

Introduction

The U-PROX Siren is a wireless indoor siren designed to notify about an alarm when wireless detectors of the U-PROX control panel are triggered. It is installed indoors to warn users of a threat and deter intruders. The device includes terminals for connecting an arming LED indicator and an external reed switch.

Technical support for U-PROX products is available by phone at +38 (091) 481-01-69 or by email at support@u-prox.systems.

Safety Warnings

CAUTION. RISK OF EXPLOSION IF THE POWER CELL IS REPLACED WITH AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO LOCAL REGULATIONS.

THE WARRANTY PERIOD FOR THE U-PROX Siren (excluding batteries) IS TWO YEARS FROM THE DATE OF PURCHASE. IF THE DEVICE MALFUNCTIONS, CONTACT support@u-prox.systems FIRST, AS THE ISSUE MAY BE RESOLVED REMOTELY.

Description and Principle of Operation

The U-PROX Siren operates as part of the U-PROX alarm system. It receives an alarm command from the control panel (U-PROX MPX) and emits a sound signal at no less than 85 dB at 1 m for up to 10 seconds. The wireless channel operates in the ISM band with secure two-way communication (256-bit encryption) and tamper (jamming) detection. The siren reports signal loss as a sabotage event back to the control panel and triggers the alarm sound.

Functional Elements of the Device

1. Device housing
2. LED indicator
3. Resonator openings (for sound waves)
4. Two pre-installed CR123A batteries
5. Tamper contact (protects against opening the housing)
6. Power On/Off button
7. Connector for external devices:
 - LD terminal (+ LED)
 - GND terminal (ground)

- DC terminal (reed switch)
- 8. Reed switch (external magnetic contact)
- 9. LED for arming indication

Specifications

- **Power Supply:** 3 V, two CR123A lithium batteries included; battery life up to 5 years.
- **Wireless Communication:** ISM band with multiple channels.
 - ITU Region 1 (EU, UA): 868.0 – 868.6 MHz; MA: 869.0 – 869.4 MHz; 100 kHz bandwidth; 20 mW max; up to 4800 m line-of-sight.
 - ITU Region 3 (AU): 916.5 – 917 MHz; 100 kHz bandwidth; 20 mW max; up to 4800 m line-of-sight.
- **Encryption:** 256-bit two-way secure, with sabotage (jamming) detection.
- **Volume Levels:** 3 adjustable levels.
- **Trigger Delay:** No more than 10 s.
- **Sound Pressure Level:** At least 85 dB at 1 m.
- **Light Indication:** Built-in or external LED, configurable.
- **Dimensions:** 84.5 × 84.5 × 24.3 mm.
- **Weight:** 134 g.
- **Housing Color:** White or black.
- **Operating Temperature:** –10 °C ... +55 °C.
- **Permissible Humidity:** Up to 75 %.
- **Environmental Class:** II (per EN 50131-1).
- **Security Grade:** Grade 2 (EN 50131-1).

Package Contents

1. U-PROX Siren
2. Two CR123A batteries (pre-installed)
3. Quick Start Guide

Installation

Selecting the Installation Location

Install the Siren indoors in a location free from excessive humidity and extreme temperatures. Ensure the installation site provides reliable wireless communication with the control panel (e.g., signal strength between –87 dBm and –94 dBm) by using the **Range Test** mode in the U-PROX Installer app. Follow these recommendations:

1. Avoid areas with high radio interference (near metal structures, mirrors, etc.).
2. The siren's range to the control panel can be up to 4800 m in open space, but for reliability keep it within 30 m in typical indoor conditions.
3. Do not place the siren directly above ventilation openings or near strong electromagnetic sources (e.g., large transformers).

Mounting

1. Detach the siren housing from its mounting plate by pressing and sliding the housing downward.
2. Secure the mounting plate to the wall using the provided screws and wall anchors. Make sure it is level.
3. Insert two CR123A batteries into the siren (if not pre-installed).
4. Attach the siren housing onto the mounting plate and slide it upward until the tamper contact is engaged (the tamper switch will lock).
5. Secure the housing with the provided screw to prevent unauthorized removal.

Connecting External LED and Reed Switch

The siren includes a universal terminal for an external arming LED indicator and an external reed switch. The connector has three terminals:

- **LD (+ LED):** Connect to an external LED to indicate arming status.
- **GND (ground):** Common ground terminal.
- **DC (reed switch):** Input from an external magnetic contact (reed switch), which can be used for remote status indication (e.g., an additional door/window sensor).

Power On/Off

To power on the siren, insert the batteries and mount the housing on the plate (the tamper is engaged and the device enters active mode). To power off the siren, remove the batteries or detach the housing from the mounting plate (tamper contact is released).

Testing Wireless Communication

BEFORE TESTING, THE SIREN MUST BE ADDED TO THE U-PROX CONTROL PANEL AND ONLINE.

1. Open the U-PROX Installer app and select the control panel to which the siren is added.
2. Navigate to "Communication Test" and choose the "Range Test" mode.
3. Move the siren around the intended installation location and observe the LED indication:
 - Green flash (≤ -87 dBm): Excellent signal—installation site is acceptable.

- Yellow flash (−88 dBm ... −94 dBm): Average signal—acceptable but consider a different location if possible.
 - Red flash (−95 dBm ... −111 dBm): Weak signal—move the siren closer to the control panel or use a wireless extender.
4. To exit test mode, press “End Test” in the app or wait for the automatic end after 30 minutes.

Working with U-PROX Installer

The siren is added and configured via the U-PROX Installer mobile app or the U-PROX Installer WEB portal. Once the siren is added to the control panel, the following settings can be modified:

- **Device Name:** Assign a user-friendly name (e.g., “Hallway Siren”).
- **LED Indication:** Enable or disable the external LED notifications.
- **Volume Level:** Select one of three levels (Low, Medium, High).
- **Trigger Delay:** Set a delay time before the siren sounds (up to 10 s).
- **Automatic Updates:** Allow or disallow OTA firmware updates for the siren.
- **Special Settings:**
 - *Disable Tamper:* The siren will not react if the housing is opened.
 - *Disable Sabotage Detection (Jamming):* The siren will not report signal loss as sabotage.

Warranty

The siren’s warranty period (excluding batteries) is 2 years from the date of purchase. In case of malfunction, contact support@u-prox.systems; the issue may be resolved remotely.

The siren complies with RED (Directive 2014/53/EU) and RoHS (Directive 2011/65/EU) standards.









Adding to the Control Panel

1. Open the U-PROX Installer app and select the control panel.
2. Tap “+ Add Device” and choose the Siren icon from the list.
3. Power on the siren (engage the tamper), and bring it within approximately 1 m of the control panel.
4. Wait for registration confirmation—the siren will appear in the device list.
5. Configure basic settings (name, volume, LED, etc.) and save changes.

Removing the Device

1. In the U-PROX Installer app or WEB portal, navigate to the device list of the control panel.
2. Select the siren and tap “Remove.”
3. Confirm removal in the dialog box—the siren will be deleted from the account.

Device States

	Tamper closed (normal state)
	Tamper open (sabotage alarm)
	Battery charged
	Battery level (changes according to indication)
	Battery critically low
	Battery failure
	Signal strength OK (≤ -87 dBm)
	No signal (≤ -95 dBm) – move the siren closer or use an Extender