

MotionCam (PhOD) Fibra user manual

Soon to be: Superior MotionCam (PhOD) Fibra

Updated August 16, 2024



MotionCam (PhOD) Fibra is a wired IR motion detector supporting **Photo by Alarm**, **Photo on Demand**, **Photo by Scenario**, and **Photo by Schedule** features. The device is designed for indoor use only. Detects movement at a distance of up to 12* meters. Ignores pets when installed and configured correctly.



An Ajax hub is required for the detector to operate. MotionCam (PhOD) Fibra is compatible with [Hub Hybrid \(2G\)](#) and [Hub Hybrid \(4G\)](#) on [OS Malevich 2.15.2](#) or higher. Connection to other [hubs](#), [radio signal range extenders](#), [ocBridge Plus](#), and [uartBridge](#) is not provided.

MotionCam (PhOD) Fibra is part of an Ajax system and exchanges data with the hub using the secure Fibra wired communication protocol. Wired communication

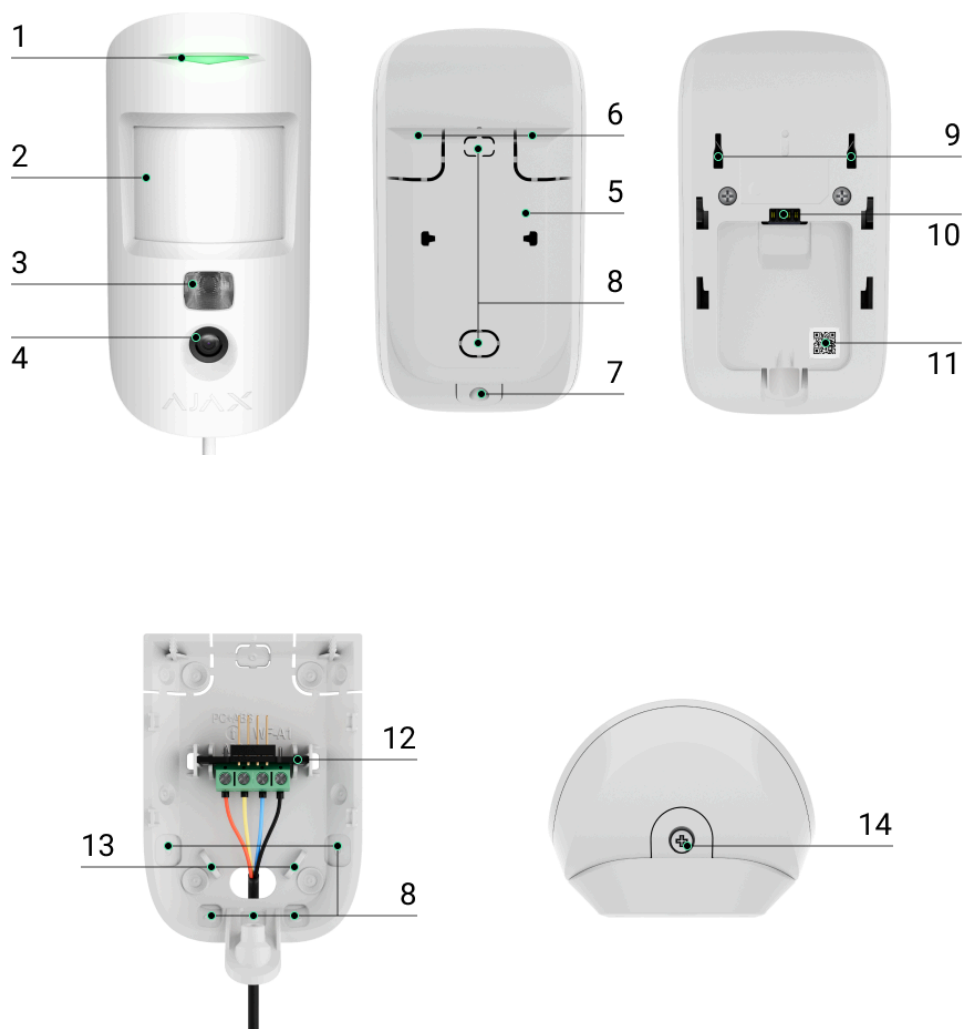
can be up to 2,000 meters long when connected using the U/UTP cat.5 twisted pair cable.

MotionCam (PhOD) Fibra relates to the Fibra product line of wired devices. Only accredited Ajax Systems partners can buy, install, and administer Fibra products.

Buy MotionCam (PhOD) Fibra

* – for INCERT compliance 10 meters (very high sensitivity)

Functional elements

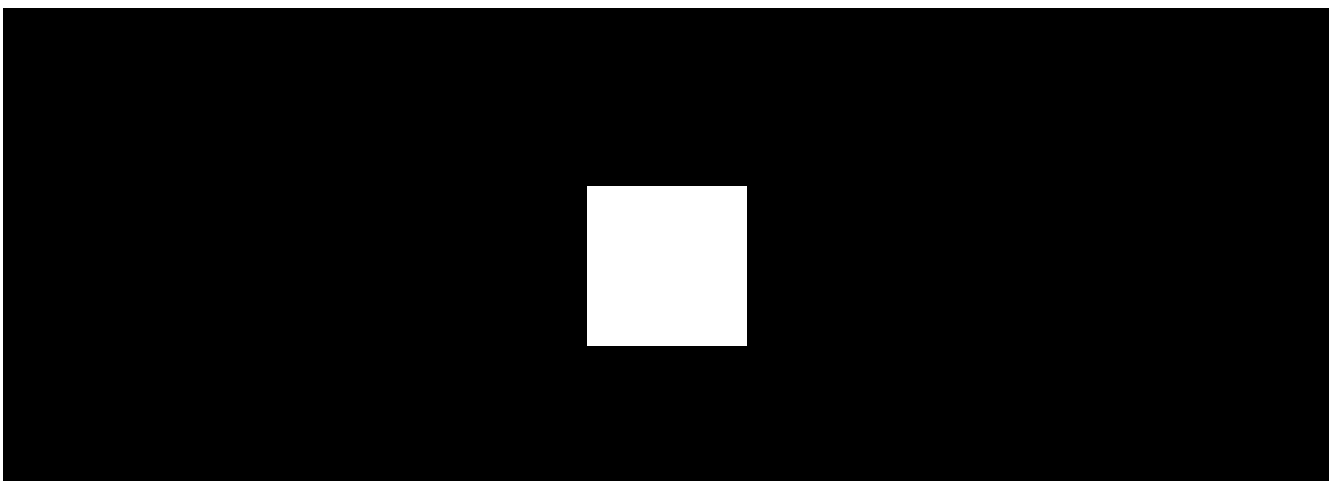


1. LED indicator.

2. Motion detector lens.

3. Infrared (IR) 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 parts of the mounting panel. Necessary to trigger a tamper in case of any attempt to detach the detector from the surface. Do not break them off!
7. The hole for attaching the SmartBracket mounting panel with a screw.
8. Places for the cables.
9. Tamper button. Triggers when an attempt is made to detach the detector from the surface or remove it from the mounting panel.
10. Terminal strip connection socket.
11. QR code with the device ID. It is used to pair the device with an Ajax hub.
12. Terminal strip for the detector connection.
13. The holes to secure the wires with wire ties.
14. Captive screw. It is used to fix the detector on the mounting panel.

Operating principle



00:00

00:12

MotionCam (PhOD) Fibra is a wired motion detector supporting photo verification. After detecting motion, it takes a series of images, which allows you to assess

what is happening at the facility in dynamics. This relieves users of unnecessary anxiety and security companies of unnecessary patrol despatches.

When an armed detector identifies motion, it instantly sends an alarm to the hub. Control panel activates the [sirens](#) connected to the system, triggers [scenarios](#), and notifies users and the security company. The Ajax app's log displays all the alarms and events. The notifications contain the hub's name, the device's name, and the [virtual room](#) to which the detector is assigned.

MotionCam (PhOD) Fibra is equipped with a tamper button and a battery. The tamper reacts if someone tries to break or open the lid of the enclosure. If it triggers, the notification is sent to the [Ajax apps](#). The battery is used when the detector takes a photo, activates an IR backlight, and transmits an alarm. This reduces the current consumption on the line to which the detector is connected and increases the autonomy of the detector and the system.

[How Ajax notifies of alerts](#)

[More about Ajax motion detectors](#)

[What is the tamper](#)

Fibra data transfer protocol

The detector uses Fibra technology to transmit alarms and events. It is a wired data transfer protocol for fast and reliable two-way communication between the hub and connected devices.

[Learn more about Fibra protocol](#)

Photo verification

Photo verification allows you to assess what is happening in the facility. Four types of photo verification for MotionCam (PhOD) are available:

- Photo by Alarm.

- Photo on Demand.
- Photo by Scenario.
- Photo by Schedule.

The detector takes **Photo by Alarm** only if the motion is detected and only when the armed mode is on. By default, the **Photo by Alarm** feature is enabled for all detectors.



The detector does not switch to armed mode instantly. The switching time depends on two factors: the exit delay (specified in the detector settings) and the hub–detector ping interval. The ping interval specified in the hub settings , **Jeweller/Fibra** section, by default its meaning is 36 seconds.

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

Features of alarm photo verification

The **Photo on Demand** feature is useful for checking the situation at the facility. Depending on the settings, photos can be taken anytime or when MotionCam (PhOD) is armed. By default, the **Photo on Demand** feature is disabled for all users.

More about the Photo on Demand feature

How to configure Photo on Demand

When **Photo by Scenario** is enabled, MotionCam (PhOD) takes pictures in case of alarm from specified Ajax devices. By default, the **Photo by Scenario** feature is disabled for all detectors.

More about the Photo by Scenario feature

How to configure Photo by Scenario

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

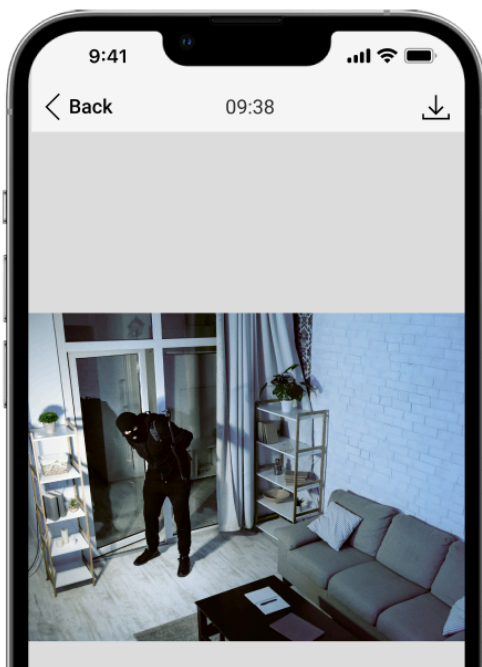
How to configure Photo by Schedule



Ajax Systems also has the detector without the support of **Photo on Demand**, **Photo by Scenario**, and **Photo by Schedule** features. This product is called MotionCam Fibra.

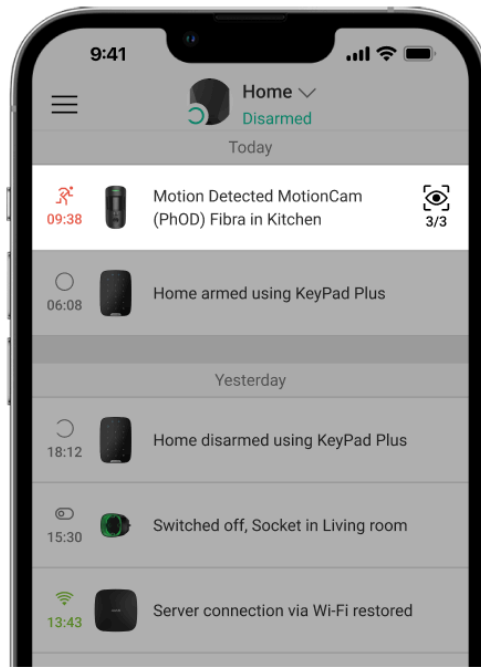
A built-in camera can take from 1 to 5 images with a resolution of 160 × 120 and 320 × 240 pixels, as well as up to 3 images with a resolution of 640 × 480 pixels.

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



Photos are played back in the application as a photo or animated series (if more than 1 photo is taken). The number of pictures is configured in Ajax apps. To view

the received photos, click on the MotionCam (PhOD) Fibra notification in the event feed.



You can view all the photos from the animated series individually by clicking on the icon at the bottom of the screen.



You can save photo verification as video or images by clicking the download icon.



Photo delivery time

The photo delivery time to Ajax apps depends on the image resolution, Fibra signal strength, and Internet connection speed. The alarm messages are delivered immediately, regardless of the settings.

The table shows the delivery time for one photo when the signal strength between the hub and MotionCam (PhOD) is 2–3 bars, and the hub is connected via Ethernet or 4G (LTE).

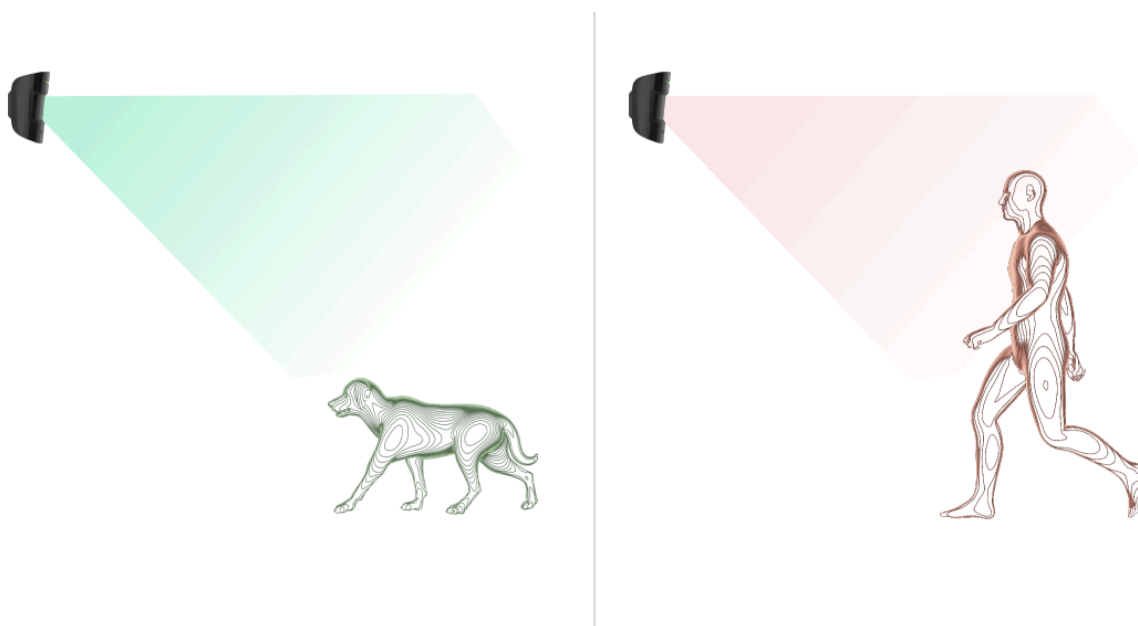
Photo resolution	Delivery time
160 × 120 pixels	up to 7 seconds
320 × 240 pixels (default)	up to 9 seconds
640 × 480 pixels	up to 20 seconds

Temperature compensation

Temperature compensation is necessary for the detector's response to movements, even if the room temperature is close to the human body temperature. Read more about temperature compensation in [this article](#).

Pet immunity

When properly installed and configured, MotionCam (PhOD) does not react to pets weighing up to 20 kg and below 50 cm in height. To [install](#) and [configure](#) the detector, follow our recommendations.



[Why motion detectors react to animals and how to avoid it](#)

Sending events to the monitoring station

The Ajax security system can transmit alarms to the [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 protocols](#).

[Which CMS the Ajax security system can be connected to](#)

MotionCam (PhOD) Fibra can transmit the following events:

1. Motion alarm.
2. MotionCam (PhOD) Fibra alarm photo verifications.
3. Photo by Scenario.
4. Tamper alarm. Tamper recovery.
5. Loss of connection with the hub. Restoration of connection.
6. Permanent Deactivation / activation of the detector.
7. Alarm due to loss of the main power. Restoration of the main power.

The Ajax devices are addressable, meaning that PRO Desktop app and CMS receive events, device type, assigned name, and location (room, group). The list of transmitted parameters may differ depending on the type of CMS and the selected communication protocol.



You can find the device ID, loop (zone) number, and the line number in the device [States](#).

Photos are sent to the security company monitoring station if the CMS software supports photo verification. A list of such CMSs is [available here](#).



[PRO Desktop](#) supports receiving photo verification without additional setup.

Selecting the installation site

When choosing a spot to install MotionCam (PhOD), consider the parameters that affect the operation of the device:

- Fibra signal strength.
- The length of the cable used to connect the detector to the hub.



- Motion detection zone.
- The camera's viewing angle and the presence of obstacles in front of it.

Follow these [recommendations](#) when designing the Ajax system project for an object. The security system should be designed and installed by professionals. The list of authorized Ajax partners is [available here](#).

MotionCam (PhOD) Fibra cannot be installed

1. Outdoors. This could damage the detector.
2. In places where objects and structures may obstruct the detector's and the camera's view. For example, behind a flower or a column.
3. In places where glass structures may obstruct the detector's view; it doesn't detect movement behind glass.
4. Facing the window to avoid direct sun rays hitting the detector lens. This can lead to false alarms of the motion detector on the armed mode.
5. Opposite any objects with rapidly changing temperature – for example, electric and gas heaters, air conditioners. This can lead to false alarms of the motion detector on the armed mode.
6. Opposite any moving objects with a temperature close to that of the human body – for example, opposite the swinging curtains above a radiator. This can lead to false alarms of the motion detector on the armed mode.
7. In places with fast air circulation – for example, near fans, air conditioners, open windows, or doors. This can lead to false alarms of the motion detector on the armed mode.
8. Inside premises with temperature and humidity values that do not correspond to the operating parameters. This could damage the detector.
9. In places with low or unstable Fibra signal strength.

Fibra signal strength

Fibra signal strength is determined by the ratio of the number of undelivered or corrupted data packages to those expected over a specific time. The icon  in the **Devices**  tab in Ajax apps 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; stable operation is not guaranteed.

The following factors affect the signal strength:

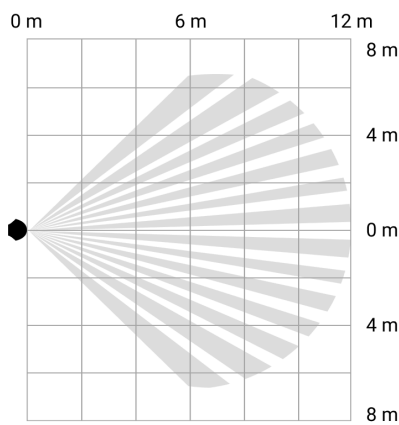
- The number of devices on the Fibra line.
- Cable length and type.
- The correctness of the wire connections to the terminals.

What is Fibra Signal Strength Test

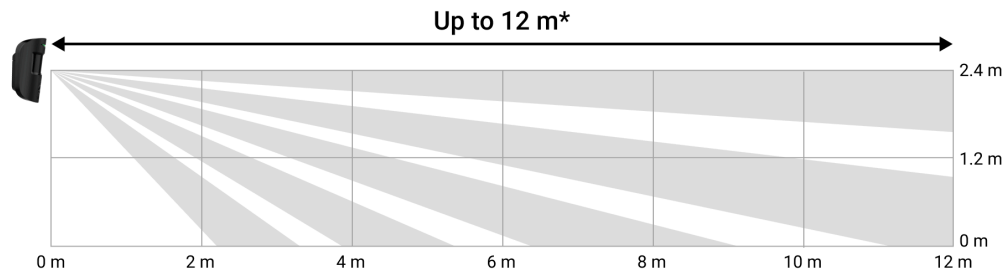
Motion detector detection area

The location of the detector determines the area to be monitored and the effectiveness of the security system. When selecting the installation place, consider the direction of the detector lens, viewing angles, and the presence of obstacles to the view of the lens.

The detector can recognize motion at a distance of up to 12* metres. The direction of the detector lens should be perpendicular to the intended entry path into the premises. Ensure that furniture, house plants, vases, and decorative or glass elements do not obstruct the view of the detector or its camera.



Horizontal viewing angle of the detector



Vertical viewing angle of the detector

** – for INCERT compliance 10 meters (high sensitivity)*

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. If possible, take a couple of photos at the installation site to ensure that the camera captures the desired area and that no obstructions are blocking its view.

Designing and preparing

It is crucial to properly design the system project to install and configure the devices correctly. The project must consider the number and types of devices at the object, their exact location and installation height, the length of wired Fibra lines, the type of cable used, and other parameters. Read the article to learn tips for designing the Fibra system project.

When designing the project, consider the wiring diagram of the power cables laid at the facility. Lay signal cables at a distance of at least 50 cm from power cables in

parallel. In case of an intersection, maintain a 90° angle between the conductors.

Before installation, check the cables for bends and physical damage. During installation, observe the bending radius specified by the manufacturer in the cable specifications. Otherwise, there is a risk of damaging or breaking the conductor.

Different types of devices can be connected to the same Fibra line. For example, you can use opening detectors, sirens, keypads, and MotionCam (PhOD) Fibra on the same line.

If you are connecting multiple devices to a single Fibra line, make sure that they are connected one after the other, as shown in the diagram.



Ajax systems also support **Beam** and **Ring** topologies.

[More about Fibra topologies](#)

[How to update OS Malevich](#)

Cable length and type

Recommended cable types:

- U/UTP cat.5 4 × 2 × 0.51, copper conductor.
- Signal cable 4 × 0.22, copper conductor.



The wired connection range may vary if you use a different cable type. No other types of cables have been tested.

Verification using a calculator

To ensure that the project is designed correctly and that the system will work in practice, we have developed a [Fibra power supply calculator](#). The calculator helps check the communication quality and cable length for wired Fibra devices when designing the system project for the selected configuration.



You can connect up to 100 devices to Hub Hybrid (with default settings).

Preparing for installation

Cable arrangement

When preparing to lay cables, check the electrical and fire safety regulations in your region. Strictly follow these standards and regulations. Tips for cable arrangement are available in [this article](#).

Cable routing

We recommend you to carefully read the [Selecting the installation site](#) section before installation. Avoid deviations from the system project. Violating the basic installation rules and the recommendations of this manual may lead to incorrect operation and loss of connection with MotionCam (PhOD). Tips for cable routing are available in [this article](#).

Preparing cables for connection

Remove the insulating layer and strip the cable with a special insulation stripper. The ends of the wires inserted into the device terminals must be tinned or crimped with a sleeve. This ensures a reliable connection and protects the conductor from oxidation. Tips for preparing the cables are available in [this article](#).

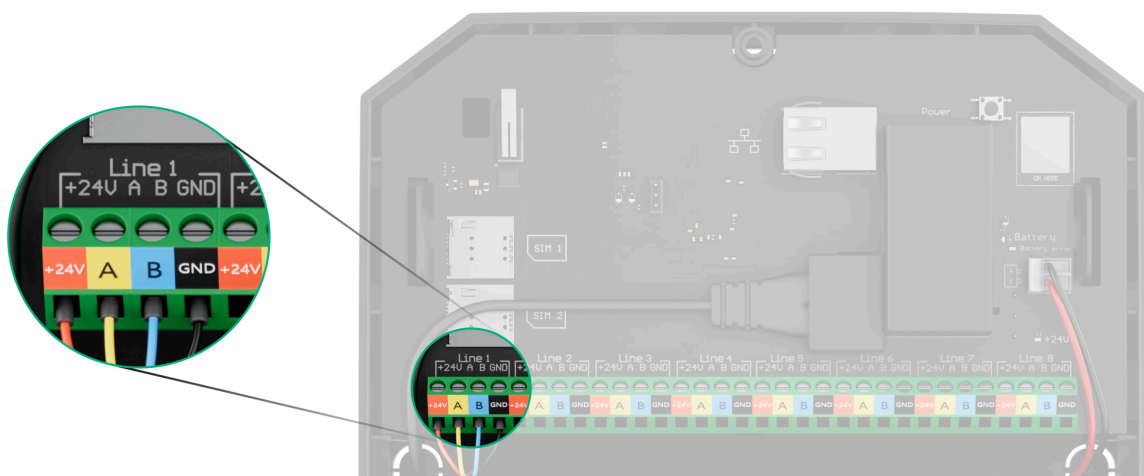
Installation and connection



Before installing MotionCam (PhOD), make sure that the optimal detector location has been selected and that it meets the requirements of this manual. Before final installation, run the [line power supply test](#), [detection zone test](#) and [Fibra signal strength test](#). During installation adhere to the rules and requirements of regulatory legal acts on electrical safety.

Connecting MotionCam (PhOD) Fibra to the hub

1. Turn off the power of lines in the [Ajax PRO app](#). The function is available in the **Lines** menu:
Hub → **Settings** ⚙️ → **Lines** → **Lines Power Supply**.
2. Route the cable to connect MotionCam (PhOD) to the hub casing. Connect the wires to the required hub line.

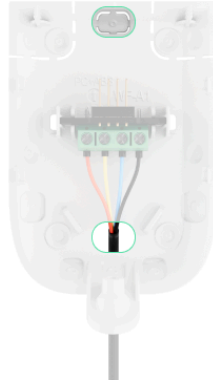


+24V – 24 V= power terminal.

A, B – signal terminals.

GND – ground.

3. Remove the SmartBracket mounting panel from the detector. Carefully break out the perforated part to output the cable from the rear side (top or bottom).

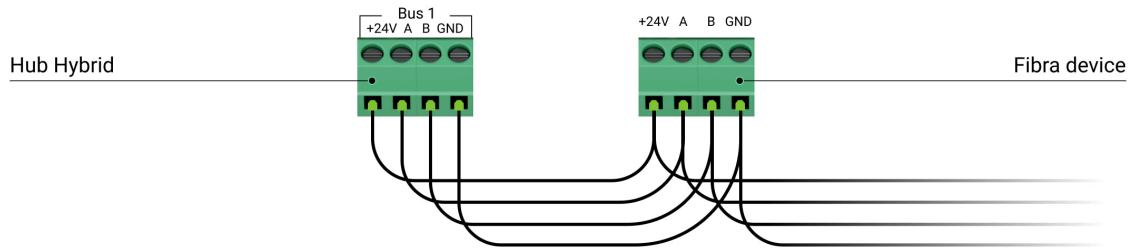


If it is necessary to output cable from the bottom or the side, make holes carefully in the places indicated in the figure using a drill at low speed.



4. If the detector is not the last device in the connection line, prepare a second cable in advance. The ends of the wires of the first and second cables, which will be inserted into the detector terminals, must be tinned and soldered together, or crimped with a sleeve.
5. Run the cable from the hub into the detector enclosure through the hole that was made.

6. Connect the wires to the MotionCam (PhOD) terminals according to the figure below. Be sure to follow the polarity and connection order of the wires. Securely fasten the cable to the terminals. Secure the cable with ties.

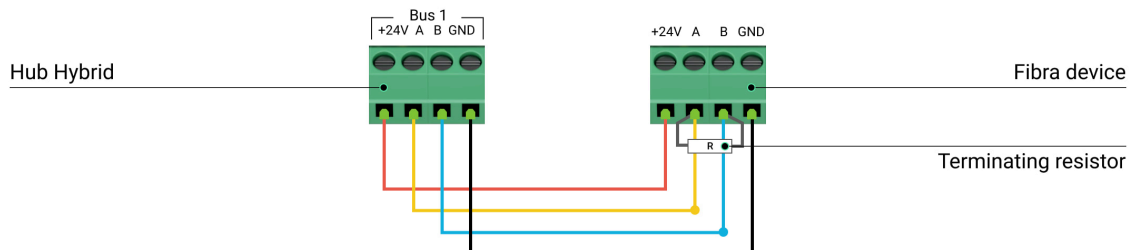


+24V – 24 V= power terminal.

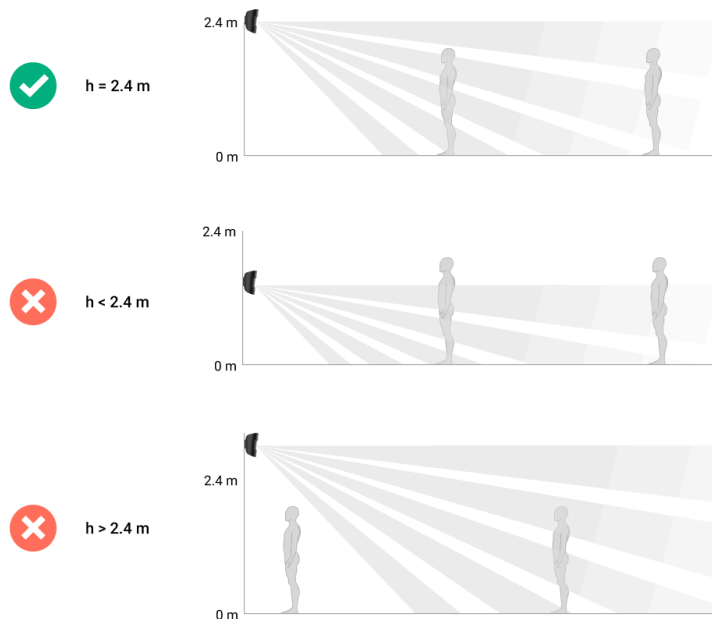
A, B – signal terminals.

GND – ground.

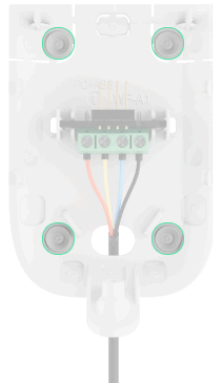
7. If the detector is the last on the line, in case of **Beam (Radial) connection**, install a terminating resistor by connecting it to the signal terminals of the device. Connect it to the signal terminals of the MotionCam (PhOD). Terminating resistor (120 Ohm) is included in the hub complete set.



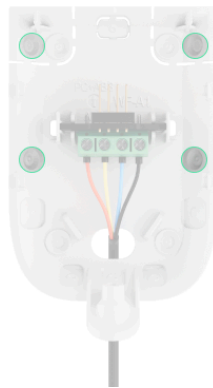
8. Temporarily secure the SmartBracket panel to a vertical surface or corner using double-sided adhesive tape or other temporary fasteners. This is necessary to run the detector tests. The installation height is 2.4 metres.



9. Place the detector on the SmartBracket mounting panel.
 10. Turn on line power in the Ajax PRO app (**Hub** → **Settings** ⚙️ → **Lines** → **Lines Power Supply**). When the device is turned on, the green LED will light up for about 1 second.
 11. Add the detector to the hub.
 12. Perform the Detection Zone Test.
- How to run the functionality testing
13. Take some test photos to make sure that the camera is capturing the required area and no obstacles are blocking its view.
 14. Perform the Fibra Signal Strength Test. The recommended signal strength is two or three bars. If the signal strength is one or zero bars, check the connection correctness and the cable integrity.
 15. Run Lines Power Test.
 16. If the detector passes the tests, fix the SmartBracket mounting panel to a vertical surface with bundled screws. Use at least two fixing points (one is in the perforated part of the mount above the tamper). The tamper reacts if someone tries to break or open the lid of the enclosure – the notification about this is sent to Ajax apps.



To fix SmartBracket on the corner, screw the bundled fasteners to the side recesses. Use at least two fixing points (one is in the perforated part of the mount above the tamper).



When using other mounts, make sure they do not damage or deform the mounting panel.



Double-sided adhesive tape can be used for temporary fastening as the device can come unglued from the surface at any time. As long as the device is taped, the tamper will not be triggered when the detector is detached from the surface.

17. Put the detector on the SmartBracket mounting panel and secure it with a captive screw. The screw is needed for more reliable fastening and protection of the detector from quick dismantling.

Adding to the system



The detector is compatible with [Hub Hybrid \(2G\)](#) and [Hub Hybrid \(4G\)](#) only with firmware version [OS Malevich 2.15.2](#) or higher. Only verified partners can add and configure Fibra devices in [Ajax PRO apps](#).

[Types of accounts and their rights](#)

Before adding a device

1. Install an [Ajax PRO app](#).
2. Log in to a [PRO account](#) or create a new one.
3. Select a space or create a new one.

[What is a space](#)

[How to create a space](#)



The **space** functionality is available for apps of such versions or later:

- Ajax Security System 3.0 for iOS;
- Ajax Security System 3.0 for Android;
- Ajax PRO: Tool for Engineers 2.0 for iOS;
- Ajax PRO: Tool for Engineers 2.0 for Android;
- Ajax PRO Desktop 4.0 for macOS;
- Ajax PRO Desktop 4.0 for Windows.

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. Ensure the space is disarmed, and the hub is not starting an update by checking statuses in the Ajax app.

How to add MotionCam (PhOD) Fibra


Two ways to add devices are available in the [Ajax PRO app](#): automatically and manually. If the connection fails, check the wired connection's correctness and try again. If the maximum number of devices (100 for Hub Hybrid) has already been added to the hub, you will receive an error notification while adding.

MotionCam only works with one hub. When the device is paired with a new hub, it stops exchanging data with the previous hub. When the detector is added to a new hub, it remains in the list of devices on the previous hub. You can remove the device manually.

To add a device manually:

1. Open the Ajax PRO app. Select the hub to which you want to add MotionCam (PhOD).
2. Go to the **Devices**  tab and click: **Add Device**.
3. Assign a name to the device.
4. Scan the QR code or enter the device's ID manually. A QR code with ID is placed on the detector enclosure under the SmartBracket mounting panel. Also, it is duplicated on the device packaging.
5. Select a virtual room and a security group (if [Group mode](#) is enabled).
6. Press **Add**.

To automatically add a device:

1. Open the Ajax PRO app. Select the hub to which you want to add the detector.
2. Go to the **Devices**  tab and click **Add Device**.
3. Select **Add All Fibra Devices**. The hub will scan the Fibra lines. After scanning, all devices connected to the hub that have not yet been added to the system

will be shown. The order of the devices will depend on which line of the hub they are connected to.



Scanning is also available in **Lines** menu:
Hub → **Settings** → **Lines** → **Add All Fibra Devices**.

4. Select the device from the list. To check which detector you deal with, use any of the following methods: **Identify device by blinking** and **Add devices by alerts**. Learn more about these methods [here](#).

After choosing the necessary MotionCam (PhOD) Fibra, the LED indicator of the device will start blinking.

5. Set the device name, and specify the room and security group if **Group Mode** is enabled. Press **Save**. By default, the device name includes the detector name and its identifier.

If the detector is successfully connected to the hub, it disappears from the list of available detectors.



Device status updating depends on the Fibra settings; the default value is 36 seconds.

The detector connected to the hub will appear in the list of hub devices in the Ajax app.

Functionality testing


The Ajax system offers several types of tests to help select the correct installation place for the devices. Tests do not start immediately. However, the waiting time does not exceed the duration of one “hub—device” polling interval. Polling interval can be checked and configured at hub settings (**Hub** → **Settings** ⚙️ → **Jeweller/Fibra**).








Two tests are available for MotionCam (PhOD) Fibra in Ajax system:







- **Fibra Signal Strength Test** – to determine the strength and stability of the signal at the device installation site.
- **Detection Zone Test** – to check how the detector registers motion at the device installation site.

Icons

The icons show some statuses of MotionCam (PhOD). You can check them in the Ajax apps:


1. Select the hub in the Ajax app.
2. Go to the **Devices**  tab.
3. Find **MotionCam (PhOD) Fibra** in the list.

Icon	Meaning
	Fibra Signal Strength – displays the signal strength between the hub and the detector. Recommended values: 2–3 bars. Learn more
	The detector battery charge level is OK or it is charging.
	The detector battery charge level is low.
	The detector battery malfunctions, or it is not installed.
	Other users have access to Photo on Demand . Learn more
	The detector operates in the Always Active mode. Learn more
	Delay When Entering and/or Leaving enabled.


	<u>Learn more</u>
	MotionCam (PhOD) will operate when Night Mode is enabled. <u>Learn more</u>
	MotionCam (PhOD) has detected motion. The detector detects motion in the armed mode only.
	MotionCam (PhOD) has been permanently deactivated. <u>Learn more</u>
	MotionCam (PhOD) tamper triggering events are permanently deactivated. <u>Learn more</u>
	MotionCam (PhOD) has been deactivated due to exceeding the preset number of alarms. <u>Learn more</u>
	The device was not transferred to the new hub. <u>Learn more</u>

States

The states display information about the device and its operating parameters. You can check the MotionCam (PhOD) states in the Ajax apps:

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

Parameter	Meaning
Malfunction	<p>Clicking on ⓘ opens the list of MotionCam (PhOD) malfunctions.</p> <p>The field is displayed only if a malfunction is detected.</p>
Temperature	<p>Detector temperature.</p> <p>The acceptable error between the value in the app and the temperature at the installation site: 2°C.</p> <p>The value is updated as soon as the detector detects a temperature change of at least 1°C.</p> <p>You can create a scenario by temperature to control automation devices.</p> <p><u>Learn more</u></p>
Fibra Signal Strength	<p>Signal strength between the hub and MotionCam (PhOD). Recommended values: 2–3 bars.</p> <p><u>Learn more</u></p>
Connection via Fibra	<p>The status of the connection between the hub and the detector:</p> <ul style="list-style-type: none"> • Online – the detector is connected to the hub. • Offline – the detector has lost connection with the hub. Check the detector connection to the hub.
Line Voltage	<p>The voltage value on the Fibra line to which the detector is connected.</p>
Battery Charge	<p>The device battery statuses:</p> <ul style="list-style-type: none"> • OK.

	<ul style="list-style-type: none"> • Low. • Charging. • Error. • Battery not installed. <p>The indication of the battery charge on the Fibra line is displayed with the  icon.</p>
Lid	<p>The tamper status that responds to the detachment of the device from the surface or violation of the device's enclosure integrity:</p> <ul style="list-style-type: none"> • Open – the detector is removed from the mount. Check the mounting of the detector. • Closed – the detector is installed on the mount. Normal state. <p><u>Learn more</u></p>
Sensitivity	Sensitivity level of the motion detector.
Always Active	<p>When this option is enabled, the detector is constantly armed, detects motion, and raises alarms.</p> <p><u>Learn more</u></p>
Permanent Deactivation	<p>Shows the status of the device deactivation setting:</p> <ul style="list-style-type: none"> • No – the device operates in normal mode and transmits all events. • Lid only – the hub administrator has disabled notifications about tamper triggering. • Entirely – the hub administrator has entirely excluded the detector from the system. The device does not follow system commands and does not report alarms or other events.

- **By number of alarms** – the device is automatically excluded from the system when the number of alarms is exceeded. The number of alarms is specified in the [Devices Auto Deactivation](#) hub settings in Ajax PRO-app.

[Learn more](#)



Alarm Reaction

Operating Mode	<p>Shows how the detector reacts to alarms:</p> <ul style="list-style-type: none"> • Instant Alarm – the armed detector immediately reacts to a threat and raises the alarm. • 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	<p>Delay when entering (alarm activation delay) is the time the user has to disarm the security system after entering the premises.</p> <p>Learn more</p>
Delay When Leaving, sec	<p>Delay when leaving (arming delay) is the time the user has to leave the premises after arming.</p> <p>Learn more</p>
Arm in Night Mode	<p>When this option is enabled, the detector will enter the armed mode when the system is set to Night Mode.</p>
Night Mode Delay When Entering, sec	<p>Entry delay time in Night Mode. Delay when entering (alarm activation delay) is the time the</p>

	user has to disarm the security system after entering the premises. Learn more
Night Mode Delay When Leaving, sec	Exit delay time in Night Mode . Delay when leaving (arming delay) is the time the user has to leave the premises after arming. Learn more
Firmware	Detector firmware version.
Device ID	Device ID/Serial Number.
Device No.	MotionCam (PhOD) loop (zone) number.
Line No.	The Fibra line number of the hub to which MotionCam (PhOD) is connected.

Settings

To change detector settings in an Ajax app:

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

Settings	Meaning
Name	Name of the detector. Displayed in the list of hub devices, text of SMS and notifications in the events feed.

	<p>To change the name of the detector, click on the text field.</p> <p>The name can contain up to 12 Cyrillic characters or up to 24 Latin characters.</p>
Room	<p>Selection of the MotionCam (PhOD) virtual room.</p> <p>The room name is displayed in the text of SMS and notifications in the events feed.</p>
Alarm LED indication	<p>When the option is disabled, the LED indicator of the detector doesn't notify about alarms or tamper triggering.</p>
Sensitivity	<p>MotionCam (PhOD) has four levels of sensitivity. The choice depends on the type of the object, the presence of probable sources of false alarms, and the specifics of the secured area:</p> <ul style="list-style-type: none"> • Low – it does not respond to animals up to 50 cm tall. • Normal (by default) – it does not respond to small dogs (up to 35 cm tall). • High – the detector does not respond to cats (up to 25 cm tall). • Very high – the highest level of sensitivity (for INCERT compliance). <p><u>Why motion detectors react to animals and how to avoid this</u></p>
Image resolution	<p>MotionCam (PhOD) takes pictures with the next resolution (in pixels):</p> <ul style="list-style-type: none"> • 160 × 120. • 320 × 240 (default). • 640 × 480.

	<p>The higher the resolution, the more detailed the image is, but it takes longer to transfer the photos to the hub. The setting extends to visual alarm verification, photo by scenario, photo on demand, and photo by schedule.</p>
Photos by Alarm	<p>Selecting the number of photos in case of an alarm:</p> <ul style="list-style-type: none">• No photo (the detector does not turn on the camera in case of alarm).• 1 photo.• Series of 2.• Series of 3.• Series of 4 (only available with 320 × 240 or 160 × 120 resolutions).• Series of 5 (only available with 320 × 240 or 160 × 120 resolutions). <p>Applies to MotionCam (PhOD) photos by alarm and by scenario.</p>
Alarms with photo verification	<p>Selecting the number of alarms accompanied by photos.</p> <p>You can choose if the photo will be transmitted each time the device is triggered or specify the exact number of alarms: 1 to 10.</p> <p>An alarm counter with photo verification is reset when the security system is disarmed and re-armed.</p> <p>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.</p>
Photos on Demand	<p>Select the number of photos on demand:</p> <ul style="list-style-type: none">• 1 photo.

	<ul style="list-style-type: none"> • Series of 2. • Series of 3. • Series of 4 (only available with 320 × 240 or 160 × 120 resolutions). • Series of 5 (only available with 320 × 240 or 160 × 120 resolutions). <p>It is displayed if the Photo on Demand feature is enabled in the hub settings in the Privacy section.</p>
Always Active	<p>When this option is enabled, the detector is always in the armed mode and detects motion.</p> <p>Learn more</p>
Alert with a siren if motion detected	<p>When this option is enabled, the sirens added to the system are activated when motion is detected by MotionCam (PhOD).</p>
Scenarios	<p>Opens the menu for creating and setting scenarios for the MotionCam (PhOD) detector. The menu allows you to create a scenario where the detector takes pictures when specified Ajax devices are triggered or by schedule.</p> <p>Learn more</p>

Alarm Reaction

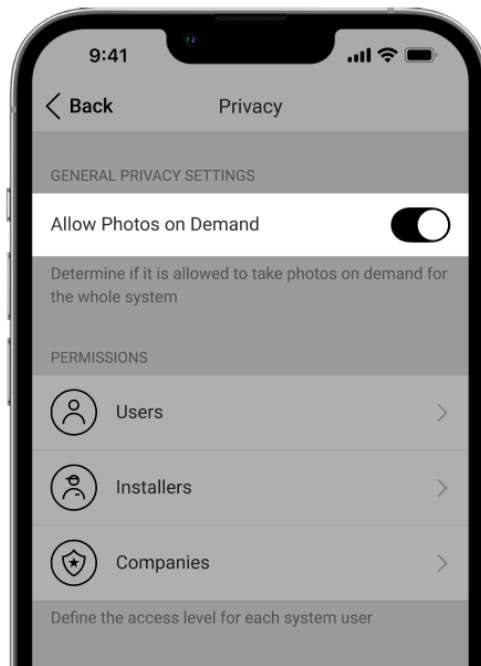
Operating Mode	<p>Specify how this device will react to alarms:</p> <ul style="list-style-type: none"> • Instant Alarm – the armed detector immediately reacts to a threat and raises the alarm. • Entry/Exit – when a delay is set, the armed device starts the countdown and doesn't raise the alarm even if triggered until the countdown ends.
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	<ul style="list-style-type: none"> • Follower – the detector inherits the delays from Entry/Exit detectors. However, when the Follower is triggered individually, it immediately raises the alarm.
<p>Delay When Entering, sec</p>	<p>Selecting delay time when entering: 5 to 120 seconds.</p> <p>Delay when entering (alarm activation delay) is the time the user has to disarm the security system after entering the premises.</p> <p><u>Learn more</u></p>
<p>Delay When Leaving, sec</p>	<p>Selecting delay time when leaving: 5 to 120 seconds.</p> <p>Delay when leaving (arming delay) is the time the user has to leave the premises after arming.</p> <p><u>Learn more</u></p>
<p>Arm in Night Mode</p>	<p>When this option is enabled, the detector will enter the armed mode when the system is set to Night Mode.</p> <p><u>Learn more</u></p>
<p>Night Mode Delay When Entering, sec</p>	<p>Delay time when entering in Night Mode.</p> <p>Delay when entering (alarm activation delay) is the time the user has to disable Night Mode after entering the premises.</p> <p><u>Learn more</u></p>



Night Mode Delay When Leaving, sec	<p>Delay time when leaving in Night Mode.</p> <p>Delay when leaving (arming delay) is the time the user has to leave the premises after enabling Night Mode.</p> <p><u>Learn more</u></p>
Fibra Signal Strength Test	<p>Puts the detector into the Fibra Signal Strength Test mode.</p> <p>The test allows you to check the signal strength between the hub and the detector via the wired Fibra data transfer protocol to select the optimal installation site.</p> <p><u>Learn more</u></p>
Detection Zone Test	<p>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.</p> <p><u>Learn more</u></p>
User Guide	<p>Opens user manual.</p>
Permanent Deactivation	<p>Allows the user to disable events of the device without removing it from the system.</p> <p>Three options are available:</p> <ul style="list-style-type: none">• No – the device operates in normal mode and transmits all events.• Entirely – the device will not execute system commands, and the system will ignore alarms and other notifications from the device.• Lid Only – notifications on the tamper triggering are disabled. <p><u>Learn more</u></p>

	The system can also automatically deactivate devices when the preset number of alarms is exceeded. Learn more
Unpair Device	Unpairs the detector from the hub and deletes its settings.

Setting up the Photo on Demand feature

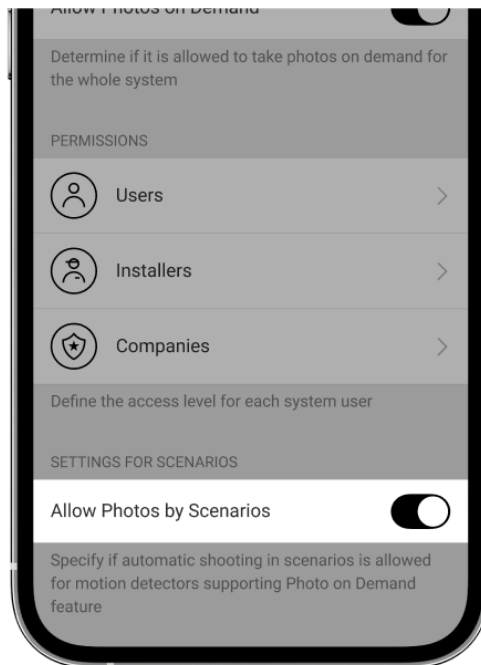


A hub admin or a user with access to privacy settings can enable and configure the **Photo on Demand** feature. The way to configurations in the Ajax app:

Devices  → **Hub** → **Settings**  → **Privacy**.

[This article](#) provides more information about configuring the **Photo on Demand** feature.



Setting up the Photo by Scenario feature



A hub admin or a user with access to privacy settings can enable the **Photo by Scenario** feature. The way to enable the **Photo by Scenario** feature in the Ajax app:

Devices  → **Hub** → **Settings**  → **Privacy** → **Allow Photos by Scenarios**.



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

1. In the Ajax apps, select the facility if you have several of them.
2. Go to the **Devices**  tab and select a detector with photo verification.
3. Click on the  icon to go to the detector **Settings**.
4. Select the **Scenarios** item from the list.

[This article](#) provides more information about configuring the **Photo by Scenario** feature.

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 it is armed. By default, MotionCam (PhOD) Fibra 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) LED indicator may light up red or green, depending on the status of the detector.



00:00

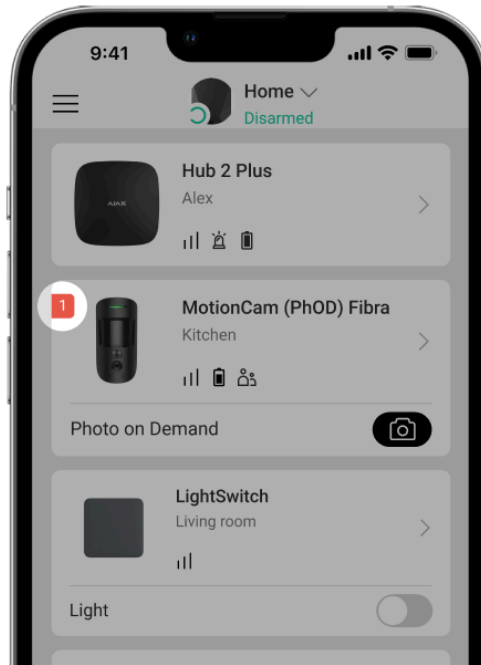
00:02

Indication	Event	Note
Lights up green once when power is connected.	The detector is on.	
Lights up green for about 1 second.	Motion alarm/tamper alarm.	The device detects motion every 7 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.	
In case of an alarm, it slowly lights up green and goes out.	Detector batteries need to be replaced.	
Flashes green frequently.	The detector is not connected to the hub.	
Lights up red and flashes after the first switching on.	Hardware error.	The device needs to be repaired, contact Ajax Technical Support .

Malfunctions

When the detector detects a malfunction (for example, there is no communication via the Fibra protocol), a malfunction counter is displayed in the Ajax app in the upper left corner of the device icon.

All malfunctions can be seen in the detector states. Fields with malfunctions will be highlighted in red.



Malfunction is displayed if:

- The detector temperature is outside acceptable limits.
- The detector enclosure is open (tamper is triggered).
- There is no signal via Fibra protocol.
- The detector battery is low.

Maintenance

Check the functioning of the detector regularly. Clean the detector enclosure of dust, cobwebs, and other contaminants as they emerge. Use a soft dry cloth 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.

Technical specifications

[All technical specifications](#)

[Compliance with standards](#)

[Setup in compliance with EN requirements](#)

Complete set

1. MotionCam (PhOD) Fibra.
2. SmartBracket mounting panel.
3. Installation kit.
4. Quick Start Guide.

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 Ajax Technical Support first. In most cases, technical issues can be resolved remotely.

[Warranty obligations](#)

[User Agreement](#)

Contact Technical Support:

- [e-mail](#)
- [Telegram](#)

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