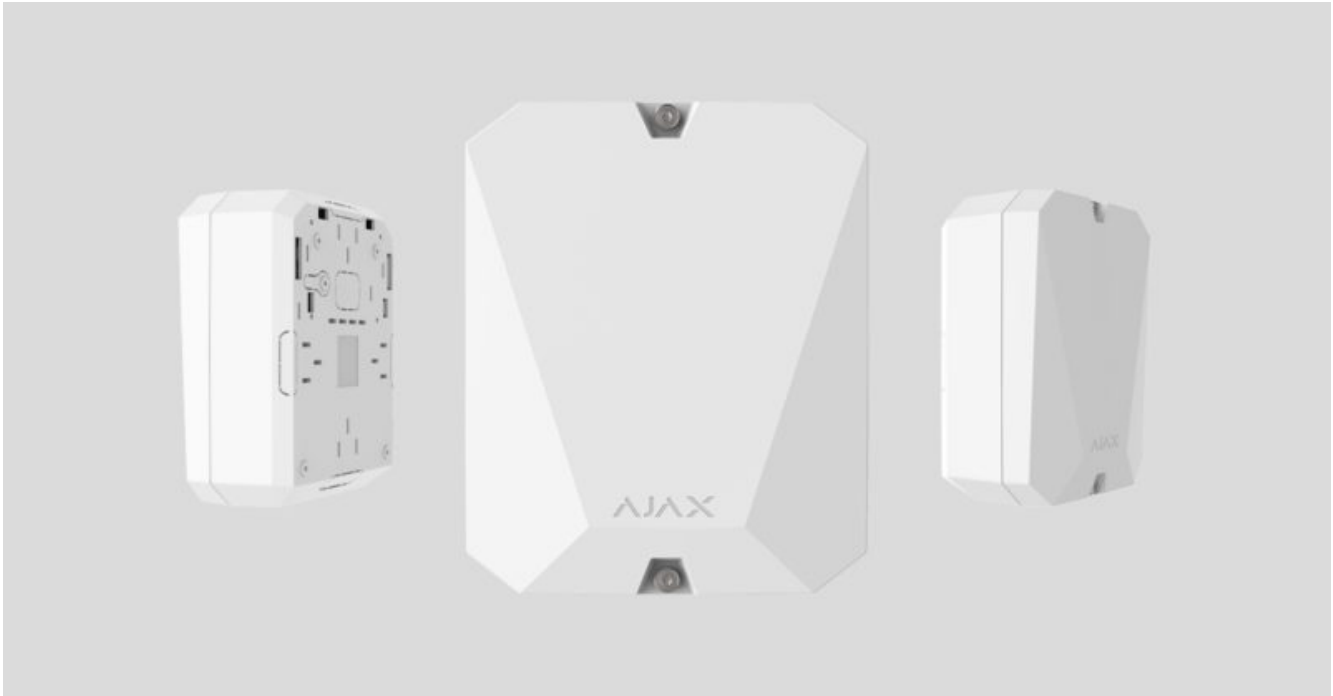


# MultiTransmitter User Manual

Updated December 8, 2021



**MultiTransmitter** is an integration module with 18 wired zones for connecting third-party detectors to the Ajax security system. To protect against dismantling, MultiTransmitter is equipped with two tamperers. It is powered from the mains 100–240 V AC, and can also run on a 12 V backup battery. It can supply 12 V power to connected detectors.

MultiTransmitter operates as part of the Ajax security system by connecting via the Jeweller secure radio communication protocol to the hub. The hub communication range is up to 2,000 meters provided there are no obstacles. If jamming or interference is detected, the **“high level of interference at Jeweller frequencies”** event is transmitted to the central monitoring station of the security company and system users.

What jamming of a security system is



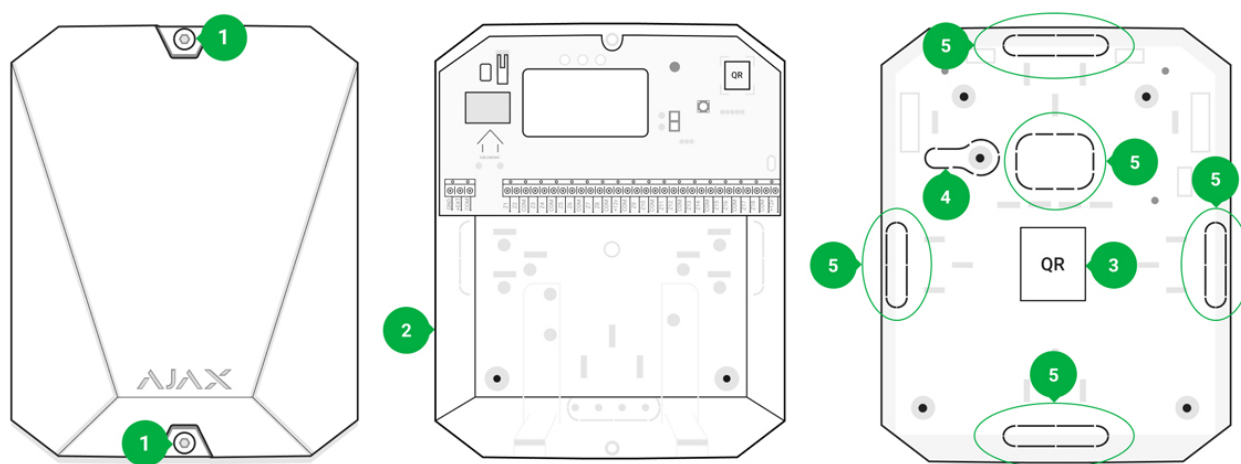
Not compatible with [ocBridge Plus](#), [uartBridge](#), and third-party security central units

The device connects to the hub and is configured through [Ajax apps](#) on iOS, Android, macOS, and Windows. All alarms and user events are reported by push notifications, SMS, and calls if enabled. Ajax security system can be connected to the central monitoring station of the security company. The list of authorized partners is available [here](#).

[Buy MultiTransmitter integration module](#)

## Functional elements

### Body elements



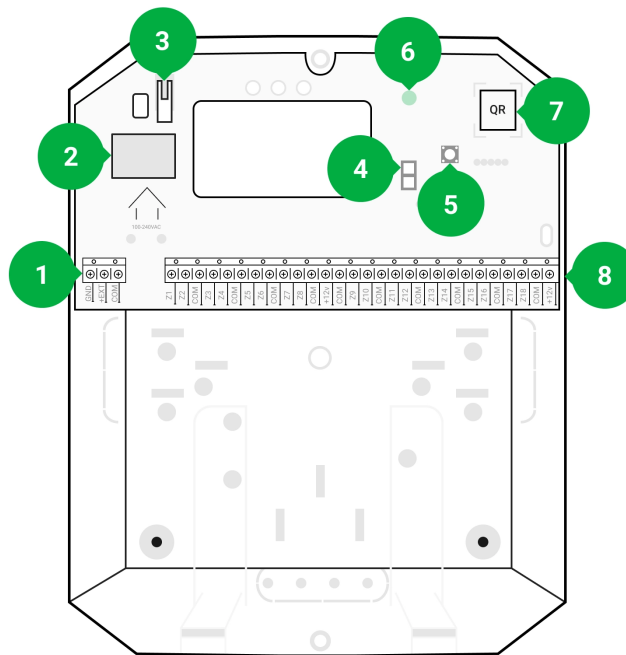
1. Screws securing the body lid. Unscrew with bundled hexagon key ( $\varnothing$  4 mm)
2. Cavity for backup battery



Battery not included with MultiTransmitter set

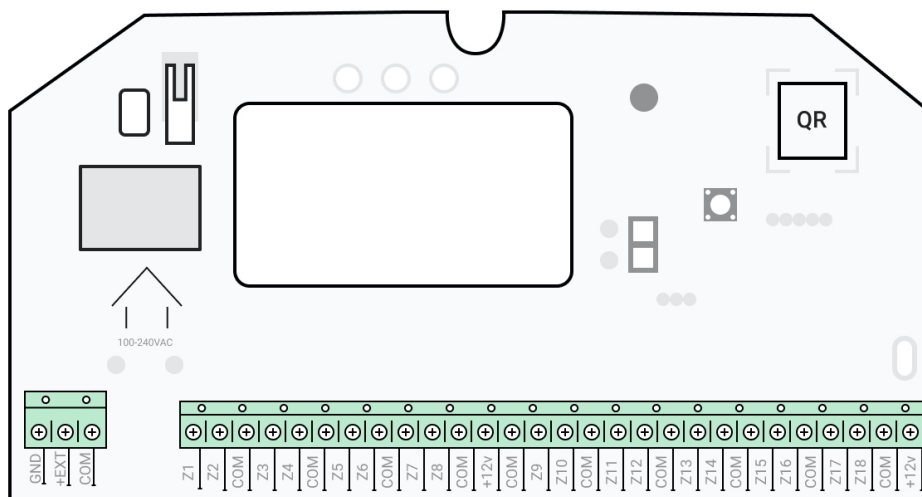
3. QR code and ID/serial number of the device
4. Perforated part of the body. It is necessary for tamper triggering in case of dismantling attempts
5. Perforated part of the body for the output of wires of connected detectors and devices

## MultiTransmitter card elements



1. Power supply terminals for fire detectors
2. Power supply input 110/230 V
3. Tamper button. Signals if MultiTransmitter body lid is removed
4. Terminals for connecting a 12 V backup battery
5. Power button
6. LED indicator
7. QR code and ID/serial number of the device
8. Terminals for connecting wired detectors (zones)

# MultiTransmitter terminals



## Left-hand terminals:

**GND** — MultiTransmitter common ground

**+EXT** — 12 V power supply output for fire detectors

**COM** — common input for connecting power supply circuits and signal contacts of wired detectors

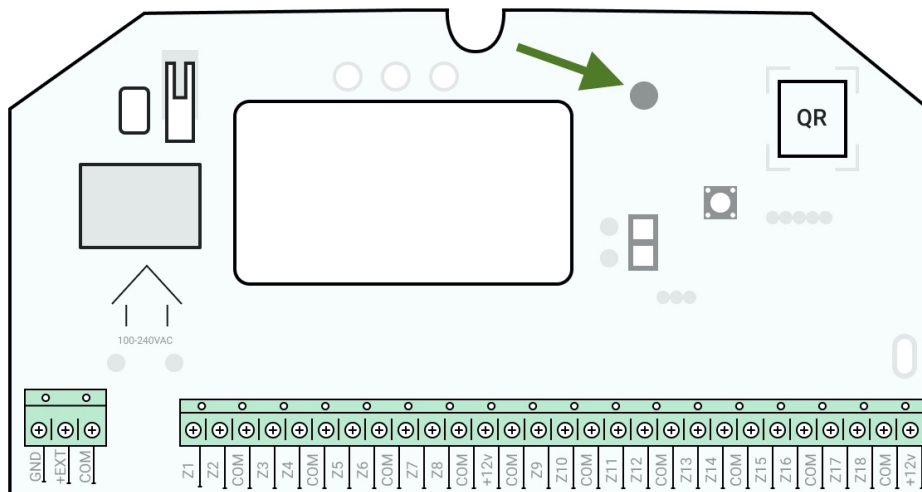
## Right-hand terminals:

**Z1–Z18** — input for wired detector connection

**+12 V** — 12 V power supply output for wired detectors

**COM** — common input for connecting power supply circuits and signal contacts of wired detectors

## LED indication



MultiTransmitter LED indicator may light up white, red, or green, depending on the status of the device. Please note that the LED indicator is not visible when the body lid is closed, but the status of the device can be found in the Ajax app.

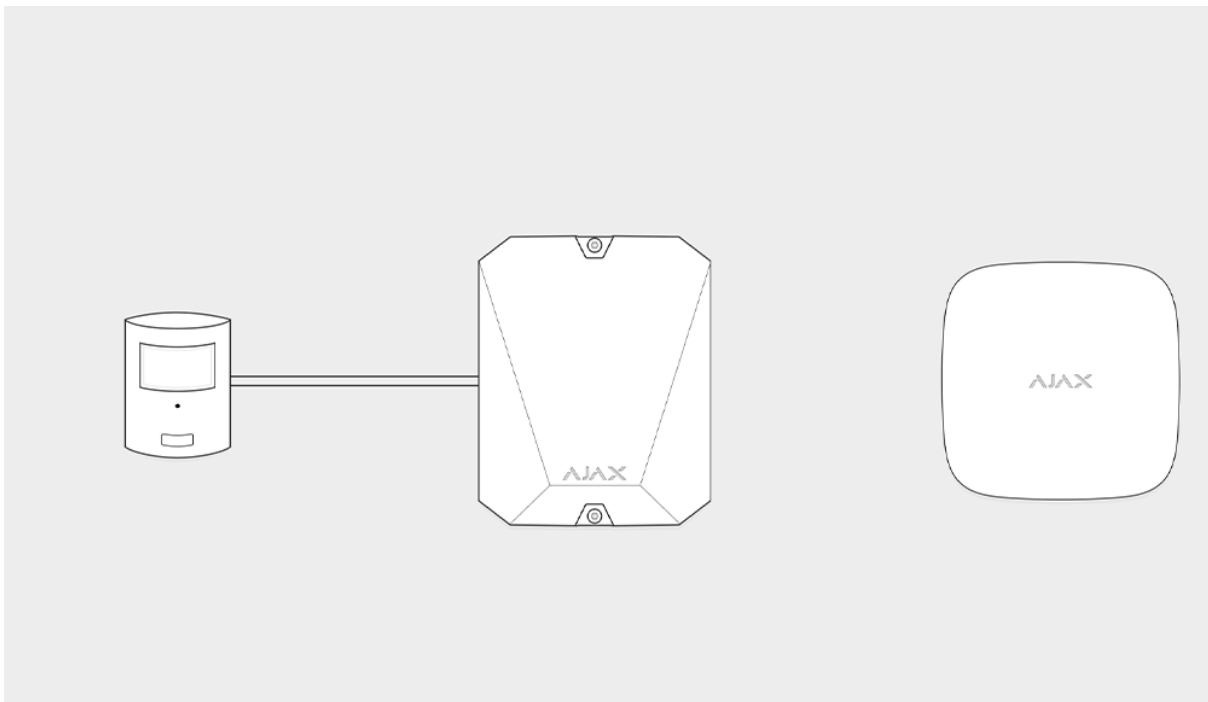
LED indication	Event	Note
Lights white	Connection with the hub is established, external power supply is connected	
Lights red	There is no connection with the hub, external power supply is connected	For example, the hub is turned off or MultiTransmitter is outside the coverage area of the hub's wireless network
Goes out for 0.5 seconds, then lights up green and turns off	Switching off the MultiTransmitter	
Blinks red once per second	MultiTransmitter is not assigned to the hub	
Lights up for a second once every 10 seconds	No external power supply is connected to MultiTransmitter	Lights up white if there is connection with hub.  Lights up red if there is no hub connection
During an alarm, gradually lights up and goes out once every 10 seconds	No external power supply and discharged external battery of MultiTransmitter	Lights up white if there is connection with hub.  Lights up red if there is no hub connection



If MultiTransmitter is not assigned to the hub or has lost connection with it, the integration module will not give an indication of the battery status or the presence of external power supply.

## Operating principle






MultiTransmitter is designed for connecting third-party wired detectors and devices to the Ajax security system. The integration module receives information about alarms and triggering of detector tampers via wires connected to the terminals.



MultiTransmitter can be used to connect panic and medical alarm buttons, indoor and outdoor motion detectors, as well as detectors tracking opening, vibration, breaking, fire, gas, leakage, etc. The type of device is indicated in the zone settings. The text of notifications about alarms and events of the connected device, as well as event codes transmitted to the Central Monitoring Station (CMS) of the security company depend on the selected device type.

**A total of 6 types of devices are available:**

Type	Icon
Tamper	

	
Intrusion alarm	
Fire alarm	
Medical alarm	
Panic button	
Gas concentration alarm	

MultiTransmitter has 18 wired zones. The number of connected devices depends on their power consumption. The total maximum current consumption of all connected devices or detectors is 1 A.

### Supported connection types:

Designation	Type
NO	Normally open
NC	Normally closed. Without resistors
EOL (NC with resistors)	Normally closed. With resistors
EOL (NO with resistors)	Normally open. With resistors

### How to connect a wired detector or device to MultiTransmitter

The integration module has 3 power supply lines of 12 V: one dedicated line for fire detectors and two – for other devices.



After the fire alarm, fire detectors need a power reset to restore normal operation. Therefore, the fire detectors power supply should only be connected to a dedicated line. Also, avoid connecting other detectors and devices to power terminals of fire detectors as this may lead to false alarms or incorrect operation of the devices.

## Event transmission to the monitoring station

Ajax security system can connect to the CMS and transmit alarms to the monitoring station in Sur-Gard (ContactID) and SIA protocol formats.

The loop (zone) number of the integration module and the devices connected to it can be found in Ajax apps, in the **Groups** menu of the hub settings.

To learn the loop (zone) number, select the group in which the integration module is located or the desired connected device. The **Device Number** (or **DeviceIndex** in Ajax PRO Desktop) corresponds to the loop (zone) number.



# Connecting to the hub

For the Ajax security system, MultiTransmitter acts as a single device and each connected device or detector occupies a single slot in the limited number of the hub devices – 100 in Hub and Hub 2, 150 in Hub Plus, and 200 in Hub 2 Plus.



Wired detectors can be connected to MultiTransmitter both before and after connecting the module to the hub.


## Before starting connection

1. Install the Ajax app. Create an account. Add a hub to the app and create at least one room.
2. Check that the hub is on and has access to the internet (via Ethernet cable, Wi-Fi, and/or mobile network). You can do this in the Ajax app or by looking at the hub logo on the front panel. The logo should light up white or green if the hub is connected to the network.
3. Ensure that the hub **is disarmed** and **does not start updates** by checking its status in the app.



Only users with administrator rights can add MultiTransmitter to the hub.

## In order to connect MultiTransmitter

1. Go to the **Devices** tab  in the Ajax app and click **Add Device**.
2. Name the integration module, scan or enter the QR code manually (located on the body and packaging), and select the placement room.
3. Click **Add**; the countdown will begin.
4. Turn on MultiTransmitter by holding the power button for 3 seconds. Keep in mind that the request to connect to the hub is transmitted only when the

integration module is turning on.



For the detection and pairing to occur, the integration module should be located within the coverage area of the hub's wireless network (at the same guarded object).


If the connection has failed, disconnect MultiTransmitter for 5 seconds and try again.






If the integration module has already been assigned to another hub, turn off the integration module, and then follow the standard addition procedure.

The connected integration module will appear in the app, in the hub's list of devices. Updating device statuses in the list depends on the ping time defined in Jeweller settings. The default value is 36 seconds.

## MultiTransmitter states

### Icons


Icons display some of the MultiTransmitter states. You can view them in the Ajax app, in the **Devices** tab .

Icon	Value
	Jeweller signal strength — displays the signal strength between the hub and MultiTransmitter
	A fire detector connected to MultiTransmitter has registered an alarm
	MultiTransmitter battery charge level
	MultiTransmitter has a malfunction. The list is available in the integration module states
	MultiTransmitter works through a <u>radio signal range extender</u>

# States

The statuses include information about the integration module, the connected detectors, and their operating parameters. Find the MultiTransmitter states in the Ajax app:

1. Go to the **Devices**  tab.
2. Select MultiTransmitter from the list.



Parameter	Value
Malfunction	<p>Click  to open the list of MultiTransmitter malfunctions</p> <p>The field is displayed only if a malfunction is detected.</p>
Jeweller Signal Strength	<p>Signal strength between the hub/range extender and the MultiTransmitter.</p> <p>We recommend installing the detector in places where the signal strength is 2–3 bars</p>
Connection	<p>Connection status between the hub/range extender and device:</p> <ul style="list-style-type: none"><li>• <b>Online</b> — device is connected with the hub/range extender</li><li>• <b>Offline</b> — device has lost connection with the hub/range extender</li></ul>
ReX range extender name	<p>Indicates if MultiTransmitter is connected via a <u><b>radio signal range extender</b></u></p>
Battery Charge	<p>Battery level of the device. Displayed as a percentage</p> <p><u><b>How battery charge is displayed in Ajax apps</b></u></p>
Lid	<p>The status of tampers that respond to</p>

	<p>detachment or violation of the integrity of the body</p> <p><u>What is a tamper</u></p>
External Power	The presence of external power supply 110/230 V
Detectors power line	<p>Status of detector power terminals:</p> <ul style="list-style-type: none"> <li>• <b>OK</b> — terminals in normal condition</li> <li>• <b>Shorted</b> — terminals are shorted</li> </ul>
Fire detectors power line	<p>Status of power supply terminals of fire detectors:</p> <ul style="list-style-type: none"> <li>• <b>OK</b> — terminals in normal condition</li> <li>• <b>Shorted</b> — terminals are shorted</li> </ul>
Temporary Deactivation	<p>Shows the status of the device temporary deactivation function:</p> <ul style="list-style-type: none"> <li>• <b>No</b> — the device operates normally and transmits all events.</li> <li>• <b>Lid only</b> — the hub administrator has disabled notifications about triggering on the device body.</li> <li>• <b>Entirely</b> — the device is completely excluded from the system operation by the hub administrator. The device does not follow system commands and does not report alarms or other events.</li> <li>• <b>By number of alarms</b> — the device is automatically disabled by the system when the number of alarms is exceeded (specified in the settings for Devices Auto Deactivation). The feature is configured in the Ajax PRO app.</li> <li>• <b>By timer</b> — the device is automatically disabled by the system when the recovery timer expires (specified in the settings for Devices Auto Deactivation). The feature is configured in the Ajax PRO app.</li> </ul>
Firmware	MultiTransmitter firmware version. It is not

	possible to change the firmware
Device ID	ID/serial number of MultiTransmitter. Also located on the device box and on the integration module body
Device No.	Number of the device loop (zone)

## MultiTransmitter settings

To change the MultiTransmitter settings in the Ajax app:


1. Go to the **Devices**  tab.
2. Select **MultiTransmitter** from the list.
3. Go to **Settings** by clicking on the .
4. Set the required parameters.
5. Click **Back** to save the new settings.

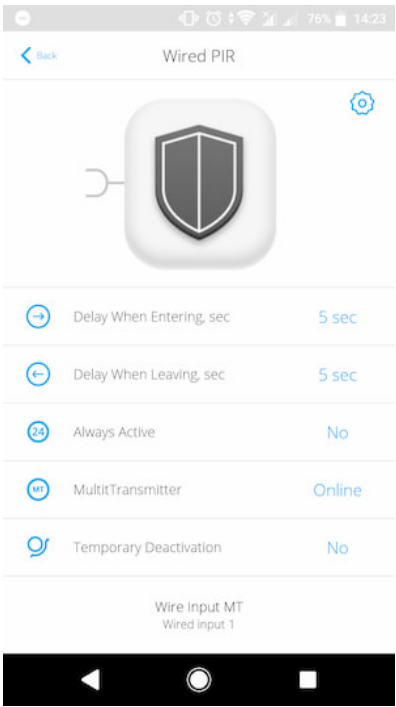
Setting	Value
First field	<p>Integration module name that can be edited. The name of the device is displayed in the text of SMS and notifications in the event feed.</p> <p>The name can contain up to 12 Cyrillic characters or up to 24 Latin symbols</p>
Room	Selecting the virtual room to which MultiTransmitter is assigned. The room name is displayed in the text of SMS and notifications in the event feed
Alert with a siren, if power supply for detectors is shorted out	When enabled, sirens connected to the security system signal if detectors power line is shorted out
Jeweller Signal Strength Test	Switches the integration module to the Jeweller signal strength test mode. The test allows you to check the signal strength between the hub and MultiTransmitter and determine the optimal installation location


	<a href="#">What is Jeweller Signal Strength Test</a>
Signal Attenuation Test	<p>Switches MultiTransmitter to the signal attenuation test mode</p> <p><a href="#">What is signal attenuation test</a></p>
User Guide	<p>Opens the MultiTransmitter User Manual in the Ajax app</p>
Temporary Deactivation	<p>Allows the user to disconnect the device without removing it from the system.</p> <p>Two options are available:</p> <ul style="list-style-type: none"> <li>• <b>Deactivate entirely</b> – the device will not execute system commands or participate in automation scenarios, and the system will ignore device alarms and other notifications</li> <li>• <b>Deactivate lid notifications</b> – the system will ignore only notifications about the triggering of the device tamper button</li> </ul> <p><a href="#">Learn more about temporary deactivation of devices</a></p> <p><b>Note that the system will ignore only the disabled device. Devices connected via MultiTransmitter will continue operating normally</b></p> <p>The system can also automatically deactivate devices when the set number of alarms is exceeded or when the recovery timer expires.</p> <p><a href="#">Learn more about auto deactivation of devices</a></p>
Unpair device	<p>Unpairs MultiTransmitter, disconnects it from the hub, and deletes its settings</p>

## States of connected detectors and devices

You can find the states of connected wired detectors and devices in the [Ajax app](#):

- 1. Go to the **Devices**  tab.
- 2. Find MultiTransmitter in the list.
- 3. Click on **Devices** under MultiTransmitter status icons.
- 4. Select the device from the list.



Parameter	Value
Malfunction	<p>Click  to open the malfunctions list of the connected wired detector.</p> <p>The field is displayed only if a malfunction is detected</p>
Delay when entering, sec	<p>Delay time when entering in seconds. Delay when entering (alarm activation delay) is the time you have to disarm the security system after entering the premises</p> <p><u>What is Delay When Entering</u></p>
Delay when leaving, sec	<p>Delay time when leaving in seconds. Delay when leaving (alarm activation delay) is the time you</p>


	<p>have to exit the premises after the security system is armed</p> <p><b><u>What is Delay When Leaving</u></b></p>
Night mode Delay When Entering, sec	<p>The time of Delay When Entering in the Night mode. Delay when entering (alarm activation delay) is the time you have to disarm the security system after entering the premises.</p> <p><b><u>What is delay when entering</u></b></p>
Night mode Delay When Leaving, sec	<p>The time of Delay When Leaving in the Night mode. Delay when leaving (alarm activation delay) is the time you have to exit the premises after the security system is armed.</p> <p><b><u>What is delay when leaving</u></b></p>
<p>External sensor state</p> <p>(displayed when the detector is in bistable mode only)</p>	<p>The status of the connected wired detector:</p> <ul style="list-style-type: none"> <li>• <b>OK</b> — the connected detector is normal</li> <li>• <b>Alert</b> — the connected detector has detected an alarm</li> <li>• <b>Shorted</b> — the terminals to which the detector is connected are shorted. Status is only available in case of an EOL NC connection</li> <li>• <b>Break</b> — is displayed if the connected detector is disconnected. Status is only available in case of an EOL NO connection</li> </ul>
Name MultiTransmitter	<p>Status of the MultiTransmitter to which the wired detector is connected:</p> <ul style="list-style-type: none"> <li>• <b>Online</b> — MultiTransmitter is connected to the hub/range extender</li> <li>• <b>Offline</b> — MultiTransmitter has no connection with the hub/range extender</li> </ul>
Always Active	<p>If the option is enabled, the detector connected via MultiTransmitter is constantly armed and</p>




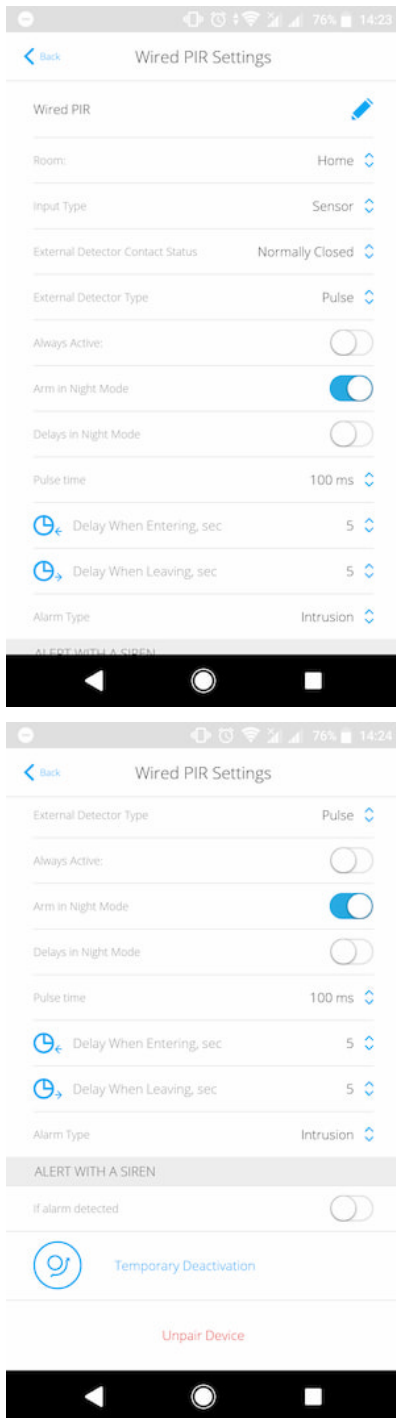
	<p>notifies of alarms</p> <p><a href="#">Learn more</a></p>
Temporary Deactivation	<p>Shows the status of the device temporary deactivation function:</p> <ul style="list-style-type: none"> <li>• <b>No</b> — the device operates normally and transmits all events.</li> <li>• <b>Lid only</b> — the hub administrator has disabled notifications about triggering on the device body.</li> <li>• <b>Entirely</b> — the device is completely excluded from the system operation by the hub administrator. The device does not follow system commands and does not report alarms or other events.</li> <li>• <b>By number of alarms</b> — the device is automatically disabled by the system when the number of alarms is exceeded (specified in the settings for Devices Auto Deactivation). The feature is configured in the Ajax PRO app.</li> <li>• <b>By timer</b> — the device is automatically disabled by the system when the recovery timer expires (specified in the settings for Devices Auto Deactivation). The feature is configured in the Ajax PRO app.</li> </ul>
Device №	The number of MultiTransmitter zone to which the detector is connected

## Settings of connected wired detectors and devices


Settings can be changed in the [Ajax app](#):

1. Go to the **Devices**  tab.
2. Find MultiTransmitter in the list.
3. Click on **Devices** under MultiTransmitter status icons.

4. Select the desired device from the list.
5. Go to **Settings** by clicking on the .
6. Set the required parameters.
7. Click **Back** to save the new settings.



**Wired PIR Settings**

Wired PIR 

Room: Home ▾

Input Type: Sensor ▾

External Detector Contact Status: Normally Closed ▾


External Detector Type: Pulse ▾


Always Active: ☐

Arm in Night Mode: ☒

Delays in Night Mode: ☐

Pulse time: 100 ms ▾

 Delay When Entering, sec: 5 ▾


 Delay When Leaving, sec: 5 ▾

Alarm Type: Intrusion ▾

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**ALERT WITH A SIREN**

if alarm detected: ☐

 Temporary Deactivation

Unpair Device

Setting	Value
First field	The name of the detector or device that can be

	<p>changed. The name is displayed in the text of SMS and notifications in the event feed.</p> <p>The name can contain up to 12 Cyrillic characters or up to 24 Latin symbols</p>
Room	<p>Selecting the virtual room to which a detector or device is assigned. The room name is displayed in the text of SMS and notifications in the event feed</p>
Delay When Entering, sec	<p>Selecting delay time when entering. Delay when entering (alarm activation delay) is the time you have to disarm the security system after entering the room</p> <p><b><u>What is delay when entering</u></b></p>
Delay When Leaving, sec	<p>Selecting the delay time when exiting. Delay when exiting (alarm activation delay) is the time you have to exit the room after arming the security system</p> <p><b><u>What is delay when leaving</u></b></p>
Arm in Night Mode	<p>If active, the detector connected to the integration module will switch to the armed mode when using the Night mode</p>
Night mode Delay When Entering, sec	<p>The time of Delay When Entering in the Night mode. Delay when entering (alarm activation delay) is the time you have to disarm the security system after entering the premises.</p> <p><b><u>What is delay when entering</u></b></p>
Night mode Delay When Leaving, sec	<p>The time of Delay When Leaving in the Night mode. Delay when leaving (alarm activation delay) is the time you have to exit the premises after the security system is armed.</p> <p><b><u>What is delay when leaving</u></b></p>
Type of event	<p>Selecting the alarm type of the connected detector or device:</p>

	<ul style="list-style-type: none"> <li>• Intrusion</li> <li>• Fire</li> <li>• Medical help</li> <li>• Panic button</li> <li>• Gas</li> </ul> <p>The text of notifications in the notification feed and SMS, as well as the code transmitted to the monitoring station of the security company, depends on the selected type of event</p>
Input type	<p>Selecting the connected device type:</p> <ul style="list-style-type: none"> <li>• Tamper</li> <li>• Sensor</li> </ul>
External Detector Contact Status / Work mode	<p>Selecting the normal contact state of the connected detector or device:</p> <ul style="list-style-type: none"> <li>• <b>NC</b> — Normally closed</li> <li>• <b>NO</b> — Normally opened</li> <li>• <b>EOL (NC with R)</b> — NC with Resistor</li> <li>• <b>EOL (NO with R)</b> — NO with Resistor</li> </ul>
External detector type	<p>Type of connected detector or device:</p> <ul style="list-style-type: none"> <li>• <b>Pulse</b> — e. g., a motion detector. After an alarm, a recovery event is not sent if the detector returns to the normal state</li> <li>• <b>Bistable</b> — e. g., an opening detector. After an alarm, a recovery event is also sent when the detector returns to the normal state</li> </ul> <p>Set the type that matches the connected detector. The pulsed detector in the bistable mode generates unnecessary recovery events. A bistable detector in pulsed mode, on the contrary, will not send recovery events</p>

Always Active	<p>If the option is enabled, the detector connected via MultiTransmitter is constantly armed and notifies of alarms</p> <p><a href="#">Learn more</a></p>
Pulse time	<p>Pulse time of a detector or device for detecting an alarm:</p> <ul style="list-style-type: none"> <li>• 20 ms</li> <li>• 100 ms</li> <li>• 1 s</li> </ul> <p>An alarm is raised if the pulse from the detector is longer than the specified value in this setting. It can be used as a bounce filter</p>
Resistance	<p>The resistance of the resistor connected to the detector. Can be set from 1 kΩ to 7.5 kΩ in increments of 100 ohms.</p> <p>MultiTransmitter automatically measures the resistance of the connected resistor and displays it in this field as the recommended value</p>
Alert with a siren if alarm is detected	<p>If enabled, <a href="#">sirens added to the system</a> are activated if an alarm is detected</p>
Alert with a siren if contact is lost or shorted out	<p>If enabled, <a href="#">sirens added to the system</a> are activated when a broken or shorted contact is detected</p>
Chime Settings	<p>Opens the Chime settings. Please note that this function works for bistable detectors only</p> <p><a href="#">How to set Chime</a></p> <p><a href="#">What is Chime</a></p>
Temporary Deactivation	<p>Allows the user to disconnect the device without removing it from the system.</p>

	<p>Two options are available:</p> <ul style="list-style-type: none"> <li>• <b>Deactivate entirely</b> — the device will not execute system commands or participate in automation scenarios, and the system will ignore device alarms and other notifications</li> <li>• <b>Deactivate lid notifications</b> — the system will ignore only notifications about the triggering of the device tamper button</li> </ul> <p><a href="#"><u>Learn more about temporary deactivation of devices</u></a></p> <p><b>Note that the system will ignore only the disabled device. Devices connected via MultiTransmitter will continue operating normally</b></p> <p>The system can also automatically deactivate devices when the set number of alarms is exceeded or when the recovery timer expires.</p> <p><a href="#"><u>Learn more about auto deactivation of devices</u></a></p>
Unpair device	Deletes wired detector or device settings

## Connecting wired detectors and devices to MultiTransmitter

### How to connect a wired detector or device



When connecting third-party detectors and devices, do not twist the wires together, but solder them. The ends of wires of the devices or detectors, which will be inserted into the integration module terminals should be tinned or crimped with a special sleeve.

1. Select the MultiTransmitter zone to which you would like to connect a detector or device.


2. Route the wires of the detector or device into the integration module body.
3. Connect a wired detector or device to the appropriate MultiTransmitter terminals. The wiring diagram can be found in the User Guide provided by the manufacturer of the wired detector or device.
4. Securely fasten the cable to the terminals.

### How to connect a wired detector or device to MultiTransmitter



If the detector or device requires 12 V power supply for operation, it can be connected to the power terminals of the corresponding MultiTransmitter zone. Separate terminals are provided for fire detectors. Do not connect the external power supply to the detector power terminals, as this may damage the device.

## How to add a wired detector or device

1. In the Ajax app, go to the **Devices** tab .
2. Select MultiTransmitter in the device list.
3. Click on **Devices**.
4. Click **Add Wired Device**.
5. Name the device or detector, select the wired zone to which the device or detector is connected, and select a placement room and a group.
6. Click **Add**. The device or detector will be then added within 30 seconds. If for some reason this does not happen, try again. If you encounter connection problems, contact [Support Service](#).

## How to set Chime

Chime is a sound signal that indicates the triggering of the opening detectors when the system is disarmed. The feature is used, for example, in stores, to notify employees that someone has entered the building.

Notifications are configured in two stages: setting up opening detectors and setting up sirens.



## [Learn more about Chime](#)

### Setting up a wired opening detector connected to MultiTransmitter



Before setting up the Chime feature, make sure that a wired opening detector is connected to MultiTransmitter and the following options have been configured in the detector settings in the Ajax app:



- Type of event
- Input type
- Work mode
- External detector type
- Pulse time

1. Go to the **Devices**  tab.
2. Find MultiTransmitter in the list.
3. Click on **Devices** under MultiTransmitter status icons.
4. Select the desired device from the list.
5. Go to its settings by clicking the gear icon  in the upper right corner.
6. Go to the **Chime Settings** menu.
7. Select siren notification for the event **If external contact is open**.
8. Select the chime sound: 1 to 4 short beeps. Once selected, the Ajax app will play the sound.
9. Click **Back** to save the settings.
10. Set up the required siren.



### MultiTransmitter functionality test

Integration module functionality tests do not begin immediately, but not later than over a single ping period of the hub detector (36 seconds with the standard settings of the hub). You can change the ping period of devices in the **Jeweller** menu of the hub settings.

Tests are available in the device settings menu (**Ajax app** → **Devices**  → **MultiTransmitter** → **Settings** 

- Jeweller Signal Strength Test
- Attenuation Test

### Selecting MultiTransmitter placement

The placement of the integration module determines its distance from the hub and the presence of obstacles between them that impede the passage of the radio signal: walls, inter-floor constructions, or large-sized objects located in the room.



Be sure to check the signal strength at the installation site. If the signal strength is low (a single bar), we cannot guarantee a stable operation of the security system! At the very least, relocate the device as repositioning even by 20 cm can significantly improve the signal reception.

If after moving the device still has a low or unstable signal strength, use a radio signal range extender.

When choosing the installation location, consider the distance between the integration module and wired devices or detectors — the cable length should be sufficient for connection. The maximum length of the signal cable for connecting a device or a detector is 400 meters (cable material is copper-plated aluminum, cross-section is 0.22 mm<sup>2</sup>). The value may vary if a different type of cable is used. No tests were conducted on other types of cables.

# MultiTransmitter installation



Prior to mounting the integration module, ensure that you have selected the optimal location and that it corresponds to this manual!

The body allows mounting the integration module on a vertical surface.

## In order to install a module:

1. Secure the body to the surface with bundled screws using at least two fixing points. In order for the integration module tamper to respond to a dismantling attempt, be sure to fix the body at the point with the perforated section.
2. Install the MultiTransmitter card into the body on the racks.
3. If available, connect a backup battery. Don't connect external power supply!



We recommend using a 12 V battery with a capacity of 4 or 7 A·h. For such batteries, special racks in the body are designed. You can also use similar batteries of a different capacity, of matching size, with the maximum full charge time of no more than 30 hours. The maximum battery size for installation in the body is 150 × 64 × 94 mm.

4. Connect wired detectors and devices to the integration module. Turn on the integration module.
5. Install the lid on the body and secure it with the bundled screws.



After installation, be sure to check the MultiTransmitter tamper status in the Ajax app.

## Do not install the integration module:

- Outdoors.

- Near metal objects and mirrors causing radio signal attenuation or screening.
- Inside premises with temperature and humidity outside the permissible limits.
- At a distance of less than 1 meter from the hub.

## Maintenance

Check the functionality of the integration module regularly. Clean the body from dust, cobwebs, and other contaminants as they emerge. Use a soft dry cloth that is suitable for equipment care. Do not use any substances containing alcohol, acetone, gasoline, and other active solvents to clean the device.

## Malfunction notifications

MultiTransmitter can report malfunctions to the central monitoring station of the security company, as well as to users through push notifications and SMS.

Notification	Value	Action
Contact is shorted out, <b>[device name]</b> in <b>[room name]</b>	<p>MultiTransmitter terminals for connecting the wired device are shorted.</p> <p>Notification can only be received if an EOL NC connection is used</p>	<p>Check the connection of the wired device or detector for short circuit.</p> <p>After the normal state of the terminals is resumed, you will receive respective notification</p>
Lost contact, <b>[device name]</b> in <b>[room name]</b>	<p>The connected wired detector is torn off.</p> <p>Notification can be obtained if an EOL NO connection is used</p>	<p>Check the connection of the wired device or detector to the integration module</p>
External power has been disconnected, <b>[device name]</b> in <b>[room name]</b>	<p>MultiTransmitter does not have a 100–240 V power supply</p>	<p>Check for external power supply on the integration module</p>
Battery has been disconnected, <b>[device name]</b> in <b>[room name]</b>	<p>The backup battery is disconnected from MultiTransmitter</p>	<p>Check the connection of the backup battery to the integration module</p>

Power supply terminal for detectors is shorted out, <b>[device name]</b> in <b>[room name]</b>	One of the two MultiTransmitter power supply outputs is shorted	<p>Check the power supply connection of wired devices or detectors for short circuit.</p> <p>After the normal state of the terminals is resumed, you will receive respective notification</p>
Fire detector power supply terminal is shorted out, <b>[device name]</b> in <b>[room name]</b>	MultiTransmitter fire detector power supply output is shorted	<p>Check the power supply connection of the wired fire detector for short circuit.</p> <p>After the normal state of the terminals is resumed, you will receive respective notification</p>
<p>Battery is charging too long</p> <p><i>Displayed in integration module statuses</i></p>	MultiTransmitter battery charges for over 40 hours	The battery is most likely defective. Install another backup battery

## Fire alarms reset

In case of alarms of the fire detectors connected to MultiTransmitter, the window prompting of the need to reset the alarms is displayed in the Ajax app. This will make the detectors return to their normal state and continue to respond to a fire.



If the detectors are not reset after the fire alarm, they will not respond to the next fire, as they will remain in alarm mode.

### There are two ways to reset fire detectors:

1. By clicking the button in the notification in the app.
2. Via MultiTransmitter menu: click on the red button opposite the integration module.

# Technical specifications

Number of alarm/tamper zones	18
Supported detector contact types	NO, NC (without R), EOL (NC with R), EOL (NO with R)  <a href="#"><b>How to connect a wired detector or device to MultiTransmitter</b></a>
Resistance of the EOL Resistor	From 1 kΩ to 7.5 kΩ
Alarm signals processing mode	Pulsed or bistable
Main power supply	110–255 V, 50/60 Hz
Backup power	12 V DC
Supported battery type	12 V battery with a full charge cycle of up to 30 hours. The maximum battery size for installation in the body is 150 × 64 × 94 mm
Recommended battery type	12V battery with a capacity of 4 or 7 A·h
Detector power supply	12 V DC, up to 1 A total for all detector power supply outputs
Protection against dismantling	Tamper
Radio communication protocol	Jeweller  <a href="#"><b>Learn more</b></a>
Radio frequency band	866.0 – 866.5 MHz 868.0 – 868.6 MHz 868.7 – 869.2 MHz 905.0 – 926.5 MHz 915.85 – 926.5 MHz 921.0 – 922.0 MHz Depends on the region of sale.
Compatibility	Operates only with all Ajax <a href="#"><b>hubs</b></a> , and <a href="#"><b>radio signal range extenders</b></a>
Maximum RF output power	Up to 7.29 mW (25 mW limit)
Radio signal range	Up to 2,000 m (any obstacles absent)

	<a href="#"><u>Learn more</u></a>
Operating temperature range	From -10°C to +40°C
Operating humidity	Up to 75%
Dimensions	196 × 238 × 100 mm
Weight	805 g
Service life	10 years

### [Compliance with standards](#)

## Complete Set

1. MultiTransmitter
2. Power cable
3. 12 V battery connection cable
4. Installation kit
5. Body
6. Quick Start Guide

## Warranty

The warranty for the “AJAX SYSTEMS MANUFACTURING” Limited Liability Company products is valid for 2 years after the purchase.

If the device does not work correctly, you should first contact the support service. In half of the cases, technical issues can be solved remotely!

### [Warranty obligations](#)

### [User agreement](#)

Technical support: [support@ajax.systems](mailto:support@ajax.systems)

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