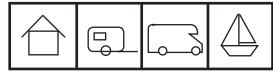


1. Welcome

Thank you for purchasing this Carbon Monoxide (CO) alarm.



The symbols above mean that the alarm is suitable for use in domestic premises (including static caravan holiday homes), caravans, motor caravans and boats.

This manual contains important safety information about the installation and operation of the alarm. Read the manual carefully and keep it in a safe place for future reference.

Warnings

Installation of a CO alarm should not be used as a substitute for proper installation, use and maintenance of fuel burning appliances including appropriate ventilation and exhaust systems.

This CO alarm is designed to protect individuals from the acute effects of Carbon Monoxide exposure.

This device does not protect against the chronic effects of Carbon Monoxide exposure.

Long exposure to low levels (>10 ppm) of CO may cause chronic effects. If in doubt consult a medical practitioner.

2. Description



Honeywell offers three versions of its battery powered CO alarms, with different user interfaces and lifetime:

The basic model **XC70** uses indicator lights to visually signal the state of the unit and comes with 7 years life and warranty

XC100 and **XC100D** both show big alarm messages in the case of an alarm, and both come with 10 years life and warranty.

XC100D has an LCD screen to provide more information about rising CO levels and recorded CO peak levels.

In addition, all versions have an audible alarm and a **TEST/HUSH** button.

All Honeywell X-Series alarms can be wirelessly interconnected using an optional plug-in module. This means that if one X-Series CO or Fire Alarm triggers an alarm, all interconnected units will give an audible alarm as well. This is especially useful, when living in a large or multi-story dwelling. Some wireless module information is included in this manual for completeness.

3. About Carbon Monoxide (CO)

Carbon Monoxide (CO) is an invisible, odourless gas which is highly toxic. It is produced by the incomplete burning of fuels such as wood, charcoal, coal, heating oil, paraffin, petrol, natural gas, propane, butane etc. and by cigarette smoke. A dangerous level of CO can occur if an appliance is faulty or badly maintained, if a flue is blocked or if a room is inadequately ventilated.

The poisoning effect of breathing in CO depends on the concentration (described in parts per million, ppm) and for how long you are exposed.

| Concentration | Signs and Symptoms |
|------------------|---|
| ~ 100 ppm | Slight headache, flushing of skin (indefinite exposure) |
| 200 – 300 ppm | Headache (5 – 6 hour exposure) |
| 400 – 600 ppm | Severe headache, weakness, dizziness, nausea, vomiting (4 – 5 hour exposure) |
| 1100 – 1500 ppm | Increased pulse and breathing rate, syncope (fainting), coma, intermittent seizures (4 – 5 hour exposure) |
| 5000 – 10000 ppm | Weak pulse, depressed respiration / respiratory failure, death (1 – 2 minutes exposure) |

Source: Health Protection Agency Compendium of Chemical Hazards, Carbon Monoxide, Version 3, 2011

The CO alarm will activate if it has detected a certain concentration for a given time, as described below:

- 50 ppm:** Alarm between 60 and 90 minutes
- 100 ppm:** Alarm between 10 and 40 minutes
- 300 ppm:** Alarm within 3 minutes

The CO alarm is set in accordance with the relevant European standard to provide alarms determined by concentration and length of exposure. This ensures alarm activation when dangerous CO levels have built up over time, while avoiding false alarms resulting from temporary low CO levels (e.g. cigarette smoke).

4. CO Alarm Operation

XC70

Separate, indicators for each unit state

- Alarm
- Power
- Fault
- Ventilate (pre-alarm)

TEST/HUSH button

- Fault hush
- Alarm hush
- Test with reduced sound level

XC100 / XC100D

Separate, indicators for each unit state

- Power
- Fault
- Ventilate (pre-alarm)

TEST/HUSH button

- Fault hush
- Alarm hush
- Test with reduced sound level

Display (XC100D only)

Alarm or Fault silenced

Remote fire alarm

Full CO alarm

CO pre-alarm levels

Replace unit

Remote alarm triggered by another unit

CO concentration in PPM

Number of units in a wireless network (during configuration with XW100 wireless module)

4. CO Alarm Operation continued

| Status | Lights and Sound | | | | | Display (XC100D) | Meaning |
|----------------------------|--|---------------|----------------|------------------|-------|---|--|
| | Alarm (Red) | Power (Green) | Fault (Yellow) | Ventilate (Blue) | Sound | | |
| NORMAL OPERATION | | | | | | | Normal operation No gas present |
| | 1 flash once every minute | | | | | | |
| ALARM | | | | | | Current CO concentration | Dangerous CO condition detected |
| | Continuously 4 chirps and flashes After 60 minutes, pattern is repeated once every 30 seconds | | | | | | |
| REMOTE CO or FIRE ALARM*** | | | | | | | Dangerous CO condition detected by another interconnected CO alarm |
| | CO ALARM: Continuously 4 chirps Fire ALARM: Continuously 3 chirps | | | | | | Fire detected by an interconnected fire alarm |
| REMOTE FAULT*** | | | | | | | A wireless connected unit (either alarm or module) is in fault |
| | Networked units – 4 chirps and 4 flashes every 4 hours. | | | | | | |
| ALARM MEMORY | | | | | | | Dangerous CO condition detected whilst user was absent. Currently, no dangerous CO level present |
| | 1/2/3 chirps and flashes once every minute for low/medium/high CO level | | | | | | |
| PRE-ALARM** | | | | | | Current CO concentration and percentage of full alarm level | A dangerous CO condition is building up. A full CO alarm will be triggered later, if the CO level does not decrease |
| | 1 (2, or 3) chirps and flashes once every 30 seconds, increasing the longer CO is present | | | | | | |
| FAULT | | | | | | | The unit has reached its end of life and must be replaced. XX is a number between 1 and 99 |
| | 1 chirp and flash once every minute | | | | | | |
| WIRELESS MODULE FAULT*** | | | | | | | The wireless module is not working correctly. Refer to the wireless module manual for further details |
| | 3 chirps and flashes once every minute | | | | | | |

*unless muted by pressing the TEST/HUSH button

**only if activated during switch on

***only applicable when a wireless interconnection plug-in module is installed

GAS EMERGENCY SERVICE

TELEPHONE NUMBER

0800 111 999

Contact numbers for other fuel appliances:

Oil users: Contact OFTEC on 0845 658 5080

Solid fuel users: Contact HETAS on 0800 600 000

For liquefied petroleum gas (LPG), Bulk and metered supplies; see telephone number on the bulk storage vessel or at the meter

Cylinder supplies; see gas supplier emergency contact details in the local telephone directory (The Calor Gas Emergency number is 08457 444999)

If your unit is in **ALARM**, keep calm, and carry out the following actions in the order given:

Open all doors and windows to increase the rate of ventilation

Stop using all fuel-burning appliances and turn them off where possible

If the alarm continues, then evacuate the premises. Leave the doors and windows open, and only re-enter the building when the alarm has stopped

Get medical help for anyone suffering the effects of Carbon Monoxide poisoning, such as headache or nausea, and advise that Carbon Monoxide inhalation is suspected

Telephone the gas or other fuel supplier on their emergency number, so that the source of carbon monoxide emissions can be identified and corrected

Do not use the fuel-burning appliances again until they have been checked and cleared for use by a competent person according to national regulations

Note: There may be another source of carbon monoxide emission apart from fuel-burning appliances, for example a large amount of tobacco smoke, town gas or emission from a smouldering fire.

If the unit is in **ALARM**, the audible alarm can be silenced for 5 minutes by pressing the **TEST/HUSH** button (the red light will continue to flash, XC100D will show the muted symbol). If a dangerous gas level is still present after 5 minutes, the audible alarm will sound again.

*Note: The **HUSH** function only operates if the gas reading is less than 200 ppm and can only be operated once*

Alarm memory

CO does not leave any detectable traces, so if an alarm happens while you are out, the memory function will keep the red light flashing till the button is pressed or 7 days have passed.

XC100D will also show the recorded peak concentration level for 10 seconds after pressing the button.

Event logger

Honeywell's CO alarms record a history of events, which can be downloaded by professionals. This provides a more in depth analysis of CO events such as detailed information on the CO concentration of the last 7 days, and weekly maximums for the whole operating life. Dates of alarm events are recorded.

Alarm Scan App

Honeywell's X-Series Alarm Scan App enables users of any X-Series alarm to download data from the alarm to a smart device, allowing on-the-spot incident investigation and effortless report generation.

Download on the App Store

GET IT ON Google Play

Operating and Installation Instructions



X-Series Battery CO Alarms

XC70

XC100

XC100D

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Acts for and on behalf of Life Safety Distribution GmbH, Javastrasse 2, 8604 Hegnau, Switzerland by its Authorised Representative Honeywell Inc.

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4. CO Alarm Operation continued

Ventilate - Pre-Alarm

Dangerous CO levels may be caused by faulty appliances, which start to produce more and more CO over time. Pre-alarms will give an early warning of such situations even if the alarm levels are not being reached. If these occur frequently it is recommended to call a technician for further investigations. The pre-alarm will start giving indications once 25% of the alarm level (time and concentration) has been reached. For example, if 50 ppm CO is present, the pre-alarm will start after 15-23 minutes instead of 60-90 minutes for a full alarm.

By default, this function is deactivated as it is not required to protect you from dangerous levels of CO. The installation section gives details of how to activate it. The pre-alarm is intended to help the knowledgeable end-user to get an early indication of malfunctioning appliances.

If the Pre-Alarm function is activated, and CO is detected, the blue ventilate light will flash with a short chirp 1, 2 or 3 times every 30 seconds when 25%, 50% or 75% of the alarm level respectively has been reached. **XC100D** will also indicate the percentage of the alarm level and current CO concentration. The audible alarm can be silenced by pressing the **TEST/HUSH** button (XC100D will show the muted symbol).

Fault – end of unit life

If the unit is in **FAULT** the **YELLOW** light will flash every minute with a short chirp. The CO alarm must not be used any more, and should be replaced. (The only exception is a wireless module fault, which is signalled with a triple chirp. In this case, refer to the wireless module manual for further details). The chirps can be silenced for 12 hours by pressing the **TEST/HUSH** button. The 12hour period can be restarted by pressing the **TEST/HUSH** button twice (XC100D will show the muted symbol).

Note: The fault signal is caused by a low battery, an electronics failure or the end of the CO sensor life. The end-of-life signal comes from an inbuilt timer, and is given 10 years (XC100, XC100D models) or 7 years (XC70 model) after activation.

A replace by date is also printed on the side of the unit to facilitate an advance replacement before the end-of-life signal is given. This date includes a 6 months shelf life, i.e. this is the latest date the unit should be replaced. An end-of-life signal may be given earlier.

