U-PROX Smoke User Manual

Wireless Optical Smoke Alarm for Residential & Industrial Premises

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1. Introduction

The U-PROX Smoke is a wireless optical smoke alarm designed to provide early notification of smoke in residential or industrial premises. Although it does not prevent a fire, it significantly increases your potential escape time by alerting you to dangerous conditions. The device is an integral part of the U-PROX security alarm system and is configured using the U-PROX Installer mobile application.

For technical support, please contact:

Phone: +38(091)481-01-69

Email: **support@u-prox.systems**

2. Safety Warnings

Battery Replacement:

The U-PROX Smoke is powered by two AAA (LR03) alkaline batteries. Replacing these batteries with an incorrect type may result in fire or explosion. Use only FR03 lithium or approved alkaline batteries (LR03) at temperatures above +5°C. Dispose of used batteries in accordance with local regulations.

Installation Precautions:

Install the device only when the power supply is disconnected. Follow all electrical and fire safety guidelines during installation and maintenance.

Handling:

Do not disassemble or modify the device. Adhere strictly to the manufacturer's instructions to avoid safety hazards.

3. Applications for Customization

The U-PROX Smoke integrates seamlessly into the U-PROX security system. Configure and monitor its operation using:
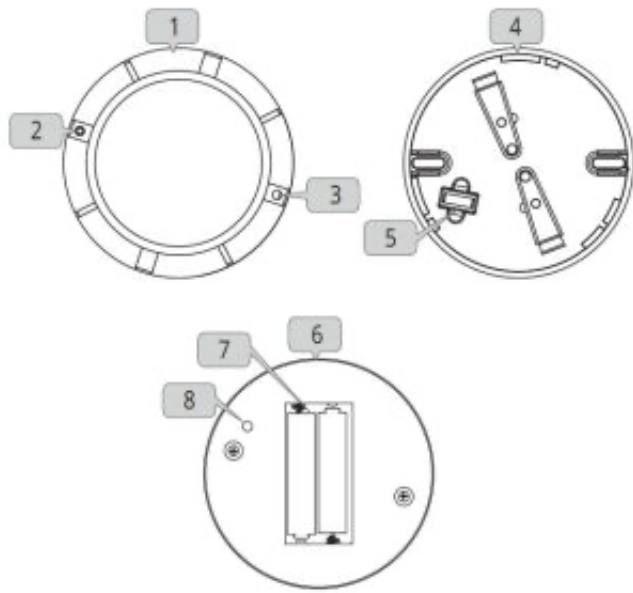
- **U-PROX Installer Mobile Application:** Quickly set up, test, and calibrate the smoke alarm from your mobile device.
- **Installer Web Portal:** Access comprehensive configuration options remotely via the web portal.

4. Description and Principle of Operation

U-PROX Smoke is a wireless optical smoke detector that monitors for the presence of smoke using an optical sensor. Upon detecting smoke, the device sends a secure, encrypted alarm notification to the U-PROX control panel. While it cannot prevent a fire, the smoke alarm allows for timely reaction and potentially increases the escape time during emergencies.

5. Functional Elements

1. **Device Case:** The main housing that encases the sensor.
2. **Test/Hush Button:** Allows you to perform a self-test or temporarily silence the alarm.

3. **Light Indicator:** Provides visual feedback on the device status.
4. **Bottom Plate of the Case:** Forms the base of the device.
5. **Tamper Magnet:** Detects unauthorized opening of the device.
6. **Device Bottom View (Without Bottom Plate):** Shows the internal configuration when the bottom plate is removed.
7. **Battery Compartments:** Houses two AAA (LR03) batteries.
8. **Transmitter LED Indicator:** Signals wireless communication status.

6. Technical Specifications

Power Supply: 3V, powered by two AAA (LR03) alkaline batteries (included). Battery service life up to 3 years.

Wireless Communication:

- ISM-band interface with multiple channels, operating as follows:
- **ITU Region 1 (EU, UA):** 868.0 to 868.6 MHz, 100 kHz bandwidth, 20 mW max, up to 4800 m (line-of-sight)
- **ITU Region 3 (AU):** 916.5 to 917 MHz, 100 kHz bandwidth, 20 mW max, up to 4800 m (line-of-sight)
- Secure two-way communication with a 256-bit encryption key and sabotage detection.

Operating Temperature: −10°C to +55°C

Dimensions & Weight:

- Diameter: 80 x 47 mm
- Weight: 160 grams

Optical Characteristics:

- Sensitivity: 0.08–0.12 dB/m (under cotton smoke, air speed 0.2 m/s)
- Sound Pressure Level: At least 85 dB at 3 m

Environmental & Safety Ratings:

- Environmental Class: II (EN 50131-1)
- Permissible Humidity: Up to 75%
- Security Grade: 2
- Service Life: Up to 10 years

7. Installation Instructions

7.1 Selecting the Installation Location

Location Requirements: Install the smoke alarm in a location that provides the best detection of smoke in case of fire.

Avoid:

- Areas with direct sunlight, high humidity, or extreme temperatures
- Locations prone to dust or vapor that might affect the optical sensor

Tip: Use the U-PROX Installer app to verify that the chosen location meets optimal detection conditions.

7.2 Mounting Procedure

Surface Preparation: Ensure that the installation surface is clean, flat, and free of dust.

Mount the Device: Secure the device case on the wall or ceiling using appropriate mounting hardware. The bottom plate should be properly installed.

Verification: Confirm that the tamper magnet is engaged and that the light indicator functions correctly once the device is installed.

Registration: Register the device with the U-PROX control panel using the U-PROX Installer mobile application.

8. Operation and Settings

8.1 Device Registration and Pairing

Launch the U-PROX Installer mobile app or web portal and log in with your installer credentials.

- **Register the Device:** Follow the step-by-step instructions to add the Wireport to

your U-PROX security system. Hold the module within approximately 1 meter of the control panel during registration.

- **Confirmation:** The light indicator will confirm successful registration.

9. Maintenance and Service

Cleaning:

Regularly clean the device plate, antenna, and terminal block with a soft, dry cloth to prevent dust accumulation.

Battery Replacement:

Replace the AAA batteries only with approved models. Follow proper safety guidelines and dispose of used batteries according to local regulations.

Troubleshooting:

If the module fails to communicate or power connected devices, recheck all wiring, verify battery condition, and consult the diagnostic features in the U-PROX Installer app.

10. Compliance and Warranty

Standards Compliance:

The U-PROX Smoke complies with the Radio Equipment Directive 2014/53/EU and Directive 2011/65/EU (RoHS) and EN14604. The original Declaration of Conformity is available on the U-PROX website in the Certificates section.

Warranty:

Warranty for U-PROX devices (excluding batteries) is valid for two years from the purchase date. For any issues, please contact **support@u-prox.systems**; remote troubleshooting may be available.

11. Scope of Delivery

The complete package includes:

- U-PROX Smoke Module
- Two AAA (LR03) (Pre-installed)

- Quick Start Guide