

CO-FA-9B USER MANUAL

CARBON MONOXIDE ALARM

Please read me – as I could save your life.

NOTE: This User Manual is available in larger text please call **0800 141 2561**

INTRODUCTION

The First Alert CO-FA-9B Carbon Monoxide Poisonous Gas Alarm is one of a new generation of domestic life safety products from Sprue Safety Products Limited, which combines the latest technology and innovative design to provide an aesthetically pleasing and effective contribution to your home safety.

Sprue Safety Products Ltd manufactures some of the most technologically advanced carbon monoxide detectors in the world.

FEATURES

- An advanced electrochemical sensor designed to accurately measure low levels of carbon monoxide (CO) providing an early warning of toxic CO levels in your home
- Detects carbon monoxide continuously
- Resistant to false alarms caused by normal household contaminants
- Sounds a loud 85dB alarm (at 1m/3 feet) to alert you in case of an emergency
- Test/reset button
- Regular self-check to ensure detector is operating correctly
- Simple to mount, portable, ideal for travelling
- Certified to the European Standard for Carbon Monoxide Alarms EN 50291-1: 2010 and EN 50291-2: 2010
- 7 year warranty

CARBON MONOXIDE AND HOW IT CAN AFFECT YOU AND YOUR FAMILY

Carbon monoxide is a poisonous gas that kills hundreds of people each year and injures many more. It is often referred to as the silent killer, it has no odour or taste and cannot be seen. Like oxygen, CO enters the body through the lungs during the normal breathing process. It competes with oxygen by replacing it in the red blood cells, thereby reducing the flow of oxygen to the heart, brain and other vital organs. In high concentrations, CO can kill in minutes.

Many cases of reported carbon monoxide poisoning indicate that while victims are aware they are not feeling well, they become disorientated and unable to save themselves by either exiting the building or calling for assistance. Exposure during sleep is particularly dangerous because the victim usually does not wake up.

Symptoms of CO poisoning
The following symptoms may be related to CO poisoning which all household members should be made aware of:

- Mild Exposure: Slight headache, nausea, vomiting, fatigue (often described as 'flu-like' symptoms)
- Medium Exposure: Severe throbbing headache, drowsiness, confusion, fast heart rate

- Extreme Exposure: Unconsciousness, convulsions, cardiorespiratory failure, death

Your First Alert CO detector monitors the level of CO as parts per million (ppm) in the atmosphere surrounding the detector.

35ppm

The maximum allowable concentration for continuous exposure for healthy adults in any 8 hour period, as recommended by the Occupational Safety and Health Administration (OSHA).

200ppm

Slight headache, fatigue, dizziness, nausea after 2 - 3 hours.

400ppm

Frontal headaches within 1 - 2 hours, life threatening after 3 hours.

800ppm

Dizziness, nausea and convulsions within 45 minutes. Unconsciousness within 2 hours. Death within 2 - 3 hours.

Should you suspect CO may be affecting you or your family, open the doors and windows of your property to ventilate, turn off your appliances and evacuate the premises. At this time the authorities should be contacted to locate the source of the carbon monoxide before re-entering the building. Medical attention should be sought for anyone suffering the effects of CO poisoning (headache, nausea).

Common sources of CO

- Oil and gas boilers
- Portable generators
- Oil or solid fuel cookers
- Gas or paraffin heaters
- Barbecues
- Clogged chimneys
- Gas, wood, coal or coke fireplaces
- Cigarette smoke
- Gas appliances
- Any fossil fuel burning appliance

WARNING: This First Alert carbon monoxide detector is not a combustible gas detector, nor a smoke detector. Please install the proper detectors to detect combustible gases, or smoke.

This CO detector should not be seen as a substitute for the proper installation, use, and maintenance of fuel-burning appliances (including appropriate ventilation and exhaust systems), nor the sweeping of chimneys.

WARNING: Variables relating to your fuel burning appliances can change at any point eg. the flue or chimney could suddenly become blocked or damaged, appliances may stop running correctly or circumstances in neighbouring properties may change resulting in the presence of carbon monoxide. For this and other reasons do not use this carbon monoxide detector on an intermittent basis, or as a portable detector for trying to trace one source of the spillage of combustion products from fuel burning appliances or from chimney.

Do not:

- IGNORE ANY WARNING FROM YOUR CO DETECTOR!
- Burn charcoal inside your home, caravan, tent or cabin
- Install, convert or service fuel-burning appliances without proper knowledge, skill and expertise
- Use a gas cooker for heating a room
- Operate unvented gas burning appliances using paraffin or natural gas in closed rooms
- Operate petrol-powered engines indoors or in confined areas
- Ignore a safety device when it shuts an appliance off

Always:

- Buy appliances accepted by a recognised testing laboratory
- Install appliances according to the manufacturer's instructions
- Have appliance installations carried out by professionals (for gas appliances engineers should be registered)
- Have your appliances checked regularly by a qualified service engineer
- Have your chimneys and flues cleaned professionally every year
- Make regular visual inspections of all fuel-burning appliances
- Do not barbecue indoors, or in an attached garage
- Open windows when a fireplace or oil/solid fuel cooker is in use
- Only install CO detectors that meet the requirements of EN 50291-1: 2010 and EN 50291-2: 2010 in your home
- Be aware of CO poisoning symptoms

EDUCATE YOURSELF AND YOUR FAMILY ON THE SOURCES AND SYMPTOMS OF CO POISONING AND HOW TO USE YOUR CARBON MONOXIDE DETECTOR

WHERE TO INSTALL YOUR DETECTOR

This CO alarm is suitable for use in domestic premises (caravan holiday homes), caravans and motor caravans.



The following advice is applicable to all intended applications, there are special instructions at the end of this section relating to positioning in caravan holiday homes, caravans and motor caravans.

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

In which room should the detector be installed?

Ideally, an apparatus should be installed in every room containing a fuel burning appliance. Additional apparatus may be installed to ensure that adequate warning is given for occupants in other rooms, by locating apparatus in:

- Remote rooms in which the occupant(s) spend considerable time whilst awake and from which they may not be able hear an alarm from apparatus in another part of the premises, and
- Every sleeping room

However, if there is a fuel burning appliance in more than one room and the number of apparatus is limited, the following points should be considered when deciding where best to put the apparatus:

- Locate the apparatus in a room containing a flueless or open-flued appliance, and
- Locate apparatus in a room where the occupant(s) spend most time
- If the domestic premises is a bedsit (a single room serving as both sitting and bedroom) then the apparatus should be put as far from the cooking appliances as possible but near to where the person sleeps
- If the appliance is in a room not normally used (for example a boiler room), the apparatus should be put just outside the room so that the alarm may be heard more easily.

Where in the room should I place the detector?

Apparatus located in the same room as a fuel-burning appliance:

A For both wall and ceiling mounted apparatus the following applies:

- The apparatus should be at a horizontal distance of between 1m and 3m from the potential source
- If there is a partition in a room, the apparatus should be located on the same side of the partition as the potential source
- Carbon Monoxide detectors in rooms with sloped ceilings should be located at the high side of the room

B In addition to the previous points the following must be observed:

If the apparatus is located on a wall:

- it should be located close to the ceiling;
- it should be located at a height greater than the height of any door or window;
- it should be at least 150mm from the ceiling.

If the apparatus is located on the ceiling:

- it should be at least 300mm from any wall and any ceiling obstruction e.g. light fittings.

Apparatus located in sleeping rooms and in rooms remote from a fuel burning appliance:

- Apparatus located in sleeping rooms or located in rooms remote from the fuel-burning appliance should be located relatively close to the breathing zone of the occupants

Where not to put the detector

The apparatus should not be installed:

- In an enclosed space (for example in a cupboard or behind a curtain)
- Where it can be obstructed (for example by furniture)
- Directly above a sink
- Next to a door or window
- Next to an extractor fan
- Next to an air vent or other similar ventilation openings
- In an area where the temperature may drop below -10°C or exceed 40°C
- Where dirt and dust may block the sensor
- In a damp or humid location (for example in a bathroom)
- Less than 1m/3 feet from any appliance
- Within 1m (3 feet) of mobile phones

Caravans

Caravans may have additional risks of carbon monoxide ingress through air vents due to the nearby presence of other vehicles, engines, generators or barbecues, however this does not change the basic guidance on location of the alarm. Caravans should be fitted with an

alarm in the same room as any combustion appliance(s), located in accordance with previous advice in this section. If the caravan has a single living space which incorporates the sleeping accommodation, it can be considered to be equivalent to a bedsit, and a single alarm is sufficient. However, any sleeping accommodation which is in a separate room from the combustion appliance(s) should also contain an alarm, located in accordance with previous advice in this section.

It is not always possible to find an optimum location for an apparatus, for example, a small caravan may not have suitable vertical surfaces available. Nevertheless, when fitting an apparatus in such situations, the two most important considerations when selecting an appropriate location are:

- Not mounting the apparatus directly above a source of heat or steam; and
- Mounting the apparatus at a distance of 1 - 3 m from the nearest edge of the potential source.

HOW TO INSTALL YOUR DETECTOR

NOTE: This apparatus should be installed by a competent person who feels able to install it according to the instructions.

Firstly write the installation date on your detector in the area provided. We recommend that your detector is installed on the wall.

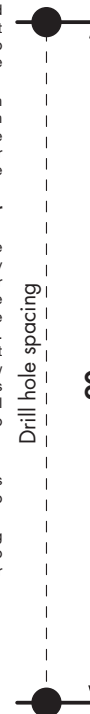
To mount on a wall or ceiling:

Please ensure that you use the screws provided, as they were chosen specifically for use with this product. Use template below for guidance on marking hole positions. Drill holes into the wall. Insert the plastic wall plugs. Screw in the screws. Ensure screws are protruding from the wall by 3mm to allow detector to slot onto screws.

To place on a shelf:

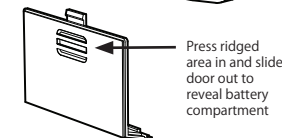
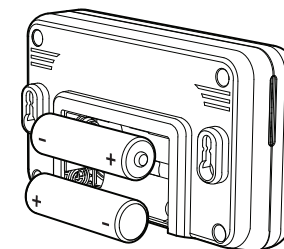
The base of the detector has been designed to allow it to stand freely on a shelf.

WARNING: When placing on a shelf, please follow to the recommendations for positioning.



Products Ltd may have a detrimental effect on the detector's operation. Replace the battery cover and return the detector to its original position.

D Your advanced First Alert CO detector requires a short 'warm-up' period before it is fully operational.



If you have followed all of the above steps correctly, your unit will begin monitoring for CO in around 3 minutes. When the 3 minute warm-up period is complete, the Power LED will flash green once per minute to indicate that the alarm is receiving power from the batteries and is fully operational (if your detector chips or enters alarm following the 3 minute warm-up period and your product is still within warranty, then please contact technical support for advice).

E Test the sounder, batteries and circuitry by pressing and holding the Test/Reset button for 1 second. The sounder should sound as soon as the button is pressed, and the Alarm LED will illuminate red for a short time indicating that the sounder is working and the batteries are providing power to the unit. This test for the sounder, batteries and circuitry should be performed weekly.

WARNING: Prolonged exposure to the sounder in close proximity to your ears may damage your hearing.

Under normal operating conditions, the batteries should last for at least 12 months. The detector will not protect against the risk of carbon monoxide poisoning when the batteries have drained.

WARNING: Prolonged exposure to extreme high or low temperatures may reduce the life of the batteries.

OPERATING FEATURES

Your First Alert CO detector offers many features which set it apart from other CO detectors on the market today.

Test/Reset button feature

This button will:

- Test the sounder, batteries and circuitry
- Allow you to test the sensor by introducing a source of CO into the detector (see 'Testing The Sensor' below)
- Silence the loud 85dB sounder during an alarm (only possible when current CO level is less than 50ppm)

Testing the sounder, batteries and circuitry

Test the sounder, batteries and circuitry by pressing and holding the Test/Reset button for 1 second to confirm that the detector is operating

BATTERY INSTALLATION / REPLACEMENT

A If the detector is already wall or ceiling mounted then unhook it from the mounting screws.

B Remove the battery cover located on the back of the detector.

C Replace the batteries with 2 x approved 1.5 volt AA size alkaline batteries, making sure the batteries are the correct way round. Use of batteries other than those recommended by Sprue Safety

