EN54 Fire Hub Jeweller user manual

Updated June 30, 2025

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Revision 1

EN54 Fire Hub Jeweller is a wireless control and indicating equipment (CIE) for a fire alarm system, supporting intrusion protection devices. It enables the integration of EN 54 fire detection with EN 50131 intruder alarm, automation, and video surveillance in a single system. The CIE features a 10.1" touch display that provides informative fire alarm notifications, system status updates, and convenient fire system control.

The CIE requires an internet connection to access the Ajax Cloud server. Supported communication channels include Ethernet, Wi-Fi, and two SIM cards.

EN54 Fire Hub Jeweller can operate autonomously for 24 or 72 hours, depending on the battery. The backup battery is not included in the complete set. Only use compatible batteries: **EN54 Internal Battery (24h)** or **EN54 Internal Battery (72h)**.

Buy EN54 Fire Hub Jeweller

Buy EN54 Internal Battery (24h)

Buy EN54 Internal Battery (72h)

Functional elements



- **1.** IPS touch display with a 10.1" diagonal.
- 2. Card/key fob reader (coming soon).
- 3. SmartBracket mounting panel.
- **4.** Perforated part of the mounting panel for routing cables through the wall.
- **5.** Perforated part of the mounting panel that triggers the **tamper button** if the device is removed from the surface. Do not break it off.
- **6.** Slot for micro SIM 2.
- **7.** Slot for micro SIM 1.
- 8. QR code and ID (serial number) of the device.
- 9. Power button.

- 10. Tamper button.
- **11.** Ethernet cable connector.
- **12.** Bubble level for checking mount inclination angle during installation.
- **13.** Terminals for connecting a power cable.
- **14.** Relay output 2 -for alerting the monitoring station to fire alarms.
- **15.** Relay output 1 -for alerting the monitoring station to system faults.
- 16. Slot for internal battery (not included).
- **17.** Hole for the special tool.
- 18. Special tool (key).

LED indicators



- **1.** Fire alarm indicator.
- 2. Test indicator.
- 3. Disablement indicator.
- 4. System fault indicator.
- 5. Fault indicator.

- 6. Power supply indicator.
- 7. Fire zones LED indicators.

Operating principle

EN54 Fire Hub Jeweller is the CIE of an Ajax system, designed for comprehensive management of fire safety systems. It also supports intrusion protection, video surveillance, and automation devices, making it a unified solution for protecting commercial and municipal sites. The CIE controls the operation of connected devices and indicates the current state of the fire safety system.

The CIE is added to a **space** – a virtual entity that brings together various autonomous devices installed at the same facility.

How to create a space

You can connect up to 200 wireless Ajax devices to EN54 Fire Hub Jeweller. Once connected, they provide protection against fire, intrusion, and flooding, while also enabling control of electrical appliances — either via automation scenarios or manually via mobile apps, panic button, **LightSwitch**, or **keypad with a touch screen**.

To monitor the operation of all connected devices, the CIE communicates with them using two **encrypted protocols**:

1. **Jeweller** is a radio protocol for transmitting events and alarms from Ajax wireless devices. The communication range is up to 1,800 m in open space, without obstacles such as walls, doors, or inter-floor structures.

Learn more about Jeweller

2. **Wings** is a radio protocol for transmitting large data packets. The communication range is also up to 1,800 m in open space.

Learn more about Wings

If a fire detector is triggered, the system raises an alarm within three seconds. In this case, the CIE activates the sirens, runs scenarios, and alerts the monitoring station and all users.

Fire protection

EN54 Fire Hub Jeweller is fully compliant with key fire detection and fire alarm system standards, specifically EN 54. It allows building wireless fire detection and alarm systems in commercial and municipal facilities.

Ajax devices from the EN54 Line connected to the CIE are assigned to one of 40 **Fire zones**. When a fire is detected in any zone or an <u>Ajax manual</u> <u>call point</u> is pressed, all Ajax EN54 sounders and VADs across the facility raise an alarm.

The CIE display shows complete incident information: the cause of the alarm, the time it started, and where (zone, room, location), along with the last activated zone and the total number of zones in the fire alarm state.

Thanks to its intuitive interface and detailed LED indication, users can quickly respond to alarms, locate the fire, or activate the fire alarm manually. The CIE is also equipped with a buzzer that provides audible alarm notifications with a volume of at least 60 dB at a distance of 1 m from the device.

Users with the appropriate rights and access level can silence, resound, or reset the fire alarm from the CIE display or via Ajax apps: **Control** tab \rightarrow tap the \clubsuit icon. Depending on the CIE settings, a silenced fire alarm may be raised again automatically if fire is detected in a new zone, or users may be notified only via CIE indications and in-app alerts. Even if the CIE buzzer was muted earlier, it will still alert in the event of fire in a new zone or in case of new faults. Sounders and VADs can also be manually resounded from the CIE or via the **Control** \clubsuit tab in Ajax apps. If the fire alarm state is reset while detectors are still registering fire, the system will raise an alarm again after 20 seconds.

Event center

Ajax apps keep a detailed log of alarms, security events, and user actions. The CIE display also shows an event log, limited to Ajax EN54 devices connected to the CIE. The **Event center** tab provides detailed information about fire alarms, device faults, disablements, tests, and other important events. The information is organized into separate tabs for easier navigation.

Fire alarm tab

The **Fire alarm** tab becomes active only when a fire is detected in the system. Tapping this tab opens a list of zones currently in the fire alarm state, sorted by the time the fire started. Selecting a zone from the list displays the alarms registered in that zone.

Fault, test, or disablement tab

The **Fault, test, or disablement** tab displays all active system events matching the types listed in its name. The tab becomes active only when the system is running a test of Ajax EN54 devices, when some devices are fully or partially disabled, or when a fault has occurred within the fire alarm system, and it has not yet been restored. Tapping this tab opens a list of the corresponding system events.

Event log tab

The **Event log** tab is always active. Tapping it opens a chronological list of all events and alarms related to the fire alarm system. The CIE event log stores up to 5,000 events.

Fire zones

EN54 Fire Hub Jeweller allows for managing Ajax EN54 devices in different **Fire zones**. Users can quickly access the **Fire zones** list from the CIE display to view the current state of each zone and check for any device disablements within them. An admin or a user with **access level 2** can initiate a test or disable devices directly from the CIE touch screen.

Authorization

Unauthorized users have access to the CIE Control tab and can perform basic actions: start an indication test, mute the CIE buzzer, or override configured delays (coming soon) to send an alarm to the monitoring station in case of fire.

Authorized users with **access level 2** or higher have access to the broader CIE functionality, such as starting evacuation, silencing alarms, running device tests, etc.

Available authorization methods:

- Entering a **personal code** on the CIE display.
- Entering an **access code** on the CIE display (*coming soon*).
- Presenting Tag or Pass to the reader (*coming soon*).

Access level 2 can be configured in Ajax apps:

• For admins – in the **Users** section of the space settings.

An admin with system configuration rights is assigned **access level 2** by default. Only a PRO with system configuration rights can manage admin permissions in Ajax PRO apps.

To disable the **Fire system access level 2** toggle, the **System settings** toggle must be disabled first.

• For unauthorized users — in the **Access codes** section of the CIE settings (coming soon).

User account types and rights

Settings

In the **Settings** tab on the EN54 Fire Hub Jeweller display, users can adjust the screen backlight brightness and select the interface language. These options are available to all users.

All other CIE settings can be configured via Ajax apps.

Sabotage protection

EN54 Fire Hub Jeweller supports four communication channels for connecting to the Ajax Cloud server: Wi-Fi, Ethernet, and two SIM cards. This allows the device to work with multiple communication providers at once. If one channel becomes unavailable, the CIE automatically switches to another and notifies the monitoring station and system users.

If a jamming attempt is detected, the system switches to an idle radio frequency and sends notifications to the monitoring station and users.

What is security system jamming

The CIE regularly checks the connection quality with all linked devices. If any device loses connection, and the configured timeout expires, all system users (depending on the settings) and the monitoring station will receive a notification of the incident.

Learn more

To comply with the EN 54-25 standard, the time before CIE detects communication loss with connected devices must be less than 300 seconds. An admin or a PRO with system configuration rights can adjust the settings to meet this requirement.

Learn more

No one can turn off the CIE unnoticed. If an intruder attempts to open the CIE enclosure, a tamper alarm is triggered immediately. An alarm notification is then sent to the monitoring company and all system users.

What is a tamper button

The CIE regularly checks its connection to Ajax Cloud. The ping interval is defined in the CIE settings. When the minimum interval is configured, the server can notify users and the monitoring company as soon as 60 seconds after the connection is lost.

Learn more

A 5 Ah or 10 Ah backup battery can be installed in the CIE. **EN54 Internal Battery (24h)** provides up to 24 hours of autonomous system operation, while **EN54 Internal Battery (72h)** offers up to 72 hours.

Internal battery is not included in the CIE complete set and must be bought separately.

Learn more

OS Malevich

EN54 Fire Hub Jeweller runs on OS Malevich, a real-time operating system protected against viruses and cyberattacks.

OS Malevich brings new features and functionality to the Ajax system through over-the-air updates. A PRO or a company with firmware update rights can start an update – when available – from the EN54 Fire Hub Jeweller field in the **Devices** tab, or via the CIE states or settings. Onscreen instructions help guide the user through the process.

The update takes up to 2 minutes and requires the system to be disarmed, free of active fire alarms, and connected to an external power supply.

How OS Malevich updates

Ajax account

To set up the system, install an **Ajax app** and log in to your account, or create a new one if you don't have one. Don't create a new account for each space, since one account can manage multiple security systems. Where necessary, you can configure separate access rights for each space. Changing the space admin, adding or removing users does not reset the settings of devices added to the space.

How to create the user account

How to create a PRO account

Adding the CIE in an Ajax app

We highly recommend creating <u>personal access codes</u>, as well as access codes with access level 2, after adding EN54 Fire Hub Jeweller to a space. A code is required to log in and manage the fire alarm system from the CIE touch screen.



Use the latest versions of Ajax apps to access all available features and ensure proper system operation.

After adding a CIE to your account, you become the admin of the device. Admins can invite other users to the system and determine their rights. You can connect up to 200 users to EN54 Fire Hub Jeweller. Each PRO account connected to the CIE, as well as the security company profile, is considered a user of the system.

If there are already users on the CIE, the CIE admin, PRO with the rights to configure the system, or the installation company maintaining the selected CIE can add your account. You will be notified that the CIE has already been added to another account. Contact our <u>Technical Support</u> to determine who has admin rights on the CIE.

User account types and rights

To add the CIE in an Ajax app:

- **1.** Connect external power, internal battery, Ethernet, and/or Wi-Fi and SIM cards to the CIE.
- **2.** Open an **Ajax app** and allow the requested permissions. This ensures full functionality and reliable delivery of alarm and event notifications.
- **3.** Make sure you have a space in the app. If not, create one.

What is a space

How to create a space

- **4.** Scan the CIE QR code or enter its ID manually.
- 5. Assign a name to the CIE.
- 6. Add at least one virtual room.
- 7. Turn on the CIE.

- 8. Install the CIE on the SmartBracket mounting panel.
- 9. Click Add device.
- 10. Wait until the CIE is added. Once connected, the CIE will appear in the Devices tab of an Ajax app.

Adding devices to the CIE



Check the device compatibility before adding it to the CIE. To add a device to the CIE, it should be located within the CIE radio communication range — at the same secured premises.

To add a device to the CIE:

- **1.** Select a space with a compatible CIE.
- **2.** Ensure the CIE is switched on and has internet access via Ethernet, Wi-Fi, and/or mobile network.
- **3.** Check the states in an Ajax app to ensure the space is disarmed and the CIE is not starting an update.



Only a PRO or a space admin with the rights to configure the system can add a device to the CIE.

- **4.** Go to the **Devices •** tab and tap **Add device**.
- **5.** Scan the QR code or enter the device ID manually. A QR code with ID is placed on the device under the SmartBracket mounting panel. Also, it is duplicated on the device packaging.
- 6. Assign a name to the device.
- 7. Select a virtual room.

8. For Ajax EN54 devices, select a fire zone. If necessary, specify the device location in the **Location** field.



Names of devices, fire zones, rooms, and locations are displayed in the text of events and alarms of the Ajax system.

- 9. Tap Add device, and the countdown will begin.
- **10.** Switch on the device.

Find more information in the **user manual** for each device how to add it to the CIE.

Faults

When a CIE fault is detected (e.g., the tamper alarm is triggered, the internal battery is low, the device is offline), the Ajax app displays a fault counter on the device icon. Faults are also indicated in the device's states. Affected fields are highlighted in red.

All faults related to Ajax EN54 devices and the CIE itself are shown on its display. In the **Control** tab, users can see which zone requires attention and the reason. The built-in buzzer and LED indicators of the CIE always signal the presence of a fault.

More details about the fault can be found in the **Event center** or **Fire zones** tab on the CIE. Full information about the fire alarm system is also available in Ajax apps: **Control** \bullet tab \rightarrow Swipe or tap the \diamondsuit icon.

Icons

Icons display some of the EN54 Fire Hub Jeweller states. You can view them in the Ajax app, in the **Devices** tab.

lcon	Meaning
26	The CIE operates in the 2G network.
(4G)	The CIE operates in the 4G (LTE) network.
	No SIM cards. Insert at least one SIM card.
	The SIM card is faulty or has a PIN code set up. Check SIM card operation in the phone and disable the PIN code request.
Ì	The CIE battery charge level. Displayed in 1% increments.
×	The backup battery is not connected.
\triangle	EN54 Fire Hub Jeweller fault detected. Open CIE states for details.
٦	The CIE is directly connected to the monitoring station of the security company. The icon is not displayed if direct connection is not available or not configured.
ě	The CIE is not directly connected to the monitoring station of the security company. The icon is not displayed if direct connection is not available or not configured.

States

In the CIE Control tab

Users can check the fire alarm system states in the CIE **Control** tab. It shows whether the system operates normally, if a fire alarm is active, and other system states.

Parameter Meaning

System state	 The system state field is located in the upper-left corner of the CIE and shows the following state: System operates normally. System requires attention – in case of any EN54 device fault, test, or disablement. Fire alarm started – in case of a fire alarm in the system. This field also contains additional details about the state, which can be checked in the Event center.
Alarm signal to CMS	 Signal sending status to the monitoring station: Transmitted – fire alarm signal is sent to the monitoring company. Received – CIE received a confirmation that the fire alarm signal is delivered. Fault – CIE didn't receive a confirmation that the fire alarm signal is delivered.
Sounder, VAD	 The state of annunciation devices in the system: Activated – sounder or VAD is activated in the system. Silenced – sounder or VAD is silenced in the system. Fault – at least one device with a sounder or VAD in the system has a fault. Disabled – at least one device with a sounder or VAD is partially or completely disabled.

	 Delayed — at least one sounder or VAD in the system is in the delayed state.
Override delays (<i>coming soon</i>)	The button is active when the investigation and/or acknowledgement delay has started, allowing users to switch the system to the fire alarm state, overriding the delay.
Start evacuation	Users can start evacuation manually. Sounders and VADs will alert about the fire, and the fire alarm signal will be sent to the monitoring station.
Mute buzzer	The button is active when the CIE built-in buzzer is alerting about a fire or fault, and disabled when the buzzer is muted.
Indication test	When the button is active , the user can run the CIE indication test. When it is disabled , CIE indication test is already running. Learn more
Silence alarm	The button is active when at least one sounder or VAD is active. When it is disabled , there is no fire alarm in the system, or the user has no access to silence annunciation devices.
Resound alarm	The button is available and active if at least one sounder or VAD in the system is silenced after a fire alarm had started.
Reset	When the button is active , there is a fire alarm in the system, and an admin, PRO, or a user with access level 2 can reset it. When it is disabled , there is no fire alarm in the system, or the user has no access to reset a fire alarm.

In Ajax apps

States can also be found in Ajax apps:

- 1. Go to the **Devices** tab.
- 2. Select EN54 Fire Hub Jeweller from the list.

Parameter	Meaning	
	Click the (i) button to open the list of the device faults.	
Fault	The field appears only if a fault is detected. A fault is a critical interferer for fire alarm system operation according to the EN 54 standard.	
	Click the \overbrace{i} button to open the list of the device malfunctions.	
Malfunction	The field appears only if a malfunction is detected. A malfunction is not a critical interferer for fire alarm system operation according to the EN 54 standard.	
	The CIE buzzer states:	
Buzzer	 Not alerting – not active or muted. Alerting – activated in case of a fire 	
	alarm, fault, or CIE test.	

Cellular signal strength	The signal strength of the active SIM mobile network. Install the CIE in places where the cellular communication level reaches 2–3 bars. If the CIE is installed in a place with weak or unstable signal strength, it will not be able to call or send an SMS about an event or alarm.
Connection	 The state of connection between the CIE and Ajax Cloud: Online – the CIE is connected to Ajax Cloud. Offline – the CIE is not connected to Ajax Cloud. Check the CIE Internet connection. If the device is not connected to the server, icons of the CIE and all connected devices become semi-transparent in the list of devices.
Battery charge	CIE backup battery charge level. Displayed in 1% increments. At a charge level of 20% and below, the CIE will report low battery charge. Learn more
Lid	 The state of the tamper button that responds to detachment or opening of the device enclosure: Closed – the device is installed on the SmartBracket mounting panel. The integrity of the device enclosure and the mounting panel is not compromised. Normal state. Open – the device lid is open, or its integrity is otherwise compromised.

	Check the device.
Main power	 External power supply connection state: Connected – the device is connected to an external power supply. Disconnected – no external power supply. Check the connection of the device to the external power supply.
Cellular data	 Mobile Internet connection status of the device: Connected – the device is connected to Ajax Cloud via mobile Internet. Not connected – the device is not connected to Ajax Cloud via mobile Internet. Check the device connection to the Internet via the mobile network. Disabled – the option is disabled in the CIE settings. If the cellular signal strength reaches 1–3 bars, and the CIE has enough funds and/or has bonus SMS/calls, it will be able to call and send SMS, even if this field displays the Not connected state.

	Internet connection state of the CIE via Ethernet:	
Ethernet	• Connected — the device is connected to Ajax Cloud via Ethernet. Normal state.	
	 Not connected — the device is not connected to Ajax Cloud via Ethernet. Check the device connection to the Internet via the wired Internet. 	
	• Disabled — the option is disabled in the CIE settings.	
SIM 1	The number of the SIM card installed in the first slot.	
	To copy the number, click on it.	
	If the phone number is displayed as an Unknown number , the operator has not written it to the memory of the SIM card.	
	The number of the SIM card installed in the second slot.	
SIM 2	To copy the number, click on it.	
	If the phone number is displayed as an Unknown number , the operator has not written it to the memory of the SIM card.	
Average noise (dBm)	Average noise in the radio channel. Measured in the place where the CIE is installed.	
	The first two values show the level at Jeweller frequencies, and the third — at Wings frequencies.	
	The acceptable value is –80 dBm or lower. For example, –95 dBm is considered acceptable and –70 dBm is invalid.	
	What is security system jamming	

Hub model	CIE model name.
Hardware	Device hardware version. Not updated.
Firmware	Device firmware version. Updates remotely.
Device ID	Identifier (first 8 digits of the serial number) of the device. The identifier is located on the device box and on the board under the QR code.
IMEI	A unique 15-digit serial number for identifying the CIE modem on a GSM network. It is shown only when a SIM card is installed in the CIE.

Settings

The CIE settings can be changed in Ajax apps. In order to change the settings:

- 1. Log in to the Ajax app.
- 2. Select a facility from the list.
- 3. Go to the **Devices** tab.
- 4. Select a CIE.
- **5.** Go to its **Settings** by clicking on the gear icon $^{\textcircled{O}}$.
- **6.** Select a settings category and make changes. After making changes, click **Back** to save the new settings.

Room

Control panel	~
Fire system settings	~
Ethernet	~
Cellular	~
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Code length restrictions	~
Detection zone test	~
Jeweller	~
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User guide	~
Transfer settings to another hub	~
Scenarios and schedule	~
Remove hub	~

×

CIE settings reset (coming soon)

Resetting the CIE to the factory settings:

- **1.** Turn on the CIE if it is off.
- 2. Remove all users and installers from the CIE.
- **3.** Hold the power button for 30 s.
- 4. Remove the CIE from your account.

Space settings

Settings can be changed in the Ajax app:

- **1.** Select the space if you have several of them or if you are using a PRO app.
- 2. Go to the Control 🖯 tab.
- **3.** Go to **Settings** by tapping the gear icon O in the center.
- 4. Set the required parameters.
- 5. Tap Back to save the new settings.

How to configure a space

Indication

EN54 Fire Hub Jeweller informs users of fire-related system states via its display, built-in buzzer, and LED indicators located on the front panel of the CIE enclosure. In case of a fire alarm, fault, device disablement, or test, the CIE display shows an appropriate screen. It includes details such as the cause of the alarm (e.g., smoke, heat, or manual call point activation), the location, room, and zones in alarm. The display also indicates whether the alarm signal was sent to the monitoring station and shows the current states of Ajax EN54 sounders and VADs.

Indication	Event	Note
The built-in buzzer emits a short sound.	Tapping the display.	
() lights up continuously.	An external power supply is connected to the CIE.	
 blinks; 01-40 Fire zones indicator lights up continuously; The built-in buzzer beeps continuously. 	A fire alarm occurred.	Fire zone indicators light up according to the zone number where fire is detected or a manual call point is pressed.
Iights up continuously; 01-40 Fire zones indicator lights up continuously;	The CIE built-in buzzer was muted after a fire alarm had occurred.	Fire zone indicators light up according to the zone number where fire is detected or a manual call point is pressed.
▲ blinks; The built-in buzzer beeps continuously.	A fault occurred.	The CIE or connected Ajax EN54 devices have a fault. If connected, the system alerts the monitoring station.
⚠️ lights up continuously.	The CIE built-in buzzer was muted after a fault had occurred.	
 ▲ blinks; ▲ blinks; The built-in buzzer beeps continuously. 	A system fault occurred.	The CIE has a hardware issue (e.g., the display is broken). Contact the Ajax Technical Support for assistance. If configured, the system alerts the monitoring station.

▲ lights up continuously; ▲ lights up continuously.	The CIE built-in buzzer was muted after a system fault had occurred.	
📰 lights up continuously.	A test of Ajax EN54 devices in fire zones is in progress.	
× lights up continuously.	Some Ajax EN54 devices connected to the CIE are fully or partially disabled.	
All LED indicators light up, and the built-in buzzer emits sound for 7 seconds.	Indication test is in progress.	

Indication test

To run the indication test of the CIE and ensure it functions properly:

- 1. Go to the **Control** tab on the CIE display.
- 2. Tap Indication test.
- **3.** Ensure that the built-in buzzer is sounding and all CIE LED indicators are lit. During the test, the names of the LED indicators will appear on the display for 5 seconds. Then, the display will turn green for 2 seconds.

If the CIE does not perform as described during the indication test, please contact Ajax Technical Support for assistance.

Additional features

Video surveillance

EN54 Fire Hub Jeweller is compatible with <u>Ajax cameras and NVRs</u> and with third-party cameras that support RTSP protocol or SDK integration.

You can calculate the number of cameras and NVRs that can be added to the space using the **video device calculator**.

Scenarios

EN54 Fire Hub Jeweller allows creating 64 scenarios and minimizing the human factor impact on safety. The CIE can manage the security of the entire facility or group according to a schedule; activate the smoke machine if intruders enter the room; de-energize the room and turn on emergency lighting in case of fire; shut off water in the event of a leak; control lighting devices, electric locks, roller shutters, and garage doors — when changing the security mode by pressing a button or by a detector alarm.

Scenarios can be used to reduce the number of routine actions and increase productivity. Ajax automation devices respond to changes in temperature and air quality. For example, configure the heating to turn on at low temperatures, control the supply system, humidifier, and air conditioner to maintain a comfortable climate.

How to create and customize a scenario

Photo verification

EN54 Fire Hub Jeweller supports both MotionCam and MotionCam Outdoor motion detectors. When triggered, the detectors take a series of shots you can use to evaluate the unfolding of the events at the facility over time. This relieves users of unnecessary anxiety and prevents security companies from sending unnecessary patrol dispatches.

The detector activates the camera when armed and detects movement. Only users with access to the events feed, as well as authorized employees of the security company, can see visual alarm verifications provided that the security system is connected to the monitoring station. If **Photo on demand** function is activated, the detectors can take a photo upon the command of a system user or PRO user with the appropriate rights. The taking of a photo is always registered in the CIE events feed in the Ajax app.

The shots are protected by encryption at every stage of transmission. They are stored on the Ajax Cloud server and are not processed or analyzed.

Learn more

Selecting the installation site

The CIE is designed for indoor installation only. It is recommended to install it in a visible and easily accessible location — for example, near the entrance on the first floor of the building. This helps ensure timely response to a fire alarm, quick identification of the fire location, and informed decisions about evacuation.

Install the CIE on a vertical surface. This will ensure proper tamper button response if someone attempts to remove the device. Refer to the <u>battery</u> <u>documentation</u> before installation. Note that incorrect positioning may accelerate battery degradation.

Choose a location where the CIE can access all available communication channels: Wi-Fi, Ethernet, and two SIM cards. Ensure that the cellular signal at the installation site is stable and reaches at least 2–3 bars. Correct device operation is not guaranteed if the cellular signal is weak.

When selecting the installation site, consider the distance between the CIE and wireless devices, as well as any obstacles that may interfere with radio signal transmission, such as walls, intermediate floors, or large objects in the room.

To roughly calculate the signal strength at the place of installation of wireless devices, use our **radio communication range calculator**. Note that

if the signal strength is excellent, the device can automatically adjust the power of radio transmission to reduce power consumption and radio interference.

Run the Jeweller and Wings signal strength tests before final installation. The test checks the signal strength at the device's maximum transmission power. To comply with the EN 54 requirements, the signal strength between the device and the CIE has to be three bars. With a signal strength of one or zero bars during the test, we do not guarantee stable operation of the system.

If the system has devices with signal strength of 1 or 0 bars, consider relocating the CIE or device. If this is not possible or the device still has low or unstable signal strength after being moved, use **EN54 Fire ReX Jeweller**.

We recommend laying out power or signal cables inside the wall. Otherwise, use the **GlandBox** wiring accessory with 20 mm cable glands (not included) for external cable routing.

Where not to install the device

- **1.** Outdoors. This could result in device failure.
- **2.** Near metal objects and mirrors. They can cause attenuation or shielding of the radio signal. This could result in the loss of connection between the CIE and wireless Ajax devices.
- **3.** In places with high levels of radio interference. This could result in the loss of connection between the CIE and wireless Ajax devices or false notifications about security system jamming.
- **4.** Less than 1 meter away from the router and power cables. This could result in the loss of connection between the CIE and wireless devices.
- **5.** Less than 1 meter away from Jeweller devices. This could result in the loss of connection between the CIE and these devices.
- **6.** In places where the CIE will have a signal strength of 1 or 0 bars with connected devices. This could result in the loss of connection

between the CIE and these devices.

- **7.** Inside premises with temperature and humidity beyond the permissible limits. This could result in a failure of the CIE.
- **8.** In places with no cellular signal or 1 bar signal strength. We do not guarantee correct operation of the device with a low cellular signal strength.

Installation

During installation and operation of the Ajax system, adhere to the rules and requirements of regulatory legal acts on electrical safety. Do not disassemble the device while it is energized or use it with a damaged power cable. **Observe the safety procedures and the rules for electrical installation work when connecting the CIE and wired devices**.

Before installing EN54 Fire Hub Jeweller make sure that you have selected the optimal location and that it meets the requirements of this manual.

To install EN54 Fire Hub Jeweller:

 Remove the SmartBracket mounting panel from the device. To do this, insert the special tool into the hole, and slide the mounting plate down.



2. Carefully break out the necessary perforated part to output the cable from the rear side (top, bottom, or through the wall).

If you are not routing cables inside the wall, use the <u>GlandBox</u> wiring accessory with red cable glands (not included).

How to install GlandBox



- **3.** Run the power, Ethernet, and optionally signal cables into the CIE enclosure.
- **4.** Secure the SmartBracket mounting panel to a vertical surface at the selected installation site using the bundled screws at all fixation

points. One of them is in the perforated part above the tamper button — it is required for tamper alarm triggering in case of any attempt to detach the device.

The **UP** key on SmartBracket marks the top of the device. Orient these markings when installing the CIE. Also use the bubble level to check the inclination angle of the mount during installation.



5. Connect the Ethernet, external power cable, and optionally signal cables to the appropriate connector and terminals.

Selecting the cables for connecting to power supply and relay outputs, adhere to the rules and requirements of regulatory legal acts on electrical safety.



1 – Ethernet cable connector.

2 – terminals for connecting external power supply 110-240 V, 50/60 Hz.

3 - relay output for connecting the signal cable for sending events to the monitoring station in case of any fault in the system.

4 - relay output for connecting the signal cable for sending events to the monitoring station in case of in case of fire alarm.

6. Install the internal battery.

Use only EN54 Internal Battery (24h) or EN54 Internal Battery (72h). We do not guarantee correct device operation with third-party batteries, and they can cause the CIE to fail.

7. Install SIM cards:



- 1 -the first micro SIM slot.
- 2 the second micro SIM slot.
- 8. Add the CIE to a space.
- 9. Place the turned on device on the SmartBracket mounting panel.
- **10.** Switch on the external power supply, if the power cable was deenergized previously.
- **11.** Check the status of the CIE in an <u>Ajax app</u>. If a tamper alarm is indicated, ensure that the mounting panel is closed tightly.
- **12.** Run the CIE indication test.

If Ethernet connection fails

If the Ethernet connection is not established, disable proxy and MAC address filtration and activate DHCP in the router settings. The CIE will automatically receive an IP address. After that, you can assign a static IP address to the CIE in the Ajax app.

If SIM connection fails

To connect to the cellular network, you need to install a micro SIM card with a PIN code request disabled and a sufficient amount of funds on the account to pay for services as per the operator's tariff. To disable the PIN code request, insert the SIM card into the phone.

If the CIE fails to connect to the cellular network, use Ethernet to configure the network parameters: roaming, APN access point, user name, and password. To find out these parameters, contact the support service of your mobile operator.

How to set or change APN settings in the CIE

Zone management

How to disable or enable EN54 devices

A user with access level 2 can disable EN54 devices in fire zones. Information that some devices are disabled is shown on the CIE **Control** tab, and in the **Event center** tab \rightarrow **Fault, test, or disablement** tab.

To provide the device disablement or activation:

With the CIE In Ajax apps

- **1.** Log in using an access code, or present Tag/Pass to the reader (coming soon) on the CIE front panel.
- 2. Go to the Fire zones tab.
- **3.** Tap zone, where you want to disable/enable devices.
- 4. If you want to disable a particular device, tap Open device list, and select the device. Tap Disable device or Enable device, choose its sensors or annunciation devices you want to enable/disable (e.g., heat sensor, VAD, or sounder).

- If you want to enable/disable all sensors or annunciation devices in a particular zone, tap Disable zone devices or Enable zone devices. Select sensors, sounders, and VADs you need to enable or disable.
- **6.** Tap **Save**.

A zone in which devices are partially or completely disabled will be marked correspondingly in the **Fire zones** tab.

How to run an alarm annunciation test

An admin, PRO, or user with **access level 2** can run an alarm annunciation test of EN54 devices. The test allows checking the sound and visual alarm signals, and to ensure that fire alarm signals are clearly audible and visible within the premises. It runs for up to 10 minutes and can be stopped earlier if needed. Information that some devices are in test mode is shown on the CIE **Control** tab, and in the **Event center** \rightarrow **Fault, test, or disablement** tab.

To run the test:

With the CIE In Ajax apps

- **1.** Log in with your personal or access code, or apply Tag/Pass to the reader on the CIE front panel.
- 2. Go to the Fire zones tab.
- 3. Select zone, where you want to run the test.
- 4. Tap **Open device list**, and select the device.
- 5. Tap Alarm annunciation test.
- 6. Choose annunciation devices you want to test.
- 7. Tap Start test.
- 8. To stop the test, repeat steps from 2 to 4, and tap Stop active test.

Maintenance

Check the functioning of EN54 Fire Hub Jeweller and connected devices on a regular basis. The optimal frequency of checks is once every three months. Clean the device enclosure from dust, cobwebs, and other contaminants as they emerge. Use a soft, dry cloth that is suitable for equipment care.

Do not use substances that contain alcohol, acetone, petrol, and other active solvents to clean the device.

Technical specifications

All technical specifications

Compliance with standards

Warranty

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

If the device does not operate properly, we recommend contacting Ajax Technical Support first. In most cases, technical issues can be resolved remotely.

Warranty obligations

User agreement

Contact Technical Support:

- e-mail
- Telegram

Manufactured by "AS Manufacturing" LLC