

Ανιχνευτής μονοξειδίου του άνθρακα X-Sense XC0C-SR

X-Sense · EAN 0810194780714

Machine translation from Polski. In case of doubt the manufacturer's original document prevails.

X-SENSE

XC0C-SR

Gas Leak Alarm (Type B)

EN 50291-1:2018

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

Introduction

This device is a battery-powered, standalone CO (carbon monoxide) alarm equipped with an advanced electrochemical sensor, intended for home use. It is important to remember that this device does not detect smoke, heat, flames, or any other hazardous gases besides carbon monoxide, although carbon monoxide can be produced by fire. Therefore, smoke alarms should also be installed to provide early warning of fire and protect you and your family from fire-related hazards.

WARNING!

- THE INSTALLATION OF THIS DEVICE SHOULD NOT REPLACE PROPER INSTALLATION, USE, AND MAINTENANCE OF FUEL-BURNING APPLIANCES, INCLUDING PROPER VENTILATION AND EXHAUST SYSTEMS.
- THIS DEVICE SHOULD BE INSTALLED BY A COMPETENT PERSON.
- THIS DEVICE HAS NOT BEEN TESTED FOR USE IN CAMPERS OR BOATS.
- THE PRODUCT IS INTENDED FOR USE IN TYPICAL LIVING SPACES OF FAMILY UNITS. IT IS NOT DESIGNED TO MEASURE COMPLIANCE WITH COMMERCIAL OR INDUSTRIAL SAFETY AND HEALTH REGULATIONS (OSHA).

NOTE! This alarm exclusively signals the presence of carbon monoxide in the immediate vicinity of the sensor. Carbon monoxide may also be present in other locations.

Contents of the package

- 1 × CO alarm
- 1 × drilling hole placement indicator label
- 2 × AA batteries (pre-installed)
- 1 × User manual
- 2 × Expansion plugs
- 2 × Screws
- 1 × Warranty card

Product features

1. Maximum Level Button
2. Test/Silence Button
3. LCD Display
4. LED Indicator (red/yellow/green)
5. Buzzer
6. Maximum Level Indicator
7. Battery Status
8. CO Level

Test/Silence Button

The test/silence button is used to test the device's electronics and to silence the alarm during a warning signal. Press the test/silence button, then the LCD display will activate, and you will hear a short beep, indicating that the alarm has entered test mode. After the test is complete, the alarm returns to standby mode. In case of a fault after the test, an appropriate fault code will appear on the display. Please refer to the "Testing the Alarm" section for further information.

Note: Once the test starts, the alarm will sound, and the LED indicator will flash red. This does not indicate the presence of carbon monoxide. If you press the test button during the alarm signal, the device will enter silence mode.

CO Alarm Levels

This X-Sense carbon monoxide alarm is programmed to trigger the alarm at the following CO levels within the specified time frames:

30 ppm for 120 minutes,

50 ppm for 60–90 minutes,
100 ppm for 10–40 minutes,
and 300 ppm for 0–3 minutes.

Upon detecting carbon monoxide and triggering the alarm, the CO level will be displayed on the LCD display, and the backlight will turn blue. The LED indicator will flash red, and the alarm will emit 4 short beeps, repeating the cycle every 5.8 seconds.

CO Levels and Symptoms

The following symptoms are associated with CARBON MONOXIDE POISONING and should be discussed with ALL household members:

Exposure Levels Symptoms

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

Moderate exposure Severe throbbing headache, drowsiness, confusion, rapid heartbeat.

Severe exposure Loss of consciousness, seizures, respiratory and cardiac failure, death.

WARNING:

- THIS DEVICE HAS BEEN DESIGNED TO PROTECT PEOPLE FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT MAY NOT FULLY PROTECT PERSONS WITH SPECIFIC MEDICAL CONDITIONS. IN CASE OF SYMPTOMS, CONSULT A DOCTOR.
- MANY CASES OF CARBON MONOXIDE POISONING INDICATE THAT EVEN THOUGH VICTIMS ARE AWARE OF THEIR CONDITION, THEY BECOME SO DISORIENTED THAT THEY ARE UNABLE TO SAVE THEMSELVES BY LEAVING THE BUILDING OR CALLING FOR HELP. CHILDREN AND PETS ARE OFTEN THE FIRST VICTIMS.

Low Battery Warning

If the battery voltage is low, the device will generate a single beep, and the LED indicator will flash yellow every 60 seconds, signaling the need to replace the batteries. If you press the test button while the battery is low, the beep will be temporarily silenced for 10 hours, and the LED indicator will flash yellow once every 60 seconds;

Pressing the test button again will cause the device to enter test mode and exit the mute mode when the battery is low. End of life indicator and mute control After reaching the maximum usage time (10 years), the alarm will emit 3 audible signals, and the LED indicator will flash 3 times every 60 seconds. The end of life signal can be temporarily silenced for 22 hours by pressing the test button. During the mute period, the LED indicator will flash 3

times every 60 seconds. The temporary mute function for the end of life signal can be used a total of 30 times. After 30 days, the end of life signal can no longer be silenced. During this mute period, the alarm continues to monitor carbon monoxide and provides protection as usual. To facilitate the identification of the alarm replacement date, record the date of the first activation on the dedicated label placed on the side of the alarm. Installation location Ideally, the carbon monoxide alarm should be installed in every room with a fuel-burning appliance and in every bedroom. However, if the number of available carbon monoxide alarms is limited, consider the following guidelines when choosing the best locations for installation of the alarm(s):

- If there is an appliance in the bedroom, a CO detector should be installed.
- Install the alarm in rooms containing wireless appliances or with an open combustion chamber.
- Install the alarm where occupants spend the most time.
- In a studio apartment, the CO alarm should be placed as far away from cooking appliances as possible, but close to the sleeping area.
- If the appliance is in a rarely used room (e.g., a basement), the CO alarm should be placed outside that room to make it easier to hear.

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

- If mounted on a wall, it should be located above the height of doors or windows, but at least 150 mm below the ceiling.
- The CO alarm should be installed at a horizontal distance of 1 m (3.3 feet) to 3 m (10 feet) from a potential source of CO.
- If there is a partition in the room, the CO alarm should be mounted on the same side as the potential source of CO.

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

CO ALARM

DEAD AIR ZONE

DO NOT INSTALL HERE

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 a person in the room.
- Install the alarm in such a way that the LED indicator is visible when a person is near the alarm.

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

CO ALARM

HIGH MOUNT

WARNING: Due to the unique design of the product and the lack of permanent mounting, it is not recommended to mount it on the ceiling, as there is a risk of it falling and causing injury.

Locations to avoid

Important notice

Improper placement may affect the sensitive electronic components of this alarm. To avoid damaging the device, ensure optimal performance, and prevent unnecessary false alarms, do not place CO alarms in the following locations:

1. In garages or in very dusty, dirty, or humid rooms.
2. In places where smoke or vapors may occur during normal operation.
3. In poorly ventilated kitchens, garages, and basements. If possible, keep CO alarms at least 1.5 m (5 feet) away from potential sources of smoke or vapors (e.g., stoves, ovens, water heaters, heating appliances).
4. In places where it is not possible to maintain a distance of 1.5 m (5 feet) from a potential source of smoke or vapors. In modular, mobile, or smaller homes, it is recommended to place the CO alarm as far away as possible from any potential sources of smoke or vapors.
5. At a distance of less than 1.5 m (5 feet) from any cooking appliance.
6. In areas of exceptionally high humidity. This alarm should be located at least 3 m (10 feet) from bathtubs, showers, saunas, humidifiers, evaporators, dishwashers, laundry rooms, utility rooms, or other sources of high humidity.
7. In places where the temperature is below 4.4°C (40°F) or above 37.8°C (100°F). For example, in non-air-conditioned crawl spaces, unfinished attics, uninsulated or poorly insulated ceilings, on porches, and in garages.
8. In areas with turbulent airflow, such as near ceiling fans, heat vents, air conditioning vents, fresh air intakes, or open windows.

Excessive airflow may prevent the penetration of carbon monoxide to the sensors. 9. In direct sunlight. Installation method

To activate the device

Insulation film

Before use, remove the insulation film from the battery compartment to activate the device.

When the device is turned on, the siren will emit one beep, the LCD backlight will turn on, and the LED indicator will perform an 8-cycle sequence (red/green/yellow). The device will then enter standby mode. Follow the instructions below to open the battery compartment cover:

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

WARNING

- PROLONGED EXPOSURE TO HIGH OR LOW TEMPERATURES AND HIGH HUMIDITY MAY SHORTEN BATTERY LIFE.
- STORE NEW AND USED BATTERIES OUT OF REACH OF CHILDREN.
- In case of battery leakage, do not allow the liquid to come into contact with skin or eyes. In case of contact, immediately rinse the area with plenty of water and seek medical advice without delay.
- NEVER recharge batteries.
- Do not mix alkaline batteries, standard (zinc-carbon) batteries, or rechargeable batteries (Ni-Cd; Ni-MH).
- Do not mix different types of batteries or new with used ones. Do not mix batteries from different manufacturers, of different capacities or sizes.
- Batteries must be inserted with the correct polarity. Replacing the battery with an incorrect type may void the warranty. There is a risk of fire or explosion if the battery is replaced with an incorrect type.
- WARNING - Use only the batteries indicated on the label. Using a different battery may negatively affect the operation of the alarm.
- WARNING - After each battery replacement, test the proper operation of the alarm using the test function.

Mounting on the wall

1. Choose an appropriate installation location, referring to the section "Where to install."
2. Remove the sticker from the packaging and use the marked spots for the holes. Mark two holes for screws according to the size and layout of the mounting holes located at the back of the device. Drill holes for the screws about 30 mm (1.18 inches) using a Ø 6.0 mm (1/4 inch) drill. Note that the distance between the centers of both holes is 112 mm (4.4 inches).

Mounting holes

3. Insert the expansion plug into the hole and tap it in until its head is flush with the wall.
4. Screw in the two included screws or countersunk screws 3.5 × 25 mm into the expansion plugs. Maintain a 5 mm (1/5 inch) gap between the screw head and the device to allow for

easy mounting of the device.

5. Mount and secure the device on the wall, aligning the mounting holes at the back of the device with the screws in the wall.

6. Test the device by pressing the test button to ensure it operates correctly.

Mounting on a table

The base of the detector has two built-in legs that allow it to stand independently on a flat surface.

Legs

NOTE: When placing on a shelf, follow the recommendations regarding locations described in the section "Where to install."

Testing the alarm

Make sure to test the CO alarm upon its first activation. In addition to a weekly test, it is also recommended to check the alarm after returning from a long trip or vacation.

Type XC0C-SR

Operation Press the test button. Reaction When the LCD backlight is on, the device emits one beep, and the LED flashes red once, then enters test mode: the LED flashes red four times accompanied by beeps, repeating this cycle twice. During this time, the LCD sequentially displays "---", "PASS", after which the backlight turns off. The LCD returns to standby mode, indicating normal operating status. If a fault occurs during self-diagnosis, the LCD display will show the appropriate patterns according to the current state of the device, such as low battery, malfunction, and end of life, sequentially displaying "Lb", "E03/E04", and "End".

NOTE

The test function accurately checks the CO alarm sensor circuit without the need for a test CO. If the CO alarm does not emit a test beep, you should immediately refer to the troubleshooting instructions at the end of this manual.

Remember to reset the maximum CO level

The maximum CO level function helps identify whether dangerous CO readings have occurred since the last reset of the maximum values. Press the Maximum Level button once, and the device will perform a short test. The LCD backlight will turn on and display the maximum value recorded since the last reset of the maximum data. A "Peak" indicator will appear on the left side of the LCD display. The maximum data will be displayed for 5 seconds. If no action is taken during these 5 seconds, the device will automatically return to standby mode. For example, 300 ppm would be the maximum carbon monoxide level recorded since the last reset of the device.

Resetting the maximum CO level: While the maximum carbon monoxide level is displayed on the LCD for 5 seconds, press and hold the Maximum Level button for 3 seconds. The device will emit a beep, the LED indicator will light up green, and the maximum CO level will be reset, displaying "0" on the LCD.

WARNING: If the carbon monoxide level is below 30 ppm, it will not be recorded as the maximum CO level. To display the maximum value, briefly press the Maximum Level button (for less than 3 seconds). If the button is held for at least 3 seconds, the display of the maximum value will not be activated.

Silence mode

Press the test button during an alarm to put the device into silence mode. If the carbon monoxide level continues to exceed the alarm threshold after 6 minutes, the device will re-enter alarm mode. Otherwise, the device will exit silence mode after 9 minutes and resume normal operation. If the CO level exceeds 300 ppm, the silence function cannot be activated.

LCD Display

When CO is detected, various indicators will be displayed on the LCD, indicating the alarm status, as shown below:

Mode LCD Display LED Indicator Signal

Notes

a Beep

Ensure that the insulation

is sequentially One quick

Battery foil has been

8 cycles beep.

removed, and the device is

(on/off/green/red). (Backlight is on)

Flashes green None. None. Standby mode

light once every

60 seconds. (No backlight)

CO level in Four

the range of 30 to beeps

999 ppm detected and

maintained in reached

alarm state. Please

familiarize yourself with

the chapter on
time. Indicator (Backlight
LED flashes red 4 is on)
times every 5.8 seconds. Alarm mode
Detected level of Detected dangerous
None. CO in the range of CO level, which has not
30 to 999 ppm, yet reached alarm state. There is
however for a time a potential threat
shorter than related to the CO level.
the expected Please first determine
detection source. (No backlight)
Open windows and
doors nearby and
immediately move to
fresh air. Alarm cancellation: when
Flashes green once None. CO level drops
for 5 seconds below the alarm threshold,
the alarm signal will be
turned off. Test mode
Beep
First flashes LED indicator flashes red,
emits
red once, and the beep emits
then 2 series one beep,
of 4 red followed by 2
flashes. dings. series of 4
quick
(Backlight
is on)
Check Maximum level:
None. None. The LCD backlight is
Maximum
on for 5 seconds;
If the Maximum Level
button is pressed and

held for more than
3 seconds during these 5
seconds of display,
(Backlight
is on)
the device will emit
a beep,
the LED indicator will flash
once green, and
the previous data
will be reset to
zero. The maximum CO level
recorded since
the last reset. Flashes red
Mode None. Silence mode CO: After 9
4 times every 5.8
seconds. minutes, the device
will exit silence mode. (Backlight
is on) displays
current values
Flashes green 3 None. When exiting
times. silence mode, when
the device is in
alarm state. Flashes once None. Silence mode at
every 60 low battery level:
seconds. After 10 hours
(No backlight)
the device will exit
silence mode. Flashes three None. Silence mode at
times every 60 the end of the cycle: After 22
seconds. hours, the device
will exit silence mode. (No backlight)
LED Indicator 1 quick Battery must be
Low battery flashes once replaced immediately.
(Backlight)

flashes every 60 seconds. Fault Flashes twice 2 beeps If on the display twice every 60 seconds.

d wi kowe co nadal widoczny jest

60 seconds. message "E03/E04",

the device has failed and must be replaced immediately

(No lighting)

The device must be replaced.

End of the operational period Flashes red 3 times every 60 seconds. signals

(No lighting)

every 60 seconds. Technical specifications

Power supply 2 × 1.5 V AA batteries (replaceable)

Battery life 3 years

Device usage period 10 years

Sensor type Electrochemical

Safety standard EN 50291-1:2018

CO alarm response time 30 ppm for 120 minutes

50 ppm: 60–90 minutes

100 ppm: 10–40 minutes

300 ppm: 0–3 minutes

Operating temperature 4.4–37.8°C (40–100°F)

Relative humidity during operation 10%–85% RH (non-condensing)

Alarm sound level 85 dB at a distance of 3 m (10 feet) @ 3.2 ± 0.3 kHz

pulsing alarm

- °C - °F) -

Storage and transport conditions -20 to 60 (-4 to 140 , 5% to 95% RH (non-condensing)

Silence time 9 minutes

Troubleshooting

Number

Problem Possible causes Solution

serial

The device cannot be turned on, and nothing is displayed on the LCD.

1

After the test is completed,

nothing is displayed on the LCD, to determine the cause of the problem. "PASS" appears

instead of "E03/04" or "End". This may result from low battery level, end of the device's operational period. Make sure the button has been pressed firmly.

After pressing the button correctly, you will hear a beep or see the LCD lighting up. No response after pressing the test/silence button or the Maximum Level button.

2

The Maximum Level button was held too long; it only works after a short press. When the CO level is below 30 ppm, pressing the button will not save it in the historical data. The LCD display still shows the peak value "0".

3

When the battery voltage drops below the threshold, instead of numerical values, "Lb" will be displayed, and the device's LED flashes red once every 60 seconds, accompanied by a low battery warning beep. When the CO level exceeds 300 ppm, the device cannot be silenced during the alarm.

4

The device cannot be silenced. The LCD display no longer shows numerical values, instead displaying "E03" or "E04", and the LED flashes red twice every 60 seconds, accompanied by two alarm beeps. The LCD display no longer shows numerical values.

5

The device indicates a failure, displaying "E03" in case of a circuit interruption or "E04" in case of a short circuit.

6

Replace the device. The device has reached the end of its operational period. The LED flashes red three times every 60 seconds, accompanied by three alarm beeps. Ensure that the carbon monoxide level is high enough or the exposure time is sufficient to trigger the alarm.

7

In the presence of an environment containing carbon monoxide, the device does not activate. Check if the appropriate error code appears on the LCD. If so, the device must be replaced. The LCD display does not show values when the carbon monoxide level is below 30 ppm.

8

The device indicates "0" on the LCD in the presence of carbon monoxide.

Post-activation procedure after the CO alarm is triggered

WARNING

The activation of the CO alarm indicates the presence of carbon monoxide (CO), which CAN BE FATAL. If the alarm sounds:

- 1) Press the reset/silence button (test/silence button).
- 2) Call emergency services.
- 3) Immediately move to fresh air – outside or near open doors/windows. Check that all persons are accounted for. Do not re-enter the room or move away from open doors/windows until emergency services arrive, the room has been ventilated, and the alarm has returned to normal.
- 4) After completing steps 1-3, if the alarm reactivates within 24 hours, repeat steps 1-3 and contact a qualified technician (Phone number) to investigate the source of CO from fuel-burning appliances and check their proper operation. If discrepancies are found during the inspection, the appliances must be serviced immediately. Note the fuel-burning appliances that were not inspected by the technician, and refer to the manufacturers' instructions or contact them directly for additional information regarding CO safety and the use of these appliances. Ensure that motor vehicles are not and have not been operated in the adjacent garage or in the vicinity of the residential building.

Maintenance

To keep the alarm in proper working order, the following rules must be followed.

1. Test the alarm once a week by pressing the test/silence button.
2. Once a month, vacuum the alarm housing to remove accumulated dust.
3. Never use detergents or solvents to clean the alarm. Chemicals may permanently damage or temporarily contaminate the sensor.
4. Avoid spraying air fresheners, hair sprays, paints, or other aerosols near the alarm.
5. Do not paint the device. Paint may block the openings leading to the sensor chamber and prevent the device from functioning properly.

WARNING: DO NOT MODIFY THE DEVICE, AS THERE IS A RISK OF ELECTRIC SHOCK OR MALFUNCTION.

Battery Replacement

Remove old batteries and replace them with 2 AA batteries (using the Pairdeer brand is recommended) when the LCD display shows the message "Lb," and the LED indicator flashes yellow once every 60 seconds along with the beeping of the buzzer. After replacing the batteries, the buzzer will emit one chirp, the LCD display will light up, and the LED indicator will flash 8 times in sequence (yellow/green/red). Reinstall the alarm and test it by pressing the test/silence button.

Note: Rechargeable batteries are not allowed, as they may negatively affect the operation of

the device.

Limitations of CO Alarms

1. CO alarms may not wake all individuals. If children or other individuals do not wake easily to the sound of the CO alarm, or if there are infants or family members with mobility limitations in the home, assistance should be provided in an emergency situation.
2. This CO alarm will not detect carbon monoxide that does not reach the sensor. This CO alarm will only detect carbon monoxide that reaches the sensor. Carbon monoxide may be present in other rooms. Doors or other obstacles may affect the rate at which carbon monoxide reaches the CO alarm. For this reason, if the bedroom doors are usually closed at night, it is recommended to install a CO alarm in each bedroom and in the hallway between them.
3. CO alarms may not detect carbon monoxide on another level of the home. For example, a CO alarm on the second floor, near the bedrooms, may not detect carbon monoxide in the basement. For this reason, one CO alarm may not provide adequate warning. It is recommended to ensure full coverage by installing CO alarms on every level of the home.
4. CO alarms may not be audible. The sound level of the alarm siren exceeds 85 dB at a distance of 3 m (10 feet). However, if the CO alarm is installed outside the bedroom, it may not wake a person sleeping deeply or someone who has recently used drugs or consumed alcohol. This is especially true if the doors are closed or only partially open. Even awake individuals may not hear the alarm signal if the sound is muffled by distance or closed doors. Noise from street traffic, stereo equipment, radios, televisions, air conditioners, or other devices may prevent the alarm signal from being heard by individuals present. This CO alarm is not intended for individuals with hearing impairments.
5. CO alarms do not replace smoke alarms. Although fire is a source of carbon monoxide, this CO alarm does not detect smoke or fire. This CO alarm detects carbon monoxide that may be silently escaping from faulty furnaces, appliances, or other potential sources of unsafe combustion. Installing a smoke alarm is essential for early warning of fire.
- 6.

Alarmy CO do not replace life insurance. Although CO alarms warn of increased CO levels, we do not guarantee or suggest that they will protect life from carbon monoxide poisoning. Homeowners and tenants must still insure their lives. 7. CO alarms have a limited operational lifespan. Although the CO alarm and all its components have undergone numerous rigorous tests and are designed to be as reliable as possible, any of these components may fail at any time. It is strongly recommended to test the CO alarm weekly. 8.

CO alarms are not completely foolproof. Like other electronic devices, CO alarms have their limitations. They only detect CO that reaches their sensors. They may not provide early warning of rising CO levels if the carbon monoxide originates from a distant part of the building or is located at a certain distance from the CO alarm. EU Declaration of Conformity X-Sense Electronics Co., Ltd. declares that the type of radio equipment is in compliance with the essential requirements and other relevant provisions of Directive RoHS 2011/65/EU and Directive WEEE 2012/19/EU; The full text of the EU Declaration of Conformity is available at the following website: www.x-sense.com Environmental Protection The symbol of the crossed-out wheeled bin on the product, in the documentation, or packaging reminds that all electrical and electronic products, batteries, or accumulators must be handed over to designated collection points after their useful life has ended. These products must not be disposed of with unsorted municipal waste. They must be disposed of in accordance with the applicable regulations and rules in your region. Manufacturer and service information X-Sense Electronics Co., Ltd. Address: Room 402, Building 4, No. 9, Jinshagang 1st Road, Shixia Village, Dalang Town, Dongguan, Guangdong, 523750, China Email: support@x-sense.com