HomeSiren User Manual

Updated November 19, 2021

HomeSiren is a wireless home siren with the capacity up to 105 dB. It can be quickly installed and paired with the AAX sensor (PIR sensor) 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 can be set up in a mode application for LED and/or Siren activation.

Capacitors on PCB Ajax Hubs. Connection of LED bar or switching relays may cause a false alarm.

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

Buy here siren HomeSiren

Functional elements

1. Light Indicator
2. 3mm button 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

HomeSiren 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 profitability, 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 disarm the siren in a short time. Thus, by first, the power supply is autonomous, and the on/off button will be blocked when the security systems is set to the guard mode.

Connecting the Siren to the hub

The hub firmware must operate only with the Ajax security system. Up to 10 sirens may be connected to the 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 administrator's privileges can add the devices 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/enter 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 siren already assigned to another hub, switch off HomeSiren and then perform the unbinding 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 later. To redo 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. Updates of the status of the siren 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
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 removal of the SmartBracket panel
Alarm Volume	Volume level of a siren alarm
Alarm Duration	Duration of the alarm (seconds)
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 emits short beeps when arming/disarming the security system. Also, the siren LED will blink once if the security system is armed/disarmed
Beep on delay	If activated, siren LED blinks (slow) and beeps when entering the delay when arming
Firmware	Siren firmware version
Device ID	Device identifier

Setting Up the Detector

1. Devices
2. HomeSiren
3. Settings

Setting	Value
Siren Name	Device name, can be edited
Room	Selecting the virtual room to which the device is assigned
Alarm Volume	Volume level of a siren. Press Test to use it. Edit
Alarm Duration	The setting determines how long the siren sounds. If the tamper is triggered, the siren will sound for the set time (seconds)
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 emits short beeps when arming/disarming the security system. Also, the siren LED will blink once if the security system is armed/disarmed
Beep on delay	If active, siren LED blinks (slow) and beeps when entering the delay when arming. **Firmware version 3.50 and later**
Volume Test	Plays a siren sound of the siren
Signal Strength Test	Switches the detector to the signal strength test mode
Attenuation Test	Switches the siren to the attenuation test mode. Available in versions with **Firmware version 3.50 and later**
User Manual	Opens the siren User Manual
Unpair Device	Disconnects the siren from the hub and deletes its settings

Indication

Event	Indication
Alarm	Either an alarm signal (the duration depends on the settings) and/or LED bar blinks
Switching on the device	LED lights up once
Switching off the device	LED will light up for 1 second, then blinks three times
Registration failed	LED lights up and goes out, then the siren switches off
Blinks twice when the siren is armed (mode of the detectors is activated)	Blinks once when a LED and blinks twice when armed signal
Blinks twice when the siren is disarmed (mode of the detectors is activated)	Blinks once when a LED and blinks twice when disarm signal
Blinks in the armed mode (if the indication is activated)	LED lights up for 2 short intervals. Example: Arming in the armed mode (if the indication is activated)
Battery Low	LED will light up for 20 seconds after the successful arming. The tamper is actuated or siren is given

Performance testing

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

The tests start to run not straight away but within a period of 36 seconds when using the standard settings. The test siren depends on the settings of the devices scanning period (the paragraph on "Jeweller" settings in hub settings).

Volume Level Test

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 that impede the passing of radio signal (reinforced concrete walls, inserted floors, large size objects located within the room).

Check the signal strength 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 dbiseo, we cannot guarantee stable operation of the security system. After installation, please check the signal level in the Ajax application. If it is one dbiseo, move the device closer (it is still can stably transmit alarms regardless the quality of signal).

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

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

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!

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.

Fixing only by the edges will damage the case and the tamper may not actuate when an attempt to tear off the siren. Fixing only by the center will damage the tamper and the siren will not be able to notify about the dismantling.

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 values
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 siren "–", "+" contact.

Outlet power supply: 2.5 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 5 hours of the backup sound. If the battery is discharged, the security system will send respective notices and the LED will periodically light up and give out when the armed mode is activated.

Battery Replacement

Tech specs

Type of notification	Acoustic and LED
Sound notification modes	9 – 105 dB at a distance of 1 m (adjustable)
Operating Frequency of Permanent	2.4 2.5 GHz
Hotspot protection	Yes
Frequency band	868.0 – 868.0 MHz or 868.7 – 869.2 MHz depending on the region of sale
Compatibility	Operates only with Hub, Hub Plus, Hub 2 and Hub
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 x CR123A, 3 V
Battery life	Up to 5 years
Sound for connecting an external light indicator	Yes (power supply 12 10 mA)
Body protection level	IP50
Operating temperature range	From -10°C to +40°C
Operating humidity	Up to 75%
Overall dimensions	72 x 72 x 27 mm
Weight	97 g
Certification	Security Grade 2, Environmental Class II in conformity with the requirements of EN 50131-1, EN 50131-5-3, EN 50131-4

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 "ELIAS 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 – to half of the cases, technical issues can be solved remotely!

The full text of the warranty

User Agreement

Technical support: support@ajax.systems