X-5ENSE 深圳市安室智能有限公司	料号	F.1.05.XC0C02	版本号	V1.0
	品名	XCOC-iR-单英语说明书-美规	设计师	刘晓宇
	材质	70g书纸	日期	2024/08/16
	工艺	单黑印刷,骑马钉		
	尺寸	130*70mm		
	公差	±1 mm		

注: 此页不印刷



Scan the QR code to view the product model.



X-SENSE Wi-Fi Carbon Monoxide Alarm User Manual



Model: XC0C-iR

This user manual contains important information regarding the installation and operation of your carbon monoxide alarm. Please take a few minutes to thoroughly read this manual which should be saved for future reference. If you are installing the carbon monoxide alarm for use by others, you must leave this manual—or a copy of it—with the end user.

Introduction

This device is a battery-powered Wi-Fi CO (carbon monoxide) alarm with an advanced electrochemical sensor for domestic use. Please note that this device does not detect smoke, heat, flames or any hazardous gas other than carbon monoxide even though carbon monoxide can be generated by fire. For this reason you must install smoke alarms to provide early warning of fire and to protect you and your family from fire and its related hazards.

AWARNING

- CAUTION: READ THE INSTRUCTIONS CAREFULLY BEFORE OPERATING OR SERVICING.
- 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 SHOULD BE INSTALLED BY QUALIFIED PERSONNEL.
- IT IS NOT TESTED FOR USE IN A CARAVAN OR BOAT.
- 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.

▲ CAUTION

This alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas

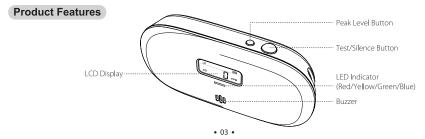
1 x User Manual

Package Contents

1 x CO Alarm 1 × CR123A Battery (Pre-installed) 2 × Anchor Plugs 1 × Warranty Card 2 × Carbon Monoxide Safety Stickers

1 × Drill Hole Spacing Indicator Label

2 x Screws





Test/Silence Button

The test/silence button is used to test the unit's electronics and to silence the unit during an alarm.

Short press the test button and you will hear a short beep, indicating that the alarm has entered the test mode. A test push notification will be sent to your smartphone by the app. Please refer to the "Alarm Testing" 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 indicator will flash red. This does not indicate that CO is present. If you press the test button during an alarm state, the unit will enter the silence mode.

CO Alarm Levels

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

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

When CO is detected and the alarm sounds, the CO concentration will be displayed on the LCD and a blue backlight will be lit. The LED indicator will flash red and the alarm will issue 4 short beeps, repeating the cycle every 5.8 seconds. An alarm push notification will be sent to your smartphone by the app.

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	osure Severe throbbing headache, drowsiness, confusion, fast heart rate.		
Extreme Exposure Unconsciousness, convulsions, cardiorespiratory failure, death.			

AWARNING

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

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

Low-Battery Warning

If the battery is low, the unit will chirp once, and the LED indicator will flash yellow every 60 seconds to indicate that the battery needs replacement. A low battery notification will be sent to your smartphone by the app.

If you press the test button when the battery is low, the chirp will temporarily cease for 10 hours, but the LED flashes yellow once every 60 seconds; if you press the test button again, the unit will enter the test mode and then exit silence mode during low battery.

End-of-Life Indication and Hush Control

Once the maximum lifetime (10 years) is reached, the alarm will deliver 3 beeps and the LED indicator will flash yellow 3 times every 60 seconds. This end-of-life signal can be temporarily silenced for 22 hours by pressing the test button. During the silence period, the LED flashes yellow 3 times every 60 seconds.

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. During this end-of-life hush period, your alarm continues monitoring CO and provides protection as usual.

To help identify the date to replace the alarm, write down the date of first operation on the dedicated label on the side of the alarm.

Device Setup

Download the X-Sense Home Security App





To download the app, search for **K-Sense Home Security** in the Apple App Store or Google Play Store, or simply scan the QR code. Create an account using a valid email address. If you already have an account, make sure it is updated to the latest version.

Note: Make sure your smartphone supports iOS 11 and higher, or Android 8.0 and higher.

Apple

GOOGLE Play

Before connecting devices, make sure that:

- 1. You know your Wi-Fi network name and password.
- You are connecting your device using a 2.4 GHz Wi-Fi network (incompatible with 5 GHz Wi-Fi network).
- 3. Make sure the Bluetooth on your phone is turned on.

• 06 •

• 07 •

Note: When the device is configured via Wi-Fi, make sure your mobile phone and devices are as close to the router as possible, which can speed up device configuration.

App Features

Notifications: You will receive push notifications on the app for alarms, danger cleared, low battery, device malfunction, end of life, etc.

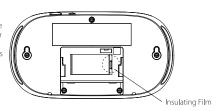
Device Test: Simply tap the Device Test button in the app to test whether the device is functioning properly.

Device Sharing: You can share the device with your family members and friends. They will receive app push notifications for alarms and have the ability to silence the device, view historical events, etc.

Installation Method

To Activate the Device

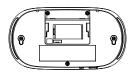
Before use, pull out the battery insulating film from the battery compartment to power on the device. After the device is turned on, the buzzer will beep once, the LCD backlight will light up, and the LED indicator will flash through 8 cycles (yellow/green/red). The device will then enter standby mode.



Follow the process below to open the battery compartment cover:

Hold the alarm with both hands and put your thumbs on both ends of the battery compartment cover. Then, push the cover upwards with some force to remove it.





AWARNING

• CONSTANT EXPOSURE TO HIGH OR LOW TEMPERATURES AND HIGH HUMIDITY MAY REDUCE BATTERY LIFE.

• 08 •

- KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.
- In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.
- NEVER charge a battery.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (Ni-Cd; Ni-MH) batteries.
- 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.

Add a Carbon Monoxide Alarm

- Tap "⊕" in the right top corner of the app homepage, select "Carbon Monoxide Alarms", then select "Wi-Fi CO Alarms (Standalone, working without Base Station)". Then select "XCOC-iR".
- Enter a name for the alarm. Select the home you created or create a new home for the alarm, then select the room in which it is installed.
 If you create a new home, you will need to enter a name and select the country or region in which you live. After selecting the room, tap
 "Next" to add a device.
- 3. Remove the insulating film to power up the alarm.
- 4. Press and hold the test/silence button on the alarm for 5 seconds until it flashes blue. Before the light goes off, immediately tap "Operation Confirmed", then tap "Next"; or else you need to repeat the step to make the LED indicator flash blue.

NOTE: If your mobile phone finds two or more devices waiting to connect to the network, you need to tap to select the corresponding device you want to add.

- 5. Connect to a 2.4 GHz Wi-Fi network and make sure you enter the correct password. Then, the alarm will enter the pairing process. Make sure the LED indicator is still flashing blue; or else you need to press it to make it flash blue again.
- 6. When finished, you will see the Wi-Fi CO alarm on the app's device list.

....

- NOTE:
 If your router supports a dual band network with both 2.4 GHz
 and 5 GHz, please create separate SSIDs for the 2.4 GHz and 5
 GHz channels. This device is only compatible with a 2.4 GHz
 Wi-Fi network
- To promote successful Wi-Fi connection, make sure you place the alarm within the router range, and that you enter the correct password.



Set the Preferences for Your Mobile App

Push Notifications

You can choose to receive app push notifications when any change is made to your system. It is highly recommended that you limit push notifications, as too many notifications can become redundant and load your phone, which can quickly become a nuisance. Furthermore, the more push notifications you allow, the more power your CO alarm will consume, which will reduce battery life.

Record History

To access data or check device status, tap the History button on the bottom.

Offline Notifications

Offline notifications are used to notify you if the alarm disconnects from the Wi-Fi. Note that this notification may not be sent instantly, as the alarm reports to the cloud service center at set intervals.

CO Alarm Precaution

Dangerous CO concentration is detected, but has not reached the alarm status. The app will show a "CO Alarm Precaution" message, and an app push notification will be sent to your smartphone. Potential dangerous CO conditions exist.

Reset to Factory Settings

Quickly press the test button 4 times, and the device will emit a beep. Then, press and hold the test button, and the device will emit another beep and the LED will flash blue once quickly. At this point, the device will exit the network and become a standalone device. Afterward, reconnect to the same or a new network.

Where to Install

Ideally, a carbon monoxide alarm should be installed in every room containing a fuel-burning appliance, and one in every bedroom.

However, if the number of carbon monoxide alarm available is limited, the following guidelines should be considered when choosing the best places to install an alarm(s):

- If there is an appliance in a bedroom, a CO monitor should be installed.
- Install an alarm in rooms containing a flueless or open-flued appliance.
- Install an alarm where residents spend most of their time.
- In a studio apartment, a CO alarm should be placed as far away from the cooking appliances as possible, but close to where the person sleeps.
- If the appliance is in a room not normally used (such as a boiler room), the CO alarm should be placed just outside of this room so that the alarm can be heard more easily.

1. Installing a CO alarm in a room with a fuel-burning appliance (see Figure 1):

- If it is mounted on a wall, it should be installed at a height greater than the height of any door or window, but should still be at least 150 mm (5.9 inches) below the ceiling.
- The CO alarm should have a horizontal distance between 1 m (3.3 feet) and 3 m (10 feet) from any potential CO source.
- If there is a partition in the room, the CO alarm should be installed on the same side of the partition as the potential CO source.

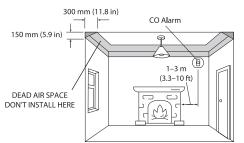


Figure 1: Installation in a room with a fuel-burning appliance

2. Installing the CO alarm in a bedroom or room without a fuel-burning appliance (see Figure 2):

- Mount the CO alarm relatively close to the breathing zone of the occupant.
- Install the alarm such that the LED indicator is viewable when the occupant is near the alarm.

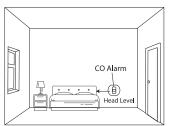


Figure 2: Installation in a bedroom or room without a fuel-burning appliance (installed at head level)

NOTE: Due to the product's unique design and unfixed installation, it is not recommended to install it on a ceiling, as it is prone to falling off and causing injuries to people.

Locations to Avoid

Important Note

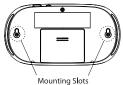
Improper location can affect the sensitive electronic components in this alarm. To avoid causing damage to the unit, to provide optimum performance and to prevent unnecessary nuisance alarms, **do not locate CO alarms** in the following areas:

- In garages or in any extremely dusty, dirty or greasy areas.
- 2. Where there is the possibility of smoke or fumes under normal operating circumstances.
- 3. In poorly ventilated kitchens, garages and furnace rooms. Keep the CO alarms at least 1.5 m (5 feet) from potential smoke or fume sources (e.g. stoves, furnaces, water heaters, space heaters) if possible.
- 4. In areas where a 1.5 m (5-foot) distance from a potential smoke or fume source is not possible. In modular, mobile or smaller houses, it is recommended the CO alarm be placed as far from any potential smoke or fume sources.
- 5. Within 1.5 m (5 feet) of any cooking appliance.
- 6. In extremely humid areas. This alarm should be at least 3 m (10 feet) from a bath or shower, sauna, humidifier, vaporizer, dishwasher, laundry room, utility room or other source of high humidity.
- 7. In areas where the temperature is colder than 4.4°C (40°F) or hotter than 37.8°C (100°F). For example, non-air-conditioned crawl spaces, unfinished attics, uninsulated or poorly insulated ceilings, porches and garages.
- 8. Where the air is turbulent, such as near ceiling fans, heat vents, air conditioner vents, fresh air return vents, or open windows. Excessive air flow may prevent any CO from reaching the sensors.
- 9. In direct sunlight.

Wall Mounting

- 1. Choose a suitable installation location by referring to the "Where to Install" section.
- 2. Remove the indication sticker from the packaging and refer to the hole locations on the sticker. Draw two screw holes according to the size and layout of the mounting holes on the back of the product. Drill the screw holes 30 mm (1.18 inches) deep using a Ø 6.0 mm (1/4-inch) drill bit. Note that the distance between the center of the two holes is 112 mm (4.4 in).





- 3. Insert the anchor plug into the screw hole and hammer it in until the head of the anchor plug is flush with the wall.
- 4. Use the two provided screws or 3.5 × 25 mm countersunk screws to screw into the two anchor plugs. Be sure to leave a 5 mm (1/5-inch) gap between the head of the anchor plugs and the screws, which will allow for easy device mounting.
- 5. Mount and lock the device onto the wall by aligning the two mounting slots on the back of the device with the screws on the wall. 6. Test the device by pushing the test button to make sure that the device is functioning properly.

Installation on a Table





The base of the detector has two feet built into the design that allow it to stand freely on a flat surface.

NOTE: When placing on a shelf, please adhere to the recommended placement as described in "Where to Install."

• 16 •

Alarm Testing

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

Туре	XCOC-iR
Action	Push the test button.
Device Response	When the LCD backlight turns on, the device beeps once, and the LED flashes red once, entering test mode: the LED flashes red 4 times continuously paired with beeps, repeating 2 cycles. During this period, the LCD sequentially displays "—", "PAS", then the backlight turns off. The LCD returns to standby mode indicating normal working status. If there is an error during self-test, the LCD will display corresponding patterns according to the current device status, such as low battery, malfunction, and end of life, displaying "Lb", "E03/E04", and "End" respectively.

NOTE: The test function accurately tests the alarm's CO sensing circuit without the need of test CO. If your CO alarm fails to emit an audible test signal, refer to the troubleshooting guide at the end of this manual immediately.

Peak CO Concentration Memory and Reset

The peak CO concentration feature is helpful in identifying if there have been any dangerous CO readings since a peak CO concentration reset

Press the Peak Level button once and the device will perform a brief test. The LCD backlight will turn on and display the maximum value recorded since the last peak data reset. The "Peak" indicator will appear on the left side of the LCD. The peak data will be shown for 5 seconds. If no further action is taken within those 5 seconds, the device will automatically return to standby mode.

In the example, 300 pom was the maximum CO concentration recorded since the unit was last reset.





Peak CO Concentration Reset: During the 5 seconds when the LCD displays the peak CO concentration, press and hold the Peak Level button for 3 seconds, the device will beep, the LED will flash green, and the peak CO concentration will be reset with LCD displaying "0."

• If the carbon monoxide concentration is lower than 30 ppm, it will not be recorded in the peak CO

• To show the peak value, you need to press the Peak Level button briefly (less than 3 seconds). If you press it for a long time (3 seconds or more), the peak display will not be triggered.

Alarm Mode

When the device detects CO, and the CO ppm reaches a certain level for a period of time, the unit will sound an alarm, beep 4 times every 5.8 seconds, and the LED will flash red. The app will show a "CO Alarm Triggered" notification, and an app push notification will be sent to your smartphone. The CO concentration is shown through the in-app message and push notifications. You can also check the CO concentration in the history section of the app.

When the carbon monoxide concentration drops below the alarm threshold, the alarm sound will stop, and the LED will flash green once every second for 5 seconds. Then, it will automatically enter standby mode. When the alarm ends, an app push notification will be sent to your smartphone.

Silence Mode

If there is a false alarm, you can temporarily silence it by pressing the test/silence button on the device or in the app. You will receive an instant notification from the app telling you that the device has been temporarily silenced. The LED will flash red 4 times every 5.8 seconds to remind you that the alarm has been silenced. The alarm will automatically exit silence mode after 9 minutes.

During silence mode, if the carbon monoxide concentration is still greater than 70 ppm after 6 minutes, the device will be triggered again; if not, the device will automatically exit the silence mode after 9 minutes, and the LED will flash green 3 times continuously.

LCD Display

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

Mode		LCD Display	LED Indicator	Audible Alarm	Remarks
Powering On	First-time use without connecting to the Wi-Fi.	(Backlight on)	Runs through 8 cycles (yellow/green/red) in sequence.	1 quick beep.	Make sure battery insulating film is removed and the device is turned on.
	The battery is replaced and the device has connected to the Wi-Fi before.	co ppu (No backlight)	Flashes blue until the Wi-Fi connection is successful.		Make sure the battery is properly installed and the device is turned on.
Standby Mode		co ppm	Flashes green once every 60 seconds.	None.	Normal network connection status.

	co PPM (No backlight)	Flashes green once every 60 seconds, followed by flashing yellow once.	None.	Abnormal network connection status.
Alarm Mode	(Backlight on) displays actual values	A CO concentration ranging from 30 to 999 ppm has been present for a certain time period. and 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. Please refer to "What to Do When the Alarm Sounds".
on 12 4 mm with the second of		A CO concentration level ranging from 30 to 999 ppm has been detected, but for less than the allotted detection period.	None.	Dangerous CO concentration is detected, but has not reached the alarm status. Potential dangerous CO conditions exist. Please search for the CO source first.
		The LED indicator flashes green once every second for 5 seconds.	None.	Alarm cancellation: when the CO concentration level drops below the alarm threshold, the alarm signal will stop. Then the device goes back to the standby mode.
Test Mode		Flashes red once first, then 2 sets of 4 red flashes.	The buzzer beeps once first, then 2 sets of 4 quick beeps.	The LED flashes red and the buzzer beeps simultaneously.

• 20 •

• 21 •

	PR5 (Backlight on)			
Peak Level Check	Peak level: II	None.	None.	LCD backlight is lit for 5 seconds; if the peak level button is pressed and held for more than 3 seconds within the 5 seconds of display, the device emits a beep, the LED flashes green once, and the existing recorded data is reset to zero. Peak CO level recorded since the previous reset.
Silence Mode	(Backlight on) displays actual values	Flashes red 4 times every 5.8 seconds.	None.	CO silence mode: After 9 minutes, the unit will exit silence mode.
		Flashes green 3 times.	None.	When exiting the silence mode while in alarm state.

	(No backlight)	Flashes yellow once every 60 seconds.	None.	Silence mode during low battery: after 10 hours, the unit will exit silence mode.
	(No backlight)	Flashes yellow 3 times every 60 seconds.	None.	Silence mode during the end of cycle: after 22 hours, the unit will exit silence mode.
Low Battery	co L b PPM (No backlight)	The LED indicator flashes yellow once every 60 seconds.	1 quick beep every 60 seconds.	The battery must be replaced immediately.
Fault	co EO 3 PPM 11 GO CO EO 4 PPM (No backlight)	Flashes yellow 2 times every 60 seconds.	2 beeps every 60 seconds.	If the "E03/E04" message is still displayed, the unit has malfunctioned and must be replaced immediately.
End of Life	© End PPM (No backlight)	Flashes yellow 3 times every 60 seconds.	3 quick beeps every 60 seconds.	Replace the unit immediately.

• 22 •

Technical Specifications

Power Supply	1×3 V CR123A battery (replaceable)	
Battery Life	1 year (test once a week)	
Product Lifespan	10 years	
Sensor Type	Electrochemical	
CO Alarm Response Time	70 ppm for 60–240 minutes	
	150 ppm for 10–50 minutes	
	400 ppm for 4–15 minutes	
Operating Temperature	4.4–37.8°C (40–100°F)	
Operating Relative Humidity	10%-85% RH (non-condensing)	
Alarm Loudness ≥ 85 dB at 3 m (10 ft) @ 3.2 ± 0.3 kHz pulsing alarm		
Storage and Transport Conditions	-20–60°C (-4–140°F), 5%–95% RH (non-condensing)	
Silence Duration	≤ 9 minutes	
Operating Frequency	2400-2483.5 MHz	

Troubleshooting

Serial Number	Problem	Possible Causes	Solution
1	The device cannot be powered on and the LCD shows nothing.	The device isn't powering on properly.	Open the battery compartment and remove the battery insulating film; if the batteries ran out, please replace them.
2	After the test is completed, instead of displaying "PAS", it shows "Lb", "E03/E04", or "End".	Self-test abnormal.	Look at what's shown on the LCD to figure out why there's a problem. It might be because the battery is low, there's an error, or the device has reached its end of life.
3	There is no response when the test/silence button or peak level button is pressed.	The button is not pressed properly.	Make sure the button is pressed firmly. When the button is pressed properly, you will hear beeps or the LCD backlight will turn on.
		The Peak Level button was held down for an extended period; it only works when pressed briefly.	Press the Peak Level button briefly, do not hold it down.
4	After the device detects CO, pressing the Peak Level button again still shows a concentration of "0".	When the CO concentration is below 30 ppm, it will not be recorded in the historical peak data.	None

• 24 •

5	The LCD no longer displays numerical values, instead showing "Lb", while the LED flashes yellow once every 60 seconds paired with a single alarm sound.	When the battery voltage is below the threshold, the product enters low battery warning mode.	Replace the batteries.
6	When the battery is low, pressing the test/silence button cannot silence it.	When the battery is too low, it cannot be silenced.	None
7	The LCD no longer displays numerical values, instead showing "E03" or "E04", while the LED flashes yellow twice every 60 seconds paired with two alarm sounds.	The device malfunctions, with short circuit displaying "E04", and open circuit displaying "E03".	Replace the device.
8	The LCD no longer displays numerical values, instead showing "End", while the LED flashes yellow 3 times every 60 seconds paired with 3 alarm sounds.	The device has reached its end of life.	Replace the device.
9	In the presence of a CO environment, the device is not triggered.	The CO concentration is not high, or the duration of exposure is insufficient to trigger an alarm.	Ensure there is a sufficient CO concentration and maintain exposure for an adequate duration.
		The device is in a 'fault' state.	Check if the corresponding error code appears on the LCD. If so, the device needs to be replaced.

10	The device shows a reading of "0" on the LCD in the presence of a CO environment.	The LCD does not display when the CO concentration is below 30 ppm.	None
11	Unable to add the carbon monoxide alarm to the app.	Incorrect Wi-Fi username or password.	Enter the correct Wi-Fi username and password.
		Bluetooth permissions not enabled on the phone.	Enable Bluetooth permissions on the phone.
		The carbon monoxide alarm does not enter the Wi-Fi pairing mode.	Press and hold the alarm's test/silence button for 5 seconds; its LED will flash blue, indicating it entered Wi-Fi pairing mode.
12	Unable to receive app notifications.	The phone has disabled the app's notification permissions.	Enable the app's notification permissions.
		The communication between the carbon monoxide alarm and the	Reduce obstacles between the carbon monoxide alarm and the router, including
		router is obstructed or the distance is too far.	metal doors and thick walls. The maximum allowable distance between the alarm and the router in an open environment is 50 m (170 ft).
		The router or phone network is malfunctioning.	Ensure the router and phone network connected to the carbon monoxide alarm are functioning properly.

• 26 •

13		The battery ran out.	Replace with a new battery.	
	monoxide alarm is offline.	The communication between the carbon monoxide alarm and the router is obstructed or the distance is too far.	Reduce obstacles between the carbon monoxide alarm and the router, including metal doors and thick walls. The maximum allowable distance between the base station and the router in an open environment is 50 m (170 ft).	
		The router or phone network is malfunctioning.	Ensure the router and phone network connected to the carbon monoxide alarm are functioning properly.	
14	The LCD shows the concentration value, but the app neither pushes notifications nor shows the concentration value.	The CO concentration is below 100 ppm and has not yet reached the alarm threshold duration.	To prevent frequent pre-alarm notifications from disturbing customers and to save battery power, the device will not send pre-alarm notifications or display concentration values in the app when CO concentration is below 100 ppm. However, if the CO concentration remains below 100 ppm but reaches the alarm duration threshold, the carbon monoxide alarm will still be triggered and send normal alarm notifications.	
15	The LCD display has updated the concentration value, but the concentration value in the app hasn't been updated.	The device is in pre-alarm status, and the concentration has not risen to a higher range.	To save power, the app only updates the concentration value when it crosses into a different range during pre-alarm status (for example, rising from 110 ppm to 220 ppm).	

What to Do When the Alarm Sounds

AWARNING

Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can KILL YOU. If alarm signal sounds:

- 1) Operate reset/silence button (test/silence button).
- 2) Call your emergency services (Telephone Number) [Fire Department or 911].
- 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. Do not reenter the premises nor 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 your alarm reactivates within a 24-hour period, repeat steps 1-3 and call a qualified appliance technician (Telephone Number) to investigate for sources of CO from fuel-burning equipment and appliances, and inspect for proper operation of this 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 manufacturers' instructions, or contact the

manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not been, operating in an attached garage or adjacent to the residence.

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

- 1. Excessive spillage or reverse venting of fuel burning appliances caused by:
 - Outdoor ambient conditions such as wind direction and/or velocity, including high gusts of wind; heavy air in the vent pipes (cold/humid air with extended periods between cycles).

- 20

• 31 •

- Negative pressure differential resulting from the use of exhaust fans.
- Simultaneous operation of several fuel-burning appliances competing for limited internal air.
- Vent pipe connection vibrating loose from clothes dryers, furnaces, or water heaters.
- Obstructions in or unconventional vent pipe designs which amplify the above situations.
- 2. Extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.).
- 3. Temperature inversions which can trap exhaust gasses near the ground.

4. Car idling in an open or closed attached garage, or near a home.

Maintenance

To keep your alarm in good working order, you should adhere to the following steps.

- 1. Test the alarm once a week by pressing the test/silence button.
- 2. Vacuum the alarm cover once every three months to remove any accumulated dust.
- 3. Never use detergents or solvents to clean the alarm. Chemicals can permanently damage or temporarily contaminate the sensor.
- 4. Avoid spraying air fresheners, hair spray, paint or other aerosols near the alarm.
- 5. Do not paint the unit. Paint may clog the openings to the sensing chamber and prevent the unit from operating properly.

AWARNING

DO NOT TAMPER WITH THE APPARATUS, AS THERE IS A RISK OF ELECTRIC SHOCK OR MALFUNCTION.

Battery Replacement

Remove the old battery and replace with one CR123A battery when the LCD displays the "Lb" message and the LED indicator flashes yellow once every 60 seconds with the buzzer chirping.

After replacing the battery in the device and ensuring that it is powered on successfully, the device will operate normally. For indications of battery replacement, refer to the LCD display.

NOTE: Rechargeable batteries are not allowed, as other may negatively impact operation.

Limitations of CO Alarms

- 1. CO alarms may not wake up all individuals. If children or others do not readily awaken to the sound of the CO alarm, or if there are infants or family members with mobility limitations, make sure that someone assists them in the event of an emergency.
- 2. This CO alarm will not sense carbon monoxide that does not reach the sensor. This CO alarm will only detect CO that reaches the sensor. CO may be present in other areas. Doors or other obstructions may affect the rate at which CO reaches the CO alarm. For this reason, if bedroom doors are usually closed at night, it is recommended that you install a CO alarm in each bedroom and in the hallway between them
- 3. CO alarms may not sense CO on another level of the house. For example, a CO alarm on the second level, near the bedrooms, may not sense CO in the basement. For this reason, one CO alarm may not give an adequate warning. Complete coverage is recommended by placing CO alarms on each level of the house.
- 4. CO alarms may not be heard. The alarm buzzer noise level is over 85 dB at a distance of 3 m (10 feet). However, if the CO alarm is installed outside the bedroom, it may not awaken a sound sleeper or one who has recently used drugs or has been drinking alcohol. This is especially true if the door is closed or only partially open. Even persons who are awake may not hear the alarm horn if the sound is blocked by distance or closed doors. Noise from traffic, stereos, radios, televisions, air conditioners, or other appliances may even prevent alert persons from hearing the alarm horn. This CO alarm is not intended for people who are hearing impaired.

- 5. CO alarms are not a substitute for a smoke alarm. Although fire is a source of carbon monoxide, this CO alarm does not sense smoke or fire. This CO alarm senses CO that may be escaping unnoticed from malfunctioning furnaces, appliances, or other possible sources of incomplete combustion. The installation of a smoke alarm is required for an early warning of fire.
- 6. CO alarms are not a substitute for life insurance. Though these CO alarms warn against increasing CO levels, we do not warrant or imply in any way that they will protect lives from CO poisoning. Homeowners and renters must still insure their lives.
- 7. CO alarms have a limited life. Although the CO alarm and all of its parts have passed many stringent tests and are designed to be as reliable as possible, any of these parts could fail at any time. Therefore, you are strongly recommended to test your CO alarm weekly.
- 8. CO alarms are not foolproof. Like all other electronic devices, CO alarms have limitations. They can only detect CO that reaches their sensors. They may not give early warning of rising CO levels if the CO is coming from a remote part of the house, or is at some distance from the CO alarm.

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.

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

X-Sense Electronics Co., Ltd.
Address: Room 402, Building 4, No. 9, Jinshagang 1st Road, Shixia Village, Dalang Town, Dongguan City, 523750 Guangdong, P.R. China Email: support@x-sense.com