

Important Safeguard and Warning

The following description is the correct application method of the device. Please read the manual carefully before use, in order to prevent danger and property loss. Strictly conform to the manual during application and keep it properly after reading.

Caution

- Please don't place and install the device in an area exposed to direct sunlight or near heat generating device.
- Please don't install the device in a humid, dusty or fuliginous area.
- Please install this product according to the position in the user's manual.
- Please keep its horizontal installation, or install it at stable places, and prevent this product from falling.
- Please don't drip or splash liquids onto the device; don't put on the device anything filled with liquids, in order to prevent liquids from flowing into the device.
- Use the device only within rated input and output range.
- Please don't dismantle the device arbitrarily.
- Please transport, use and store the device within allowed humidity and temperature range.

Warning

- To replace batteries, only the same type of batteries can be used, or it may lead to fire, explosion or burning!

Wireless Smoke Detector

User's Manual

V1.0.0

1.2.51.32.12775-001

System Operating Notice

Operating Notice about Wireless Smoke Detector

Although this product boasts stable and reliable performance, it may break down due to the following reasons. Please read through the notice earnestly:

- Fire zone isn't protected, or smoke detector in fire zone breaks down.
- The alarm is installed improperly or detection area is too large, so it fails to detect smoke timely.
- Low-voltage alarm information of the product isn't dealt with by the user timely, so the detector fails to respond timely.
- It breaks down in case of lack in regular maintenance and inspection of alarm system.
- The alarm fails to detect smoke because smoke sensing component is covered by foreign matters.

Notice to Installation Personnel

- It is suggested that installation or maintenance personnel should inspect and maintain the system regularly, at least once every month, in order to ensure that the system works stably for a long time.
- Installation or maintenance personnel shall train users, so users get to know the system and operate the system proficiently.

Notice about System Test

- After installation, press test key on the product to carry out test.

1 Product Overview

1.1 Product Profile

Wireless smoke detector (hereinafter referred to as detector) adopts imported microprocessor and advanced electronic technology, and timely sends out audio and visual alarm signals if it detects a lot of smoke when fire occurs. With high sensitivity, stability, reliability and convenient use, it applies to families, hotels and apartments. In particular, wireless smoke detector owns in-built decibel buzzer. In case that smoke concentration reaches set value, the detector sends out high decibel audio and optical alarm signals immediately, so as to remind you of taking effective measures at once. The detector owns mute function.

1.2 Product Appearance

Appearance of wireless smoke detector is shown in Figure 1-1.

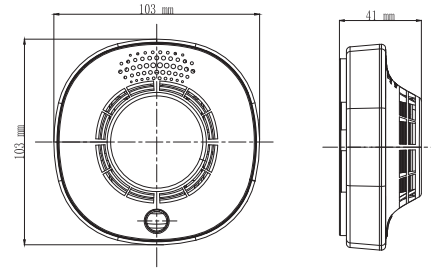


Figure 1-1

1.3 Technical Index

Technical parameters of wireless smoke detector are shown in Table 1-1.

Working principle	Photoelectric type
Alarm sound volume	≥80dB/3m
Alarm type	Audio and optical alarm
Surveillance status	The indicator light flashes once every 90s.
Alarm status	The indicator light flashes continuously.
Low-voltage status	The indicator light flashes once every 90s, and the buzzer gives alarm once every 90s.
Working voltage	Lithium battery, DC 3.6V
Working current	Surveillance status ≤15μA; Alarm status ≤50mA
Working temperature	-10°C~+55°C
Working humidity	Relative humidity ≤95% (non-condensation)
Service life	About 3 years
Dimension	103mm × 103mm × 41mm
Weight	110g (including battery)
Wireless frequency	433MHz
Wireless transmitted power	10dB
Installation	Ceiling type installation

Table 1-1

2 Installation Instruction

2.1 Packing List

The following device and materials shall be included in the packing box. When opening the box, please inspect them earnestly according to Table 2-1 and keep them properly.

Name	Quantity
Wireless smoke detector	1
User's manual	1
Screw kit	1
Installation sticker	1

Table 2-1

2.2 Installation Position

Its installation shall conform to the following principles or local fire alarm design codes:

- It shall be at least 300mm horizontally away from the wall corresponding to the ceiling and 100mm away from wall corner, as shown in Figure 2-1.

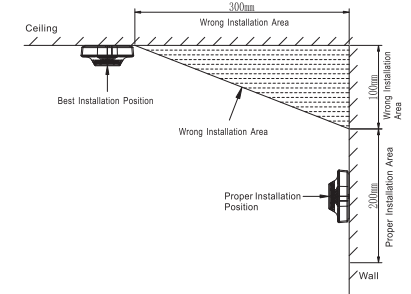


Figure 2-1

- Multiple detectors shall be installed if the length is over 10m.
- Don't install it at the following positions:
 - ◇ High-humidity areas such as kitchen, water heater and bathroom;
 - ◇ Within 400mm away from air outlet of air conditioner, fan and central heating; severe convection area of air speed;
 - ◇ Dusty, dirty place or place with insects;
 - ◇ High-temperature and easily polluted place, such as cooker;
 - ◇ Place covered by things;
 - ◇ Within 300mm away from lamps;
 - ◇ The top of pinnacled room, room corner and other dead-air spaces;
- When it is installed on tilted or pedestrian roof, the detector shall keep certain distance from the roof. The distance shall be 500mm when gradient is less than 30°, and shall be 500mm~1000mm when gradient is larger than 30°, as shown in Figure 2-2.

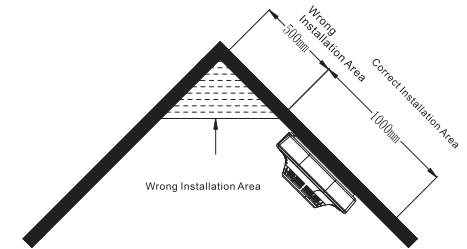


Figure 2-2

2.3 Product Installation

Step 1

Get the wireless smoke detector out of the packing box.

Step 2

Rotate and take out the mounting plate, as shown in Figure 2-3.

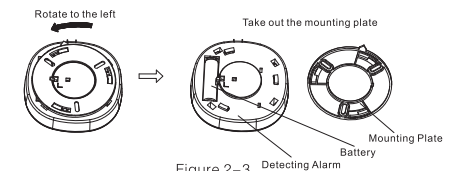


Figure 2-3

Step 3

Take out the battery from battery compartment of the detector, and peel off plastic packages of the battery, as shown in Figure 2-4.

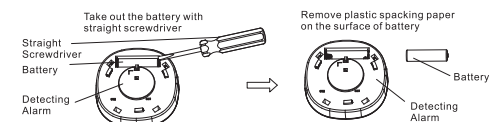


Figure 2-4

Preface

Overview

Wireless smoke detector is characterized by high sensitivity, stability, reliability, small power consumption, attractive appearance, durability and convenient use. Used with related products of this company, the detector gives an alarm signal when smoke is produced and reaches certain concentration, and thus effectively reduces fire casualty and property loss.

Applicable models: DHI-FAD122A-W and FAD122A-W.

Symbol Definition

The following symbols may appear in the document. Please refer to the table below for the respective definition.

Symbol	Note
	It indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	It indicates a moderate or low level of potential danger which, if not avoided, could result in minor or moderate injury.
	It indicates a potential risk that, if ignored, could result in damage to device, loss of data, degraded performance, or unpredictable results.
	It means electrostatic-sensitive device.
	It means high-voltage danger.
	It means intensive laser radiation.
	It means that it can help you to solve some problems or save your time.
	It means the additional information, which is to emphasize or supplement.

Step 4

Install the battery into the product correctly according to “+” mark in battery compartment. Don't install it reversely, as shown in Figure 2-5 and Figure 2-6.

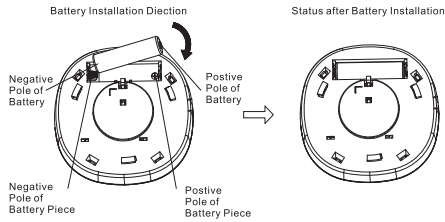


Figure 2-5

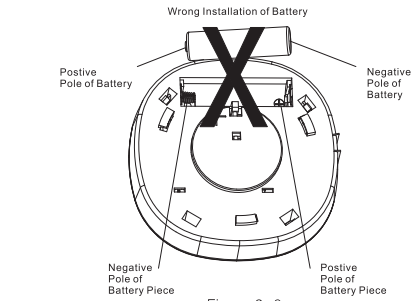


Figure 2-6

Step 5

Press the key in the center of the obverse side of detector, as shown in Figure 2-7. It means that the detector works normally if alarm sound is heard and LED alarm lamp turns on.

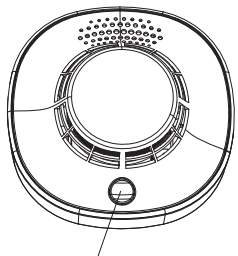


Figure 2-7

Step 6

Choose a proper installation position for wireless smoke detector, and affix installation stickers in the attachment, as shown in Figure 2-8.

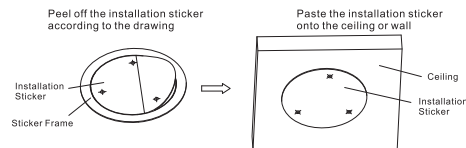


Figure 2-8

Step 7

At the center of three circular holes of installation sticker, use a percussion drill to drill holes with 5mm diameter, as shown in Figure 2-9.

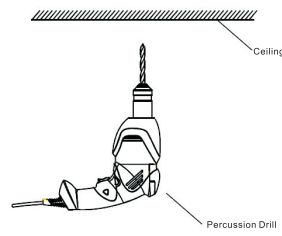


Figure 2-9

Step 8

Get three “plastic expansion screws” out of the screw kit, and put them into circular holes respectively, as shown in Figure 2-10. Hammer them into the holes, so their terminal faces are flush with ceiling or wall.

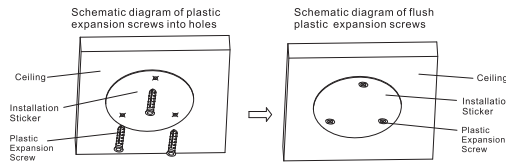


Figure 2-10

Step 9

Get three “tapping screws” out of the screw kit, and use them to fix the mounting plate onto the ceiling or wall, as shown in Figure 2-11. Tighten “tapping screws” with a screwdriver.

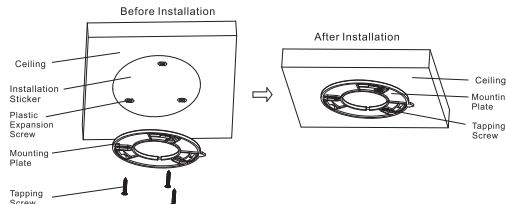


Figure 2-11

Step 10

Rotate the wireless smoke detector into the mounting plate.
 ◇ Put the detector onto the mounting plate; make sure that the center of detector and the center of mounting plate is on the same axis, as shown in Figure 2-12.

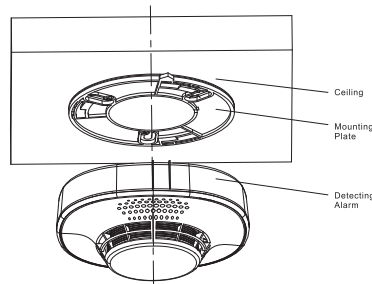


Figure 2-12

◇ Rib in the right of detector base shall align with pointed mark position on mounting plate, as shown in Figure 2-13.

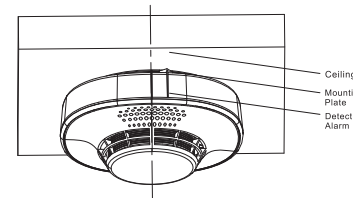


Figure 2-13

◇ Push the detector onto the ceiling with hands and rotate it to the right, so pointed mark position on mounting plate aligns with rib in the left of detector base, as shown in Figure 2-14.

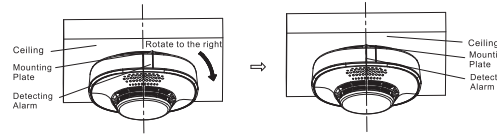


Figure 2-14

Step 11

After installation is completed, press the test key on the obverse side and test again. Test method is the same as Step 5.

3 Product Test

3.1 Device Pairing and Clearing

3.1.1 Device Pairing

Pair with the gateway and enable wireless code function of the gateway. For specific methods, please refer to quick start guide of the gateway. Press the test key shortly. The indicator light turns on and then flashes quickly, representing that it enters pairing mode and starts pairing.

- If the indicator flashes quickly and then turns off, it means that the pairing is successful;
- If the indicator flashes quickly, then flashes slowly for three times and then turns off, it means that the pairing has failed and pairing shall be implemented again.
- To pair again, press the test key again (or pull out the battery and power on again after 2 minutes). The indicator light flashes quickly and pairing can be started again.

3.1.2 Pairing Clearing

In case that the detector has been paired with other gateways, previous pairing info shall be cleared before pairing. Press the test key of detector for 10 seconds, loosen the key and the indicator light turns on and then flashes quickly. It means that configuration info has been cleared successfully.

3.2 Product Test

During test of wireless smoke detector, press the test button, alarm sound will be heard; buzzer and battery work normally. If there is no alarm sound, battery or other parts may break down. Please refer to “Troubleshooting” for solutions.

Note

- Don't test the alarm with open fire, which may damage the detector or lead to fire disaster!
- It is recommended that standard smoke barrel should be used to test!

3.3 Status Instruction

- Normal working status
In normal working status, indicator light flashes once every 90 seconds.
- Alarm status
When wireless smoke detector detects smoke and enters alarm status, indicator light flashes continuously and sends out continuous alarm sound.
- Low battery status
When indicator light flashes once every 90 seconds and detector sends out transient alarm sound, it means that a new detector is needed.

3.4 Maintenance and Cleaning

- It is suggested that detector should be tested once every month, and cleaned regularly to remove dust.
- A dust-absorption soft brush shall be used to clean the cover and every edge of detector.
- Please use the manufacturer's special battery, in order to guarantee quality.

4 Trouble and Repair

4.1 Troubleshooting

Common troubles are shown in Table 4-1.

Trouble	Solution
The test key doesn't respond	Take down detector, and inspect whether battery is installed correctly.
Transient alarm sound is sent every 90 seconds	This is a low-voltage prompt, so battery shall be replaced.

Table 4-1

4.2 Repair

In case that detector cannot work normally within quality guarantee period, please contact the seller; pay attention to packing protection and filling when returning the product. In case that detector is beyond quality guarantee period, please contact the manufacturer.

Note

- Don't attempt to repair the detector by yourself, which will affect the quality guarantee!
- Don't attempt to remove the cover plate and clean the interior, which will affect the quality guarantee!



ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD.

Address: No. 1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China
 Postcode: 310053
 Tel: +86-571-8768883
 Fax: +86-571-87688815
 Email: overseas@dahuatech.com
 Website: www.dahuasecurity.com