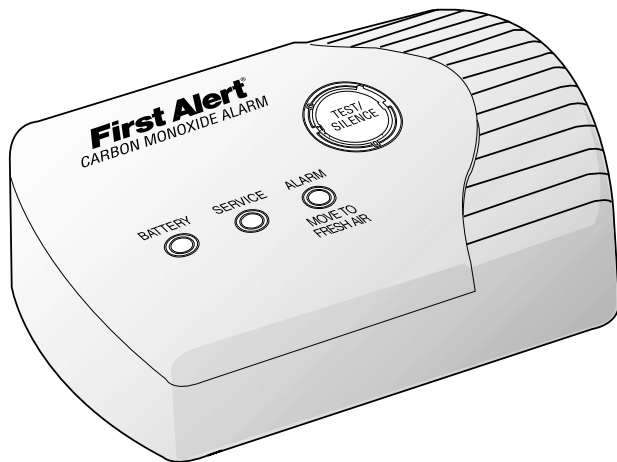


First Alert[®]

MODEL FCD3N—User's Manual

Battery-Operated Carbon Monoxide Alarm



M06-1042-001 7/00

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PLEASE READ CAREFULLY AND SAVE: This unit was shipped with a user's manual that contains important information about its operation. If you are installing this unit for use by others, you must leave this manual—or a copy of it—with the user.

CHAPTER 1: *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.

IMPORTANT!

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.

IMPORTANT!

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.

WARNING!

This CO Alarm does not operate without a working battery. Removing the battery, or failure to replace it at the end of its service life, removes your protection.

WARNING!

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.

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.

WARNING!

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 may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.

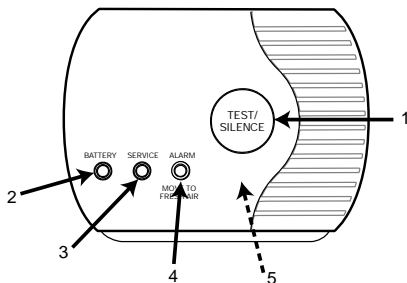
HOW YOUR CO ALARM WORKS

General Information

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, three colored indicator lights, and an 85 dB alarm horn. It also has a silence feature to temporarily quiet the alarm horn.

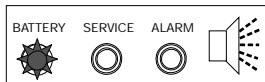
The Cover of Your CO Alarm



1	Test/Silence Button:
2	BATTERY Light (Dual Color — Green or Yellow)
3	SERVICE Light (Yellow)
4	ALARM Light (Red)
5	(Behind Cover) Alarm Horn: 85db audible alarm for test, alarm, and unit malfunction warning.

WHAT THE LIGHTS AND ALARM TONES MEAN

WELCOME CHIRP.



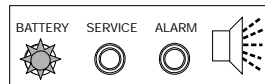
Horn chirps and battery light blinks green once when battery is first connected.

ALARM RECEIVING BATTERY POWER



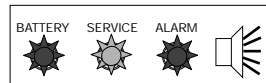
BATTERY light flashes GREEN twice a minute. Horn is silent.

LOW BATTERY WARNING.



The BATTERY light turns YELLOW. It flashes and the horn "chirps" twice a minute. This warning should last for up to 30 days, but you should replace the battery as soon as possible. See Chapter 4 for details.

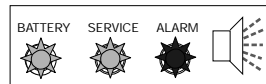
DURING TESTING - GOOD BATTERY



When you press the Test/Silence button, all three lights will flash briefly, and the horn will sound.

If the battery is GOOD, the BATTERY light flashes GREEN.

DURING TESTING - LOW/WEAK BATTERY

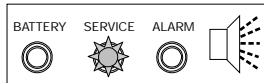


When you press the Test/Silence button, all three lights will flash briefly, but the horn may stay silent.

If the battery is WEAK, the BATTERY light flashes YELLOW.

IMPORTANT! Replace a weak battery immediately!

CO ALARM REQUIRES SERVICE



The SERVICE light flashes YELLOW and the horn "chirps" three times every 30 seconds. CO Alarm needs to be serviced or replaced. See Chapter 4 for details.

CO ALARM IS IN ALARM.



Sensor has detected enough CO to trigger an alarm. ALARM light flashes RED rapidly and horn sounds loudly. See Chapter 3 for details on how to respond to an alarm.

"ALARM-MOVE TO FRESH AIR"

During an alarm, move everyone to a source of fresh air. Do NOT move the CO Alarm!

CO ALARM SPECIFICATIONS

Gas Detection at Typical Temperature and Humidity Ranges: The CO Alarm is not formulated to detect CO levels below 30 ppm typically. UL tested for false alarm resistance to Methane (500 ppm), Butane (300 ppm), Heptane (500 ppm), Ethyl Acetate (200 ppm), Isopropyl Alcohol (200 ppm) and Carbon Dioxide (5000 ppm). Values measure gas and vapor concentrations in parts per million.

Required Alarm Levels: Before 10% COHb exposure at levels of 30% to 70% Relative Humidity (RH):

- 400 ppm CO between 4 and 15 minutes
- 150 ppm CO between 10 and 50 minutes
- 70 ppm CO between 60 and 240 minutes

The unit is designed not to alarm when exposed to a constant level of 30 ppm for 30 days.

Audible Alarm: 85dB minimum at 10 feet

Power: Powered by 9V battery. Green light flashes about twice a minute when device is receiving battery power.

During Alarm: CO Alarm horn sounds while the red light flashes rapidly.

This CO alarm is designed to sound for up to 12 hours in alarm conditions, provided the battery is fresh and installed correctly.

Warranty: 5-year limited warranty.

Standards: Underwriters Laboratories Inc. Single and Multiple Station carbon monoxide alarms UL2034.

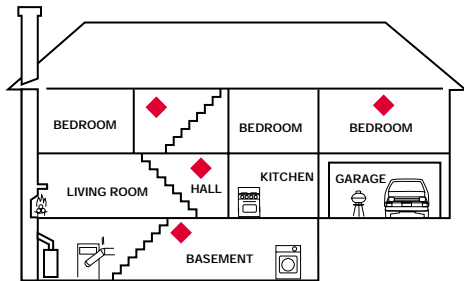
According to Underwriters Laboratories Inc. UL2034, Section 1-1.2: "Carbon monoxide alarms covered by these requirements are intended to respond to the presence of carbon monoxide from sources such as, but not limited to, exhaust from internal-combustion engines, abnormal operation of fuel-fired appliances, and fireplaces. CO alarms are intended to alarm at carbon monoxide levels below those that could cause a loss of ability to react to the dangers of Carbon Monoxide exposure." This CO Alarm monitors the air, and is designed to alarm before CO levels become life threatening. 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.

CHAPTER 2: *Installation*

WHERE TO INSTALL CO ALARMS

The Consumer Product Safety Commission (CPSC) recommends the use of at least one CO Alarm per household, located near the sleeping area. 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, install a CO Alarm at BOTH ends of the hallway.



◆ SUGGESTED AREAS FOR INSTALLING CO ALARMS

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. If you have a basement, install that CO Alarm at the top of the basement stairs.
- 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 Mobile Home:

- Install CO Alarms on inside walls ONLY. Uninsulated outside walls and roofs of mobile homes often transfer heat and cold from outdoors.

WHERE NOT TO INSTALL YOUR CO ALARM

DO NOT locate this CO Alarm:

- In garages, kitchens, furnace rooms, or in any extremely dusty, dirty or greasy areas.
- Closer than 20 feet from a furnace or other fuel burning heat source, or fuel burning appliances like a water heater.
- Within 5 feet of any cooking appliance.
- In extremely humid areas. This alarm should be at least 10 feet 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.
- 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.

WARNING!

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.

WARNING!

DO NOT use this CO Alarm in warehouses, industrial or commercial buildings, special-purpose non-residential buildings, RVs, boats, or airplanes. This CO Alarm is specifically designed for residential use, and may not provide adequate protection in non-residential applications.

HOW TO INSTALL YOUR CO ALARM

Read “Where To Install Your CO Alarm” before starting. This CO Alarm can be used on a tabletop or mounted on the wall. For tabletop use, choose a table no taller than 36” (92 cm); a fall from a high table could damage the Alarm’s sensitive components.

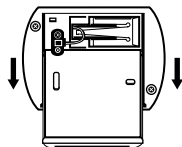
Before you start installation, find the pair of self-adhesive labels included with this CO alarm. On each label write in the phone number of your emergency responder (like 911) and a qualified appliance technician. Place one label near the CO Alarm, and the other label in the “fresh air” location you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

NOTE:

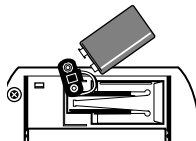
A qualified appliance technician is defined as “a person, firm, corporation, or company that either in person or through a representative, is engaged in and responsible for the installation, testing, servicing, or replacement of heating, ventilation, air conditioning (HVAC) equipment, combustion appliances and equipment, and/or gas fireplaces or other decorative combustion equipment.”

Installing the 9V Battery

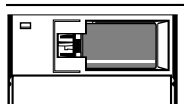
1. Slide the mounting bracket/battery door off the back of the CO Alarm.



2. Attach the 9V battery (included) to the battery connector inside the battery compartment. Make sure the battery snaps in securely, and cannot be shaken loose.



3. Place the battery and connector back inside the battery compartment.

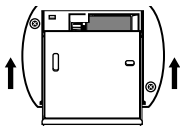


IMPORTANT!

For your safety, the CO Alarm will not close until a 9V battery is installed.

For Tabletop Use

1. Close the battery compartment by sliding the mounting bracket/battery door back onto the back of the CO Alarm.
2. Test the CO Alarm as described below.
3. Set the CO Alarm in plain view on a table where it will not be blocked by any obstructions. Table height should not exceed 36" (92 cm).



IMPORTANT!

Put the CO Alarm where children and pets cannot reach it.

To Test this CO Alarm:

Push and hold the Test/Silence button on the cover until you hear a "chirp." The "chirp" marks the start of the self-test sequence.

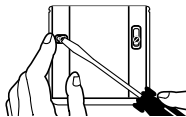
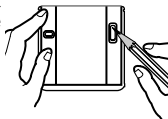
- First, the yellow and green lights will flash briefly—this is normal.
- Next, the alarm horn will sound: 4 beeps, a pause, then 4 beeps. The red light will flash quickly.

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

To Mount On The Wall

Tools you will need: pencil, drill with 3/16" or 5mm drill bit, flathead screwdriver, hammer.

1. Choose a location on the wall. Do not install the alarm closer than 4" from where the wall meets the ceiling.
2. Hold the mounting bracket against the wall, and make a mark inside each keyhole where you will drill your mounting hole.
3. Use a 3/16" drill bit to drill through the marks you made for the mounting holes.
4. Insert the plastic screw anchors into the mounting holes until they are flush with the wall. If necessary, tap them gently with a hammer.
5. Line up the mounting bracket up with the screw anchors, and screw the bracket onto the wall.
6. Slide the CO Alarm onto the mounting bracket until you feel it click into place.
7. Test the CO Alarm as described in "To Test this CO Alarm."



CHAPTER 3: *If Your CO Alarm Sounds*

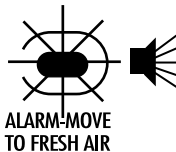
WARNING!

Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can kill you. In other words, when your CO Alarm sounds, you must not ignore it!

If the Alarm Sounds:

1. Operate the Test/Silence button.
2. Call your emergency services, fire department or 911. Write down the number of your local emergency service here:
3. Immediately move to fresh air—outdoors or by an open door or window. Do a head count to check that all persons are accounted for. Do not re-enter the premises, or move away from the open door or window until the emergency services responder has arrived, the premises have been aired out, and your CO alarm remains in its normal condition.
4. After following steps 1-3, if your CO alarm reactivates within a 24-hour period, repeat steps 1-3 and call a qualified appliance technician to investigate for sources of CO from fuel-burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection have the equipment serviced

immediately. Note any combustion equipment not inspected by the technician, and consult the manufacturers' instructions, or contact the manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not, been operating in an attached garage or adjacent to the residence. Write down the number of a qualified appliance technician here:



"ALARM-MOVE TO FRESH AIR"

If you hear the alarm horn and the red light is flashing, move everyone to a source of fresh air. DO NOT move the CO Alarm!

Finding the Source of CO After an Alarm

Because CO may dissipate by the time an investigator arrives, it may be difficult to locate the source of CO. See Chapter 5 "What You Must Know About CO." **BRK Brands, Inc. shall not be obligated to pay for any carbon monoxide investigation or service call.**

Using the Silence Feature

⚠ WARNING!

NEVER remove the batteries from your CO Alarm to silence the horn. Use the silence feature. Removing the batteries removes your protection! See previous page for details on responding to an alarm.

The silence feature is intended to temporarily silence your CO Alarm's alarm horn while you correct the problem—it will not correct a CO problem. While the alarm is silenced, it will continue to monitor the air for CO.

When CO reaches the alarm level, the Alarm will sound—repeating horn pattern: 4 beeps, a pause, 4 beeps, etc. Press and hold the Test/Silence button until the horn is silent. The initial Silence cycle will last approximately 4 minutes.

NOTE:

After initial 4-minute Silence cycle, the CO Alarm re-evaluates present CO levels and responds accordingly. If CO levels remain potentially dangerous—or start rising higher—the horn will start sounding again.

While the alarm is silenced:

If the CO Alarm...

remains silent after you pressed the Test/Silence button...

This means...

CO levels are dropping.

If the CO Alarm...

goes back into alarm 4 minutes after you pressed the Test/Silence button...

This means...

CO levels present indicate a potentially dangerous situation.

CHAPTER 4: *Testing and Maintenance*

WEEKLY TESTING

WARNING!

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 you hear a “chirp.” The “chirp” marks the start of the self-test sequence.

- First, the BATTERY (green) and SERVICE (yellow) lights will flash briefly—this is normal.
- Next, the alarm horn will sound: 4 beeps, a pause, then 4 beeps. The ALARM (red) light will flash quickly.

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

NOTE:

When you press and hold the Test/Silence button, if the battery is low or weak, the BATTERY light will flash YELLOW. Even if the horn sounds, you should replace a low or weak battery immediately for optimum performance.

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 alkaline or lithium battery* and test the alarm again.

If the CO Alarm is not working properly, refer to the “Limited Warranty” at the end of this manual.

CAUTION!

If there is still a problem, do not try to fix the alarm yourself—this will void your warranty! Install a new CO Alarm immediately. CO Alarms under warranty can be returned to BRK Brands, Inc. for replacement (see Limited Warranty for details).

WARNING!

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 Alarm again after vacuuming.
- Replace the battery when the CO Alarm “chirps” and the yellow light blinks twice a minute (the low battery warning).

NOTE:

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 unit requires one standard 9V alkaline battery. The following alkaline batteries are acceptable as replacements: Duracell #MN1604. You can also use an Ultralife 9 volt lithium battery #U9VL for longer service life between battery changes. These replacement batteries are commonly available at local retail stores.

IMPORTANT!

Use only the alkaline or lithium 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 permanently damage the CO Alarm.

IMPORTANT!

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

CHAPTER 5: *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 now that 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.



CAUTION!

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.

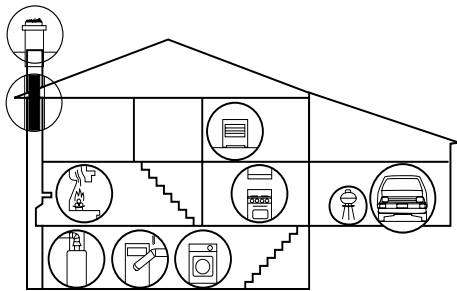
Finding the Source of CO After an Alarm

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.

BRK Brands, Inc. shall not be obligated to pay for any carbon monoxide investigation or service call.

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.

The following conditions can result in transient CO situations:

1. Excessive spillage or reverse venting of fuel appliances caused by outdoor conditions such as:
 - Wind direction and/or velocity, including high, gusty winds. Heavy air in the vent pipes (cold/humid air with extended periods between cycles).
 - Negative pressure differential resulting from the use of exhaust fans.
 - Several appliances running at the same time competing for limited fresh 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.
2. Extended operation of unvented fuel burning devices (range, oven, fireplace).
3. Temperature inversions, which can trap exhaust close to the ground.
4. Car idling in an open or closed attached garage, or near a home.

These conditions are dangerous because they can trap exhaust in your home. Since these conditions can come and go, they are also hard to recreate during a CO investigation.

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 being 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.

CHAPTER 6: *Underwriters Laboratories Inc. UL2034*

What Levels of CO Cause an Alarm?

Underwriters Laboratories Inc. UL2034 defines three specific alarm points by which all residential CO Alarms must alarm. 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.

IMPORTANT!

CO Alarms are designed to alarm before there is an immediate life threat. Since you cannot see or smell CO, never assume it's not present.

- 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!

This 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.

Why is this important? Because you need to be warned of a potential CO problem while you can still react in time. In many reported cases of CO exposure, victims may be aware that they are not feeling well, but become disoriented and can no longer react well enough to exit the building or get help. Also, young children and pets may be the first affected. The average healthy adult might not feel any symptoms when the CO Alarm alarms. However, people with cardiac or respiratory problems, infants, unborn babies, pregnant mothers, or elderly people can be more quickly and severely affected by CO. If you experience even mild symptoms of CO poisoning, consult your doctor immediately!

CHAPTER 7: *Troubleshooting Guide*

Problem...	This means...	You should...
The BATTERY Light turns YELLOW. It flashes and the horn "chirps" twice a minute.	Low battery warning.	Install a new 9V alkaline or lithium battery*.
During testing, when you press and hold the Test/Silence button, the BATTERY Light turns YELLOW.	Low battery	Install a new 9V alkaline or lithium battery*.
Horn chirps and yellow service light blinks three times every 30 seconds.	Unit needs to be replaced.	Units under warranty should be returned to manufacturer for replacement. See "Limited Warranty" for details.
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 alarms 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 Your CO Alarm."	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 "Regular Maintenance."*

If you have any questions that cannot be answered by reading this manual, call our Consumer Affairs Department at 1-800-323-9005, 7:30 a.m. - 5:00 p.m. (CT).

CHAPTER 8: *General Limitations Of CO Alarms*

This CO Alarm is intended for residential use. It is not intended for use in industrial applications where Occupational Safety and Health Administration (OSHA) requirements for carbon monoxide alarms must be met.

CO Alarms will not work without power. This alarm requires a 9V alkaline or lithium battery to operate.

This CO Alarm will not sense carbon monoxide that does not reach the sensor. This CO Alarm will only sense CO at the sensor. CO may be present in other areas. Doors or other obstructions may affect the rate at which CO reaches the CO Alarm. For this reason, we recommend if bedroom doors are usually closed at night, you install a CO Alarm in each bedroom and in the hallway between them.

CO Alarms may not sense CO on another level of the home. For example, a CO Alarm on the second level, near the bedrooms, may not sense CO in the basement. For this reason, one CO Alarm may not give adequate warning. Complete coverage is recommended. Place CO Alarms on each level of the home.

CO Alarms may not be heard. The alarm horn loudness meets or exceeds current UL standards. 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 closed doors. 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.

Limited Warranty

Coverage: BRK Brands, Inc. warrants its enclosed carbon monoxide alarm to be free from defects in materials and workmanship under normal use for a period of five years from the date of purchase. During the first year after the date of purchase, BRK Brands, Inc. will replace any defective carbon monoxide alarm without charge. During the next four years, BRK Brands, Inc. will replace any defective carbon monoxide alarm at a charge to you not to exceed BRK Brands, Inc.'s cost. 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. If this carbon monoxide alarm is installed by a contractor, this warranty will be valid for the homeowner (or the first homeowner after installation) from the date of initial purchase by the contractor and is not transferable. Dealers, service centers, or retail stores selling this product 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 on improper voltage or current or use contrary to the operating instructions, disassembly, repair or alteration by anyone other than BRK Brands, Inc. Further, the warranty does not cover acts of God, such as fire, flood, hurricanes and tornadoes.

BRK Brands, Inc. 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 for five years. 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 exclusions 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.

Service: Units under warranty and in need of repair should be returned, shipping prepaid, to BRK Brands, Inc., Attn.: Consumer Affairs, 3920 Enterprise Court, Aurora, IL 60504-8132.

For your records, please record:

Date Purchased:

Where Purchased:

First Alert® is a registered trademark of the First Alert Trust.

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