

5. WHAT IS CARBON MONOXIDE?

Carbon Monoxide (CO) is an extremely poisonous gas. It is colourless, odourless, and tasteless, making it difficult to detect. CO is released by the incomplete combustion of fossil fuels, such as natural gas, bottled gas, petrol, diesel, oil, paraffin, wood, coal, coke, and biofuels.

When inhaled, CO causes chemical asphyxiation by mixing with the blood and reducing the oxygen that is carried throughout the body, especially to the brain. The following symptoms are typical of CO poisoning and should be discussed with all members of your household:

- Mild Exposure:**
Slight headache, nausea, and fatigue—often mistaken for flu symptoms. Think CO.
- Medium Exposure:**
Severe throbbing headache, drowsiness, confusion, vomiting, and a fast heart rate.
- Extreme Exposure:**
Unconsciousness, convulsions, cardio-respiratory failure, and death.
- CO poisoning is particularly dangerous because victims can become so disoriented that they are unable to act, such as exiting the building or calling for help. Very young children may show symptoms earlier than adults.
- The most dangerous situation occurs during sleep, as the victim will not wake up due to the effects of CO poisoning.

6. WHAT ARE THE POTENTIAL SOURCES OF CARBON MONOXIDE?

A correctly operating and serviced fossil fuel-burning appliance should allow for complete combustion of the fuel and, therefore, should not pose a hazard. To ensure safety, have all such appliances serviced at least once a year by a fully qualified Gas Safe registered engineer.

TYPICAL SOURCES OF CARBON MONOXIDE AROUND THE AVERAGE HOUSEHOLD INCLUDE:

Room heaters: Real flame fires, wood burners, ranges, open coal, coke, and wood fires, as well as portable gas and paraffin heaters.

Central heating boilers: Oil-fired and gas central heating boilers, wood burners, and automated feeders for coke and coal.

Cookers and solid fuel ranges.
NOTE: Cooker hoods without flues will not remove CO.

Barbecues and chimneas: Even when used outside, they can pose a risk if placed too close to the property.

Petrol and diesel engines: Cars, motorbikes, lawnmowers, trimmers, rotoators, chainsaws, etc., particularly when operated in enclosed spaces like garages or garden sheds.

Cigarette, cigar and pipe smoke. Carbon monoxide from burning tobacco can accumulate, especially in poorly ventilated areas.

Blocked flues from fires, ranges and boilers. A partially blocked flue can cause a buildup of unburned gases. If the flue is damaged due to building movement or poor condition, it may hinder complete combustion or leak combustion gases into the property, particularly when these appliances rely on room air for improved exhaust efficiency.

7. TYPICAL CAUSES OF CARBON MONOXIDE IN THE HOME ARE

- Incorrect Installation of Equipment:** Always use a registered Gas Safe Installation Engineer.
- Faulty Equipment:** Examples include cracked or blocked flues and cracked heat exchangers.
- Insufficient Ventilation for Complete Combustion:** For appliances that take air for combustion from the room—such as open wood and coal fires, portable gas or paraffin heaters, or space-heating boilers—the room MUST have adequate ventilation to ensure sufficient air for complete combustion. DO NOT block room vents specifically provided for this purpose.
- Appliances Competing for Air Supply:** Where more than one appliance is drawing air from a room, ensure there is an adequate air supply. Consult your Gas Safe Engineer.

HAVING A WORKING CARBON MONOXIDE ALARM IN YOUR PROPERTY SHOULD NOT BE SEEN AS A REASON TO AVOID THE REGULAR SERVICING OF FUEL BURNING APPLIANCES.

8. HOW TO MAINTAIN YOUR ALARM

WARNING: Tampering with this alarm may cause a malfunction

- Testing the alarm**
Test the alarm once a week using the test button. It should flash all three LEDs in sequence, followed by four beeps from the sounder.
- Cleaning the alarm**
Regular cleaning is essential for proper functioning. Keep the alarm free of dust by vacuuming it every month, and ensure the vents are clear. Every six months, wipe the outside with a damp cloth to remove staining and grease from cooking etc.
- End-of-Life Warning Indicator**
After approximately 10 years of use, the alarm will reach the end of its operational life. At this point, it will emit three beeps every minute, indicating that it is time to replace the unit. This end-of-life signal means the internal components may no longer function reliably, and the alarm may not provide adequate protection.
- When the end-of-life warning activates, replace the alarm immediately with a new unit to ensure continued safety. The alarm cannot be reset or repaired once this signal occurs.
- Battery Information**
The CO24 series alarms are powered by a sealed, non-replaceable battery designed to last approximately 10 years. After this period, the alarm will emit three beeps every minute, indicating that the battery has reached the end of its life and the alarm must be replaced.

9. AUTOMATIC FAULT DETECTION

In the unlikely event of a fault in your alarm, it will emit two beeps every minute (see Table 1). If this occurs, DO NOT OPEN THE ALARM, as there are no user-serviceable parts inside. Remove the alarm from the baseplate and take out the batteries if installed. Then, return it to the manufacturer at the address provided at the end of this manual.

10. ADDITIONAL SAFETY CONCERNS

- Air tightness of the Property.** Air tightness can occur if there is a lack of unobstructed ventilation, particularly in homes with double glazing. Ensure proper ventilation is maintained.
- Holiday Accommodation.** Take particular care when using holiday accommodation, whether at home or abroad. Make sure you understand the type of appliances in use and note the type of fuel being used. The CO24 series alarms are especially suitable for this purpose. Always take the handbook with you and familiarise yourself with these instructions.

11. PRODUCT WARRANTY

Fireblitz Ltd guarantees to you, as a purchaser, that the enclosed Carbon Monoxide alarm will be free from defects in material, workmanship or design under normal use and service for a period of 10 years.

This Guarantee is not assignable. Our liability to you, under this guarantee is limited to repairing or replacing any part which we find to be defective in material, workmanship or design, free of charge to the customer, upon sending the alarm with proof of date of purchase, postage paid to Fireblitz Ltd, Units 15-17 Manford Industrial Estate, Manor Road, Erith, Kent DA8 2AJ.

The terms of this guarantee will not apply in the following circumstances: If the alarm has been modified, dismantled, contaminated, damaged, neglected or otherwise abused or altered following the date of purchase, or if it fails to operate due to incorrect siting, installation, or damage caused by failure to abide by the instructions supplied. It is specifically drawn to the user's attention that substantial periods in alarm will shorten alarm life, during which time it will have provided valuable protection and no claim under the guarantee will be entertained.

The liability of Fireblitz Ltd, arising from the sale of this alarm or under the terms of this guarantee shall not in any case exceed the cost of replacement of the alarm. In no case, shall Fireblitz Ltd be liable for consequential loss or damage resulting from the failure of the alarm or the breach of this or any other guarantee, express or implied or for damage caused by failure to abide by the instructions supplied. This guarantee does not affect your statutory rights.

IMPORTANT: This device is not suitable as a smoke, fire or combustible gas detector. It should not be regarded as a substitute for the proper servicing of fossil fuel burning appliances such as gas, oil, paraffin, bio-fuel, wood, coke, charcoal or coal fired boilers, room heaters and cookers etc, or their flues.

Fireblitz Extinguisher Ltd.
Units 15-17 Manford Industrial Estate, Manor Road, Erith, Kent DA8 2AJ
Telephone: 01322 342238 TECHNICAL HELPLINE 0800 008 6568
Text on 07885 831239 Email: customerservices@fireblitz.co.uk

Firehawk

SAFETY PRODUCTS



CO Alarm

MANUAL

10 YEAR WARRANTY



ALARM SILENCE



LONG-LIFE BATTERY



CE

UK CA



Regular Production Surveillance Safety Type Approved
www.tuv.com
ID 1111297143



Control Unit Classification: 6K2/6B1/6S1/6M3

CO24 Series

BS EN 50291-1:2018
BS EN 50291-2:2019

READ AND RETAIN THIS USER MANUAL

1. PRODUCT DESCRIPTION

The Firehawk CO24 series battery-operated Carbon Monoxide alarms are ideal for both home use and travel. Its compact size makes it easy to pack, providing invaluable protection from faulty heating and cooking appliances wherever you are.

Three LEDs on the front of the alarm indicate different device states: Alarm (red) illuminates when harmful levels of CO are detected; Power (green) flashes once every minute to show the alarm is functioning; and Fault (yellow) signals a malfunction. All three LEDs are accompanied by distinct sound patterns, as shown in Table 1.

CO24BD Alarm with LCD Display

The LCD display on the CO24BD alarm allows you to view harmful levels of Carbon Monoxide (CO) in ppm (parts per million) by pressing the display button. Additional presses will show peak CO levels from the previous 12 hours, as well as the % COHb (carboxyhemoglobin, or CO in the blood).

WARNING: This apparatus is designed to protect individuals from the acute effects of carbon monoxide exposure. It will not fully safeguard individuals from specific medical conditions. If in doubt consult a medical practitioner.

2. WHERE TO INSTALL YOUR ALARM

The design and layout of domestic premises, as well as the number, type, and position of carbon monoxide sources, can vary widely. However, the following general guidance will help minimize the risk of misleading indications (for further installation guidance refer to EN 50292):

Which room?

Ideally, an alarm should be installed in every room containing a fuel-burning appliance. Additional alarms may be necessary to ensure adequate warning in other rooms by locating alarms:

- a. In remote rooms where occupants spend significant time while awake and may not hear an alarm from another part of the premises.
- b. In every sleeping room.

If there are multiple fuel-burning appliances and the number of alarms is limited, consider the following points when deciding the best locations:

- c. Install an alarm in a room containing a flueless or open-flued appliance.
- d. Install an alarm in a room where occupants spend the most time.
- e. If the appliance is in a room not normally used (e.g., a boiler room), place the alarm just outside the room to ensure it can be heard more easily. If that room is remote, follow the guidance in points a. and b. above.

Where in the room?

Ensure that all light indicators on the alarm are visible from the chosen location. While specific guidance may vary by room type and usage, consider the following points when determining the best location:

Caravans and boats?

This CO alarm is suitable for use in domestic premises (including caravan holiday homes), caravans, motor caravans, and boats. Caravans and boats may face additional risks of carbon monoxide ingress through air vents due to nearby vehicles, engines, generators, or barbecues; however, the basic guidance on alarm location remains the same.

Install the alarm in the same room as any combustion appliance(s), following the previous advice. If the caravan has a single living space that includes sleeping accommodation, a single alarm is generally sufficient. However, if the sleeping area is separate from the combustion appliance(s), install an additional alarm in the sleeping area as per the earlier guidance.

If finding an optimal location is challenging (e.g., in a small caravan), prioritize the following when selecting a location:

Avoid mounting the alarm directly above a source of heat or steam.

Mount the alarm 1–3 meters from the nearest edge of a potential source.

Where not to install the alarm

The alarm **SHOULD NOT** be installed:

- In an enclosed space (e.g., a cupboard or behind a curtain).
- Where it can be obstructed (e.g., by furniture, books, or ornaments).
- Directly above a sink.
- Next to a door or window.
- Next to an extractor fan.
- Next to an air vent or other 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.
- In the immediate vicinity of a cooking appliance.

For Alarms in the Same Room as a Fuel-Burning Appliance:

- If wall-mounted, place the alarm close to the ceiling, higher than any door or window.
- If ceiling-mounted, ensure the alarm is at least 300 mm from any wall. If wall-mounted, it should be at least 150 mm from the ceiling.

- The alarm should be placed at a horizontal distance of between 1m and 3m from the potential source. If there is a partition, position the alarm on the same side of the partition as the potential source.
- In rooms with sloped ceilings, install the alarm at the high side of the room.

For Alarms in Sleeping Rooms and Remote Rooms:

Place the alarm relatively close to the breathing zone of occupants (i.e., where a person's head is typically located while sitting or lying down).

Pay special attention to the needs of the elderly and disabled. For further information, contact the manufacturer's helpline at **01322 342 238** or CoGDEM (The Council for Gas Detection and Environmental Monitoring) at **0800 1694 457**.

WARNING: Do not operate this alarm in temperatures below -10°C or above 40°C, or in humidity levels below 30% RH or above 90% RH.

WARNING: Do not tamper with the alarm as this could cause electric shock or malfunction.

3. HOW TO INSTALL YOUR ALARM

This apparatus should be installed by a competent person.

As a portable Device:

1. Assemble the device as shown in Figs. 1 & 2. The alarm will automatically switch on and beep 4 times with lights and display if fitted. Test the alarm using the test button and refer to Table 1. To remove the baseplate and turn off the alarm, see the end of this section.
2. Attach the stand as shown in Fig. 3
3. Place the alarm in your chosen position in free air with no local obstructions and close to the front edge of shelves and surfaces. See "Where to install the alarm" above.

Fixing the alarm to a wall:

1. Decide on the position for the alarm in open air and unobstructed from the guidance given above in "Where to install the alarm".
2. Using the screws and fixings supplied fix firmly to the wall as shown in Fig. 4. Assemble the alarm to the baseplate as shown above in Fig 1. The alarm will automatically switch on and beep 4 times with lights and display if fitted.
3. Test the alarm using the test button and refer to Table 1.

NOTE: To Remove the alarm from the baseplate, depress the tag fully towards the back of the baseplate and slide the alarm towards the top. See Fig 5.

Testing the Alarm

1. Press the test button on the alarm. It should emit four loud beeps, and the lights and display (if fitted) will activate.

Pairing the Radio System (CO24-RF)

The CO24-RF alarm comes with an additional radio pattress, allowing the alarms to be interlinked by radio with other RF-Link series devices, including Firehawk Smoke, Heat, and Carbon Monoxide alarms, as well as FHN800HIA Control Units for the hard of hearing. Please refer to the enclosed instructions for linking the radio alarm devices together.

1. Once the linking process is complete, test all alarms to ensure they are interconnected. If any alarms do not link, reset and pair them again according to the instructions provided with the alarms.
2. Next, take the fully linked alarms to their designated rooms and test the system again to confirm they still function correctly in their new locations.
3. Finally, separate the alarms from their radio bases by pressing the security tag (as shown below) and sliding them apart.



4. Fix the baseplate to the wall or ceiling using the provided fixings. Alternatively, you may use two half-moon shaped, double-sided fixing pads available from Fireblitz. Reattach the alarm to the baseplate as shown.

NOTE: You need to ensure surfaces do not contain hazardous materials e.g. asbestos. The screw fittings supplied are suitable for use on wood, plaster and plasterboard but on other surfaces such as concrete where adhesive material or adhesive pads may be better. For certain applications, the installer may need to source their own fixings.

5. Alternatively, you may use any proprietary builder's fixing adhesive typically used for attaching skirting boards and other lightweight building components to walls.

NOTE: Be sparing with any adhesives used on the back of the radio pattress to avoid excess adhesive squeezing through holes onto the circuit board. When using adhesive pads or adhesives make sure the surfaces are flake free, clean, dry and flat. Take care to use all appropriate Health and Safety precautions when fixing the pattress and alarm to their surface - in particular use appropriate access equipment, protect yourself from dust and wear eye protection.

Do not change any components of the system for those made by other manufacturers. Up to 15 alarms may be paired to the system.

WARNING: The electronic test button provides a full test of the alarms functionality. Do not try to test the alarm using either heat smoke or naked flame as damage will occur.

4. WHAT TO DO IF THE ALARM SOUNDS

If the alarm sounds a repeating series of 4 beeps (see Table 1), evacuate the property immediately. If it is not possible for all occupants to exit the property, call for help, open all doors and windows to ventilate the area, and move to fresh air.

IN THE CASE OF SUSPECTED CARBON MONOXIDE (CO) POISONING, SEEK MEDICAL ASSISTANCE IMMEDIATELY.

If it is safe to do so, turn off all appliances, shut off the gas supply tap and:

CALL NATIONAL GAS EMERGENCY SERVICE ON 0800 111 999

Do not silence the alarm or re-enter the property until the source of Carbon Monoxide (CO) has been located and resolved by a competent, registered Gas Safe engineer.

To silence the alarm, press the silence button. This will pause the alarm for 10 minutes. The alarm will reactivate if the concentration of carbon monoxide remains above 50ppm. The silence button will not work if the carbon monoxide level is above 300ppm.

Carbon Monoxide Present	Repeating Series of 4 beeps with Red LED	
Alarm Test	One series of 4 beep with green, yellow and red LEDs	
Low Battery	One beep every minute	
Fault	Two beeps every minute with red and yellow LEDs	
End of alarm life	Three beeps every minute	

Table 1

The CO24 alarm series will trigger an alarm condition when continuously exposed to carbon monoxide (CO) at specific concentrations for set durations. The alarm does not activate immediately upon reaching a certain CO level; it must remain at that level for the specified time before sounding:

Carbon Monoxide Level (Parts per million)	No Alarm Before	Alarm Before
30 ppm	120 mins	-
50 ppm	60 mins	90 mins
100ppm	10 mins	40 mins
300ppm	-	3 mins

The alarm will reset itself if the CO dissipates naturally.