
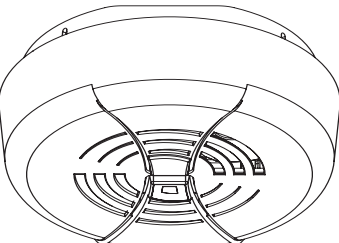


**USER'S MANUAL**  
**BATTERY POWERED**  
**CARBON MONOXIDE ALARM**

LISTED TO  
**UL 2034**  
**STANDARD**

**IMPORTANT! PLEASE READ CAREFULLY AND SAVE.**  
 This user's manual contains important information about your Carbon Monoxide Alarm's operation. If you are installing this CO Alarm for use by others, you must leave this manual—or a copy of it—with the end user.

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 www.brkelectronics.com • www.firstalert.com

**INTRODUCTION**

**BASIC SAFETY INFORMATION**

- IMPORTANT!**
- Dangers, Warnings, and Cautions alert you to important operating instructions or to potentially hazardous situations. Pay special attention to these items.
  - **THIS IS NOT A SMOKE ALARM!** This CO Alarm is designed to detect carbon monoxide from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gas.
  - This CO Alarm is approved for use in single-family residences. It is NOT designed for marine use.

- CAUTION!**
- This CO Alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.

- WARNING!**
- The Silence Feature is for your convenience only and will not correct a CO problem. Always check your home for a potential problem after any alarm. Failure to do so can result in injury or death.
  - NEVER ignore your Carbon Monoxide Alarm if it alarms. Refer to "If Your CO Alarm Sounds" for more information. Failure to do so can result in injury or death.
  - Test the CO Alarm once a week. If the CO Alarm ever fails to test correctly, have it replaced immediately! If the CO Alarm is not working properly, it cannot alert you to a problem.
  - This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure CO levels in compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards. Individuals with medical conditions that may make them more sensitive to carbon monoxide may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm. For additional information on carbon monoxide and your medical condition contact your physician.

- HOW YOUR CO ALARM WORKS**
- GENERAL INFORMATION**
- WARNING!**
- This CO Alarm does not operate without working batteries. Removing the batteries, or failure to replace them at the end of their service life, removes your protection.
- A CO Alarm measures the CO levels in the air. It will alarm if CO levels rise quickly (if the heat exchanger on your furnace breaks, for example), or if CO is consistently present (a slow CO leak on a fuel-burning appliance).
- This Carbon Monoxide Alarm features a permanently installed sensor and an 85 dB alarm horn. It also has a silence feature to temporarily quiet the alarm horn.

**UNDERSTANDING YOUR CO ALARM**

**WELCOME CHIRP**  
 Horn chirps and light blinks once when batteries are first connected.

**ALARM RECEIVING BATTERY POWER**  
 Light flashes every minute. Horn is silent.

**LOW BATTERY WARNING**  
 The light continues to flash (RED) and the horn also "chirps" once every minute. This warning should last for up to 30 days, but you should replace the batteries as soon as possible.

**DURING TESTING**  
 Light flashes Red with the horn pattern (4 beeps, pause, 4 beeps), simulating a CO Alarm condition.

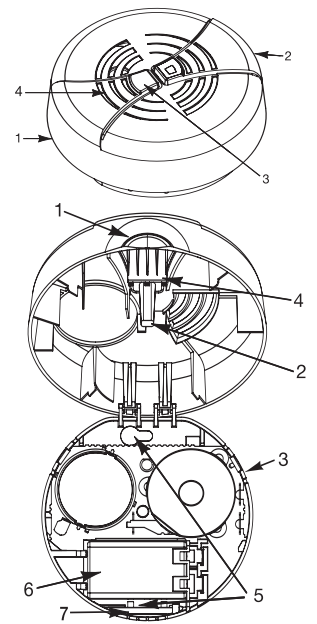
**CO ALARM**  
 Sensor has detected enough CO to trigger an alarm. Light flashes rapidly and horn sounds loudly (repeating 4 beeps, pause). See "If Your CO Alarm Sounds" for details. During an alarm, move everyone to a source of fresh air. DO NOT move the CO Alarm!

**CO ALARM REQUIRES SERVICE (MALFUNCTION SIGNAL)**  
 The light flashes (RED) and the horn sounds 3 "chirps" every minute. CO Alarm needs to be replaced.

**CO ALARM HAS REACHED ITS END OF LIFE**  
 The light flashes (RED) and the horn sounds 5 "chirps" every minute. CO Alarm needs to be replaced.

**HOW TO INSTALL THIS CO ALARM**

**THE PARTS OF THIS SMOKE ALARM**



1. "OPEN HERE" tab
2. Cover hinge
3. Test/Silence button
4. Power/alarm indicator

**COVER OPEN**

1. "Open Here"
2. Test/Silence button
3. CO alarm base
4. "No Battery" tab
5. Mounting slots
6. Install 9V battery here
7. Locking pin slot

This unit is designed to be mounted on the ceiling, or on the wall if necessary.

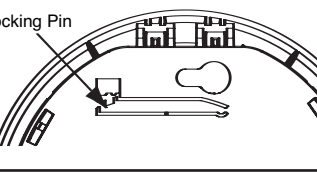
**Tools you will need:**

- Pencil
- Hammer
- Drill with 3/16" (5 mm) drill bit
- Standard flathead screwdriver

**LOCKING FEATURE**

To lock/unlock the cover to the base:

1. Using needle-nose pliers or a utility knife, detach locking pin from back of alarm base.
2. Insert locking pin into the slot located on the front of the alarm as shown in the diagram.
3. Remove pin to unlock and replace battery.



**INSTALLATION**

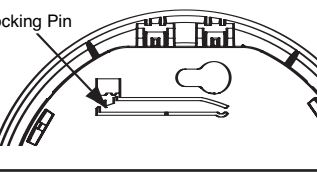
Read "Where To Install CO Alarms" before starting.

Before you start installation, find the pair of self-adhesive labels included with this CO Alarm. On each label write in the phone number of your emergency responder (like 911) and a qualified appliance technician. Place one label near the CO Alarm, and the other label in the "fresh air" location you plan to go if the alarm sounds.

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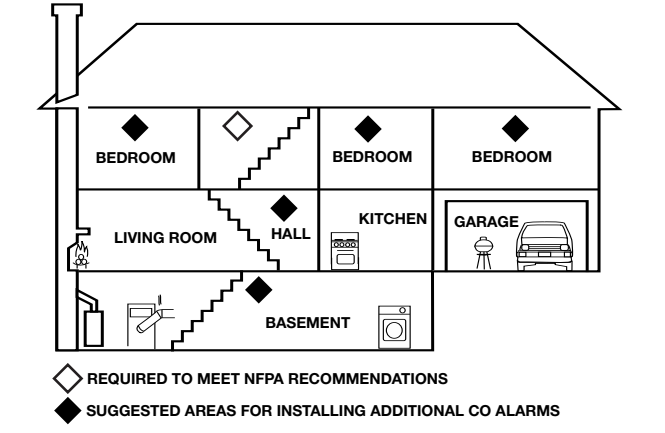
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**WHERE TO INSTALL CO ALARMS**

The National Fire Protection Association (NFPA) recommends that a CO Alarm should be centrally located outside of each separate sleeping area in the immediate vicinity of the bedrooms. For added protection, install additional CO Alarms in each separate bedroom, and on every level of your home.

If your bedroom hallway is longer than 40 feet (12 meters), install a CO Alarm at BOTH ends of the hallway.

This alarm can be installed on the wall or ceiling. If the alarm is to be wall mounted it is recommended that the unit be mounted with hinge down so the words "Carbon Monoxide Alarm" is readable.



- In a Single-level Home:**
- Install at least one CO Alarm near or within each separate sleeping area.
  - For added protection, install an additional CO Alarm at least 20 feet (6 meters) away from the furnace or fuel burning heat source.
- In a Multi-level Home:**
- Install at least one CO Alarm near or within each separate sleeping area.
  - For added protection, install at least one CO Alarm on each level of the home.
  - For added protection, install an additional CO Alarm at least 20 feet (6 meters) away from the furnace or fuel burning heat source.
- In Mobile Homes:**
- Install CO Alarms on inside walls ONLY. Uninsulated outside walls and roofs of mobile homes often transfer heat and cold from outdoors. The Alarm should be located at least 152 mm (6 inches) from all exterior walls and at least 305 mm (12 inches) from supply or return vents.

**WHERE CO ALARMS SHOULD NOT BE INSTALLED**

- DO NOT LOCATE THIS CO ALARM:**
- In garages, kitchens, furnace rooms, or in any extremely dusty, dirty or greasy areas.
  - Within 5 feet (1.5 meters) of any cooking appliance.
  - In extremely humid areas. This alarm should be at least 10 feet (3 meters) from a bath or shower, sauna, humidifier, vaporizer, dishwasher, laundry room, utility room or other source of high humidity.
  - In areas where temperature is colder than 40° F (4° C) or hotter than 100° F (38° C). These areas include unconditioned crawl spaces, unfinished attics, uninsulated or poorly insulated ceilings, porches, and garages.
  - In turbulent air, like near ceiling fans, heat vents, air conditioners, fresh air returns, or open windows. Blowing air may prevent CO from reaching the sensors.
  - Outside the Mobile Home.
  - In direct sunlight.

- WARNING!**
- This CO Alarm is designed for use inside a single-family home or apartment. It is not meant to be used in common lobbies, hallways, or basements of multi-family buildings unless working CO Alarms are also installed in each family living unit. CO Alarms in common areas may not be heard from inside individual family living units.
  - This CO Alarm alone is not a suitable substitute for complete detection systems in places which house many people, like hotels or dormitories, unless a CO Alarm is also placed in each unit.
  - DO NOT use this CO Alarm in warehouses, industrial or commercial buildings, special-purpose non-residential buildings, or airplanes. This CO Alarm is specifically designed for residential use, and may not provide adequate protection in non-residential applications.

**TESTING & MAINTENANCE**

- WEEKLY TESTING**
- WARNING!**
- Test the CO Alarm once a week. If the CO Alarm ever fails to test correctly, have it replaced immediately! If the CO Alarm is not working properly, it cannot alert you to a problem.
  - DO NOT stand close to the Alarm when the horn is sounding. Exposure at close range may be harmful to your hearing. When testing, step away when horn starts sounding.

Push and hold the Test/Silence button on the cover until the LED flashes. The alarm horn will sound 4 beeps, a pause, then 4 beeps. The ALARM (RED) light will flash.

The alarm sequence should last 5-6 seconds. If it does not alarm, make sure fresh batteries are correctly installed, and test it again. If the unit still does not alarm, replace it immediately.

- If the alarm does not test properly:**
1. Make sure the battery is installed correctly.
  2. Be sure the Alarm is clean and dust-free.
  3. Install a fresh 9V battery\* and test the Alarm again.

- WARNING!**
- DO NOT try fixing the Alarm yourself – this will void your warranty! If the CO Alarm is still not operating properly, and it is still under warranty, please see "How to Obtain Warranty Service" in the Limited Warranty. Install a new CO Alarm immediately.
  - The Test/Silence button is the only proper way to test the CO Alarm. NEVER use vehicle exhaust! Exhaust may cause permanent damage and voids your warranty.

\*For a list of acceptable replacement batteries, see "Regular Maintenance."

**REGULAR MAINTENANCE**

- To keep the CO Alarm in good working order:
- Test it every week using the Test/Silence button.
  - Vacuum the CO Alarm cover once a month, using the soft brush attachment. Never use water, cleaners, or solvents, since these may damage the unit. Test the CO Alarm again after vacuuming.
  - Replace the batteries when the CO Alarm "chirps" about every minute (the low battery warning).
- The low battery warning should last for 30 days, but you should replace the battery immediately to continue your protection.

**Choosing a replacement battery:**

This CO Alarm requires one 9V alkaline battery. The following batteries are acceptable as replacements: Alkaline Batteries – Duracell M1160 or Energizer 522; Lithium Batteries – Ultralife U9V-L. These replacement batteries are commonly available at local retail stores.

**IMPORTANT!**

Use only the replacement batteries listed. The unit may not operate properly with other batteries. Never use rechargeable batteries since they may not provide a constant charge.

**CAUTION!**

DO NOT spray cleaning chemicals or insect sprays directly on or near the CO Alarm. DO NOT paint over the CO Alarm. Doing so may cause permanent damage.

**IMPORTANT!**

Household cleaners, aerosol chemicals, and other contaminants can affect the sensor. When using any of these materials near the CO Alarm, make sure the room is well ventilated.

**WHAT YOU NEED TO KNOW ABOUT CO**

**WHAT IS CO?**

CO is an invisible, odorless, tasteless gas produced when fossil fuels do not burn completely, or are exposed to heat (usually fire). Electrical appliances typically do not produce CO.

**These fuels include:** Wood, coal, charcoal, oil, natural gas, gasoline, kerosene, and propane.

Common appliances are often sources of CO. If they are not properly maintained, are improperly ventilated, or malfunction, CO levels can rise quickly. CO is a real danger near those homes are more energy efficient. "Air-tight" homes with added insulation, sealed windows, and other weatherproofing can "trap" CO inside.

**SYMPTOMS OF CO POISONING**

These symptoms are related to CO POISONING and should be discussed with ALL household members.

**Mild Exposure:**  
 Slight headache, nausea, vomiting, fatigue ("flu-like" symptoms).

**Medium Exposure:**  
 Throbbing headache, drowsiness, confusion, fast heart rate.

**Extreme Exposure:**  
 Convulsions, unconsciousness, heart and lung failure. Exposure to carbon monoxide can cause brain damage, death.

- WARNING!**
- Some individuals are more sensitive to CO than others, including people with cardiac or respiratory problems, infants, unborn babies, pregnant mothers, or elderly people can be more quickly and severely affected by CO. Members of sensitive populations should consult their doctors for advice on taking additional precautions.

**FINDING THE SOURCE OF CO AFTER AN ALARM**

Carbon monoxide is an odorless, invisible gas, which often makes it difficult to locate the source of CO after an alarm. These are a few of the factors that can make it difficult to locate sources of CO:

- House well ventilated before the investigator arrives.
- Problem caused by "backdrafting."
- Transient CO problem caused by special circumstances.

Because CO may dissipate by the time an investigator arrives, it may be difficult to locate the source of CO. BRK Brands, Inc. shall not be obligated to pay for any carbon monoxide investigation or service call.

**HOW CAN I PROTECT MY FAMILY?**

A CO Alarm is an excellent means of protection. It monitors the air and sounds a loud alarm before carbon monoxide levels become threatening for average, healthy adults.

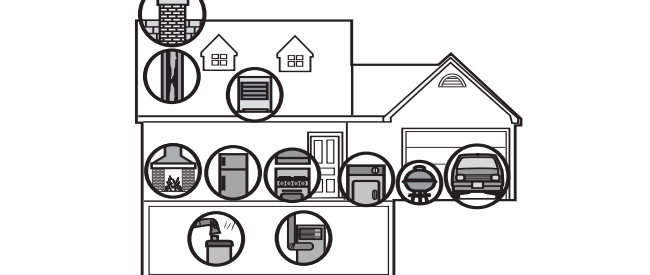
**A CO Alarm is not a substitute for proper maintenance of home appliances.**

To help prevent CO problems and reduce the risk of CO poisoning:

- Clean chimneys and flues yearly. Keep them free of debris, leaves, and nests for proper air flow. Also, have a professional check for rust and corrosion, cracks, or separations. These conditions can prevent proper air movement and cause backdrafting. Never "cap" or cover a chimney in any way that would block air flow.
- Test and maintain all fuel-burning equipment annually. Many local gas or oil companies and HVAC companies offer appliance inspections for a nominal fee.
- Make regular visual inspections of all fuel-burning appliances. Check appliances for excessive rust and scaling. Also, check the flame on the burner and pilot lights. The flame should be blue. A yellow flame means fuel is not burning burned completely and CO may be present. Keep the blower door on the furnace closed. Use vents or fans when they are available on all fuel-burning appliances. Make sure appliances are vented to the outside. Do not grill or barbecue indoors, or in garages or on screen porches.
- Check for exhaust backflow from CO sources. Check the draft hood on an operating furnace for a backdraft. Look for cracks on furnace heat exchangers.
- Check the house or garage on the other side of shared wall.
- Keep windows and doors open slightly. If you suspect that CO is escaping into your home, open a window or a door. Opening windows and doors can significantly decrease CO levels.

In addition, familiarize yourself with all enclosed materials. Read this manual in its entirety, and make sure you understand what to do if your CO Alarm sounds.

**POTENTIAL SOURCES OF CO IN THE HOME**



**Fuel-burning appliances like:** portable heater, gas or wood burning fireplace, gas kitchen range or cooktop, gas clothes dryer.

**Damaged or insufficient venting:** corroded or disconnected water heater vent pipe, leaking chimney pipe or flue, or cracked heat exchanger, blocked or clogged chimney opening.

**Improper use of appliance/device:** operating a barbecue grill or vehicle in an enclosed area (like a garage or screened porch).

**Transient CO Problems:** "transient" or on-again-off-again CO problems can be caused by outdoor conditions and other special circumstances.

**REGULATORY INFORMATION FOR CO ALARMS**

**WHAT LEVELS OF CO CAUSE AN ALARM?**

Underwriters Laboratories Inc. Standard UL2034 requires residential CO Alarms to sound when exposed to levels of CO and exposure times as described below. They are measured in parts per million (ppm) of CO over time (in minutes).

- UL2034 Required Alarm Points:**
- If the alarm is exposed to 400 ppm of CO, IT MUST ALARM BETWEEN 4 and 15 MINUTES.
  - If the alarm is exposed to 150 ppm of CO, IT MUST ALARM BETWEEN 10 and 50 MINUTES.
  - If the alarm is exposed to 70 ppm of CO, IT MUST ALARM BETWEEN 60 and 240 MINUTES.
- \*Approximately 10% COHb exposure at levels of 10% to 95% Relative Humidity (RH).
- The unit is designed not to alarm when exposed to a constant level of 30 ppm for 30 days.

**IMPORTANT!**

CO Alarms are designed to alarm before there is an immediate life threat. This allows you precious time to leave the house and correct the problem. This is only possible if Alarms are located, installed, and maintained as described in this manual.

- An exposure to 100 ppm of CO for 20 minutes may not affect average, healthy adults, but after 4 hours the same level may cause headaches.
- An exposure to 400 ppm of CO may cause headaches in average, healthy adults after 35 minutes, but can cause death after 2 hours.

**IMPORTANT!**

CO Alarm measures exposure to CO over time. It alarms if CO levels are extremely high in a short period of time, or if CO levels reach a certain minimum over a long period of time. The CO Alarm generally sounds an alarm before the onset of symptoms in average, healthy adults.

**GENERAL LIMITATIONS OF CO ALARMS**

**CO Alarms may not be heard.** The alarm horn loudness meets or exceeds current UL standards of 85 dB at 10 feet (3 meters). However, if the CO Alarm is installed outside the bedroom, it may not wake up a sound sleeper or one who has recently used drugs or has been drinking alcoholic beverages. This is especially true if the door is closed or only partly open. Even persons who are awake may not hear the alarm horn if the sound is blocked by distance or obstructions. Noise from traffic, stereo, radio, television, air conditioner, or other appliances may also prevent alert persons from hearing the alarm horn. This CO Alarm is not intended for people who are hearing impaired.

**CO Alarms are not a substitute for a smoke alarm.** Although fire is a source of carbon monoxide, this CO Alarm does not sense smoke or fire. This CO Alarm senses CO that may be escaping unnoticed from malfunctioning furnaces, appliances, or other sources. Early warning of fire requires the installation of smoke alarms.

**CO Alarms are not a substitute for life insurance.** Though these CO Alarms warn against increasing CO levels, BRK Brands, Inc. does not warrant or imply in any way that they will protect lives from CO poisoning. Homeowners and renters must still insure their lives.

**CO Alarms have a limited life.** Although the CO Alarm and all of its parts have passed many stringent tests and are designed to be as reliable as possible, any of these parts could fail at any time. Therefore, you must test your CO Alarm weekly.

**CO Alarms are not foolproof.** Like all other electronic devices, CO Alarms have limitations. They can only detect CO that reaches their sensors. They may not give early warning to rising CO levels if the CO is coming from a remote part of the home, away from the CO Alarm.

**TROUBLESHOOTING GUIDE**

PROBLEM...	THIS MEANS...	YOU SHOULD...
The light continues to flash (RED) and the horn "chirps" once every minute.	Low battery warning.	Install a new 9V alkaline battery*.
The light flashes (RED) and the horn sounds 3 "chirps" every minute.	<b>MALFUNCTION SIGNAL.</b> CO Alarm needs to be replaced.	CO Alarms under warranty should be returned to manufacturer for replacement. See "Limited Warranty" for details.
The light flashes (RED) and the horn sounds 5 "chirps" every minute.	<b>END OF LIFE SIGNAL.</b> CO Alarm needs to be replaced.	Immediately replace the CO Alarm.
CO Alarm goes back into alarm 4 minutes after you press the Test/Silence button.	CO levels indicate a potentially dangerous situation.	IF YOU ARE FEELING SYMPTOMS OF CO POISONING, EVACUATE your home and call 911 or the Fire Department. If not, press the Test/Silence button again and keep ventilating your home.
CO Alarm sounds frequently even though no high levels of CO are revealed in an investigation.	The CO Alarm may be improperly located. Refer to "Where to Install CO Alarms."	Relocate your alarm. If frequent alarms continue, have home rechecked for potential CO problems. You may be experiencing an intermittent CO problem.

\*For a list of acceptable replacement batteries, see "Page 4: Regular Maintenance."  
 If you have any questions that cannot be answered by reading this manual, call Consumer Affairs at 1-800-323-9005.

**LIMITED WARRANTY**

BRK Brands, Inc. ("BRK") the maker of BRK® brand and First Alert® brand products, warrants that for a period of five years from the date of purchase, this product will be free from defects in material and workmanship. BRK, at its option, will repair or replace this product or any component of the product found to be defective during the warranty period. Replacement will be made with a new or remanufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal or greater value. This is your exclusive warranty.

This warranty is valid for the original retail purchaser from the date of initial retail purchase and is not transferable. Keep the original sales receipt. Proof of purchase is required to obtain warranty performance. BRK dealers, service centers, or retail stores selling BRK products do not have the right to alter, modify or any way change the terms and conditions of this warranty.

This warranty does not cover normal wear of parts or damage resulting from any of the following: negligent use or misuse of the product, use of improper voltage or current, use contrary to the operating instructions, disassembly, repair or alteration by anyone other than BRK or an authorized service center. Further, the warranty does not cover acts of God, such as fire, flood, hurricanes and tornadoes or any batteries that are included with this unit.

BRK shall not be liable for any incidental or consequential damages caused by the breach of any express or implied warranty. Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose is limited in duration to the above warranty. Some states, provinces, or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state, or province to province.

**How to Obtain Warranty Service**

**Service:** If service is required, do not return the product to your retailer. In order to obtain warranty service, contact the Consumer Affairs Division at 1-800-323-9005, 7:30 AM to 5:00 PM, Central Standard Time, Monday through Friday. To assist in serving you, please have the model number and date of purchase available when calling. **For Warranty Service return to:** 25 Spur Drive, El Paso, TX 75044.

**Battery:** BRK Brands, Inc. makes no warranty, express or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to battery.

For your records, please record:

Date Purchased: _____	Where Purchased: _____
Date Installed: _____	Month/Year _____

Replace alarm 5 years after installation. Please write the date in the space provided: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

The alarm will also provide an audible End-of-Life Signal approximately 5 years after installation to remind you to replace the unit. The End-of-Life Signal can be silenced for up to 2 days. Do not unplug the alarm or remove the batteries until you get replacement.