

# X-SENSE

## **Smoke & Carbon Monoxide Alarm** **Non-replaceable Battery (10-Year)**

# User Manual

Model: SC01/SC06/SC07/XP0H-SN

This user manual contains important information about your combination smoke & carbon monoxide alarm's operation. To ensure proper use and trouble-free operation, please read this manual carefully and store it in a safe place for future reference.

## **Package Contents**

- 1 × Alarm Unit
- 1 × Mounting Bracket
- 3 × Screws
- 3 × Anchor Plugs
- 1 × User Manual
- 1 × Warranty Card
- 2 × Carbon Monoxide Safety Stickers

## **Introduction**

This X-Sense combination smoke and carbon monoxide alarm detects both smoke and carbon monoxide, meeting UL 217 Ed.9 (designed to reduce false alarms from cooking fumes) and UL2034 Ed.5 standards.

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 and may smolder for hours before bursting into flame. Sources of these fires may include cigarettes burning in couches or bedding.

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.

**Note: For maximum protection, use smoke & CO alarms on each level and in every bedroom of your home.**

**THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION'S STANDARD 72**

(NATIONAL FIRE PROTECTION ASSOCIATION, BATTERYMARCH PARK, QUINCY, MA02269.)

**NEVER IGNORE THE SOUND OF THE ALARM!**

Determining what type of alarm has sounded is easy with your X-SENSE Combination Smoke & Carbon Monoxide Alarm. The alarm sounder will inform you of the type of situation occurring.

**Technical Specifications**

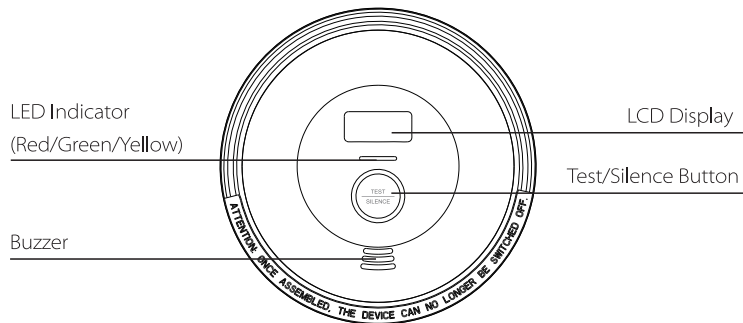
Power supply	3 V (==) CR123A lithium battery x 2 (non-replaceable)
Battery life	10 years
Sensor type	Smoke: Photoelectric CO: Electrochemical
Product life	10 years from the date of manufacture
Safety standards	Conforms with UL 217 9th & UL 2034 5th standards
Smoke Sensitivity	0.78 - 1.88% Obs/ft

CO sensitivity	70 ppm: 60-240 minutes
	150 ppm: 10-50 minutes
	400 ppm: 4-15 minutes
Standby current	<25 $\mu$ A (avg.)
Alarm current	<45 mA (avg.)
Best operating ambient temperature	40-100 °F (4.4-37.8 °C)
Operating relative humidity	$\leq$ 85% RH (non-condensing)
Alarm loudness	$\geq$ 85 dB at 9.84 ft (3 m) @ 3.2 $\pm$ 0.3 kHz pulsing alarm
Silence duration	$\leq$ 9 minutes

## Product Overview

### CAUTION

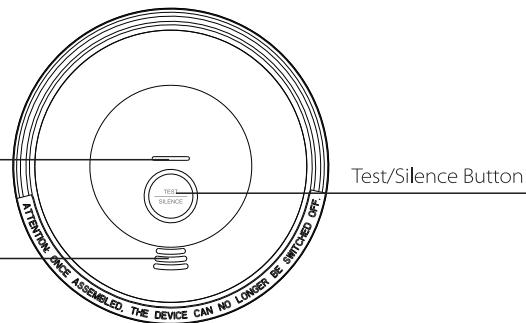
THIS SMOKE AND CO ALARM IS DESIGNED FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR MOISTURE. DO NOT KNOCK OR DROP THE ALARM. DO NOT OPEN OR TAMPER WITH THE ALARM AS THIS COULD CAUSE MALFUNCTION.



SC01/SC07/XP0H-SN

LED Indicator  
(Red/Green/Yellow)

Buzzer



SC06

### Test & Silence Button

The Test & Silence button is used to test the unit's electronics and to silence the unit during an alarm. When testing the alarm weekly, you should first wake up your alarm by pressing the test button; once the alarm has woken up, the LCD display will activate, then press the test button again until you hear a short beep, indicating that the alarm has entered the test mode. To save power, the alarm is designed to automatically turn off the LCD display if there has been no operation for 5 minutes.

**Note: After a test has begun, the alarm will sound and the red LED will flash. This does not indicate that smoke/CO is present.**

If you press the test button during an alarm state, the unit will enter the 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.

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

**Note: If the smoke concentration is too high, silence mode cannot be enabled. This unit will continue to alarm until the smoke concentration has decreased to a low level.**

## Alarm Sounder

The alarm will sound when there is smoke or CO present, when testing the alarm, when the battery is low, when there is a fault, when the smoke chamber is contaminated, and when the end of life is reached.

## LED Indicator

The LED indicator will flash in conjunction with the alarm sounder. Therefore, it will flash during the following states: when powering on, in standby mode, during smoke or CO alarm states, when exiting an alarm state, during test mode, when there is low battery, in silence mode, when there is a fault, when the smoke chamber is contaminated, and when the unit is at the end of its life.

## Low Battery

The LED indicator will flash yellow together with one beep every 60 seconds. The LCD displays the 'Lb' icon.

### **THE UNIT MUST BE DEACTIVATED (see "Deactivation of the Alarm" section) AND REPLACED AS SOON AS POSSIBLE.**

(If you press the test button when there is low battery, the low battery signal will temporarily cease for 10 hours; if you press the test button again, the unit will enter the test mode and then the standby mode.)

## Fault

If the core component of the product, the smoke sensor or CO sensor, fails, the product's LED will flash yellow twice every 60 seconds, accompanied by two beeps every 60 seconds, and the screen will display Err/E03/E04. The fault alarm cannot be silenced, and the product should be replaced immediately.

## Smoke Chamber Contamination

If the core part of the smoke sensor, the smoke chamber, is contaminated by the surrounding environment, causing abnormal operation, the product's LED will flash yellow 4 times every 60 seconds, accompanied by 4 beeps every 60 seconds, and the LCD screen will display E05. The smoke chamber contamination alarm cannot be silenced. Please keep the area around the product clean, remove the product from the ceiling, vacuum the outside of the device with a vacuum cleaner fitted with a soft brush attachment, and reinstall the product on the ceiling. If the alarm persists, replace the product immediately.

## End of Life

Once the maximum lifetime (10 years) is reached, the LED flashes yellow 3 times every 60 seconds, accompanied by 3 beeps every 60 seconds, and the LCD screen displays "End." The end-of-life beep can be silenced for 22 hours by pressing the test button.

The end-of-life silence feature can only be used for a total of 30 days. After 30 days, the end-of-life signal cannot be silenced.

## CO Alarm Levels

This carbon monoxide alarm complies with UL 2034 standard: when CO concentration is below 30 PPM, the LCD will not show the specific value; when CO concentration is between 30 and 70 PPM, the LCD will show the specific value, but no audible or visual indicators will be triggered; when CO concentration reaches 70 PPM or above, the device will emit an audible and visual indicators within the standard-required time.

### When CO concentration is below 30 PPM:

The LCD will show "CO — PPM".

**NOTE: A CO concentration below 30 PPM is generally considered a normal daily fluctuation.**

1. Ensure good ventilation.
2. Make sure to turn off all combustion appliances after use.
3. If the device continuously shows "CO — PPM" but individuals feel unwell, everyone should immediately move to fresh outdoor air and seek medical advice. Afterward, have a professional inspect the home's combustion appliances and ventilation system.
4. Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.

### When CO concentration is between 30 and 70 PPM:

The LCD will show the CO concentration value, but no audible or visual will be triggered.

**NOTE: CO concentration has exceeded normal daily levels, and requires active investigation and reduction.**

1. Immediately increase ventilation—open doors and windows, and turn on exhaust fans.
2. Check potential sources—turn off or temporarily discontinue use of stoves, gas water heaters, and any combustion equipment.
3. Monitor the concentration levels—if the concentration drops below 30 PPM after ventilation, normal activities can resume, but it is recommended to maintain the related combustion equipment.
4. If the concentration remains above 30 PPM for over 30 minutes or if individuals feel unwell, everyone should immediately move to fresh outdoor air and seek medical advice. Afterward, have a professional inspect the home's combustion appliances and ventilation system.

### When CO concentration exceeds 70 PPM:

The LCD will show the CO concentration value, and the device will emit an audible and visual indicators within the standard-required time.

**NOTE: Please refer to the section titled "If the CO Alarm Sounds".**

This device complies with UL 2034 standard and is programmed to sound an alarm at the following CO concentrations within the periods listed:

**70 ppm for 60–240 minutes,  
150 ppm for 10–50 minutes,  
and 400 ppm for 4–15 minutes.**

When CO is detected and the alarm sounds, the CO concentration will be displayed on the LCD and a blue backlight will be lit. The LED indicator will flash red and the alarm will issue 4 short beeps, repeating the cycle every 5.8 seconds.

### CO Concentration and Symptoms

The following symptoms are related to CARBON MONOXIDE POISONING and are to be discussed with ALL members of the household:

Levels of Exposure	Symptoms
<b>Mild Exposure</b>	Slight headache, nausea, vomiting, fatigue (often described as "flu-like" symptoms).
<b>Medium Exposure</b>	Severe throbbing headache, drowsiness, confusion, fast heart rate.
<b>Extreme Exposure</b>	Unconsciousness, convulsions, cardiorespiratory failure, death.

## WARNING

- THIS APPARATUS IS DESIGNED TO PROTECT INDIVIDUALS FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT WILL NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT CONSULT A MEDICAL PRACTITIONER.
- MANY CASES OF REPORTED CARBON MONOXIDE POISONING INDICATE THAT WHILE VICTIMS ARE AWARE THEY ARE NOT WELL, THEY BECOME SO DISORIENTED THEY ARE UNABLE TO SAVE THEMSELVES BY EITHER EXITING THE BUILDING OR CALLING FOR ASSISTANCE. YOUNG CHILDREN AND HOUSEHOLD PETS ARE TYPICALLY THE FIRST AFFECTED.

**Different working modes and states are shown in the below table:**

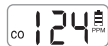
Mode	LED Indicator	Audible Alarm	Remarks
Powering on	Blinks 8 cycles (red/green/yellow) in sequence.	1 beep.	
Standby mode	Flashes green once every 60 seconds.	None.	
Alarm mode	Flashes red 3 times every 4 seconds.	3 long beeps every 4 seconds.	Smoke alarm.
	Flashes red 4 times every 5.8 seconds.	First 4 minutes: 4 quick beeps every 5.8 seconds. After 4 minutes: 4 quick beeps every 60 seconds.	CO alarm.
	Flashes green once every second for 5 seconds.	None.	Exiting an alarm: When the smoke or CO concentration drops below the alarm threshold, the alarm signal stops.
Test mode	2 sets of 3 red flashes followed by 2 sets of 4 red flashes.	2 sets of 3 long beeps followed by 2 sets of 4 quick beeps.	
Silence mode	Flashes red once every 5 seconds.	None.	After 9 minutes, the unit will exit silence mode.
	Flashes green 3 times.	None.	Exiting silence mode.


Low battery	Flashes yellow once every 60 seconds.	One beep every 60 seconds.	
Fault	Flashes yellow 2 times every 60 seconds.	2 beeps every 60 seconds.	Smoke malfunction mode.
			CO malfunction mode.
Smoke chamber contamination	Flashes yellow 4 times every 60 seconds.	4 beeps every 60 seconds.	The smoke chamber is contaminated.
End of life	Flashes yellow 3 times every 60 seconds.	3 beeps every 60 seconds.	







### LCD Display


While detecting CO, the LCD will display different indications to help you understand what to do, as shown below:

**NOTE: The SC06 does not have an LCD display, while the SC01/SC07/XP0H-SN do. Those models share the same LED indicator and buzzer functionality.**

LCD Display	LED Status	Alarm Sound	Unit Status	Solutions
	If a CO concentration of 30-999 ppm exists for a certain time period, the screen will be backlit blue, and the LED indicator will flash red 4 times every 5.8 seconds.	The alarm delivers beeps and the LED indicator will flash with the same frequency.	Dangerous CO concentration has been detected.	Refer to "If the Smoke/CO Alarm Sounds".

	If a CO concentration of 30-999 ppm exists for a very short time, the LED indicator will flash green once every 60 seconds.	No sound.	CO has been detected, but has not reached alarm status. Potential dangerous conditions exist.	Check if there are any sources of CO gas, such as from burning, cooking, etc. If such gas sources exist, please cut them off as soon as possible. Open the doors and windows to ventilate the room and immediately move to fresh air.
	The LED indicator flashes red 3 times for 2 cycles and then 4 times for 2 cycles, finally flashing once.	The alarm delivers beeps and the LED indicator will flash with the same frequency.	The unit is self-checking (the test button has been pressed).	None.
	The LED indicator flashes red, green and yellow in sequence.	One short beep.	The unit has been powered on.	None.

	The LED indicator flashes green once every 60 seconds.	None.	The unit is working normally with good battery life.	None.
	The LCD display alternates between "Lb" and current CO level. The LED indicator flashes yellow once every 60 seconds.	One quick beep every 60 seconds.	Low battery warning.	As the battery is not replaceable, you will need to replace the unit.
  	The LED indicator flashes yellow 2 times every 60 seconds.	Two quick beeps every 60 seconds.	Smoke malfunction. CO malfunction	The unit has malfunctioned and must be replaced immediately.
	The LED indicator flashes yellow 4 times every 60 seconds.	4 beeps every 60 seconds.	The smoke chamber is contaminated.	Refer to the Smoke Chamber Contamination section in the Product Overview for handling.

	The LED indicator flashes yellow 3 times every 60 seconds.	3 quick beeps every 60 seconds.	End of life.	Replace the device immediately.
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## Fire Safety Tips

Follow these safety rules to prevent hazardous situations:

1. Use smoking materials properly. Never smoke in bed.
2. Keep matches or lighters away from children.
3. Store flammable materials in proper containers.
4. Keep electrical appliances in good condition and don't overload electrical circuits.
5. Keep stoves, barbecue grills, fireplaces and chimneys grease-free and debris-free.
6. Never leave anything cooking on the stove unattended.
7. Keep portable heaters and open flames, like candles, away from flammable materials.
8. Don't let rubbish accumulate.
9. Keep alarms clean, and test them weekly.
10. Replace alarms immediately if they are not working properly. Smoke alarm that do not work cannot alert you to a fire.
11. Keep at least one working fire extinguisher on every floor, and an additional one in the kitchen.
12. Have fire escape ladders or other reliable means of escape from an upper floor in case stairs are blocked.

## Safety Information

DANGERS, WARNINGS, AND CAUTIONS ALERT YOU TO IMPORTANT INSTALLATION AND OPERATING INSTRUCTIONS, OR POTENTIAL HAZARDS. PLEASE PAY ATTENTION TO THE SITUATIONS.

## IMPORTANT

1. THIS DEVICE IS NOT DESIGNED FOR HEARING-IMPAIRED PEOPLE. USE OF ALCOHOL OR DRUGS MAY IMPAIR ONE'S ABILITY TO HEAR THE ALARM.
2. FIRES IN CHIMNEYS, WALLS, ROOFS, OR BEHIND CLOSED DOORS MAY NOT BE DETECTED.
3. THIS DEVICE IS DESIGNED TO DETECT CARBON MONOXIDE GAS FROM ANY COMBUSTION SOURCE.
4. An indication that current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

## CAUTION!

THIS SMOKE & CARBON MONOXIDE ALARM HAS TWO SEPARATE ALARMS WHICH WORK INDEPENDENTLY. THE CARBON MONOXIDE ALARM IS NOT DESIGNED TO DETECT FIRE OR ANY OTHER GAS. IT WILL ONLY INDICATE THE PRESENCE OF CARBON MONOXIDE GAS AT THE SENSOR. CARBON MONOXIDE GAS MAY BE PRESENT IN OTHER AREAS. THE SMOKE ALARM WILL ONLY INDICATE THE PRESENCE OF SMOKE THAT REACHES THE SENSOR. THE SMOKE ALARM IS NOT DESIGNED TO DETECT GAS, HEAT OR FLAMES.

## WARNING

1. NEVER IGNORE ANY ALARM. FAILURE TO RESPOND CAN RESULT IN SERIOUS INJURY OR DEATH.
2. THE SILENCE FEATURE IS ONLY FOR YOUR CONVENIENCE AND WILL NOT CORRECT A PROBLEM. ALWAYS CHECK YOUR HOME FOR A POTENTIAL PROBLEM AFTER ANY ALARM. FAILURE TO DO SO

CAN RESULT IN INJURY OR DEATH.

3. TEST THIS SMOKE/CO ALARM ONCE A WEEK. IF THE ALARM EVER FAILS TO TEST CORRECTLY, REPLACE IT IMMEDIATELY! IF THE ALARM CANNOT WORK PROPERLY, IT WILL NOT ALERT YOU TO A PROBLEM.
4. THE REPLACEMENT DATE THAT APPEARS ON THE DEVICE IS THE DATE BEYOND WHICH THE DEVICE MAY NO LONGER DETECT CARBON MONOXIDE ACCURATELY AND SHOULD BE IMMEDIATELY REPLACED.
5. IT IS NOT TESTED FOR USE IN RECREATIONAL VEHICLES, COMMERCIAL VEHICLES, AND UNCONDITIONED AREAS.
6. DO NOT TAMPER WITH THE APPARATUS, AS THERE IS A RISK OF ELECTRIC SHOCK OR MALFUNCTION.

#### **CAUTION!**

THIS ALARM WILL ONLY INDICATE THE PRESENCE OF CARBON MONOXIDE GAS AT THE SENSOR. CARBON MONOXIDE GAS MAY BE PRESENT IN OTHER AREAS.

### **Installation Instructions**

**THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION'S STANDARD 72(National Fire Protection Association,Batterymarch Park,Quincy,MA 02269).**

#### **The National Fire Protection Association recommends:**

"29.5.1 \*Required Detection."

\*29.5.1.1Where required by applicable laws, codes, or standards for a specific type of occupancy, approved single- and multiple-station smoke alarms shall be installed as follows:

(1)\*In all sleeping rooms and guest rooms

- (2)\*Outside of each separate dwelling unit sleeping area, within 21 ft (6.4 m) of any door to a sleeping room, the distance measured along a path of travel
- (3)On every level of a dwelling unit, including basements
- (4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics
- (5)\*In the living area(s) of a guest suite
- (6) In the living area(s) of a residential board and care occupancy (small facility)

#### STATEMENT:

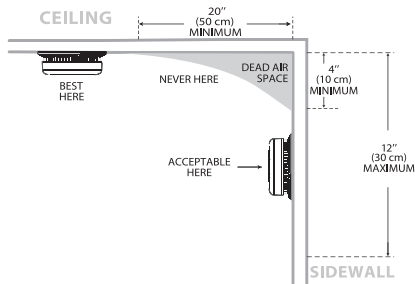
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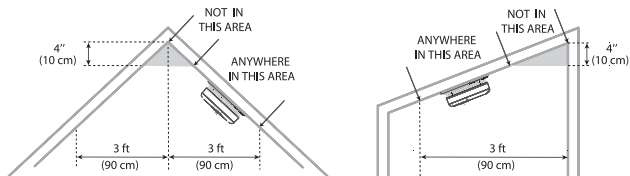
#### **Installation Locations**

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.

- If an alarm cannot be installed in the middle of a ceiling, install at a distance of 20 inches (50 cm) away from the corners of the room.
- If an alarm is installed on a wall, it should be at a distance of 4-12 inches (10-30 cm) below the ceiling.
- If the length of a room or hall is beyond 30 feet (900 cm), you will need to install several alarms in the same space.



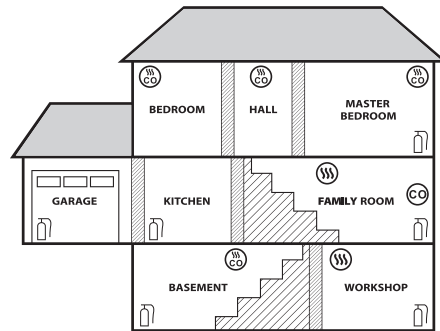
- When the wall or ceiling is angled, the alarm needs to be installed within 3 feet (90 cm) of the highest wall or ceiling point (measured horizontally) in the room.



## Recommended Placement

### ⚠ WARNING!

- THIS ALARM SHOULD BE INSTALLED BY A COMPETENT PERSON.
- INSTALLATION OF THE ALARM SHOULD NOT BE USED AS A SUBSTITUTE FOR PROPER INSTALLATION, USE AND MAINTENANCE OF FUEL BURNING APPLIANCES INCLUDING APPROPRIATE VENTILATION AND EXHAUST SYSTEMS.
- TO PREVENT INJURY, THIS DEVICE SHOULD BE SECURELY ATTACHED TO THE CEILING OR WALL IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS.
- BATTERIES SHOULD NOT BE EXPOSED TO EXCESSIVE HEAT SUCH AS DIRECT SUNLIGHT, FIRE, ETC.



 FIRE EXTINGUISHERS

 SMOKE ALARMS

 CARBON MONOXIDE ALARMS

 SMOKE & CO ALARMS

## How to Install This Alarm

### IMPORTANT!

THIS COMBINATION SMOKE/CO ALARM IS DESIGNED TO BE MOUNTED ON THE CEILING OR WALL.

### **WARNING**

FAILURE TO PROPERLY INSTALL AND ACTIVATE THIS ALARM WILL PREVENT PROPER OPERATION OF THE ALARM AND WILL PREVENT ITS RESPONSE TO FIRE HAZARDS OR CO.

### Locations to Avoid

**WARNING** - This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure CO levels in compliance with the Occupational Safety and Health Administration (OSHA) commercial or industrial standards.

1. Do not install in garages, kitchens, furnace rooms or bathrooms! Do not install within 5 ft (1.5 m) of cooking appliances.
2. Do not install within 3 ft (0.9 m) 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.

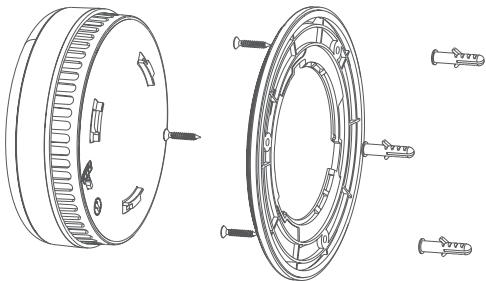
3. Place the alarm where drapes or other objects will not block the sensors. Smoke and CO must be able to reach the sensors to accurately detect these conditions. Do not install in peaks of vaulted ceilings, "A" frame ceilings or gabled roofs. Keep out of damp and humid areas.
4. Install at least one (1) foot 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 40°F (4.4°C) or hotter than 100°F (37.8°C), such as garages and unfinished attics.
7. Do not install in areas where the relative humidity (RH) is above 85% or below 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.

### Mounting Steps

1. Drill three Ø 6.0 mm holes in the wall or ceiling, then insert three plastic anchor plugs into the holes with a hammer.

2. Attach the mounting bracket to the surface of the wall or ceiling with three screws and mount the alarm into the bracket by pushing them together and twisting the unit clockwise.
3. Test the unit by using the Test/Silence button. Ensure the unit sounds in an alarm pattern.

**Note: This model is equipped with a feature that automatically activates the alarm when the alarm is attached to the mounting bracket for the first time.**



## Deactivation of the Alarm

### ⚠ WARNING

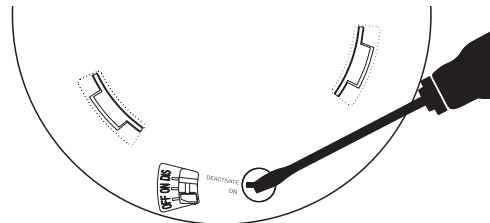
1. DO NOT DEACTIVATE THE ALARM UNIT UNTIL THE END-OF-LIFE SIGNAL HAS BEEN HEARD.
2. ONCE THE MAXIMUM LIFETIME (10 YEARS) IS REACHED, THE ALARM DELIVERS 3 BEEPS EVERY 60 SECONDS.

3. ONCE THE ALARM IS DEACTIVATED, IT WILL NO LONGER FUNCTION. IT CANNOT BE REACTIVATED AND MUST BE REPLACED.

## To Deactivate the Alarm

Pressing the Test/Silence button can silence the end-of-life signal for up to 22 hours.

1. Peel back the shaded label obstructing the "DIS" setting, and break the thin plastic guard, as below.
2. Twist the plastic pin upwards to the "DIS" position or insert a screwdriver into the slot and turn the dial clockwise to the "DIS" position.
3. Dispose of the alarm.
4. Replace the alarm.



## Weekly Test

### ⚠ WARNING

1. NEVER USE AN OPEN FLAME OF ANY KIND TO TEST THIS UNIT. YOU MIGHT ACCIDENTALLY DAMAGE OR SET FIRE TO THE UNIT OR TO YOUR HOME.

2. NEVER USE A VEHICLE EXHAUST TO TEST THIS UNIT. EXHAUST FUMES MAY CAUSE PERMANENT DAMAGE AND VOID YOUR WARRANTY.
3. DO NOT STAND CLOSE TO THE ALARM WHEN THE ALARM IS SOUNDING. EXPOSURE AT CLOSE RANGE MAY BE HARMFUL TO YOUR HEARING. WHEN TESTING, STEP AWAY WHEN THE ALARM BEGINS TO SOUND.

Be sure to test your alarms when you turn them on for the first time use. In addition to the weekly test you should perform, it is also recommended to test the alarm after returning from a long trip or vacation.

<b>Action</b>	Push the Test/Silence button.
<b>Device Response</b>	The device beeps 2 sets of 3 long beeps followed by 2 sets of 4 quick beeps, and the LED will flash red.

## Maintenance

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

1. Verify the unit's alarm sound and indicator are working properly by testing the unit once a week.
2. As a minimum your alarm should be cleaned once every 3 months: Remove the unit from the ceiling and clean the alarm cover and vents with your vacuum cleaner fitted with the soft brush attachment 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 fire or CO.
6. Never attempt to disassemble the unit or clean inside. Doing so will void your warranty.
7. When removed, place the alarm back in its proper location as soon as possible, to assure continuous protection from fire or carbon monoxide.
8. When household cleaning supplies or similar contaminants are used, the area should be ventilated.

1. **WARNING:** KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.
2. In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.
3. **WARNING:** This smoke alarm is powered by a non-replaceable 10-year battery and once deactivated the smoke alarm is incapable of being reactivated and must be replaced.

## Troubleshooting

PROBLEM	CAUSE	SOLUTION
The device is not triggered when it is tested with smoke.	The device is not turned on.	Check and make sure that the device is correctly installed on the mounting bracket.
	The smoke is not reaching the sensor properly.	Smoke must enter the smoke sensor through the side openings to activate the device. Please be aware that the top of the device features the buzzer and decorative metal mesh.
	The time duration is insufficient for the device to detect smoke.	Continuous smoke exposure is necessary for the device to be triggered. When smoke reaches the smoke sensor, the device will be activated within about 20 seconds.
	Insufficient smoke concentration.	This product utilizes a photoelectric sensor, requiring sufficient smoke concentration for detection. Higher smoke levels lead to faster alarm response. Avoid using an open flame for testing.
The alarm does not sound during a test.	The device is not turned on.	Check and make sure that the device is correctly installed on the mounting bracket.
	You don't push the test/silence button firmly.	Make sure you push the test/silence button firmly.

False alarms are triggered intermittently or when residents are cooking, taking showers, etc.	The device is improperly installed.	Check the location of your alarm (see " <b>Locations to Avoid</b> ").
	The device is clogged by dirt and dust.	Clean the device periodically (see " <b>Maintenance</b> ").
LED flashes yellow once every 60 seconds with 1 beep.	Low battery warning.	The battery is low. Push Test/Silence button once to silence for 10 hours. <b>Replace the device immediately.</b>
LED flashes yellow 2 times every 60 seconds with 2 beeps.	Malfunction.	The alarm is malfunctioning. <b>Replace the device immediately.</b>
LED flashes yellow 4 times every 60 seconds with 4 beeps.	The smoke chamber is contaminated.	Please keep the area around the product clean, remove the product from the ceiling, vacuum the outside of the device with a vacuum cleaner fitted with a soft brush attachment, and reinstall the product on the ceiling. If the alarm persists, replace the product immediately.
LED flashes yellow 3 times every 60 seconds with 3 beeps.	End-of-life warning.	The maximum lifetime (10 years) is reached. Push the Test/Silence button once to silence for 22 hours. Replace the alarm immediately.

## Industry Safety Standards

### NFPA (National Fire Protection Association)

For your information, the National Fire Alarm Code, NFPA 72, reads as follows:

11.5.1 Required Detection.

Where required by applicable laws, codes, or standards for a specified type of occupancy, approved single and multiple-station smoke alarms shall be installed as follows:

- (1) In all sleeping rooms and guest rooms
- (2) Outside of each separate dwelling area, within 21 ft (6.4 m) of any door to a sleeping room, the distance measured along a path of travel
- (3) On each level of a dwelling unit, including basements
- (4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics
- (5) In the living area(s) of a guest suite
- (6) In the living area(s) of a residential board and care occupancy

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## If the Smoke Alarm Sounds

1. Create family escape plan, crawl low in the presence of smoke.
2. Don't panic; stay calm. Follow your family's escape plan.
3. Get out of the house as quickly as possible. Don't stop to get dressed or collect anything.
4. Feel doors with the back of your hand before opening them.
5. 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.
6. Cover your nose and mouth with a cloth (preferably damp).
7. Take short, shallow breaths.
8. Meet at your planned meeting place outside your home, and do a head count to make sure everybody got out safely.
9. Call the Fire Department as soon as possible from outside. Give your address, then your name.
10. Never go back inside a burning building for any reason.
11. Contact your Fire Department for ideas on making your home safer.

## If the CO Alarm Sounds

### WARNING

Carbon monoxide (CO) is a colorless, odorless, poisonous gas. You can't taste, see, or smell CO, but it can kill in just minutes.

This alarm will sound in a 4-beep pattern if life threatening levels of CO are detected.

If the alarm sounds:

- 1) Immediately evacuate all occupants from the space and go outdoors to fresh air.
- 2) Call emergency responders (911 or fire department) for help; notify the building or vehicle owner, as necessary.

**More detailed information on conditions which can result in transient CO situations, such as:**

1. Excessive spillage or reverse venting of fuel burning appliances caused by:
  - Outdoor ambient conditions such as wind direction and/or velocity, including high gusts of wind; heavy air in the vent pipes (cold/humid air with extended periods between cycles).
  - Negative pressure differential resulting from the use of exhaust fans.
  - Simultaneous operation of several fuel-burning appliances competing for limited internal air.
  - Vent pipe connection vibrating loose from clothes dryers, furnaces, or water heaters.
  - Obstructions in or unconventional vent pipe designs which amplify the above situations.
2. Extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.).
3. Temperature inversions which can trap exhaust gasses near the ground.
4. Car idling in an open or closed attached garage, or near a home.

**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 10 feet (3 m). 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.
9. Fires where the victim is intimate with a flaming initiated fire; for example, when a person's clothes catch fire while cooking;
10. Fires where the smoke is prevented from reaching the smoke alarm due to a closed door or other obstruction;
11. Incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located smoke alarms.

## Environmental Protection

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that all electrical and electronic products, batteries, or accumulators must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws and rules in your area.



## Manufacturer and Service Information

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