StreetSiren User Manual

Updated January 12, 2021

StreetSiren is a wireless outdoor alerting device with a sound volume of up to 113 dB. Equipped with a bright LED frame and pre-installed battery, StreetSiren can be quickly installed, set up, and operate autonomously up to 5 years.

Connecting to the Ajax security system via the secured **Jeweller** radio protocol, StreetSiren communicates with the **hub** at a distance of up to 1,500 m in line of sight.

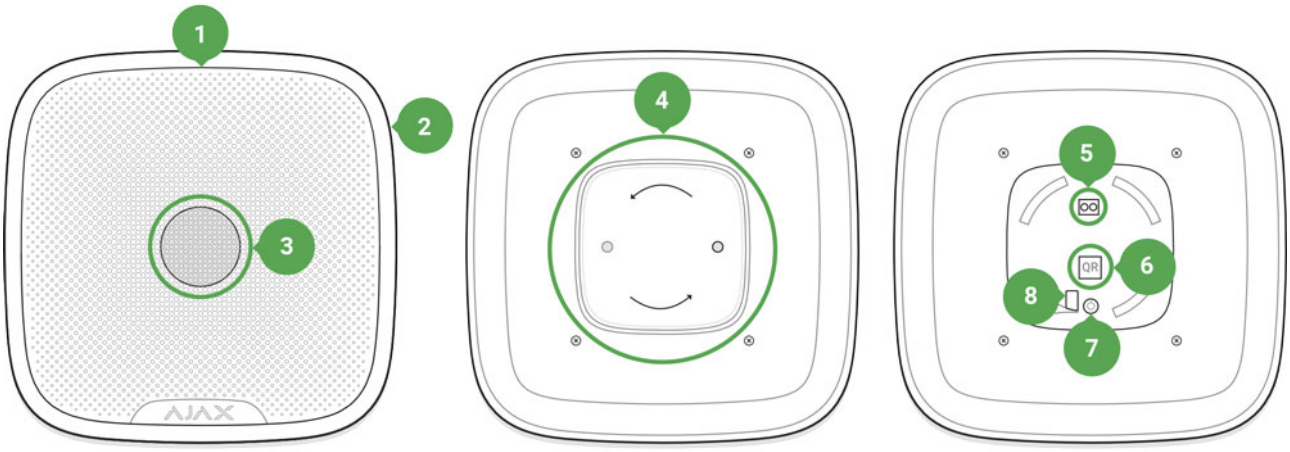
The device is set up via the **Ajax apps** for iOS, Android, macOS, and Windows. The system notifies users of all events through push notifications, SMS, and calls (if activated).

> StreetSiren operates with Ajax hubs only and does not support connecting via uartBridge or ocBridge Plus integration modules.

The Ajax security system can be connected to a central monitoring station of a security company.

Buy street siren StreetSiren

Functional elements



1. LED frame
2. Light indicator
3. Siren buzzer behind the metal net
4. SmartBracket attachment panel
5. External power supply connection terminals
6. QR code
7. On/off button
8. Place of fixing the SmartBracket panel with a screw

Operating Principle

StreetSiren significantly improves the efficiency of the security system.With a high probability, its loud alarm signal and light indication is sufficient to attract the attention of neighbors and deter intruders.

The siren can be seen and heard from far away due to the powerful buzzer and bright LED. When installed properly, it is hard to dismount and switch off the actuated siren: its body is sturdy, the metal net protects the buzzer, the power supply is autonomous, and the on/off button is locked during the alarm.

StreetSiren is equipped with a tamper button and an accelerometer. The tamper button is triggered when the device body is opened, and the accelerometer is activated when someone's try to move or dismount the device.

Connecting

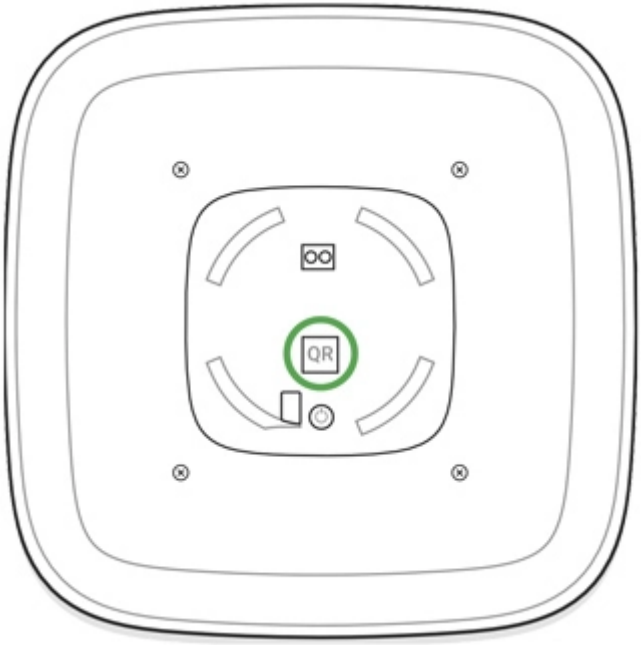
Before starting the connection:

1. Following the hub user guide, install the **Ajax app**. Create an account, add the hub, and create at least one room.
2. Switch on the hub and check the internet connection (via Ethernet cable and/or GSM network).
3. Make sure that the hub is disarmed and does not update by checking its status in the Ajax app.

> ⚠ Only users with administrator rights can pair the device with the hub

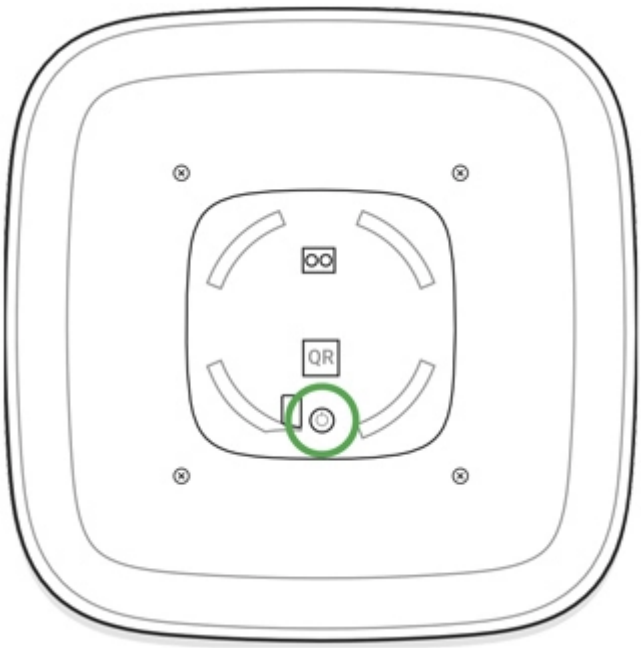
Pairing the device with the hub:

1. Select **Add Device** in the Ajax app.
2. Name the device, scan or type the **QR code** (located on the detector body and packaging), and select the location room.



3. Tap **Add** — the countdown will start.

4. Switch on the device by holding the power button for 3 seconds.



> The on/off button is recessed into the body of the siren and quite tight, you can use a thin solid object to press it.

For detecting and pairing to occur, the device should be located within the coverage of the wireless network of the hub (at the same protected object). The connection request is transmitted briefly: at the moment of switching on the device.

StreetSiren switches off automatically after failing to connect to the hub. To retry the connection, you do not need to switch it off. If the device has already been assigned to another hub, switch it off and follow the standard pairing procedure.

The device connected to the hub appears in the list of devices in the app. The update of the detector statuses in the list depends on the device ping interval set in the hub settings (the default value is 36 seconds).

> Please note that only 10 sirens can be connected to one hub

States

1. Devices
2. StreetSiren

Parameter	Value
Temperature	The temperature of the device which is measured on the processor and changes gradually
Jeweller Signal Strength	The signal strength between the hub and device
Connection	The connection status between the hub and device
Battery Charge	Battery level of the device. Two states available: • OK • Battery discharged How battery charge is displayed in Ajax apps
Lid	The tamper button state, which reacts to the opening of the device body
Routed Through ReX	Displays the status of using the ReX range extender

External Power	The external power supply state
Alarm Volume	Volume level in case of alarm
Alarm Duration	Duration of the alarm sound
Alert if Moved	The state of the accelerometer alarm
LED indication	The state of armed mode indication
Beep When Arming/Disarming	The state of indication of security mode changing
Beep on Entry/Exit delay	The state of beeping arming/disarming delays
Beep Volume	The volume level of the beeper
Firmware	Siren firmware version
Device ID	Device identifier

Settings

1. Devices
2. StreetSiren
3. Settings

Setting	Value
First field	Device name, can be edited
Room	Selecting the virtual room to which the device is assigned
Alarms in Group Mode	Selecting the security group to which the siren is assigned. When assigned to a group, the siren and its indication are related to alarms and events of this group. Regardless of the group selected, the siren will respond to **Night Mode** activation and alarms
Alarm Volume	Choosing one of the three volume* levels: from 85 dB — the lowest to 113 dB — the highest * the volume level was measured at a distance of 1 m
Alarm Duration (sec)	Settling the time of the siren alarm (from 3 to

	180 seconds per alarm)
Alarm if Moved	If active, the accelerometer reacts to moving or tearing off from the surface
LED indication	If activated, the siren LED blinks once every 2 seconds when the security system is armed
Beep When Arming/Disarming	If activated, the siren indicates arming and disarming by LED frame blink and a short sound signal
Beep on Entry/Exit delay	If activated, the siren will beep delays (available from **3.50 FW version**)
Beep Volume	Selecting the volume level of the siren beeper when notifying about arming/disarming or delays
Volume Test	Starting the siren volume test
Jeweller Signal Strength Test	Switching the device to the signal strength test mode
Attenuation Test	Switching the siren to the signal fade test mode (available in devices with **firmware version 3.50 and later**)
User Guide	Opens the siren User Guide
Unpair Device	Disconnects the siren from the hub and deletes its settings

Setting up the processing of detector alarms

Through the Ajax app, you can configure which detector alarms can activate the siren. This can help to avoid situations when the security system notifies of LeaksProtect detector alarm or any other device alarm. The parameter is adjusted in the detector or device settings:

1. Sign in to the Ajax app.
2. Go to the **Devices** menu.
3. Select the detector or device.
4. Go to its settings and set the necessary parameters for activating the siren.

Setting the tamper alarm response

The siren can respond to the tamper alarm of devices and detectors. The option is disabled by default. Note that the tamper reacts to the opening and closing of the body even if the system is not armed!

What is a tamper

For the siren to respond to tamper triggering, in Ajax app:

1. Go to the **Devices** menu.
2. Select the hub and go to its settings .
3. Select the **Service** menu.
4. Go to **Siren Settings**.
5. Enable the **Alert with a siren if the hub or detector lid is open** option.

Setting the response to pressing the panic button in the Ajax app

The siren can respond to pressing the panic button in Ajax apps. Note that the panic button can be pressed even if the system is disarmed!

For the siren to respond to pressing the panic button:

1. Go to the **Devices** menu.
2. Select the hub and go to its settings .
3. Select the **Service** menu.
4. Go to **Siren Settings**.
5. Enable the **Alert with a siren if in-app panic button is pressed** option.

Setting the siren after-alarm indication

The siren can inform about triggerings in armed system by means of LED indication.

The option functions as follows:

1. The system registers the alarm.
2. The siren plays an alarm (duration and volume depend on settings).
3. The lower right corner of the siren LED frame blinks twice (about once every 3 seconds) until the system is disarmed.

Thanks to this feature, system users and security companies patrols can understand that the alarm has occurred.

> The siren after-alarm indication does not work for always active detectors, if the detector was triggered when the system was disarmed.

To enable the siren after-alarm indication, in Ajax PRO app:

1. Go to siren settings:

- Hub → Settings ⚙ → Service → Siren Settings

2. Specify what events the sirens will inform about by double blinking before the security system is disarmed:

- Confirmed alarm
- Unconfirmed alarm
- Lid opening

3. Select the sirens needed. Go back to **Siren Settings**. The set parameters will be saved.

4. Click **Back**. All values will be applied.

> StreetSiren with firmware version 3.72 and later supports this function.

Indication

Event	Indication
Alarm	Emits an acoustic signal (the duration depends on the settings) and the LED frame blinks red
An alarm was detected in the armed system (if after-alarm indication is enabled)	The siren LED frame blinks red twice in the lower right corner about every 3 seconds until the system is disarmed. The indication turns on after the siren has completely played the alarm signal configured in settings
Switching on	The LED frame blinks once
Switching off	The LED frame lights up for 1 second, then blinks three times
Registration failed	The LED frame blinks 6 times in the corner then full frame blinks 3 times and the siren switches off
Security system is armed (if indication activated)	The LED frame blinks one time and the siren emits a short sound signal
Security system is disarmed (if the indication is activated)	The LED frame blinks two times and the siren emits two short sound signals
The system is armed (if the indication is on)	**No external power supply**

	• The LED in the lower right corner lights up with a pause of 2 seconds **External power connected** • **If the firmware version is 3.41.0 or higher**: the LED in the lower right corner is on continuously • **If the firmware version is lower than 3.41.0**: the LED in the lower right corner lights up with a pause of 2 seconds
Low battery	The LED frame corner lights up and goes out when the system is armed/disarmed, the alarm goes off, in case of dismounting or unauthorized opening

Performance Testing

The Ajax security system allows conducting tests for checking the functionality of connected devices.

The tests do not start straight away but within a period of 36 seconds when using the standard settings. The test time start depends on the settings of the detector polling period (the **Jeweller** menu settings in hub settings).

Volume Level Test

Jeweller Signal Strength Test

Attenuation Test

Installing

The location of the siren depends on its remoteness from the hub, and obstacles hindering the radio signal transmission: walls, floors, large objects.

Check the Jeweller signal strength at the installation location

If the signal level is low (one bar), we cannot guarantee stable operation of the detector. Take all possible measures to improve the quality of the signal. At least, move the detector: even a 20 cm shift can significantly improve the quality of signal reception.

If the detector has low or unstable signal strength even after moving, use a **ReX radio signal range extender**.

StreetSiren is protected from dust/moisture (IP54 class), which means it can be placed outdoors. The recommended installation height is 2.5 meters and higher. Such a height hinders access to the device for intruders.

When installing and using the device, follow the general electrical safety rules for electrical appliances, as well as the requirements of regulatory legal acts on electrical safety.

> ⚠ It is strictly prohibited to disassemble the device under voltage! Do not use the device with a damaged power cord.

Mounting

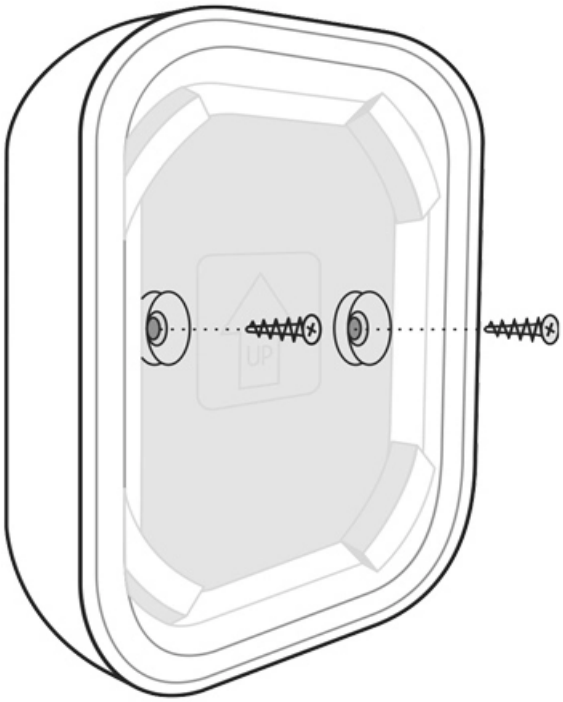
Before mounting StreetSiren, make sure that you have selected the optimal location and it is in compliance with the guidelines of this manual!

Installation process

1. If you are going to use an external power supply (12 V), drill a hole for the wire in SmartBracket. Before installation, make sure that there the wire insulation is not damaged!

> You need to drill a hole in the mounting panel to lead out the external power supply wire.

2. Fix SmartBracket to the surface with bundled screws. If using any other attaching hardware, make sure that they do not damage or deform the panel.



> Using the double-sided adhesive tape is not recommended either for a temporary nor permanent fixing.

3. Put StreetSiren on the SmartBracket panel and turn it clockwise. Fix the device with a screw. Fixing the siren to the panel with a screw makes it difficult for intruders to remove the device quickly.

Do not install the siren:

1. near metal objects and mirrors (they can interfere with the RF signal and cause it to fade);

2. in the places were its sound can be muffled;
3. closer than 1 m from the hub.

Maintenance

Check the operational capability of StreetSiren regularly. Clean the siren body from dust, spider web, and other contaminants as they appear. Use a soft dry napkin suitable for tech equipment.

Do not use any substances containing alcohol, acetone, gasoline, and other active solvents to clean the detector.

StreetSiren can operate up to 5 years from pre-installed batteries (with the detector ping interval of 1 minute) or approximately 5 hours of constant signaling with buzzer. When the battery is low, the security system notifies the user, and the LED frame corner smoothly lights up and goes out when arming/disarming or when the alarm goes off, including dismounting or unauthorized opening.

How long Ajax devices operate on batteries, and what affects this

Battery Replacement

Tech specs

Type of notification	Sound and light (LEDs)
Sound notification volume	85 dB to 113 dB at a distance of 1 m (adjustable)
Operating frequency of the piezo annunciator	3.5 ± 0.5 kHz
Protection against dismounting	Accelerometer
Frequency band	868.0 – 868.6 MHz or 868.7 – 869.2 MHz depending on the region of sale
Compatibility	Operates with all Ajax **hubs**, and **range extenders**
Maximum RF output power	Up to 25 mW
Modulation of the signal	GFSK

Radio signal range	Up to 1,500 m (any obstacles absent)
Power supply	4 × CR123A, 3 V
Battery life	Up to 5 years
External supply	12 V, 1.5 A DC
Body protection level	IP54
Installation method	Indoors/outdoors
Operating temperature range	From -25°C to +50°C
Operating humidity	Up to 95%
Overall dimensions	200 × 200 × 51 mm
Weight	528 g
Certification	Security Grade 2, Environmental Class III in conformity with the requirements of EN 50131-1, EN 50131-4, EN 50131-5-3

Complete Set

1. StreetSiren
2. SmartBracket mounting panel
3. Battery CR123A (pre-installed) – 4 pcs
4. Installation kit
5. Quick Start Guide

Warranty

Warranty for the “AJAX SYSTEMS MANUFACTURING” LIMITED LIABILITY COMPANY products is valid for 2 years after the purchase and does not apply to the pre-installed battery.

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

The full text of the warranty

User Agreement

Technical support: **support@ajax.systems**