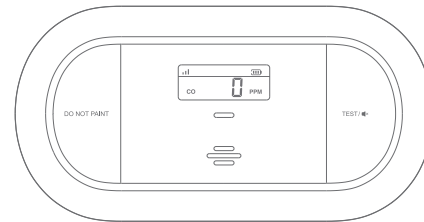




**Scan the QR code to view the product model.**

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

**X-SENSE**



## **Wi-Fi Carbon Monoxide Alarm**

### User Manual

Model: XC0C-iA

## Contents

1 Introduction .....	01
2 How to Connect .....	09
3 How to Install .....	13
4 Introduction of Functions .....	21
5 Daily Maintenance .....	23
6 Audio-Visual Display .....	24
7 Troubleshooting .....	28
8 Limitations of CO Alarm .....	32
9 Statement .....	33
10 Manufacturer and Service Information .....	34

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.

### 1 Introduction

This device is a mains-powered Wi-Fi CO (carbon monoxide) alarm with a back-up battery, equipped with an advanced electrochemical sensor for domestic use.

Please note that this carbon monoxide alarm is designed to detect carbon monoxide gas from any combustion source. 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.

#### **⚠ CAUTION**

- This is a CO alarm powered by mains power, which should be plugged into a standard non-switched 120 V AC wall outlet. Please ensure a stable and continuous power supply, as this CO alarm should receive continuous 120 V AC, 60 Hz pure sine wave electrical power 24 hours a day (batteries are for emergency backup only).
- 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.
- 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.
- 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.

## ⚠ WARNING

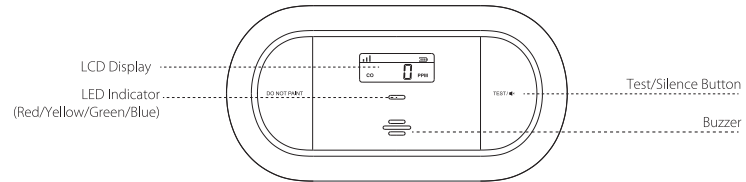
- CAUTION: READ THE INSTRUCTIONS CAREFULLY BEFORE OPERATING OR SERVICING.
- THE INSTALLATION OF THE APPARATUS SHOULD NOT BE USED AS A SUBSTITUTE FOR PROPER INSTALLATION, USE AND MAINTENANCE OF FUEL-BURNING APPLIANCES INCLUDING APPROPRIATE VENTILATION AND EXHAUST SYSTEMS.
- THIS APPARATUS SHOULD BE INSTALLED 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.

#### 1.1 Product Features





1.2 Technical Specifications

Power Supply	1.5 V AAA alkaline battery x 2 (replaceable)
	120 V AC, 35 mA, 60 Hz
Maximum Service Life	10 years
Sensor Type	CO: Electrochemical
CO Alarm Response Time	70 ppm: 60–240 minutes
	150 ppm: 10–50 minutes
	400 ppm: 4–15 minutes
Operating Temperature:	4.4–37.8°C (40–100°F)
Operating Relative Humidity	10%-85% RH (non-condensing)
Alarm Noise Level	≥ 85 dB at 3 m (10 ft) @ 3.2 ± 0.3 kHz pulsing alarm
Silence Duration	≤ 9 minutes
Band	2400–2483.5 MHz

1.3 Package Contents

- 1 × CO Alarm  
2 × AAA Batteries (Pre-installed)
- 1 × User Manual  
2 × Carbon Monoxide Safety Stickers
- 1 × Warranty Card

1.4 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**

- 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.

#### 1.5 What to Do When the Alarm Sounds

### **⚠️ WARNING**

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

- 1) Operate 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.

**1.6 More Detailed Information on Conditions Which Can Result in Transient CO Situations, Such as:**

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

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

**2 How to Connect**

**2.1 APP Download**

**Download the X-Sense Home Security App**



Download on the  
Apple App Store



GET IT ON  
Google Play

To download the app, search for **X-Sense Home Security** in the Apple App Store or Google Play, 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.***

## 2.2 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.

**Power Outage Report:** When the mains power is cut off, the app will receive a signal indicating that the device has been disconnected from the mains power and the network. (Note: If the battery is not installed or the battery level is too low, the report cannot be completed.)

## 2.3 Preparations

**Before connecting devices, make sure that:**

1. You know your Wi-Fi network name and password.
2. 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.

**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.

## 2.4 Power-on Guide

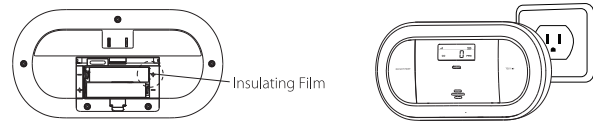
**To Activate the Device**

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. During startup, you can plug the device into a power outlet (ensure that the outlet is within the Wi-Fi signal coverage area).

[Important Note]: If the mains power is not connected, the device will not be able to use any networking-related functions. During the backup battery power period, the device will operate independently. Therefore, before attempting to connect to any network, please

ensure that the device is properly powered by AC. The backup battery is designed solely for emergency situations, and the device cannot be used for an extended period without AC power.

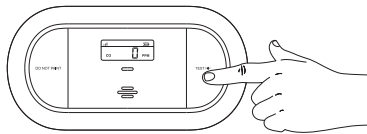
Additional Information: If the device has been connected to a network before, after removing the insulating film and turning the alarm on, it will no longer cycle through red, green, and yellow lights, but will instead flash a blue light. (When powered by the backup battery, there will be no blue light flashing, and it will continue to cycle through red, green, and yellow lights.)



## 2.5 Steps of Connecting Wi-Fi

1. 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 "XC0C-iA".
2. 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. Ensure that the device is powered on, plugged into a power outlet, and that the mains power supply is functioning normally.
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.

## 2.6 APP Settings

### 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. In special situations, such as when the mains power is disconnected, the app will immediately receive a notification saying, '**Mains Power Supply and Wi-Fi Disconnected.**' (Note: If the backup battery is not installed or the battery level is too low, the report cannot be completed.)

### 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.

## 2.7 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.

# 3 How to Install

## 3.1 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.



### 3.2 Improper Location to Install

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:

1. 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.

### 3.3 Specific Location of Installation

#### 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.

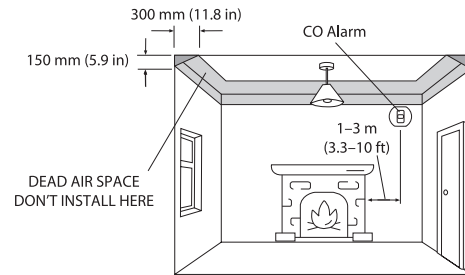


Figure 1: Installation in a room with a fuel-burning appliance

#### 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.

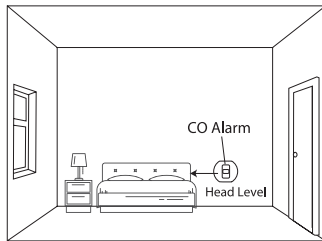
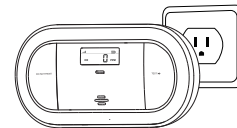


Figure 2: Installation in a bedroom or room without a fuel-burning appliance (installed at head level)

**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.

### 3.4 Installation Guide

1. Choose a suitable installation location by referring to the "Where to Install" section.
2. Choose a standard 120 V AC outlet without a switch, preferably in a place that is not easily accessible to children to prevent them from removing the alarm or causing a hazard.
3. Insert the alarm, make sure it is inserted properly.



4. Check the device to ensure that the LED green light is always on and the content on the LCD screen is not flickering.
5. Test the device by pushing the test button to make sure that the device is functioning properly. (During testing, there will be loud noises. Please take protective measures.)

**Note: Make sure the installation location is covered by a stable Wi-Fi, otherwise the online function will be limited.**

### 3.5 Test after Installation

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.

Type	XCOC-iA
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", showing the peak data. Several seconds later, 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.**

### 3.6 Battery Replacement

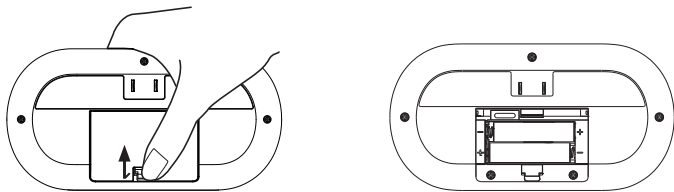
When the LCD displays the “Lb” message, the LED indicator flashes yellow once every 60 seconds and the buzzer chirps, remove the old battery and replace it with a new one.

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.*

Follow the process below to open the battery compartment cover:

Use your fingertip to unhook the latch of the battery cover and open it. Then replace the old battery with the new one correctly according to the polarity indications. After ensuring the battery is securely in place, gently press the battery cover until you hear a click, confirming that the cover is fully closed.



## ! WARNING

- KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.
- In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.
- NEVER charge a battery unless it is a rechargeable 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.

- 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.

**WARNING-CONSTANT EXPOSURES TO HIGH OR LOW TEMPERATURES OR HIGH HUMIDITY MAY REDUCE BATTERY LIFE.**

**WARNING-Use Only Batteries Specified In Marking. Use Of A Different Battery May Have A Detrimental Effect On Alarm Operation.**

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.

## 4 Introduction of Functions

### 4.1 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.**

### 4.2 Alarm Mode and CO Alarm Levels

#### 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,  
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.

#### 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.

### 4.3 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.

After the self-test is completed, the device will display the peak data. 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 ppm 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 test/silence 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."

**NOTE:** *If the carbon monoxide concentration is lower than 30 ppm, it will not be recorded in the peak CO concentration.*

### 4.4 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.

### 4.5 Low-Battery Mode

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.

### 4.6 Fault Mode

When the device sensor fails (including sensor open circuit and short circuit), the LED will flash yellow twice every 60 seconds, accompanied by two alarm sounds.

The fault code E04 indicates a short circuit, while E03 indicates an open circuit. The APP will receive a push notification for **"Device Malfunction"**.

### 4.7 End-of-Life Mode

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 APP will receive a push notification saying **"End of Life"**.

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.

## 5 Daily 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.






# ! WARNING

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

## 6 Audio-Visual 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	Power on with battery only.	 (Backlight on)	Runs through 8 cycles (yellow/green/red) in sequence.	1 quick beep.	When powered by battery only, there is no network connectivity.
	Power on with AC, and without connecting to the Wi-Fi.				Make sure the battery insulating film is removed and the device is turned on. And the mains power has been connected.
	Power on with AC and the device has connected to the Wi-Fi before.	 (No backlight)	Flashes blue until the Wi-Fi connection is successful.		Make sure the battery is properly installed and the device is turned on. And the mains power has been connected.

Standby Mode	 (No backlight)	Remains green.	None.	Normal network connection status.
	 (No backlight) Screen flashing	Flashes green once every 60 seconds.	None.	Mains power is disconnected, currently powered by the backup battery.
	 (No backlight)	The LED green light remains on, and the blue light flashes once every 3 seconds.	None.	Abnormal network connection status.
Alarm Mode	 (Backlight on) displays actual values	A CO concentration ranging from 70 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 CO Alarm Sounds".
	 (No backlight) displays actual values	A CO concentration level ranging from 70 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.
<b>Test Mode</b>	   (Backlight on)	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.
<b>Peak Level Check</b>	Peak level:  Clear to zero:  (Backlight on)	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.
<b>Silence Mode</b>	 (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 the cycle: after 22 hours, the unit will exit silence mode.
<b>Low Battery</b>	 (No backlight)	The LED indicator flashes yellow once every 60 seconds.	1 quick beep every 60 seconds.	The battery must be replaced immediately.
<b>Fault</b>	  (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.
<b>End of Life</b>	 (No backlight)	Flashes yellow 3 times every 60 seconds.	3 quick beeps every 60 seconds.	Replace the unit immediately.

## 7 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	The screen content continuously flickers, and the green light flashes once every 60 seconds.	Mains power supply abnormal.	Check if the socket is properly plugged in; or if there is a stable supply of AC power; or there are switches not turned off in the circuit.
3	The green light remains on, but the blue light flashes once every 3 seconds, and the Wi-Fi icon on the LCD screen has disappeared.	Wi-Fi connection abnormal.	Please check the Wi-Fi signal and the device's internet connection on the APP.
4	After the test is completed, instead of displaying "PAS", it shows "Lb", "E03/04", 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.
5	There is no response when the test/silence 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.

6	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; or the battery is not installed; or the insulating film has not been removed; the product enters low battery warning mode.	Replace the batteries. Check if the battery is installed or not; or the insulating film has been removed or not.
7	When the battery is low, pressing the test/silence button cannot silence it.	When the battery is too low, it cannot be silenced.	None.
8	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.
9	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.
10	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.



11	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
12	The device cannot enter network configuration mode or clear the network configuration data.	When the mains power supply is abnormal and the device is powered by the backup battery, it cannot use Wi-Fi-related functions.	Check the mains power supply.
13	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.
		When the mains power supply is abnormal and the device is powered by the backup battery, it cannot use Wi-Fi-related functions.	Check the mains power supply.
14	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 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 alarm and the router in an open environment is 170 ft (50 m).

		The router or phone network is malfunctioning.	Ensure the router and phone network connected to the carbon monoxide alarm are functioning properly.
15	The app shows the carbon monoxide alarm is offline.	When the mains power supply is abnormal and the device is powered by the backup battery, it cannot use Wi-Fi-related functions.	Check the mains power supply.
		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 170 ft (50 m).
		The router or phone network is malfunctioning.	Ensure the router and phone network connected to the carbon monoxide alarm are functioning properly.
16	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, 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.
17	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.	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).

## 8 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.

## 9 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.

### 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.



## 10 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](mailto:support@x-sense.com)