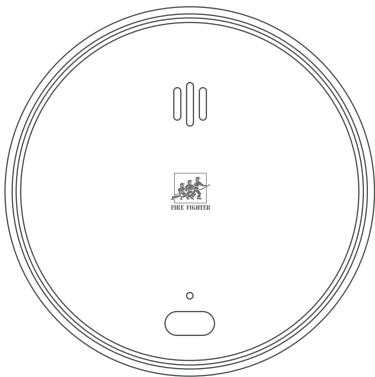


INTERCONNECTED

FF Smoke Detector PLUS

USER'S MANUAL



www.firefighter.com.my

1. IMPORTANT SAFEGUARDS AND WARNINGS

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 detector is only designed for indicating the presence of smoke, but it cannot detect gas, heat or flames.

Please refer to 3. Technical information for more details.

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 Fire Fighter Industry via our website at www.firefighter.com.my if there are any problems.
- 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.

2. INTRODUCTION

2.1 Product Information

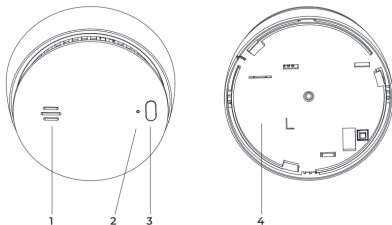
The Wireless Interconnected Smoke Detector (hereinafter referred to as the device) is a monitoring system designed to detect smoke concentration. Equipped with an advanced split-spectrum photoelectric chamber and a high-volume buzzer, it is highly sensitive and responds quickly with stable performance, reducing the likelihood of false alarms.

When the smoke concentration reaches the alarm value, the device will immediately emit visual and audible signals, alerting users to take immediate action.

The device has a built-in RF module, allowing up to 24 smoke detectors to be wirelessly connected and forming an interlinked network. If one device triggers an alarm, the signal will be transmitted to all connected devices, and they will simultaneously sound the alarm.

This product is intended for use in households or similar residential settings, such as family homes or apartments.

2.2 Product Profile



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

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"> • Monitoring current: $\leq 15\mu\text{A}$ (avg.) • Alarm current: $\leq 25\text{mA}$ (avg.)
Operating Temperature	-10°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
Radio Signal Range	Up to 1000 m (3280.84 ft) in open air
Detecting Area	When the height of the space is less than 8m (3.28 ft), the protection area of a device is 20 m^2 – 40 m^2
Dimensions	$\varphi 98\text{mm} \times \text{H}43.1\text{mm}$ ($\varphi 3.85" \times \text{H}1.70"$)
Weight (with battery)	138 g (0.30 lb)
Certification	EN 14604:2005+AC: 2008
Model Name	FF Smoke Detector Plus (DHI-SY-SA30A-R8-A)

4. INTERCONNECTION

PREREQUISITE

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

WARNING

Make sure that only 2 smoke detectors 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 detectors enter the same interlinked network, make sure only one smoke detector 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 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 detectors 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 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.

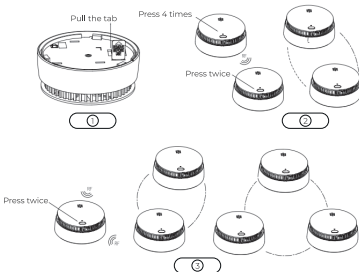
Step 5 If you want to connect more devices, please repeat Step 4.



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

Step 6 Refer to "Chapter 6 Operation", test all interconnected smoke detectors before installation to ensure they are interconnected well.

Figure 41 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 detector, and the device emits 1 short quick beep and red LED indicator starts to flash continuously.

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 detectors 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 interconnected smoke detector 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 detector

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.

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 detectors

Test

- Press and hold the **Test/Silence** button on any interconnected smoke detector until other interconnected smoke detectors 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.



Press and hold the **Test/Silence** button on disconnected device, there is no visual and audible alarm.

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.

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

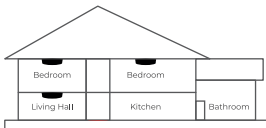
Name	Quantity
Smoke Detector	1
Self-tapping Screw	2
Expansion Bolt	2
Double Sided Tape	1
Mounting Plate	1
User's Manual	1
Instruction Sheet	1

6.2 Installation Position

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.

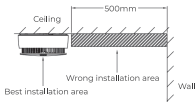
Figure 6 1 Overall layout



- 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.

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

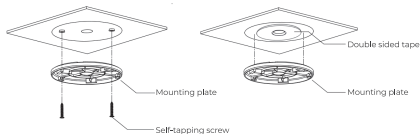
Follow below steps to install the device properly.

Step 1 Choose suitable place to install your smoke detector.

Step 2 Drill holes ($\Phi 6$ 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 or double sided tape.

Figure 6 4 Installation step (1)



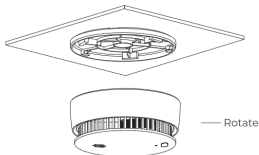
Step 4 Install the Device.

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.

- **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 Fire Fighter Industry via our website at www.firefighter.com.my for help.

8. FREQUENTLY ASKED QUESTIONS

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

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

9. DISCARD



Waste electrical products should not be disposed of with 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 throw into fire.

10. WARRANTY AND CONTACT

For after-sales service please contact us at

Website:

<https://www.firefighter.com.my/pages/contact-us-now>

E-mail: hello@firefighter.com.my



11. DOCUMENTS

For more information, please scan the QR code or visit www.firefighter.com.my