up to 12 Cyrillic characters or up to 24 Latin characters. |
| Room | Selecting the virtual room to which the MotionCam (PhOD) Jeweller is assigned.<br><br>The name of the room is displayed in the SMS text and notifications in the event feed. |
| Alarm LED indication | When the option is disabled, the LED indicator of the detector doesn't notify about alarms or tamper triggering. |
| Sensitivity | Sensitivity level of the motion detector.<br><br>The choice depends on the type of the object, the presence of probable sources of false alarms, and the specifics of the secured area:<br><br>• **Low** — it does not respond to animals up to 50 cm tall.<br>• **Normal** (by default) — it does not respond to small dogs (up to 35 cm tall).<br>• **High** — the detector does not respond to cats (up to 25 cm tall).<br><br>Why motion detectors react to animals and how to avoid this |
| Image resolution | Selecting the image resolution (in pixels):<br><br>• 160 × 120<br>• 320 × 240 (default)<br>• 640 × 480<br><br>The higher the resolution, the more detailed the image is, but it takes longer to transfer the photos. The setting extends to visual alarm verification, photo on demand, photos by schedule, arming/disarming, or scenario.<br><br>Learn more |
| Photos by Alarm | Selecting the number of photos in case of an alarm:<br><br>• No photo<br>• 1 photo<br>• Series of 2<br>• Series of 3<br>• Series of 4 (only available with 320 × 240 or 160 × 120 resolutions)<br>• Series of 5 (only available with 320 × 240 or 160 × 120 resolutions)<br><br>Applies to MotionCam (PhOD) Jeweller photos by alarm and by scenario. |

| | |
|---|---|
| Alarms with photo verification | Selecting the number of alarms accompanied by photos.<br><br>You can specify 1 to 10 alarms or set up the transmission of a photo each time the device is triggered.<br><br>An alarm counter with photo verification is reset when the security system is disarmed and re-armed.<br><br>The setting is available if the **Always active** option is disabled. When the detector is in the **Always active** mode, it will transmit a photo every time it is triggered. |
| Photos on Demand | Select the number of photos on demand:<br><br>• 1 photo<br>• Series of 2<br>• Series of 3<br>• Series of 4 (only available with 320 × 240 or 160 × 120 resolutions)<br>• Series of 5 (only available with 320 × 240 or 160 × 120 resolutions) |
| Always Active | When this option is enabled, the detector is always in the armed mode and detects motion.<br><br>Learn more |
| HDR image | When enabled, the device improves the accuracy of detail in bright and dark scenes.<br><br>The **HDR image** feature is available for devices with the 16.59.36.5 firmware version or later. |
| Alert with a siren if motion is detected | When this option is enabled, the sirens **added to the system** are activated when motion is detected by the MotionCam (PhOD) Jeweller. |
| Scenarios | Opens the menu for creating and setting scenarios for the MotionCam (PhOD) Jeweller detector. The menu allows you to create a scenario where the detector takes pictures when specified Ajax devices are triggered or by schedule.<br><br>Learn more |
| **Alarm Reaction** | |
| Operating Mode | Specify how this device will react to alarms:<br><br>• **Instant Alarm** — the armed detector immediately reacts to a threat and rai the alarm.<br>• **Entry/Exit** — when a delay is set, the armed device starts the countdown and doesn't raise the alarm even if triggered until the countdown ends. |

| | |
|---|---|
| | • **Follower** — the detector inherits the delays from Entry/Exit detectors. However, when the Follower is triggered individually, it immediately raises the alarm. |
| Delay When Entering, sec | Delay time when entering: from 5 to 120 seconds.<br><br>Delay when entering (alarm activation delay) is the time the user has to disarm the security system after entering the secured area.<br><br>Learn more |
| Delay When Leaving, sec | Delay time when leaving: from 5 to 120 seconds.<br><br>Delay when leaving (arming delay) is the time the user has to leave the secured area after the security system arming.<br><br>Learn more |
| Arm in Night Mode | If this option is enabled, the detector will go into the armed mode when the system is set to the **Night Mode**.<br><br>Learn more |
| Night Mode Delay When Entering, sec | Delay time when entering in the **Night Mode**: from 5 to 120 seconds.<br><br>Delay when entering (alarm activation delay) is the time the user has to disarm the security system after entering the premises.<br><br>Learn more |
| Night Mode Delay When Leaving, sec | Delay time when leaving in the **Night Mode**: from 5 to 120 seconds.<br><br>Delay when leaving (arming delay) is the time the user has to leave the premises after the security system arming.<br><br>Learn more |
| Jeweller Signal Strength Test | Switches the detector to the Jeweller signal strength test mode.<br><br>The test allows you to check the signal strength between the hub or the range extender and the detector via the Jeweller wireless data transfer protocol to determine the optimal installation location.<br><br>Learn more |
| Wings Signal Strength Test | Switches the detector to the Wings signal strength test mode.<br><br>The test allows you to check the signal strength between the hub or the range extender and the detector via the Wings wireless data transfer protocol to determine the optimal installation location.<br><br>Learn more |
| Detection Zone Test | Switches the detector to the detection zone test mode. |

| | |
|---|---|
| | The test enables users to check how the detector responds to movement and determine the optimal installation location.<br><br>Learn more |
| Signal Attenuation Test | Switches the device to the signal attenuation test mode.<br><br>During the test, the transmitter power is decreased or increased to simulate a change in the environment to test the stability of communication between the detector and the hub.<br><br>Learn more |
| User Guide | Opens the MotionCam (PhOD) Jeweller User Manual in the Ajax app. |
| Permanent Deactivation | Allows the user to disable the device without removing it from the system.<br><br>Three options are available:<br><br>• **No**.<br>• **Entirely** — the device does not execute system commands and does not participate in automation scenarios, and the system ignores alarms and other device notifications.<br>• **Lid only** — the system ignores the detector tamper triggering notifications.<br><br>More about permanent deactivation<br><br>The system can also automatically deactivate devices when the preset number of alarms is exceeded.<br><br>More about auto deactivation |
| Unpair Device | Unpairs the detector, disconnects it from the hub, and deletes its settings. |

# Setting up the Photo on demand feature




A hub admin or a user with access to privacy settings can enable and configure the **Photos on demand** feature. To do this, in the Ajax app:

1. Select the facility if you have several of them.
2. Go to the **Devices** tab and select a hub.
3. Click the gear icon to go to the hub **Settings**.
4. Select the **Privacy** menu and enable the **Allow photos on demand** option.
5. Select the user category:
   - Users
   - Installers (PRO app users)
6. Select a specific user or a PRO. A list of cameras, DVRs, and detectors with photo verification added to the hub will open.
7. Select the detector to which you want to provide access.
8. Enable the **Take & View Photo** option.
9. Specify when the user can take on-demand photos: always or when MotionCam (PhOD) is armed.
10. Click **Back** to save the settings.
11. Repeat steps 6–10 for any other detectors to which you want to provide access.

Also, you can use the **Bulk access management** feature to grant and revoke permissions for multiple users, installers, or companies, as well as for multiple

devices at once.

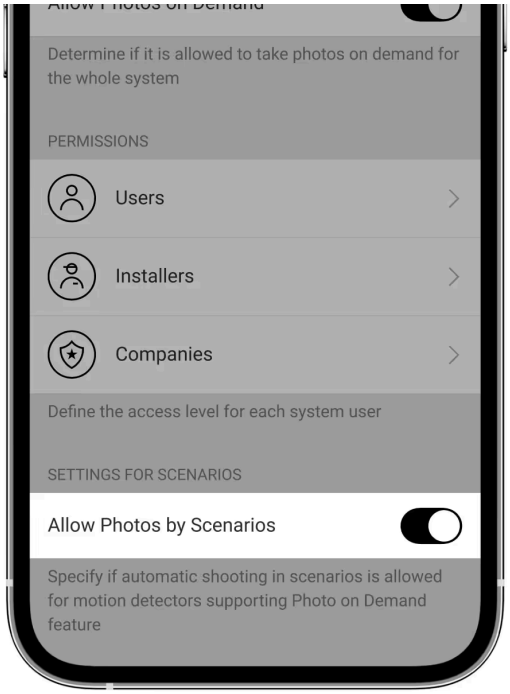
### How to configure permissions using Bulk access management

After saving the privacy settings, all users with access to the event feed will receive a notification about who has received access rights, and which user has granted these rights.

Learn more

## Setting up the Photo by scenario feature

### How to enable Photo by scenario




A hub admin or a user with access to privacy settings can enable the **Photo by scenario** feature. To do this, in the Ajax app:

1. Select the facility if you have several of them.
2. Go to the **Devices** tab and select a hub.
3. Click on the gear icon to go to the detector **Settings**.
4. Select the **Privacy** menu and enable the **Allow photos by scenario** option.
5. Click **Back** to save the settings.

Learn more

## How to create a scenario for taking photos in case of alarms from specified devices

A hub admin or PRO with system configuration rights can create and set up a scenario. To do this:

1. In the Ajax app, select the facility if you have several or if you are using a PRO app.
2. Go to the **Devices** tab and select a detector with photo verification.
3. Click on the gear icon to go to the detector **Settings**.
4. Select the **Scenarios** item from the list.
5. Define Ajax devices and the types of alarms for which the MotionCam (PhOD) will take photos.
6. Click **Next**.
7. Specify:
   - Name of the scenario.
   - Number of devices that trigger a scenario (available if there are two or more Ajax devices in the system):**Any** — the scenario will run if at least one device triggers.**All selected** — the scenario will run if all selected devices trigger.
   - Triggering time for all devices (the parameter is available if in the **Devices triggering the scenario** block the **All selected** option is specified).To start the scenario, all selected devices should raise the alarm within the specified time. If the devices don't raise the alarm within the specified time, the timer will reset, and the scenario will not run.
   - When the detector can take photos: always or when it is armed. By default, MotionCam (PhOD) Jeweller takes photos by scenario only in the armed mode.

   ⚠ Note that only the hub admin can specify when the detector takes photos.

8. Click **Save**. The scenario will appear in the list of device scenarios.

⚠ The scenario will not be executed if the **Allow photos by scenario** option is disabled in the privacy settings (hub settings, **Privacy** menu).

To delete or edit a scenario, click on it in the list. You can also disable the scenario with a toggle next to the scenario name: its settings will be saved but not executed after the alarm from other devices.

> ⚠ Permanently disabled (PhOD) detectors cannot take photos by scenario, and permanently disabled devices do not trigger the scenario for taking photos.
>
> More about permanent deactivation

## Setting up the Photo by schedule feature

A hub admin or PRO with system configuration rights can create and set up a scheduled scenario. To do this:

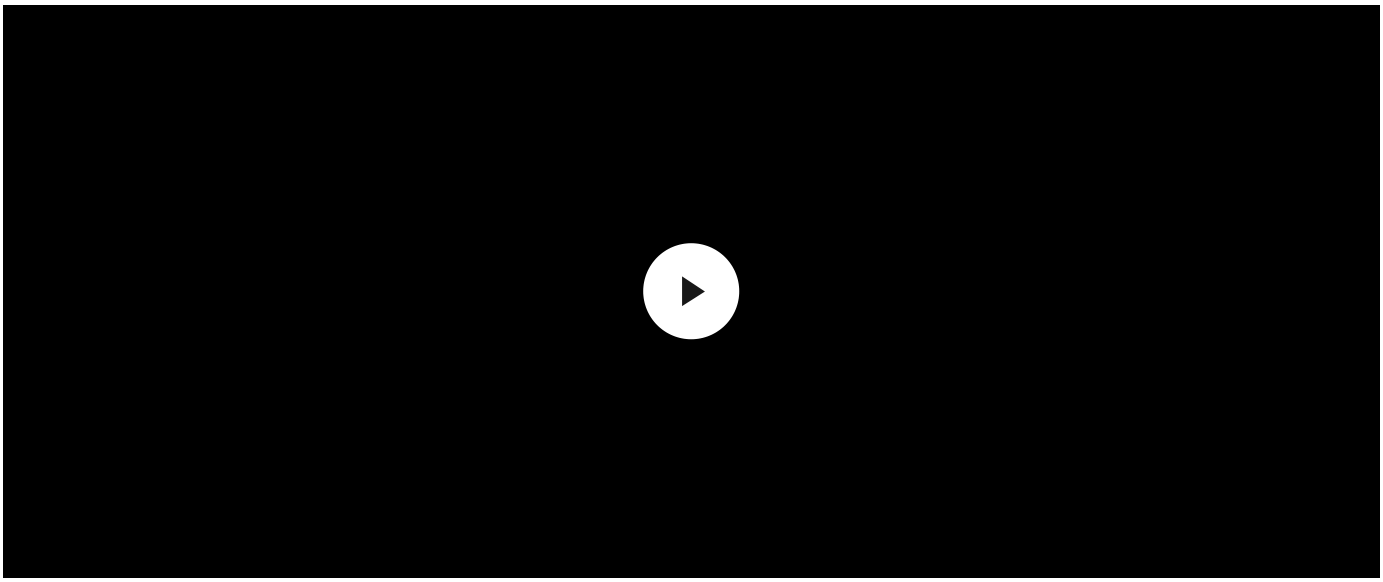
1. Open the Ajax app and select the facility if you have several or if you are using the Ajax PRO app.
2. Go to the **Devices** tab and select a detector with photo verification.
3. Click on the gear icon to go to the detector **Settings**.
4. Select the **Scenarios** item from the list.
5. Select the scenario type **By schedule**.
6. Specify:
   - Name of the scenario.
   - Device action — only **Take photo** by default. The quantity of photos equals the quantity of **Photos on demand** in settings.
   - Execution time — 24h or 12h format, depending on the device time format. Click the field to set the defined time for the detector.
   - Repeat — click the field to set the day of the week.
   - When the detector can take photos: always or when the system is armed. By default, MotionCam (PhOD) Jeweller takes photos by schedule only in the armed mode.

   > ⚠ Note that only the hub admin can specify when the detector takes photos.

7. Click **Save**. The scenario will appear in the list of device scenarios.

# Indication

The MotionCam (PhOD) Jeweller LED indicator may light up red or green, depending on the status of the detector.



## Indication upon pressing the power button

| Indication | Event |
|---|---|
| Lights up green. | Turning the detector on. |
| Lights up red and then flashes three times. | Turning the detector off. |

## Enabled detector indication

| Indication | Event | Note |
|---|---|---|
| Lights up green for 1 second. | Motion alarm/tamper triggering. | The detector records movement once every 5 seconds. |
| Lights up green for 0.5 seconds. | Taking photos on demand/by scenario. | When taking a photo on demand or by scenario, the indicator lights up even if the LED indication is turned off in the detector settings. |
| Lights up green for a few seconds. | Connecting the detector to the hub. | |
| Lights up red and blinks after the first activation. | Hardware error. | The detector needs to be repaired, pl contact our Technical Support. |

| | | |
|---|---|---|
| In case of an alarm, it slowly lights up green and goes out. | Detector batteries need to be replaced. | The procedure for replacing the batteries is described in the article How to replace the batteries in the MotionCam (PhOD) Jeweller detector. |
| Blinks green frequently. | The batteries are completely discharged. The detector stopped detecting motion and transmitting alarms to the hub. | The procedure for replacing the batteries is described in the article How to replace the batteries in the MotionCam (PhOD) Jeweller detector. |

## Functionality testing

The Ajax system provides several types of tests to make sure that installation place is chosen correctly. MotionCam (PhOD) Jeweller tests do not start straight away but not later than over a single hub–detector ping interval (36 seconds by default). You can change the ping interval of devices in the **Jeweller** menu of the hub settings.

**To run a test, in the Ajax app:**

1. Select the required space.
2. Go to the **Devices** tab.
3. Select **MotionCam (PhOD) Jeweller** from the list.
4. Go to **Settings**.
5. Select a test:
   - Jeweller Signal Strength Test
   - Wings Signal Strength Test
   - Detection Zone Test
   - Signal Attenuation Test
6. Run the test.

## Detector placement

The device is designed for indoor use only.

When choosing where to place MotionCam (PhOD), consider the parameters that affect its operation:

- Motion detection zone.
- The camera's viewing angle and the presence of obstacles in front of it.
- Jeweller and Wings signal strength.
- Distance between the detector and the hub.
- Presence of obstacles for radio signal passage: walls, interfloor ceilings, large objects located in the room.

Consider the recommendations for placement when developing a project for the security system of the facility. The security system must be designed and installed by specialists. A list of recommended partners is available here.

## Signal strength

The Jeweller and Wings signal strength is determined by the number of undelivered or corrupted data packages over a certain period of time. The icon ||| on the **Devices** tab indicates the signal strength:

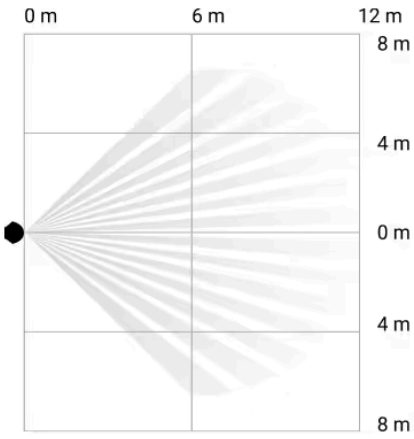
- **Three bars** — excellent signal strength.
- **Two bars** — good signal strength.
- **One bar** — low signal strength, stable operation is not guaranteed.
- **Crossed out icon** — no signal.

⚠ Check the Jeweller and Wings signal strength before final installation. With a signal strength of one or zero bars, we do not guarantee stable operation of the device. Consider to relocate the device as repositioning even by 20 cm can significantly improve the signal strength. If there is still poor or unstable signal after the relocation, use ReX 2 radio signal range extender. **MotionCam (PhOD) Jeweller is incompatible with ReX radio signal range extenders**.

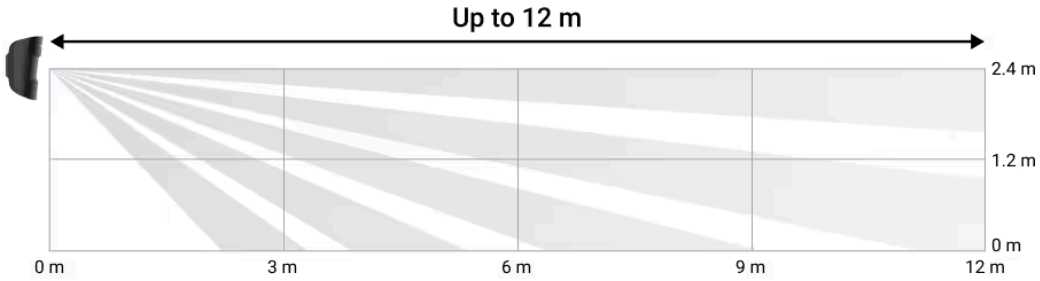
## Detection zone

When choosing the installation place, consider the direction of the lens, viewing angles of the detector and camera, and the presence of obstacles impairing the view.

The intended path of the intruder must be perpendicular to the axis of the detector's lens. Ensure that furniture, house plants, vases, decorative or glass elements do not obstruct the view of the detector.




Horizontal viewing angle of the detector




Vertical viewing angle of the detector

When installing the detector, perform the Detection Zone Test. This allows you to check the operation of the device and accurately determine the sector in which the detector registers motion.

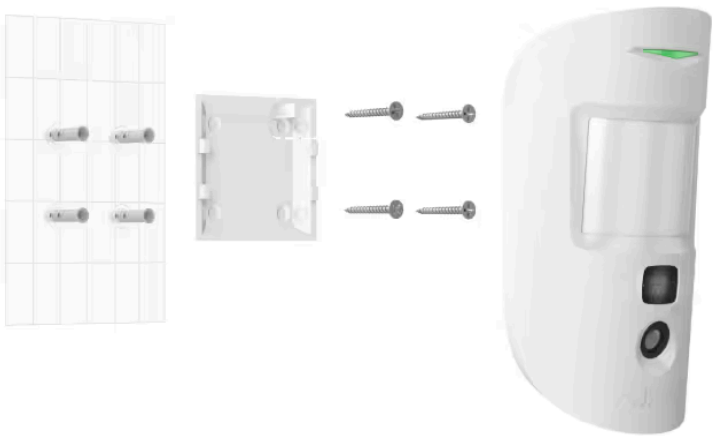
Take several photos with MotionCam (PhOD) camera at the installation site to ensure that the detector captures the required area.

## Do not install the detector

1. Outdoors. This can lead to false alarms and detector failure.
2. In the direction where direct sunlight hits the detector lens. This can lead to false alarms.

3. Opposite any objects with rapidly changing temperature like any electric or gas heater. This can lead to false alarms.
4. Opposite any moving objects with a temperature close to the human body. For example, in front of swaying curtains above a radiator. This can lead to false alarms.
5. In places with fast air circulation. For example, near fans, open windows, or doors. This can lead to false alarms.
6. In places where objects and structures can block the detector's view. For example, behind a flower or a column. In this case, the view will be limited, and it will be more difficult for MotionCam (PhOD) to detect motion.
7. In places where glass structures may block the detector's view. MotionCam (PhOD) does not register motion behind glass.
8. Inside premises with temperature and humidity outside the permissible limits. This could damage the detector.

## Installation and connection

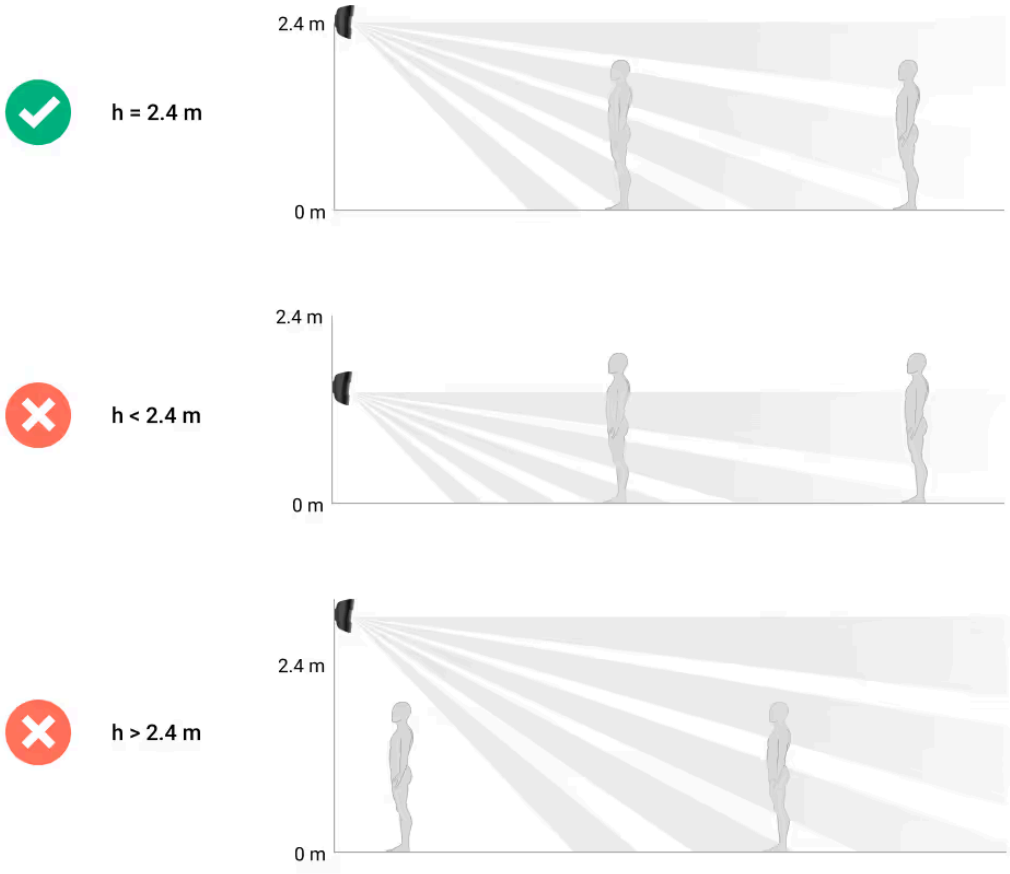


⚠ Before installing MotionCam (PhOD) Jeweller, ensure that you have selected the optimal location that complies with the requirements of this manual.

**To mount a detector:**

1. Remove the SmartBracket mounting panel from the detector by sliding it down.

2. Fix the SmartBracket panel using double-sided tape or other temporary fasteners. The panel can be mounted on a vertical surface or in a corner of the room. **The installation height is 2.4 meters**.




⚠ Double-sided tape can only be used for temporary installation. The device attached by the tape may come unstuck from the surface at any time. As long as the device is taped, the tamper will not be triggered when the device is detached from the surface.

3. Run the Jeweller and Wings signal strength tests. The recommended signal strength is two or three bars. If the signal strength is low (a single bar), we do not guarantee stable operation of the device. Consider to relocate the device as repositioning even by 20 cm can significantly improve the signal strength. If there is still poor or unstable signal after the relocation, use ReX 2 radio signal range extender.
4. Run the Detection zone test. To check the motion detector, walk around the premises while observing the LED and determine the detection zone of the

detector. The maximum range of motion detection is 12 meters. If the detector did not respond to movement during the test in 5 out of 5 cases, relocate the device.

5. Take some test photos to make sure that the camera is capturing the required area and no obstacles are blocking its view.
6. SmartBracket has special holes that need to be drilled to fix the panel with the bundled screws. Attach the SmartBracket mounting panel with the bundled screws using all fixation points (one of them is in the perforated part of the mounting panel above the tamper). When using other fasteners, make sure they do not damage or deform the mounting panel.
7. Place the detector on the SmartBracket mounting panel.

## Maintenance

Check the functioning of the detector on a regular basis. The optimal frequency of checks is once every three months. Clean the device enclosure of dust, cobwebs, and other contaminants as they emerge. Use a soft dry wipes suitable for equipment care.

Do not use substances that contain alcohol, acetone, gasoline, and other active solvents to clean the detector. Wipe the detector lens and camera gently: scratches can result in decreased sensitivity of the detector, poor-quality images, and camera failure.

MotionCam (PhOD) Jeweller runs for up to 4 years with bundled batteries when **Photo on demand** toggle **is disabled** and up to 3 years when **Photo on demand** toggle **is enabled**. The security system will send an early warning about replacing the batteries. In case of an alarm, the LED will slowly light up green and go out.

MotionCam battery life and what affects it

How to replace MotionCam (PhOD) Jeweller detector batteries

## Technical specifications

All technical specifications of MotionCam (PhOD) Jeweller

Compliance with standards

# Warranty

Warranty for the Limited Liability Company “Ajax Systems Manufacturing” products is valid for 2 years after the purchase.

If the device does not function correctly, please contact the Ajax Technical Support first. In most cases, technical issues can be resolved remotely.

Warranty obligations

User agreement

**Contact Technical Support:**

- e-mail
- Telegram



# Need help?

Explore the full potential of an Ajax system through detailed manuals, articles, tools, and FAQs. For immediate assistance, our AI-powered chatbot and professional technical support team are available 24/7.

Ask a question

## Subscribe

Subscribe to our emails about secure life. No spam.

Subscribe

## Request extra help

support@ajax.systems

@AjaxSystemsSupport_Bot

Ask a question

Trustpilot

Rating 4.8

4,500,000

people worldwide under Ajax protection

Suggest a feature

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Intrusion protection

Video surveillance

Fire and life safety

Comfort and automation

## Software

Ajax Security System

Ajax PRO: Tool for Engineers

Ajax Desktop

Ajax PRO Desktop

All products
Services
System integrations
Ajax Ready products
Fibra wired protocol
Ajax radio protocols

Ajax TV
Ajax Translator PRO
Ajax Cloud Signaling
Ajax Media Player
Scenarios

Available on App Store

Available on Google Play

## Solutions

Customer stories
Solutions by facility type
Commercial fire detection and alarm system
Wireless Grade 3 solution
Video surveillance solution
Integration with Yale smart locks
Upgrades and retrofits
Why Ajax
How it works

## Support

Manuals and articles
Compliance with standards

## Tools

Ajax device compatibility
CMS software compatibility
Ajax Services availability
Video storage calculator
Video device calculator
Battery life calculator
Radio communication range calculator
Switches and outlets configurator
Fibra power supply calculator
All web tools

## Monitoring solutions and integrations

Intrusion alarm monitoring
Video monitoring and visual alarm verification
Audio alarm verification

## Company

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Ajax Next

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