

EN54 Indicator Jeweller user manual

Updated July 17, 2026

Revision 1

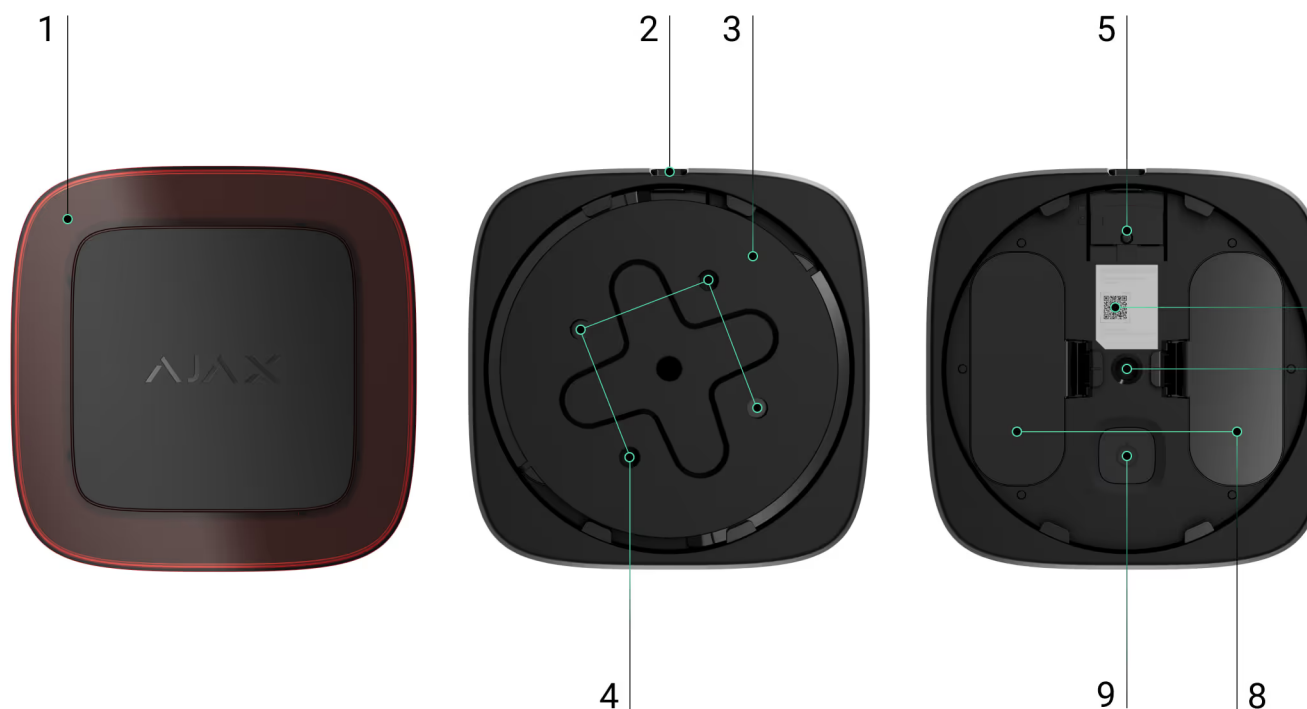


EN54 Indicator Jeweller is a wireless addressable remote fire alarm indicator. It is designed to be installed near the main EN 54-certified detectors, providing a visual alarm indication with a red light.

EN54 Indicator Jeweller operates as part of an Ajax system and communicates with control and indicating equipment (CIE) via secure Jeweller radio protocol. The communication range with the CIE is up to 1,700 m in an open space.

› **Buy EN54 Indicator Jeweller**

Functional elements



1. LED frame.
2. Hole for a special tool needed to unlock the lock.
3. SmartBracket mounting panel. To remove the panel, insert the special tool into the corresponding hole and turn SmartBracket counterclockwise. If the device is unlocked, simply turn SmartBracket counterclockwise.
4. Fixing points to attach SmartBracket to the surface.
5. Lock to secure the device on SmartBracket (optionally).
6. QR code with the device ID. It is used to add the device to the CIE.
7. Tamper button. It triggers in case of an attempt to remove the device from the mounting panel.
8. Battery compartment covers. To replace the batteries, open the covers.
9. Power button.

Compatible CIEs and range extenders

EN54 Indicator Jeweller requires the Ajax CIE running OS Malevich 2.39 or later.

[Check device compatibility](#)

Operating principle

EN54 Indicator Jeweller is a wireless remote indicator designed for fire safety systems that comply with EN 54 standards. It is installed near the main EN 54-certified detectors, providing a visual alarm indication with a red light.

The indicator is designed for situations where direct visual contact with the detector is hindered or impossible (e.g., detectors are located behind closed doors or false ceilings). The indicator alerts the user to the activation, greatly simplifying the localization of the source of the alarm.

The device is powered by pre-installed batteries and does not require an external power supply. EN54 Indicator Jeweller monitors its operational state and informs the system of faults if any occur.

Jeweller data transfer protocol

Jeweller is a wireless data transfer protocol that provides fast and reliable two-way communication between the CIE and devices. The device uses Jeweller to transmit commands, alarms, and events.

[Learn more](#)

Sending events to the monitoring station

An Ajax system can transmit alarms to both the [Ajax PRO Desktop](#) app and the monitoring station in the formats of **SurGard (Contact ID)**, **SIA (DC-09)**, **ADEMCO 685**, and [other protocols](#).

The system with EN54 Indicator Jeweller installed can transmit the following events:

1. Device hardware fault/recovery.
2. Low battery alarm/recovery.
3. Tamper alarm/recovery.
4. Loss/recovery of communication between EN54 Indicator Jeweller and the C



The system allows disabling fault indication and notifications of Jeweller connection loss for EN54 devices used in mobile environments, such as fire engines.

How to disable Jeweller connection loss notifications for EN54 devices

When an alarm is received, the operator at the monitoring station knows precisely what happened and where. The addressability of Ajax devices allows sending events to Ajax PRO Desktop or the monitoring software, including the device type, its name, fire zone, virtual room, and location description. Please note that the list of transmitted parameters may vary depending on the monitoring software and the selected communication protocol for the monitoring station.



You can find the device ID and zone number in the device states.

Selecting the installation site

The device is intended for outdoor and indoor installation. When selecting a proper location, consider the visibility of its LED frame, as it determines the device's performance.



Follow your local fire safety regulations when selecting the device installation site.

When selecting where to place EN54 Indicator Jeweller, consider the parameters that affect its operation:

- Jeweller signal strength.
- The distance between the device and the CIE.
- Presence of obstacles to radio signal transmission, such as walls, interfloor ceilings, and large objects in the room.

Consider the placement recommendations when developing a system project. Only specialists must design and install Ajax systems. A list of recommended partners is [available here](#).

Signal strength

The signal strength is determined by the number of undelivered or corrupted data packets over a certain period of time. The icon  in the **Devices**  tab in Ajax apps indicates the signal strength:

- **three bars** — excellent signal strength;
- **two bars** — good signal strength;
- **one bar** — low signal strength, stable operation is not guaranteed;
- **crossed-out icon** — no signal.

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



Run the radio signal strength survey before final installation. The test checks the signal strength at the device's maximum transmission power. **To comply with EN 54 requirements, the signal strength between the device and the CIE must be Medium or Strong.**

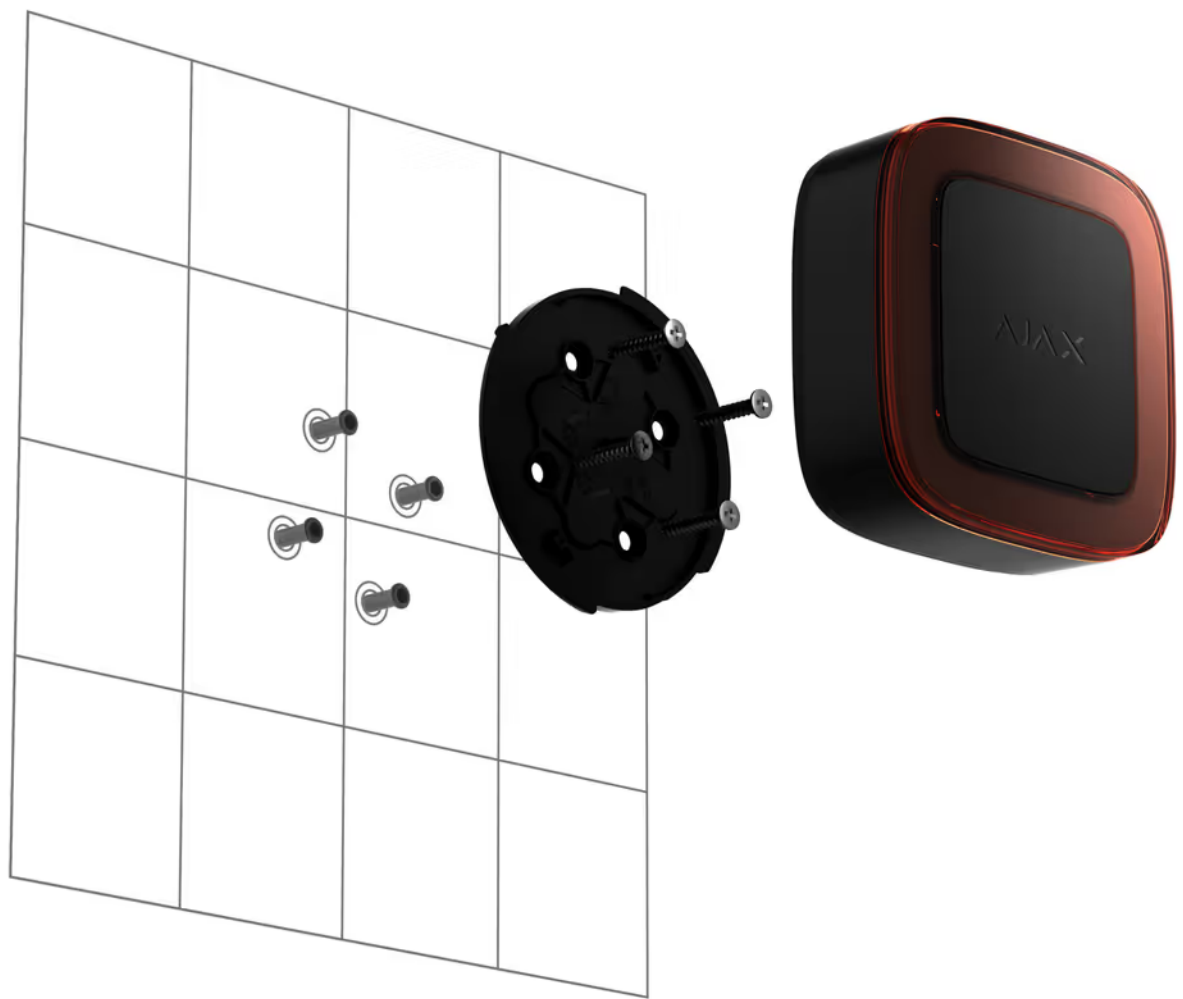
If the signal strength is **Weak** during the test, we do not guarantee the device will operate stably. Consider relocating it, as adjusting its position even by 20 cm or rotating it relative to the CIE can significantly improve the signal strength. If the signal remains poor or unstable after relocation, consider using a radio signal range extender.

Refer to the device functionality testing section to learn how to run the radio signal strength survey.

Where not to install the device

1. Near any metal objects or mirrors that cause signal attenuation and screening of the signal.
2. In places where temperature and humidity levels are outside the permissible limits. This may damage the device.
3. In places with low or unstable Jeweller signal strength. This may result in losing connection to the CIE.
4. Closer than 1 m to the CIE or radio signal range extender.

Installation



Before installing EN54 Indicator Jeweller, ensure that you have selected the optimal location that complies with the requirements of this manual.

Only a professional must install this device.

To install the device:

1. Remove the SmartBracket mounting panel from the device. To remove the panel, turn it counterclockwise.
2. Secure the SmartBracket panel to a surface using double-sided adhesive tape or other temporary fasteners. The ↑↑ sign on SmartBracket is for informational purposes only. It can help you align the device properly.



Use double-sided adhesive tape for temporary fixation only. The device secured by the adhesive tape can detach from the surface at any time, which may result in damage if it falls.

3. Add EN54 Indicator Jeweller to the CIE and pair with fire detectors.
4. Place the device on the SmartBracket mounting panel.
5. Run the device functionality testing.
6. Remove the device from the mounting panel.
7. Attach the SmartBracket panel to the surface using the bundled screws for all fixing points. When using other fasteners, make sure they do not damage or deform the mounting panel.
8. To additionally secure the device on SmartBracket with the lock, move the locking mechanism to  position. In this case, you will need to insert a special tool into the corresponding hole to remove the mounting panel.



9. Place the device on the SmartBracket mounting panel.
10. Adjust the position of the device if necessary. The SmartBracket mounting panel allows the detector to be rotated up to 55°.

Adding to the system



The CIE and the device must operate at the same radio frequency; otherwise, they are incompatible. The radio frequency range of the device may vary based on the region. We recommend purchasing and using Ajax devices in the same region. You can verify the range of operating radio frequencies with the [technical support service](#).

Before adding the device

1. Install an [Ajax app](#).
2. Log in to your [account](#) or create a new one.
3. Select a [space](#) or create a new one.
4. Add at least one [virtual room](#).
5. Add a [compatible CIE](#) to the space. Ensure the CIE is switched on and has internet access via Ethernet, Wi-Fi, and/or mobile network.
6. Check the states in the 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 the device to the CIE.

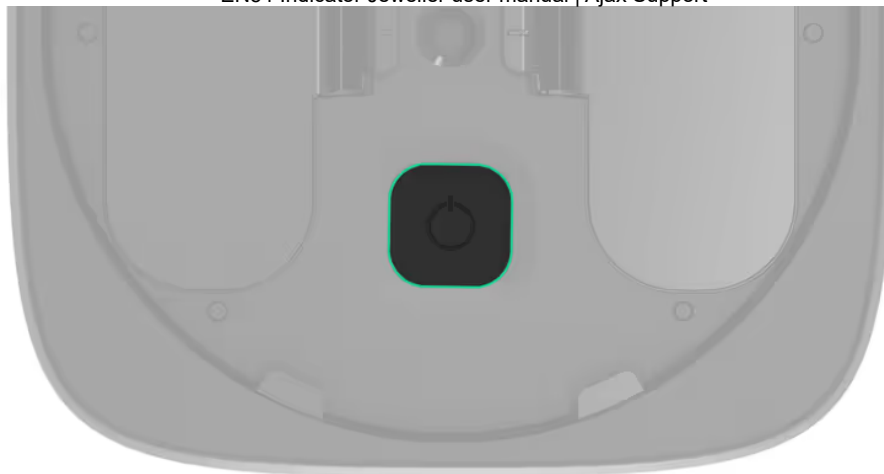
Types of accounts and their rights

Adding to the CIE

1. Open an Ajax app. Select a space to which you want to add the device.
2. Go to the **Devices**  tab and select **Add device**.
3. Scan the QR code or enter the device ID manually. A QR code with the ID is placed on the device under the SmartBracket mounting panel. Also, it is duplicated on the device packaging.



4. Assign a name to the device.
5. Select a fire zone and a virtual room.
6. If necessary, specify the device location in the **Location** field.
7. Select **Add device**, and the countdown will begin.
8. Switch on the device by holding the power button for 3 seconds.



Once added to the CIE, the device will appear in the list of CIE devices in the Ajax app. The update frequency for device states in the list depends on the **Jeweller** settings and is 36 seconds by default.

If the connection fails, try again in 5 seconds. If the maximum number of devices has already been added to the CIE, you will receive an error notification when you try to add more.



EN54 Indicator Jeweller works with only one CIE. When added to a new CIE, it stops sending events to the old one. After the device is added to a new CIE, it will not be automatically removed from the device list of the old CIE. This must be done through the Ajax app.

Pairing with fire detectors

Once the remote fire alarm indicator is added to the CIE, it must be paired with the required fire alarm detectors so that it can indicate their alarms. Otherwise, the indicator would not notify about any alarms.

EN54 Indicator Jeweller is paired with fire alarm detectors by creating a **fire alarm scenario** in the system.



The fire alarm scenario that pairs the indicator with the fire alarm detectors counts as one scenario from the CIE's overall limit of scenarios.

To pair EN54 Indicator Jeweller with the fire alarm detectors in an Ajax app:

1. Select a space and go to:
 - **Control**  → **Settings**  → **Scenarios and schedule**
2. Tap **Add scenario** and select the **Fire scenarios (EN-54)** type.
3. Specify:
 - a. **Name** of the scenario.
 - b. **Triggers**. Select devices that detect fire conditions and activate the scenario.
 - c. **Performers**. Select EN54 Indicator Jeweller and, if necessary, other devices that respond to triggers by alerting people or controlling building systems.
 - d. **Scenario notifications**. Set whether to send notifications to system users when scenario is executed.
4. Tap **Save**.



Note that performers (e.g., EN54 Indicator Jeweller) can be used **only in one fire alarm scenario**. If a performer device is assigned to another scenario, the system removes it from the initial scenario.

Functionality testing

An Ajax system provides several types of tests to help select the correct installation place for the devices. For EN54 Indicator Jeweller, the following tests are available:

- **Radio signal strength survey** – to determine the signal strength and stability between the CIE (or the radio signal range extender) and the device via the wireless Jeweller data transfer protocol at the device installation site.
- **Alarm indication test** – to check the LED indication to ensure the fire alarm signal is visible within the premises.

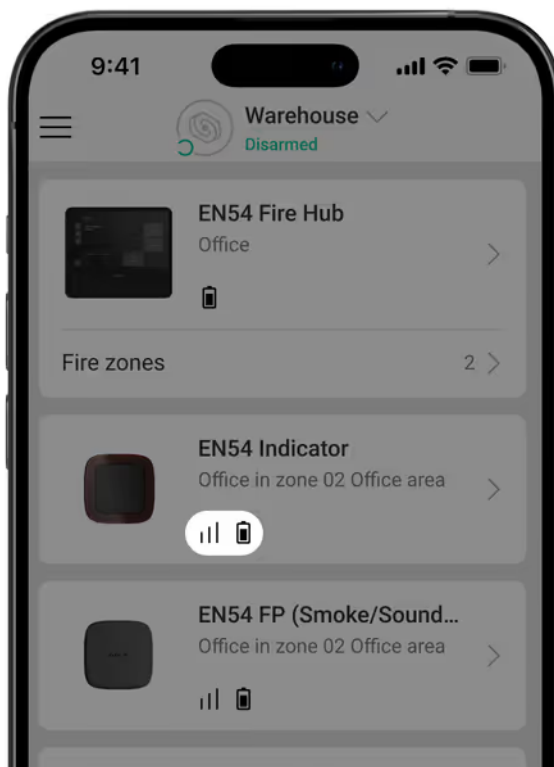
To run the test:

1. Open an Ajax app. Select a space with the added device.
2. Go to the **Devices**  tab.
3. Select **EN54 Indicator Jeweller**.
4. Go to the settings by tapping on the gear icon .

5. Select **Radio signal strength survey** or **Alarm indication test**.

Also, you can run the **Alarm indication test** on the CIE touch screen.

Icons

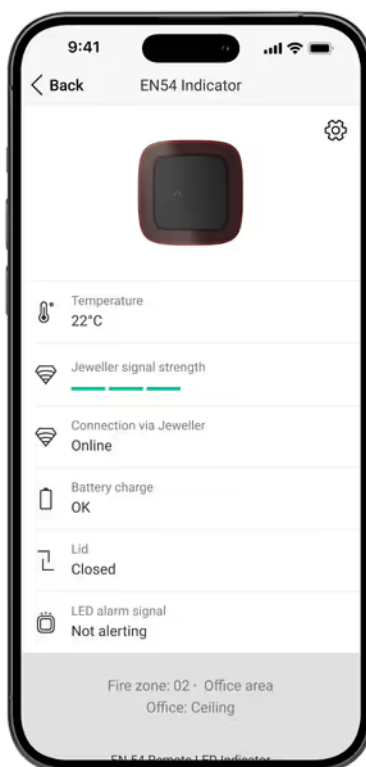


Icons in an Ajax app display some of the EN54 Indicator Jeweller states. You can check the icons in the **Devices**  tab.

Icon	Meaning
	Jeweller signal strength. It displays the signal strength between the CIE or the range extender and the device. The recommended value is 3 bars. Learn more
	Battery charge level of the device. Learn more
	The device operates via the radio signal range extender.

	Learn more
	The LED frame is flashing.
	The device test is in progress.
	EN54 Indicator Jeweller has a fault. The list of faults is available in the device states .
	EN54 Indicator Jeweller is disabled.
	The device has lost connection to the CIE, or the CIE has lost connection to the Ajax Cloud server.
	The device has not been transferred to the new CIE. Learn more

States



The states include information about the device and its operating parameters. You can find the states of EN54 Indicator Jeweller in Ajax apps:

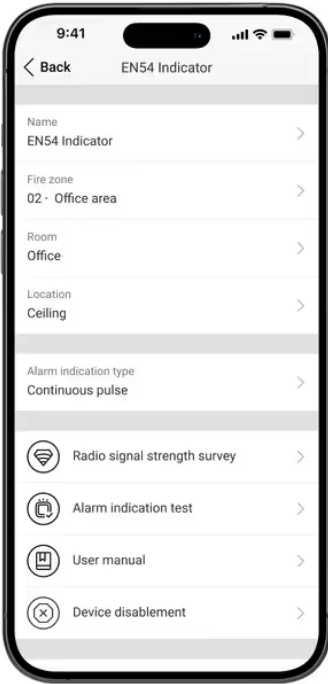
1. Go to the **Devices**  tab.

2. Select **EN54 Indicator Jeweller** from the list.

Parameter	Meaning
Data import	Displays the error when the data is being transferred to the new CIE: Failed — the device has not been transferred to the new CIE. Learn more
Fault	The device has a fault. Tapping on  opens the list of EN54 Indicator Jeweller faults. The field is displayed only if a fault is detected.
Disabled	The device is disabled. It does not respond to the alarm and does not notify users and the monitoring station. Tapping on  opens a list of disabled device functions. The field is displayed only if the device is disabled.
Test	The device test is in progress. Testing helps ensure that the device operates correctly and provides visual alerts as intended.
Temperature	The device temperature. It is measured by EN54 Indicator Jeweller and changes depending on the ambient temperature.
Jeweller signal strength	Jeweller signal strength between the device and the CIE (or the radio signal range extender). The recommended value is 3 bars. Jeweller is a protocol for transmitting commands, events, and alarms.
Connection via Jeweller	The connection state via the Jeweller channel between the device and the CIE (or the range extender): Online — the device is connected to the CIE (or the range extender). Normal state. Offline — the device is not connected to the CIE (or the range extender). Check the device connection.
[Range extender name]	The connection state between the device and the radio signal range extender: Online — the device is connected to the range extender. Offline — the device is not connected to the range extender. The field is displayed if the device operates via the radio signal range extender.
Battery charge	The device's battery charge level. Three states are available:

	• OK • Low • Error When the batteries need to be replaced, users and the monitoring company will receive appropriate notifications. Learn more
Lid	The state of the device's tamper button that responds to the detachment or opening of the device enclosure: • Open – the device is removed from the SmartBracket mounting panel, or its integrity is compromised. Check the device mounting. • 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. Learn more
LED alarm signal	The state of the device's visual alert: • Not alerting – the system is not in an alarm mode. The device is not flashing. • Alerting – the system is in an alarm mode. The device is flashing.
Fire zone	Number and name of the fire zone to which the device is assigned.
Room	Name of the room to which the device is assigned.
Location	Detailed description of the device location.
Firmware	Device firmware version.
Device ID	The EN54 Indicator Jeweller ID. It is also available on the device behind SmartBracket and on its packaging.
Device No.	Number of the device loop (zone).

Settings



To change EN54 Indicator Jeweller settings, in an Ajax app:

- 1. Go to the **Devices**  tab.
- 2. Select **EN54 Indicator Jeweller** from the list.
- 3. Go to **Settings** .
- 4. Configure the required settings.
- 5. Select **Back** to save the new settings.

Setting	Meaning
Name	Name of the device. It is displayed in the list of CIE devices, SMS text, and notifications in the event feed. To change the device name, tap on the text field. The name can contain up to 24 Latin characters or up to 12 Cyrillic characters.
Fire zone	Selecting the fire zone to which EN54 Indicator Jeweller is assigned. The fire zone is displayed in the text of SMS and notifications in the event feed.
Room	Selecting the virtual room to which EN54 Indicator Jeweller is assigned. The room name is displayed in the text of SMS and notifications in the event feed.

Location	Detailed description of the device location. It is displayed next to the room name in the event feed notifications. The location field can contain up to 24 Latin or Cyrillic characters.
Alarm indication type	Configuring how the LED frame indicates an alarm: • Bistable — the LED frame remains steady on until the alarm reset. • Continuous pulse — the LED frame flashes with a defined pattern. When the Continuous pulse option is selected, the additional Flash pattern options are available: On time and Off time. For each option, you can configure a time between 100 and 1000 milliseconds to set a specific flash pattern.
Radio signal strength survey	Switching the device to the radio signal strength survey mode. The test allows you to check the signal strength between the CIE (or the radio signal range extender) and the device via the wireless Jeweller data transfer protocol to select the optimal installation site. Learn more
Alarm indication test	Switching the device to the Alarm indication test mode. The test allows you to check the LED indication to ensure the fire alarm signal is clearly visible within the premises. The test lasts for up to 10 minutes and can be stopped manually at any time.
User manual	Opening the EN54 Indicator Jeweller user manual in an Ajax app.
Device disablement	The option allows for deactivating the device. The device remains in the system but no longer detects signs of fire or raises an alarm.
Delete device	Unpairing the device, disconnecting it from the CIE, and deleting its settings.

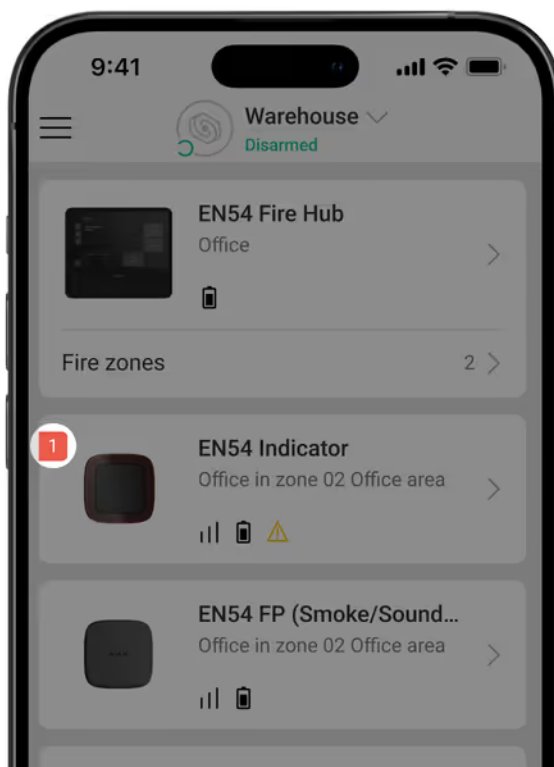
Indication

The EN54 Indicator Jeweller LED indicator lights up **red** depending on the device state.

Event	LED frame indication	Note
Alarm	Lights up according to the device's LED indication settings.	

Turning on the device	Lights up for 1 s.	Press and hold the power button until the LED frame lights up.
Turning off the device	Flashes twice rapidly.	Press and hold the power button until the LED frame lights up.
Tamper alarm/recovery	Lights up for 0.5 s.	The device has been removed or installed on the SmartBracket mounting panel.
Performing the radio signal strength survey	The indication depends on the signal strength: • Strong – the LED frame lights up for about 0.6 s and goes off for a very short time; • Medium – the LED frame lights up for about 0.1 s and goes off for a short time; • Weak – the LED frame lights up for about 0.15 s and goes off for about 0.5 s; • No signal – the LED frame lights up for a very short time and goes off for about 1.4 s.	

Faults



When an EN54 Indicator Jeweller fault is detected, an Ajax app displays a fault counter on the device icon. All faults are indicated in the device states. Fields with faults are highlighted in yellow. Also, faults are displayed in the **Control** tab of the CIE display. More details about the fault can be found in the **Event center** or **Fire zones** tabs of the CIE.

The EN54 Indicator Jeweller fault is displayed if:

- The device is removed from the SmartBracket mounting panel, or its integrity is compromised (a tamper button has been triggered).
- There is no connection with the CIE or radio signal range extender via Jeweller.
- The device battery is low.
- The device is faulty.

An admin or a user with **access level 2** can disable the notifications of Jeweller connection loss. The **Deactivate notifications** feature allows disabling fault indication and notifications of Jeweller connection loss for EN54 devices used in mobile environments, such as fire engines.

[How to disable Jeweller connection loss notifications for EN54 devices](https://ajax.systems/support/manuals/en54-indicator-jeweller/)

Maintenance

Regularly check the device operation. Clean the device enclosure from dust, cobwebs, and other contaminants as they emerge. Use soft, dry wipes suitable for equipment maintenance. Do not use substances that contain alcohol, acetone, gasoline, or other active solvents to clean the device.

The pre-installed batteries provide up to 5 years of autonomous operation with the standard Jeweller settings (the polling interval is 36 seconds). If the batteries are low, the system will send an appropriate notification.

We recommend replacing the batteries immediately upon receiving the notification. It is advisable to use **Huiderui CR123A LiMnO₂ (3 V; 1,600 mAh)** batteries.



Ensure the batteries are installed with the correct polarity. The polarity is marked inside the enclosure. After replacing the batteries, run the [functionality test](#) to ensure the device operates properly.

[How long Ajax devices operate on batteries, and what affects this](#)

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:

- [email](#)
- [Telegram](#)

Manufactured by “AS Manufacturing” LLC



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