



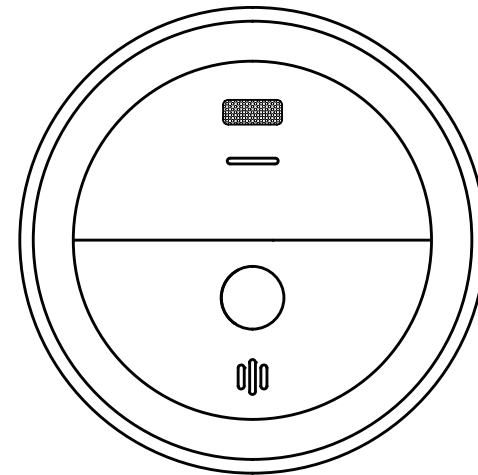
Wiring and Mounting Video.

For proper installation, please watch the video first.



X-Sense Electronics Co., Ltd.
Website: www.x-sense.com

X-SENSE



XPOJ-SA

User Manual

Smoke & Carbon Monoxide Alarm

Hardwired / Replaceable Backup Battery / Voice and Location

F800004000194 V1.0

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1 Introduction

Thank you for purchasing this alarm. Hardwired for 120 V AC, this model includes replaceable CR123A backup batteries. With built-in voice and location features, it announces the type of hazard and the location name when smoke or CO is detected, and also provides voice prompts under specific conditions.

The unit supports hardwired interconnection—when one device sounds an alarm, all compatible hardwired units will also activate.

NOTE: Please thoroughly read this user guide and save the document for future reference and to pass on to any subsequent owner.

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.)

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.

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.

CAUTION

1. 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.

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

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!
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

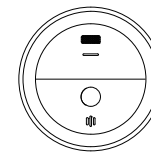
USING WARNING DEVICES WHICH PROVIDE AUDIBLE AND VISUAL SIGNALS FOR CARBON MONOXIDE CONCENTRATIONS UNDER 30 PPM. FOR ADDITIONAL INFORMATION ON CARBON MONOXIDE AND YOUR MEDICAL CONDITION CONTACT YOUR PHYSICIAN.

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. IT IS NOT TESTED FOR USE IN A CARAVAN OR BOAT.
7. DO NOT TAMPER WITH THE APPARATUS, AS THERE IS A RISK OF ELECTRIC SHOCK OR MALFUNCTION.
8. CAUTION: READ THE INSTRUCTIONS CAREFULLY BEFORE OPERATING OR SERVICING.
9. 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.
10. THIS APPARATUS SHOULD BE INSTALLED BY QUALIFIED PERSONNEL.

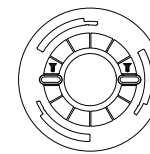
1.1 Product Overview

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.



1 × Alarm Unit



1 × Mounting Bracket



1 × Anti-dust Cover



2 × Screws



2 × Anchor Plugs



1 × AC Connector



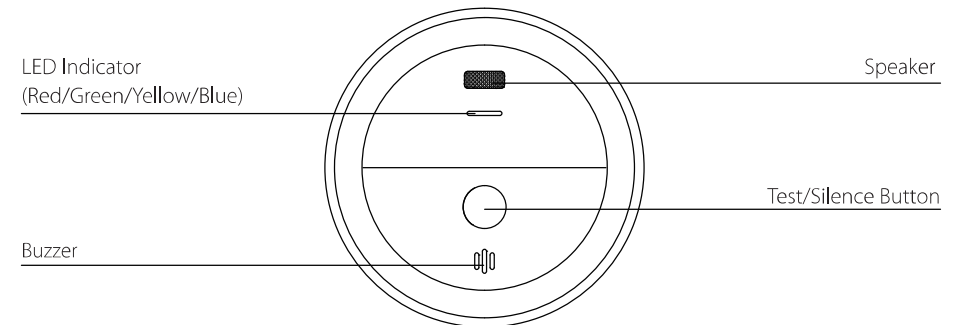
1 × CR123A Battery
(Pre-installed)

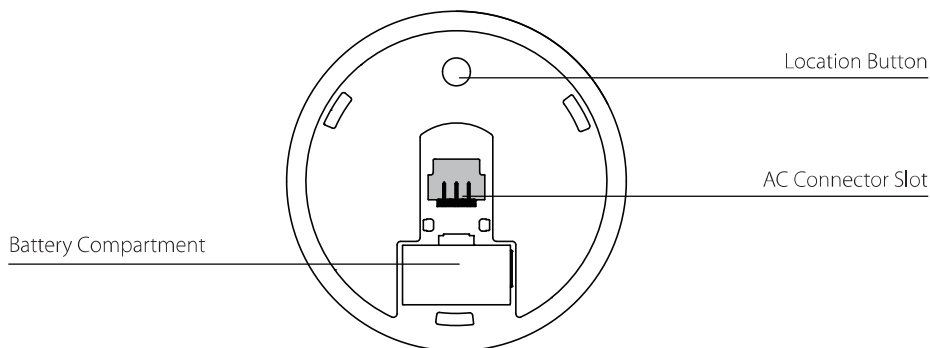


1 × User Manual



2 × CO Warning Stickers





1.2 Technical Specifications

Power Supply	120 V (~), 60 Hz wire-in connector with 3 V (≡) CR123A × 1 backup battery
Sensor Type	Smoke: Photoelectric CO: Electrochemical
Product Lifespan	10 years from manufacture
Smoke Sensitivity	1.02-1.66% obs/ft
CO Alarm Response Time	70 ppm: 60-240 minutes 150 ppm: 10-50 minutes 400 ppm: 4-15 minutes
Operating Temperature	40-100°F (4.4-37.8°C)
Operating Relative Humidity	10%-85% RH (non-condensing)
Audible Alarm	≥ 85 dB at 10 ft (3 m) @ 3.2 ± 0.3 kHz pulsing alarm, with voice alerts
Silence Duration	≤ 9 minutes
Maximum Interconnectable Units	Up to 18 devices can be connected via wired connections, the maximum wire run distance between the first and last unit in an interconnected system is 1000 ft (300 m)

- 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.

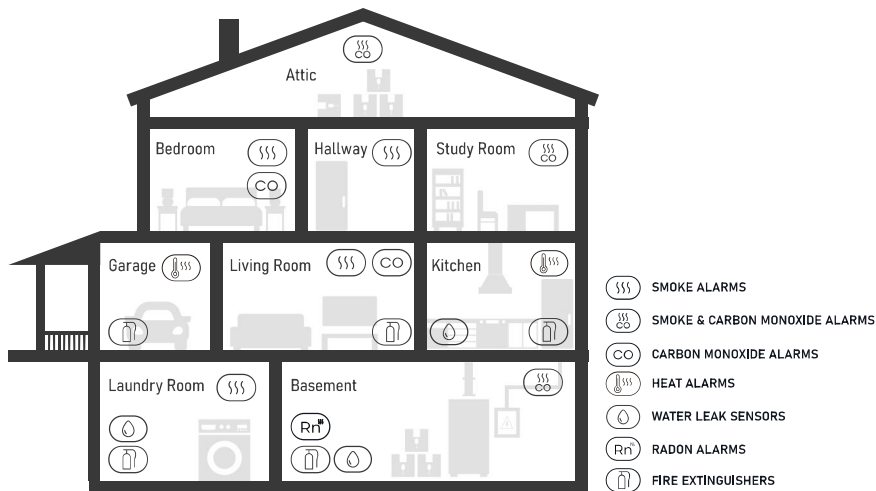
2 Where to Install

2.1 Recommended Locations

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

⚠ WARNING

1. THIS ALARM SHOULD BE INSTALLED BY A COMPETENT PERSON.
2. BATTERIES SHOULD NOT BE EXPOSED TO EXCESSIVE HEAT SUCH AS DIRECT SUNLIGHT, FIRE, ETC.
3. 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.



The National Fire Protection Association (NFPA) recommends installing a smoke and carbon monoxide alarm in the following areas:

1. On every floor, including finished attics and basements.
2. Inside and outside every sleeping area. Try to monitor the exit path as the bedrooms are usually farthest from the exit.
3. In every room containing a fuel-burning appliance.
4. In every room where electrical appliances are operated (i.e. portable heaters or humidifiers).
5. In all rooms, hallways, and storage areas where the temperature is usually between 40–100°F (4.4–37.8°C).
6. If the length of a room or hall exceeds 30 ft (900 cm), you will need to install several alarms in the same room.
7. Locate additional alarms in stairways, because stairways act like chimneys for smoke and heat.

2.2 Locations to Avoid

1. Do not install in the garage. Products of combustion are present when you start your automobile.
2. Do not install in kitchens, furnace rooms or bathrooms. Do not install within 5 ft (1.5 m) of cooking appliances.
3. 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.
4. Place the alarm where drapes or other objects will not block the sensors. Smoke and CO must be able to reach

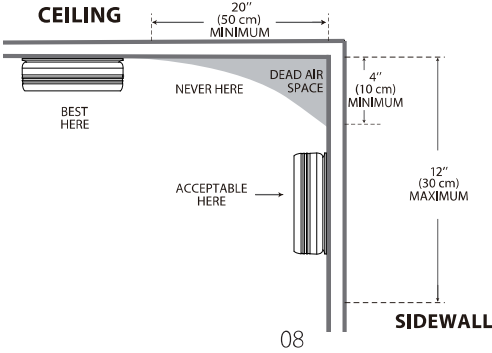
- the sensors to accurately detect these conditions. Do not install in peaks of vaulted ceilings, "A" frame ceilings or gabled roofs. Keep out of damp and humid areas.
5. Do not place in direct sunlight and keep out of insect-infested areas. Extreme temperatures will affect the sensitivity of the smoke/CO 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.
 9. Near large metal surfaces and/or bundles of wire.
 10. Near fluorescent lights, amateur radios, electrical equipment, or other devices that may transmit an RF signal, as electronic noise may cause nuisance alarms.

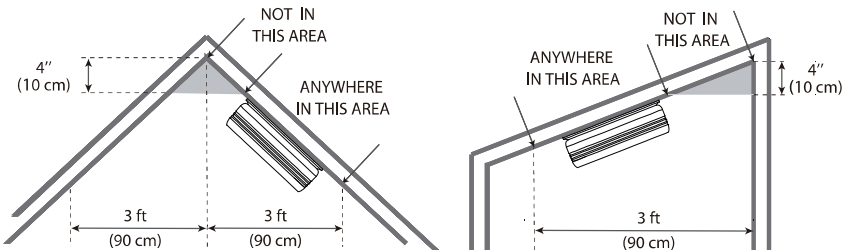
Attention: This alarm is designed to minimize nuisance alarms. Cigarette smoke will not normally cause the device to alarm, unless the smoke is blown directly into the alarm. Combustion particles from cooking may set off the alarm if it is located too close to a cooking appliance. Large quantities of combustible particles are generated from spills or when broiling. Using the fan on a range hood which vents to the outside (non-recirculating type) will also help prevent nuisance alarms from occurring by removing these combustible products from the kitchen.

2.3 Position on a Wall or Ceiling

Important Information About Installing a Combination Smoke and CO Alarm:

According to certification regulations, when both smoke and CO alarms are triggered simultaneously, the smoke alarm should take priority. Therefore, to ensure optimal smoke detection, the installation of a combination alarm should follow the same guidelines as a smoke alarm, i.e., installed on the ceiling or high on the wall. You need not worry that this installation will affect CO detection performance, as carbon monoxide, when leaking, mixes with the air and spreads throughout the room, without concentrating significantly in the upper or lower areas, allowing it to be detected by alarms installed in higher locations.





1. Ceiling mounting is preferred in ordinary residential construction.
2. Smoke, heat, and combustion products rise to the ceiling and spread horizontally, if you install the alarm on the ceiling, mounting the smoke alarm on the ceiling in the center of the room places it closest to all points in the room, make sure it is at least 20 inches (50 cm) away from the wall.
3. If an alarm is installed onto a wall, keep 4–12 inches (10–30 cm) below the ceiling.
4. Install alarm on sloped, peaked or cathedral ceilings at or within 3 ft (0.9 m) of the highest point (measured horizontally).
5. If you install the alarm on a sloped ceiling, place it between 4 inches (10 cm) and 35 inches (90 cm) from the peak.
6. For mobile home installation, select locations carefully to avoid thermal barriers that may form at the ceiling. For more details, see MOBILE HOME INSTALLATION Section.

⚠ WARNING

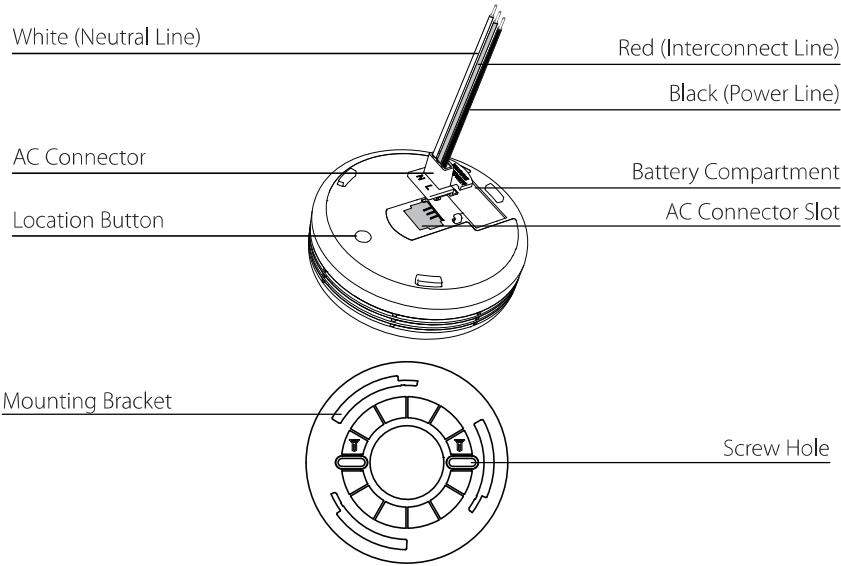
TO PREVENT INJURY, THIS DEVICE SHOULD BE SECURELY ATTACHED TO THE CEILING OR WALL IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS.

3 Setup and Installation (Professional Installation Recommended)

NOTE: An anti-dust cover has been installed on the alarm. Keep the dust cover on until all construction has been completed for at least 24 hours (drywall, painting, varnishing, mounting bracket installation, etc). Retain the dust cover and re-install it to protect the alarm during future construction projects. Construction dust and chemicals can cause contamination and false alarms.

CAUTION: DUST COVER MUST BE REMOVED FOR ALARM TO OPERATE.

3.1 Get to Know Your Alarm



3.2 Wiring Requirements

This alarm should be installed on a UL Listed or recognized electrical box. All connections should be made by a qualified electrician and all wiring used shall be in accordance with articles 210 and 300.3(B) of the U.S. National Electrical Code ANSI/NFPA 70, NFPA 72 and/or any other codes having jurisdiction in your area. The multiple station interconnect wiring to the alarms must be run in the same raceway or cable as the AC power wiring. In addition, the resistance of the interconnect wiring shall be a maximum of 10 ohms.

CAUTION

1. This is a CO alarm powered by hardwired. Please ensure a stable and continuous power supply, as this CO alarm should receive continuous 120 V (~), 60 Hz, pure sine wave electrical power 24 hours a day (batteries are for emergency backup only).

2. Extension cords, power strips, or outlets controlled by a switch or dimmer, which cannot provide stable and continuous power to the unit, are not suitable for the alarm.
3. Ensure that the power supply of the alarm is not affected by excessively noisy power. Situations that may cause noisy power include: large household appliances, generators or solar power sources on the same circuit, dimmer switches on the same circuit or mounted near fluorescent lights. Excessively noisy power has the potential to cause damage to the device.
4. AC-powered CO alarms should only be operated with true or pure sine wave inverters. Operating this CO alarm with most battery-powered UPS (uninterruptible power supply) products or square wave or “quasi sine wave” inverters will damage the alarm. If you are not sure about your inverter or UPS type, please consult with the manufacturer to verify.

3.3 Compatible Model Information

CAUTION: This product only supports hardwired interconnection with X-Sense hardwired alarms. Please remove any alarms of other brands from the wiring, as they may cause electric shock hazards or malfunctions.

3.4 Power-On

For first-time use, simply remove the battery insulation film to turn on the device. After the device is powered on, the device will say "Hello from X-Sense. Location not set. Press the Location button to select a location." During this voice report process, if you press the test/silence button, there will be no response.

3.5 Location Setting

Follow the steps below to set the device location via the location button so that it is accurate to the actual installation location. When an alarm is triggered, it will broadcast this designated location. That is to say, when danger occurs, the alarm will say "Warning. Smoke detected in **Location**. Evacuate." or "Warning. Carbon monoxide detected in **Location**. Move to fresh air."

1. After the device is powered on and the voice is finished, press the Location button. If the location has not been set, the device will say "Location not set. Press the Location button again to select a location." If the location has been set, the device will say "**Location** set. Press the Location button again to change the set location."
2. After step 1, press the Location button again. The device will say "Press the Location button for the next location. Quickly press the Location button twice for the last location. Hold down the Location button to save the location."
3. After step 2, press the Location button again. The device will say "Entryway."
4. After entering the location list, press the location button for the next location. Quickly press the Location button twice for the last location. Hold down the Location button to save the location.
5. The location list will be repeated. When the device says "No location", press the location button again, and "Entryway" will be reported again.

6. When the location is saved, the device will say "**Location** saved."
7. There is a 1-minute timeout limit when the product is in setting mode. If there is no operation within 1 minute, it will automatically exit and return to standby mode, and will say "Unable to set the location. Please try it again."

NOTES:

1. *Regardless of whether the device has been connected to the Wi-Fi, you can set and modify the location through the location button on the back of the device.*
2. *If the device, not yet added to the app, is set the location using the location button, when added to the app the location set in the app will override the device-side location.*
3. *If you've already added the device to the app and then change its location using the location button, the app will update to show the new location.*
4. *When you add the device to the app, you have the option to set its location. Once the adding process is finished, you can also change the device's location if needed.*

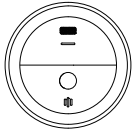
Location List

1	Entryway
2	Basement
3	Living room
4	Dining room
5	Kitchen
6	Hallway
7	Master bedroom
8	Kid's room
9	Guest room
10	Den
11	Family room
12	Study
13	Office
14	Workshop
15	Utility room
16	Attic
17	No location

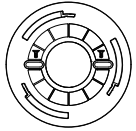
3.6 Gather Required Items

Before installation, make sure you have all the necessary items ready:

Included in the package:



Alarm Unit



Mounting Bracket



AC Connector



Screw kit

NOT included in the package:



Wire Connectors



Phillips Screwdriver



Flathead Screwdriver



Ladder

When drilling is required (not installing on an Electrical Box):



Electric Drill with 1/4-inch (6 mm) Drill Bit

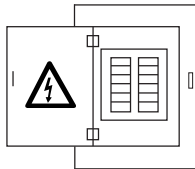


Pencil

3.7 Turn Off Power

Protect yourself and avoid blowing a fuse. Switch off the correct circuit breaker for the room where you are installing the alarm or remove the fuse from the fuse box. Otherwise, it can result in serious electrical shock, personal injury, or even death.

NOTE: During installation, ensure that the power remains disconnected. Do not turn on the power until all alarms are installed.



Breaker Box

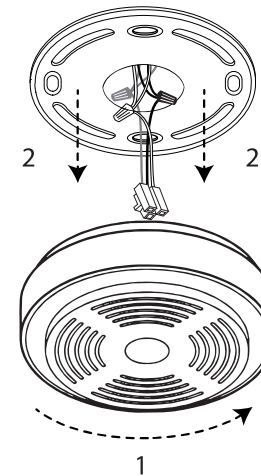
WARNING: ELECTRICAL SHOCK HAZARD

Failure to turn off the power may result in serious electrical shock, injury and death.

3.8 Remove Your Old Smoke Alarm

 **WARNING:** Before installing the X-Sense alarms, remove all non-X-Sense alarms in the circuit, as doing so could harm the devices and cause electric shock or fire.

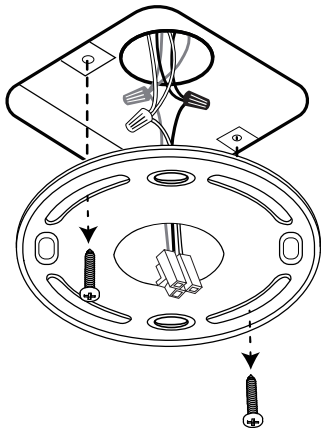
To prevent electrical shock, make sure the green power light is off on the alarm. You may have to twist the alarm to release it. Carefully remove it to keep from damaging your ceiling or wall.



Tip: Your old smoke alarm might make a loud noise when you disconnect it.

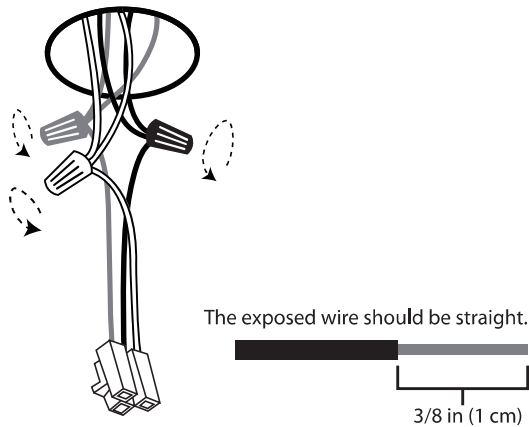
3.9 Remove the Old Mounting Bracket

Unscrew the old mounting bracket from the electrical box. **Save the screws to install the X-Sense alarm mounting bracket later.**



3.10 Remove the Old AC Connector

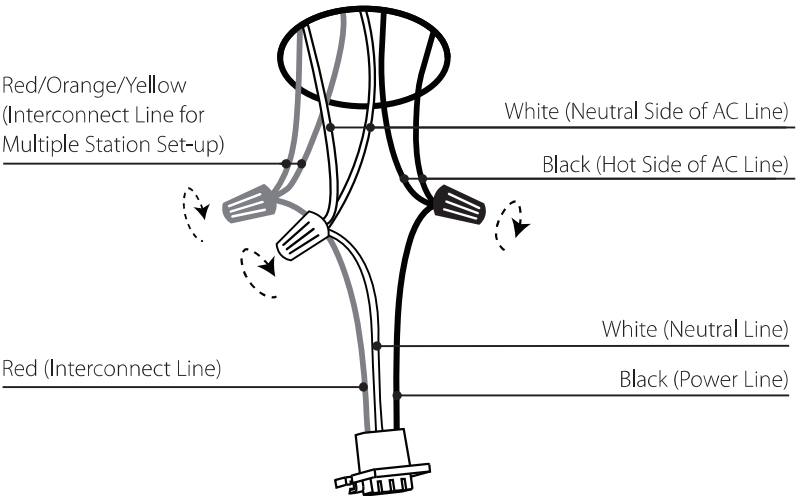
Unscrew the wire connectors to detach the AC connector from your old alarm.



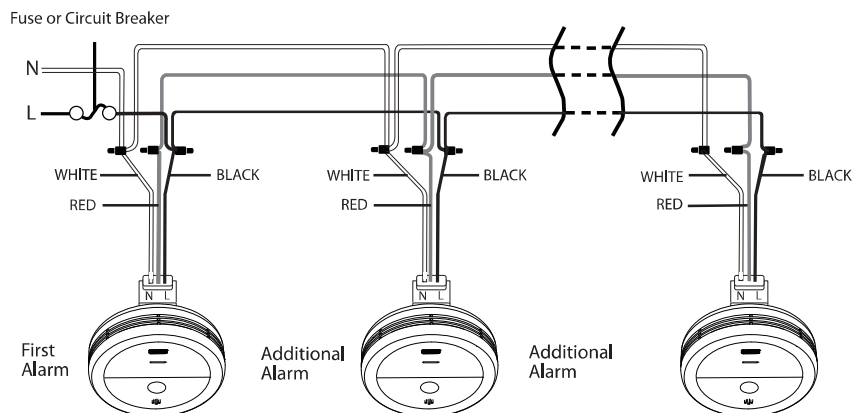
3.11 Attach the X-Sense AC Connector

CAUTION: Turn off the main power to the circuit before wiring the alarm.
CAUTION: Wiring is as shown in the diagram. Improper connection may cause damage to the alarm, malfunction, or risk of electric shock.
CAUTION: For alarms that are used as single station, DO NOT CONNECT THE RED WIRE TO ANYTHING. Leave the red wire insulating cap in place to make certain that the red wire cannot contact any metal parts or the electrical box.

Hold the black line ends together, cap them with a wire connector and twist clockwise until it's secure. Do the same with the white and red/orange/yellow line.



CAUTION: If the colors of X-Sense AC connector three wires are inconsistent with those in your circuit, please do not rely on the wire colors and connect them strictly according to the power line, neutral line, and interconnect line.

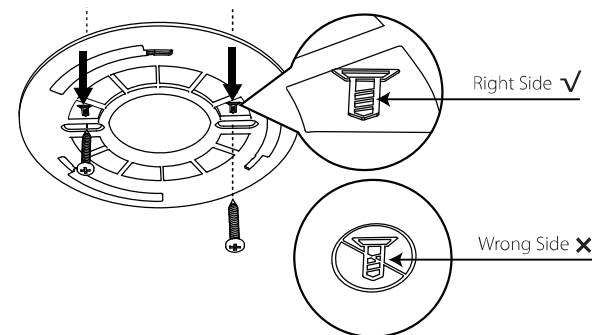


NOTES:

1. Use standard UL Listed household wire (as required by local codes) available at all electrical supply stores and most hardware stores.
2. If this device is used as a single station alarm (without connecting the signal wire), it **CANNOT** send or receive smoke or CO alarm signals to other hardwired interconnected alarms in your home.
3. A maximum of 24 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 and/or 18 alarms total (smoke, CO, Smoke/CO Combination, heat, etc.). With 18 alarms interconnected, it is still possible to interconnect up to a total of 6 remote signaling devices and/or relay modules.
4. The maximum wire run distance between the first and last unit in an interconnected system is 1000 feet (300 m).
5. When alarms are hardwire interconnected, all interconnected units must be powered from a single circuit.
6. Make certain alarms are wired to a continuous (non-switched) power line.
7. For best results to minimize nuisance alarms, interconnected alarms should be on a dedicated line. If not on a dedicated line, it is suggested that the smoke alarms share a lighting load circuit that does not have a dimmer associated with it. If receptacles must be placed on the same line it is suggested that they be placed ahead of the smoke alarms. This will prevent large voltage drops from occurring between the first and last alarm in the circuit.

3.12 Install the New Mounting Bracket

Pass the AC connector through the hole in the center of the mounting bracket, then screw the mounting bracket to the electrical box **reusing the old screws via the right side**. You can also screw the mounting bracket directly into the wall or ceiling with the X-Sense screws. Make sure the screws are inserted from the right side.

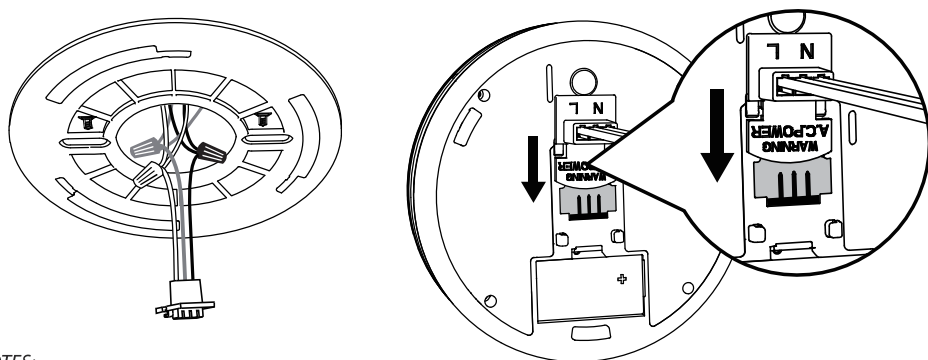


NOTE: If you do not want to install on an electrical box and prefer to drill holes, please use an electric drill with a $\varnothing 1/4$ -inch (6 mm) drill bit. Drill holes $1\frac{3}{8}$ inches (35 mm) deep, and use the included wall anchors and screws for installation.

3.13 Connect Power

⚠ WARNING: THIS X-SENSE HARDWIRED ALARM SHOULD NOT BE CONNECTED TO ANY OTHER BRAND OF HARDWIRED ALARMS SINCE DOING SO COULD HARM THE DEVICE AND CAUSE ELECTRIC SHOCK OR FIRE.

Plug the AC connector into the back slot of your X-Sense alarm, making sure the AC connector is fully inserted into the slot. Then, push the excess wire back into the electrical box through the hole in the center of the mounting bracket.

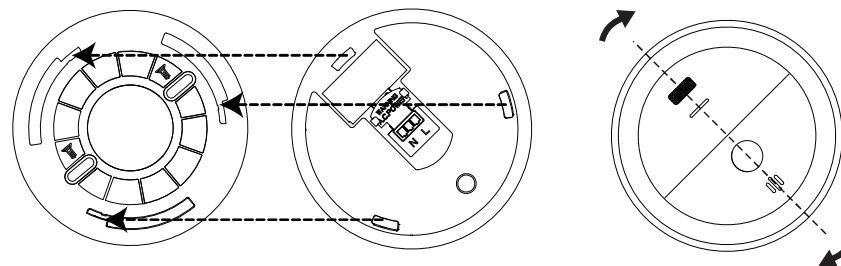


NOTES:

1. If the battery is not installed correctly, the battery cover will not close, and the AC connector will not be able to fully insert into the slot.
2. AC wiring must be completed properly and the AC connector must be attached to the unit for the hardwire interconnect function to work.

3.14 Install Your X-Sense Alarm

Line up the three tabs on the back of your alarm with the notches on the mounting bracket. Hold alarm against the mounting bracket and turn it clockwise. **If you need to install more than one device, repeat the steps above.**

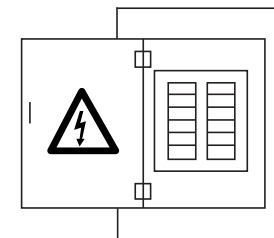


Tip: If you ever need to remove it (for cleaning or battery replacement), turn off power to your alarm at the breaker box or remove the fuse first. Then turn counterclockwise until it disconnects from the mounting bracket.

3.15 Switch Power Back on or Replace the Fuse

After turning on the AC power, all alarms properly connected to the AC power will have a steady green LED light.

NOTE: If you connect the AC power without removing the battery insulating film, the device will continuously announce: "Please install the backup battery." You need to remove the battery insulating film to stop the alert.



Breaker Box

⚠ WARNING: FAILURE TO PROPERLY CONNECT AC POWER AND INSTALL BATTERIES IN THE CORRECT ORIENTATION WILL PREVENT PROPER OPERATION OF THIS ALARM.

Attention: At this point, you have completed the installation of all alarms. You need to perform inspection and testing before use. Please refer to Section 3.16 “Check After Installation.”

3.16 Check and Test After Installation

Part 1: Check each alarm you have installed to ensure it matches the “√ Normal Performance” before proceeding to Part 2.

	Behavior	Cause	Solution
√ Normal Performance	All alarms show a steady green light.	None.	None.
× Abnormal Performance	The LED on the alarm does not stay green steadily but flashes once every 60 seconds.	AC power supply failure.	Turn on the AC power and check if the LED stays green steadily. If the issue persists, check whether the cable has power. If the problem still continues, rewire the device (refer to sections 3.7, 3.8, 3.10, 3.11, 3.13, 3.14, and 3.15 of the manual).
	The alarm announces the voice message “Please install the backup battery” every 5 seconds, while the LED flashes yellow once.	The battery insulating film has not been removed, or the battery is not installed correctly.	Remove the battery insulating film from the device and ensure the battery is installed correctly (turn off the AC power first).

Part 2: Briefly press the Test/Silence button on each installed alarm to ensure it matches the “√ Normal Performance” before proceeding to Part 3.

	Behavior	Cause	Solution
√ Normal Performance	All alarms announces voice message “Normal working status.”	None.	None.
× Abnormal Performance	The device doesn't respond when the button is pressed.	The device is not powered on.	Remove the battery insulating film. If the battery ran out, replace it (turn off the AC power first).
		You don't push the test/silence button firmly.	Make sure you push the test/silence button firmly.
		The device is announcing something other than “Normal working status.”	Refer to the Troubleshooting section in the manual.

CAUTION: Due to the loudness of the alarm, always use ear protection when testing.

Part 3: Select a device with correct wiring (see Section 3.11). Quickly press the test button 3 times. The device will flash red light once per second and beep. Then, go to the other alarms you installed and check that they match the “√ Normal Performance”. If they do, all alarms are working properly, installation is successful, and you can start using them.

	Behavior	Cause	Solution
√ Normal Performance	All other alarms flash red light once every 10 seconds and beep. At this point, press the test button on the first device (the one flashing red light once per second and beeping) to end the test.	None.	None.
× Abnormal Performance	Some devices are not responding.	The unresponsive device is wired incorrectly.	1. Note the location of the unresponsive device. 2. Press the test button on the first device (flashing red light once per second and beeping) to end the test, and remember its location. 3. Rewire the unresponsive device according to Sections 3.7, 3.8, 3.10, 3.11, 3.13, 3.14, and 3.15 in the manual. 4. Go back to the first device, quickly press the test button 3 times, and check whether the previously unresponsive device now behaves normally.
		The first device is wired incorrectly.	1. Press the test button on the first device (flashing red light once per second and beeping) to end the test, and note its location. 2. Rewire this device following Sections 3.7, 3.8, 3.10, 3.11, 3.13, 3.14, and 3.15 in the manual. 3. Quickly press the test button on this device 3 times and check whether all other devices are now functioning normally.

CAUTION: Due to the loudness of the alarm, always use ear protection when testing.

4 Function Overview

4.1 Smoke Alarm Mode

When products of combustion (smoke or CO) are sensed, the device sounds a loud alarm with voice alerts. If an alarm is triggered, all other interconnected alarms will sound simultaneously with the initiating alarm. When the smoke concentration level drops below the alarm threshold, the alarm will cease.

	Initiating Device	Other Interconnected Devices
Buzzer	3 beeps every 4 seconds.	
LED Indicator	Flashes red 3 times every 4 seconds.	Alternates flashing red and green 3 times every 4 seconds.
Voice Alarm	"Warning. Smoke detected in Location . Evacuate."	

What to Do When the Smoke Alarm Sounds:

- 1. Alert small children in the home as well as anyone else that might have difficulty recognizing the importance of the alarm sounding or that might have difficulty leaving the area without help.
- 2. Plan two ways out! Leave immediately by your escape plan. Don't waste time getting dressed or picking up valuables.
- 3. While leaving, don't open any inside door without first feeling its surface. If hot, or if you see smoke seeping through cracks, don't open that door! Instead, use your alternate exit. If the inside of the door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- 4. If the escape route requires you to go through smoke, stay close to the floor where the air is cleaner. Crawl if necessary, and breathe shallowly through a cloth, wet if possible.
- 5. Once outside, go to your selected meeting place and make sure everyone is there.
- 6. Call the fire department or 911 from your cell phone outside, or from your neighbor's home-not from yours!
- 7. Don't return to your home until the fire officials say that it is all right to do so.

NOTE: The smoke alarm takes precedence when both smoke and carbon monoxide are present.

4.2 Carbon Monoxide Alarm Mode

 **WARNING:** ACTUATION OF YOUR CO ALARM INDICATES THE PRESENCE OF CARBON MONOXIDE (CO) WHICH CAN KILL YOU.

	Initiating Device	Other Interconnected Devices
Buzzer	4 beeps every 5.8 seconds.	
LED Indicator	Flashes red every 5.8 seconds	Flashes red 4 times and green once every 5.8 seconds
Voice Alarm	"Warning. Carbon monoxide detected in Location . Move to fresh air."	

NOTE: When running on battery power only, after 4 minutes of a CO alarm, the buzzer and voice alert will sound only once every 60 seconds.

CO alarm sensor response times:

- At 70 PPM, the unit must alarm within 60-240 minutes.
- At 150 PPM, the unit must alarm within 10-50 minutes.
- At 400 PPM, the unit must alarm within 4-15 minutes.

NOTE: In high levels of CO, the unit will go into alarm in a shorter period of time than at low levels of CO.

What to Do When the Carbon Monoxide Alarm Sounds:

- 1. Operate the Test/Silence button. NOTE: Pressing the button on the alarming unit will silence the alarm notification. If the unit goes into alarm mode again within six minutes, it is sensing high levels of CO which can quickly become a dangerous situation.
- 2. Call your emergency services (Fire Department or 911).
EMERGENCY PHONE #: _____
- 3. Immediately move to fresh air—outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Alert small children in the home as well as anyone else that might have difficulty recognizing the importance of the alarm sounding or that might have difficulty leaving the area without help. Do not reenter the premises or move away from the open door/window until the emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition.
- 4. After following steps 1-3, if the alarm reactivates within a 24 hour period, repeat steps 1-3 and call a qualified appliance technician to investigate sources of CO from fuel burning equipment and appliances, and to inspect for proper operation of equipment.
If problems are identified during this inspection, have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturer's instructions, or contact the manufacturer directly for more information about CO safety and the equipment. Make sure that motor vehicles are not, or have not been, operating in a garage attached or adjacent to the residence. Never restart the source of a CO problem until it has been corrected. Never ignore the sound of the alarm!

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
Mild Exposure	Slight headache, nausea, vomiting, fatigue (often described as “flu-like” symptoms).
Medium Exposure	Severe throbbing headache, drowsiness, confusion, fast heart rate.
Extreme Exposure	Unconsciousness, convulsions, cardio-respiratory failure, death.

 WARNING

1. 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.
2. 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.

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:
 - 1) 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).
 - 2) Negative pressure differential resulting from the use of exhaust fans.
 - 3) Simultaneous operation of several fuel-burning appliances competing for limited internal air.
 - 4) Vent pipe connection vibrating loose from clothes dryers, furnaces, or water heaters.

- 5) 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.

4.3 Silence Mode

When the device is in alarm mode, pressing the Test/Silence button will silence the alarm sound, while the LED continues to flash to indicate the alarm status. The device will automatically exit silence mode after 9 minutes.

Silencing Smoke Alarm Silence	When the test/silence button is pressed, the device will enter a silenced state and audibly announce, “Smoke alarm silenced.” The silence duration for a smoke alarm is 9 minutes. After that, if the smoke concentration level reaches the alarm level again, the device will alarm again. <i>NOTE: When smoke concentration is too high, the smoke alarm cannot be silenced.</i>
Silencing CO Alarm	When the test/silence button is pressed, the device will enter a silenced state and audibly announce, “Carbon monoxide alarm silenced.” The silence duration for a CO alarm is 9 minutes, then it will exit the silence mode. However, if after 6 minutes, the CO concentration is still at the alarm level, the device will alarm again. If the CO concentration is at a very dangerous level higher than 300 ppm, the device cannot be silenced.

NOTES:

1. The silence function is only intended for temporarily silencing an alarm, not for correcting any problems. Note that you cannot silence an alarm by removing the battery from the device or disconnecting from power. Doing so will disable the unit and remove your protection.
2. To silence any interconnected smoke or CO alarm, press the Test/Silence button on the source alarm. To locate the source alarm, press the Test/Silence button on any device; if all devices are silenced except for one device, then the alarm still sounding is the initiating device.
3. When you temporarily silence one device by pressing the Test/Silence button, other interconnected devices are not silenced and will sound an alarm together if they detect smoke or CO.

 **WARNING:** IF THERE IS ANY DOUBT ABOUT THE CAUSE OF THE ALARM, IT SHOULD BE ASSUMED THAT THE ALARM WAS TRIGGERED BY DANGEROUS LEVELS OF CARBON MONOXIDE, AND THE RESIDENCE SHOULD BE EVACUATED.

4.4 Test Mode

CAUTION

- 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.

Make sure to perform both individual and interconnected tests for each alarm after installation. In addition to the weekly tests you should perform, it is recommended to test the alarm after returning from a long trip or vacation.

Test a Single Alarm		Test All Interconnected Alarms
Action	Select one device and briefly press the Test/Silence button. The device will begin testing. During the test, press the Test/Silence button once to cancel the test. <i>NOTE: Pressing the Test/Silence button has no effect until the power-on voice prompt has finished.</i>	Select one device and press and hold the Test/Silence button. The device will begin the interconnected test. Releasing the Test/Silence button during the test will cancel it.
Indication	The device will emit voice prompts and beeps, accompanied by LED flashing.	1. All interconnected devices will emit voice prompts and beeps, accompanied by LED flashing. 2. If other interconnected alarms in the network do not support the interconnected voice test, they will only beep with LED flashing. <i>NOTE: If an alarm that does not support the interconnected voice test initiates the test, this device will respond with a voice prompt without the location announcement.</i>
Result	1. If the test is successful, the device will announce "Normal working status." 2. If the test fails, the device will announce a specific fault message. Please refer to Section 7 "Troubleshooting" for further guidance.	1. If the test is successful, all other interconnected devices will emit audible and visual alerts. 2. If the test fails, only the device you pressed will sound, while the other alarms remain silent. This indicates an issue with the interconnect wiring of that unit. Please repeat Sections 3.7, 3.8, 3.10, 3.11, 3.13, 3.14, and 3.15. If you have confirmed that the wiring is correct but the issue persists, please contact customer support.
Attention	If the device you pressed does not sound, please refer to the "Troubleshooting" section.	

NOTES:

- 1. The current test mode does not indicate a real smoke/CO alarm.
- 2. The test function accurately checks the sensor and circuitry without the need for actual smoke or CO.
- 3. If your device fails to emit an audible test alert, please refer to the Troubleshooting Section.

CAUTION

- 1. Due to the loudness of the alarm, always use ear protection when testing.
- 2. Do not use an open flame to test your alarm, you could damage the alarm or ignite combustible materials and start a structure fire.
- 3. Do not attempt to test this unit with retail "canned smoke" products. those products are intended for use by trained professionals and produce inconsistent results when misused. over-application of canned smoke can permanently damage the alarm.

4.5 Smoke and CO Alarm Reminder Mode

The device will remind you of any smoke and CO alarm you may have missed:

Smoke Alarm Reminder	If a smoke alarm is triggered and then returns to standby mode after the smoke concentration drops below the alarm threshold, the LED will stay red for 2 seconds every 30 seconds, paired with a voice alert saying, "Warning. Smoke was detected. For your safety, please check immediately!" This will continue for 24 hours. After 24 hours, the voice alert will stop, but the LED will continue to stay red for 2 seconds every 30 seconds.
CO Alarm Reminder	If a CO alarm is triggered and then returns to standby mode after the CO concentration drops below the alarm level, the LED will alternate flashing red and yellow for 1 second every 30 seconds, paired with a voice alert saying, "Warning. Carbon monoxide was detected. For your safety, please check immediately!" This will continue for 24 hours. After 24 hours, the voice alert will stop, but the LED will continue to alternate flashing red and yellow for 1 second every 30 seconds.

NOTES:

- 1. Briefly pressing the Test button, powering off, or switching from AC and DC power to DC power only (battery-powered only) will clear the alarm memory, and the device will return to normal working mode.
- 2. Only the most recent alarm is recorded; new alarm memory will overwrite previous records.
- 3. This function is not available when powered by DC only (battery-powered only).
- 4. Only the actively triggered device exhibits this behavior; there is no interconnection effect.

4.6 Low-Battery Mode

When the device’s backup battery is running low, the device will alert:

AC and DC Powered	The LED indicator flashes yellow once every 60 seconds, paired with a verbal warning “Caution. Low battery. Replace the battery now.”
DC Powered (battery-powered only)	The LED indicator flashes yellow once every 60 seconds. For the first 15 minutes, the device will give a verbal warning “Caution. Low battery. Replace the battery now.” every 60 seconds. After 15 minutes, the device will stop the voice alert and beep once every 60 seconds.

- NOTES:
- 1. During the low battery alarm, pressing the device’s Test/Silence button will silence the alarm for 10 hours. After this period, the low battery alarm will resume. During this silence period, the LED will continue flashing yellow in its regular pattern, indicating the device’s low battery mode.
 - 2. When the battery is nearly depleted, the device will no longer enter silence mode.
 - 3. You can replace the old battery with a CR123A lithium battery. For replacement instructions, please refer to Section 5.2 “Battery Replacement.”
 - 4. Only the device with low battery will behave as described; this will not trigger interconnected alarms.

4.7 Fault Mode

If the device’s core components malfunction, the device will alert you as follows:

Smoke Sensor Malfunction		CO Sensor Malfunction
AC and DC Powered	LED indicator flash yellow twice every 60 seconds and the device will give a verbal warning “Caution. Smoke sensor malfunction. Replace the device now.”	LED indicator flash yellow twice every 60 seconds and the device will give a verbal warning “Caution. Carbon monoxide sensor malfunction. Replace the device now.”
DC Powered (battery-powered only)	LED indicator flash yellow twice every 60 seconds. For the first 15 minutes, the device will give a verbal warning “Caution. Smoke sensor malfunction. Replace the device now.” After 15 minutes, the device will stop the voice alert and beep twice every 60 seconds.	LED indicator flash yellow twice every 60 seconds. For the first 15 minutes, the device will give a verbal warning “Caution. Carbon monoxide sensor malfunction. Replace the device now.” After 15 minutes, the device will stop the voice alert and beep twice every 60 seconds.

- NOTES:
- 1. Fault alarms cannot be silenced. If you detect a fault, please replace the device immediately.
 - 2. Only the faulty device will exhibit this behavior; there is no interconnection with other devices.

4.8 Smoke Chamber Contamination Mode

If the core part of the smoke sensor, the smoke chamber, is contaminated by the surrounding environment, causing abnormal operation, the device will alert you as follows:

AC and DC Powered	The LED indicator flashes yellow 4 times every 60 seconds, paired with a verbal warning “Caution: The smoke chamber is contaminated. Keep the surrounding environment clean and remove dust from the alarm surface.”
DC Powered (battery-powered only)	The LED indicator flashes yellow 4 times every 60 seconds. For the first 15 minutes, the device will give a verbal warning “Caution: The smoke chamber is contaminated. Keep the surrounding environment clean and remove dust from the alarm surface.” every 60 seconds. After 15 minutes, the device will stop the voice alert and beep 4 times every 60 seconds.

- NOTES:
- 1. 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 using a vacuum cleaner with a soft brush attachment, then reinstall the product on the ceiling. Monitor the device continuously; if the alarm persists, replace the product immediately.
 - 2. Only devices with smoke chamber contamination monitoring will behave as described above; there will be no interconnection with other devices.

4.9 End-of-Life Mode

When the device reaches its 10-year service life, the device will alert you as follows:

AC and DC Powered	The LED indicator flashes yellow 3 times every 60 seconds, paired with a verbal warning “Caution. Low battery. Replace the battery now.”
DC Powered (battery-powered only)	The LED indicator flashes yellow 3 times every 60 seconds. For the first 15 minutes, the device will give a verbal warning “Caution. Low battery. Replace the battery now.” every 60 seconds. After 15 minutes, the device will stop the voice alert and beep 3 times every 60 seconds.

- NOTES:
- 1. During the end-of-life alarm, pressing the device’s Test/Silence button will silence the alarm for 22 hours. After that, the end-of-life alarm will resume. During this silence period, the LED will continue flashing yellow in its regular pattern to indicate the device’s lifespan has ended.
 - 2. The end-of-life silence feature can only be used within 30 days after the device reaches the end of its service life. After 30 days, this feature will no longer be available, and the device will not enter silence mode.
 - 3. Once the device has reached the end of its service life, it will no longer provide safety protection. Please replace it immediately.
 - 4. Only devices at end-of-life behave this way; no interconnect functionality is affected.

5 Maintenance

5.1 Daily Maintenance

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

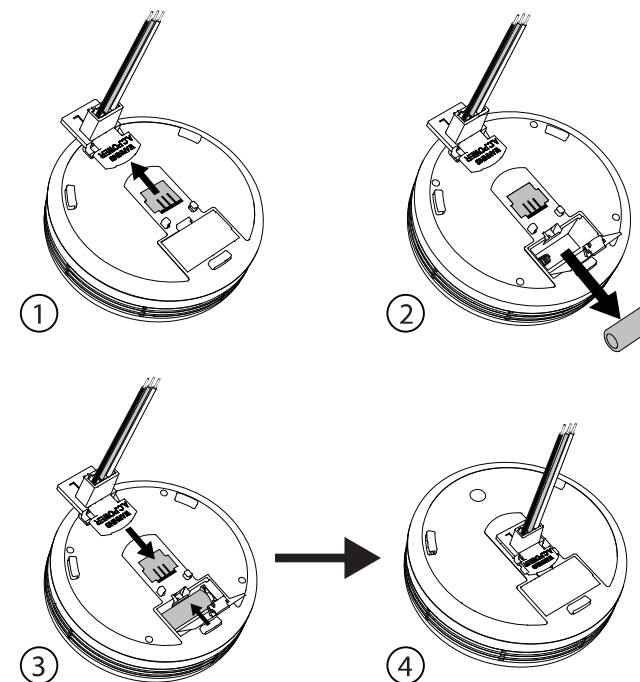
1. Verify the main unit's alarm sound and indicator are working properly by testing the unit once a week.
2. At a minimum, your smoke alarm should be cleaned once every 3 months. Remove the main unit from the ceiling and clean the alarm cover and vents using your vacuum cleaner with a soft brush attachment to remove dust and dirt.
3. Never use detergents or other solvents to clean the main unit.
4. Avoid spraying air fresheners, hairspray or other aerosols near the alarm.
5. Do not paint the main unit. Paint will seal the vents and interfere with the sensor's ability to detect fire.
6. Do not tamper with this device, as this may lead to electrical shock or malfunction.
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. Never attempt to disassemble the main unit or clean the inside. Doing so will not only void your warranty but also pose a risk of electric shock.
9. When household cleaning supplies or similar contaminants are used, the area should be ventilated.
10. If your home is undergoing renovations or deep cleaning, it is recommended to use the anti-dust cover provided with the device to protect it. The anti-dust cover will prevent dust and other debris that may cause false alarms or malfunctions from entering the device.

5.2 Battery Replacement

When the device's backup battery is running low, the device will alert you (see Section 4.8 **Low-Battery Mode**). Please follow the steps below to replace the battery immediately. Note that this alarm requires a standard 3 V lithium battery.

1. Obtain a new CR123A lithium battery, which you can purchase from retailers.
2. Switch off the correct circuit breaker for the room where you are replacing the battery or remove the fuse from the fuse box. Otherwise, it can result in serious electrical shock, personal injury, or even death. Do not restore power until the device is mounted back on the bracket.
3. Unscrew the alarm from the mounting bracket and remove the AC Connector.
4. Open the battery compartment and remove the old battery.
5. Insert the new battery, making sure it is properly aligned. Match the battery terminals with the device terminals.
6. Close the battery compartment, plug back in the AC connector, and mount the device back onto the bracket.
7. Switch the power back on or replace the fuse.
8. After turning on the AC power, all alarms properly connected to AC power will show a steady green LED. Then test the device by pressing the Test/Silence button.

NOTE: Constant exposure to high or low humidity or temperatures may reduce battery life.



⚠ WARNING: ELECTRICAL SHOCK HAZARD

Disconnect AC power before changing the battery, failure to turn off the power may result in serious electrical shock, injury and death.

WARNING

1. 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. Never charge a battery unless it is a rechargeable battery.
4. Do not mix alkaline, standard (carbon-zinc) or rechargeable (Ni-Cd; Ni-MH) batteries.
5. Different types of batteries or new and used old batteries are not to be mixed. Do not mix batteries of different manufacturers, capacities, or sizes.
6. Batteries must be inserted with the correct polarity. Replacement of a battery with an incorrect type can defeat the safeguard. There will be a risk of fire or explosion if a battery is replaced by an incorrect type.
7. Constant exposure to high or low temperatures or high humidity may reduce battery life.

8. Use only batteries specified in marking. Use of a different battery may have a detrimental effect on alarm operation.
9. The secondary power battery is a non-rechargeable battery. Please check the battery regularly. If it is short of power, it should be replaced in time.
10. Test the alarm for correct operation using the test facility, whenever the battery is replaced.

6 Visual And Audible Indicators

Mode	LED Indicators	Audible Indications	Action/Note
Powering On	Runs through 2 cycles (red/yellow/green/blue) in sequence.	Beeps once and announces "Hello from X-Sense."	None
		Announces "Location not set. Press the Location button to select a location."	Location not set. Press the location button to set the location.
		Announces "Press the Test/Silence button to test."	Location set. Press the Test/Silence button to test.
Standby Mode	AC and DC Powered: remains green.	None	None
	DC Powered: flashes green once every 60 seconds.		

Setting Location		Flashes red once every 3 seconds.	Location not set.	Announces "Location not set. Press the Location button again to select a location."	Press down the Location Button. After the voice guide has ended, the LED will flash red every 3 seconds to indicate that the device is currently in the location setting mode, and the LED will continue to flash until it returns to standby mode.
			Location set.	Announces " Location set. Press the Location button again to change the set location."	
Test Mode	Test a single unit.	1 set of 3 red flashes followed by 2 set of 4 red flashes.	Announces "This is only a test. The alarm will sound loudly. You can press the Test/Silence button to cancel the test."	Short press the Test/Silence button to start testing a single unit. During the test, short press the Test/Silence button again to cancel the test.	
			3 long beeps and announces "Testing the smoke sensor."		
			4 quick beeps and announces "Testing the carbon monoxide sensor." repeated for 2 cycles		
			Announces "The test is finished."		

			Announces "Normal working status."	Normal functioning.
			Announces "Caution. Smoke sensor malfunction. Replace the device now."	Smoke sensor malfunction. Please replace the device immediately.
			Announces "Caution. Carbon monoxide sensor malfunction. Replace the device now."	Carbon monoxide sensor malfunction. Please replace the device immediately.
			Announces "Caution. Low battery. Replace the battery now."	Low battery. Please replace the battery immediately.
			Announces "Caution. The alarm has reached the end of its lifetime. Replace the device now."	Device has reached the end of its service life. Please replace the device immediately.

	Test all interconnected units.	Flashes red rapidly.	Initiating alarm.	Announces “This is a test for all units. Please confirm if other units receive this test signal from Location . To cancel, release the Test/Silence button.”	Press and hold the Test/Silence button on one device in the interconnected network to start testing all interconnected units. Release the Test/Silence button during the test to cancel it.
		Flashes red and green sequentially.	Other interconnected alarms in the network.	Announces “Test signal received from Location , not a real alarm.”	
	Interconnection Test	Flash red once every 1 second.	Initiating alarm.	Beeps once every 1 second	Select a device with correct wiring and quickly press the test button 3 times to start the test. Press the test button on this device again to cancel the test.
		Flash red once every 10 seconds.	Other interconnected alarms in the network.	Beeps once every 10 seconds.	
Alarm Drill Mode		Consistent with Alarm Mode behavior.	Consistent with Alarm Mode behavior.		Consistent with Alarm Mode behavior.
Smoke and CO Alarm Reminder Mode		LED stays red for 2 seconds every 30 seconds.	Announces “Warning. Smoke was detected. For your safety please check immediately.”		The device has previously alarmed. Briefly pressing the Test button, powering off, or switching from AC and DC power to DC power (battery-powered only) will clear the alarm memory and restore standby mode.
		LED alternates flashing red and yellow for 1 second every 30 seconds (total on time 2 seconds).	Announces “Warning. Carbon monoxide was detected. For your safety please check immediately.”		
Alarm Mode	Unit detected smoke and initiated an alarm.	Flashes red 3 times every 4 seconds.	3 long beeps and announces “Warning. Smoke detected in Location . Evacuate.”		Dangerous smoke concentration is detected. Please evacuate immediately.

	Unit detected CO and initiated an alarm.	A CO concentration ranging from 70 to 999 ppm has been present for a certain time period. The LED indicator flashes red 4 times every 5.8 seconds.	4 quick beeps and announces "Warning. Carbon monoxide detected in Location . Move to fresh air."	Dangerous CO concentration is detected, and has reached the alarm status. Immediately move to fresh air.
	Smoke/CO concentration level drops.	None	Announces "Danger cleared."	Alarm cancellation: when the smoke/CO concentration level drops below the alarm threshold, the alarm signal will stop.
	All other interconnected units in the network.	Flashes red and green 3 times sequentially every 4 seconds.	3 long beeps and announces "Warning. Smoke detected in Location . Evacuate."	Dangerous smoke concentration is detected by the initiating unit in the network. Please evacuate immediately.
		The LED flashes red 4 times, then the LED flashes green once every 5.8 seconds.	4 quick beeps and announces "Warning. Carbon monoxide detected in Location . Move to fresh air."	Dangerous CO concentration is detected by the initiating unit, and has reached the alarm status. Immediately move to fresh air.

Silence Mode	Flashes red 3 times every 4 seconds.	Announces "Smoke alarm silenced."	Smoke silence mode: After 9 minutes, the unit will exit silence mode.
		Announces "This alarm cannot be silenced. Smoke levels too high."	When the smoke concentration is too high, the sound cannot be muted by pressing the test button.
	Flashes red 4 times every 5.8 seconds.	Announces "Carbon monoxide alarm silenced."	CO silence mode: After 9 minutes, the unit will exit silence mode.
	Flashes yellow once every 60 seconds.	Announces "Temporarily silenced."	Silence mode during low battery: After 10 hours, the unit will exit silence mode.
	Flashes yellow 3 times every 60 seconds.	Announces "Temporarily silenced."	Silence mode during the end of life cycle: After 22 hours, the unit will exit silence mode.
Low Battery Mode	Flashes yellow once every 60 seconds.	Announces "Caution. Low battery. Replace the battery now." When in DC power mode (battery powered only), voice alert plays for the first 15 minutes. After 15 minutes, it changes to 1 beep every 60 seconds.	Replace the battery immediately.

Fault Mode	Flashes yellow 2 times every 60 seconds.	Announces "Caution. Smoke sensor malfunction. Replace the device now." When in DC power mode (battery powered only), the voice alert plays for the first 15 minutes. After 15 minutes, it changes to 2 beeps every 60 seconds. Announces "Caution. Carbon monoxide sensor malfunction. Replace the device now." When in DC power mode (battery powered only), the voice alert plays for the first 15 minutes. After 15 minutes, it changes to 2 beeps every 60 seconds.	Replace the alarm immediately.
Smoke Chamber Contamination Mode	Flashes yellow 4 times every 60 seconds.	Announces "Caution: The smoke chamber is contaminated. Keep the surrounding environment clean and remove dust from the alarm surface." When in DC power mode (battery powered only), the voice alert plays for the first 15 minutes. After 15 minutes, it changes to 4 beeps every 60 seconds.	Keep the area around the product clean. Remove the product from the ceiling, vacuum the outside of the device using a vacuum cleaner with a soft brush attachment, then reinstall the product on the ceiling. Monitor the device, and if the malfunction continues, replace the product immediately.

End-of-Life Mode	Flashes yellow 3 times every 60 seconds.	Announces "Caution. The alarm has reached the end of its lifetime. Replace the device now." After 15 minutes, it changes to 3 beeps every 60 seconds.	Replace the alarm immediately.
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7 Troubleshooting

Problem	Possible Cause	Solution
The device is not triggered when it is tested with smoke.	The device is not turned on.	Make sure the battery insulating film is removed. If the battery runs out, please replace the battery.
	The smoke is not reaching the sensor properly.	Applying smoke directly to the front mesh of the device is ineffective; smoke must enter the device through the side vents to trigger the alarm.
	The time duration is insufficient for the device to detect smoke.	Continuous smoke is necessary for the device to be triggered. When smoke reaches the smoke sensor, the device will be triggered in 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 announces "Please install the backup battery," every 5 seconds, and the LED flashes yellow once at the same time.	The battery insulating film has not been removed, or the battery is not properly installed.	Remove the battery insulating from this device and ensure the battery is properly installed.
The alarm does not sound during a test.	The device has no power.	Make sure the battery insulating film is removed. If the battery runs out, please replace the battery.
	The button was not fully pressed.	Make sure the Test button is pressed completely.

Some devices don't respond when you press a device's test button 3 times to start the interconnection test.	The unresponsive device is wired incorrectly.	1. Note the location of the unresponsive device. 2. Press the test button on the first device (flashing red light once per second and beeping) to end the test, and remember its location. 3. Rewire the unresponsive device according to Sections 3.7, 3.8, 3.10, 3.11, 3.13, 3.14, and 3.15 in the manual. 4. Go back to the first device, quickly press the test button 3 times, and check whether the previously unresponsive device now behaves normally.
	The first device is wired incorrectly.	1. Press the test button on the first device (flashing red light once per second and beeping) to end the test, and note its location. 2. Rewire this device following Sections 3.7, 3.8, 3.10, 3.11, 3.13, 3.14, and 3.15 in the manual. 3. Quickly press the test button on this device 3 times and check whether all other devices are now functioning normally.
When alarming, the voice does not announce the location, but only says "Warning. Smoke detected. Evacuate." or "Warning. Carbon monoxide detected. Move to fresh air."	The device that triggered the alarm does not support the location feature.	When this model is hardwired interconnected with other X-Sense alarms, if an active alarm from another device does not support location reporting, this model—when it alarms passively—will only announce the hazard type (smoke or CO) and will not provide the specific location of the alarm.
	The actively alarming device has no location set.	According to the manual, set the location for each device based on its installation site.

It is not possible to determine which device triggered the alarm first during an alarm event.		Method 1: Judge based on the voice announcement. When an alarm occurs, all devices will simultaneously announce the location name of the device that triggered the alarm first.
		Method 2: Observe the indicator lights. The actively alarming device's LED will flash red continuously, while passive devices will flash red and green alternately during the alarm.
		Method 3: Press the test button on any device during the alarm state. 1. If all devices stop sounding, the device you pressed is the one that triggered the alarm first. 2. If one device continues to sound, that device is the original alarm source and you need to press its test button to silence it.
False alarms are triggered intermittently when residents are cooking, taking showers, etc.	Incorrect device installation location	Avoid installing the device near kitchen appliances, dusty areas, or shower areas, and avoid locations where the temperature is below 40°F (4.4°C) or above 100°F (37.8°C). Please check the installation location as described in Section 2 above.
	Device is dirty and needs cleaning.	Regularly clean dust and dirt from the device. See Section 5.1 above.
The LED flashes yellow once every 60 seconds, accompanied by the voice alert "Caution. Low battery. Replace the battery now."	Low battery.	Replace the battery immediately. If you cannot replace it right away, pressing the Test/Silence button will mute the low battery alert for 10 hours.

The LED flashes yellow twice every 60 seconds, accompanied by the voice alert "Caution. Smoke sensor malfunction. Replace the device now." or "Caution. Carbon monoxide sensor malfunction. Replace the device now."	Device malfunction.	Replace the device immediately.
The LED flashes yellow 4 times every 60 seconds, accompanied by the voice alert "Caution: The smoke chamber is contaminated. Keep the surrounding environment clean and remove dust from the alarm surface."	Smoke chamber contamination.	Keep the area around the device clean. Remove the device from the ceiling, vacuum the outside of the device using a vacuum cleaner with a soft brush attachment, then reinstall the device on the ceiling. Monitor the device, and if the issue persists, replace the device immediately.
The LED flashes yellow 3 times every 60 seconds, accompanied by the voice alert "Caution. The alarm has reached the end of its lifetime. Replace the device now."	The device has reached the end of its service life.	Replace the alarm immediately. If immediate replacement is not possible, pressing the Test/Silence button can mute the end-of-life alarm for 22 hours.

8 Limitations of Smoke and Carbon Monoxide Alarms



WARNING: PLEASE READ CAREFULLY AND THOROUGHLY.

1. Life safety from fire in residential occupancies is based primarily on early notification to occupants of the need to escape, followed by the appropriate egress actions by those occupants.

- 1) There are situations where a smoke alarm may not be effective to protect against fire as stated in the NFPA Standard 72. For instance:
 - a) smoking in bed
 - b) leaving children home alone
 - c) cleaning with flammable liquids, such as gasoline
- 2) Fire warning systems for dwelling units are capable of protecting about half of the occupants in potentially fatal fires. A smoke alarm may not be effective in some situations, such as during incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located smoke alarms, or when victims are in close contact with the fire (for example, when a person's clothes catch fire while cooking), too old or young, or physically or mentally impaired such that they cannot escape even when warned early enough that escape should be possible. For these people, additional strategies such as protection-in-place or assisted escape or rescue are necessary. *
- 2) This model meets the latest residential smoke alarm standards, which includes enhanced resistance to nuisance alarms from cooking. Industry experts recommend that both ionization and photoelectric smoke alarms be installed to help ensure optimal detection of the various types of fires that can occur within the home. Ionization sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smoldering fires) sooner than ionization alarms.
3. A battery powered alarm must have a battery of the specified type, in good condition and installed properly (this model includes one CR123A replaceable backup batteries).
4. Smoke alarms must be tested regularly to make sure the battery and the alarm circuits are in good operating condition.
5. Smoke alarms cannot provide an alarm if smoke does not reach the alarm. Therefore, smoke alarms may not sense fires starting in chimneys, within walls, on roofs, on the other side of a closed door or other obstructions.
6. If the alarm is located outside the bedroom or on a different floor, it may not wake up a sound sleeper.
7. The use of alcohol or drugs may also impair one's ability to hear the smoke alarm. For optimal detection, a smoke alarm should be installed in each sleeping area on every level of a home. This alarm is not intended to alert hearing impaired individuals.
8. IMPORTANT: This alarm is designed to detect carbon monoxide gas from ANY source of combustion. It is NOT designed to detect any other gas.

CAUTION: This alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas. Never restart the source of a CO problem until it has been fixed. NEVER IGNORE THE ALARM!

WARNING

THIS PRODUCT IS INTENDED FOR USE IN ORDINARY

INDOOR LOCATIONS OF FAMILY LIVING UNITS. IT IS NOT DESIGNED TO MEASURE COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) COMMERCIAL OR INDUSTRIAL STANDARDS. IT IS NOT SUITABLE FOR INSTALLATION IN HAZARDOUS LOCATIONS AS DEFINED IN THE NATIONAL ELECTRIC CODE. IT IS NOT DESIGNED FOR USE IN A RECREATIONAL VEHICLE (RV) OR BOAT.

1. The installation of this device should not be used as a substitute for proper installation, use, and maintenance of fuel burning appliances, including appropriate ventilation and exhaust systems.
2. This alarm does not prevent CO from occurring, nor can it solve any existing CO problem.

WARNING

THIS DEVICE IS DESIGNED TO HELP PROTECT INDIVIDUALS FROM ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT WILL NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT, CONSULT A MEDICAL PRACTITIONER. INDIVIDUALS WITH

MEDICAL PROBLEMS MAY CONSIDER USING WARNING DEVICES WHICH PROVIDE AUDIBLE AND VISUAL SIGNALS FOR CARBON MONOXIDE CONCENTRATIONS UNDER 30 PPM.

1. This alarm has not been investigated for carbon monoxide detection below 70 PPM.
2. This device requires a continuous supply of electrical power from a healthy battery or AC connection, depending on the model. It will not work without power.

* Reference Underwriters Laboratories (UL) standard 2034

9 Electrical Shock Hazard

1. Turn off power to the area where you want to install this unit at the circuit breaker or fuse box before installation. Failure to turn off power before installation may result in serious electrical shock, injury, or death.
2. Do not restore power until all alarms are completely installed. Doing so may result in serious electrical shock, injury, or death.
3. Turn off power to the area where the alarm is installed before removing it from the mounting bracket. Failure to turn off power first may result in serious electrical shock, injury, or death.
4. If any unit in the series does not alarm, turn off power and re-check all connections. After that, if it does not alarm yet, replace it immediately.
5. Attempting to disconnect the power connector from the unit while the power is on may result in electrical shock, serious injury, or death.
6. Failure to meet any of the above requirements could damage the units and cause them to malfunction.
7. The alarm cannot be operated from power derived from a square wave, modified square wave, or modified sine wave inverter. These types of inverters are sometimes used to supply power to structures in off-grid installations, such as solar or wind-derived power sources. These power sources produce high peak voltages that can damage the alarm.
8. Never disconnect power from an AC-powered unit to stop a false alarm. Doing so will disable the unit and remove your protection. To silence an alarm, open a nearby window or fan the smoke away from the unit. The

alarm will automatically reset when it returns to normal operation.

9. Improper wiring of the power connector will cause damage to the alarm and may lead to a non-functioning alarm. Test the alarm to ensure proper installation.

10 Statement

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.

ISED Statement

English: This device contains license (B)-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license (B)-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. The digital apparatus complies with Canadian CAN ICES-3 (B) / NMB-3 (B).

Radiation Exposure Statement

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. L'appareil numérique est conforme à CAN CAN ICES-3 (B)/NMB-3 (B).
Déclaration d'exposition aux radiations
Cet équipement est conforme Canada limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à distance minimum de 20 cm entre le radiateur et votre corps.

11 Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities are available. Please check with your local authorities or retailers for recycling advice.



12 Manufacturer and Service Information

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