

User's Manual



 matter  THREAD

MS-1
Sensereo

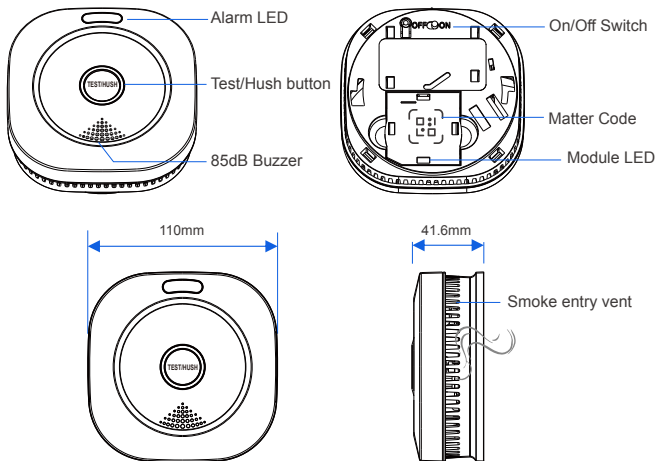


CE RoHS



1.PRODUCT OVERVIEW

The **Sensereos MS-1** is a **New-Gen photoelectric smoke alarm** designed to detect potentially life-threatening fires at an early stage by sensing smoke particles. Powered by **dual-battery design** and **Matter over Thread** technology, the MS-1 integrates easily with major smart home ecosystems, enabling real-time alerts, seamless automation, and remote monitoring via Thread-compatible smart hubs.

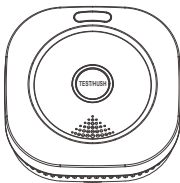


! Important:

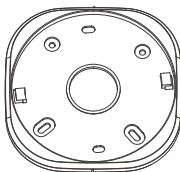
The MS-1 requires a **Matter-compatible Thread hub** to function as a smart device. Without a hub, the device operates solely as a **standalone smoke detector**.

2.PACKAGE CONTENTS

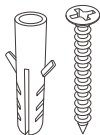
Your MS-1 Smoke Alarm package includes:



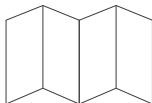
1 × Smoke Alarm (MS-1)



1 × Mounting Plate



2 × Screws & Wall Plugs



1 × User Manual
(includes Quick Setup section)



1 × Warranty Card

! Important:

The main smoke alarm battery is built-in and **non-replaceable**. The Matter-Thread communication module battery (CR123A 3V) is pre-installed and replaceable. When a low-battery alert is received through your smart home app, please replace only the module battery promptly to ensure uninterrupted connectivity.

3. QUICK SETUP GUIDE

Estimated time: 5 minutes

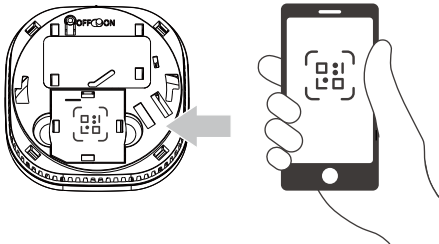
Requirements:

- A Matter-compatible **Thread hub** (e.g. Apple Home Pod, Apple TV, Samsung SmartThings Hub)
- The corresponding **smart home app** (e.g. Apple Home, SmartThings)
- Access to 2.4GHz Wi-Fi (for the hub connection)

Please visit: [Sensereio.com/matter-support](https://sensereio.com/matter-support) to check for more compatible hubs and apps.

Before You Begin

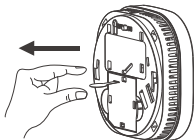
- Make sure your **Thread hub is powered** on and connected to your home network.
- Download or open the app that corresponds to your Thread hub (e.g., **Apple Home** for HomePod, **SmartThings** for SmartThings Hub).
- Locate the **Matter setup QR code** on the back of the smoke alarm or in the product box.



Step-by-Step Setup

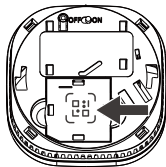
1. Power on the Communication Module

- Locate the **battery slot on the back** of the smoke alarm.
- Pull out the plastic battery tab from the Matter communication module to activate it.
- The **Matter module LED** will first turn **solid Red / Green**, then begin **flashing Green** after a few seconds — indicating the device is ready for pairing.



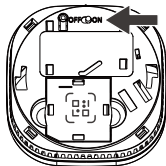
2. Pair with Your Smart Home App

- Open your smart home app.
- Tap “**Add Accessory**” or “**Add Device**”.
- Use your phone to scan the Matter QR code located on the back of the device or on the last page of this manual.
- Follow the in-app instructions to complete setup.



3. Switch on the Smoke Alarm

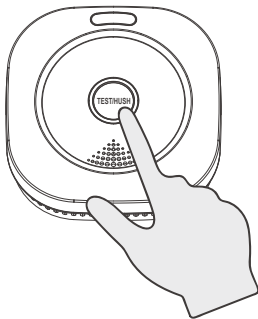
- After pairing is complete, you **may manually switch ON** the device using the **rear power switch** to test or activate it.
- Alternatively, mounting the alarm onto the plate will **automatically turn it ON** — no need to flip the switch manually.
- We recommend assigning a **clear name** to your smoke alarm in the app (e.g., “Hallway Smoke Alarm”) to make it easy to manage in your smart home.



If Pairing Fails: Reset the Device

To re-enter pairing mode, follow the steps below:

1. **Press the Test/Hush button once** to activate the device and confirm it responds.
2. Then **switch OFF** the rear power switch.
3. **Press and hold the Test/Hush button** on the front of the device.
4. While holding the button, **switch ON** the power again.
5. When the **front LED flashes green** and you hear a **beep**, **release the Test/Hush button immediately**, then **press it once briefly within 5 seconds**.
6. The **Matter module LED** will first turn **solid green**, then begin **flashing green** — indicating the device is reset and ready for pairing.



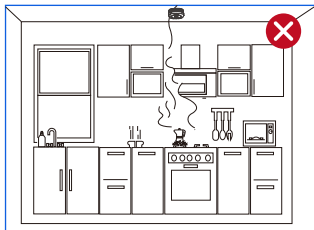
4.INSTALLATION GUIDELINES

Proper installation of your MS-1 smoke alarm is essential for early fire detection and optimal performance. It's recommended to **complete smart pairing before mounting** the device to ensure full access to the Matter communication module and enable seamless integration with your smart home system.

Recommended Placement

- **Ceiling Installation is strongly recommended.** Smoke rises, so ceiling mounting ensures earlier detection.
- Install at least **0.5 meters away from walls, light fixtures, air vents, or obstructions.**
- For rooms with pitched ceilings, mount the alarm within **90 cm (3 ft)** of the peak but **not at the apex** (smoke may bypass the very tip).
- In large spaces, install one alarm every **10 meters** for effective coverage.
- Install **at least one smoke alarm in every bedroom**, hallway, and living area of your home.

❌ Do Not Install in These Areas:



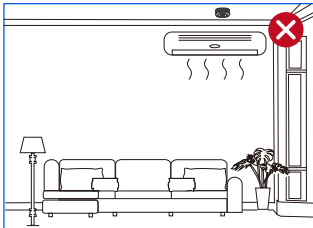
Directly above stoves or in kitchens.



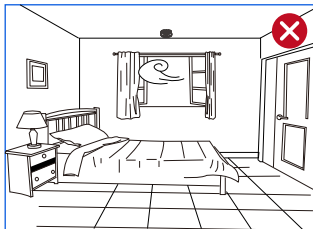
In bathrooms or near water heaters.



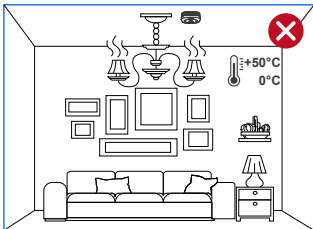
In areas with heavy dust, insects, or chemical vapors.



Near ceiling fans, vents, or air conditioning units that may disrupt airflow.



Near windows or doors where drafts may prevent smoke from reaching the alarm.

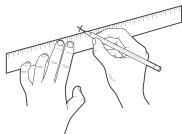


In unheated areas where temperatures fall below 0°C or exceed +50°C.

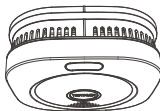
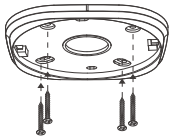
5.MOUNTING INSTRUCTIONS

Wall or Ceiling Mounting:

1. Choose a suitable, flat location.
2. Use the mounting plate to **mark two holes** (spacing: 80 mm apart).
3. Drill holes and insert the provided **wall plugs**.
4. Secure the mounting plate with screws.
5. Align the alarm with the plate and **rotate clockwise** to lock in place.



Use any two opposite holes - do not use adjacent pairs.



Note: When locked properly, you may hear a soft click, and the rear switch will activate the device automatically.

6.ALARM OPERATION

The MS-1 is designed to detect visible smoke particles from slow-smoldering fires using photoelectric sensing technology. When smoke concentration reaches a critical threshold, the alarm immediately alerts users through **sound, visual signals**, and, when connected, **app notifications**.

In Case of Smoke Detection

- The front **LED flashes red** rapidly.
- The **alarm emits a loud pulsing sound** (≥ 85 dB at 3 meters).
- If connected to a smart home system, a **notification is sent to your mobile app** via the Thread hub.



To Silence the Alarm

1. Press the Test/Hush button once.
2. The alarm enters Hush Mode for 8 to 10 minutes.
3. During this period:
 - The **red LED flashes once every 8 seconds**
 - The **buzzer is silenced**
 - The device continues to monitor for smoke during Hush Mode. If smoke remains, the alarm will sound again after the Hush Mode.

Attention:

Only use Hush Mode when you are certain there is no actual fire risk.



Automatic Reset

Once smoke levels return below the detection threshold, the alarm will:

- Stop sounding
- Stop Red LED Flashing pattern (once every 8 seconds)
- Resume normal monitoring, indicated by Red LED flashes every 45 seconds

7. TESTING & MAINTENANCE

Regular testing and maintenance are essential to ensure your MS-1 smoke alarm is functioning correctly — both as a standalone alarm and as a connected smart device. It is recommended to test the alarm at least once a month.

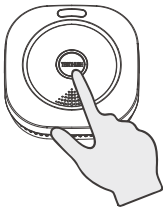
To Perform a Self-Test:

1. Make sure the device is powered on.
2. Press and hold the Test/Hush button on the front for 3 seconds.

The alarm will:

- Emit a loud beeping sound
- Front Red LED flashes
- The alarm will automatically stop after a few seconds and return to standby mode
- If connected to a Matter-compatible smart home hub, some smart home apps may display a notification or event log of the test, depending on the apps' functionalities.

Note: You may cover the speaker grill with your hand during testing to reduce sound intensity.



Cleaning & Maintenance Tips:

- Do not paint the smoke detector
- Do not use chemical solvents or aerosols near the device
- **Do not use water, solvents, or sprays to clean the device exterior.**
- Do not disassemble the detector — Internal components should only be accessed by qualified technicians.
- Clean surface with a soft brush monthly to ensure detection sensitivity
- Ensure the **smoke inlet holes are clear** of dust, debris, or insects.

When to Replace the Device:

- If the alarm **fails to sound during a self-test**, contact customer support or replace the device.
- If the device enters a **fault mode** (e.g., yellow LED patterns with beeps), refer to the Troubleshooting section.
- **After 7 years of use**, replace the device entirely, even if it appears to be functioning normally. This ensures continued accuracy and reliability.

8. BATTERY REPLACEMENT



Note:

The MS-1 is powered by a dual-battery system: a built-in, non-replaceable battery that supports the core smoke detection function, and a user-replaceable CR123A battery that powers the Matter over Thread communication module for smart home connectivity.

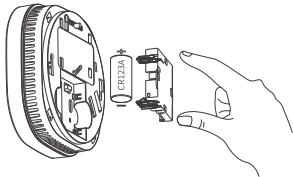
When to Replace the Module Battery

- You'll receive a low-battery alert through your connected smart home app when the module battery is running low.
- Replace the battery promptly to maintain network connectivity.

To Replace the Module Battery:

Module battery type: CR123A 3V lithium battery

1. Twist the smoke alarm counterclockwise and remove it from the mounting plate.
2. Locate the communication module battery compartment on the back of the device.
3. Carefully remove the old battery.
4. Insert a new CR123A 3V battery, ensuring the correct polarity (+/-).
5. The Matter module LED will turn solid green, then begin flashing green after a few seconds, indicating the module is powered on and ready.
6. Reattach the smoke alarm by aligning it with the mounting plate and rotating clockwise to lock it in place.
7. If your smart home hub network environment remains unchanged, the communication module will automatically reconnect to your hub within a few minutes.



Dispose of used batteries according to local environmental regulations.

9.LED & BUZZER INDICATORS

The MS-1 uses LED signals and buzzer sounds to indicate its status. Refer to the following tables for a complete guide to what each signal means.

Front LED & Buzzer Patterns (Smoke Alarm Status)

Status	Front LED Indicator	Buzzer Sound	Description
Standby	Red flash every 45 seconds	None	Normal monitoring mode
Alarm (Smoke Detected)	Red flashing rapidly	Loud pulsing alarm (≥ 85 dB)	Smoke detected
Hush Mode	Red flash once every 8 seconds	Silenced	Alarm manually silenced for 8–10 minutes; alarm reactivates if smoke persists
Self-Test	Red flashing	3 short beeps	Confirms device function
Low Battery (Module)	Yellow flash every 45 seconds	1 beep every 45 seconds	Replace communication module battery
Fault/Error	Yellow flashes (pattern)	2–3 beeps	Device error — see Troubleshooting section

Matter Module LED Behavior (Back of Device)

LED Behavior	Status Description
Red / Green solid for ~5 seconds	Module initializing
Green flashing (up to 3 minutes)	Ready for pairing — scan Matter QR code with smart home app
Green flashes 3 times, then off	Successfully paired — enters standby mode

Note: The Matter module LED is only visible during setup, reset, or troubleshooting. It remains off after pairing or during normal operation.

10. TROUBLESHOOTING

If your MS-1 smoke alarm is behaving unexpectedly, refer to the table below for common issues, causes, and recommended actions.

Issue	Possible Cause	Solution
No sound or light during self-test	Device not powered properly or internal fault	Check the rear power switch and battery tab; if still unresponsive, contact support
Alarm sounds unexpectedly (false alarm)	Cooking fumes, dust, steam, or aerosol spray	Ventilate area; move alarm away from kitchens or steamy areas; clean the device
Frequent false alarms	Smoke alarm installed in unsuitable location	Refer to Installation Guidelines; relocate to an appropriate spot
Yellow LED flashes every 45 sec + 1 beep	Communication module battery is low	Replace the CR123A battery in the module
Yellow LED pattern + 2–3 beeps	Device fault or internal error	Reset the alarm; if the issue persists, contact Sensereco support
Pairing fails or device not detected	Thread hub not compatible or pairing procedure not followed exactly	Confirm hub compatibility; reset device and repeat pairing steps
Matter LED does not flash green after resetting	Module not powered or reset incorrectly	Ensure battery tab is removed; perform reset steps again
Device won't re-pair after removal from the App	Device not reset to factory state	Follow full reset procedure in Setup Guide to clear pairing

11. TECHNICAL SPECIFICATIONS

Item	Specification
Product Name	Sensereco MS-1
Model Series	LZ-1956Z
Sensor Type	Photoelectric smoke sensor
Alarm Volume	≥ 85 dB at 3 meters
Power Supply	Built-in primary battery (non-replaceable) + CR123A 3V (replaceable module battery)
Standby Current	Detector ≤ 3μA; Module ≤ 45μA
Alarm Current	Detector ≤ 100mA; Module ≤ 150mA
Wireless Protocol	Matter over Thread (IEEE 802.15.4)
Operating Temperature	0°C to +50°C
Operating Humidity	≤ 95% RH (non-condensing)
Product Lifespan	7 years
Installation Method	Wall or ceiling mount (screws and mounting plate included)
LED Indicators	Front: Green / Red / Yellow; Rear: Module LED (Green / Red)
Dimensions	Approx. 110 × 110 × 41.6 mm
Weight	Approx. 165 g
Certifications	EN 14604, CE, RoHS

12: WARRANTY & CUSTOMER SUPPORT

For full warranty terms, please refer to the included Warranty Card or visit:

 www.sensereio.com/warranty

Need Help? We're Here for You

If you need assistance with installation, setup, or troubleshooting, please don't hesitate to contact us:

 Email: service@sensereio.com

 Website: www.sensereio.com

You may also scan the following matter code to pair with the device: