



Combination Smoke and Carbon Monoxide Alarm (Type B)

10-Year Sealed Battery Operated

User Manual

Model: SC01/SC03/SC06/SC07/SC08



Conforms with EN 14604 & EN 50291 standards

Email: support@x-sense.com

X-Sense Innovations Co., Ltd.



This user manual contains important information about your combination smoke and 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.

Introduction

All X-Sense combination smoke and carbon monoxide alarms conform with regulatory requirements, including EN 14604 and EN 50291 Standards and are designed to detect both smoke and carbon monoxide.

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. 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.

*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.

*This apparatus is to be installed by a competent person.

*It is not tested for use in a caravan or boat.

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

NEVER IGNORE THE SOUND OF THE ALARM!

Determining what type of alarm has sounded is easy with your X-Sense combination smoke and carbon monoxide alarm. The buzzer will inform you of the type of situation occurring.

Package Contents

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

Technical Specifications

Power Supply	10-year sealed lithium battery
Sensor Type	Smoke: Photoelectric
	CO: Electrochemical
Product Lifespan	10 years
Safety Standard	EN 14604:2005 and EN 50291-1:2018
CO Sensitivity	30 ppm: > 120 minutes
	50 ppm: 60–90 minutes
	100 ppm: 10–40 minutes
	300 ppm: < 3 minutes
Operating Temperature	4.4–37.8°C (40–100°F)
Operating Relative Humidity	10%–85% RH (non-condensing)
Alarm Loudness	≥ 85 dB at 3 m (10 ft) @ 3.2 ± 0.3 kHz pulsing alarm
Silence Duration	≤ 9 minutes

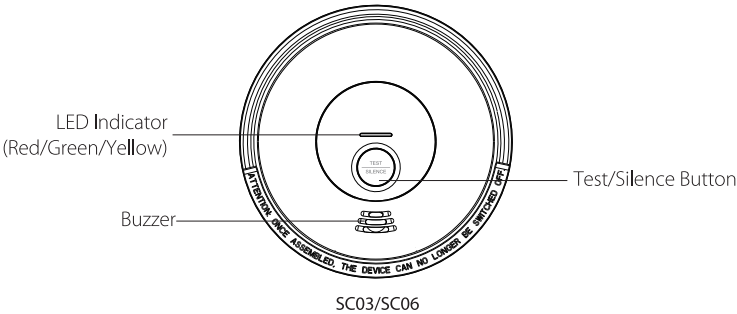
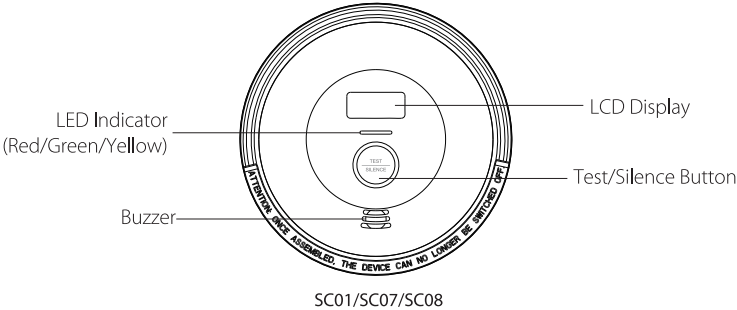
NOTES:

- 1. Battery life is calculated on the current ratings in the standby mode with weekly testings. If its operation mode changes to an alarming condition, the battery life will be decreased accordingly.
- 2. This alarm functions between 4.4–37.8°C (40–100°F). Prolonged exposure to lower or higher temperatures can reduce battery life and affect device performance. We do not recommend operating the device beyond its temperature range.

Product Overview



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.



Test/Silence Button

SC01/SC07/SC08

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.

SC03/SC06

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, press and hold the test button until you hear a short beep, indicating that the alarm has entered the test mode.

NOTE: After a test has begun, the alarm will sound and the LED indicator will flash red. 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. 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.

CO Silence Mode: Press the test button during an alarm to have the unit enter silence mode. If the CO density still exceed the alarm threshold after 6 minutes, the unit will enter another alarm state. Otherwise, the unit will exit the silence mode after 9 minutes and resume normal operation. If the CO concentration is above 300 ppm, the silence function cannot be enabled.

Buzzer

The alarm will sound when there is smoke or CO present, when testing the alarm, and when there is a fault.

LED Indicator

The LED indicator will flash in conjunction with the buzzer. 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 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 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.)

End of Life

Once the maximum lifetime (10 years) is reached, the alarm will deliver 3 beeps and the LED indicator will flash yellow 3 times every 60 seconds. This end-of-life signal can be temporarily 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

X-sense carbon monoxide alarm is programmed to sound an alarm at the following CO concentrations within the time periods listed:

**30 ppm over 120 minutes,
50 ppm for 60–90 minutes,
100 ppm for 10–40 minutes,
and 300 ppm for 0–3 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 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.



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.

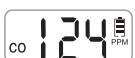
Different working modes and states are shown in the below table (for model SC03/SC06)

Mode	LED Indicator	Audible Alarm	Remarks
Powering On	Runs through 8 cycles (yellow/green/red) in sequence.	1 quick beep.	Make sure the alarm is properly attached to the mounting bracket.
Standby Mode	Flashes green once every 60 seconds.	None.	
Alarm Mode	Flashes red 3 times every 1.5 seconds.	3 long beeps every 1.5 seconds.	Smoke alarm.
	Flashes red 4 times every 5.8 seconds.	4 quick beeps every 5.8 seconds.	CO alarm.
	Flashes green once every second for 5 seconds.	None.	Alarm cancellation: When the smoke or CO concentration level drops below the alarm threshold, the alarm signal will stop.
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 3 times every 1.5 seconds.	None.	Smoke silence mode: After 9 minutes, the unit will exit silence mode.
	Flashes red 4 times every 5.8 seconds.	None.	CO silence mode: After 9 minutes, the unit will exit silence mode.
	Flashes yellow once every 60 seconds.	None.	Silence mode during low battery: After 10 hours, the unit will exit silence mode.
	Flashes yellow 3 times every 60 seconds.	None.	Silence mode during the end of cycle: After 22 hours, the unit will exit silence mode.
	Flashes green 3 times.	None.	Exiting silence mode.

Low Battery	Flashes yellow once every 60 seconds.	1 beep every 60 seconds.	
Fault	Flashes yellow 2 times every 60 seconds.	2 beeps every 60 seconds.	
End of Life	Flashes yellow 3 times every 60 seconds.	3 beeps every 60 seconds.	

LCD Display (for model SC01/SC07/SC08)

While detecting CO, the LCD will display different indicators to inform you of the alarm status, as shown below:

Mode	LCD Display	LED Indicator	Audible Alarm	Remarks
Powering On		Runs through 8 cycles (yellow/green/red) in sequence.	1 quick beep.	Make sure the alarm is properly attached to the mounting bracket.
Standby Mode	None.	Flashes green once every 60 seconds.	None.	None.
Alarm Mode		Flashes red 3 times every 1.5 seconds.	3 long beeps every 1.5 seconds.	Smoke alarm. Please refer to "If the Smoke Alarm Sounds".
		A CO concentration ranging from 30 to 999 ppm has been present for a certain time period. The blue backlight is lit, and the LED indicator flashes red 4 times every 5.8 seconds.	4 beeps repeating every 5.8 seconds.	Dangerous CO concentration is detected, and has reached the alarm status. Please refer to "If the CO Alarm Sounds".
		A CO concentration level ranging from 30 to 999 ppm has been detected, but for less than the allotted detection period (refer to page 5). The LED indicator flashes green once every 60 seconds.	None.	Dangerous CO concentration is detected, but has not reached the alarm status. Potential dangerous CO conditions exist. Please search for the CO source first. Open nearby windows and doors, and immediately move to fresh air.

		Flashes green once every second for 5 seconds.	None.	Alarm cancellation: when the smoke or CO concentration level drops below the alarm threshold, the alarm signal will stop.
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.	None.
Silence Mode		Flashes red 3 times every 1.5 seconds.	None.	Smoke silence mode: After 9 minutes, the unit will exit silence mode.
		Flashes red 4 times every 5.8 seconds.	None.	CO silence mode: After 9 minutes, the unit will exit silence mode.
	 	Flashes yellow once every 60 seconds.	None.	Silence mode during low battery: after 10 hours, the unit will exit silence mode.
		Flashes yellow 3 times every 60 seconds.	None.	Silence mode during the end of cycle: After 22 hours, the unit will exit silence mode.
		Flashes green 3 times.	None.	Exiting silence mode.
Low Battery	 	Display alternates between "Lb" and current CO level. The LED indicator flashes yellow once every 60 seconds.	1 quick beep every 60 seconds.	The unit must be replaced immediately.

Fault		Flashes yellow 2 times every 60 seconds.	2 beeps every 60 seconds.	If the "Err" message is still displayed, the unit has malfunctioned and must be replaced immediately.
End of Life		Flashes yellow 3 times every 60 seconds.	3 quick beeps every 60 seconds.	Replace the unit immediately.

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 alarms 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.

Basic Safety Information



1. DANGERS, WARNINGS, AND CAUTIONS ALERT YOU TO IMPORTANT OPERATING INSTRUCTIONS OR TO POTENTIALLY HAZARDOUS SITUATIONS. PAY SPECIAL ATTENTION TO THESE SITUATIONS.
2. THIS COMBINATION SMOKE & CARBON MONOXIDE ALARM IS ONLY APPROVED FOR HOME USE.

3. THIS CARBON MONOXIDE ALARM IS DESIGNED TO DETECT CARBON MONOXIDE FROM ANY SOURCE OF COMBUSTION.
4. CONSTANT EXPOSURES TO HIGH OR LOW HUMIDITY MAY REDUCE BATTERY LIFE.
5. SMOKE ALARMS ARE NOT TO BE USED WITH DETECTOR GUARDS UNLESS THE COMBINATION HAS BEEN EVALUATED AND FOUND SUITABLE FOR THAT PURPOSE.



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.



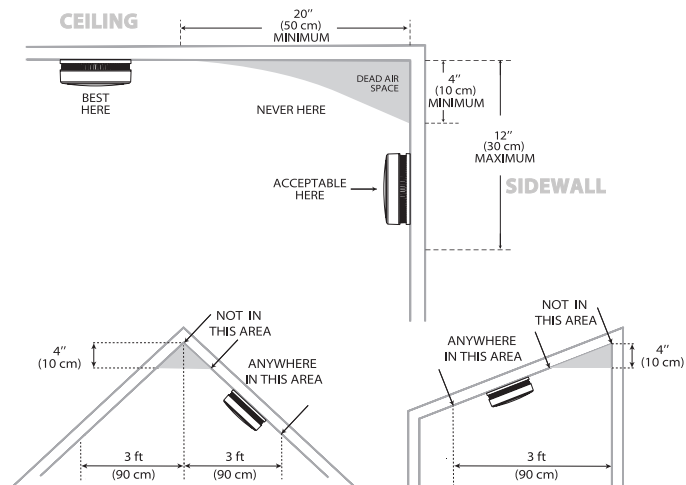
WARNING

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. 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 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) COMMERCIAL OR INDUSTRIAL STANDARDS. INDIVIDUALS WITH MEDICAL CONDITIONS THAT MAY MAKE THEM MORE SENSITIVE TO CARBON MONOXIDE MAY CONSIDER USING WARNING DEVICES WHICH PROVIDE AUDIBLE AND VISUAL SIGNALS FOR CARBON MONOXIDE CONCENTRATIONS UNDER 30 PPM. FOR ADDITIONAL INFORMATION ON CARBON MONOXIDE AND YOUR MEDICAL CONDITION CONTACT YOUR PHYSICIAN.
5. 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.
6. THIS DEVICE IS DESIGNED TO PROTECT INDIVIDUALS FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT MAY NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT, CONSULT A MEDICAL PRACTITIONER.

Installation Instructions

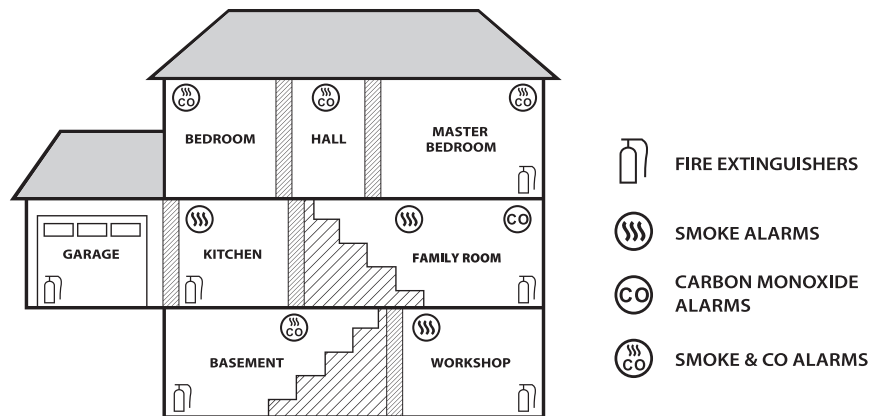
Installation Locations

1. Prioritize the installation of a smoke 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 50 cm (20 inches) away from the corners of the room.
5. If an alarm is installed on a wall, it should be at a distance of 10–30 cm (4–12 inches) below the ceiling.
6. If the length of a room or hall is beyond 900 cm (30 feet), several alarms should be installed in the same room.
7. When the wall or ceiling is angled, the alarm needs to be installed within 90 cm (3 feet) of the highest wall or ceiling point (measured horizontally) in the room.



Recommended Placement

- ! WARNING**
1. THIS ALARM SHOULD BE INSTALLED BY A COMPETENT PERSON.
 2. 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.



NOTE: If a smoke alarm is installed in a kitchen, ensure it has an easily accessible silence button and install the alarm as far away from the stove and sink as possible to avoid false alarms.

How to Install This Alarm



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



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

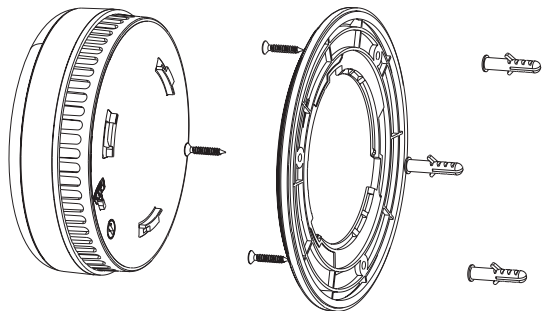


This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure compliance with the Occupational Safety and Health Administration (OSHA) commercial or industrial standards.

1. Do not install in garages, kitchens, furnace rooms or bathrooms! Do not install within 1.5 m (5 feet) of cooking appliances.
2. Do not install within 90 cm (3 feet) 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 (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 4.4°C (40°F) or hotter than 37.8°C (100°F), such as garages and unfinished attics.
7. Do not install in areas where the relative humidity (RH) is above 85%. 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. Mark three screw holes on the wall or ceiling according to the holes of the mounting bracket, and drill the screw holes to a depth of 30 mm (1.18 in) using a Ø 6.0 mm (1/4 in) drill bit. 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



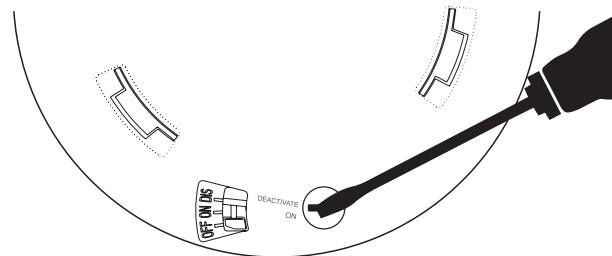
WARNING

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 WILL DELIVER 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 3 days.

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.

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.

If the Smoke Alarm Sounds

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

What You Need to Know About CO

CO cannot be seen, smelled or tasted and can be fatal. The build-up of CO in the blood is called the carboxyhemoglobin (COHb) level and interferes with the body's ability to supply itself with oxygen. Depending on the concentration, CO can kill in minutes. The most common sources of CO are malfunctioning gas appliance used for heating and cooking, vehicles running in an attached garage, blocked chimneys or flues, portable fuel burning heaters, fireplaces, fuel powered tools and operating a grill in an enclosed space.

Indications of carbon monoxide poisoning include symptoms similar to the flu, but with no fever. Other symptoms include dizziness, fatigue, weakness, headache, nausea, vomiting, sleepiness and confusion. Everyone is susceptible to the danger of CO, but experts agree that unborn babies, small children, pregnant women, senior citizens and people with heart or respiratory problems are at the highest risk for serious injury or death. Every year a qualified technician should inspect and clean your heating system, vents, chimney, and flues.

The following symptoms are related to carbon monoxide poisoning and should be discussed with all members of the household:

Mild exposure: Slight headache, nausea, vomiting, fatigue (often described as "flu-like" symptoms).

Medium exposure: Severe throbbing headache, drowsiness, fast heart rate.

Extreme exposure: Unconsciousness, cardiorespiratory failure, death.

The above levels of exposure relate to healthy adults. Levels differ for those at high risk. Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities. 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. Also, young children and household pets may be the first affected. Familiarization with the effects of each level is important.

Fire Safety Information

Poisoning indicates 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. Also, young children and household pets may be the first affected. Familiarization with the effects of each level is important.

Escape Plan

Prepare and practice a home escape plan twice a year, including drills at night. Know two ways out of every room (door & window) and identify a meeting place outside the home where everyone will gather once they have exited the residence. When two people have reached the meeting place, one should leave to call emergency service while the second person stays to account for additional family members. Establish a rule that once you're out, you never reenter under any circumstance!

Fire Prevention

Never smoke in bed, or leave cooking food unattended. Teach children never to play with matches or lighters! Train everyone in the home to recognize the alarm pattern, voice message warning and to leave the home using their escape plan when it's heard. Know how to do "Stop, Drop and Roll" if clothes catch on fire, and how to crawl low under smoke. Install and maintain fire extinguishers on every level of the home and in the kitchen, basement and garage. Know how to use a fire extinguisher prior to an emergency. Second level and higher occupied rooms with windows should have an escape ladder.

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.

Following Conditions Can Result in Transient CO Situations:

- 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 resulting from the use of exhaust fans.
- Simultaneous operation of several fuel-burning appliances competing for limited internal air.
- Vent pipe connections vibrating loose from clothes dryers, furnaces, or water heaters.
- Obstructions in, or unconventional, vent pipe designs which can amplify the above situations.
- Extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.).
- Temperature inversions which can trap exhaust gases near the ground.
- A car idling in an open or closed attached garage, or near a home.

Troubleshooting

Problems	Solutions
The alarm does not sound during a test.	Check whether the alarm is properly attached to the mounting bracket and has been activated.
	Make sure you have pushed the Test/Silence button firmly.
False alarms are triggered intermittently when residents are cooking, taking showers, etc.	Check the location of your alarm (see "Installation Locations").
	Clean the alarm (see "Maintenance").
LED flashes yellow once every 60 seconds with one beep.	The battery is low. Push Test/Silence button once to silence for 10 hours. Replace the alarm immediately.
LED flashes yellow 2 times every 60 seconds with 2 beeps.	The alarm is malfunctioning. Please clean your alarm and see if it is working normally. If not, replace the device immediately.
LED flashes yellow 3 times every 60 seconds with 3 beeps.	The maximum lifetime (10 years) is reached. Push the Test/Silence button once to silence for 22 hours. Replace the alarm immediately.

Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.



Manufacturer and Service Information

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Email: support@x-sense.com