

# S04-R8

## Wireless Interconnected Smoke Alarm



- Split-spectrum sensor technology
- Test and silence features in one single button
- Loud sound output over 85 dB(A) at 3 meters
- Low quiescent current consumption
- Surface-mount device (SMD) circuit board design
- Low battery warning signal
- Built-in battery, easy installation
- Silenced by a working infrared remote controller
- Wireless interconnected with maximum of 24 devices



### System Overview

Wireless Interconnected Smoke Alarm (hereinafter referred to as the device) is designed to continuously monitor smoke concentration. Adopting new split-spectrum sensor and a built-in high-volume buzzer, it responds quickly and becomes highly sensitive with stable performance and low false alarm. Once the surrounding smoke concentration reaches the alarm value, it will promptly send out visual and audible alarm signal to remind the user to take immediate measures. Moreover, the alarm signal will be pushed to every alarms in the interconnected network and they will raise the alarm in unison.

### Scene

The device can be widely used in residential areas such as villas, apartments and dorms, including reading rooms, living rooms, bedrooms and hallways.

### Technical Specification

#### Working Principle

Collection Type	Smoke
Sampling Period	9 s
Working Principle	Photoelectric

#### Alarm

Alarm Type	Smoke alarm, fault alarm, low battery warning
Alarm Volume	85dB (A) at 3 m (9.84 ft)
Alarm Mode	Visual and audible alarm
Silencing Function	Yes

### Technical Specification

Silence Duration	12 min
Infrared Silence	Yes
Pre-Set Alarm Value	0.2dB/m-0.3dB/m

#### Basic Parameters

Indicator Light	Alarm, fault and operation indicator
LED Instructions	Standby: Green indicator flashes once per minute Alarm: Red indicator flashes once per second Fault: Red indicator flashes once per minute Low battery warning: Red indicator flashes once per minute
Operating Frequency	868 MHz
Radio Signal Range	Up to 1000 m (3280.84 ft) in open air
Maximum Number of Interconnected Units	24pcs
Coverage Area	When the height of the space is less than 8 m (3.28 ft), the protection area of a device is 20 m <sup>2</sup> -40 m <sup>2</sup>

#### Power Supply

Battery Life	10 years
Power Source	3V CR123A lithium battery (non-replaceable)
Operating Current	Monitoring current: ≤ 15uA (avg.) Alarm current: ≤ 25mA (avg.)

#### Operating Ambient

Operating Environment	Indoor
Operating Temperature	-10°C to +55°C (+14°F to +131°F)
Operating Humidity	≤ 95% RH (non condensing)

**Technical Specification**

Appearance

Color	White
Casing	PC+ABS
Dimensions	φ98 mm × H43.1 mm (φ3.85" × H1.70")
Weight	138 g (0.30 lb)
Installation	Ceiling Mount

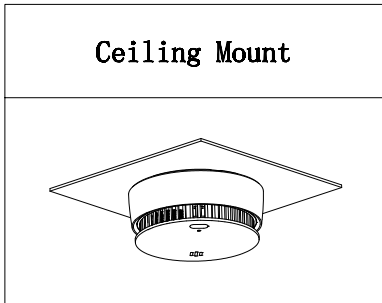
Certification

Certifications	TÜV and CE listed
Compliance Standard	EN 14604:2005+AC:2008

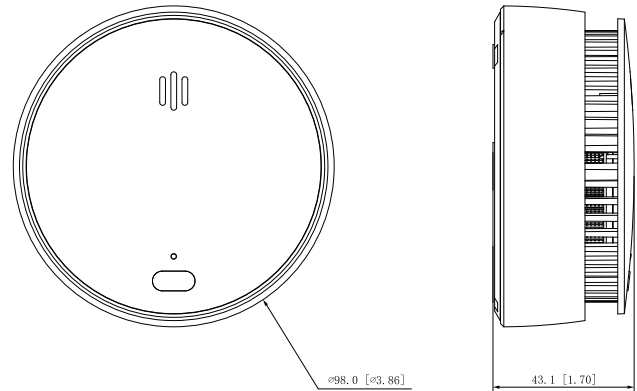
**Ordering Information**

Type	Part Number	Description
Smoke Alarm	S04-R8	Wireless Interconnected Smoke Alarm

**Installation**



**Dimensions (mm/inch)**



## User's Manual

**EN** Wireless Interconnected Smoke Alarm

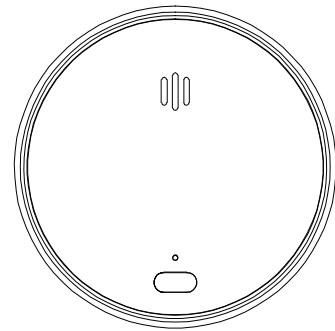
**DE** Rauchmelder vernetzt

**ES** Detector de humo inalámbrico interconectado

**FR** Détecteur de fumée interconnecté sans fil

**NL** Draadloos koppelbaar rookmelder

**PL** Bezprzewodowa połączona czujnik dymu



ZHEJIANG HUAXIAO TECHNOLOGY CO., LTD.

V1.0.0

1.2.51.32.21019-000

**EN**

## Quick Start Guide

For Device Interconnection

**Note: The alarms in this package have already been interconnected.**

To Interconnect more units:

Press **Test/Silence** button 4 times on device in existed network, then press button on a new Wisualarm unit twice.



## 1 Important Safeguards and Warnings

**EN**

This manual will help you to use the Device properly. Read the manual carefully before using the Device, and keep it well for future reference.

### Operation Requirements



#### WARNING

Never ignore any alarm. Failure to respond may lead to serious injury or death.



#### CAUTION

- Make sure that the power supply of the device works properly before use.
- Use the device according to the operating environment.
- Only use the device within the rated power range.
- Transport, use and store the device under allowed humidity and temperature conditions.
- Prevent liquids from splashing or dripping on the device. Make sure that there are no objects filled with liquid on top of the device to avoid liquids flowing into it.
- The smoke alarm is only designed for indicating the presence of smoke, but it cannot detect gas, heat or flames.

### Installation Requirements



#### WARNING

Failure to properly install and operate this device will prevent proper operation of the Device and will prevent its response to fire hazards.

## CAUTION

- Observe all safety procedures and wear required protective equipment provided for your use while working at heights.
- Do not expose the device to direct sunlight or heat sources.
- Keep the original packing material well because you might need it to pack the device and send it back for repair.
- Make sure the application scenario conforms to installation requirements. Contact your local retailer or customer service center if there is any problem.
- All installation and operations shall conform to your local electrical safety requirements, fire protection regulations, and other relevant regulations.

### Maintenance Requirements

- Do not clean the device with any cleaning products.
- Do not paint the device. Paint will seal the bents and interfere with the sensor's ability to detect smoke.

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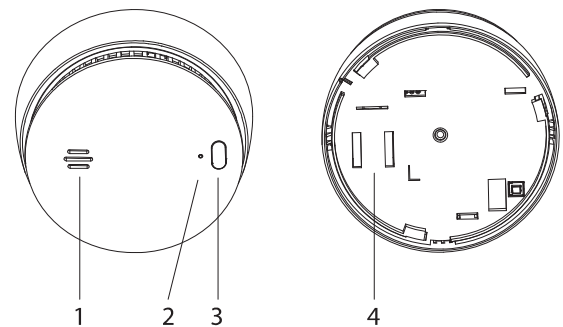
## 2 Introduction

### 2.1 Product information

Wireless Interconnected Smoke Alarm (hereinafter referred to as the device) is designed to continuously monitor smoke concentration. Adopting advanced split-spectrum photoelectric chamber and a built-in high-volume buzzer, it responds quickly and becomes highly sensitive with stable performance and low false alarm. Once the surrounding smoke concentration reaches the alarm value, it will promptly send out visual and audible alarm signal to remind the user to take immediate measures. With a built-in RF module, the device enables you to wirelessly connect up to 24 smoke alarms, constructing an interlinked network. Once one device triggers an alarm, the alarm signal will be pushed to every alarm in the interconnected network and they will raise the alarm in unison.

This product is designed for household or similar residential application such as family home or apartment.

### 2.2 Product profile



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No.	Name	Introduction
1	Buzzer	Alarm Sound: 85dB (A) at 3 m (9.84 ft)
2	Indicator	<ul style="list-style-type: none"> <li>• Standby: Green indicator flashes once per minute</li> <li>• Alarm: Red indicator flashes once per second</li> <li>• Fault: Red indicator flashes once per minute</li> </ul>
3	Test/Silence Button	<ul style="list-style-type: none"> <li>• Verify the normal working</li> <li>• Stop the alarm sound</li> </ul>
4	Battery Compartment	Built-in battery, not replaceable by user

## 3 Technical Information

Specification	Introduction
Sensor Type	Photoelectric
Power Source	3V CR123A lithium battery (non-replaceable)
Battery Life	10 years
Alarm Method	Visual and audible alarm
Operating Current	<ul style="list-style-type: none"> <li>• Monitoring current: <math>\leq 15\mu\text{A}</math> (avg.)</li> <li>• Alarm current: <math>\leq 25\text{mA}</math> (avg.)</li> </ul>
Operating Temperature	$-10^{\circ}\text{C}$ to $+55^{\circ}\text{C}$ ( $+14^{\circ}\text{F}$ to $+131^{\circ}\text{F}$ )
Operating Humidity	$\leq 95\%$ RH (non condensing)
Operating Frequency	868 MHz
Maximum Number of Interconnected Units	24 pcs
Detecting Area	When the height of the space is less than 8 m (3.28 ft), the protection area of a device is 20 m <sup>2</sup> –40 m <sup>2</sup>
Dimensions	$\varnothing 98\text{mm} \times \text{H}43.1\text{mm}$ ( $\varnothing 3.85" \times \text{H}1.70"$ )
Weight (with battery)	138 g (0.30 lb)
Certification	EN 14604:2005+AC: 2008

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## 4 Interconnection

### Prerequisite

- Remove the insulating film from the battery compartment to turn on the device.
- Make sure all smoke alarms are powered on to ensure a successful interconnection.



### WARNUNG

Make sure that only 2 smoke alarms are powered on at a time to ensure successful interconnection. Otherwise, the interconnection will fail or device malfunction may occur.

### How to interconnect

**Step 1** Press the **Test/Silence** button on the device 1 continuously 4 times (the interval between each press is less than 1 second), this device emits 1 short quick beep and the red LED indicator flashes continuously (about once every 0.5 seconds), indicating the device 1 enters the interconnecting receiving mode.



To ensure that all smoke alarms enter the same interlinked network, make sure only one smoke alarm enters interconnecting mode at a time.

**Step 2** Press the **Test/Silence** button on device 2 twice (the interval between each press is less than 1 second), this device emits 1 short quick beep and the red LED indicator starts to flash rapidly (about once every 0.25 second), indicating the device 2 enters the interconnecting transmission mode.

**Step 3** Red LED indicator on device 2 will go solid and it will emit 1 short quick beep, then the green LED indicator will flash continuously, which means the

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pairing between two devices succeed. The green LED indicator will flash continuously until device 1 quit the interconnecting mode, or you can press the **Test/Silence** button on device 2 to force it enter the normal standby state immediately.



Device 1 will be in interconnecting mode for 3 minutes with red LED indicator flashing once every 0.5 seconds. During this period, you can pair several wireless interconnected smoke alarms one by one. If needed, you can manually press the **Test/Silence** button to help device 1 quit the interconnecting mode, the red LED indicator will go solid for 3 seconds and green LED indicator flashes once, then device 1 will emit 1 short quick beep, indicating the device has already quit the interconnecting mode and enters normal standby state. Once you press the button on device 1, the device 2 will follow device 1 to quit the interconnecting mode and enter the normal standby state.

#### Step 4 (Optional) Interconnect device 3.

- 1) If device 3 is in the interconnecting receiving mode of device 1 within 3 minutes, then press the **Test/Silence** button twice on device 3 to enter the interconnecting transmission mode. If the interconnecting receiving mode of device 1 surpasses 3 minutes, then press **Test/Silence** button on either of the two previously interconnected devices 4 times to enter the interconnecting receiving mode, then press the **Test/Silence** button twice on device 3 to the join interconnected network.
- 2) If enters the interconnected network successfully, red LED indicator on device 3 will go solid and it

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will emit 1 short quick beep, then the green LED indicator will flash continuously until device 1 quit the interconnecting mode, or you can press the **Test/Silence** button on device 3 to force it enter the normal standby state immediately.

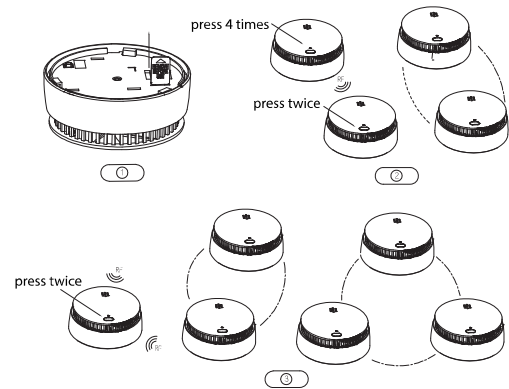
#### Step 5 If you want to connect more devices, please repeat Step 4.



Up to 24 wireless smoke alarms can be interconnected this way.

#### Step 6 Refer to "Chapter 5 Operation", test all wireless interconnected smoke alarms before installation to ensure they are interconnected well.

Figure 4-1 Interconnect device



#### How to disconnect

- Step 1** Continuously press the **Test/Silence** button 4 times on the device that needs to unpair with other smoke alarms, and the device emits 1 short quick beep and red LED indicator starts to flash continuously.

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**EN Step 2** Press and hold the **Test/Silence** button until the red LED indicator goes solid, then release the button. If the disconnection finished, the red LED indicators on all smoke alarms in the interconnected network will go solid for 3 seconds, then the green LED indicator will flash once together with buzzer beeps once. You can connect it again to join an interlinked network.



Please disconnect all the wireless interconnected smoke alarms if you want to use them in another interconnected network.

## 5 Operation

After the installation of the Device or regular maintenance, a test must be carried out to confirm that the Device is operating properly. During the testing process, the defective Device should be addressed according to "Frequently Asked Questions" and "Maintenance", and then tested again. If it fails to complete the test successfully, please send the Device to the manufacturer for repair.

### 5.1 For a single smoke alarm

#### Test

Press the **Test/Silence** button, the red LED indicator will flash once, then the buzzer will beep 3 times continuously together with red LED indicator flashing 3 times.

#### Silence//Pause the alarm

When the smoke concentration reaches a predetermined threshold, the LED indicator flashes, and the buzzer beeps (85dB). Press the **Test/Silence** button on the device to temporarily mute alarm sound and the device will be in the silence mode for 12 minutes.

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#### CAUTION

You can silence this device with an infrared remote controller by pressing the button on it and the device will pause the alarm. The alarm will automatically exit silence mode after 12 minutes.

### 5.2 For interconnected smoke alarms

#### Test

- Press and hold the **Test/Silence** button on any interconnected smoke alarm until other interconnected smoke alarms in the network start to beep. The initiating device will beep continuously with the red LED indicator flashing. After receiving a signal, other interconnected devices in the network start beeping with the indicator lights flashing red and green alternately.
- Release the **Test/Silence** button on initiating interconnected device, the initiating device stops flashing and beeping, and other interconnected devices stop testing soon.



Release the **Test/Silence** button on initiating interconnected device, the initiating device stops flashing and beeping, and other interconnected devices stop testing soon.

#### Silence/Pause the alarm

- Once the initiating device triggers an alarm, the device beeps with red LED indicator flashing once per second. After several seconds, other interconnected devices receive alarm signal with red LED indicator flashing and the buzzer beeping 3 times (once per second).
- Press the **Test/Silence** button on initiating interconnected device. All interconnected devices are temporarily silenced.
  - Press the **Test/Silence** button on any other interconnected device. The device that has been pressed is temporarily silenced, but the initiating interconnected device keeps beeping.

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## 6 Device Installation

### 6.1 Packing List

Check the package according to the following checklist. If you find device damage or any loss, contact the after-sales service.

Table 6-1 Checklist

Name	Quantity
Smoke Alarm	1
Self-tapping Screw	2
Expansion Bolt	2
Mounting Plate	1
User's Manual	1

### 6.2 Installation Position

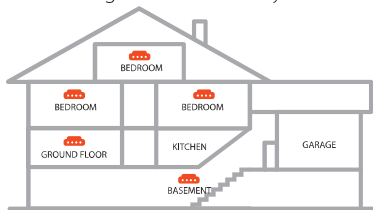
Check the package according to the following checklist. If you find device damage or any loss, contact the after-sales service.



#### CAUTION

This device is intended for use in ordinary indoor locations of family living units. Construction and layout of individual dwellings will vary, so this should be regarded as a reference only. For further guidance, please check with your local fire station.

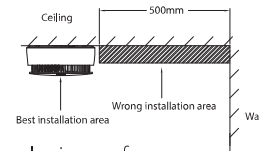
Figure 6-1 Overall layout



- Installed on the ceiling.  
If the device is installed on the ceiling, install at a distance of 20 inches (500 mm) away from the corners of the room.

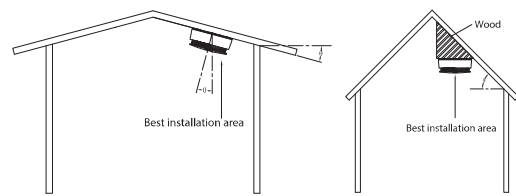
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Figure 6-2 Installation position (1)



- Installed on the sloping roof.  
When the slope is less than 45°, the appropriate distance is 20 inches (500 mm). When the slope is more than 45°, a wood should be installed.

Figure 6-3 Installation position (2)

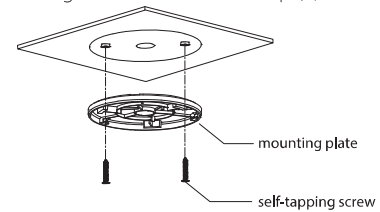


### 6.3 Installation Steps

Follow below steps to install the device properly.

- Step 1** Choose suitable place to install your smoke alarm.  
**Step 2** Drill holes (Ø6 mm [0.24"]) on the wall, and then align the screw holes on the wall with the expansion bolts.  
**Step 3** Fix the mounting plate with self-tapping screws.

Figure 6-4 Installation step (1)



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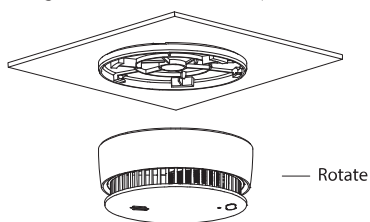
### EN Step 4 Install the Device.

- Remove the battery insulating film from the battery compartment.
- Rotate the device according to the corresponding position and direction as shown in the figure.



Please ensure it is firm.

Figure 6-5 Installation step (2)



## 7 Maintenance

To keep your device in good working condition, please follow these requirements.

- Simulate fire alarm test: Test the device once a week. Under normal working conditions, press the **Test/Silence** button to ensure that the Device can work normally. If there is a malfunction, please repair it in time. After cleaning, please install the Device and test again.
- Clean the shell: Clean the device at least once per year (recommended).  
Keep the Device free of dust or inserts by gently vacuuming the shell with a soft brush attachment when required. Avoid cleaning solutions on the Device to prevent the possibility of contaminating the sensor.

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- Do not paint the device. Paint will seal the bents and interfere with the sensor's ability to work normally.
- When the battery voltage is lower than a certain threshold, LED indicator flashes and the buzzer beeps every minute until the battery is depleted. Please replace the device immediately or contact technical support for advice.



When the detector stops working properly, please contact your local dealer or retailer for help.

## 8 Frequently Asked Questions

Problem	Solutions
Your smoke alarm does not sound during testing	<ul style="list-style-type: none"> <li>If testing immediately after first activating the alarm, you should allow a few seconds for the alarm to settle before testing.</li> <li>Make sure you push the test button firmly.</li> </ul>
Your smoke alarm chirps intermittently	<ul style="list-style-type: none"> <li>Check the location of your smoke alarm (see "Installation Position").</li> <li>Clean the smoke alarm (see "Test and Maintenance").</li> </ul>
The LED indicator flashes red and the alarm sounds one beep every 60 seconds	<ul style="list-style-type: none"> <li>The device is under low battery condition, please replace the device immediately.</li> <li>Please contact technical support for advice.</li> </ul>

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## 9 Disposal



Waste electrical products should not be disposed of your other household waste. Please dispose in an environmentally friendly manner, and strictly follow the local regulations regarding the disposal or recycling of the electrical device.



### WARNING

Do not burn or dispose of in fire.

## 10 Warranty and Contact

If you need after-sales service, please contact your local dealer or retailer.

Western EU Importer: Dahua Europe B.V.

Address: Louis Braillelaan 80, 2719 EK Zoetermeer The Netherlands

Email address for service purposes: support.benelux@dahuatech.com

CEE & Nordic Importer: Dahua Technology Poland Sp. z o.o.

Address: ul. Salsy 2, 02-823 Warszawa

Email address for service purposes: dh.cen@dahuatech.com

UK Importer: Dahua Technology UK Ltd.

Address: 3rd Floor, Quantum House, 60 Norden Road, Maidenhead, SL6 4AY

Email address for service purposes: support.uk@dahuatech.com

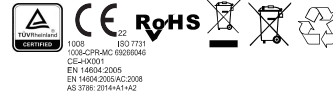
Germany Importer: Dahua Technology GmbH

Address: Niederkasseler Lohweg 185, 40547 Düsseldorf

Email address for service purpose: support.de@dahuatech.com

## 11 Documents

The full text of the EU declarations of conformity and EU declarations of performance is available at the following internet address:  
<https://www.wisualarm.com/en/ServiceSupport/DownloadCenter>



For more information, please scan the QR code below or visit  
<https://www.wisualarm.com/en/Products/ALL>.

