X-SENSE | Link+

Smoke & Carbon Monoxide Alarm

Non-replaceable Battery (10-Year)

User Manual

Model: SC01-W/SC06-W/SC07-W/XP0H-WN

Conforms with UL 217 & UL 2034 standards

X-Sense Electronics Co., Ltd.
Email: support@x-sense.com

F800004000322 V1.0

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

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. 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
1 × Warranty Card
2 × Carbon Monoxide Safety Stickers

Technical Specifications

Power Supply	3 V (⎓) CR123A lithium battery × 2 (non-replaceable)
Battery life	10 years
Sensor Type	Smoke: Photoelectric CO: Electrochemical
Product Lifespan	10 years from the date of manufacture
Safety Standard	UL 217 9th & UL 2034 5th standards
Smoke Sensitivity	0.78 - 1.88% Obs/ft
CO Sensitivity	70 ppm for 60–240 minutes 150 ppm for 10–50 minutes 400 ppm for 4–15 minutes
Standby current	< 25 μA (avg.)
Alarm current	< 45 mA (avg.)
Operating Temperature	40-100°F (4.4–37.8°C)
Operating Relative Humidity	10%–85% RH (non-condensing)
Alarm Loudness	≥ 85 dB at 10 ft (3 m) @ 3.2 ± 0.3 kHz pulsing alarm
Silence Duration	≤ 9 minutes
Operating Frequency	902–928 MHz
Maximum Number of Interconnected Units	18 wireless units (only compatible with X-Sense wireless alarms)
Transmission Range	Over 820 ft (250 m) in open air

NOTES:

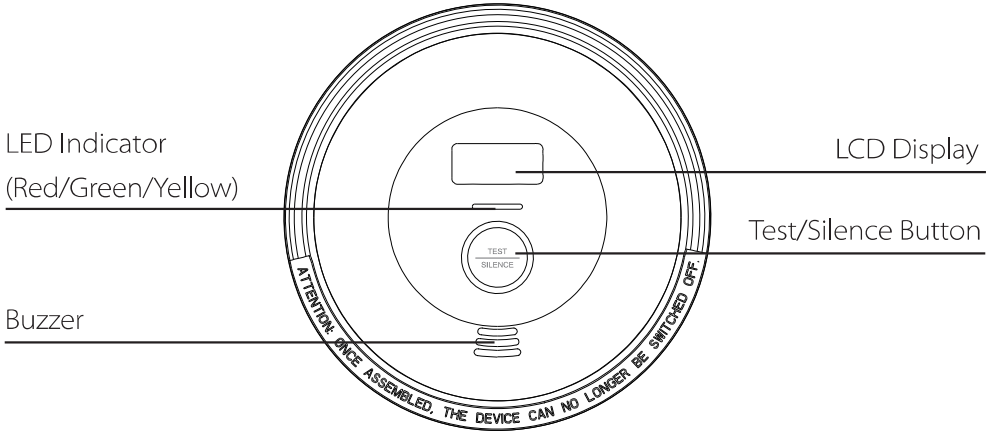
1. Battery life is calculated on the current ratings in the standby mode with weekly testings. If its operation mode changes to an alarming condition, the battery life will be decreased accordingly.

2. This alarm functions between 40-100°F (4.4-37.8°C). 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.

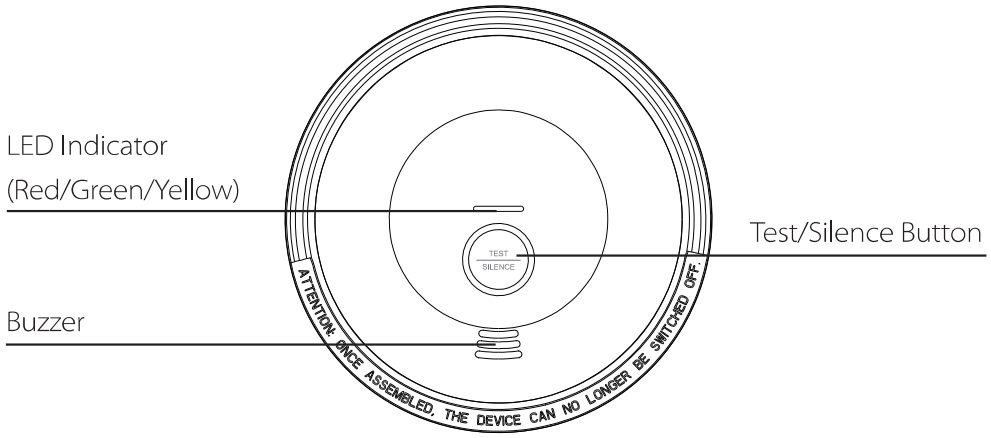
Product Overview

CAUTION

THIS COMBINATION SMOKE AND CARBON MONOXIDE 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-W/SC07-W/XP0H-WN



SC06-W

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 and hold the test button again until you hear a short beep, indicating that the alarm has entered the test mode. Please refer to the "Alarm Test" section for further information. The alarm goes back to the standby mode after testing. 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 LED indicator will flash red. This does not indicate that smoke/CO is present.

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, within 6 minutes, the unit will re-enter alarm state.

NOTES

1. *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.*
2. *You can silence all interconnected units by pressing the Test/Silence button on one of the units. If one unit is still alarming, it is the initiating unit (the unit that detected danger); to silence all interlinked units, you must also press the Test/Silence button on the initiating unit.*
3. *The silence period will last 9 minutes unless the smoke level increases to unsafe levels.*

Buzzer

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 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, 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.

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 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

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 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.

⚠ WARNING

- 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.

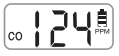
- MANY CASES OF REPORTED CARBON MONOXIDE POISONING INDICATE THAT WHILE VICTIMS ARE AWARE THEY ARE NOT WELL, THEY BECOME SO DISORIENTED THEY ARE UNABLE TO SAVE THEMSELVES BY EITHER EXITING THE BUILDING OR CALLING FOR ASSISTANCE. YOUNG CHILDREN AND HOUSEHOLD PETS ARE TYPICALLY THE FIRST AFFECTED.

LCD Display

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

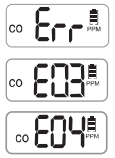
NOTE: The SC06-W does not have an LCD display, while the SC01-W/SC07-W/XP0H-WN do. Those models share the same LED indicator and buzzer functionality.

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			Flashes green once every 60 seconds.	None.	None.
Alarm Mode	Unit detects smoke and initiates an alarm.	-	Flashes red 3 times every 4 seconds.	3 long beeps every 4 seconds.	Dangerous smoke concentration is detected. Please evacuate immediately.

Alarm Mode	Unit detects CO and initiates an alarm.		A CO concentration ranging from 30 to 999 ppm has been present for a certain time period. The LED indicator 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.	Dangerous CO concentration is detected, and has reached the alarm status. Please move to fresh air immediately.
	All other interconnected units in the network.	-	The LED flashes red and green 3 times sequentially every 4 seconds.	3 long beeps every 4 seconds.	Dangerous smoke concentration is detected by the initiating unit in the network. Please evacuate immediately.
			The LED flashes red 4 times, then the green LED flashes once every 5.8 seconds.	First 4 minutes: 4 quick beeps every 5.8 seconds. After 4 minutes: 4 quick beeps every 60 seconds.	Dangerous CO concentration is detected by the initiating unit, and has reached the alarm status. Please move to fresh air immediately.
	Unit detects CO (alarm not initiated).		A CO concentration level ranging from 30 to 999 ppm has been detected, but for less than the allotted detection period. The LED indicator flashes green once every 60 seconds.	None.	Dangerous CO concentration is detected, but has not reached the alarm status. Potentially dangerous CO conditions exist.

					Please search for the CO source first. Open nearby windows and doors, and immediately move to fresh air.
	Unit detected smoke and initiated an alarm.	-	The LED indicator flashes green once every second for 5 seconds.	None.	Alarm cancellation: when the smoke concentration level drops below the alarm threshold, the alarm signal will stop. Then, the alarm goes back to the standby mode after testing.
	Unit detected CO and initiated an alarm.	-	The LED indicator flashes green once every second for 5 seconds.	None.	Alarm cancellation: when the CO concentration level drops below the alarm threshold, the alarm signal will stop. Then, the alarm goes back to the standby mode after testing.
Test Mode	Test a single unit.		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.	Press the Test/Silence button.

	Test all interconnected units.		The LED indicator flashes red rapidly.	Continuous beeping until you release the Test/Silence button.	Initiating alarm. Hold down the Test/Silence button on one unit in the network.
			The LED flashes red and green sequentially.		Other interconnected alarms in the network.
Silence Mode		-	Flashes red 3 times every 4 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.	One beep every 60 seconds.	Replace the unit immediately.

Fault		Flashes yellow 2 times every 60 seconds.	2 beeps every 60 seconds.	Replace the unit immediately.
Smoke Chamber Contamination		Flashes yellow 4 times every 60 seconds.	4 beeps every 60 seconds.	Refer to the Smoke Chamber Contamination section in the Product Overview for handling.
End of Life		Flashes yellow 3 times every 60 seconds.	3 beeps every 60 seconds.	Replace the unit immediately.

How to Set Up and Interconnect Wireless Alarms

All X-Sense Link⁺ wireless interlinked alarms contain a built-in RF module that enables you to wirelessly connect 2 or more interlinked alarms and create an interlinked network. When one unit is triggered, all interconnected alarms will sound. The X-Sense Link⁺ series contain wireless interlinked smoke alarms, wireless interlinked carbon monoxide alarms, and wireless interlinked smoke and carbon monoxide alarms. This model is designed to be wirelessly interlinked with other X-Sense Link⁺ alarms, but is not designed to communicate with wireless interlinked alarms from other manufacturers.

A maximum of 18 X-Sense safety devices may be interconnected in a multiple station arrangement. The interconnect system should not exceed the NFPA interconnect limit of 12 smoke alarms. This smoke/CO combination alarm must be counted as a smoke alarm when determining the number of units on an interconnect line. With 12 alarms interconnected, it is still possible to interconnect up to a total of 6 remote signaling devices and/or relay modules.

The X-Sense Link+ 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 to it.

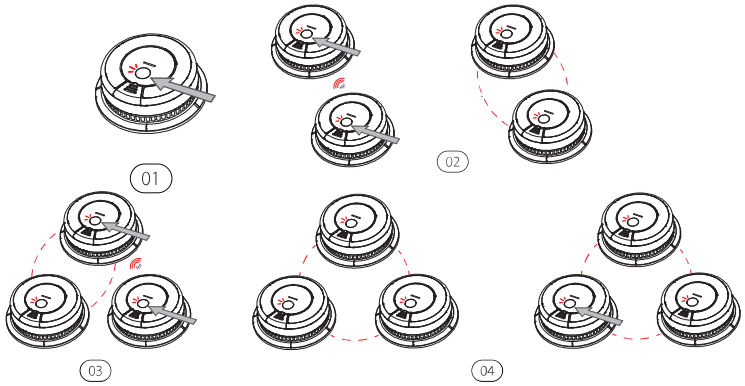
NOTE! The following instructions regarding wireless interconnection are applicable to the X-Sense Link+ wireless interlinked alarms only.

How to Interconnect

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.

NOTE: To turn on the device, attach the alarm properly to the mounting bracket and turn clockwise to lock it. To learn how to turn on different models of wireless interlinked alarms, please refer to their specific user manuals for more details.

2. Press the test/silence button on one of the 2 units 4 times; it will beep once and the LED will flash blue slowly, indicating it has entered pairing mode and is waiting for a new unit to be added. Quickly press the test/silence button on the other unit twice; it will beep once and the LED will flash blue rapidly, indicating it is searching for a device to connect to.
3. After the search is successful and an interconnected group is created, both units will beep once and automatically exit the interconnection mode. At this point, both units will only flash once every 60 seconds, indicating they are in normal standby mode.
4. If you want to connect a third alarm to this group, first activate a new device according to its operating instructions, and then quickly press the test/silence button on either of the 2 previously interconnected units 4 times. This unit will beep once, and the LED will flash blue slowly, indicating it is ready to add a new device to the network. Next, quickly press the test/silence button on the new unit twice, and the LED will flash blue rapidly as it searches for a network to connect to. After the third unit successfully joins the interconnected network, both units will beep once and automatically exit the interconnection mode.
5. If you want to connect more units, simply repeat step 4. Up to 18 alarms can be interconnected this way. To ensure that all alarms enter the same interlinked network, make sure you only work with 2 units at a time—one unit enters the pairing mode and the other unit enters the searching mode.
6. Test the alarms according to the steps in the section "Alarm Test."



NOTES

1. The alarm will enter the searching mode or the pairing mode for 60 seconds with the LED flashing blue. After 60 seconds, repeat step 2 to connect the alarms. If needed, press the test/silence button once while the alarm is in the searching mode or the pairing mode, and the LED will stop flashing blue and the alarm will quit the pairing mode to enter normal status.
2. Test all wireless alarms to ensure they are interconnected before installation.
3. A maximum of 18 wireless alarms can be interconnected on the same network.
4. The model can only be interconnected with other X-Sense Link+ wireless interlinked alarms.

How to Disconnect

Press the test/silence button 4 times; the alarm will beep once. Then, hold down the button until it beeps once more to disconnect. After disconnecting, it can be reconnected to the same network, or added to a new network.

NOTE: The X-Sense Link+ wireless interlinked alarms in one multi-pack have already been interconnected. To create a new network, you will first need to disconnect each alarm individually in this multi-pack to avoid having them all join the same network.

Alarm Mode

X-Sense Link+ wireless interlinked alarms can be interconnected such that any unit that senses danger will cause all other units in the interconnected network to alarm.

1. If the Initiating Unit Is Triggered by Smoke:

When one smoke alarm is triggered in the interconnected network, the unit will beep 3 times, paired with the LED that flashes red every 4 seconds. Any other interconnected units will follow suit—they will beep 3 times every 4 seconds, paired with the LED flashing red and green in succession.

2. If the Initiating Unit Is Triggered by CO:

When one CO alarm is triggered in the interconnected network, the unit will beep 4 times every 5.8 seconds, paired with the LED flashing red. Any other interconnected units in the network will follow suit—they will beep 4 times every 5.8 seconds, paired with the LED that flashes red 4 times first, followed by the LED that flashes green once with every beep. When the CO concentration level drops below the alarm threshold, the alarm will cease.

NOTES:

1. *When one unit is triggered, other interconnected units will sound. If the smoke alarm and CO alarm are triggered in the network at the same time, the alarm signal of the smoke alarm will take priority over that of the CO alarm.*
2. *This alarm has a relay function that extends the wireless interconnected network for wide detection coverage.*

Alarm Test

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

If your X-Sense Link+ alarm is interconnected to other X-Sense wireless alarms, we recommend that every individual alarm is tested during the weekly test.

	Test a Single Alarm	Test All Interconnected Alarms
Action	Press the test/silence button.	Hold down the test/silence button.
Indication	• The alarm will emit 2 sets of 3 long beeps followed by 2 sets of 4 quick beeps. • The LED will flash red during the audible signal. • You should first wake up your alarm by pressing the test button. The LCD will turn on and the backlight will be lit. • After testing, the alarm will automatically enter standby mode.	• The initiating unit will beep continuously with the LED flashing red. • Other interconnected alarms in the network will receive the signal after 5 seconds, then they will beep continuously with the LED flashing red and green successively. Release the test/silence button and all the units will stop testing. • The units testing should be completed within 3 minutes. • After testing, the units will automatically enter standby mode.

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 troubleshooting guide at the end of this manual.

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 INRECREATIONAL 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

NOTES:

1. 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:
Reproduced with permission from NFPA 72® -2016, National Fire Alarm and Signaling Code® Copyright © 2015, National Fire Protection Association. This reprinted material is not the complete and official position of the NFPA onthe referenced subject, which is represented only by the standard in its entirety which may be obtained through the NFPA website at www.nfpa.org.

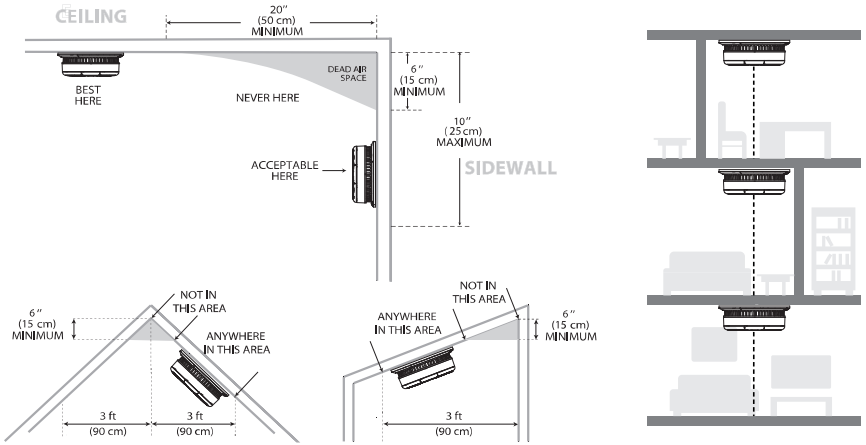
NFPA 72® and National Fire Alarm and Signaling Code® are registered trademarks of the National Fire Protection Association, Inc., Quincy, MA.

2. Before installation, it is recommended to test the interconnected alarms in the rooms where you intend to install them to ensure that they are within transmission range and that nothing will interfere with their communication.

Installation Locations

1. Prioritize the installation of a smoke/CO 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 20 inches (50 cm) away from the corners of the room.
5. If an alarm is installed on a wall, it should be at a distance of 6–10 inches (15–25 cm) below the ceiling.
6. If the length of a room or hall is beyond 30 feet (900 cm), several alarms should be installed in the same room.
7. 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.
8. In multi-level houses or apartments, install at least one wireless alarm on each level and keep them installed in a straight vertical line (see diagram) with as few obstacles between each of the interconnected alarms as possible to ensure optimal signal transmission.



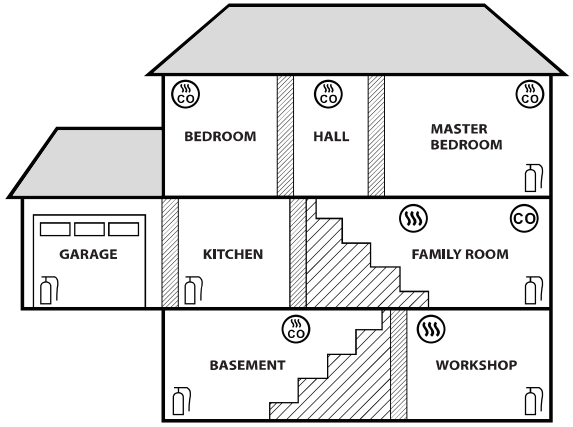
Locations to Avoid:

1. Near large metal surfaces and/or bundles of wire.
2. Near fluorescent lights, amateur radios, electrical equipment, or other devices that may transmit an RF signal, as electronic noise may cause nuisance alarms.

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.
3. TO PREVENT INJURY, THIS DEVICE SHOULD BE SECURELY ATTACHED TO THE CEILING OR WALL IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS.
4. 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 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.

Locations to Avoid

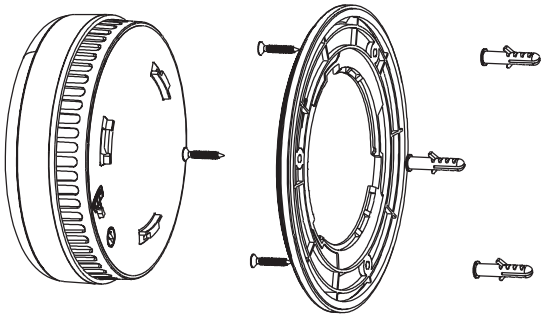
WARNING - This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure CO levels in compliance with the Occupational Safety and Health Administration (OSHA) commercial or industrial standards.

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 1 ft (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 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. 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 1.18 in (30 mm) using a Ø 1/4 in (6.0 mm) 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

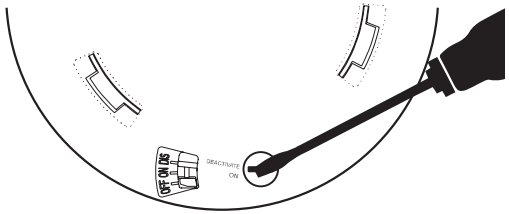
⚠ WARNING

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 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.



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.

- **WARNING:** KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.
- 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.
- **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

Problems	Solutions	Solutions
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.
When the test button is held down, only one alarm sounds and the other interconnected alarms do not respond.		· When connected to a wireless interconnected network, holding down the test button will test all devices in the network. · When exited from the wireless interconnected network, holding down the test button only tests a single device. · A short press on the test button will always test a single device.

False alarms are triggered intermittently when residents are cooking, taking showers, etc.	The device is improperly installed.	Check the location of your alarm (see "**Locations to Avoid**").
	The device is clogged by dirt and dust.	Clean the alarm (see "**Maintenance**").
LED flashes yellow once every 60 seconds with one beep.	Low battery warning.	The battery is low. Push Test/Silence button once to silence for 10 hours. **Replace the device immediately.**
LED flashes yellow 2 times every 60 seconds with 2 beeps.	Malfunction.	The alarm is malfunctioning. **Replace the device immediately.**
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 device immediately.

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 3 m (10 feet). 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.

Limitations of smoke alarms

1. Fires where the victim is intimate with a flaming initiated fire;for example,when a person's clothes catch fire while cooking;
2. Fires where the smoke is prevented from reaching the smoke alarm due to a closed door or other obstruction;
3. 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.

ISED Statement

English: This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

French: Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux CNR exempts de licence d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes :

(1) Cet appareil ne doit pas causer d'interférences.

(2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux radiations du Canada dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

FCC statement:

1. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Note: This equipment has been tested and found to comply with the limits for a Class B digital device. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

3. Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

4. The distance between user and products should be no less than 20 cm.

Manufacturer and Service Information

X-Sense Electronics Co., Ltd.

Address: Room 402, Building 4, No. 9, Jinshagang 1st Road, Shixia Village, Dalang Town, Dongguan City, 523750 Guangdong, P.R. China

Website: www.x-sense.com

Email: support@x-sense.com