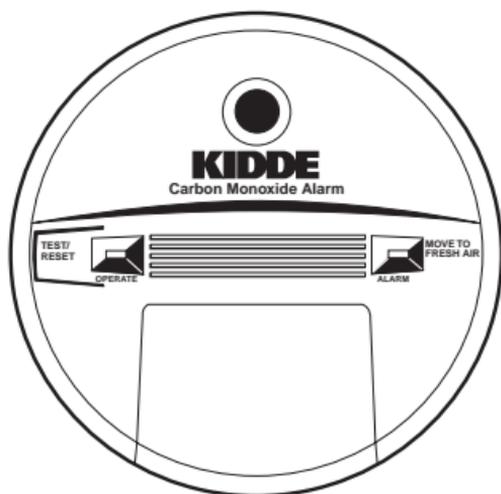




Battery Powered Carbon Monoxide Alarm

User's Guide

Model KN-COB-B
P/N: 9CO5



ATTENTION: Please take a few minutes to thoroughly read this manual, which should be saved for future reference and passed on to any subsequent owner. If you have any questions about the operation or installation of your alarm, please call our toll free Consumer Hotline at 1-800-880-6788.

810-1362 REV. B

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Carbon Monoxide Overview

Your new Kidde carbon monoxide (CO) alarm is a sophisticated instrument that has been carefully designed and tested to assure accurate detection of CO build up in a residential environment.

Your Kidde is for use specifically in the home.

Carbon monoxide 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 carbon monoxide are malfunctioning gas appliances used for heating and cooking, vehicles running in an attached garage, blocked chimneys or flues, portable fuel burning heaters, fireplaces, fuel powered tools and operating a grill in an enclosed space.

Indications of carbon monoxide 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 experts agree that unborn babies, small children, pregnant women, senior citizens and people with heart or respiratory problems are at the highest risk for serious injury or death. Each year a qualified technician should inspect and clean your heating system, vents, chimney, and flues.

Your new Kidde CO alarm has a five year limited warranty. Please take a few minutes to thoroughly read the user's guide and familiarize yourself and your family with its operation. Your Kidde 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 our Consumer Hotline at 1-800-880-6788.

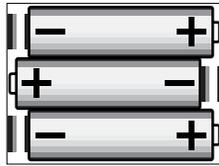
This manual and the products described are copyrighted, with all rights reserved. Under these copyright laws, no part of this manual may be copied for use without the written consent of KIDDE Safety. If you require further information, contact our Consumer Hotline, or write to us at:

Kidde / Pyrene Corp.
130 Esna Park Drive, Markham, ON, Canada L3R 1E3
Consumer Hotline: 1-800-880-6788
www.kidde.ca

Thank you for the purchase of your new Kidde carbon monoxide alarm. If you have any questions about the operation or setup of your CO alarm, feel free to call our Consumer Hotline at 1-800-880-6788.

Quick Set Up

Remove the three enclosed AA batteries and install them into the battery well. Carefully place the red battery warning flags into the battery well. Observe the battery polarity markings at the bottom of the battery well.



When the batteries are first installed, the unit will beep once and the red alarm light will flash. After approximately 20-30 seconds the green light will flash indicating that the unit is operational. Replace battery cover. Your Kidde CO alarm is now operational.

Installation Location

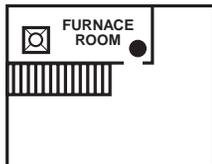
When choosing your installation locations, make sure you can hear the alarm from all sleeping areas. If you install **only one** carbon monoxide alarm in your home, install the alarm near bedrooms, not in the basement or furnace room.

Recommended Locations - Upper Levels of Home

- If you have only one alarm, place it near sleeping areas, not near fuel burning appliances, such as fireplaces, furnaces or hot water heaters.



- Basement Levels of Home



Installation Instructions

Mounting

1. Using the template provided (see page 18). Mark the location on wall.
2. Insert the two screws provided until the screw heads are approximately 1/8" from wall. (If mounting in plaster board or drywall, drill 3/16" hole and use the plastic anchors provided.)
3. Hook the Kidde CO Alarm unit over the screws onto keyholes in back of unit.

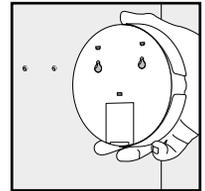


Figure 1

Seven (7) years after initial power up, this unit will "chirp" every 30 seconds to indicate that it is time to replace the alarm. After seven years the device may no longer detect carbon monoxide accurately and should be replaced immediately. To help identify the date to replace the unit, a label has been affixed to the side of the alarm. Write the "Replace by" date (7 years from power up) in permanent marker on the label.

Where To Install Your Kidde CO Alarm

The following suggestions are intended to help you with the placement and installation of your Kidde CO alarm.

- Place out of the reach of children. Under no circumstance should children be allowed to handle the CO alarm.
- Install in a bedroom or hallway located close to the sleeping area. Take special care to verify the alarm can be heard in sleeping areas.
- It is recommended that a CO alarm be installed on each level of a multilevel home.
- Locate at least 5 feet away from all fuel burning appliances.
- Placing at eye level allows for optimum monitoring of the red and green indicator lights.

Installation Instructions (cont.)

- Insure that all vents of the unit are unobstructed.
- Do not install in dead air spaces such as peaks of vaulted ceilings, or gabled roofs.
- Do not install in turbulent air from ceiling fans. Do not place near fresh air vents or close to doors and windows that open to the outside.
- Keep the CO alarm away from excessively dusty, dirty, or greasy areas such as kitchens, garages and furnace rooms. Dust, grease and household chemicals can affect the sensor.
- Keep out of damp and humid areas such as the bathroom. Avoid spraying aerosols near the CO alarm.
- Do not install in areas where the temperature is below 40° Fahrenheit (4.4° Celsius) or hotter than 100° Fahrenheit (37.8° Celsius).
- Do not place behind curtains or furniture. CO must be able to reach the sensor for the unit to accurately detect 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, and insufficient draft in the vent pipes;
- negative pressure differential resulting from the use of exhaust fans;
- simultaneous operation of several fuel-burning appliances competing for limited internal air;
- loose vent pipe connections from fuel-fired appliances;
- obstructions, or unconventional vent pipe designs that can amplify the above situations;
- poorly designed or maintained chimneys and/or vents;

Extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.);

Temperature inversions that can trap exhaust gasses near the ground; and a

Car idling in an open or closed attached garage, or near a home.

Features and Operation

Your new Kidde battery powered CO alarm utilizes sophisticated electronic components to protect you and your family from the dangers of CO. Unique features include red and green diagnostic lights, battery status, and sensor health. Familiarize yourself with these features:

Red Alarm Indicator Light

If a dangerous level of carbon monoxide is detected the red alarm LED will pulse and a loud (85 decibel) alarm pattern will sound. When the device detects Carbon Monoxide, the alarm pattern will be 4 short beeps – followed by 5 seconds of silence – followed by 4 short beeps with a corresponding red LED flash. This cycle will continue for 4 minutes and then change to 1 cycle every 1 minute until the device is reset or the CO is eliminated. See figure 2.

See page 11-12 for an understanding of which CO levels are dangerous.

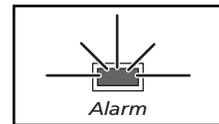


Figure 2

Green Operate Indicator Light

The green light flashing every 30 seconds indicates the unit is functioning properly (see figure 3).

The green light will flash before a CO reading is taken and when any button is pressed.

If the unit chirps once every 30 seconds, observe the unit for the following:

A chirp every 30 seconds, with a green LED flash followed by a red LED flash, indicates the batteries are low. Follow the battery installation/replacement instructions on page 9 and 10.

A chirp every 30 seconds, with a red flash and no green LED flash indicates a unit error. If the unit does not respond, call the Kidde consumer hotline at 1-800-880-6788.

Features and Operation (cont.)

Test/Reset Button

The test/reset button is used to test the unit's electronics and to reset the unit during alarm (see figure 3).

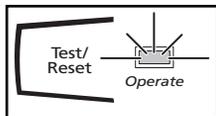


Figure 3

- **Test the unit** - To test, press and release the test/reset button, you should hear one short beep – followed by 5 seconds of silence – followed by 4 short beeps with a corresponding red LED flash. Familiarize yourself and family members with the alarm pattern.

Test the unit weekly! If at any time your unit does not perform as described replace it immediately.

Note: After the test/reset button is pressed, the alarm sounds and the red alarm light flashes. This does not indicate that carbon monoxide is present.

Due to the loudness of the alarm we suggest you place your fingers over the sounder opening when testing your Kidde CO Alarm.

- **Reset the unit** - If the alarm is sounding, pressing the test/reset button will terminate the alarm. If the CO condition that caused the alert in the first place continues, the alarm will reactivate. Reactivation times depend on the amount of CO that caused the CO alarm to initially alarm and the amount of CO present after resetting the alarm (see page 11, Alarm Instructions/Emergency Response).

Battery Installation/Replacement

Since batteries are not installed in the unit at the factory, you will need to install them. Your Kidde unit will continue to remind you to change the batteries for up to seven days after low batteries are detected.

WARNING: Your Kidde CO alarm will not be operational and will not monitor for CO levels without the installation of three charged AA batteries.

Your Kidde CO alarm monitors for battery failure such as bad or corroded connections, sudden battery failure and other causes. **If the alarm senses any form of battery failure, the unit will start chirping an audible alarm every 30 seconds, the green and red alarm light will flash.**

The battery error warning will continue until new batteries are placed in the unit, or until the remaining batteries become completely exhausted.

Three AA batteries have been included with your purchase. When replacing the batteries, we recommend use of the following for a minimum of one year normal operation:

- Duracell MN1500
- Camelion Mignon LR6-AM3-1.5
- Energizer E91
- Rayovac LR6

These batteries can be purchased at your local retailer.

Battery Installation/Replacement (cont.)

Battery Installation/Replacement Instructions

To install or replace the batteries in your Kidde unit please perform the following steps:

1. Gently lift open the battery cover to expose the battery compartment.
2. Remove the old batteries and properly dispose of them as recommended by the manufacturer (see figure 4).
3. **Reinstall the new batteries, being careful to seat the red battery warning flags in the recess of the battery well.** Also, note the polarity illustration in the bottom of the battery compartment (see figure 5).
4. The unit will chirp and the green light will flash.
5. Gently close the battery cover. **The battery cover of your CO alarm will NOT close if all three AA batteries are not installed.**

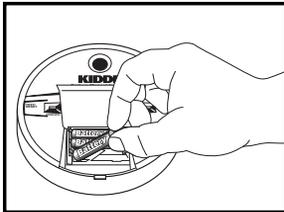


Figure 4

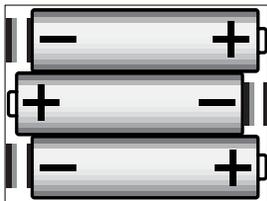


Figure 5

What To Do If The Alarm Sounds

Carbon Monoxide Alarm Procedure



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

If alarm signal sounds 4 quick beeps, 5 seconds off:

- 1) Immediately move to fresh air - outdoors or by an open door or window. Check that all persons are accounted for. Do not re-enter the premises or 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 operating condition.
- 2) Call your emergency local service (fire department or 911).

PHONE NUMBER

Never restart the source of a CO problem until it has been corrected. **Never ignore the sound of the alarm!**

Alarm/Danger Levels

Caution: This CO alarm will only indicate the presence of CO at the sensor. CO may be present in other areas.

Mild Exposure: Headaches, running nose, sore eyes, often described as “flu-like” symptoms.

Medium Exposure: Dizziness, drowsiness, vomiting.

Extreme Exposure: Unconsciousness, brain damage, death.

Familiarization with the effects of each level is important. The symptoms described in the chart above are related to carbon monoxide poisoning and should be discussed with ALL members of the household.

Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities.

Many victims of carbon monoxide poisoning indicate that while they were aware that they were ill, they became so disoriented and confused that they were unable to help themselves by exiting the building or calling for assistance. If you experience any symptoms of carbon monoxide poisoning, consult your doctor immediately! CO poisoning can be determined by a simple blood test called a carboxyhemoglobin test. Severe cases may require treatment in a hyperbaric chamber. Remember, young children and household pets may be the first effected.

If you have additional questions please call the Kidde Consumer Hotline at 1-800-880-6788.

Alarm/Danger Levels (cont.)

Concentration of CO in Air (ppm = parts per million)	Approximate Inhalation Time and Symptoms Developed
50 ppm	The maximum allowable concentration for continuous exposure for healthy adults in any 8-hour period, according to OSHA*.
200 ppm	Slight headache, 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 2-3 hours.
1,600 ppm	Headache, dizziness and nausea within 20 minutes. Death within 1 hour.
3,200 ppm	Headache, dizziness and nausea within 5-10 minutes. Death within 25-30 minutes.
6,400 ppm	Headache, dizziness and nausea within 1-2 minutes. Death within 10-15 minutes.
12,800 ppm	Death within 1-3 minutes.

* Occupational Safety and Health Administration

WARNING: The chart above relates to healthy adults. Levels differ for those at high risk. This product is intended for use in ordinary indoor residential areas. It is not designed to measure compliance with commercial and industrial standards. This device is designed to protect individuals from acute effects of carbon monoxide exposure. It will 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 CO alarm meets these alarm response times
At 70 PPM, the unit must alarm within 60-240 minutes
At 150 PPM, the unit must alarm within 10-50 minutes
At 400 PPM, the unit must alarm within 4-15 minutes

Caring for your Kidde Battery Powered CO Alarm

How to Care for Your Alarm

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

- Test the alarm once a week by pressing the Test/Reset button
- Vacuum the alarm cover once a month to remove accumulated dust. Use the soft brush attachment of your vacuum cleaner, and unplug the alarm from the electrical outlet before vacuuming.
- Instruct children never to touch, unplug or otherwise interfere with the unit. Warn children of the dangers of CO poisoning.
- 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 CO alarm.
- Do not paint the CO alarm. Paint will seal the vents and interfere with proper sensor operation.
- Do not mount the CO alarm directly above or near a diaper pail, as high amounts of methane gas can cause temporary readings on the digital display.

Note: If you will be staining or stripping wood floors or furniture, painting, wall-papering, or using aerosols or adhesives for a do-it-yourself project or hobby, **before you begin: Remove the CO alarm to a remote location to prevent possible damage to or contamination of the sensor.** You may wish to unplug the CO alarm and store in a plastic bag during the project.

The following is a list of substances that at high levels can affect the sensor and cause temporary readings on the digital display that are not carbon monoxide readings:

Methane, propane, iso-butane, ethylene, ethanol, alcohol, iso-propanol, benzene, toluene, ethyl acetate, hydrogen, hydrogen sulfide, sulfur dioxides.

Also most **aerosol sprays, alcohol based products, paints, thinners, solvents, adhesives, hair sprays, after shaves, perfumes, auto exhaust** (cold start) and some cleaning agents.

Frequently Asked Questions

Q. *How many CO alarms do I need in my house?
How much square footage will one CO alarm cover?*

A. We recommend you place CO alarms near the sleeping area(s). If you have a multi-level home, you should place a CO alarm on each level of the home. A good rule of thumb for the number and placement of CO alarms for your particular home is to place CO alarms near smoke alarms that have been installed to meet current building code requirements.

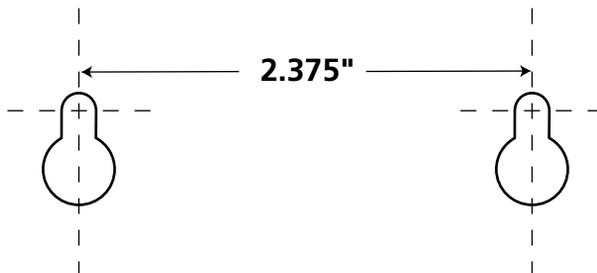
Generally, one CO alarm can be adequate for 1,200 to 1,500 square feet of living space. The most important determination for the number of CO alarms needed is whether an alarm can be heard in all sleeping areas.

Q. *Do I have to press the test button to get a CO reading?*

A. No. Your Kidde CO alarm continuously monitors the air for carbon monoxide. If it detects a dangerous level of CO it will alarm automatically. To test the internal components and circuitry of your CO alarm, press the test/reset button.

Wall Mounting Template

If you are going to mount your Kidde CO Alarm to the wall, you may use this template for exact placement of the two wall mount screws provided. For more information about mounting to the wall, please refer to page 5.



Product Specifications

Power:	Three AA batteries (supplied)
Sensor:	Electrochemical carbon monoxide sensor
Temperature:	Operating range 4.4°C (40°F) to 37.8°C (100°F)
Mounting:	Accessories supplied for wall mounting
Alarm:	85+ dB at 10' @ 3.4 ± 0.5 KHz pulsing alarm
LED Operation:	<ul style="list-style-type: none">• Flashing green LED every 30 seconds indicates proper operation• 4 pulsing red LED with 4 quick alarm chirps indicates presence of CO
Battery Replacement:	Red and green LED flashes, and the unit chirps every 30 seconds. Replace the three AA batteries with one of the following brands. <ul style="list-style-type: none">• Duracell MN1500• Energizer E91• Camelion Mignon LR6-AM3-1.5• Rayovac LR6
Unit Malfunction:	Red light flashes, and the unit chirps every 30 seconds indicates a unit error. Refer to page 7.
Test/Reset Button:	Test button verifies proper unit operation.
Size & Weight:	5.5" diameter x 1.4" depth/0.66 lbs. with batteries
Warranty:	Five-year limited warranty from date of purchase against defects in material and workmanship on CO Alarm unit.

Limited Warranty

WARRANTY COVERAGE: THE MANUFACTURER WARRANTS TO THE ORIGINAL CONSUMER PURCHASER, THAT THIS ALARM 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 MANUFACTURER. 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.

Some states/ provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Some states/ provinces do not allow the exclusion or limitation of consequential or incidental damages, so the above limitations or exclusions may not apply to you.

Legal Remedies: This warranty gives you specific legal rights and you may also have other remedies that vary from state to state/ province to province.

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 KIDDE / Pyrene Corp., Customer Service Dept., 130 Esna Park Drive, Markham, ON, L3R 1E3, 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.

Kidde makes no warranty, express or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the battery.

The above warranty may not be altered except in writing signed by both parties hereto.

Limited Warranty

The model number and assembly number can be found on the label on the back of the CO alarm.

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 KIDDE customer service department at 1-800-880-6788 for assistance.

Please have the following information ready when calling:

CO Alarm Model Number (Located on the back of alarm):
CO Alarm Assembly Number (Located on back of alarm):
Date of Manufacture (Located on back of alarm):
Date of Purchase:
Where Purchased:

***For questions concerning your
Carbon Monoxide Alarm, please
call our Consumer Hotline at
1-800-880-6788***

Kidde / Pyrene Corp.

130 Esna Park Drive, Markham, ON, L3R 1E3
Consumer Hotline: 1-800-880-6788
www.kidde.ca

Custom Assembled in China with U.S. and Foreign Components.