

BATTERY POWERED CARBON MONOXIDE ALARM

Main Features:

- Long Life Electro-Chemical Sensor Self Test
- Easy Installation
- Test / Reset Button
- Low Battery Warning
- Supplied With Wall Plugs & Screws
- Cannot Be Fitted With Battery Missing

This instruction leaflet contains important information on the correct installation and operation of your CO-detector. Read this leaflet fully before attempting installation and retain for future reference.

SPECIFICATION

Power Source	: DC 4,5V ~ 3x AA 1,5VDC, LR6, Alkaline
Sensor Type	: Electrochemical
Type of Gas sensed	: Carbon Monoxide
Sensor Lifetime	: 7 Years (storage: -20°~+50°C ± 2°C)
Alarm activation	: 50 ppm (Between 60-90 min.) : 100 ppm (Between 10-40 min.) : 300 ppm (Within 3 minutes)
Operation Temperature	: 0°C~+50°C (storage: -20°~+50°C ± 2°C)
Ambient Humidity	: 0%-90% RH (storage: 0%-70% RH)
Horn Level	: >85 Decibels at 1 metres
Battery Life	: 1 year minimum

WHAT IS CARBON MONOXIDE

Carbon Monoxide (CO) is an insidious poison that is released when fuels are burnt. It is a colorless, odorless, tasteless gas and therefore very difficult to detect with the human senses.
CO kills hundreds of people each year and injures many more. It binds to the hemoglobin in the blood and reduces the amount of oxygen being circulated in the body. In high concentrations, CO can kill in minutes. CO is produced by the incomplete combustion of fuels such as wood, charcoal, coal, heating oil, paraffin, petrol, natural gas, propane, butane etc.
Examples of CO sources:

- Running engine in garage
- Oil and Gas furnaces
- Wood stoves
- Barbecues
- Wood and gas fireplaces
- Gas appliances
- Portable generators
- Heating boilers
- Clogged chimneys
- Heating boiler

SYMPTOMS OF CO POISONING

The following symptoms may be related to CO poisoning
(ppm = parts per million/ 1:1000.000):
35 ppm The maximum allowable concentration for continuous exposure for healthy adults in any 8 hour period
200 ppm Slight headaches, fatigue, dizziness, nausea after 2-3 hours
400 ppm Frontal headaches within 1-2 hours, life threatening after 3 hours.
800 ppm Dizziness, nausea and convulsions within 45 minutes. Unconsciousness within 2 hours. Death within 3 hours.
1600 ppm Headache, dizziness and nausea within 20 minutes.
Death within 1 hour
6400 ppm Headache, dizziness and nausea within 1-2 minutes

LOCATING THE CO ALARM

Carbon Monoxide alarm is designed to detect the toxic CO fumes that result from incomplete combustion, such as those emitted from appliances, furnaces, fireplace and auto exhaust. If your dwelling is on a single storey, for minimum protection you should fit an alarm in the bedrooms or in the hallway of sleeping areas. Place it as near to the sleeping areas as possible and ensure the alarm is audible when the bedrooms are occupied. If your dwelling is multi-storey, for minimum protection at least one alarm on each floor. NOTE: For maximum protection an alarm should be located in or near every room that contains a fuel burning appliance such as gas fires, central heating boilers, room heaters, water heaters, cookers, grills, etc.

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

A CARBON MONOXIDE ALARM DOES NOT FUNCTION AS A REPLACEMENT FOR A SMOKE OR GAS DETECTOR

POSITIONING THE CO ALARM

Carbon Monoxide has a similar density to warm air and, to ensure that the most effective use is made of the detector, it should be fitted at least 1.5 metres (5 feet) above the floor level and at least 1.85 metres (6 feet) from the appliance (1).
Areas to be avoided include the following:

- Situations where the temperature may fall below -10°C or rise above 40°C
- In a damp or humid area
- Any area where high levels of dusty, dirty or greasy emissions could contaminate or clog the sensor.
- Behind doors or furniture.
- In the path of air discharged from a furnace / air conditioning vent or ceiling fan.
- Outside the building
- Directly above a sink or cooker

CAUTION: This carbon monoxide alarm is designed for indoor use only. Do not expose to rain or moisture. It will not protect against the risk of carbon monoxide poisoning when the battery has drained. Do not open or tamper with the alarm as this could cause malfunction

INSTALLING THE CO ALARM

This CO alarm is powered by a battery and requires no additional wiring. It can either be installed on the wall using the fixings provided or on a tabletop.

Wall mount installation:

- Having established the mounting location ensure that there is no electrical wiring or pipe work/run area adjacent to the mounting surface.
- Mark the two mounting hole locations (2).
- Drill holes in the positions marked.
- Insert wall plugs into the drilled holes.
- Screw mounting bracket to mounting surface. DO NOT OVER TIGHTEN (3)
- Regularly check the alarm battery firmly into battery compartment on the rear of the detector (4).

NOTE For the safety of the end user the CO alarm cannot be fitted without its battery.
Assemble the alarm onto the mounting plate (5).
Test whether the CO alarm is functioning properly By holding the test button on the front of the alarm for 2S and then release it. The unit will sound 4 beep tones and the red LED will flash at the same time.

OPERATING YOUR CO ALARM

Normal Operation
When no carbon monoxide is present, the green light flashes every 45 sec. and is an indication that your alarm is powered and functional.

Alarm Condition
When the unit detects dangerous levels of CO, it will emit an alarm signal of 4 beeps along with flashing of Red LED. This will continue as long as there is a dangerous level of CO present. Should the CO levels return to normal, the unit will stop beeping and return to standby mode automatically

CO-LEVEL (PPM) RESPONSE TIME (MIN)

50 ppm	60-90 min.
100 ppm	<10 min.
300 ppm	<3 min.

Return to Normal Operation
When the carbon monoxide gas disperses and the unit has been reset, the alarm signal will stop. The green power lamp will continue to flash approximately twice every minute.

Low Battery Signal
If the battery needs replacing, the unit will beep and green LED indicator will flash at the same time (every 45 seconds) for up to 7 days.

NOTE - with normal use the batteries will last for 1 year minimum. However, battery life will be reduced if either a fault occurs with the battery or the alarm remains in alarm for long periods of time.

Unit Malfunction
If the unit has detected an error, the yellow light will flash and the unit will beep twice per 10 seconds for the same time indicating that your alarm has failed.

TESTING YOUR CO ALARM
It is recommended that you test your CO alarm once a month to ensure the alarm is working correctly.
- By holding the test button on the front of the alarm for 2seconds and then release it. The unit will sound 4 beep tones and the red LED will flash at the same time.

MAINTAINING YOUR CO ALARM
- Your alarm will alert you to potentially hazardous CO concentrations in your home when maintained properly. To maintain your alarm in proper working order, it is recommended that you:
- Test your alarm at least once a month.
- Clean your CO alarm regularly to prevent dust build up. This can be done using a vacuum cleaner with the brush attachment once per month. Clean gently around the front grille section and sides.
- Never use cleaning solutions on your alarm. Simply wipe with a damp cloth.
- Do not paint the alarm

ATTENTION:
When sanding or stripping a wooden floor, painting, wallpapering or using adhesive or aerosol, you should remove the carbon monoxide detector and keep it in a safe place to prevent damaging the sensor. High concentrations of the following substances can damage the sensor, which often results in a false alarm: methane, propane, isopropyl butane, ethylene, ethanol, alcohol, isopropyl alcohol, benzene, toluene, ethyl acetate, hydrogen, hydrogen sulfate and sulfur dioxide. Also aerosol sprays, alcoholic products, paint, solvents, adhesive, hair spray, aftershave, perfume and certain cleaning agents can cause damage.

BATTERY REPLACEMENT
If the CO Alarm emits a short 'beep' at the same time the green led flashes, the battery is at the end of its life and should be replaced immediately. This low voltage warning will be given for at least 7 days. A fresh battery should last for approximately one year. If the green indicator light (LED) does not flash every minute then replace the battery.
- Remove the battery from the compartment.
- Press the Test button to remove the last bit of voltage from the detector.
- See "TESTING YOUR CO ALARM"
- Let the alarm warm up first for 2 minutes (green LED should not continue to flash quickly every 5 seconds when you press the test button)
- Using the Test button to test the CO Alarm.
See "TESTING YOUR CO ALARM"
- Reattach the CO alarm to the mounting plate.
- Replace the battery every year

Note: Pressing the test button too soon (i.e. when the green LED is still flashing quickly) can lead to a false alarm. In this case, remove the battery again, wait approx. 5 minutes and repeat the procedure.

WHAT TO DO IN THE EVENT OF AN ALARM
In the event the CO alarm raises an alarm:
- Immediately move to fresh air outdoor or open all doors/windows to ventilate the area and allow the carbon monoxide to disperse.
- Where possible turn off fuel burning appliance.
- Evacuate the premises.
- Do not re-enter the premises nor move away from the open door/window until emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition.
Seek medical help immediately for anyone suffering from the symptoms of headache, drowsiness, nausea, etc.
Do not use the appliances again until they have been checked by a qualified technician and the fault located and cleared.

IMPORTANT SAFETY REQUIREMENTS
Installing a CO-detector is only the first step towards safer living conditions. Make sure that you and other members of your household are familiar with the cause and effect of carbon monoxide poisoning and how to operate a CO-detector:
- Test your CO-detector once per month.
- Immediately replace low batteries.
- Only purchase approved combustion devices.
- Follow instructions for installing devices in the correct way and strictly follow the instructions of the manufacturer.
- Have your installation performed by a professional.
- Have your installation checked by a qualified installer on a regular basis.
- Clean your chimney and drainage once every year.
- Regularly clean all carbon containing devices.
- Verify if your equipment is free of corrosion and peellings.
- Never use your barbecue indoors or in garages.
- Ensure sufficient ventilation when using a fireplace or multi-burner.
- Always pay attention to symptoms of carbon monoxide poisoning.

NEVER:

- Never repair charcoal indoors or in a caravan, camper, tent or cabin.
- Never repair, check or install combustion devices yourself without having the proper knowledge and required skills to do so.
- Never use a gas range, oven or hair or clothes drier as a heater.
- Never use stoves (combustion devices) without outlet in sealed off spaces.
- Never let diesel or petrol engines operate indoors or in sealed off spaces.
- Never ignore a security system when it shuts down a device.
- Never ignore a warning from your CO-detector.

This CO alarm is designed to only sense Carbon Monoxide from any source of combustion. It is **NOT** designed to detect smoke, fire and other gases.

THIS PRODUCT CANNOT BE REPAIRED IF THE UNIT IS TAMPERED WITH IT WILL INVALIDATE THE GUARANTEE. IF THE UNIT IS FAULTY PLEASE RETURN IT TO YOUR ORIGINAL SUPPLIER WITH YOUR PROOF OF PURCHASE.

This product is not designed for use in a recreational vehicle or mobile home. The alarm should be installed by a competent person. 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.

: For Indoor use only.

: Read the manual before use, and keep it in a safe place for future use and for product maintenance.

: For DOP go to: service.smartwares.eu/dop and follow instructions.

Eigenschaften:

- Langlebiger elektro-chemischer Sensor
- Einfache Installation
- Test- / Rückstell Taste
- Batterie-Kontrollanzeige
- Lieferung einschließlich Schrauben und Dübeln
- Kann nicht ohne Batterie montiert werden

Diese Bedienungsanleitung enthält wichtige Informationen zu Montage und Betrieb Ihres Kohlenmonoxid-Alarms. Bitte lesen Sie dieses Merkblatt sorgfältig durch, bevor Sie mit der Montage beginnen und heben es für späteres Nachlesen auf.

SPEZIFIKATIONEN

Seisung	: DC 4,5V ~ 3x AA 1,5VDC, LR6, Alkaline
Sensor Typ	: Elektro-chemisch
Gemeldete Lebensdauer	: 7 Jahre
Sensor Lebensdauer	: 7 Jahre
Auslösewert	: 50 ppm (Zwischen 60-90 min.) : 100 ppm (Zwischen 10-40 min.) : 300 ppm (Innenhalb 3 Minuten)
Betriebstemperatur	: 0°C~+50°C (Lagerung: -20°~+50°C ± 2°C)
Luftfeuchtigkeit	: 0%-90% RH (Abstand: 0%-70% RH)
Laustärke Sirene	: >85dB in 1 m Abstand
Batterie Lebenserwartung	: min. 1 Jahr

WAS IST KOHLENMONOXID
Kohlenmonoxid (CO) ist ein heimtückisches Giftgas, das beim Verbrennen freigesetzt

