

Ανιχνευτής μονοξειδίου του άνθρακα X-Sense XC01-R

X-Sense · EAN 0810194780615

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

X-SENSE

XC01 & XC01-R & XC04 & XC04-R

X-Sense XC01-R Carbon Monoxide Detector

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 installing the carbon monoxide alarm for use by others, please leave this manual - or a copy of it - with the end user.

Introduction

This device is a battery-powered standalone CO (carbon monoxide) alarm with an advanced electrochemical sensor for home use. Please note that this device does not detect smoke, heat, flames, or any hazardous gases other than carbon monoxide, even though carbon monoxide may be produced by fire. For this reason, smoke detectors should be installed to provide early warning of fire and to protect yourself and your family from fire and 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.
- NOT TESTED FOR USE IN A CAMPER OR BOAT.

Contents of the package

- 1 × detector
- 2 × screws
- 2 × wall plugs

1 × user manual

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Product features

LCD display

Buzzer

Test/silence button

Indicator

LED (red/yellow/green)

Battery status

Peak concentration indication

CO concentration

Test/silence button

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

XC01/XC04: First, wake the alarm by pressing the test button; after waking the alarm, the LCD display will be activated, then press the test button again until you hear a short beep indicating that the alarm has entered test mode. More information can be found in the "Testing the Alarm" section. After the test is completed, the alarm returns to standby mode. To save energy, the alarm is designed to automatically turn off the LCD display if it has not been used for 5 minutes.

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XC01-R/XC04-R: Press the test button briefly, and you will hear a short beep indicating that the alarm has entered test mode.

Note: Once the test begins, the alarm will sound, and the LED indicator will start flashing red. This does not indicate the presence of CO.

If the test button is pressed during an alarm state, the device will enter silence mode.

CO Alarm Levels

This X-Sense carbon monoxide alarm is programmed to trigger an alarm at the following CO concentrations 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 CO and activating the alarm, the CO concentration will be displayed on the LCD, and the blue backlight will illuminate. The LED indicator will flash red, and the alarm will emit 4 short beeps, repeating the cycle every 5.8 seconds.

CO Concentration and Symptoms

The table below shows the effects of various levels of CO poisoning on the body:

Parts per million (PPM) Effects on adults

100 Mild headache, nausea, fatigue (flu-like symptoms).

200 Dizziness and headache within 2-3 hours.

400 Nausea, frontal headache, drowsiness, confusion, and rapid heartbeat. Life-threatening after more than 3 hours of exposure.

800 Severe headaches, convulsions, failure of vital organs. Death possible within 2-3 hours.

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WARNING: THIS DEVICE IS DESIGNED TO PROTECT PEOPLE FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT MAY NOT PROVIDE FULL PROTECTION FOR PERSONS WITH CERTAIN MEDICAL CONDITIONS. IN CASE OF DOUBT, CONSULT A DOCTOR.

Low Battery Warning

If the battery voltage is low, the device will emit one beep, and the LED indicator will flash yellow every 60 seconds, indicating the need to replace the battery.

Pressing the test button when the battery is low will temporarily silence the low battery signal for 10 hours; pressing the test button again will put the device into test mode and then into standby mode.

End of Life Indication and Mute Control

Upon reaching maximum life (10 years), the alarm will emit 3 beeps, and the LED indicator will flash yellow 3 times every 60 seconds. This end-of-life signal can be temporarily silenced for 22 hours by pressing the test button.

The end-of-life mute function can only be used for 30 days. After 30 days, the end-of-life signal cannot be silenced. During this mute period, the alarm continues to monitor CO and provides protection as usual.

To facilitate identifying the alarm replacement date, the date of first use should be recorded on a special label on the side of the alarm.

Where to Install

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It is best to install a carbon monoxide alarm in every room where a fuel-burning appliance is

located, as well as in every bedroom.

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

- If there is an appliance in the bedroom, a CO monitor should be installed.
- Install the alarm in rooms where there are appliances without flue gas discharge or with open flue gas discharge.
- Install the alarm where residents spend most of their time.
- In a studio apartment, the CO alarm should be placed as far away from cooking appliances as possible, but close to where a person sleeps.
- If the appliance is in a room that is not usually used (e.g., a boiler room), the CO alarm should be placed outside that room to be more audible.

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

- If the appliance is wall-mounted, it should be installed at a height greater than the height of the door or window, but still at least 150 mm (5.9 inches) below the ceiling.
- The CO alarm should be located 1 m (3.3 feet) to 3 m (10 feet) away from a 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.

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CO ALARM

DEAD AIR SPACE

DO NOT INSTALL HERE

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):

- The CO alarm should be mounted relatively close to the breathing zone of the person in the room.
- The alarm should be installed in such a way that the LED indicator is visible when the user is near the alarm.

CO ALARM

HEAD LEVEL

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Figure 2: Installation in a bedroom or room without a fuel-burning appliance (head-height

installation)

NOTE: Due to the unique design of the product and unstable installation, it is not recommended to install it on the ceiling, as it may fall and cause injury to individuals.

Locations to Avoid

Important Note

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

1. In garages or other very dusty, dirty, or greasy places.
2. Where smoke or vapors may be present under normal working conditions.
3. In poorly ventilated kitchens, garages, and furnaces. If possible, CO alarms should be located at least 1.5 m (5 feet) away from potential sources of smoke or vapors (e.g., furnaces, stoves, water heaters, space heaters).
4. In locations where a distance of 1.5 m (5 feet) from a potential source of smoke or vapors is not possible. In modular, mobile, or smaller homes, it is recommended to place the CO alarm as far away from potential sources of smoke or vapors as possible.
5. Within 1.5 m (5 feet) of any cooking appliance.
6. In areas of very high humidity. This alarm should be located at least 3 m (10 feet) away from bathtubs or showers, saunas, humidifiers, vaporizers, dishwashers, laundry rooms, utility rooms, or any other source of high humidity.

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7. In areas where the temperature is lower than 4.4°C (40°F) or higher than 37.8°C (100°F). For example, unairconditioned vacant buildings, unfinished attics, uninsulated or poorly insulated ceilings, porches, and garages.

8. Where the air is turbulent, e.g., near ceiling fans, heating vents, air conditioner vents, fresh air return vents, or open windows. Excessive airflow may prevent CO from reaching the sensors.

9. In direct sunlight.

Installation Method

To activate the device

XC01/XC04

XC01-R/XC04-R

Battery Insulation Film

This device is equipped with a battery insulation film to ensure that it will not be activated during transport before being shipped from the factory. During the installation of this product, it will be necessary to remove the film before turning on the power and activating the device.

Before use, remove the insulation film from the battery compartment to turn on the device. After turning on the device, the buzzer will emit one beep, the LCD display backlight will turn on, and the LED indicator will flash in 8 cycles (yellow/green/red). The device will then enter standby mode.

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Perform the following steps to open the battery compartment cover:

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

WARNING

PROLONGED EXPOSURE TO HIGH OR LOW TEMPERATURES AND HIGH HUMIDITY MAY SHORTEN BATTERY LIFE.

Wall Mounting

1. Choose an appropriate installation location by referring to the "Where to Install" section.
2. Remove the sticker indicating from the packaging and familiarize yourself with the hole layout on the sticker. Draw two screw holes according to the size and layout of the mounting holes on the back of the product. Drill 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 centers of the two holes is 74 mm (2.9 inches).
3. Insert a wall plug into the screw hole and tap it in until the head of the wall plug is flush with the wall.
4. Use the two supplied screws or 3.5 × 25 mm pan head screws to screw in the two wall plugs. Be sure to leave a 5 mm (1/5 inch) gap between the heads of the wall plugs and the screws to allow for easy installation of the device.

Mounting Slots

5. Install and lock the device onto the wall, aligning the two mounting holes on the back of the device with the screws on the wall.
6. Test the device by pressing the test button to ensure it is functioning correctly.

Table Installation

The detector base has two legs built into the design, allowing it to stand freely on a flat surface.

Feet

NOTE: When placing on a shelf, follow the recommended placement described in the "Installation Location" section.

Testing Alarms

Remember to test the CO alarms after their initial activation. In addition to the weekly test, it is also recommended to test the alarm after returning from a long trip or vacation.

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Type XC01/XC04 XC01-R/XC04-R

Operation Press the test button once to wake the alarm and press the test button again when the LCD display is on.

Response The device will emit a 4-tone sound, and the LED will start flashing red. The LCD display will show "---", "PASS", the peak CO concentration recorded since the last reset, and finally "0". This indicates that the device is functioning correctly.

NOTE: The test function accurately tests the CO alarm detection circuit without the need to test for CO. If the CO alarm does not emit a test sound, refer immediately to the troubleshooting guide at the end of this manual.

Memory and Resetting Peak CO Concentration

The peak CO concentration function is helpful in determining whether any dangerous CO readings have occurred since the peak CO concentration was last reset.

After each press of the test button, the LCD display will show the peak CO concentration recorded since the last reset. The peak CO concentration will be displayed for 5 seconds, after which the device will enter standby mode. In the given example, the maximum CO concentration recorded since the last reset of the device was 300 ppm.

Resetting the peak CO concentration: Within 5 seconds, when the LCD displays the peak CO concentration, press and hold the test button for 3 seconds; the device will emit a sound, the LED will start flashing green, and

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the peak CO concentration will be reset, and the LCD will display "0".

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

Silence Mode

Press the test button during the alarm to put the device into silence mode. If the CO density still exceeds the alarm threshold after 6 minutes, the device will return to alarm status. Otherwise, the device will exit silence mode after 9 minutes and resume normal operation. If the CO concentration exceeds 300 ppm, the silence function cannot be activated.

LCD Display

During CO detection, various indicators will be displayed on the LCD indicating the alarm status, as shown below:

Mode Display LED Indicator Alarm Notes

LCD sound

Power On Performs 8 cycles 1 short Ensure that the battery (yellow/green/red) of sound. beep insulation film has been removed and the device is powered on.

Standby Mode None. Flashes green None.

(XC01/XC04) once every 60 seconds.

Standby Mode Flashes green None. None.

(XC01-R/XC04-R)

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CO concentration in 4 sound signals Dangerous

the range of 30 to repeating every 5.8 CO concentration 999 ppm has been seconds. has been detected and reached present for a specified time. Blue backlight alarm status. More is on, and the LED indicator information on this flashes red 4 times can be found in the "What every 5.8 seconds. to do when the alarm goes off."

CO concentration detected None. Dangerous CO concentration in the range of is detected, but the sensor 30 to 999 ppm, has not reached alarm

but for a time status. Potentially shorter than dangerous CO conditions the assigned detection period. First, look for the source of CO.

The LED indicator Open nearby windows and flashes green doors and immediately go out once every 60 seconds. for fresh air.

Flashes green None. Alarm cancellation: when once per second the CO concentration level for 5 seconds. drops below the alarm threshold, the alarm signal will stop.

Test Mode 2 sets of 4 2 sets Peak CO level sound signals red flashes. of 4 quick recorded since the last reset.

Silence Mode Flashes red 4 times every 5.8 Silence mode CO: After 9 seconds. minutes the device will exit silence mode.

Flashes yellow once None. Silence mode at low every 60 seconds. battery level: after 10 hours the device will exit silence mode.

Flashes yellow 3 None. Silence mode after the times every 60 cycle: after 22 hours seconds. the device will exit silence mode.

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Flashes green 3 None. Exiting silence mode. times.

Low Battery Display shows 1 short XC01/XC04: The device Level "Lb" and current beep should be replaced immediately. CO level. The LED XC01-R/XC04-R: The battery indicator flashes yellow should be replaced immediately. every 60 seconds.

Fault Flashes yellow 2 2 beeps If the message "Err" is times every 60 sound signals still displayed, seconds. every 60 the device has failed and seconds. should be replaced immediately.

End of Life Flashes yellow 3 3 quick Replace the device Cycle times every 60 beeps immediately. seconds. sound signals every 60 seconds.

Technical Specification

Power Supply XC01/XC04: 10-year sealed lithium battery

XC01-R/XC04-R: CR123A or CR2/3A (replaceable battery)

Product Lifespan 10 years

Sensor Type Electrochemical

Safety Standard EN 50291-1:2018

Operating Temperature 4.4-37.8°C (40-100°F)

Relative Humidity 10%-85% relative humidity (non-condensing) during operation

Alarm Volume ≥ 85 dB at 3 m (10 feet) @ 3.2 ± 0.3 kHz pulsing alarm

Storage and Transport Conditions -20-60°C (-4-140°F), 5%-95% relative humidity (non-condensing)

Silence Duration Approximately 9 minutes

What to do when the alarm goes off

1. Call emergency services as soon as possible.
2. Immediately exit the building and ensure that all persons in the house have evacuated or have access to fresh air. Do not re-enter the house until it has been ventilated and the alarm is functioning normally. If exiting is not possible, stay near open doors/windows until emergency services arrive.
3. After completing steps 1-2, if the alarm goes off again within 24 hours, repeat steps 1-2 and call a qualified technician to investigate CO sources from appliances and fuel-burning equipment and check the proper functioning of this equipment.
4. If problems are detected during this inspection, arrange for servicing of the device immediately. Pay attention to any gas appliances that have not been checked by a technician and refer to the manufacturer's instructions or contact the manufacturer directly for more information on CO safety and these devices. Ensure that motor vehicles are not and

have not been used in the adjacent garage or in the vicinity of the residence.

Maintenance

To keep the alarm in good working condition, follow these steps.

1. Test the alarm once a week by pressing the test/silence button.
2. Vacuum the alarm cover once a month to remove accumulated dust.
3. Do not use detergents or solvents to clean the alarm. Chemicals may permanently damage or temporarily contaminate the sensor.
4. Avoid spraying air fresheners, hairspray, paint, or other aerosols near the alarm.
5. Do not paint the device. Paint may clog the sensor chamber openings and prevent the device from functioning properly.

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

Battery Replacement (XC01-R/XC04-R)

Remove the used batteries and replace them with CR123A or CR2/3A batteries (Huiderui CR123A or Pairdeer CR2/3A batteries are recommended) when the LCD display shows the message "Lb," and the LED indicator flashes yellow every 60 seconds along with the buzzer. After replacing the batteries, the buzzer will emit one beep, the LCD display backlight will turn on, and the LED indicator will flash in 8 cycles (yellow/green/red). Reinstall the alarm and test it by pressing the test/silence button.

Note: Rechargeable batteries are not recommended for use with this device.

CO Alarm Limitations

1. CO alarms may not wake all individuals. If children or others do not wake easily to the sound of the CO alarm or if there are infants or family members with mobility limitations, ensure that someone assists them in case of danger.
2. This CO alarm does not detect 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 obstacles may affect the speed at which CO reaches the CO alarm. For this reason, if the bedroom door is 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 CO on another level of the house. For example, a CO alarm on the second level, near the bedrooms, may not detect CO in the basement. For this reason, one CO alarm may not provide adequate warning. Full coverage is recommended by placing CO alarms on every level of the house.
4. CO alarms may not be audible. The alarm buzzer's 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 wake a person sleeping soundly or someone who has recently taken drugs or consumed alcohol. This is especially true if the doors are closed or only partially open. Even individuals who are not sleeping may not hear the alarm's horn if the sound is blocked by distance or closed doors. Noise from traffic, stereo equipment, radios, televisions, air conditioners, or other devices may even prevent alert individuals from hearing the alarm sound. This CO alarm is not intended for hearing-impaired individuals.

5. CO alarms do not replace smoke detectors. Although fire is a source of carbon monoxide, this CO alarm does not detect smoke or fire. This CO alarm detects CO that may escape unnoticed from malfunctioning furnaces, appliances, or other possible sources of incomplete combustion. A smoke detector is required for early warning of fire.

6. CO alarms do not replace life insurance. Although these CO alarms warn of rising CO levels, we do not guarantee or suggest in any way that they will protect life from CO poisoning. Homeowners and renters must still insure their lives.

7. CO alarms have a limited lifespan. Although the CO alarm and all its components have undergone many rigorous tests and are designed to be as reliable as possible, any of these components may fail at any time. Therefore, it is strongly recommended to test the CO alarm weekly.

8. CO alarms are not infallible. Like all other electronic devices, CO alarms have their limitations. They can only detect CO that reaches their sensors. They may not provide early warning of rising CO levels if the CO originates from a distant part of the house or is at some distance from the CO alarm.

Product Battery Specifications

Feature Value

Product Code ZASXS00167WEU

EAN Code 810194780615

Battery Category General-purpose portable battery

Battery Type Portable lithium batteries (other than button cell)

Contains Cadmium/Lead (>0.002% Cd, >0.004% Pb) -

Net Weight (kg) 0.01656

Capacity (mAh) 1600

Power (kWh) 0.003

Manufacturer Information

X-Sense Innovations Co., Ltd.

Address: B4-503, Kexing Science Park, 15 Keyuan Road, Shenzhen, 518057, CHINA

SIMPLIFIED EU DECLARATION OF CONFORMITY

X-Sense Innovations Co., Ltd. hereby declares that the type of radio equipment [X-Sense Carbon Monoxide Sensor XC01-R] is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following address:

<https://files.innpro.pl/X-sense>

Manufacturer's address: B4-503, Kexing Science Park, 15 Keyuan Road, Shenzhen, 518057, CHINA

Radio frequency: 869.25-869.3 MHz

Maximum radio frequency power: 15 dBm

ENVIRONMENTAL PROTECTION

Used electronic equipment marked in accordance with the European Union directive must not be disposed of together with other municipal waste. It is subject to selective collection and recycling at designated points. By ensuring its proper disposal, you prevent potential negative consequences for the natural environment and human health. The collection system for used equipment complies with locally applicable environmental protection regulations regarding waste disposal. Detailed information on this topic can be obtained from the municipal office, waste management facility, or the store where the product was purchased.

The product meets the requirements of the so-called New Approach directives of the European Union (EU) regarding issues related to user safety, health protection, and environmental protection, identifying hazards that should be detected and eliminated.

Importer:

INNPRO Robert Błędowski sp. z o.o.

ul. Rudzka 65c

44-200 Rybnik, Poland

tel. +48 533 234 303

hurt@innpro.pl

www.innpro.pl

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