Aqara Smoke Detector Introduction

Product Overview

The Aqara smoke detector is an independent photoelectric smoke fire detector that detects fires by sensing smoke. When the smoke concentration in the monitored area reaches the alarm level, the alarm will immediately emit an audible and visual alarm signal and send a notification to the app through the connected ZigBee gateway. It also enables remote control and device linkage functions.

The Aqara smoke detector uses the principle of light scattering by smoke particles. The higher the concentration of smoke, the more obvious the scattering, generating a stronger photoelectric current, thereby triggering the fire alarm.

The product is powered by a CR17450 lithium battery, with a standby time of up to 10 years (the standby time is theoretically calculated based on alarming once a month, each alarm lasting 5 minutes).

Product Specification

Item	Parameter
Product Name	Aqara Smoke Detector (EU)
Model	SD-S01E/SD-S01D
Dimension	Φ104.6 × 42mm (Including Mounting Plate)
Protocol	Zigbee
Battery Type	CR 17450 lithium battery
Battery Voltage	3V DC
Battery Capacity	2400 mAh
Alarm Sound Pressure	＞85dB (3 meters away from the detector)
Operating Temperature	-10℃ ~ 55℃
Operating Humidity	0-95%RH (No condensation)

Product Scenarios

The product is an independent smoke fire detector. It is primarily aimed at those who wish to enhance fire safety in their homes through smoke alarms. It fills a critical gap in smart home fire protection.

Product Functions

Smoke concentration detection	Monitor the smoke concentration in the current area and report it to the APP.
Fire alarm	When the smoke concentration in the monitored area reaches the alarm threshold, the device will immediately emit a strong audible and visual alarm signal, and push the alarm information to the APP through a nearby ZigBee gateway
Self-test	Supports to check whether the device is normal by button or App.
Mute	Supports to turn off the alarm by button or App when it alarms.
Fault alerts	When the device malfunctions, it will actively alert through indicator lights and a buzzer, while also sending a malfunction notification through the mobile app.
Low power alerts	When the battery is low, the device will alert through indicator lights and a buzzer, while also sending a low battery notification through the mobile app.
Linked alarm	When one device triggers a fire alarm, it can link with other smoke alarm devices to issue an alert.

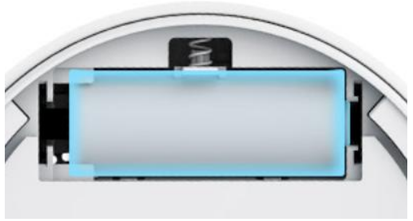
Product Selling Points

Sensitive smoke detection and timely fire alarm

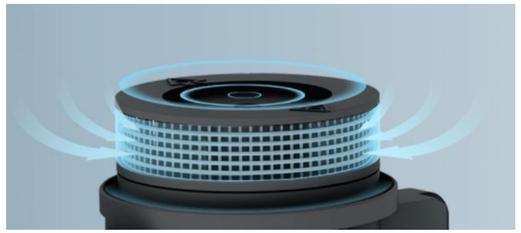
Alarms interact with each other to promptly spread the alert.

10 years of extended battery life, safe and worry-free.

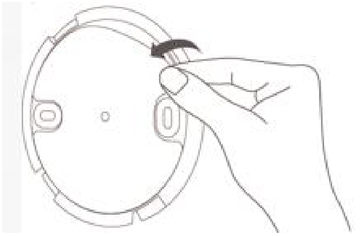
Insect-resistant design reduces false alarms and extends service life.



Battery anti-misinstallation design prevents installation if the battery is not properly installed, ensuring installation safety.



360-degree wide-range detection, senses fire immediately and triggers the alarm.



Convenient installation design, includes adhesive pads to avoid the hassle of drilling, stick and use immediately.

Red Dot Design Award, where safety and art are seamlessly integrated.

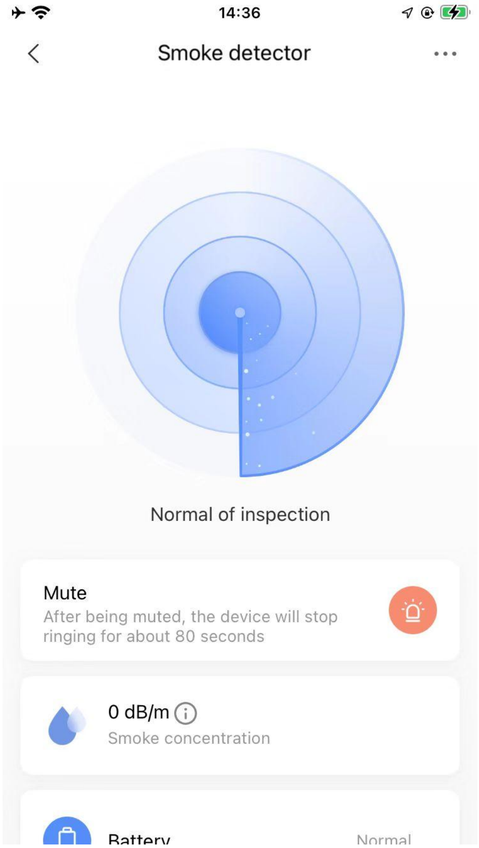
Smart Automation

Smart Linkage:

Link to gateway for audible and visual alarms, push alarm messages to mobile APP. Link to smart cameras to automatically take photos/record videos of the 'scene of the incident', enabling real-time viewing of the situation.

Smoke detector detects the fire and alarm

The users check the situation from camera



Linkage Alarm

After one smoke alarm is triggered, it interacts with other smoke alarms to promptly spread the alert and notify users present at the scene.

Rich Scenarios

Kitchen and Bathroom Suite:

Install smoke detector in open kitchens to prevent fire hazards. Install smart valve controllers next to kitchens and gas pipelines to ensure household gas safety. Install water immersion sensors under sinks to ensure water safety. Install smart cameras in the kitchen to monitor safety anytime, anywhere, and serve as a gateway to connect other sensor devices.

- Smoke detector
- Water leak sensor
- Valve controller T1
- Smart camera

Rich Scenarios

Smart Security:

Integrate with water immersion sensors, door/window sensors, and motion sensors, linked with smart cameras, to create a comprehensive, multi-functional security system. When an alarm is triggered, it can automatically take photos or record videos of the 'incident scene' and provide real-time monitoring of the situation. Each separate space can be equipped with a smoke alarm.

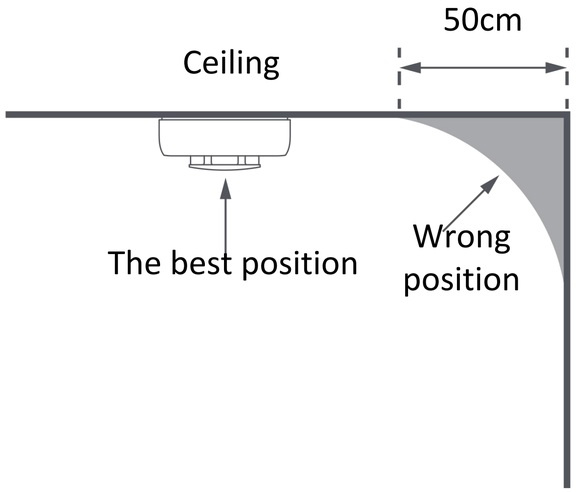
- Smoke detector
- Water leak sensor
- Door and window sensor
- Motion sensor
- Valve controller T1
- Smart lock
- Smart camera

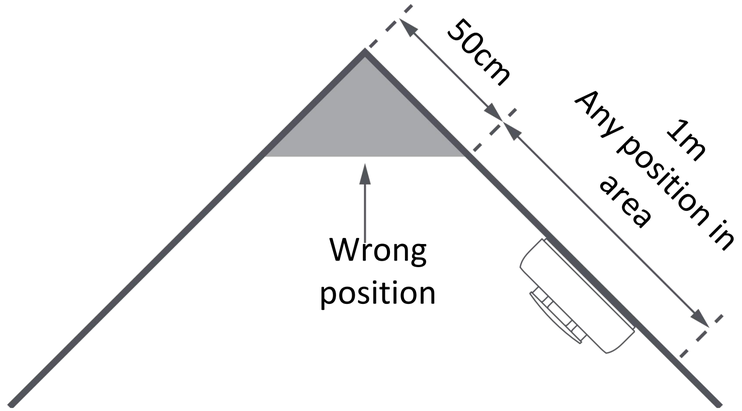
Compatibility

Platform	States
Aiot	Supported
HomeKit	Supported
Alexa	Will support in Sep.
Google	Will support in Sep.
Sumsung SmartThings	Will support in Sep.
IFTTT	Will support in Sep.
Homey	Will support in Sep.
Cloud	Will support in Sep.
HomeAssistant	Will support in Sep.

Precautions

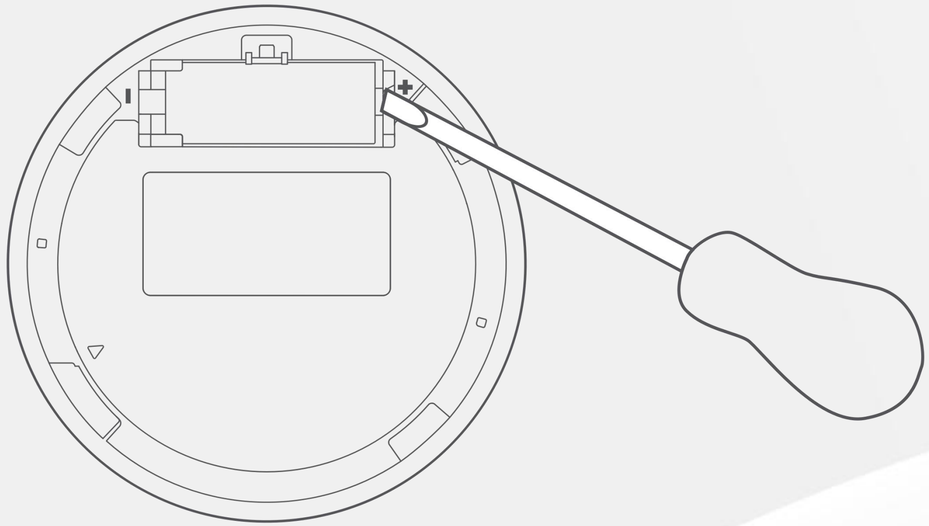
1. At least one detector should be installed in each independent room.
2. The detector should be installed in the middle of the roof, with at least 0.5 meters away from any wall.
3. The detector should not be installed in the kitchen or near the water heater with combustible smoke particles.
4. The detector should not be installed in places with massive moisture or large amount of water vapor, such as bathrooms.
5. The detector should not be installed in places with too much dust.
6. The detector should not be installed near the fans, air conditioners, fresh air entrances and exits where the wind speed is too fast.
7. The detector should not be installed at the corner of the wall or at the top of the spire room with poor air flow.
8. The detector should not be installed near fluorescent lamps with electromagnetic interference.
9. The detector should not be installed in places with temperature below 0° C or above 40° C.
10. The detector should be installed horizontally. In case slanting installation is inevitable, the dip angle should not be greater than 45 degrees.
11. Do not install the detector in new buildings until renovations and other processes that may generate dust are completed.





How to Replace the Battery

1. Hold the detector and remove it from the mounting plate by rotating it counterclockwise.
2. Remove the old battery with a screwdriver.
3. Load a new CR17450 battery in the battery compartment. Do not reverse the positive and negative electrodes of the battery.
4. After replacing the battery, hold down the silence/self-test button for more than 3 seconds to confirm that the indicator flashes red, yellow and green in turn, with three beeps of the buzzer, which indicates that the self-test is normal.
5. Align the "△" mark on the back of the detector with the same mark on the mounting plate and rotate clockwise to fix it.

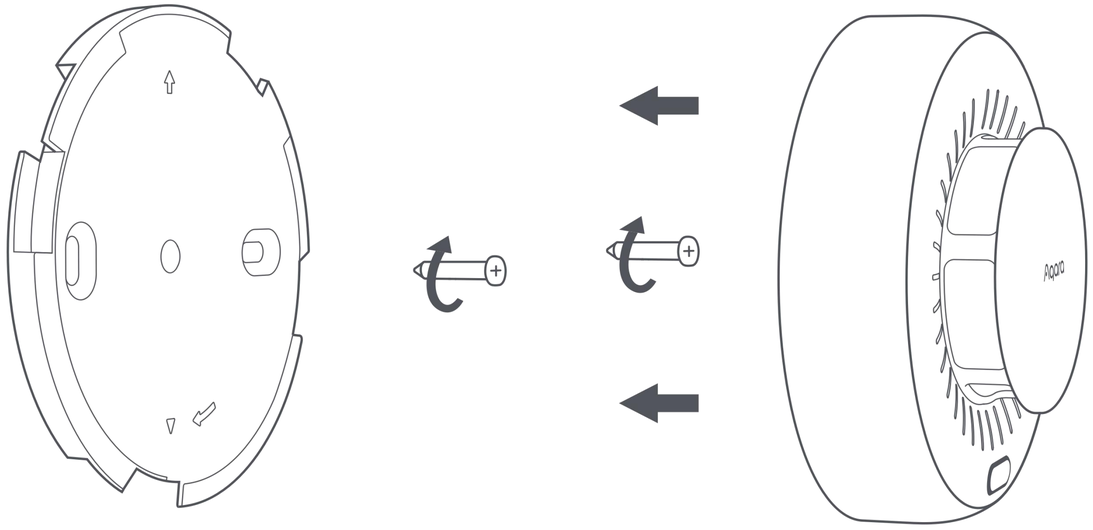


Product Installation

Please first place the detector in the target position for installation, load the batteries, and press the silence/self-test button to verify the communication distance. You should make sure that the device communicates properly with the hub before installing and fixing it in position.

Installation with screws

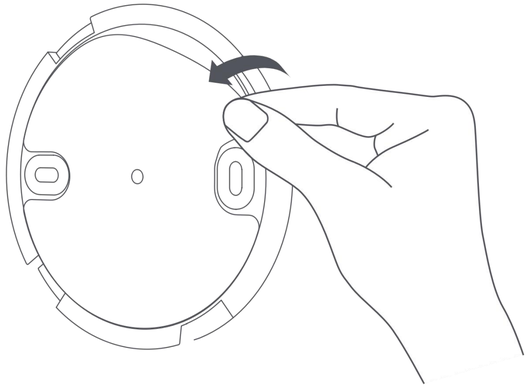
1. After loading the battery, hold down the silence/self-test button for more than 3 seconds to confirm that the indicator flashes red, yellow and green in turn, with three beeps of the buzzer, which indicates that the self-test is normal.
2. Choose a suitable position in the middle of the roof and use an impact drill to punch holes in accordance with the holes on the mounting plate.
3. Install the expansion tube at the punch position.
4. Secure the mounting plate with self-tapping screws.
5. Align the "△" mark on the back of the detector with the same mark on the mounting plate and rotate clockwise to fix it.
6. Use screws first to ensure a more secure installation.

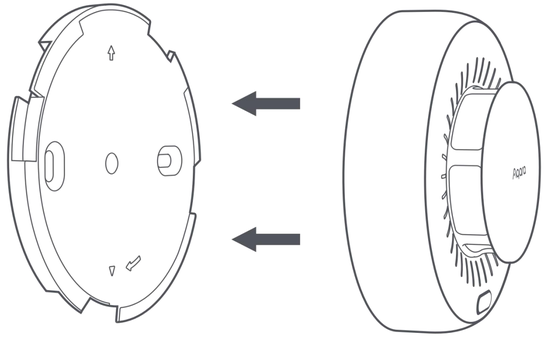


Product Installation

Installation with adhesive

1. After loading the battery, hold down the silence/self-test button for more than 3 seconds to confirm that the indicator flashes red, yellow and green in turn, with three beeps of the buzzer, which indicates that the self-test is normal.
2. Remove the protective film on one side of the adhesive sticker and stick the adhesive sticker on the back of the mounting plate.
3. Choose a suitable position in the middle of the roof and make sure the surface is smooth, clean and dry. Please do not stick the mounting plate on the surface of the wall paint and other coatings, otherwise the sticking position is prone to peeling after a period, resulting in falling off the detector.
4. Remove the protective film on the other side of the adhesive sticker, stick the mounting plate, and press with uniform force for 30 seconds to make it firm (it is recommended to leave it still for 24 hours before installing the detector).
5. Align the "△" mark on the back of the detector with the same mark on the mounting plate and rotate clockwise to fix it.





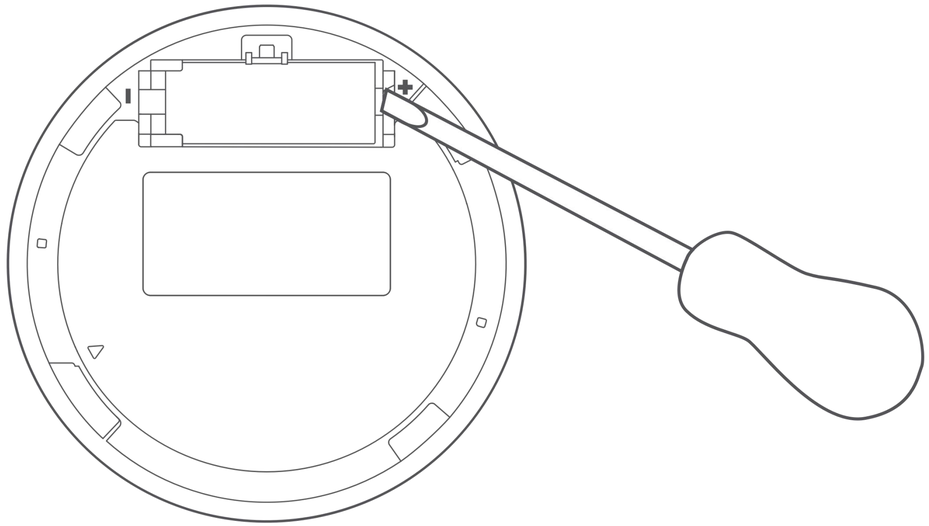
Product Installation

Status signal of the detector

Status	Indicator	Buzzer	App
Normal monitoring	Power off (green light flashes once every 56 seconds after the power indicator is turned on)	No sound	Monitoring normal
Self-test	The red, yellow and green colors flash in turn, with duration of each flash one second and a pause every three flashes	One beep per second, with a pause every three beeps	Self-test
Fire alarm	Red light flashes once per second	One beep per second, with a pause every three beeps	Fire alarm
Linkage alarm	Red light flashes once every 4 seconds	One beep per second, with a pause every three beeps	Linkage alarm
Fault	Yellow light flashes three times every 48 seconds	Three beeps every 48 seconds	Fault
Low battery	Yellow light flashes once every 48 seconds	One beep every 48 seconds	Low battery

Battery Replacement

1. Hold the detector and remove it from the mounting plate by rotating it counterclockwise.
2. Remove the old battery with a screwdriver.
3. Load a new CR17450 battery in the battery compartment. Do not reverse the positive and negative electrodes of the battery.
4. After replacing the battery, hold down the silence/self-test button for more than 3 seconds to confirm that the indicator flashes red, yellow and green in turn, with three beeps of the buzzer, which indicates that the self-test is normal.
5. Align the "△" mark on the back of the detector with the same mark on the mounting plate and rotate clockwise to fix it.



FAQ

What situations might cause the Aqara smoke alarm to falsely trigger a fire alarm?

1. Cooking smoke or steam can cause a false alarm.
2. Humid weather causing condensation on the device may trigger a false alarm.
3. Using incense, electric mosquito repellent, etc., may lead to false alarms.
4. Spraying air fresheners, insecticides, etc., can result in false alarms.
5. Accumulation of a large amount of dust inside the device can cause a false alarm.

How to silence the Aqara smoke alarm after a false alarm?

1. Press the silence/self-test button on the device surface, or open the mobile app and click the “Silence” button on the device's home page to stop the alarm sound.

How long will the alarm sound stop after silencing the Aqara smoke alarm?

1.In the case of a fire alarm, silencing will stop the alarm sound for approximately 80 seconds.

2.In the case of sensor malfunction or low battery, silencing will stop the alarm sound for approximately 8 hours.

THANK YOU