

# User Manual

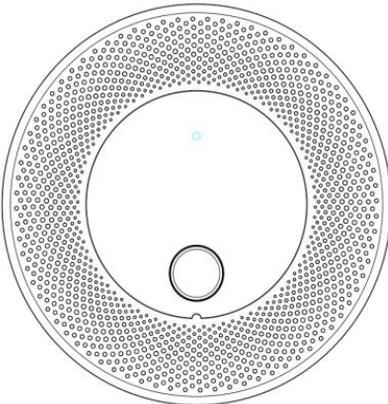
## Combination Smoke and Carbon Monoxide Alarm (Type B)

V1.0

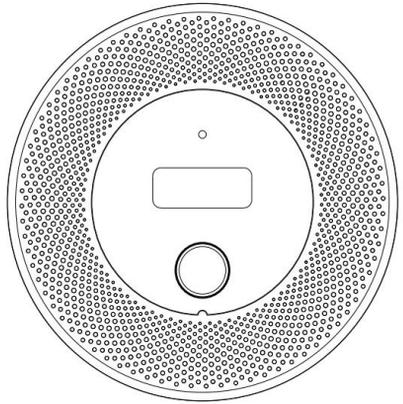
Thank you for purchasing our Combination Smoke and Carbon Monoxide Alarm. It is designed to detect both smoke and carbon monoxide (CO). Please read this manual carefully to ensure proper use and store it in a safe place for future reference.

This unit adopts photoelectric technology to detect smoke which is generally more sensitive than ionization technology. It is effective at detecting large particles, which tend to be produced in greater amounts by smoldering fires. These types of fires may smolder for hours before bursting into flame.

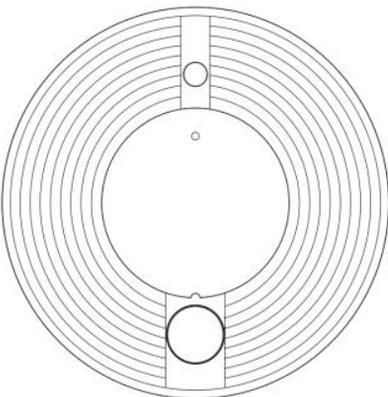
Carbon monoxide (CO) is odorless, tasteless and invisible-it's a silent killer. Using electrochemical sensing technology, this unit can detect increased levels of carbon monoxide early, protecting your family from the dangers of carbon monoxide.



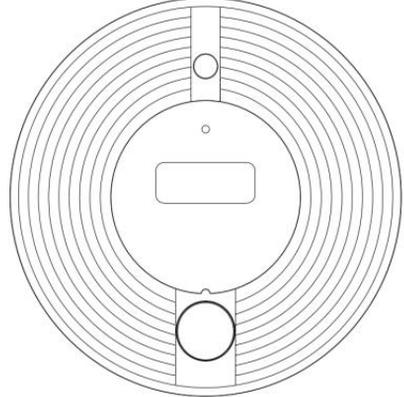
VCS61 / VCS61F / VCS61W



VCS62 / VCS62F / VCS62W



VCS51 / VCS51F / VCS51W



VCS52 / VCS52F / VCS52W

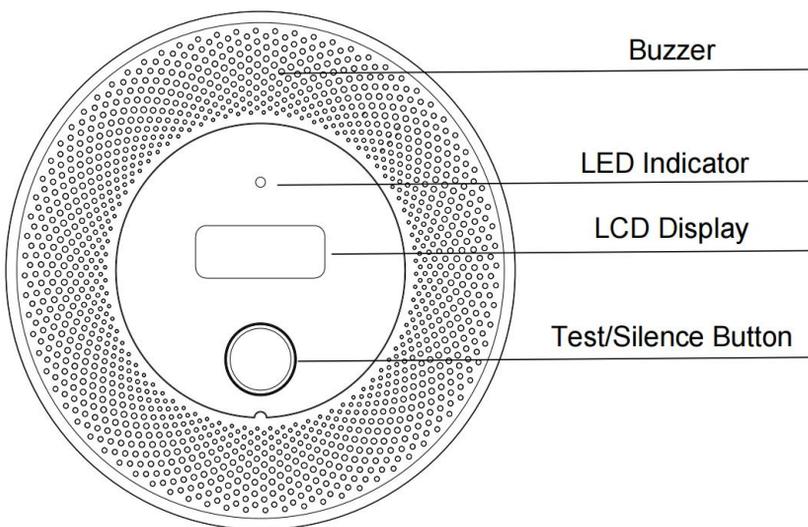
## Model Chart

Model	LCD Display	Wireless (RF 433MHz)	APP (WiFi 2.4GHz)	Voice Alerts	Battery
VCS51				NA	2*AA 1.5V Replaceable Alkaline Batteries  <b>or</b> 10-year Sealed Lithium Battery/DC 3.0V
VCS51F		✓			
VCS51W			✓		
VCS52	✓				
VCS52F	✓	✓			
VCS52W	✓		✓		
VCS61				<b>Note:</b> Purchasers need to confirm with the manufacturer whether they need the Voice Alerts function before placing a bulk order.	<b>Note:</b> Purchasers need to confirm with the manufacturer the type of battery required for the device's configuration before placing a bulk order.
VCS61F		✓			
VCS61W			✓		
VCS62	✓				
VCS62F	✓	✓			
VCS62W	✓		✓		

## Packing List

- 1 × Alarm Unit
- 1 × Mounting Bracket
- 2× Screws
- 2 × Anchor Plugs
- 1 × User Manual

## Product Profile



## Product Specifications

Product Life	10 years
Smoke Sensor Type	Photoelectric
CO Sensor Type	Electrochemical
CO Sensitivity and response time	50ppm: 60~90 minutes
	100ppm: 10~40 minutes
	300ppm: < 3 minutes
Accuracy of Digital Display	30-999 PPM
Coverage Area	215-430 sq. ft (20-40 m <sup>2</sup> )
Operating Temperature	0-40°C
Operating Relative Humidity	≤90% RH (non-condensing)
Alarm Volume	≥85 dB at 3M
Alarm Silence	9 minutes (Smoke); 6 minutes (CO)
Following specifications are only applicable to devices with wireless(RF 433MHz) functionality	
Wireless Frequency	433MHz
Transmission Range	Over 100m (in open air)
Max. Number of Interconnected Units	30 wireless units
Following specifications are only applicable to devices with APP(WiFi 2.4GHz) functionality	
Wi-Fi Wireless Frequency	2.4GHz
Wireless Protocol	IEEE 802.11b/g/n
Phone App	TuyaSmart / Smart Life APP (Android and iOS)

### **⚠ WARNING:**

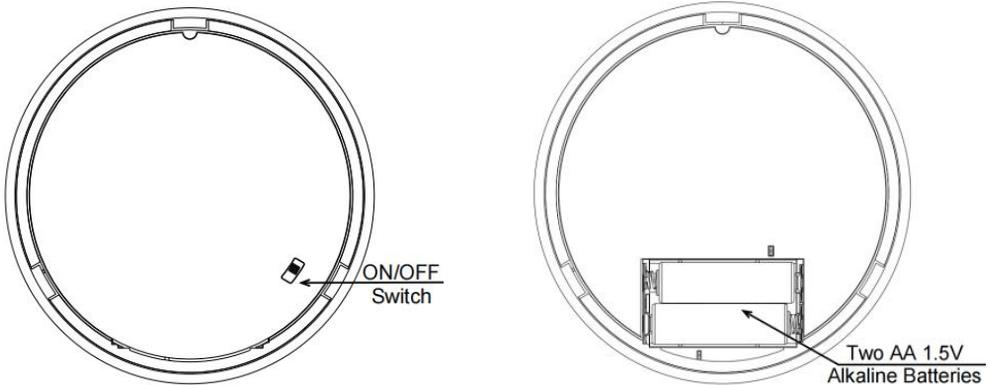
1. NEVER IGNORE ANY ALARM. FAILURE TO RESPOND CAN RESULT IN SERIOUS

INJURY OR DEATH.

2. THIS PRODUCT IS INTENDED FOR USE IN ORDINARY INDOOR RESIDENTIAL AREAS.
3. THE INSTALLATION OF THE APPARATUS SHOULD NOT BE USED AS A SUBSTITUTE FOR PROPER INSTALLATION, USE AND MAINTENANCE OF FUEL-BURNING APPLIANCES INCLUDING APPROPRIATE VENTILATION AND EXHAUST SYSTEMS.
4. THIS APPARATUS IS TO BE INSTALLED BY A COMPETENT PERSON.
5. THIS DEVICE IS DESIGNED TO PROTECT INDIVIDUALS FROM ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT MAY NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT, CONSULT A MEDICAL PRACTITIONER.
6. IT WILL MALFUNCTION IF THE APPARATUS IS TAMPERED WITH.

## To Activate the Device

1. For the device powered by a 10-year Sealed Lithium Battery: Turn the switch to the ON position, the device will be activated directly.
2. For the device powered by 2\*AA 1.5V replaceable Alkaline Batteries: When batteries are installed, the device will be activated directly.



## Alarm Testing

Test the unit to ensure proper operation by pressing the Test/Silence button. After a test has begun, the alarm will sound and the LED will flash red. This does not indicate that smoke/CO is present.

**Note:** The test function accurately tests the alarm's circuits without the need to test with smoke and CO. If your alarm fails to give an audible test signal, please refer immediately to the Trouble Shooting guide at the end of this manual.

## Silence Mode

**Smoke Silence Mode:** Press the test button during an alarm to have the unit enter silence mode for 9 minutes. If the smoke concentration has reached an alarm level, after the silence time has expired, this unit will continue to alarm until the smoke

concentration decreases to a safe, low level. Otherwise, the alarm will enter the normal mode after 9 minutes.

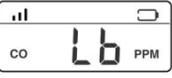
**Note:** Before using the alarm silence, identify the source of the smoke and be certain a safe condition exists.

**CO Silence Mode:** Press the test button during an alarm to have the unit enter silence mode for 6 minutes. If the CO density still exceeds the alarm threshold, the unit will re-enter the alarm state. Otherwise, the unit will exit the silence mode after 6 minutes and resume normal operation.

**Note:** If the CO concentration is above 180 ppm, the silence function cannot be enabled. And any remote silencing feature shall only be used in line of sight of the CO alarm.

## Indicator and Audible Alarm

Mode	LCD Display <i>**If the device has this function**</i>	LED Indicator	Voice Alerts <i>**If the device has this function**</i>	Audible Alarm	Remarks
Power On		Red/ Green/ Yellow LED flash in sequence	Ready! Please press the test button to test.	1 quick beep	None
Test Mode		2 sets of 3 red flashes followed by 2 sets of 4 red flashes	This is only a test. The alarm will sound loudly.	2 sets of 3 long beeps followed by 2 sets of 4 quick beeps	Short Press the Test/Silence button.
Standby Mode		Flashes green once every 1 minute	None	None	None
Smoke Alarm Mode		Flashes red 3 times every 4 seconds	Warning! Smoke detected. Evacuate.	3 long beeps repeating every 4 seconds	Dangerous smoke concentration is detected. Open nearby windows and doors, and immediately move to fresh air.
CO Alarm Mode	 CO concentration (30~999ppm) exists for a certain time period, the screen will be light up	Flashes red 4 times every 5 seconds	Warning! Carbon monoxide detected. Move to fresh air.	4 beeps repeating every 5 seconds	Dangerous CO concentration is detected, and has reached the alarm status. Open nearby windows and doors, and immediately move to fresh air.

Smoke Silence Mode		Flashes red 3 times every 4 seconds	Smoke alarm silenced.	None	Smoke silence mode: After 9 minutes, the unit will exit silence mode.
CO Silence Mode		Flashes red 4 times every 5 seconds	Carbon monoxide alarm silenced.	None	CO silence mode: After 6 minutes, the unit will exit silence mode.
			This alarm cannot be silenced. Carbon monoxide level too high.	4 beeps repeating every 5 seconds	Note: If the CO concentration is above 180 ppm, the silence function cannot be enabled.
Low Battery	  The LCD alternate displays between "Lb" and current CO level.	Flashes yellow once every 1 minute	Caution. Low Battery (Voice every 15 minutes)	1 beep every 1 minute	The battery is low.  1. If the device powered by a 10-year Sealed Lithium Battery--- Replace the device immediately.  2. If the device powered by two AA replaceable Alkaline Batteries--The battery must be replaced immediately.
Fault		Flashes yellow 2 times every 40 seconds	Caution. Smoke sensor malfunction	2 beeps every 40 seconds	Please clean your alarm and see if it is working normally. If the unit has malfunctioned, it must be replaced immediately.
			Caution. Carbon monoxide sensor malfunction		
End of Life		Flashes yellow 3 times every 1 minute	Caution. The device has reached the end of its lifetime. Replace the device now.	3 beeps every 1 minute	Replace the unit immediately.

## Set Up and Interconnect Wireless Alarms

**Note:** This part is only applicable to devices featuring wireless (RF 433MHz) functionality.

Wireless interlinked alarms are interlinked through radio-frequency signals. When one unit is triggered, all interconnected units will sound an alarm.

The wireless interlinked alarms in one multi-pack have already been interconnected, and the alarms in each multi-pack have their own independent interlinked network. If you have more than one multi-pack, you will need to connect them all to the same network. Choose one multi-pack as your base network and connect the other multi-packs (The alarms in this multi-pack must be disconnected one by one) to it.

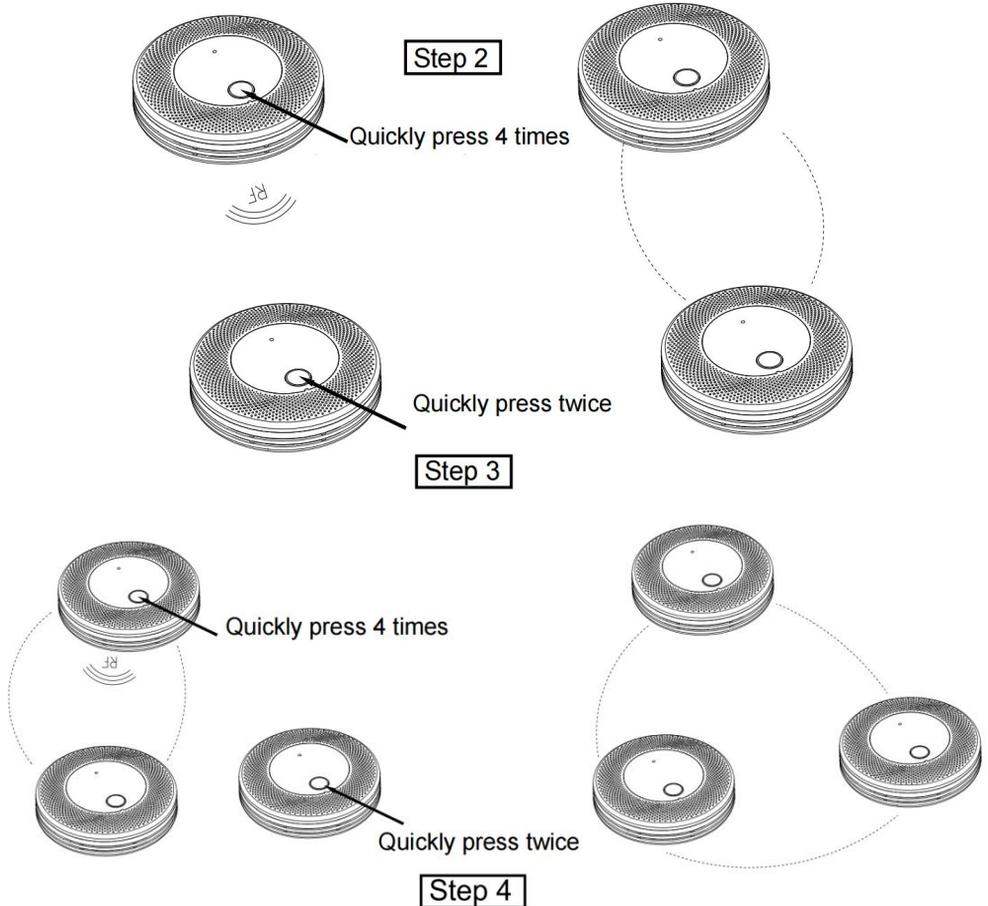
### How to create the interlinked network

- Step 1: Make sure you only work with 2 units at a time, and make sure that they are both turned on to ensure successful connection.
- Step 2: Press the test/silence button on one of these alarms 4 times, and the green LED will slowly flash continuously, indicating it has entered the transmitting mode (valid time: 60 seconds).
- Step 3: Press the test/silence button on the other alarms twice, and the green LED will rapidly flash continuously, indicating it has entered the receiving mode.

**If pairing is successful:** The green LED of these alarms will stop flashing.

**When it is failure:** The green light will continue to flash for 60 seconds, and then the red light will stay on for 2 seconds.

- Step 4: If you want to connect more units, first choose any one of the previously interconnected units and follow step 2. Then, perform step 3 with the new device.



### How to disabling the interconnect function

Quickly press the test/silence button 2 times; the green LED will rapidly flash for a few seconds. then ignore it and It will automatically disconnect. After disconnecting, it can be reconnected to the same network, or added to a new network.

### How to silence the alarms in network when alarm

- If the alarm is triggered, the device will go into Source/Master alarm sound pattern, and emits the alarm signal;
- When other alarm devices received the alarm signal, they will go into Slave alarm sound pattern, until the Source/Master alarm device stop alarm;
- You can silence all interconnected units by pressing the test/silence button on one of the alarms. If one unit is still alarming, **it is the initiating alarm (the unit that detected the smoke or CO gas)**. To silence all connected units, you must also press the test/silence button on the initiating alarm.

Status	LED indicator	Audible alarm
Source/Master smoke alarm sound pattern	Red LED flashes 3 times every 4 seconds.	3 long beeps every 4 seconds
Source/Master CO alarm sound pattern	Red LED flashes 4 times every 5 seconds	4 beeps every 5 seconds
Slave alarm sound pattern	Red LED and Green LED flash alternately.	Short quick beeps

## Set Up and Connect Alarms to Wi-Fi

**Note:** This part is only applicable to devices featuring APP(WiFi 2.4GHz) functionality.



This unit can notify your cell phone when there is an alarm. To do this, the unit must be connected to your local WiFi. To start, make sure to:

1. Download the TuyaSmart/Smart Life app and connect the alarm to your Wi-Fi via the app. Search for TuyaSmart/Smart Life in the App Store or Google Play, or simply scan the included QR code to install the TuyaSmart/Smart Life app. You will also need to register an account.
2. Know your Wi-Fi network name and password.
3. Make sure you are connecting alarms to a 2.4GHz Wi-Fi network. **(incompatible with 5GHz Wi-Fi network)**.
4. Make sure the Bluetooth on your phone is turned ON.



TuyaSmart App



Smart Life App

### How to Wi-Fi Connect?

1. Activate the detector.
2. Press the Test/Silence button **four times** until the green light is blinking.
3. Open the TuyaSmart/Smart Life app, tap the “+” icon in the top right corner of the “Home” page, or directly tap “Add Device” to add the device.
4. When found the the device, select it.
5. Then confirm and enter your Wi-Fi Information.
6. Once you have successfully connected your device to the app, you can continue to the “Settings” section to set up push notifications.
7. To test a push notification, we recommend pressing the test button to enter the TEST MODE. This will send a push notification to ensure your alarm notifications are working. This will send a “test” Battery Power Notification to your phone for test purposes.

### Not connecting?

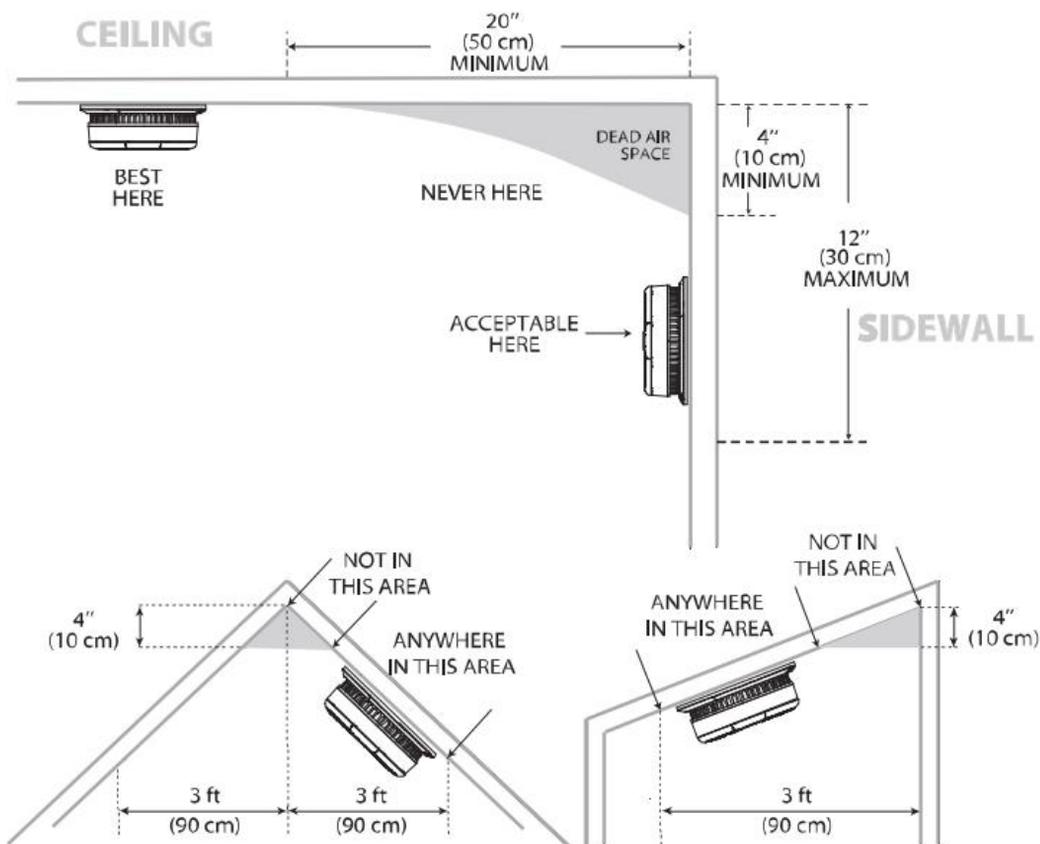
1. Unsuccessful connection may be because your router, mobile phone, and alarm are not as close to each other as possible, you have incorrectly entered your Wi-Fi password, or the Bluetooth on your phone is not enabled.
2. If your home Wi-Fi router is a 2.4 and 5 GHz dual-band that works with a single SSID name, please refer to your Wi-Fi router manual to create separate SSIDs for the 2.4 and 5 GHz channels. Must use the 2.4GHz SSID.

## Installation Instructions

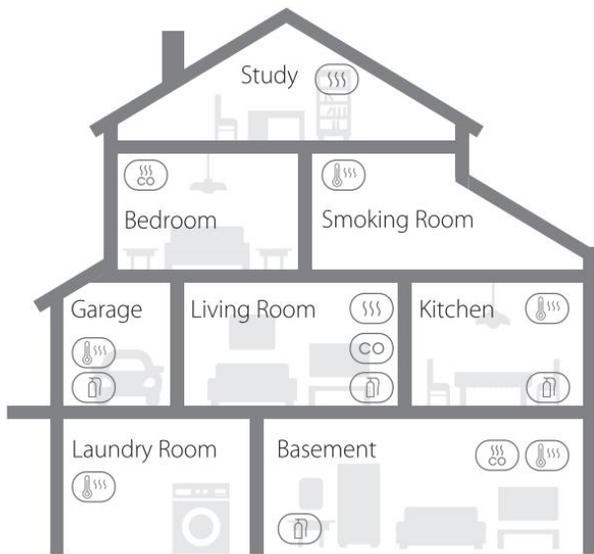
### Installation Positioning

1. Prioritize the installation of an alarm in the bedroom and walkways, and make sure you can hear the alarm from all sleeping areas. In a home with several bedrooms, install an alarm in every bedroom. If you install only one smoke alarm in your home, install the alarm near to all bedrooms where possible, and not in a basement or furnace room.
2. Install an alarm above the stairway and on every floor of the house.
3. Smoke, heat and anything burning will spread horizontally after rising to the ceiling, so install the alarm in the middle of the ceiling where possible. Ensure the alarm is within working distance of all corners of the room.
4. If an alarm cannot be installed in the middle of a ceiling, install at a distance of 50cm(20in) away from the corners of the room.
5. If an alarm is installed on a wall, it should be at a distance of 10-30cm(4-12in) below the ceiling.

6. If the length of a room or hall is beyond 900cm(30ft), several alarms should be installed in the same room.
7. When the wall or ceiling is angled, the alarm needs to be installed within 90cm (3ft) of the highest wall or ceiling point (measured horizontally) in the room.



### Recommended Placement



- |  |                        |  |                                |
|--|------------------------|--|--------------------------------|
|  | Smoke Alarms           |  | Smoke & Carbon Monoxide Alarms |
|  | Carbon Monoxide Alarms |  | Fire Extinguishers             |
|  | Heat Alarms            |  |                                |

## Locations to Avoid

This product is intended for use in ordinary indoor residential areas. It's not designed to measure CO levels in compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards.

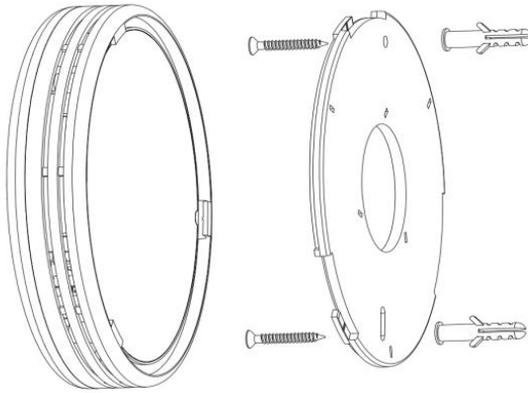
1. Do not install in garages, furnace rooms or bathrooms! Do not install within 1.5 m of cooking appliances.
2. Do not install within 90 cm of the following: The door to a kitchen, or a bathroom that contains a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air flow areas. Avoid excessively dusty, dirty or greasy areas. Dust, grease or household chemicals can contaminate the alarm's sensors, causing the alarm to not operate properly.
3. Place the alarm where drapes or other objects will not block the sensors. Smoke and CO must be able to reach the sensors to accurately detect these conditions. Do not install in peaks of vaulted ceilings, "A" frame ceilings or gabled roofs. Keep out of damp and humid areas.
4. Install at least 30 cm away from fluorescent lights, as electronic noise may cause nuisance alarms.
5. Do not place in direct sunlight and keep out of insect-infested areas. Extreme temperatures will affect the sensitivity of the smoke/CO alarm.
6. Do not install in areas where the temperature is colder than 0°C or hotter 40°C, such as garages and unfinished attics.
7. Do not install in areas where the relative humidity (RH) is above 90% or less than 10%. Place away from doors and windows that open to the outside.
8. Smoke alarms are not to be used with detector guards unless the combination (alarm and guard) has been evaluated and found suitable for that purpose.

## Installation Method

1. Activate the Device.
2. Put the bracket on the installation position and mark the screw holes on the ceiling

or the wall.

3. Drill two mounting holes in the marked place by an electric drill and insert two plastic anchor plugs by hammer.
4. Screw the mounting bracket to the ceiling or the wall.
5. Attach the alarm to the mounting bracket and turn clockwise to lock the alarm.
6. Test the unit by using the Test/Silence button. Ensure the unit sounds in an alarm pattern.



## Maintenance

To keep your smoke/CO alarm in good working order, follow these simple steps:

1. Verify the unit's alarm sound and indicators are working properly by testing the unit once a week.
2. Remove the unit from the ceiling/wall and clean the alarm cover and vents with a soft brush attachment once a month to remove dust and dirt.
3. Never use detergents or other solvents to clean the unit.
4. Avoid spraying air fresheners, hair spray or other aerosols near the alarm.
5. Do not paint the unit. Paint will seal the vents and interfere with the sensor's ability to detect smoke or CO. Never attempt to disassemble the unit or clean inside. Doing so will void your warranty.
6. When removed, place the smoke/CO alarm back in its proper location as soon as possible, to assure continuous protection from fire or carbon monoxide poisoning.
7. When household cleaning supplies or similar contaminants are used, the area should be ventilated.
8. The following substances can affect the sensor and may cause false actions: Methane, propane, isobutene, isopropanol, ethylene, benzene, toluene, ethyl acetate, hydrogen sulfide, sulfur dioxides, alcohol-based products, paints, thinner, solvents, adhesives, hair sprays, aftershave, perfumes, and some cleaning agents.

## Trouble Shooting

PROBLEM	SOLUTION
Your alarm does not sound during testing.	<ul style="list-style-type: none"><li>• Make sure the device has been activated.</li><li>• Make sure you push the test/silence button firmly.</li><li>• Check the installation positioning. The wireless signal might be blocked or out of range (Only for devices featuring wireless-RF 433MHz functionality).</li></ul>
False alarms triggered	<ul style="list-style-type: none"><li>• Check the location of your alarm (see "Installation</li></ul>

intermittently.	Positioning”). <ul style="list-style-type: none"> <li>Clean the alarm (see “Maintenance”).</li> </ul>
Red LED flashes and the alarm sounds one beep every 60 seconds.	The battery is low. If the device powered by a 10-year Sealed Lithium Battery--Replace the device immediately. If the device powered by 2*AA 1.5V replaceable Alkaline Batteries--The battery must be replaced immediately
Yellow LED flashes and two beeps every 40 seconds.	The alarm is malfunctioning. Please clean your alarm and see if it is working normally. If not, replace the device immediately.
Device failed to connect to the network.	Make sure the Bluetooth on your phone is turned on when you connect the device to the network. Read the operating instructions in this manual carefully (Only for devices featuring APP-WiFi 2.4GHz functionality).

## **If the Smoke Alarm Sounds**

1. Don't panic; stay calm. Get out of the house as quickly as possible. Don't stop to get dressed or collect anything.
2. Feel doors with the back of your hand before opening them. If a door is cool, open it slowly. Don't open a hot door, Keep doors and windows closed, unless you must escape through them.
3. Cover your nose and mouth with a cloth (preferably damp). Take short,shallow breaths.
4. Meet at your planned meeting place outside your home, and do a head count to make sure everybody got out safely.
5. Call the Fire Department as soon as possible from outside. Give your address, then your name.
6. Never go back inside a burning building for any reason.
7. Contact your Fire Department for ideas on making your home safer.

## **If the CO Alarm Sounds**

1. Keep calm and immediately move to fresh air, Open all doors and windows to increase the rate of ventilation.Stop using all fuel-burning appliances and ensure, if possible, that they are turned off: e.g.for gas appliances,isolate the emergency control valve.
2. If the alarm continues to be activated, then evacuate the premises, Leave the doors and windows open, and only re-enter the building when the alarm has stopped. in multi-occupancy and multi-storey premises, ensure that all the occupants are alerted to the risk.
3. Get medical help for anyone suffering the effects of carbon monoxide poisoning, and advise that carbon monoxide inhalation is suspected.
4. Telephone the appropriate appliance servicing and/or maintenance agency or, when necessary, the relevant fuel supplier on their emergency number or the national Gas Emergency service Provider,if appropriate, so that the source of carbon monoxide emissions can be identified and corrected, Unless the reason for the alarm is obviously spurious, do not use the fuel-burning appliances again, until they have been checked and cleared for use by a competent person according to national regulations.

# CO Concentration and Symptoms

The table below shows the effects of different levels of CO poisoning on the body.

Parts per Million (PPM)	Effects on Adults
100	Slight headache, nausea, fatigue (flu-like symptoms).
200	Dizziness and headache within 2-3 hours.
400	Nausea, frontal headache, drowsiness, confusion and rapid heart rate. Risk to life after over 3 hours of exposure.
800	Severe headaches, convulsions, vital organ failures. Death possible within 2-3 hours.

## Limitations of CO Alarms

1.CO alarms may not wake up all individuals. If children or others do not readily awaken to the sound of the CO alarm, or if there are infants or family members with mobility limitations, make sure that someone assists them in the event of an emergency.

2.This CO alarm will not sense carbon monoxide that does not reach the sensor. This CO alarm will only detect CO that reaches the sensor.CO may be present in other areas. Doors or other obstructions may affect the rate at which CO reaches the CO alarm. For this reason, if bedroom doors are usually closed at night, it is recommended that you install a CO alarm in each bedroom and in the hallway between them.

3.CO alarms may not sense CO on another level of the house. For example, a CO alarm on the second level near the bedrooms, may not sense CO in the basement. For this reason, one CO alarm may not give an adequate warning. Complete coverage is recommended by placing CO alarms on each level of the house.

4. CO alarms may not be heard. The alarm buzzer noise level is over 85 dB at a distance of 3m. However, if the CO alarm is installed outside the bedroom, it may not awaken a sound sleeper or one who has recently used drugs or has been drinking alcohol. This is especially true if the door is closed or only partially open. Even persons who are awake may not hear the alarm horn if the sound is blocked by distance or closed doors. Noise from traffic, stereos, radios, televisions, air conditioners, or other appliances may even prevent alert persons from hearing the alarm horn. This CO alarm is not intended for people who are hearing impaired.

5.CO alarms are not a substitute for a smoke alarm. Although fire is a source of carbon monoxide, this CO alarm does not sense smoke or fire. This CO alarm senses CO that may be escaping unnoticed from malfunctioning furnaces, appliances, or other possible sources of incomplete combustion. The installation of a smoke alarm is required for an early warning of fire.

6.CO alarms are not a substitute for life insurance. Though these CO alarms warn against increasing CO levels, we do not warrant or imply in any way that they will protect lives from CO poisoning. Homeowners and renters must still insure their lives.

7.CO alarms have a limited life. Although the CO alarm and all of its parts have passed many stringent tests and are designed to be as reliable as possible, any of these parts could fail at any time. Therefore, you are strongly recommended to test your CO alarm weekly.

8.CO alarms are not foolproof. Like all other electronic devices, CO alarms have limitations. They can only detect CO that reaches their sensors. They may not give early warning of

rising CO levels if the CO is coming from a remote part of the house, or is at some distance from the CO alarm.

