## HomeSiren User Manual

Updated May 28, 2021



**HomeSiren** is a wireless home siren with the capacity up to 105 dB. Developed only for indoor use. It can be quickly installed and set up, is furnished with a LED (plus allows connecting an external LED), and can operate up to 5 years from a battery.

HomeSiren operates within the Ajax security system, by connecting via the protected **Jeweller** protocol to the **hub**. The communication range is up to 2,000 meters if there are no obstacles.

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

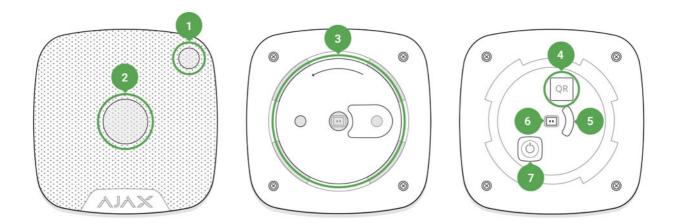


Operates only with <u>Ajax hubs</u>. Connection to <u>ocBridge Plus</u> and <u>uartBridge</u> integration modules is not provided.

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

Buy home siren HomeSiren

## **Functional elements**



- 1. Light indicator
- 2. Siren buzzer covered with a fabric
- **3.** SmartBracket attachment panel (perforated part is required for actuating the tamper in case of any attempt to tear off the siren from the surface)
- 4. QR code
- 5. Tamper button
- 6. Socket for connecting an outside-mounted light indicator
- 7. On/off button

## **Operating Principle**

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

The device is furnished with a loud buzzer – the sound of the siren can be heard from far. Subject to correct installation, it would be hard to dismount and deactivate the actuated siren: the body is firm, the power supply is autonomous,

and the on/off button will be blocked when the security system is set in the guard mode.

## Connecting the Siren to the hub

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

## **Before starting connection:**

- **1.** Following the hub instruction recommendations, install the **Ajax application** 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 siren to the hub:

- 1. 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).



For the detection and interfacing to occur, the siren should be located within the coverage area of the wireless network of the hub (at a single protected object). If the device was already assigned to another hub, switch off HomeSiren and then perform the standard adding procedure.

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. You may repeat the connection attempt then. To retry the connection, you do not need to turn off the device.

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. HomeSiren

Parameter	Value
Temperature	Temperature of the device. Measured on the processor and changes gradually
Jeweller Signal Strength	Signal strength between the hub and the siren
Connection	Connection status between the hub and the siren
Battery Charge	<ul> <li>Battery level of the device. Two states available:</li> <li>OK</li> <li>Battery discharged</li> <li>How battery charge is displayed in Ajax apps</li> </ul>
Lid	The tamper mode of the device, which reacts to the detachment of or damage to the body
Alarm Volume	Volume level in case of alarm
Alarm Duration, sec	Duration of the alarm sound
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 the activation and deactivation of the guard mode by the LED and a short sound signal
Beep on Entry/Exit delay	If activated, siren will beep delays (available in devices with <b>firmware version 3.50 and later</b> )
Beep Volume	The volume level of the beeper
Temporary Deactivation	Shows the status of the device: active, completely disabled by the user, or only notifications about triggering of the device tamper button are disabled
Firmware	Detector firmware version
Device ID	Device identifier

## Setting Up the Detector



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 <b>Night</b> <b>Mode</b> activation and alarms
Alarm Volume	<ul> <li>Volume level in case of alarm:</li> <li>Very Loud</li> <li>Loud</li> <li>Quiet</li> </ul>
Alarm Duration, sec	The setting determines how long the siren sounds, if the alarm is activated (from 3 to 180 seconds per each actuation)
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 the activation and deactivation of the guard mode by the LED and a short sound signal
Beep on Entry/Exit delay	If active, siren will beep delays (available in devices with <b>firmware version 3.50 and later</b> )
Beep Volume	The volume level of the beeper
Volume Test	Start a volume test of the siren
Jeweller Signal Strength Test	Switches the device to the signal strength test

	mode
Signal Attenuation Test	Switches the siren to the signal fade test mode (available in devices with <b>firmware version 3.50</b> <b>and later</b> )
Temporary Deactivation	<ul> <li>Allows the user to disconnect the device without removing it from the system.</li> <li>Two options are available:</li> <li>Entirely – the device will not execute system commands or participate in automation scenarios, and the system will ignore device alarms and other notifications</li> <li>Lid only – the system will ignore only notifications about the triggering of the device tamper button</li> <li>Learn more about temporary deactivation of devices</li> </ul>
User Guide	Opens the siren User Manual
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**  $\bigcirc$  menu.
- **3.** Select the detector or device.
- **4.** Go to its settings <sup>(2)</sup> 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 O.
- 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 the 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 siren LED and external LED (if connected) 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  $\rightarrow$  Settings  $\textcircled{O} \rightarrow$  Service  $\rightarrow$  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.



HomeSiren with firmware 5.55.2 and later supports this function.

## Indication

Event	Indication
Alarm	Emits an acoustic signal (the duration depends on the settings) and all LED signaling ceases
An alarm was detected in the armed system (if after-alarm indication is enabled)	The siren LED and external LED (if connected) blinks twice approximately 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 device	LED lights up once
Switching off the device	LED will light up for 1 second, then blink three times
Registration failed	LED lights up and goes out, then the siren switches off
Security system set in the armed mode (if the indication is activated)	Blinks once with a LED and emits a short sound signal
Security system is disarmed (if the indication is activated)	Blinks twice with a LED and emits two short sound signals
Siren in the armed mode (if the indication is activated)	LED lights up for a short time every 3 seconds
Battery low	LED smoothly lights up and goes out when the

system is armed or disarmed (if the indication is activated), the tamper is actuated or alarm is given

## 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 devices scanning period (the paragraph on "**Jeweller**" settings in hub settings).

Volume Level Test

Jeweller Signal Strength Test

**Attenuation Test** 

## Installing the Siren

Location of the HomeSiren 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.



The device developed only for indoor use.



Check the signal level at the installation location.

The communication range is up to 2000 meters if there are no obstacles. Please consider it when choosing an installation place for HomeSiren.

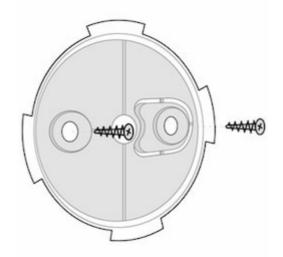
If the signal level is one division, we cannot guarantee stable operation of the security system. Take possible measures to improve the quality of the signal! As a minimum, move the device – even 20 cm shift can significantly improve the quality of reception.

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

Recommended installation height -2.5 meters and more. This will complicate the access to the device for intruders in case of intrusion.

#### Installation process

**1.** 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.





The double-sided adhesive tape may be only used for temporary attachment of the siren. The tape will run dry in course of time, which may result in the falling and damage of the device.

**2.** Put the siren on the SmartBracket panel and turn it clockwise. When installing in the attachment panel, the tamper will switch and the siren will blink with a LED.

If the light indicator of the siren is not actuated after installation in SmartBracket, check the tamper mode in the Ajax Security System application and then the fixing tightness of the device on the panel.

In case of any attempt to dismount the siren, you will receive the notification.

#### Do not install the siren:

- 1. outside the premises (outdoors)
- **2.** in places where the acoustic signal will be attenuated (inside furniture, behind thick curtains, etc.)
- **3.** nearby any metal objects or mirrors causing attenuation and screening of the signal
- **4.** within any premises with the temperature and humidity beyond the range of permissible limits
- 5. closer than 1 m from the hub.

## **External LED connection**

The outside-mounted LED connected to the HomeSiren is paralleled with the built-in LED of the device and completely repeats its indication.

For connection, use the contact on the rear side of the siren body and observe the polarity during the connection. Black terminal wire - "+" contact.

Outlet power supply: 3 V, 10 mA.

## Siren Maintenance and Battery Replacement

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

Clean the siren body from dust, spider web and other contaminations as they appear. Use soft dry napkin suitable for equipment maintenance.

Do not use for cleaning the siren any substances containing alcohol, acetone, gasoline and other active solvents.

The batteries installed in the siren ensure up to 5 years of autonomous operation (with the inquiry frequency by the hub of 1 minute) or at least 6 hours

of the buzzer sound. If the battery is discharged, the security system will send respective notices and the LED will smoothly light up and goes out when the armed mode is activated.

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

#### **Battery Replacement**

#### **Tech specs**

Type of notification	Acoustic and LED
Sound notification volume	81 – 105 dB at a distance of 1 m (adjustable)
Operating frequency of the buzzer	3.4 ± 0.5 kHz
Tamper protection	Yes
Frequency band	868.0 – 868.6 MHz or 868.7 – 869.2 MHz depending on the region of sale
Compatibility	Operates only with all Ajax <b>hubs</b> , and <b>range extenders</b>
Maximum RF output power	Up to 25 mW
Radio signal modulation	GFSK
Radio signal range	Up to 2,000 m (any obstacles absent)
Battery supply	2 × CR123A, 3 V
Battery life	Up to 5 years
Socket for connecting an external light indicator	Yes (power supply 3 V, 10 mA)
Body protection level	IP50
Installation method	Indoors
Operating temperature range	From -10°C to +40°C

Operating humidity	Up to 75%
Overall dimensions	75 × 76 × 27 mm
Weight	97 g
Service life	10 years
Certification	Security Grade 2, Environmental Class II in conformity with the requirements of EN 50131- 1, EN 50131-4, EN 50131-5-3

#### Compliance with standards

## **Complete Set**

- 1. HomeSiren
- 2. SmartBracket mounting panel
- 3. Battery CR123A (pre-installed) 2 pcs
- 4. LED connection clamp
- 5. Installation Kit
- 6. Quick Start Guide

#### Warranty

Warranty for the "AJAX SYSTEMS MANUFACTURING" LIMITED LIABILITY COMPANY products is valid for 2 years after the purchase 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>