#### StreetSiren User Manual

Updated October 18, 2019



**StreetSiren** is a wireless street siren with the capacity up to 113 dB. It can be quickly installed and set up, is furnished with bright LEDs, and can operate from a power unit or up to 5 years from batteries.

StreetSiren operates within the Ajax security system, by connecting via the protected <u>Jeweller</u> protocol to the <u>hub</u>. The communication range is up to 1.500 meters if there are no obstacles.

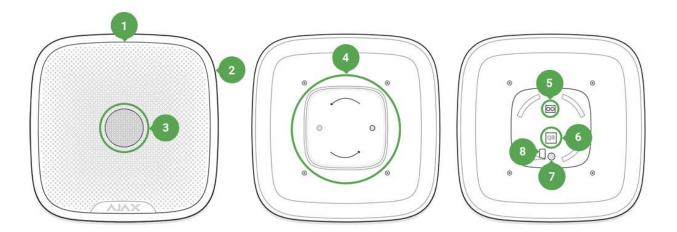
The siren is set up via a <u>mobile application</u> for iOS and Android-based smartphones or a web application. The user is notified of all events through push notifications, SMS messages and calls (if activated).

#### Operates only with Ajax hubs. Not compatible with the uartBridge or ocBridge Plus

The Ajax security system is self-sustaining, but the user can connect it to the central monitoring station of a private security company.

Buy street siren StreetSiren

### **Functional elements**



- 1. LED frame
- 2. Light indicator
- 3. Siren buzzer under 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

# StreetSiren Operating Principle

The siren significantly improves the efficiency of the security system, being the most operational means of response to the intrusion into a protected area. With a high probability, its alarm signal and the light indication will be sufficient to frighten away the intruders.

The device is furnished with a powerful buzzer and bright LEDs – StreetSiren can be seen and heard from far. Subject to correct installation, it would be hard to dismount and deactivate the actuated siren: the body is

firm, the buzzer is protected by a metal net, there is an autonomous power supply and even the on/off button is locked in case of alarm.

StreetSiren has no tamper to detect removal or tearing-off from the attachment, an accelerometer (motion detector) is used instead. If the accelerometer is switched on, the alarm will be actuated, if the siren is dismounted.

# Connecting the Siren to the hub

StreetSiren operates only with Ajax security system. You can connect up to 10 sirens to the hub

#### **Before starting connection:**

- 1. Following the hub instruction recommendations, install the <u>Ajax</u> <u>application</u> on your smartphone. Create an account, add the hub to the application, and create at least one room.
- 2. Go to the Ajax application.
- 3. Switch on the hub and check the internet connection (via Ethernet cable and/or GSM network).
- 4. Ensure that the hub is disarmed and does not start updates by checking its status in the mobile application.

Only users with administrative privileges can add the device to the hub

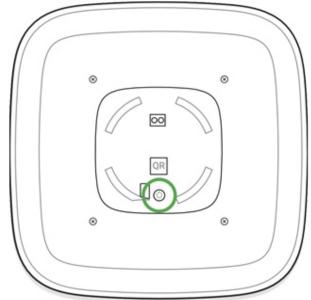
#### How to connect the StreetSiren to the hub:

Select the Add Device option in the Ajax application.

2. Name the device, scan/write manually the **QR Code** (located on the body and packaging), and select the location room.



- 3. Select **Add** the countdown will begin.
- 4. Switch on the device (by pressing on/off button for 3 seconds).



The on/off button is recessed in the body and is rather stiff, you may use a thin solid object to press it

The StreetSiren siren operates only with the Ajax security system. Up to 10 sirens may be connected to the hub.

Request for connection to the hub is transmitted for a short time at the time of switching on the device.

If the connection to the Ajax hub failed, the siren will switch off after 6 seconds. To retry the connection, you do not need to turn off the device.

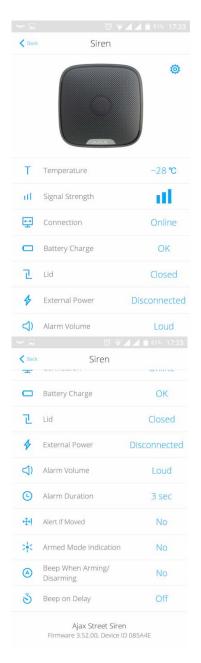
If the device was already assigned to another hub, switch off StreetSiren, then perform the standard adding procedure.

The siren connected to the hub will appear in the list of devices of the hub in the application. Update of the siren statuses in the list depends on the device inquiry time set in the hub settings, with the default value – 36 seconds.

### **States**

#### 1. Devices

#### 2. StreetSiren



Parameter	Value
Temperature	Temperature of the device. Measured on the processor and changes gradually
Signal Strength	Signal strength between the hub and the siren
Connection	Connection status between the hub and the siren
Battery Charge	Battery level of the device
Lid	The tamper mode of the device, which reacts to the detachment of or damage to the body
External Power	State of the sirens external power
Alarm Volume	Volume level in case of alarm
Alarm Duration	Duration of the alarm sound
Alarm if moved	The siren will be actuated, if you turn over the body or tear off the device from the attachment
Armed mode indication	If active, the siren LED blinks once every 3 seconds when the security system is armed
Beep when arming/disarming	If active, the siren warns about arming and disarming by blinking with LED frame and a short sound signal
Beep on delay	If active, siren will beep delays (available in devices with firmware version 3.50 and later)
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
Alarm Volume	One of the three volume levels of the siren is set up (85 dB to 113 dB at a distance of 1 m)
Alarm Duration	The setting determines how long the siren sounds, if the alarm is activated (from 3 to 180 seconds per each actuation)
Alarm if moved	The siren will be actuated, if you turn over the body or tear off the device from the attachment.  The built-in accelerometer needs about a minute to stabilize its position. Take time to check the operating capacity of the function in case of its activation until this time expires.
Armed mode indication	If active, the siren LED lights up with a pause of 2 seconds when the security system is armed
Beep when arming/disarming	If active, the siren warns about arming/disarming by the light of the LED ring and a short sound signal
Beep on delay	If active, siren will beep delays (available in devices with firmware version 3.50 and later)
Volume test	Start a volume test of the siren
Signal Strength Test	Switches the device to the signal strength test mode
Attenuation Test	Switches the siren to the signal fade test mode (available in devices with <b>firmware version 3.50 and later</b> )
User Guide	Opens the siren User Guide
Unpair Device	Disconnects the siren from the hub and deletes its settings

### Indication

Event	Indication
Alarm	Emits an acoustic signal (the duration depends on the settings) and the LED frame blinks red
Switching on the device	LED ring lights up and goes out once
Switching off the device	The LED ring will light up for 1 second, then blink three times
Registration failed	LED in the corner blinks 6 times, then the entire LED ring blinks 3 times and the siren switches off
Security system is armed (if indication activated)	Blinks once with the LED ring and emits a short sound signal
Security system is disarmed (if the indication is activated)	Blinks twice with the LED ring and emits two short sound signals
Siren in the armed mode (if the indication is activated)	LED in the corner lights up with a pause of 2 seconds
Battery low	LED in the corner lights up and goes out when the system is armed/disarmed, the alarm is actuated 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 siren scanning period (the paragraph on "**Jeweller**" settings in hub settings).

Volume Level Test

Signal Strength Test

**Attenuation Test** 

### Installing the Siren

Location of the StreetSiren determines its remoteness from the hub and presence of any obstacles between the devices, hindering the radio signal and sound transmission: walls, inserted floors, large-size objects located within the room.

#### Check the signal level at the installation location

The communication range is up to 1,500 meters if there are no obstacles, please consider it when choosing an installation place for StreetSiren.

If the signal level is one division, we cannot guarantee stable operation of the security system. Take possible measures to improve the quality of the signal! As a minimum, move the device – even 20 cm shift can significantly improve the quality of reception.

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

The siren body has the dust/moisture protection class IP54 – the device may be placed outdoors. Recommended installation height – 2.5 meters and more. This will complicate the access to the device for intruders in case of entering.

In installing and operating the StreetSiren, follow the general electrical safety regulations for using 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

### Siren Installation

Before installing the siren, make sure that you have selected the optimal location and it is in compliance with the conditions contained in this manual. In installing the siren, be careful and observe safety regulations!



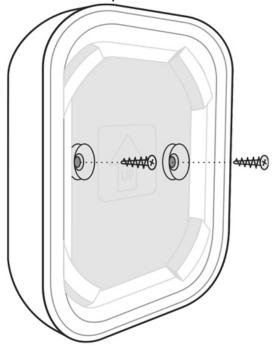
#### Installation process

1. The StreetSiren siren can operate up to 5 years from pre-installed batteries (subject to the inquiry frequency by the hub of 1 minute) or approximately 5 hours of the buzzer sound. If you want to use the external power supply (12 V), then drill a hole for wires in the SmartBracket attachment. Prior to installation, make sure that there is no damage of the wire insulation!

You need to drill a hole in SmartBrecket to lead out a wire of the external power supply

2. Fix the SmartBracket panel on the surface using bundled screws. After selecting other attachment hardware, make sure that they do not damage

or deform the panel.



We warn away from using double-sided adhesive tape for either temporary or all the more permanent attachment of the siren

3. Put the siren on the SmartBracket panel and turn it clockwise. Fix the device with a screw. Fixing the siren attachment with a screw will minimize the risk of spontaneous theft of the device.

#### 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.

# Siren Maintenance and Battery Replacement

Check the operational capability of the StreetSiren on a regular basis.

Clean the siren body from dust, spider web and other contaminations as they appear. Do not use for cleaning the siren any substances containing alcohol, acetone, gasoline and other active solvents.

The siren can operate up to 5 years from pre-installed batteries (subject to the inquiry frequency by the hub of 1 minute) or approximately 5 hours of the buzzer sound. In case of the battery discharge, the security system will send the respective notices and the corner LED will smoothly light up and go out if arming/disarming the system (if the indication is activated), if the alarm is actuated, in the event of dismounting, or unauthorized opening.

**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	$3.5 \pm 0.5 \text{ kHz}$
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 only with <u>Hub</u> , <u>Hub Plus</u> , <u>Hub 2</u> and <u>ReX</u>
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 x CR123A, 3 V
Battery life	Up to 5 years

External supply	12 V, 1.5 A DC
Body protection level	IP54
Operating temperature range	From -25°C to +50°C
Operating humidity	Up to 95%
Overall dimensions	200 x 200 x 51 mm
Weight	528 g
Certification	Security Grade 2, Environmental Class III in conformity with the requirements of EN 50131

# 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: <a href="mailto:support@ajax.systems">support@ajax.systems</a>#