



**LIFESAVER**



KM 98848  
EN50291:2001

# Carbon Monoxide Alarm

## User's Guide

**Model: KN-COB-B-LS-UK (900-0233)**

**KN-COB-B-LS-UK  
(900-0233)**



- Peak Level Memory
- 3-AA Battery Operation

**ATTENTION:** Please take a few minutes to thoroughly read this user's guide which should be saved for future reference and passed on to any subsequent owner.

## What to do When the Alarm Sounds!

### Carbon Monoxide Alarm Procedure



**WARNING:** Actuation of your CO Alarm indicates the presence of Carbon Monoxide (CO) which can kill you.

When the CO alarm senses a dangerous level of CO, the unit will emit a loud alarm pattern.



**WARNING!** – Actuation of this device indicates the presence of dangerous levels of carbon monoxide! Carbon monoxide can be fatal! If the alarm sounds:

- 1) Operate the test/reset button;
- 2) Call the Emergency Services (Fire Brigade or 000)
- 3) Immediately move to fresh air outdoors. Do a head count to check that all persons are accounted for. Do not re-enter the premises until gas emergency services have arrived, the premises has been aired out, and your alarm remains in its normal condition.
- 4) After following steps 1-3, if your alarm reactivates within a 24 hour period, repeat steps 1-3 and call a qualified Gas Safe registered installer to examine and/or turn off your gas/oil fired appliances, such as space heater, boiler, water heater, cooker, oven, clothes dryer, or other sources of combustion, such as paraffin burning stove or heater or gas log fireplace. If your car is idling in an attached garage turn off the engine.

## Welcome

**Note: Many times throughout this User's Guide, we will refer to Carbon Monoxide as "CO".**

Your new Lifesaver Carbon Monoxide (CO) Alarm is a sophisticated instrument that has been carefully designed and tested to detect CO build up in a residential environments. Your alarm is for use specifically in the home.

CO cannot be seen, smelled or tasted and can be fatal. The build up of CO in the blood is called the carboxyhemoglobin level and interferes with the body's ability to supply itself with oxygen. Depending on the concentration, carbon monoxide can kill in minutes.

The most common sources of CO are malfunctioning, or misuse of, gas appliances used for heating and cooking, vehicles engines, electric generators, blocked chimneys or flues, portable fuel burning heaters, fireplaces, fuel powered tools and operating a grill in an enclosed space.

Indications of CO poisoning include symptoms similar to the flu, but with no fever. Other symptoms include dizziness, fatigue, weakness, headache, nausea, vomiting, sleepiness and confusion. Everyone is susceptible to the danger of CO, but unborn babies, small children, pregnant women, senior citizens and people with heart or respiratory problems may experience symptoms sooner. Each year a qualified Plumber or Gas fitter should inspect and clean your heating system, vents, chimney, and flues.

Your new Lifesaver CO alarm has a five year warranty. Please take a few minutes to thoroughly read the user's guide and familiarize yourself and your family with its operation. Your Lifesaver CO alarm was designed to detect carbon monoxide gas from ANY source of combustion. It is NOT designed to detect smoke, fire or any other gases. If you have any questions please call us on 1300 772 776.

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If you require further information, contact our Consumer Hotline, or write to us at:

PSA Products Pty Ltd  
17 Millicent Street, Burwood  
Victoria 3125  
Ph: 1300 772 776  
[www.psaproducts.com.au](http://www.psaproducts.com.au)

## Important Warning Statements

**IMPORTANT: This carbon monoxide alarm is designed to detect carbon monoxide from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gas.**

**WARNING: Carbon monoxide alarms are not smoke alarms. This carbon monoxide alarm is not a substitute for installing and maintaining an appropriate number of smoke alarms in your home.**

## Important Warning Statements

This carbon monoxide alarm will not sense smoke, fire, or any poisonous gas other than carbon monoxide even though carbon monoxide can be generated by fire. For this reason you must install smoke alarms to provide early warning of fire and to protect you and your family from fire and its related hazards.

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

This product is intended for use in ordinary indoor locations of family living units.

The installation of this device should not be used as a substitute for proper installation, use and maintenance of fuel burning appliances, including appropriate ventilation and exhaust systems. It does not prevent CO from occurring, nor can it solve an existing CO problem.

**WARNING:** This device is designed to protect individuals from acute effects of carbon monoxide exposure. It may not prevent the chronic effects of carbon monoxide exposure. It may not fully safeguard individuals with specific medical conditions. If in doubt, consult a medical practitioner.

Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 PPM.

This carbon monoxide alarm requires a continuous supply of electrical power – it will not work without power.

### Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with Local Authority or retailer for recycling advice.



## Contents of This User's Guide

1. Information About Carbon Monoxide
2. Product Features and Specifications
3. Installation Locations
4. Installation Instructions
5. KN-COB-B-LS-UK(900-0233) Operating Characteristics
6. Alarm Characteristics
7. Maintenance
8. Limited Warranty

## 1. Information About Carbon Monoxide

### General Carbon Monoxide Information

Carbon monoxide is a colourless, odorless and tasteless poison gas that can be fatal when inhaled. CO inhibits the blood's capacity to carry oxygen.

Periodically review this alarm manual and discuss your CO alarm emergency procedure with all the members of your family. Never ignore a CO alarm. A true alarm is an indication of potentially dangerous levels of CO. CO alarms are designed to alert you to the presence of CO before an emergency – before most people would experience symptoms of CO poisoning, giving you time to resolve the problem calmly.

Determine if anyone in the household is experiencing symptoms of CO poisoning. Many cases of reported CO poisoning indicate that while 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. Also, young children and household pets may be the first affected. You should take extra precautions to protect high-risk persons from CO exposure because they may experience ill effects from CO at levels that would not ordinarily affect a healthy adult.

### Symptoms of CO Poisoning

The following common symptoms are related to CO poisoning and should be discussed with ALL members of the household.

#### 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, cardio-respiratory failure, death.

If you experience even mild symptoms of CO poisoning, consult your doctor immediately!

## 1. Information About Carbon Monoxide

### **Carbon Monoxide PPM Levels**

#### **Dangerous Levels:**

When someone is experiencing symptoms of CO poisoning and CO readings are generally above 100 PPM. Anytime someone is experiencing the symptoms of CO poisoning this should be treated as an emergency. See "What to do When the Alarm Sounds" (inside front cover).

#### **High Levels:**

Generally above 100 PPM, with no one experiencing symptoms. This should be treated as an urgent situation. See "What to do When the Alarm Sounds" (inside front cover).

#### **Mid Levels:**

Generally between 50 PPM to 100 PPM. This should be cause for concern and should not be ignored or dismissed. See "What to do When the Alarm Sounds" (inside front cover).

#### **Low Levels:**

Generally below 50 PPM. PSA recommends you take action to eliminate the source of CO. See "What to do When the Alarm Sounds" (inside front cover).

### **Possible Sources of Carbon Monoxide**

Inside your home, appliances used for heating and cooking are the most likely sources of CO. Vehicles running in attached garages can also produce dangerous levels of CO.

CO can be produced when burning any fossil fuel, such as gasoline, propane, natural gas, oil and wood. It can be produced by any fuel-burning appliance that is malfunctioning, improperly installed, or not ventilated correctly, such as:

- Automobiles, furnaces, gas ranges/stoves, gas clothes dryers, water heaters, portable fuel burning space heaters and generators, fireplaces, wood-burning stoves and certain swimming pool heaters.
- Blocked chimneys or flues, back drafts and changes in air pressure, corroded or disconnected vent pipes, loose or cracked furnace exchangers.
- Vehicles and other combustion engines running in an open or closed garage, attached or near a home.
- Burning charcoal or fuel in grills and hibachis in an enclosed area.

## 1. Information About Carbon Monoxide

### Conditions That Can Produce Carbon Monoxide

The following conditions can result in transient CO situations:

- Excessive spillage or reverse venting of fuel-burning appliances caused by outdoor ambient conditions, such as, wind direction and/or velocity, including high gusts of wind, heavy air in the vent pipes (cold/humid air with extended periods between cycles).
- Negative pressure resulting from the use of exhaust fans.
- Simultaneous operation of several fuel-burning appliances competing for limited internal air.
- Vent pipe connections vibrating loose from clothes dryers, furnaces, or water heaters.
- Obstructions in, or unconventional, vent pipe designs which can amplify the above situations.
- Extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.).
- Temperature inversions which can trap exhaust gases near the ground.
- Vehicle idling in an open or closed garage, or near a home.

To be safe, know the possible sources of CO in your home. Keep fuel-burning appliances and their chimneys and vents in good working condition. Learn the early symptoms of exposure, and if you suspect CO poisoning, move outside to fresh air and get emergency help. Your first line of defence is an annual inspection and regular maintenance of your appliances. Contact a licensed contractor or call your local utility company for assistance.

### Information About Carbon Monoxide Alarms – What They Can and Cannot Do:

CO alarms provide early warning of the presence of CO, usually before a healthy adult would experience symptoms. This early warning is possible, however, only if your CO alarm is located, installed and maintained as described in this guide.

Because carbon monoxide is a cumulative poison, long-term exposures to low levels may cause symptoms, as well as short-term exposures to high levels. This Lifesaver unit has a time-weighted alarm – the higher the level of CO present, the sooner the alarm will be triggered.

This CO alarm can only warn you of the presence of CO. It does not prevent CO from occurring, nor can it solve an existing CO problem. If

your unit has alarmed and you've provided ventilation by leaving your windows and doors open, the CO buildup may have dissipated by the time help responds. Although your problem may appear to be temporarily solved, it's crucial that the source of the CO is determined and that the appropriate repairs are made.

This CO alarm is designed to act as a monitor; it is not designed for use as a short-term testing device to perform a quick check for the presence of CO.

CO alarms have limitations. Like any other electronic device, CO alarms are not fool-proof. CO alarms have a limited operational life. You must test your CO alarm weekly, because it could fail to operate at any time.

If your CO alarm fails to test properly, or if its self-diagnostic test reveals a malfunction, immediately have the unit replaced. This alarm will not monitor CO levels while in an error condition.

CO alarms can only sense CO that reaches the unit's sensor. It's possible that CO may be present in other areas without reaching the alarm. The rate and ability that which CO reaches the alarm may be affected by:

- Doors or other obstructions.
- Fresh air from a vent, an open window or other source.
- CO being present on one level of the home and not reach a CO alarm installed on a different level. (For example, CO in the basement may not reach an alarm on the second level, near the bedrooms).

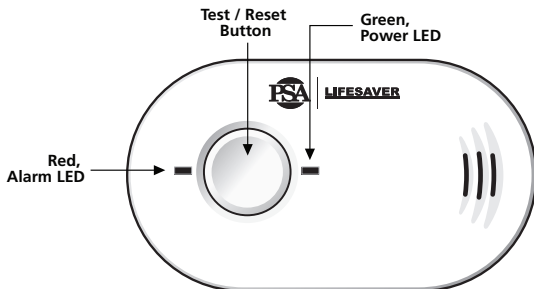
For these reasons, we recommend you provide complete coverage by placing a CO alarm on every level of the home. Please carefully read all information in sections 2 and 3 on properly installing this CO alarm.

CO alarms should not be used to detect the presence of natural gas (methane), propane, butane, or other combustible fuels.

Instruct children never to touch, unplug or otherwise interfere with the alarm. Warn children of the dangers of CO poisoning.



## 2. Product Features and Specifications



### Model KN-COB-B-LS-UK (900-0233)

**WARNING:** After seven (7) years from initial power up, this alarm will "beep" every 30 seconds to indicate that it is time to replace the alarm. Replace the alarm immediately! It will not detect CO in this condition.

**Temperature:**

Operating Range: 40°F (4.4°C) to 100°F (37.8°C)

**Humidity:**

Operating range: 10-95% non-condensing

**Audible Alarm:**

85+ dB at 10' @ 3.4±0.5 KHz pulsing alarm

**Sensor:**

Electrochemical

**Power:**

3-AA Batteries

**Alarm Response Times:**

30 ppm = no alarm in 120 minutes

50 ppm = Must alarm in 60-90 minutes

100 ppm = Must alarm in 10-40 minutes

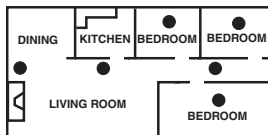
300 ppm = must alarm within 3 minutes

### 3. Installation Locations

#### Recommended Installation Locations

CO alarms should be mounted in or near bedrooms and living areas. It is recommended that you install a PSA CO alarm on each level of your home.

When choosing your installation locations, make sure you can hear the alarm from all sleeping areas. If you install only one CO alarm in your home, install it near bedrooms, not in the basement or furnace room.



Recommended Locations

- When wall mounting, place out of reach of children. Under no circumstances should children be allowed to handle the CO alarm.
- Locate the alarm at least 1 metre from the floor..

#### Locations To Avoid

**IMPORTANT:** Improper location can affect the sensitive electronic components in this alarm. To avoid causing damage to the unit, to provide optimum performance, and to prevent unnecessary nuisance alarms:

- Do not install in kitchens, garages or furnace rooms that may expose the sensor to substances that could damage or contaminate it.
- Do not install in areas where the temperature is colder than 40°F (4.4°C) or hotter than 100°F (37.8°C) such as crawl spaces, attics, porches and garages.
- Do not install within 2 metres of heating or cooking appliances. (PSA recommends 5 metres to prevent nuisance alarms).
- Do not install near vents, flues, chimneys or any forced/unforced air ventilation openings.
- Do not install near ceiling fans, doors, windows or areas directly exposed to the weather.
- Do not install in dead air spaces, such as peaks of vaulted ceilings or gabled roofs, where CO may not reach the sensor in time to provide early warning.
- Do not install this unit near deep-cell large batteries. Large batteries have emissions that can cause the alarm to perform at less than optimum performance.
- Do not obstruct the vents located on the alarm. Do not place the alarm where drapes, furniture or other objects block the flow of air to the vents.

## 4. Installation Instructions

### Battery Installation and Replacement

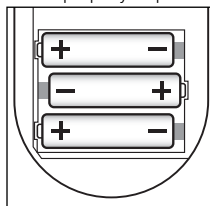
This CO alarm must be installed by a competent person.

To install or replace the batteries in this Lifesaver CO alarm, please perform the following steps.

1. Slide open the bottom cover to expose the battery compartment.
2. If replacing batteries, remove the old batteries and properly dispose of them as recommended by the battery manufacturer.
3. Install the new batteries. Note the polarity illustration in the battery compartment.
4. Close the bottom cover. Note: The bottom cover will not close if all three AA batteries are not installed.

When replacing the batteries, use one of the following approved brands:

- **Duracell**            **MN1500 or MX1500**
- **Energizer**        **E91**
- **GoldPeak**        **15A**
- **Golden Power** **GLR6A**



**Battery Polarity  
for the three AA batteries**

These batteries can be purchased where you bought the alarm or at a local hardware store. Use of a different battery may have a detrimental effect on the alarm operation.

**IMPORTANT:** Constant exposures to high or low humidity may reduce battery life. A good safety measure is to replace the battery at least once a year.

After installing or changing the batteries, reinstall your alarm. Test your alarm by using the Test/Reset button and check that the green "Power" LED is on.

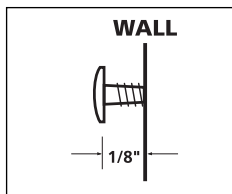
## 4. Installation Instructions

### Mounting

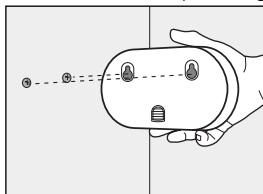
This CO alarm can be either wall mounted or placed on a tabletop.

For wall mounting, follow these steps:

1. Mark the location of the two holes needed on the wall using the battery door as a template. Placing at eye level allows for optimum monitoring of the red and green indicator lights, or, as a guide, 1.5 metres from the floor.
2. Insert the two screws provided until the screw heads are protruding approximately 1/8" from the wall. (If mounting in a plasterboard or drywall, drill a 3/16" hole in the wall and use the plastic anchors provided.)
3. Hook the CO alarm over the screws and onto the keyholes in the back of the alarm.



**Screw Head Distance  
from Wall**



**Wall Mount**

Your CO alarm may also be placed on a tabletop. Simply place in a location that is easily visible. Be sure the alarm is no more than 1 metre from the floor.

### Important Labels Provided

Two labels have been provided that have important information on what to do in case of an alarm. Place one label next to the alarm after it is mounted, and one label near a fresh air source such as a door or window.

## 5. Model KN-COB-B-LS-UK(900-0233) Operating Characteristics

Whenever the alarm is operating, the green Power LED flashes every 30 seconds to indicate the unit is monitoring for CO. If the alarm senses dangerous levels of CO, the red Alarm LED will flash and the alarm will emit an audible alarm pattern.

### Operating and Alarm Characteristics

Function	LED Display	Alarm Sound	Unit Status	Recommendation
Normal Operation	Green LED flashes every 30 seconds	None	Normal DC operation (sensing no CO) and with good batteries	None
Carbon monoxide alarm	Red LED flashes with beeps.	Repeating ON/OFF beeps	Alarm condition. Dangerous concentrations of CO detected	Refer to "What to do When the Alarm Sounds" (inside front cover)
Low battery	Red LED flashes every 30 seconds	One quick beep every 30 seconds	Batteries need to be replaced	Replace all three AA batteries
Error / service alarm	Red LED flashes every 30 seconds	One quick beep every 30 seconds	Unit is in error condition	Replace battery. If condition continues, unit has malfunctioned.
Error	Red LED constantly on	Constant alarm	Very low battery or unit malfunction	Replace immediately. Unit will not respond to CO
Normal Test/Reset function	Red LED flashes with beeps. Green LED on	Repeating ON/OFF beeps	Normal operation when Test/Reset button is pressed	CO not detected. Alarm for test purposes only
End of unit life indicator	Red LED flashes twice every 30 seconds	Two quick beeps every 30 seconds	End of unit life	Replace unit immediately. Unit will not respond to CO

## 6. Alarm Characteristics

### Carbon Monoxide Alarm Indicator

When the alarm senses a dangerous level of CO, the unit will emit a loud alarm pattern. The alarm pattern is a series of ON/OFF beeps as long as dangerous CO conditions exist. The red Alarm LED will flash the same pattern and the digital display (where equipped) will indicate CO concentrations in parts per million (PPM).

## 7. Maintenance

**NOTE:** This unit is sealed. The cover is not removable.

**Due to the loudness of the alarm, we suggest that you place your fingers over the sounder opening while testing your alarm.**

**Caution: Continuous exposure to the high sound level of this alarm over an extended period of time may cause hearing loss.**

### Testing

To test the alarm, press the Test/Reset button. If the unit is operating properly, you will hear a series of ON/OFF beeps.

### Maintenance Tips

To keep your alarm in good working order, you must follow these steps:

- Verify units alarm, lights and battery operation by pushing the test reset button once a week.
- Vacuum the alarm cover once a month to remove accumulated dust.
- Never use detergents or solvents to clean the alarm. Chemicals can permanently damage or temporarily contaminate the sensor.
- Avoid spraying air fresheners, hair spray, paint or other aerosols near the alarm.
- Do not paint the unit. Paint will seal the vents and interfere with proper sensor operation.
- Do not place near a nappy bucket.

Move the CO Alarm to a remote location, to prevent possible damage or contamination of the sensor, prior to performing any of the following:

- Staining or stripping floors or furniture, painting or wall-papering,

## 7. Maintenance

- Using aerosols or adhesives

**WARNING: Reinstall the CO Alarm as soon as possible to assure continuous protection.**

Accommodation spaces should be well ventilated when household cleaning supplies or similar contaminants are used.

The following is a list of substances that at high levels can damage the sensor or cause temporary readings that are not CO readings:

- Ethylene, ethanol, alcohol, iso-propanol, benzene, toluene, ethyl acetate, hydrogen, hydrogen sulfide and sulfur dioxide.
- Also most aerosol sprays, alcohol based products, paint, thinner, solvent, adhesive, hair spray, after shave, perfume, auto exhaust (cold start) and some cleaning agents.

Gas appliances should be checked for safety once a year by a Licensed Gas installer.

### FIVE YEAR LIMITED WARRANTY

**WARRANTY COVERAGE:** THE MANUFACTURER WARRANTS TO THE ORIGINAL CONSUMER PURCHASER, THAT THIS PRODUCT WILL BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF FIVE (5) YEARS FROM DATE OF PURCHASE. THE MANUFACTURER'S LIABILITY HEREUNDER IS LIMITED TO REPLACEMENT OF THE PRODUCT. REPAIR OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT WITH REPAIRED PRODUCT AT THE DISCRETION OF THE MANUFACTURE. THIS WARRANTY IS VOID IF THE PRODUCT HAS BEEN DAMAGED BY ACCIDENT, UNREASONABLE USE, NEGLIGENCE, TAMPERING OR OTHER CAUSES NOT ARISING FROM DEFECTS IN MATERIAL OR WORKMANSHIP. THIS WARRANTY EXTENDS TO THE ORIGINAL CONSUMER PURCHASER OF THE PRODUCT ONLY.

**Warranty Disclaimers:** Any implied warranties arising out of this sale, including but not limited to the implied warranties of description, merchantability and fitness for a particular purpose, are limited in duration to the above warranty period. In no event shall the Manufacturer be liable for loss of use of this product or for any indirect, special, incidental or consequential damages, or costs, or expenses incurred by the consumer or any other user of this product, whether due to a breach of contract, negligence, strict liability in tort or otherwise. The Manufacturer shall have no liability for any personal injury, property damage or any special, incidental, contingent or consequential damage of any kind resulting from gas leakage, fire or explosion. This warranty does not affect your statutory rights.

**Warranty Performance:** During the above warranty period, your product will be replaced with a comparable product if the defective product is returned, postage prepaid, to PSA Products Pty Ltd, 17 Millicent Street, Burwood 3125 Victoria, together with proof of purchase date. Please include a note describing the problem when you return the unit. The replacement product will be in warranty for the remainder of the original warranty period or for six months, whichever is longer. Other than the cost of postage, no charge will be made for replacement of the defective product.

**Important:** Do not remove back cover. Back cover removal will void warranty.

Your **Carbon Monoxide Alarm** is not a substitute for property, disability, life or other insurance of any kind. Appropriate insurance coverage is your responsibility. Consult your insurance agent.

PSA Products makes no warranty, express or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect of the batteries.

**For Warranty Service:** In many cases the quickest way to exchange your CO alarm is to return it to the original place of purchase. If you have questions, call the PSA Products customer service department on 1300 772 776

**Thank you for purchasing and installing the most trusted brand in fire, security and intercoms. To ensure you receive excellent after-sale product service we encourage you to register your product on-line in our website.**

*Please send all correspondence to:*

PSA Products  
17 Millicent Street  
Burwood 3125  
Australia



**LIFESAVER**

contact us at our website at  
[www.psaproducts.com.au](http://www.psaproducts.com.au)