MultiTransmitter Fibra User Manual

Updated March 14, 2022

MultiTransmitter Fibra is an integration module with 18 wired zones for connecting third-party detectors and devices to the Ajax security system. Supports NC, NO, EOL, 2EOL, and 3EOL devices.

MultiTransmitter Fibra is equipped with two tampers that protect against lid opening and detaching from the surface. The device is powered from the 110–240 V~ mains, and can also run on a 12 V⎓ backup battery. It can supply 10.5–15.0 V⎓ power to connected detectors.

> ⚠️ The integration module is compatible with Hub Hybrid (2G) and Hub Hybrid (4G). Connection to other hubs, radio signal range extenders, ocBridge Plus, and uartBridge is not provided.

MultiTransmitter Fibra only works as a part of the Ajax security system, communicating with the hub via secure Fibra protocol. The wired connection range reaches 2000 meters when connected via twisted pair U/UTP cat.5.
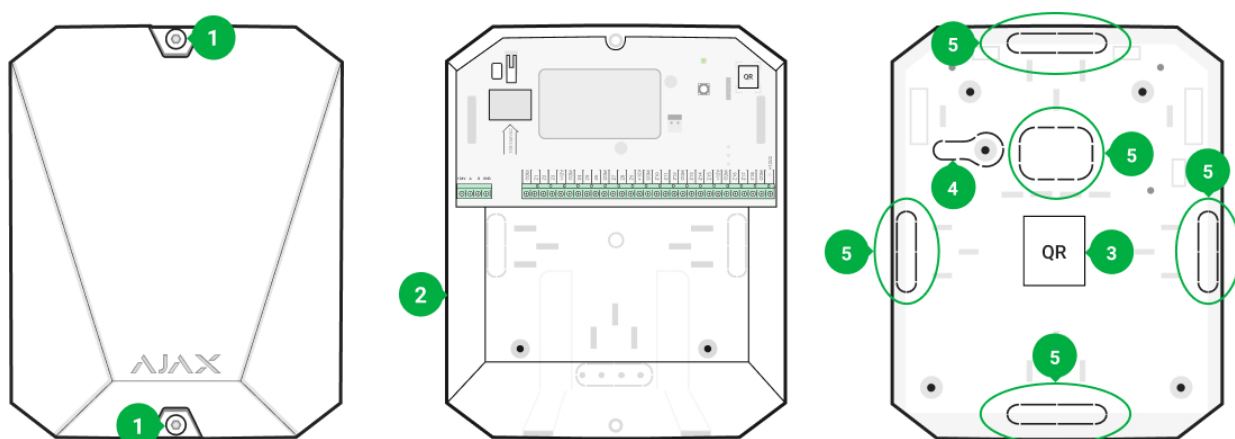
MultiTransmitter Fibra is the device of the new Fibra wired product line. Such devices can only be purchased, installed and administered by accredited Ajax partners.

Buy MultiTransmitter Fibra

# Functional elements

Chapter in progress

Casing elements

1. Screws securing the body lid. Use a bundled hex key (Ø 4 mm) to unscrew it.

2. A place for installing the backup battery.

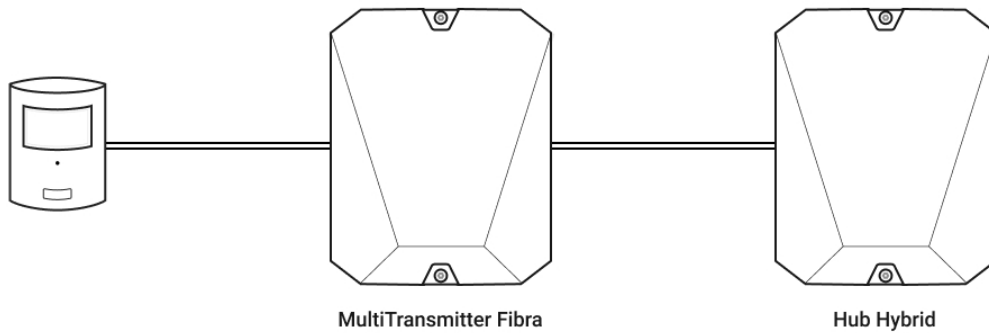> ℹ️ The backup battery is not included

3. MultiTransmitter Fibra QR code and ID / serial number.

4. Perforated part of the casing. Necessary for tamper triggering in case of any attempt to detach MultiTransmitter Fibra from the surface. Do not break it off.

5. Perforated parts of the casing for wire output.

MultiTransmitter Fibra board elements
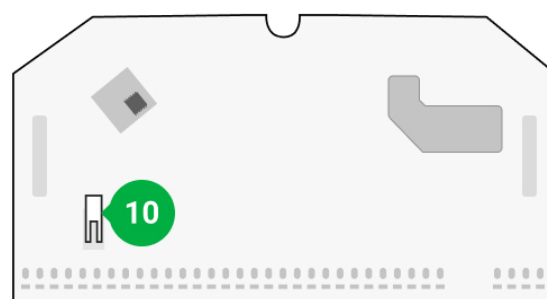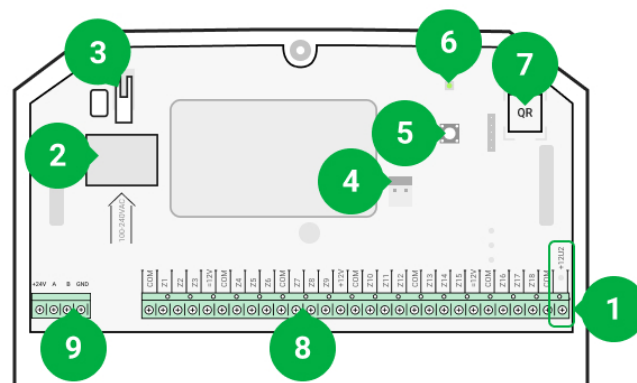
1. 10.5−15.0 V⎓ power supply for fire detectors.

2. MultiTransmitter Fibra power supply input 110−240 V~.

3. Tamper button. Triggers when an attempt is made to detach the lid.

4. Terminals for connecting a 12 V⎓ backup battery.

5. Power button.

6. LED indicator.

7. QR code and ID / serial number of the MultiTransmitter Fibra.

8. Terminals for connecting wired detectors (zones).

9. Terminals for connecting MultiTransmitter Fibra to the hub.

10. Tamper button. Triggers when an attempt is made to detach MultiTransmitter Fibra from the surface.

MultiTransmitter Fibra terminals

Terminals for connecting MultiTransmitter Fibra to the hub:

+24 V — MultiTransmitter Fibra power supply input
A, B — signal terminals
GND — ground

Terminals for connecting third-party wired detectors and devices to MultiTransmitter Fibra:

Z1−Z18 — inputs for connecting wired detectors and devices.
+12 V — 10.5−15.0 V⎓ power supply output for wired detectors and devices, up to 1 A in total for all power outputs
+12V2 — 10.5−15.0 V⎓ power supply output for wired fire detectors, up to 1 A in total for all power outputs
COM — common input for connecting power supply circuits and signal contacts of wired detectors

Operating principle

MultiTransmitter Fibra is designed for integrating third-party wired detectors and devices into the Ajax security system. The integration module receives information about alarms, events and malfunctions from detectors and devices via a wired connection. Then the integration module transmits the event to Hub Hybrid using the Fibra wired data transfer protocol. Hub Hybrid sends notifications to users and to the Central Monitoring Station (CMS) of the security company.

MultiTransmitter Fibra   Hub Hybrid

MultiTransmitter Fibra can be used for integration of panic and medical alert buttons, indoor and outdoor motion detectors, as well as opening, vibration, breaking, gas, fire detectors, etc.

The device type is indicated in the settings of the zone to which the wired detector/device is connected. The selected type determines 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.

A total of 7 types of events are available for the devices connected to MultiTransmitter Fibra:

Type	Icon
Tamper	
Intrusion	
Fire	

Medical help	
Panic button	
Gas (gas concentration alarm)	
Malfunction	Chapter in progress

MultiTransmitter Fibra has 18 wired zones. Multiple devices can be connected to one zone. The number of connected devices depends on their power consumption. The total maximum consumption of the devices or detectors connected to all zones is 1 A.

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

⚠️ After the fire alarm, fire detectors need a power reset to restore normal operation. Therefore, the power supply of fire detectors should only be connected to a separate line. 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.

Learn more

Supported connection types:

- NO (normally open).

- NC (normally closed).

- EOL (connection with one resistor).

- 2EOL (connection with two resistors).

- 3EOL (connection with three resistors).

In the Ajax app, you can select the normal state (NC or NO) for each terminal pair: panic, tamper, and malfunction. This allows connecting to MultiTransmitter Fibra any detector with "dry" contacts, regardless of its configuration.

Fibra data transfer protocol

The integration module uses Fibra technology to transmit alarms and events. This is a two-way wired data transfer protocol that provides fast and reliable communication between the hub and the rest of the devices. Using the bus connection method, Fibra delivers alarms and events instantly, even if 100 detectors are connected to the system.

Fibra supports floating key block encryption and verifies each communication session with devices to prevent sabotage and forgery. The protocol requires regular polling of sirens and detectors by the hub with a predetermined frequency to monitor connection and display the status of the system devices in real time in the Ajax apps.

Learn more (in progress)

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 the **Sur-Gard protocol (Contact ID)**, **SIA (DC-09)**, and other proprietary protocols. A complete list of supported protocols is available here.

Which CMSs can the Ajax security system be connected to

MultiTransmitter Fibra can transmit the following events:

1. MultiTransmitter Fibra tamper alarm / recovery.

2. Alarms of connected devices.

3. Loss / restoration of connection between MultiTransmitter Fibra and the hub.

4. Loss / restoration of connection with the devices connected to MultiTransmitter Fibra.

5. Temporary deactivation / activation of MultiTransmitter Fibra.

6. Temporary deactivation / activation of wired detectors and devices connected to MultiTransmitter Fibra.

7. Unsuccessful attempt to arm the security system (with enabled **integrity check of the system**).

When an alarm is received, the operator of the security company monitoring station knows exactly what happened and precisely where to send a fast response team on the site. Addressability of each Ajax device allows you to send not only events to the PRO Desktop or to the CMS but also the type of the device, the name of the device, 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.

> ℹ️ The integration module ID and the loop (zone) number can be found on its States in the Ajax app. To learn the loop (zone) number, open the **States** screen of the integration module or the connected wired device or detector. The **device number** corresponds to the loop (zone) number.
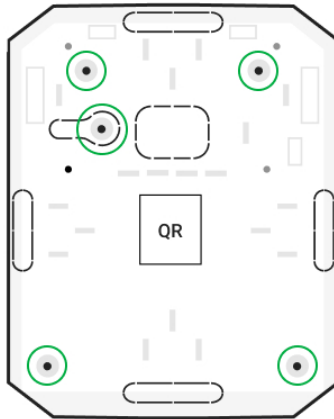
MultiTransmitter Fibra placement

When choosing where to place MultiTransmitter Fibra location, consider the parameters affecting the correct operation of the integration module:

- Fibra signal strength.

- Connection cable length for MultiTransmitetr Fibra.

- Connection cable length for wired detectors and devices connected to MultiTransmitter Fibra.

Consider the placement recommendations when designing your facility's security system. Design and installation of the security system should be carried out by professionals. A list of authorized official Ajax partners is **available here**.

MultiTransmitter Fibra can be mounted on a vertical surface with bundled fasteners. All the necessary holes for mounting are already made.

We recommend choosing the installation place where the integration module is hidden from the burglar's eyes, for example, in the storeroom. This will help to reduce the possibility of sabotage. Please note that MultiTransmitter Fibra is intended for indoor installation only.

Design and preparation

For the system to work correctly, it is important to properly design the project and install the integration module, as well as all the connected wired detectors and devices. Read the manual for third-party wired detectors and devices before installation. Be sure to follow this manual. If you have any questions, please contact the technical support of the detector or device manufacturer.

Violation of the basic installation rules and recommendations of this manual, as well as the manual for third-party wired detectors and devices may lead to incorrect operation of the integration module, false alarms of connected wired devices, or loss of connection with MultiTransmitter Fibra.

When designing the layout scheme of the detectors, consider the wiring diagram of the power cables laid on the site. Signal cables must be laid at a distance of at least 50 cm from the power cables when lying parallel, and, if they intersect, it must be at a 90° angle. Note that, if you connect multiple devices on the same bus, detectors are connected in sequence.

Note that Fibra detectors and devices are connected sequentially end-to-end in a line if you connect multiple devices to the same hub bus.

> **i** The maximum number of connectable devices for the Hub Hybrid is 100 at the default settings, including wired detectors and devices connected to MultiTransmitter Fibra.
>
> How to calculate the number of detectors to be connected (in progress)

For facilities that are under construction or renovation, cables are laid after the main wiring of the facility. Use protective tubes to route system cables to organize and secure the wires; ties, clips, and staples can be used to secure them.

When laying wires externally (without mounting them inside the walls), use an electric channel raceway. Raceways should be no more than half-filled with cables. Do not allow cables and wires to sag. The raceway should be hidden from view if possible — for example, behind furniture.

> **i** We recommend laying cables inside walls, floors, and ceilings. This will provide greater security: the wires will not be visible, and it will be impossible for an intruder to access them.

When selecting a cable, consider the length of the connecting lines and the number of detectors connected to the line; those parameters affect signal strength. We recommend using shielded copper cables with a high-quality insulating layer.

When installing, observe the bend radius that the manufacturer specifies in the cable specs. Otherwise, you risk damaging or breaking the conductor.

Be sure to check all cables for bends and physical damage before installation. Perform the installation in a way that minimizes the possibility of damage to the cables from the outside.

Signal strength and wire length

The Fibra signal level is determined by the number of undelivered or corrupted data packages over a certain period. The icon ıl| 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.

The signal strength is influenced by the following factors: the number of devices connected to one bus, the length and type of cable, and the proper connection of the wires to terminals.

> ⚠️ Check Fibra signal strength before the final installation of the devices. In case of one or zero bar signal strength, we cannot guarantee stable operation of the device.

The maximum permissible cable length depends on its type, material, and the method of connecting the devices. When connected using the **Star connection method** with a twisted pair U/UTP cat.5 (4×2×0.51), the wired connection length can be up to 2,000 meters.

When devices are connected using the **Ring connection method**, the maximum cable length is 500 meters when using a twisted pair.

How to calculate the wired connection length (in progress)

> ℹ️ Connecting devices using the **Ring connection method** will be available with future OS Malevich updates. Hardware update of Hub Hybrid won't be required.

The maximum length of the signal cable used to connect third-party devices or detectors to MultiTransmitter Fibra is 400 meters (the copper-plated aluminum cable with 0.22 sq mm cross-section). The value may vary if a different type of cable is used. No other types of cable have been tested.

Do not install MultiTransmitter Fibra

1. Outdoors. This may damage the integration module.

2. Inside premises with temperature and humidity outside the permissible limits. This could damage the integration module.

3. In places where the integration module has 0 or 1 bar of Fibra signal. This could result in the loss of connection between the hub and the integration module.

## Installation and connection

> ⚠️ Before installing MultiTransmitter Fibra, make sure that you have chosen the optimal location and that it meets the conditions of this manual. The wires must be hidden from the burglar's eyes in an inaccessible place inaccessible to reduce the possibility of sabotage. If possible, the wires must be hidden inside the walls, floor or ceiling. Run Fibra Signal Strength Test before final installation.

When connecting the integration module, do not twist the wires together; solder them. The ends of the wires which will be inserted into the integration module terminals should be tinned or crimped with a special sleeve. This will ensure a reliable connection. **Follow safety precautions and electrical installation rules when connecting the integration module and third-party devices and detectors**.
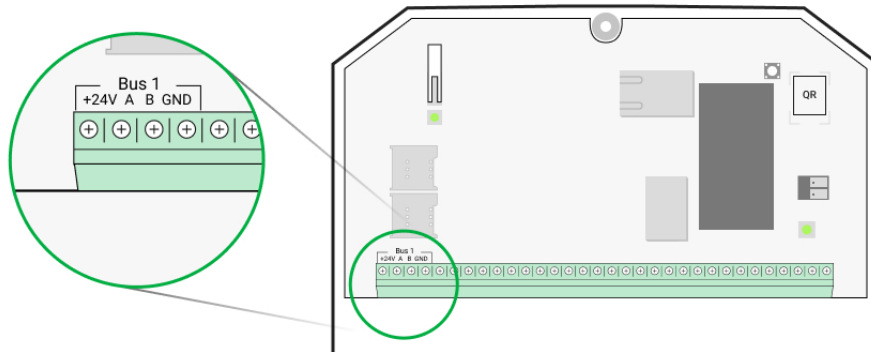
How to connect MultiTransmitter Fibra to the hub

**1.** Disconnect the external power supply and the backup battery of the hub.
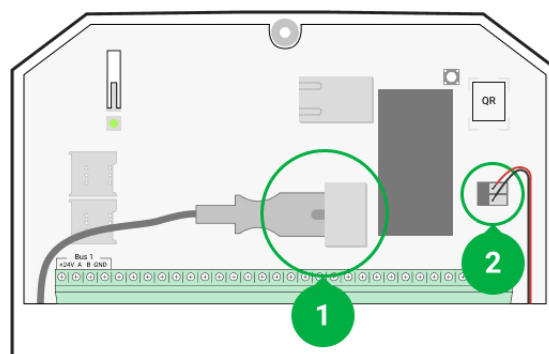
1 — External power
2 — Backup battery

2. Route the cable inside the hub casing and connect the wires to the bus.
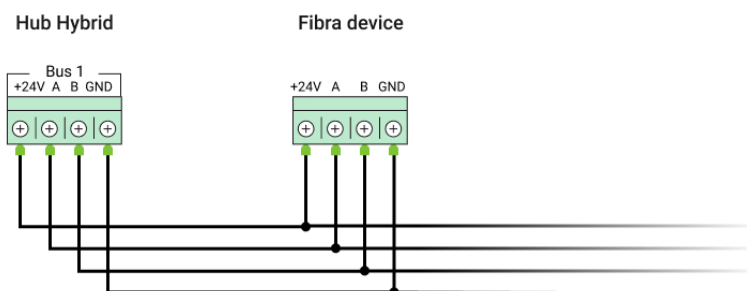
+24V — power supply input

A, B — signal terminals

GND — ground

3. Prepare the holes for wire output in advance by carefully breaking out the perforated parts of the MultiTransmitter Fibra casing.
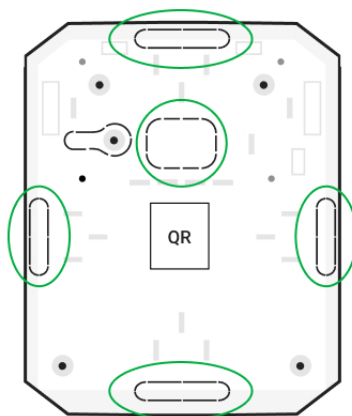

4. Insert the cable from the hub into MultiTransmitter Fibra casing through the prepared holes.

5. Connect wires to the terminals according to the diagram below. Follow the wire polarity and connection order. Securely fix the wires to the terminals.

+24V — power supply input

A, B — signal terminals

GND — ground

6. Fix the cable with ties using special fasteners inside the casing.
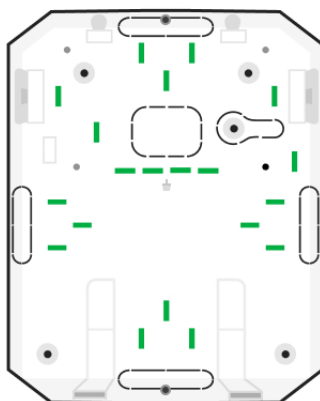
7. If MultiTransmitter Fibra is not the last in the connection line, prepare and wire the cable for the next device into MultiTransmitter Fibra terminals in advance. If the integration module is the last in the line, install a terminating resistor at the end of the connecting line in case of the **Star** connection topology. With the **Ring** connection topology, a terminating resistor is not required.

More about connection methods (in progress)

> **i** We recommend connecting devices via the **Ring connection method** (hub — detector — hub), because, if the line is broken, the devices will be connected via the **Star connection method** and will continue to transmit events to the hub. Notification about the **Ring** failure will be sent to users and the security company. Ring network connection will be implemented in the next updates of OS Malevich. Hardware update won't be required.

8. Secure the casing with the bundled screws on the vertical surface at the chosen installation place. When mounting, use all the fixing points available on the casing. One of them, in the perforated part of the mount above the tamper, is

necessary for tamper triggering in case of any attempt to detach MultiTransmitter Fibra from the surface.

9. Install a 12 V⎓ backup battery on the special holders in the casing. Note that third-party power supplies cannot be connected to the terminals.

> (i) Use a 12 V⎓ battery with a capacity of 4 or 7 A·h. You can also use similar batteries of a different capacity if their size fits the casing and the maximum full charge time doesn't exceed 30 hours. The maximum overall battery dimensions is 150 × 65 × 94 mm with weight up to 5 kg.

10. Connect the backup battery to the terminals according to the diagram below using the bundled connection cable. Follow the polarity of wire connection. Securely fix the wires in the terminals.
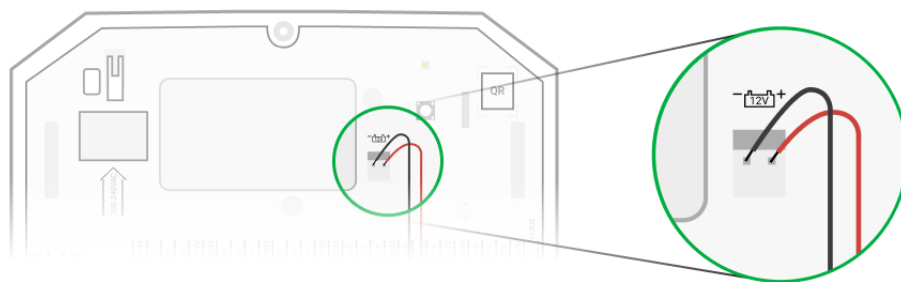

11. Turn on the hub.

12. **Add an integration module to the system**.

13. Conduct the Fibra signal strength test. The recommended signal strength value is two or three bars. Otherwise, check the connection and the condition of the wire.

14. Install the lid and secure it with the bundled screws in the lower and upper parts of the casing.

Connecting Wired Detectors and Devices to MultiTransmitter Fibra

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

2. Prepare the holes for wire output in advance by carefully breaking out the perforated parts of the MultiTransmitter Fibra casing.
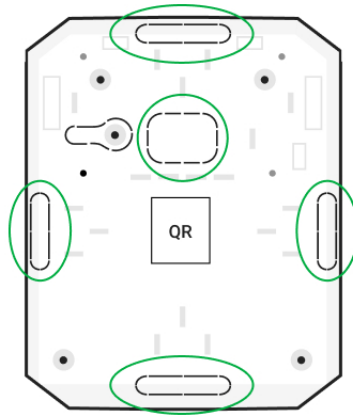

3. Route the third-party detector or device cable into the integration module casing.

4. Connect third-party wired detectors or devices to the appropriate MultiTransmitter Fibra terminals. The wiring diagram can be found in the User Guide provided by the manufacturer of the wired detector or device.

> **i** Read carefully the User Guide from a third-party detector or device manufacturer before connecting to MultiTransmitter Fibra.

5. Securely fix the wires in the terminals.

6. Fix the cable with ties using special fasteners inside the casing.
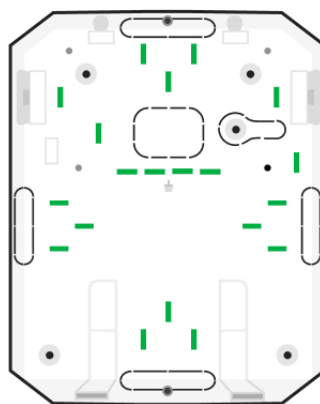
> **i** If the detector or device requires 12 V⎓ power supply, it can be connected to the power terminals of the corresponding MultiTransmitter Fibra zone. Separate power supply terminals are provided for fire detectors. Do not connect external power supply to the detector's power terminals, as this may damage the device.

7. Add a detector or device to the system.

How to connect a wired detector or device to MultiTransmitter Fibra

Adding to the system

> ⚠️ MultiTransmitter Fibra is compatible with Hub Hybrid (2G) and Hub Hybrid (4G) only. Adding and configuring Fibra devices is only possible through the PRO version of the app by a user with administrator rights.
>
> Types of accounts and their rights

Before adding the integration module

1. Install the **PRO version of the app**. Log in to a **PRO account** or create a new one if you don't have it yet.

2. Add a hub compatible with MultiTransmitter Fibra to the app, make the necessary settings, and create at least one **virtual room**.

3. Make sure that the hub is turned on and has Internet access via Ethernet and/or mobile network. You can check the connection in the Ajax app or by looking at the LED on the hub board: it should light up white or green.

4. Make sure the hub is disarmed and does not start updates by checking its status in the Ajax app.

5. Make sure the MultiTransmitter Fibra integration module is physically connected to the hub.

How to add MultiTransmitter Fibra

There are two ways to add devices: manually and automatically.

To add an integration module manually:

1. Open the **PRO version of the app**. Select the hub you want to add MultiTransmitter Fibra to.

2. Go to the **Devices** − tab and click **Add Device**.

3. Name the integration module, scan or type the QR code (placed on the integration module board and casing), select a virtual room and security group (if **Group mode** is enabled).

4. Click **Add**.

To add the integration module automatically:

1. Open the PRO version of the app. Select the hub you want to add physically connected devices to.

2. Go to the **Devices** − tab and click **Add Device**.

3. Select **Add All Bus Devices**. The hub will scan all the buses. After scanning, a list of all physically connected to the hub devices, which have not yet been added to the system, will be displayed on the screen. The devices are sorted by the buses they are physically connected to.

4. In the list of the devices available for adding click any of them. The LED of this device will start blinking. This way, you'll know exactly which device you are adding, how to name it correctly, to which room and group it has to be assigned.

5. To add a device, name it, assign the room and security group. Click **Save**. If the device successfully connects to the hub, it will disappear from the list of available ones.

6. If the device adds to the hub successfully, it will disappear from the list of devices available to add.

How to add a wired detector / device

1. In the PRO version of the app, go to the **Devices** − tab.

2. Find MultiTransmitter Fibra in the device list.

3. Click the **Devices** menu under the integration module.

4. Click **Add Wired Device**.

5. Name the device or detector, choose the wired zone to which the device or detector will be physically connected, assign the virtual room and security group.

6. Click **Add** and the device or detector will be added within 30 seconds.

> ℹ️ Device status update depends on Fibra settings; the default value is 36 seconds.

If the connection fails, check the accuracy of the wired connection and try again. If hub already has the maximum number of devices added (for Hub Hybrid, the default is 100), you will get an error notification when you add one.

MultiTransmitter Fibra operates with only one hub. After connecting to the new hub, the integration module stops exchanging commands with the old one. When added to a new hub, MultiTransmitter Fibra is not removed from the old hub's list of the devices. This must be done manually in the Ajax app.

Malfunctions

When the integration module detects a malfunction (for example, there is no connection with a hub via the Fibra protocol), the Ajax app displays a malfunction counter badge in the upper left corner of the device icon.

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

Malfunction is displayed if:

- The integration module casing is open or detached from the surface (tamper triggering).

- There is no connection between the integration module and the hub via the Fibra protocol.

- The battery is discharged.

- The battery charges for more than 40 hours.

- Failed to connect a backup battery (the battery is not physically connected or there are hardware problems, such as a faulty connection cable).

- Low voltage of the MultiTransmitter Fibra power supply bus.

- The detector power supply line is shorted out.

Icons

The icons display some of the MultiTransmitter Fibra states. You can view them in the Ajax app on the **Devices** ➖ tab.

Icon	Value
ıll	Fibra signal strength, displays the signal strength between the hub and the integration module. The recommended value is 2 or 3 bars. Learn more (in progress)
⊙	MultiTransmitter Fibra has a malfunction. A list of malfunctions is available in the MultiTransmitter Fibra states.
⊕	The fire detector connected to MultiTransmitter Fibra has registered an alarm.
⚙	MultiTransmitter Fibra is temporarily disabled. **Learn more**
⅃	MultiTransmitter Fibra has tamper triggering events temporarily deactivated by a user or PRO with administrator rights. **Learn more**

Fire alarm reset

After a fire alarm the detectors connected to MultiTransmitter need an alarm reset to return to normal state and continue to operate. The Ajax app displays a fire icon near the integration module on the Devices tab and a popup window to reset the alarm.

> ⚠️ If the detectors are not reseted after the fire alarm, they will remain in alarm mode and won't detect the next fire situation.

To reset fire detectors:

1. In the Ajax app, click on the fire icon near the MultiTransmitter Fibra on Devices tab.

2. Click the Reset button on a popup notification.

MultiTransmitter Fibra states

The states include information about the device and its operating parameters. MultiTransmitter Fibra states can be found in the Ajax app:

1. Go to the **Devices** ➖ tab.

2. Choose MultiTransmitter Fibra from the list.

Chapter in progress

Parameter	Value
Malfunction	Click ⓘ to open the list of MultiTransmitter Fibra malfunctions. The field is displayed only if a malfunction is detected.
Fibra signal strength	Signal strength between the hub and the MultiTransmitter Fibra. Recommended values: 2–3 bars. Fibra is a protocol for transmitting MultiTransmitter Fibra events and alarms. Learn more (in progress)
Connection via Fibra	Status of the connection between the hub and MultiTransmitter Fibra: • **Online** — the detector is connected to the hub. • **Offline** — the detector is not connected to the hub. Check the detector connection to the bus.
Bus voltage	Displays the total bus voltage. Chapter in progress

Battery charge	Battery charge level. Displayed as a percentage with 5% increments. **How battery charge is displayed in Ajax apps**
Lid	The status of tampers that respond to casing opening or detachment: • **Closed** — normal state of the casing. • **Open** — the lid is open or casing detached from the surface. Check the state of the device body. **Learn more**
External power	External power supply 110–240 V~: • **Connected** — the external power supply is connected to the integration module. • **Disconnected** — the external power supply is disconnected. Check the connection of the power cable to the integration module.
Detectors power line	The status of detectors power supply terminal: • **OK** — normal state of terminal. • **Shorted** — erminal is shorted out.
Fire detectors power line	The status of fire detectors power supply terminal: • **OK** — normal state of terminal. • **Shorted** — terminals is shorted out.
Temporary deactivation	Shows the status of MultiTransmitter Fibra temporary deactivation function: • **No** — the device operates normally and transmits all events. • **Lid only** — the hub administrator has disabled notifications about device tampers triggering. • **Entirely** — the hub administrator has entirely excluded the integration module from the

	system. The device does not execute system commands and does not report alarms or other events. **Learn more**
Firmware	MultiTransmitter Fibra firmware version.
Device ID	MultiTransmitter Fibra identifier / serial number. Also located on the right side of the integration module board and casing.
Device №	MultiTransmitter Fibra loop (zone) number.
Bus №	The number of the hub bus the MultiTransmitter Fibra is physically connected to.

MultiTransmitter Fibra settings

To change MultiTransmitter Fibra settings in the Ajax app:

1. Go to the **Devices** ➖ tab.

2. Select **MultiTransmitter Fibra** from the list.

3. Go to **Settings** by clicking the gear icon ⚙.

4. Set the required parameters.

5. Click **Back** to save the new settings.

Chapter in progress

Settings	Value
First field	Integration module name. Displayed in the list of hub devices, SMS text and the event feed. To change the name, click on the pencil icon ✎. The name can contain up to 12 Cyrillic characters or up to 24 Latin characters.
Room	Selecting the virtual room to which MultiTransmitter Fibra 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	If enabled, connected to the system **sirens** notify when the detector's power line is shorted out.
Fibra Signal Strength Test	Switches the integration module to the Fibra signal strength test mode. The test allows you to check the signal strength between the hub and the integration module and determine the optimal installation location. Learn more (in progress)
User Guide	Opens MultiTransmitter Fibra User Manual in the Ajax app.
Temporary deactivation	Allows to disable the device without removing it from the system. Two options are available: • **Entirely** — the device will not execute commands or participate in automation scenarios. The system will ignore device alarms and other events. • **Lid only** — the system will ignore notifications about the tampers triggering. **Learn more about temporary device deactivation** **Note that the system will ignore only the disabled integration module. The third-party devices connected to MultiTransmitter Fibra will continue to operate normally.**
Unpair device	Unpairs MultiTransmitter Fibra from the hub and deletes its settings.

States of connected detectors and devices

The states contain information about connected to MultiTransmitter Fibra devices and its operating parameters. You can find the states in the Ajax app:

1. Go to the **Devices** ➖ tab.

2. Find **MultiTransmitter Fibra** in the list.

3. Click **Devices** under MultiTransmitter Fibra status icons.

4. Select the required device from the list.

Chapter in progress

Parameter	Value
Malfunction	Click ⓘ to open the list of detector or device malfunctions. The field is displayed if a malfunction is detected.
Delay When Entering, sec	Delay time when entering (5 to 120 seconds). Delay when entering (alarm activation delay) is the time the user has to disarm the security system after entering the secured area. **Learn more**
Delay When Leaving, sec	Delay time when leaving (5 to 120 seconds). Delay when leaving (arming delay) is the time the user has for leaving the secured area after arming. **Learn more**
Night Mode Delay When Entering, sec	Delay time when entering in the Night mode. Delay when entering (alarm activation delay) is the time the user has to disarm the security system after entering the secured area. **Learn more**
Night Mode Delay When Leaving, sec	Delay time when leaving in the Night mode. Delay when leaving (arming delay) is the time the user has for leaving the secured area after arming. **Learn more**

MultiTransmitter Fibra name	The status of the MultiTransmitter Fibra the wired detector or device is connected to: • **Online** — the integration module is connected to the hub. • **Offline** — the integration module has lost connection with the hub. Check the wired connection.
External Sensor State (displayed when the detector is in bistable mode only)	Connected wired detector status: • **OK** — normal state of connected detector or device. • **Alert** — the connected detector or device has detected an alarm. • **Shorted** — the terminals, to which the detector or device is connected, are shorted out (the available in case of EOL (NC), 2EOL (NC) and 3EOL (NC) connection). • **Break** — displayed if the connected detector or device is disconnected (available in case of EOL (NO), 2EOL (NO) and 3EOL (NO) connection). • **Malfunction** — displayed if the connected detector or device has a malfunction, for example, if the detector detects masking (available in case of 3EOL connection).
Always active	If enabled, the detector connected to MultiTransmitter Fibra is always in armed mode and notifies about alarms. **Learn more**
Resistance	The total resistance of the resistors connected to the detector or device. Measured automatically. The value can also be set manually with 100 Ω increments.
Temporary deactivation	Shows the status of the detector or device temporary deactivation function:

- **No** — the device operates normally and transmits all events.

- **Entirely** — the hub administrator has entirely excluded the device from the system. The device does not execute system commands and does not report alarms or other events.

- **By number of alarms** — the device is automatically disabled when a number of alarms is exceeded (specified in **Devices Auto Deactivation** settings).

- **By timer** — the device is automatically disabled by the system when the recovery timer expires (specified in **Devices Auto Deactivation** settings).

Learn more about temporary deactivation of devices
Learn more about auto deactivation of devices

Wired device №	The number of the MultiTransmitter Fibra zone the wired device is physically connected to.
Device №	Device loop (zone) number.

Connected to MultiTransmitter Fibra detectors or devices settings

To change the settings of the connected to MultiTransmitter Fibra detectors and devices in the Ajax app:

1. Go to the **Devices** ➖ tab.

2. Find **MultiTransmitter Fibra** in the list.

3. Click **Devices** under MultiTransmitter Fibra status icons.

4. Select the required device from the list.

5. Go to **Settings** by clicking the icon ⚙.

6. Set the required parameters.

7. Click **Back** to save the new settings.

Settings	Value
First field	Detector or device name. Displayed in the list of hub devices, SMS text and the event feed. To change the name, click on the pencil icon ✏. The name can contain up to 12 Cyrillic characters or up to 24 Latin characters.
Room	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.
Contact type	Selecting the type of connection for a third-party detector or device: • No EOL • EOL • 2EOL • 3EOL
Work mode	Selecting the normal state of the contact of the connected detector/device: • **NC** — normally closed. • **NO** — normally open.
If "No EOL" is selected in the Contact Type field	
Type of event	Selecting the event type of the connected detector or device: • Intrusion • Fire • Medical help • Panic button • Gas

	• Tamper The text of notifications in the event feed and SMS, as well as the code transmitted to the CMS depend on the selected type of event.
External Detector Type	Type of connected detector or device: • **Pulse** — for example, a motion detector. After an alarm, a recovery notification will not be sent if the detector returns to the normal state. • **Bistable** — for example, an opening detector. After an alarm, a recovery notification will be sent when the detector returns to the normal state. Make sure to set the type matching the connected detector. The pulse detector in bistable mode generates unnecessary recovery events. A bistable detector in pulse mode, will not send recovery events.
If "EOL" is selected in the Contact Type field	
Connection scheme	A scheme of a wired device or detector connection to the MultiTransmitter Fibra. Used as a hint for the installation engineer.
Measure the detector resistance	Launches the assistant to automatically measure the resistance of the resistor connected to the detector.
Type of event	Selecting the event type of the connected detector or device: • Intrusion • Fire • Medical help • Panic button • Gas • Tamper

	The text of notifications in the event feed and SMS, as well as the code transmitted to the CMS depend on the selected type of event.
Detector Type	Type of connected detector or device: • **Pulse** — for example, a motion detector. After an alarm, a recovery event will not be sent if the detector returns to the normal state. • **Bistable** — for example, an opening detector. After an alarm, a recovery notification will be sent when the detector returns to the normal state. Make sure to set the type matching the connected detector. The pulse detector in bistable mode generates unnecessary recovery events. A bistable detector in pulse mode will not send recovery events.
Resistance of EOL resistor	The resistance of the resistor connected to the detector. Sets manually from 1 kΩ to 7.5 kΩ with increments of 100 Ω. Resistance can be measured automatically by the **Measure Detector Resistance** feature.
Always active	If enabled, the detector connected to MultiTransmitter Fibra is always in armed mode and notifies about alarms. Learn more
Delay When Entering, sec	Delay time when entering (5 to 120 seconds). Delay when entering (alarm activation delay): the time the user has to disarm the security system after entering the secured area. Learn more
Delay When Leaving, sec	Delay time when leaving (5 to 120 seconds).

	Delay when leaving (arming delay): the time the user has to leave the secured area after arming. **Learn more**
Arm in Night mode	If enabled, the detector connected to the integration module will switch to the armed mode when the **Night Mode** will be enabled in the system. **What is Night mode**
Night Mode Delay When Entering, sec	Delay time when entering in the **Night mode**. Delay when entering (alarm activation delay) is the time the user has to disarm the security system after entering the secured area. **Learn more**
Night Mode Delay When Leaving, sec	Delay time when leaving in the **Night mode**. Delay when leaving (alarm activation delay) is the time the user has to exit the secured area after arming. **Learn more**
Pulse time	Pulse time for alarm detection by detector or device: • 20 msec • 100 msec (default value) • 1 sec An alarm is triggered if the pulse from the detector exceeds the specified time. It can be used as a false alarm filter.
Alert with a siren if alarm is detected	If enabled, the **sirens** **added to the system** are activated in case an alarm is detected.
Alert with a siren if a contact is lost or shorted out	If enabled, the **sirens** **added to the system** are activated when a broken or shorted out contact is

	detected.
Chime Settings	Opens the Chime settings. This function works for bistable detectors only. ## How to set Chime ## What is Chime
Temporary deactivation	Allows to disable the device without removing it from the system. Two options are available: - **No** — the device or detector operates normally and transmits all events. - **Entirely** — the device will not execute commands or participate in automation scenarios. The system will ignore device alarms and other events. ## Learn more about temporary deactivation of devices The system can also automatically deactivate devices when the set number of alarms is exceeded or when the recovery timer expires. Auto deactivation of devices is configured in the **Service** menu in the hub settings. ## Learn more about auto deactivation of devices
Unpair device	Unpairs the wired detector or device from the hub and deletes its settings.

How to set Chime

Chime is a sound signal Ajax sirens that notifies about the opening detector trigger 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, the opening detectors and setting up the sirens.

Setting up a wired opening detector connected to MultiTransmitter Fibra

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

- Input type: **Detector**.

- Type of event: **Intrusion**.

- Work mode: **Normally closed**.

- External detector type: **Bistable**.

- Pulse time: set the required time to protect the detector from rattling.

Detector settings:

1. Go to the **Devices** ⬛ tab.

2. Find **MultiTransmitter Fibra** in the list.

3. Click **Devices** under the MultiTransmitter Fibra status icons.

4. Select the opening detector from the list.

5. Go to **Settings** by clicking the icon ⚙.

6. Go to the **Chime Settings** menu.

7. Enable **If an 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 Fibra indication

MultiTransmitter Fibra reports some statuses using the LED indicator on the board.

LED indication	Event
Lights up white (constantly).	MultiTransmitter Fibra is connected to the hub.
Lights up red (constantly).	MultiTransmitter Fibra has no connection with the hub.
Lights up once every 10 seconds.	External power supply is not connected.
Turns off and lights up green after, smoothly lights off until it turns off completely.	MultiTransmitter Fibra turns off after pressing the power button.
Smoothly lights up and goes out after an alarm or tamper triggering.	Low voltage of the power supply bus (7 V and below).

MultiTransmitter Fibra functionality test

Ajax security system provides several types of tests that help you make sure that device's installation place is chosen correctly. The tests do not start immediately but not later than over a single hub–detector polling period which sets automatically depending on the number of devices connected to the hub.

For MultiTransmitter Fibra the Fibra Signal Strength Test is available.

To run a test in the Ajax app:

1. Select the hub (if you have several of them or if you are using the PRO version of the app).

2. Go to the **Devices** ➖ tab.

3. Choose MultiTransmitter Fibra.

4. Go to **Settings** ⚙.

5. Select **Fibra Signal Strength Test**.

6. Run the test.

MultiTransmitter Fibra maintenance

Check the functionality of the integration module and the connected wired devices on a regular basis. The optimal interval for the check is once every three months. During the check, it is necessary to verify the correctness of the wire connection to the integration module terminals.

Clean the casing 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.

Technical specifications

Learn more

Compliance with standards

Complete Set

1. MultiTransmitter Fibra.

2. Casing.

3. Power cable.

4. 12 V⎓ battery connection cable.

5. Installation kit.

6. Quick Start Guide.

Warranty

Warranty for the AJAX SYSTEMS MANUFACTURING Limited Liability Company products is valid for 2 years after the purchase.

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

Warranty obligations

[User Agreement](#)

Contact Technical Support:

- [e-mail](#)

- [Telegram](#)

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