



## **Wireless Interlinked Combination Smoke and Carbon Monoxide Alarm**

### User Manual

Model: XP01-W



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

## Introduction

All X-Sense combination smoke and carbon monoxide alarms conform with regulatory requirements, including UL 217 and UL 2034 standards and are designed to detect both smoke and carbon monoxide.

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

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

- The installation of the apparatus should not be used as a substitute for proper installation, use and maintenance of fuel-burning appliances including appropriate ventilation and exhaust systems.
- This apparatus is to be installed by a competent person.
- It is not tested for use in a caravan or boat.

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

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

## Package Contents

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

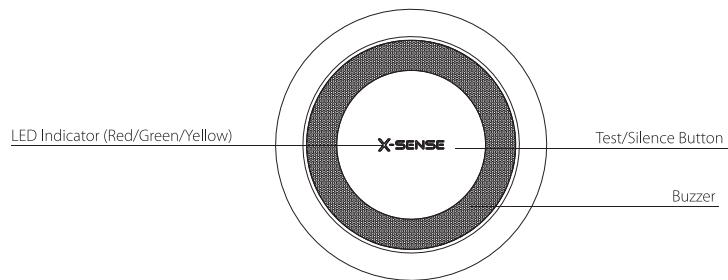
## Technical Specifications

Power Supply	Sealed lithium battery
Sensor Type	Smoke: Photoelectric CO: Electrochemical
Safety Standards	UL 217 and UL 2034
CO Sensitivity	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)
Alarm Loudness	≥ 85 dB at 10 ft (3 m) @ 3.2 ± 0.3 kHz pulsing alarm
Silence Duration	≤ 9 minutes
Operating Frequency	915 MHz
Maximum Number of Interconnected Units	24 wireless units (only compatible with X-Sense wireless alarms)
Transmission Range	Over 820 ft (250 m) in open air

## Product Overview

### ⚠ CAUTION

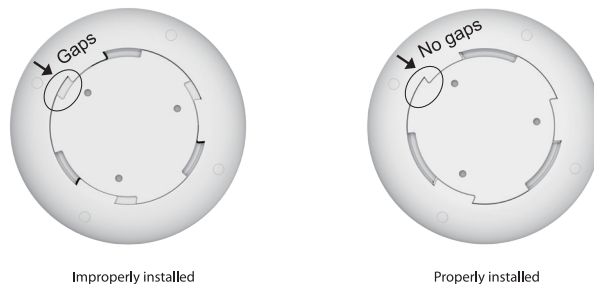
THIS SMOKE AND CO ALARM IS DESIGNED FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR MOISTURE. DO NOT KNOCK OR DROP THE ALARM. DO NOT OPEN OR TAMPER WITH THE ALARM AS THIS COULD CAUSE MALFUNCTION.



### Activating the Alarm Before Test

When attaching the alarm to the mounting bracket, twist the alarm clockwise first, then firmly press down on the alarm and rotate until it locks into place without any gaps. If not mounted properly, the alarm will not turn on. If the alarm is not properly installed or the mounting bracket is removed, the alarm will power off.

When properly installed, there are no gaps between the bracket and alarm as shown in the image below:



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

## 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, press and hold the test button 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.

*NOTE: After a test has begun, the alarm will sound and the LED 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. 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 unit will exit from silence 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 exceed the alarm threshold, the unit will enter another alarm state. Otherwise, the unit will exit the silence mode after 9 minutes and resume normal operation. If the CO concentration is above 300 ppm, the silence function cannot be enabled.

### NOTES

- 1. 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.*
- 2. While interconnected, the initiating unit cannot be triggered again during the 9-minute silence duration. However, all other interconnected units can be triggered again if they detect danger during the silence mode.*

## Low Battery

The LED indicator will flash yellow together with one beep every 60 seconds.  
(If you press the test button when there is low battery, the low battery signal will temporarily cease for 10 hours.)

## End of Life

Once the maximum lifetime is reached, the alarm delivers 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.

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

Mode	LED Indicator	Audible Alarm	Remarks
Powering On	Runs through 8 cycles (red/green/yellow) 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 1.5 seconds. 3 long beeps every 1.5 seconds.	Dangerous smoke concentration is detected. Open nearby windows and doors, and immediately move to fresh air.
	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. 4 quick beeps repeating every 5.8 seconds.	Dangerous CO concentration is detected, and has reached the alarm status. Open nearby windows and doors, and immediately move to fresh air.

Alarm Mode	All other interconnected units in the network.	The LED flashes red and green 3 times sequentially every 1.5 seconds.	3 long beeps every 1.5 seconds.	Dangerous smoke concentration is detected by the initiating unit in the network. Please find the initiating unit and take action.
		The LED flashes red 4 times, then the green LED flashes once every 5.8 seconds.	4 quick beeps repeating every 5.8 seconds.	Dangerous CO concentration is detected by the initiating unit, and has reached the alarm status.  Please find the initiating unit and take action.
	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.
	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.
	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 Mode	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 1.5 seconds.	None.	Smoke silence mode: After 9 minutes, the unit will exit silence mode.
	Flashes red 4 times every 5.8 seconds.	None.	CO silence mode: After 9 minutes, the unit will exit silence mode.
	Flashes yellow once every 60 seconds.	None.	Silence mode during low battery: After 10 hours, the unit will exit silence mode.
	Flashes yellow 3 times every 60 seconds.	None.	Silence mode during the end of cycle: After 22 hours, the unit will exit silence mode.
	Flashes green 3 times.	None.	Exiting silence mode.
Low Battery	Flashes yellow once every 60 seconds.	One beep every 60 seconds.	Replace the unit immediately.
Fault	Flashes yellow 2 times every 60 seconds.	2 beeps every 60 seconds.	Please clean your alarm and see if it is working normally. If the unit has malfunctioned, it must be replaced immediately.
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<sup>+</sup> 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<sup>+</sup> 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<sup>+</sup> alarms, but is not designed to communicate with wireless interlinked alarms from other manufacturers.

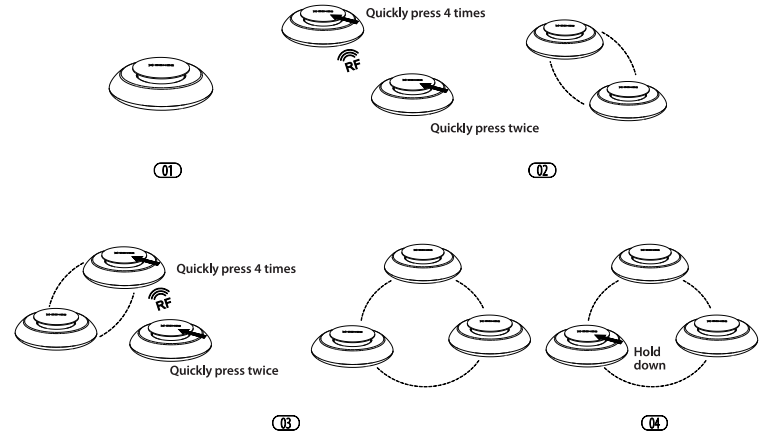
The X-Sense Link+ wireless interlinked alarms in one multi-pack have already been interconnected, and the alarms in each multi-pack have their own independent interlinked network. If you have more than one multi-pack, you will need to connect them all to the same network. Choose one multi-pack as your 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.

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 XP01-W, 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 manual 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 red 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 red 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 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 red 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 red 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 24 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 red. 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 red 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 24 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<sup>+</sup> 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 1.5 seconds. Any other XP01-W units will follow suit—they will beep 3 times every 1.5 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 XP01-W 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 if 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<sup>+</sup> XP01-W is interconnected to other X-Sense wireless alarms, we recommend that every individual alarm be 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	<ul style="list-style-type: none"><li>• The alarm will emit 2 sets of 3 long beeps followed by 2 sets of 4 quick beeps.</li><li>• The LED will flash red during the audible signal.</li><li>• After testing, the alarm will automatically enter standby mode.</li></ul>	<ul style="list-style-type: none"><li>• The initiating unit will beep continuously with the LED flashing red.</li><li>• 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.</li><li>• The units testing should be completed within 3 minutes.</li><li>• After testing, the units will automatically enter standby mode.</li></ul>

*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.*

## Basic Safety Information

### IMPORTANT

1. DANGERS, WARNINGS, AND CAUTIONS ALERT YOU TO IMPORTANT OPERATING INSTRUCTIONS OR TO POTENTIALLY HAZARDOUS SITUATIONS. PAY SPECIAL ATTENTION TO THESE SITUATIONS.
2. THIS COMBINATION SMOKE & CARBON MONOXIDE ALARM IS ONLY APPROVED FOR HOME USE.
3. THIS CARBON MONOXIDE ALARM IS DESIGNED TO DETECT CARBON MONOXIDE FROM ANY SOURCE OF COMBUSTION.
4. CONSTANT EXPOSURES TO HIGH OR LOW HUMIDITY MAY REDUCE BATTERY LIFE.
5. SMOKE ALARMS ARE NOT TO BE USED WITH DETECTOR GUARDS UNLESS THE COMBINATION HAS BEEN EVALUATED AND FOUND SUITABLE FOR THAT PURPOSE.

## ⚠ CAUTION

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

## ⚠ WARNING

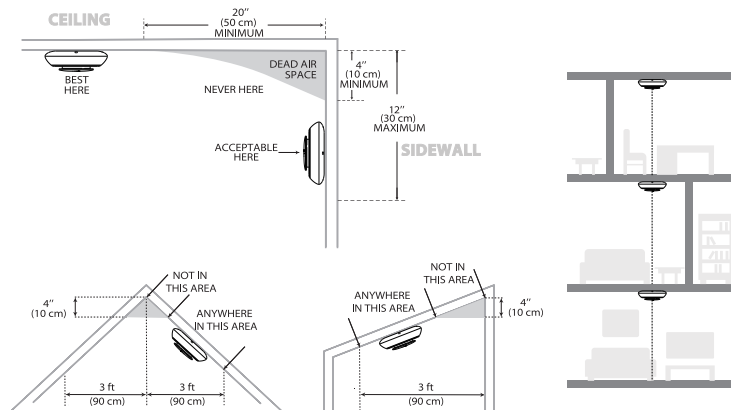
1. NEVER IGNORE ANY ALARM. FAILURE TO RESPOND CAN RESULT IN SERIOUS INJURY OR DEATH.
2. THE SILENCE FEATURE IS ONLY FOR YOUR CONVENIENCE AND WILL NOT CORRECT A PROBLEM. ALWAYS CHECK YOUR HOME FOR A POTENTIAL PROBLEM AFTER ANY ALARM. FAILURE TO DO SO CAN RESULT IN INJURY OR DEATH.
3. TEST THIS SMOKE/CO ALARM ONCE A WEEK. IF THE ALARM EVER FAILS TO TEST CORRECTLY, REPLACE IT IMMEDIATELY! IF THE ALARM CANNOT WORK PROPERLY, IT WILL NOT ALERT YOU TO A PROBLEM.
4. THIS PRODUCT IS INTENDED FOR USE IN ORDINARY INDOOR LOCATIONS OF FAMILY LIVING UNITS. IT IS NOT DESIGNED TO MEASURE CO LEVELS IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) COMMERCIAL OR INDUSTRIAL STANDARDS. INDIVIDUALS WITH MEDICAL CONDITIONS THAT MAY MAKE THEM MORE SENSITIVE TO CARBON MONOXIDE MAY CONSIDER USING WARNING DEVICES WHICH PROVIDE AUDIBLE AND VISUAL SIGNALS FOR CARBON MONOXIDE CONCENTRATIONS UNDER 30 PPM. FOR ADDITIONAL INFORMATION ON CARBON MONOXIDE AND YOUR MEDICAL CONDITION CONTACT YOUR PHYSICIAN.
5. THE REPLACEMENT DATE THAT APPEARS ON THE DEVICE IS THE DATE BEYOND WHICH THE DEVICE MAY NO LONGER DETECT CARBON MONOXIDE ACCURATELY AND SHOULD BE IMMEDIATELY REPLACED.
6. THIS DEVICE IS DESIGNED TO PROTECT INDIVIDUALS FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT MAY NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT, CONSULT A MEDICAL PRACTITIONER.

## Installation Instructions

### Installation Locations

1. Prioritize the installation of an alarm in the bedroom and walkways, and make sure you can hear the alarm from all sleeping areas. In a home with several bedrooms, install an alarm in every bedroom. If you install only one smoke alarm in your home, install the alarm near to all bedrooms where possible, and not in a basement or furnace room.

2. Install an alarm above the stairway and on every floor of the house.
3. Smoke, heat and anything burning will spread horizontally after rising to the ceiling, so install the alarm in the middle of the ceiling where possible. Ensure the alarm is within working distance of all corners of the room.
4. If an alarm cannot be installed in the middle of a ceiling, install at a distance of 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 4–12 inches (10–30 cm) below the ceiling.
6. If the length of a room or hall is beyond 30 feet (900 cm), you will need to install several alarms 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.





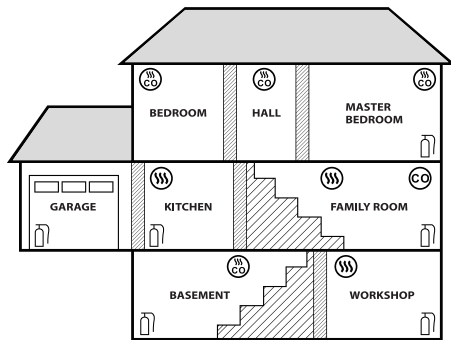
## Locations to Avoid:

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.



**FIRE EXTINGUISHERS**



**SMOKE ALARMS**



**CARBON MONOXIDE ALARMS**



**SMOKE & CO ALARMS**

## How to Install This Alarm

### ⚠ IMPORTANT

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

### ⚠ WARNING

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

## Locations to Avoid

### ⚠ WARNING

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

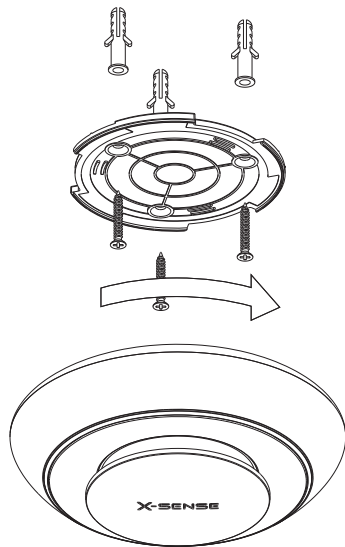
1. Do not install in garages, kitchens, furnace rooms or bathrooms! Do not install within 5 ft (1.5 m) of cooking appliances.
2. Do not install within 3 ft (0.9 m) of the following: The door to a kitchen, or a bathroom that contains a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air flow areas. Avoid excessively dusty, dirty or greasy areas. Dust, grease or household chemicals can contaminate the alarm's sensors, causing the alarm to not operate properly.
3. Place the alarm where drapes or other objects will not block the sensors. Smoke and CO must be able to reach the sensors to accurately detect these conditions. Do not install in peaks of vaulted ceilings, "A" frame ceilings or gabled roofs. Keep out of damp and humid areas.
4. Install at least one (1) foot away from fluorescent lights, as electronic noise may cause nuisance alarms.
5. Do not place in direct sunlight and keep out of insect-infested areas. Extreme temperatures will affect the sensitivity of the smoke/CO alarm.
6. Do not install in areas where the temperature is colder than 40°F (4.4°C) or hotter than 100°F (37.8°C), such as garages and unfinished attics.
7. Do not install in areas where the relative humidity (RH) is above 85%. 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

*NOTE: 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.*

1. Drill three Ø 6.0 mm holes in the wall or ceiling, then insert three plastic anchor plugs into the holes with a hammer.
2. Attach the mounting bracket to the surface of the wall or ceiling with three screws and mount the alarm into the bracket by pushing them together and twisting the unit clockwise.
3. Test the unit by using the Test/Silence button. Ensure the unit sounds in an alarm pattern.

*NOTE: If the alarm is not properly installed or the mounting bracket is removed, the alarm will power off.*



## Maintenance

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

1. Verify the unit's alarm sound and indicators are working properly by testing the unit once a week.
2. Remove the unit from the ceiling/wall and clean the alarm cover and vents with a soft brush attachment once a month to remove dust and dirt.
3. Never use detergents or other solvents to clean the unit.
4. Avoid spraying air fresheners, hair spray or other aerosols near the alarm.
5. Do not paint the unit. Paint will seal the vents and interfere with the sensor's ability to detect smoke or CO. Never attempt to disassemble the unit or clean inside. Doing so will void your warranty.
6. When removed, place the smoke/CO alarm back in its proper location as soon as possible, to assure continuous protection from fire or carbon monoxide poisoning.
7. When household cleaning supplies or similar contaminants are used, the area should be ventilated.

## What You Need to Know About CO

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

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

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

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

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

**Extreme exposure:** Unconsciousness, cardiorespiratory failure, death.

The above levels of exposure relate to healthy adults. Levels differ for those at high risk. Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities. Many cases of reported carbon monoxide poisoning indicate that while victims are aware they are not well, they

become so disoriented they are unable to save themselves by either exiting the building, or calling for assistance. Also, young children and household pets may be the first affected. Familiarization with the effects of each level is important.

### Following Conditions Can Result in Transient CO Situations:

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

## Troubleshooting

PROBLEMS	SOLUTIONS
The alarm does not sound during a test.	<ul style="list-style-type: none"> <li>• Check whether the alarm is properly attached to the mounting bracket.</li> <li>• Make sure you have pushed the test/silence button firmly.</li> <li>• Check the installation positioning. The wireless signal might be blocked or out of range.</li> </ul>
False alarms are triggered intermittently when residents are cooking, taking showers, etc.	<ul style="list-style-type: none"> <li>• Check the location of your alarm (see "Installation Locations").</li> <li>• Clean the alarm (see "Maintenance").</li> </ul>
The LED flashes yellow once every 60 seconds with one beep.	The battery is low. Push the test/silence button once to silence for 10 hours. <b>Replace the alarm immediately.</b>
The LED flashes yellow 2 times every 60 seconds with 2 beeps.	The alarm is malfunctioning. Please clean your alarm or push the test/silence button once to attempt to reset the unit. If the problem still occurs, <b>replace the alarm immediately.</b>

The LED flashes yellow 3 times every 60 seconds with 3 beeps.

The maximum lifetime is reached. Push test/silence button once to silence for 22 hours. **Replace the alarm immediately.**

## Environmental Protection

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



## Manufacturer and Service Information

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 Email: support@x-sense.com