



# CARBON MONOXIDE ALARM



## CARBON MONOXIDE ALARM USER MANUAL BS EN 50291-1:2018 BS EN 50291-2:2019

Please read carefully and store in a safe place

### 7 YEAR LIMITED WARRANTY

Arctic Hayes Ltd offers a 7 year limited warranty with the SleepSafe Carbon Monoxide Alarm from the date of purchase.

This warranty is offered on a Return To Base (RTB) basis. Should a claim under the terms of the warranty be made, it is the responsibility of the product owner to return the item, together with Proof of Purchase, to Arctic Hayes Ltd. The product should be securely packed and insured appropriately. All costs of the return, including Postage, Packing and Insurance) is borne by product owner.

Once the returned item has been inspected, it will be replaced only if the failure is a direct result of faulty materials or workmanship.

In the case of the product being replaced under warranty, Arctic Hayes Ltd will reimburse the product owner for the direct costs incurred in returning the item to us and proof of such costs will be requested. No compensation will be paid for loss of use or similar.

Any replacement product issued will be covered by the remainder of the original product warranty only.

Should a problem arise with the alarm, please contact the Arctic Hayes helpline on +44(0) 113 271 5245 or sales@arctic-hayes.com

### INTRODUCTION

Thank you for purchasing this alarm, designed to detect and alert the user to the presence of Carbon Monoxide (CO) from ANY source of combustion. It is NOT designed to detect smoke, heat or any other gas. This user manual contains information on the operation and installation of the alarm. Please take a few moments to read the manual carefully and store in a safe place for future reference.

### GENERAL CO INFORMATION

Carbon Monoxide (CO) is a colourless, odourless and tasteless gas, which inhibits the blood's capacity to carry oxygen and can be fatal when inhaled. CO is released by burning fuels: gas, oil, wood, charcoal, coke, coal and petrol. Dangers arise when fuel-burning appliances are malfunctioning, improperly installed, or not ventilated correctly. Possible sources of CO include:

- Gas Cookers / Grills.
- Barbecues.
- Water heaters.
- Portable fuel burning heaters.
- Fireplaces.
- Wood-burning stoves.
- Blocked chimneys or flues.
- Vehicles and other combustion engines running in an attached garage could also be a source of CO.

The following conditions can result in transient CO situations:

- Excessive spillage or reverse venting of fuel burning appliances caused by wind direction and/or velocity.
- Extended operation of un-vented fuel-burning devices (range, oven, fire place, etc).
- Engines idling in an open or closed attached garage, or near a property.

### CO SAFETY TIPS

Always have any heating systems, vents, chimneys and flues inspected annually by a competent professional. Always install appliances according to the manufacturer's instructions and adhere to local building regulations.

Most appliances should be installed by a competent person and inspected after installation. Regularly examine vents, chimneys and flues for improper connections, rust/stains and cracks. Verify the colour of the flame on pilot lights and burners is blue. A yellow or orange flame is a sign that the fuel is not burning completely. Teach everyone what the alarm alerts are and how to respond to them.

### SYMPTOMS OF CO POISONING

Initial carbon monoxide poisoning symptoms are similar to the flu with no fever; these can include dizziness, severe headaches, nausea, vomiting and disorientation. Everyone is susceptible but experts agree that unborn babies, pregnant women, senior citizens and people with heart or respiratory problems are especially vulnerable.

If symptoms of carbon monoxide poisoning are experienced, seek medical attention immediately. CO poisoning can be determined by a carboxyhaemoglobin test. The following symptoms are related to CARBON MONOXIDE POISONING and should be discussed with ALL members of the household/organisation:

1. Mild Exposure: Slight headache, nausea, vomiting, fatigue [often described as 'Flu-like' symptoms].
2. Medium Exposure: Severe throbbing headache, drowsiness, confusion, fast heart rate.
3. Extreme Exposure: Unconsciousness, convulsions, cardio respiratory failure, death.

The above levels of exposure relate to healthy adults. Levels can differ for those at high risk. Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities.

Many cases of reported carbon monoxide poisoning indicate that whilst 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 may be the first affected. Familiarisation with the effects of each level is important.

### HOW TO ACTIVATE:

- **Hook the alarm onto the screws, then pull out the alarm activation tab. The alarm will chirp once and a green LED will flash once. This has started the activation of the alarm.**
- **Activation of the alarm takes 90 seconds. DO NOT press the TEST button during the activation 90 seconds period.**
- **After 90 seconds, check the Green LED is flashing on the front of the alarm. The LED will flash once every 30 seconds.**

### USING THE ALARM

#### Normal Conditions:

If there is no CO present, the green power LED will flash once every 30 seconds.

#### Alarm Conditions:

If the alarm detects CO the alarm pattern will sound (3 short beeps) and the Red LED will flash for as long the CO remains at a dangerous level.

#### Silence Function:

If required, the audible alarm can be silenced by pressing the "Test" button. The alarm will re-activate after 120 seconds if CO remains present.

### End of Battery Life:

When the battery has run down the alarm will "Beep" once every 30 seconds. The green LED will continue to flash every 30 seconds.

### End of Sensor Life:

When the sensor comes to the end of its life, the Yellow LED will flash continuously and the alarm will beep.

### WHAT TO DO IF THE ALARM SOUNDS

If the alarm sounds:

- Immediately open windows and doors to ventilate the property.
- If possible, turn off and stop using any fuelled appliances.
- Evacuate the property.
- Call the National Gas Emergency Service on 0800 111 999.
- Do not re-enter the property until the cause of CO has been detected and isolated, and the alarm has returned to normal operation.
- Seek medical assistance for anyone suffering from, or suspected to be suffering from the effects of Carbon Monoxide poisoning.
- Do not use fuelled appliances until they have been assessed and cleared by a competent professional. Young children and household pets may be the first affected.
- Familiarisation with the effects of each level is important.

### RECOMMENDED INSTALLATION LOCATIONS

For maximum protection it is suggested that an alarm is installed in all rooms containing a fuel burning appliance and on each level of a multilevel property, including finished attics and basements.

### NOTE:

The 300mm gap around the top of the room where the walls and ceiling meets is known as negative pressure space. Alarms should not be installed in this space, for alarms located in the same room as a fuel burning appliance, it should be:

- If wall mounted, should be greater than 300mm below the height of the ceiling, as high as possible (above doors and windows), If ceiling mounted, do not install within 300mm of any wall.
- Between 1m and 3m horizontally from the appliance.

If there is only one alarm available for domestic use, ensure it is placed in the hallway outside of the main sleeping area(s). Verify that the alarm can be heard in all sleeping areas.

**Please see reverse for further instructions.**

## WHERE NOT TO INSTALL

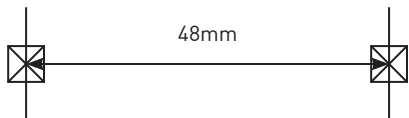
Do not install the alarm in the following areas:

- Excessively dusty, dirty or greasy areas.
- Where curtains or other objects can block the sensor.
- In the peaks of vaulted ceilings, "A" frame ceilings or gabled roofs.
- Within 300mm of fluorescent lights.
- Keep out of damp and humid areas.
- Next to doors and windows that open to the outside.
- Areas where the temperature is below 4.4°C or above 37.8°C.

## INSTALLATION

1. The alarm should be installed by a competent person.
2. After selecting a suitable location for the alarm, drill two 5mm holes in the ceiling or wall using the drilling guide below and insert the plastic plugs (provided).
3. Insert the screws.
4. Remove the tab.
5. Align the activated alarm and hook onto the screws.

## DRILLING GUIDE



## TESTING YOUR CO ALARM

Caution:

Due to the loudness (85 decibels) of the alarm, always stand an arm's length away from the alarm when testing.

After installation, the alarms's electronics can be tested by pressing the "Test" button. A series of beeps will indicate that the alarm is operational and the Red LED will flash. Please note that the alarm should not be tested until 90 seconds after battery activation during this time, the alarm is self-calibrating and should not be tested.

It is recommended that the alarm is tested weekly. If at any time it does not perform as described, firstly verify that there is power to the alarm, then clean any dust or debris off the unit. If it still does not operate correctly, contact the supplier of the alarm.

## GENERAL MAINTENANCE OF ALARM

To keep your CO Alarm in good working order, please follow these simple steps:

- Verify the alarm's, alarm and LED light operation by pushing the test button once a week.
- Remove dust and debris from the alarm cover once a month using a dry cloth.
- Never use detergents or other solvents to clean the alarm.
- Avoid spraying air fresheners, hair spray or other aerosols near the alarm.
- Do not paint the alarm. Paint will seal the vents and interfere with the sensor's ability to detect CO.
- Never attempt to disassemble the alarm and clean inside. This action will void your warranty.

## END OF ALARM LIFE

Under normal operating conditions, this alarm will operate for up to 7 years from original activation (removal of activation pin). The alarm must be replaced if there is a fault with the sensor or when the sensor 'end of life' warning is given (an audible alarm and the yellow LED will flash)

## BATTERY REPLACEMENT

Your alarm is sealed and the cover is designed not to be removed. Under normal operating conditions, the sealed battery will outlast the sensor life. If the alarm displays the 'end of battery life' alert and the alarm is within warranty, contact the Arctic Hayes helpline on +44 (0)113 271 5245.

## SPECIFICATION

Power Supply:	SEALED ER14505 3.6v battery
Standby Current:	<2.5uA
Alarm Current:	<30mA
Ambient Operating Conditions:	5 - 40°C, 20 - 90% R.H.
Alarm:	Loud 85 decibel audible alarm and flashing Red LED indicator Electrochemical
Sensor Type:	Normal
Sensor Life:	7 Years from initial activation
Certification:	BS EN 50291-1:2018 BS EN 50291-2:2019

CO Concentration	Without alarm before	With alarm before
30ppm	120min	-
50ppm	60min	90min
100ppm	10min	40min
300ppm	-	3min



## WARNING:

**WHEN HOUSEHOLD CLEANING SUPPLIES OR SIMILAR CONTAMINANTS ARE USED, THE AREA MUST BE WELL VENTILATED.**

**THE FOLLOWING SUBSTANCES CAN AFFECT THE CO SENSOR AND MAY CAUSE FALSE ALARMS AND DAMAGE TO THE SENSOR:**

**METHANE, PROPANE, ISO-BUTANE, ISO-PROPANOL, ETHYL ACETATE, HYDROGEN SULFIDE DIOXIDES, ALCOHOL BASED PRODUCTS, PAINTS, THINNERS, SOLVENTS, ADHESIVES, HAIR SPRAY, AFTER SHAVE, PERFUME, AND SOME OTHER CLEANING AGENTS.**

## DISCLAIMER

This alarm is designed to detect and alert the user to the presence of Carbon Monoxide from ANY source of combustion. It is NOT designed to detect any other gas. The alarm requires power to operate, and will only indicate the presence of Carbon Monoxide at the sensor. Carbon Monoxide may be present at other areas.

The alarm may not protect people who are especially vulnerable to Carbon Monoxide poisoning; pregnant women, unborn babies, senior citizens and people with heart or respiratory problems. Please seek medical advice if in doubt. The alarm is not a substitute for smoke or heat alarms, and is not a substitute for regularly servicing fuel burning appliances, chimneys and flues.

## DISPOSAL

Please ensure the alarm is disposed of in accordance with local regulations, once it has come to the end of its life.

## OTHER PRODUCTS IN THE SLEEPSAFE RANGE



## TEST SPRAYS FOR SMOKE & CO ALARMS



## SMOKE & HEAT ALARM



## DUAL ALARM (SMOKE/CARBON MONOXIDE)



## PERSONAL ALARMS

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