USER'S MANUAL
Smoke & Carbon Monoxide Alarm

First Alert®

AC Powered Smoke & Carbon Monoxide Alarm with Battery Back-up, Silence Feature and Latching Alarm

Model SC9120B

Input: 120V AC ~
60 Hz, 0.09A

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

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LISTED TO UL 217 and UL 2034 STANDARDS

Model SC9120B

INTRODUCTION

Thank you for choosing BRK Brands, Inc. for your Smoke and Carbon Monoxide Alarm needs. You have purchased a state-of-the-art Smoke & CO Alarm designed to provide you with early warning of a fire or Carbon Monoxide. ***Key features include:***

Smoke & Carbon Monoxide Combination Alarm. One alarm protects against two deadly household threats.

Most Accurate Carbon Monoxide Sensor*** Advanced electrochemical CO sensor technology.

Intelligent Sensing Technology designed to help reduce unwanted or nuisance alarms.

Smart Interconnect can be interconnected to BRK Smoke Alarms. One interconnect wire carries both smoke and CO alarm signals.

Single Button Test/Silence eliminates confusion. Depending on what mode the alarm is in, pushing the button provides different functions such as testing the alarm, silencing the alarm, re-testing the alarm when in silence and clearing the Latching feature.

Two Silence Features. Temporarily silence low battery chirp for up to eight hours before replacing low battery or silence an unwanted alarm for several minutes.

Two Latching Features. Alarm Latch: Easily identifies initiating alarm even after alarm condition has subsided. Low Battery Latch: Identifies which unit is in low battery condition.

Perfect Mount System includes a gasketless base for easy installation and a new mounting bracket that keeps the alarm secure over a wide rotation range to allow for perfect alignment.

End of Life Signal. Provides audible and visual confirmation alarm needs to be replaced.

*As compared to other sensing technologies

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All BRK® and First Alert® Smoke Alarms conform to regulatory requirements, including UL217 and are designed to detect particles of combustion. Smoke particles of varying number and size are produced in all fires.

Ionization technology is generally more sensitive than photoelectric technology at detecting small particles, which tend to be produced in greater amounts by flaming fires, which consume combustible materials rapidly and spread quickly. Sources of these fires may include paper burning in a wastebasket, or a grease fire in the kitchen.

Photoelectric technology is generally more sensitive than ionization technology at detecting large particles, which tend to be produced in greater amounts by smoldering fires, which may smolder for hours before bursting into flame. Sources of these fires may include cigarettes burning in couches or bedding.

For maximum protection, use both types of Smoke Alarms on each level and in every bedroom of your home.

FIRE SAFETY TIPS

Follow safety rules and prevent hazardous situations: 1) Use smoking materials properly. Never smoke in bed. 2) Keep matches or lighters away from children; 3) Store flammable materials in proper containers; 4) Keep electrical appliances in good condition and don't overload electrical circuits; 5) Keep stoves, barbecue grills, fireplaces and chimneys grease- and debris-free; 6) Never leave anything cooking on the stove unattended; 7) Keep portable heaters and open flames, like candles, away from flammable materials; 8) Don't let rubbish accumulate.

Keep alarms clean, and test them weekly. Replace alarms immediately if they are not working properly. Smoke Alarms that do not work cannot alert you to a fire. Keep at least one working fire extinguisher on every floor, and an additional one in the kitchen. Have fire escape ladders or other reliable means of escape from an upper floor in case stairs are blocked.

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 Smoke/CO Alarm is approved for use in single-family residences. It is NOT designed for marine or RV use.**

⚠CAUTION!

- **This combination Smoke/Carbon Monoxide Alarm has two separate alarms. The CO Alarm is not designed to detect fire or any other gas. It will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas. The Smoke Alarm will only indicate the presence of smoke that reaches the sensor. The Smoke Alarm is not designed to sense gas, heat or flames.**

⚠DANGER!
ELECTRICAL SHOCK HAZARD. Turn off the power to the area where the Smoke/CO Alarm is installed before removing it from the mounting bracket. Failure to turn off the power first may result in serious electrical shock, injury or death.

⚠WARNING!

- **This unit will not alert hearing impaired residents. It is recommended that you install special units which use devices like flashing strobe lights to alert hearing impaired residents.**
- **Installation of this unit must conform to the electrical codes in your area; Articles 210 and 300.3 (B) of NFPA 70 (NEC), NFPA 72, NFPA 101; ICC; SBC (SBCCI); UBC (ICBO); NBC (BOCA); OTFDC (CABO), and any other local or building codes that may apply. Wiring and installation must be performed by a licensed electrician. Failure to follow these guidelines may result in injury or property damage.**
- **This unit must be powered by a 24-hour, 120V AC pure sine wave 60 Hz circuit. Be sure the circuit cannot be turned off by a switch, dimmer, or ground fault circuit interrupter. Failure to connect this unit to a 24-hour circuit may prevent it from providing constant protection. Unit may be connected to an arc fault circuit interrupter.**
- **This Smoke/CO Alarm must have AC or battery power to operate. If AC power fails and the battery is dead or missing, the alarm cannot operate.**
- **Never disconnect the power from an AC powered unit to stop an unwanted alarm. Doing so will disable the unit and remove your protection. In the case of a true unwanted alarm, use the Silence Feature (if equipped), open a window or fan the smoke away from the unit. The alarm will reset automatically when it returns to normal operation. Never remove the batteries from a battery operated unit to stop an unwanted alarm (caused by cooking smoke, etc.). Instead open a window or fan the smoke away from the unit. The alarm will reset automatically.**

⚠CAUTION!

- **Connect this unit ONLY to other compatible units. See "How To Install This Smoke/CO Alarm" for details. Do not connect it to any other type of alarm or auxiliary device. Connecting anything else to this unit may damage it or prevent it from operating properly.**
- **The battery compartment resists closing unless a battery is installed. This warns you the unit will not operate under DC power without a battery.**
- **Do not stand too close to the unit when the alarm is sounding. It is loud to wake you in an emergency. Exposure to the horn at close range may harm your hearing.**
- **Do not paint over the unit. Paint may clog the openings to the sensing chambers and prevent the unit from operating properly.**

INSTALLATION

WHERE TO INSTALL THIS ALARM

Minimum coverage for Smoke Alarms, as recommended by the National Fire Protection Association (NFPA), is one Smoke Alarm on every floor, in every sleeping area, and in every bedroom (See "Regulatory Information For Smoke Alarms" for details on the NFPA recommendations).

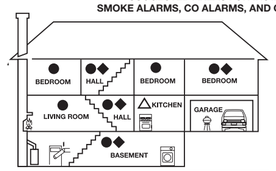
For CO Alarms, the National Fire Protection Association (NFPA) recommends that a CO Alarm should be centrally located outside of each separate sleeping area in the immediate vicinity of the bedrooms. For added protection, install additional CO Alarms in each separate bedroom, and on every level of your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

In general, install combination Smoke and Carbon Monoxide Alarms:

- On every level of your home, including finished attics and basements.
- Inside every bedroom, especially if people sleep with the door partly or completely closed.
- In the hall near every sleeping area. If your home has multiple sleeping areas, install a unit in each. If a hall is more than 40 feet (12 meters) long, install a unit at each end.
- At the top of first-to-second floor stairs.
- At the bottom of the basement stairs.
- For additional coverage, install Alarms in all rooms, halls, and storage areas, where temperatures normally remain between 40˚ F and 100˚ F (4.4˚ C and 37.8˚ C).

Recommended Placement

SUGGESTED AREAS FOR INSTALLING SMOKE ALARMS, CO ALARMS, AND COMBO UNITS



In new construction AC and AC/DC smoke alarms MUST be interconnected to meet NFPA recommendations.

KEY:
- SMOKE ALARMS
- SMOKE ALARM WITH SILENCE FEATURE
- CO ALARMS
- BOTH, OR COMBINATION SMOKE/CO ALARMS

Suggested locations are based on NFPA recommendations (NFPA 72 for Smoke Alarms and NFPA 720 for Carbon Monoxide Alarms). Always refer to national and local codes before beginning any installation.

- When installing on the wall, the top edge of Smoke Alarms should be placed between 4 inches (102 mm) and 12 inches (305 mm) from the wall/ceiling line.
- When installing on the ceiling, place the alarm as close to the center as possible.
- In either case, install at least 4 inches (102 mm) from where the wall and ceiling meet. See "Avoiding Dead Air Spaces" for more information.

NOTE: For any location, make sure no door or other obstruction could keep carbon monoxide or smoke from reaching the Alarm.

Installing Smoke/CO Alarms in Mobile Homes

For minimum security install one Smoke/CO Alarm as close to each sleeping area as possible. For more security, put one unit in each room. Many older mobile homes (especially those built before 1978) have little or no insulation. If your mobile home is not well insulated, or if you are unsure of the amount of insulation, it is important to install units on inside walls only.

WHERE THIS ALARM SHOULD NOT BE INSTALLED

Do NOT locate this Smoke/CO Alarm:

- In garages, kitchens, furnace rooms, crawl spaces and unfinished attics. Avoid extremely dusty, dirty or greasy areas.
- Where combustion particles are produced. Combustion particles form when something burns. Areas to avoid include poorly ventilated kitchens, garages, and furnace rooms. Keep units at least 20 feet (6 meters) from the sources of combustion particles (stove, furnace, water heater, space heater) if possible. In areas where a 20-foot (6 meter) distance is not possible – in modular, mobile, or smaller homes, for example – it is recommended the Smoke/CO Alarm be placed as far from these fuel-burning sources as possible. The placement recommendations are intended to keep these Alarms at a reasonable distance from a fuel-burning source, and thus reduce "unwanted" alarms. Unwanted alarms can occur if a Smoke/CO Alarm is placed directly next to a fuel-burning source. Ventilate these areas as much as possible.
- Within 5 feet (1.5 meters) of any cooking appliance. In air streams near kitchens. Air currents can draw cooking smoke into the smoke sensor and cause unwanted alarms.
- In extremely humid areas. This Alarm should be at least 10 feet (3 meters) from a shower, sauna, humidifier, vaporizer, dishwasher, laundry room, utility room, or other source of high humidity.
- In direct sunlight.
- In turbulent air, like near ceiling fans or open windows. Blowing air may prevent CO or smoke from reaching the sensors.
- In areas where temperature is colder than 40˚ F (4.4˚ C) or hotter than 100˚ F (37.8˚ C). These areas include non-airconditioned crawl spaces, unfinished attics, uninsulated or poorly insulated ceilings, porches, and garages.
- In insect infested areas. Insects can clog the openings to the sensing chamber.
- Less than 12 inches (305 mm) away from fluorescent lights. Electrical "noise" can interfere with the sensor.
- In "dead air" spaces. See "Avoiding Dead Air Spaces".

AVOIDING DEAD AIR SPACES

"Dead air" spaces may prevent smoke from reaching the Smoke/CO Alarm. To avoid dead air spaces, follow installation recommendations below.

On ceilings, install Smoke/CO Alarms as close to the center of the ceiling as possible. If this is not possible, install the Smoke/CO Alarm at least 4 inches (102 mm) from the wall or corner.

For wall mounting (if allowed by building codes), the top edge of Smoke/CO Alarms should be placed between 4 inches (102 mm) and 12 inches (305 mm) from the wall/ceiling line.

On a peaked, gabled, or cathedral ceiling, install the first Smoke/CO Alarm within 3 feet (0.9 meters) of the peak of the ceiling, measured horizontally. Additional Smoke/CO Alarms may be required depending on the length, angle, etc. of the ceiling's slope. Refer to NFPA 72 for details on requirements for sloped or peaked ceilings.

Continued...

INSTALLATION, Continued

BEFORE YOU BEGIN INSTALLATION

This unit is designed to be mounted on any standard wiring junction box up to a 4-inch (10 cm) size, on either the ceiling or wall. Read "Where to Install This Alarm" and "Where This Alarm Should Not Be Installed " before you begin installation.

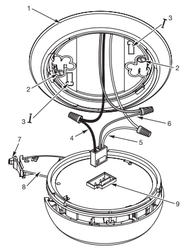
⚠WARNING!

- **Make sure the alarm is not receiving excessively noisy power. Examples of noisy power could be major appliances on the same circuit, power from a generator or solar power, light dimmer on the same circuit or mounted near fluorescent lighting. Excessively noisy power may cause damage to your Alarm.**

Find the pair of self-adhesive labels included with this Smoke/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 Smoke/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."



PARTS OF THIS SMOKE/CO ALARM

1	Mounting Bracket
2	Mounting Slot and Screw*
3	Locking Pins (break out of bracket)
4	Hot (Black) AC Wire
5	Neutral (White) AC Wire
6	Interconnect Wire (Orange)
7	Lever to Open Battery Compartment
8	Swing-Out Battery Compartment
9	Quick-Connect Power

*Not Included

HOW TO INSTALL THIS SMOKE/CO ALARM

Tools you need: Standard Flathead screwdriver, wire strippers.

⚠DANGER!
ELECTRICAL SHOCK HAZARD. Turn off power to the area where you will install this unit at the circuit breaker or fuse box before beginning installation. Failure to turn off the power before installation may result in serious electrical shock, injury or death.

To install this unit:

1. Remove the mounting bracket from the base. Position the screw slots on the mounting bracket over the screws in the junction box. Tighten the screws.

⚠WARNING!
Improper wiring of the power connector or the wiring leading to the power connector will cause damage to the Alarm and may lead to a non-functioning Alarm.

STAND ALONE ALARM ONLY:
- Connect the white wire on the power connector to the neutral wire in the junction box.
- Connect the black wire on the power connector to the hot wire in the junction box.
- Tuck the orange wire inside the junction box. **It is used for interconnect only.**

INTERCONNECTED ALARMS ONLY:
Strip off about 1/2" of the plastic coating on the orange interconnect wire on the power connector.
- Connect the white wire on the power connector to the neutral wire (usually white) in the junction box.
- Connect the black wire on the power connector to the hot wire (usually black) in the junction box.
- Connect the orange wire on the power connector to the interconnect wire in the junction box. Repeat for each unit you are interconnecting. Never connect the hot or neutral wires in the junction box to the orange interconnect wire. Never cross hot and neutral wires between interconnected Alarms.

2. Using wire nuts, connect the power connector to the AC power.
3. Plug the power connector into the back of the Smoke/CO Alarm.
4. Position the base of the Smoke/CO Alarm over the mounting bracket and turn. The Alarm will remain secure over a wide rotation range to allow for perfect alignment. When wall mounting, this will allow fine-tuning on the positioning to compensate for out of aligned wall studs and to keep the wording level. The Alarm can be positioned over the bracket every 120˚. Rotate the Alarm until aligned properly.

STAND ALONE ALARM ONLY:
- If you are only installing one unit, restore power to the junction box.

INTERCONNECTED ALARMS ONLY:
- **If you are interconnecting multiple Smoke/CO Alarms, repeat Step 1-5 for each Smoke/CO Alarm in the series. When you are finished, restore power to the junction box.**

⚠DANGER!
ELECTRICAL SHOCK HAZARD. Do not restore power until all Alarms are completely installed. Restoring power before installation

6. Make sure the Smoke/CO Alarm is receiving AC power. Under normal operation, the green indicator light will shine continuously. If the green power indicator light does not light, TURN OFF POWER TO THE JUNCTION BOX and recheck all connections. If all connections are correct and the green power indicator still does not light when you restore the power, the unit should be replaced immediately.
7. **ACTIVATING THE BATTERY BACK-UP**
   IMPORTANT!
   Activate the battery back-up by removing the "Pull to Activate Battery Back-Up" tab. You do not need to open the battery compartment and reposition the battery during installation. **DO NOT remove the battery activation tab until AC power is turned on to conserve battery power.**
8. **Single Station Alarms:** Test each Alarm. Press and hold the Test/Silence button until you hear the acknowledge "chirp" or the unit alarms.
   Interconnected Alarms: Press and hold the Test/Silence button until the unit alarms. All interconnected Alarms should sound. The other Alarms sounding only tests the interconnect signal between Alarms. It does not test each Alarm's operation. **You must test each Alarm individually to check if the Alarm is functioning properly.**

IMPORTANT!
If any unit in the series does not alarm during testing, TURN OFF POWER, REMOVE BATTERIES, and recheck connections. If it does not alarm when you restore power, replace it immediately.

SPECIAL REQUIREMENTS FOR INTERCONNECTED ALARMS

⚠WARNING!

- **Failure to meet any of the above requirements could damage the units and cause them to malfunction, removing your protection.**
- **AC and AC/DC Smoke/CO Alarms can be interconnected. Under AC power, all units will alarm when one senses smoke or CO. When power is interrupted, only the AC/DC units in the series will continue to send and receive signals. AC powered Smoke/CO Alarms will not operate. See "Smart Interconnect" Feature.**

Interconnected units can provide earlier warning of a Smoke/CO problem than stand-alone units, especially if the problem starts in a remote area of the dwelling. If any unit in the series senses Smoke/CO, all units will alarm. To determine which Smoke/CO Alarm initiated an alarm, refer to the table.

During an Alarm:

On Initiating Alarm(s)	– Red LED(s) flashes (flash) rapidly
On All Other Alarms	– Red LED is Off

After an Alarm (Latching):

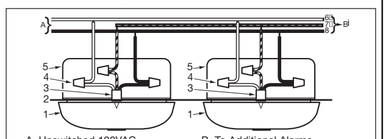
On Initiating Alarm(s)	– Red LED(s) On for 2 seconds/Off for 2 seconds
On All Other Alarms	– Green LED(s) On, Red LED(s) is Off

Compatible Interconnected Units

IMPORTANT!
Interconnect units within a single family residence only. Otherwise all households will experience unwanted alarms when you test any unit in the series. Interconnected units will only work if they are wired to compatible units and all requirements are met. This unit is designed to be compatible with: ***First Alert®*** **Smoke Alarm Models** SA4120, SA4121B, SA100B, SA520 and ***BRK®*** **Smoke Alarm Models** 9120, 9120B, SC6120B, SC9120B, 7010, 7010B, 7020B, SC7010B, SC7010BV, 100S, 4120, 4120B, 4120SB; ***BRK®*** **CO Alarm Models** CO5120BN, CO5120PDBN; ***BRK®*** **Heat Alarm Models** HD6135F and HD6135FB; ***BRK®*** **Auxiliary Devices Models** RM3 and RM4 (Relay Modules), SL177 (Strobe Light). See www.brkelectronics.com for most current interconnect list.

Interconnected units must meet ALL of the following requirements:

- A maximum of 18 compatible BRK Electronics® Smoke, Heat or CO Alarms may be interconnected. No more than 12 of the 18 can be Smoke Alarms per NFPA 72.
- The same fuse or circuit breaker must power all interconnected units.
- The total length of wire interconnecting the units should be less than 1000 feet (300 meters). This type of wire is commonly available at Hardware and Electrical Supply stores.
- All wiring must conform to all local electrical codes and NFPA 70 of the National Electrical Code. Refer to NFPA 72, NFPA 101, and/or your local building code for further connection requirements.

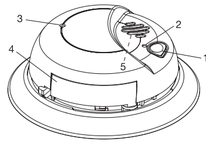


A. Unswitched 120VAC 60 Hz source
B. To Additional Alarms, Maximum = 18 Alarms

1. Smoke/CO Alarm
2. Ceiling or Wall
3. Power Connector
4. Wire Nut
5. Junction Box
6. Neutral Wire (White)
7. Interconnect Wire (Orange)
8. Hot Wire (Black)

HOW YOUR SMOKE/CO ALARM WORKS

THE COVER OF YOUR SMOKE/CO ALARM



1. Test/Silence Button: Press and hold to activate test, or to silence the alarm.
2. POWER Light (GREEN)/ SMOKE ALARM Light (RED)
3. CO ALARM Light (RED)
4. Battery Drawer
5. (Behind the Cover) Alarm Horn: 85 dB audible alarm for test, alarm, and unit malfunction warning.

WHAT YOU WILL SEE AND HEAR WITH THIS ALARM

Under Normal Operations
Horn: Silent
Power/Smoke LED: Constant Green
CO LED: Off

When You Test the Alarm
Horn: 3 beeps, pause, 3 beeps
Power/Smoke LED: AC Power (LED Green); Battery Power (LED off)
CO LED: Off, followed by
Horn: 4 beeps, pause, 4 beeps
Power/Smoke LED: Turns back On
CO LED: Flashes Red in sync with the horn pattern

If Battery Becomes Low or is Missing
Horn: chirps once a minute
Power/Smoke LED: Flashes Green once a minute until reset. Low Battery latch is now engaged. (See Latching Features note below.) Green LED On for 2 seconds/Off for two seconds.
CO LED: Off

If Alarm is Not Operating Properly (MALFUNCTION SIGNAL)
Horn: 3 chirps every minute
Power/Smoke LED: Green LED 3 Flashes approx. once a minute
CO LED: Off

Alarm has reached its End of Life
Horn: 5 chirps every minute
Power/Smoke LED: Green LED 5 Flashes approx. once a minute
CO LED: Off

Alarm Levels of CO are Detected
Horn: 4 beeps, pause, 4 beeps
Power/Smoke LED: On
CO LED: During Alarm: Flashes Red in sync with the horn pattern. After Alarm: Flashes Red On for 2 seconds/Off for 2 seconds. CO Alarm Latch is now engaged. (See LATCHING FEATURES section for details).

Smoke is Detected
Horn: 3 beeps, pause, 3 beeps
Power/Smoke LED: During Alarm: Flashes Red in sync with the horn pattern. After Alarm: Flashes Red On for 2 seconds/Off for 2 seconds. Smoke Alarm Latch is now engaged. (See LATCHING FEATURES section for details).
CO LED: Off

Smoke Alarm is Silenced
Horn: Off
Power/Smoke LED: Flashes Red
CO LED: Off

CO Alarm is Silenced
Horn: Off
Power/Smoke LED: AC Power (LED Green); Battery Power (LED off)
CO LED: Flashes Red

Latching Features Note: Without AC Power and running on battery only, Low Battery Latch or Alarm Latch are only engaged for about 15 minutes to conserve power. Low Battery Latch and Alarm Latch do not operate with a missing battery and no AC Power.

IF YOUR SMOKE/CO ALARM SOUNDS

WHAT TO DO IF CARBON MONOXIDE IS DETECTED

"ALARM-MOVE TO FRESH AIR"

If you hear the alarm horn sound 4 beeps, pause, 4 beeps, pause, and the RED CO light is flashing, move everyone to a source of fresh air.

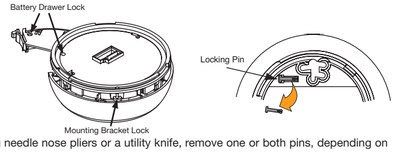
Continued...

USING THE OPTIONAL LOCKING FEATURES

The optional locking features are designed to discourage unauthorized removal of the battery or alarm. It is not necessary to activate the locks in single-family households where unauthorized battery or alarm removal is not a concern.

These Smoke/CO Alarms have two separate locking features: one locks the battery compartment, and the other locks the Smoke/CO Alarm to the mounting bracket. You can choose to use either feature independently, or use them both.

Tools you will need: • Needle-nose pliers or utility knife
• Standard/Flathead screwdriver.



Both locking features use locking pins, molded into the mounting bracket. Using needle nose pliers or a utility knife, remove one or both pins, depending on which locking features you use.

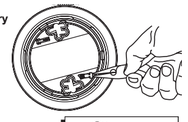
THE BATTERY COMPARTMENT LOCK

TO LOCK THE BATTERY COMPARTMENT:

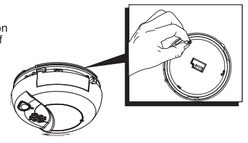
IMPORTANT!
Do not lock the battery compartment until you have activated the battery and tested the battery back-up.

1. Activate the battery back-up by removing the "Pull to Activate Battery Back-Up" tab. Push and hold the test button on the Smoke/CO Alarm's cover until the alarm sounds: 4 beeps, pause, 4 beeps, pause, 3 beeps, pause, 3 beeps, pause.

   If the unit does not alarm during testing, DO NOT lock the battery compartment! Install a new battery and test again. If it still does not alarm, replace the Smoke/CO Alarm immediately.



2. Using needle-nose pliers or a utility knife, detach one locking pin from the mounting bracket.
3. Push the locking pin through the black dot on the label on the back of the Smoke/CO Alarm.

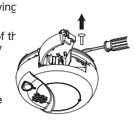


TO UNLOCK THE BATTERY COMPARTMENT:

IMPORTANT!
Once the Smoke/CO Alarm is installed, you must disconnect it from the AC power before unlocking the battery compartment.

⚠DANGER!
ELECTRICAL SHOCK HAZARD. Turn off the power to the area where the Smoke/CO Alarm is installed before removing it from the mounting bracket. Failure to turn off the power first may result in serious electrical shock, injury or death.

1. Remove the Smoke/CO Alarm from the mounting bracket. If the unit is locked to the bracket, see the section "To Deactivate the Locking Feature."
2. Disconnect the power connector by gently prying from the back of the Smoke/CO Alarm.
3. Insert a flathead screwdriver under the head of the locking pin, and gently pry it out of the battery compartment lock. (If you plan to re-lock the battery compartment, save the locking pin.)



4. To re-lock the battery compartment, close the battery door and reinsert the locking pin in the lock.
5. Reconnect the power connector to the back of the Smoke/CO Alarm, reattach the Smoke/CO Alarm to the mounting bracket, and restore the power.

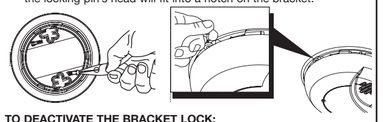
IMPORTANT!
When replacing the battery, always test the Smoke/CO Alarm before re-locking the battery compartment.

Using the Optional Locking Features (Continued)

THE MOUNTING BRACKET LOCK

TO ACTIVATE THE BRACKET LOCK:

1. Using needle-nose pliers, detach one locking pin from the mounting bracket.
2. Insert the locking pin into the lock located on the base as shown in the diagram.
3. When you attach the Smoke/CO Alarm to the mounting bracket, the locking pin's head will fit into a notch on the bracket.

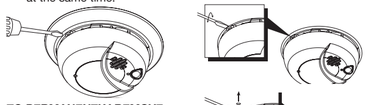


TO DEACTIVATE THE BRACKET LOCK:

⚠DANGER!
ELECTRICAL SHOCK HAZARD. Turn off the power to the area where the Smoke/CO Alarm is installed before removing it from the mounting bracket. Failure to turn off the power first may result in serious electrical shock, injury or death.

⚠WARNING! **Always discharge the branch circuit before servicing an AC or AC/DC Smoke/CO Alarm. First, turn off the AC power at the circuit breaker or fuse box. Next, remove the battery from Smoke/CO Alarms with battery back-up. Finally, press and hold the test button.**

1. Insert a flathead screwdriver between the mounting bracket pin and the mounting bracket.
2. Pry the Smoke/CO Alarm away from the bracket by turning both the screwdriver and the Smoke/CO Alarm counterclockwise (left) at the same time.



TO PERMANENTLY REMOVE THE BRACKET LOCK
Insert the flathead screwdriver between the locking pin and the lock, and pry the pin out of the lock.

WHAT TO DO IF CARBON MONOXIDE IS DETECTED, Continued

⚠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 CO 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 Smoke/CO Alarm remains in its normal condition.
4. After following steps 1-3, if your Smoke/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:

   _____

If you hear the alarm horn sound 3 beeps, pause, 3 beeps, pause and the RED SMOKE light is flashing, smoke has been detected. Evacuate everyone from the building.

WHAT TO DO IF SMOKE IS DETECTED

⚠WARNING!

- **If the unit alarms and you are not testing the unit, it is warning you of a potentially dangerous situation that requires your immediate attention. NEVER ignore any alarm. Ignoring the alarm may result in injury or death.**
  - **Never disconnect the AC power to quiet an unwanted alarm. Disconnecting the power disables the Alarm so it cannot sense smoke. This will remove your protection. Instead, open a window or fan the smoke away from the unit. The Alarm will reset automatically.**
  - **If the unit alarms get everyone out of the house immediately.**

⚠DANGER!

- **ELECTRICAL SHOCK HAZARD: Attempting to disconnect the power connector from the unit when the power is on may result in electrical shock, serious injury or death.**

When an interconnected system of AC powered units is in alarm, the alarm indicator light on the unit(s) that initiated the alarm will blink rapidly. It will remain OFF on any remaining units.

If the unit alarms, get everyone out of the dwelling immediately.

If the unit alarms and you are certain that the source of smoke is not a fire—cooking smoke or an extremely dusty furnace, for example—open a nearby window or door and fan the smoke away from the unit. Use the Silence Feature to silence the Alarm. This will silence the alarm, and once the smoke clears the unit will reset itself automatically.

WHAT TO DO IN CASE OF FIRE

- Don't panic; stay calm. Follow your family escape plan.
- Get out of the house as quickly as possible. Don't stop to get dressed or collect anything.
- Feel doors with the back of your hand before opening them. If a door is cool, open it slowly. Don't open a hot door. Keep doors and windows closed, unless you must escape through them.
- Cover your nose and mouth with a cloth (preferably damp). Take short, shallow breaths.
- Meet at your planned meeting place outside your home, and do a head count to make sure everybody got out safely.
- Call the Fire Department as soon as possible from outside. Give your address, then your name.
- Never go back inside a burning building for any reason.
- Contact your Fire Department for ideas on making your home safer.

⚠WARNING!
Alarms have various limitations. See "General Limitations of Smoke/CO Alarms" for details.

"SMART INTERCONNECT" FEATURE

This Alarm includes "Smart Interconnect" which enables the Alarm to be interconnected with other BRK Smoke, Heat, and "Smart Interconnect" CO Alarms. When smoke is detected, all Alarms will sound the smoke horn pattern. When CO is detected, "Smart Interconnect" Alarms will sound the CO horn pattern. Alarms that do not have the "Smart Interconnect" Feature will remain silent during a CO alarm.

USING THE SILENCE FEATURES

⚠WARNING!
Never remove the batteries to quiet an unwanted alarm. Removing the batteries disables the alarm and removes your protection.

The Silence Feature is intended to temporarily silence the horn while you identify and correct the problem. Do not use the Silence Feature in emergency situations. It will not correct a CO problem or extinguish a fire.

The Silence Feature can temporarily quiet an unwanted alarm for several minutes. You can silence this Smoke/CO Alarm by pressing the Test/Silence button on the alarm cover until you hear an acknowledge chirp.

After the Test/Silence button is released, the Red LED blinks during the silence mode.

When the Smoke Alarm is Silenced	When the CO Alarm is Silenced
The Smoke Alarm will remain silent for up to 15 minutes, then return to normal operation. If the smoke has not cleared–or continues to increase–the device will go back into alarm.	The CO alarm will remain silent for up to 4 minutes. After 4 minutes, if CO levels remain potentially dangerous the horn will start sounding again.

SILENCING THE LOW BATTERY WARNING

This Silence Feature can temporarily quiet the low battery warning "chirp" for up to 8 hours if AC power is present. Press the Test/Silence button on the Alarm cover until you hear the acknowledge "chirp".

Once the low battery warning "chirp" silence feature is activated, the unit continues to flash the green light once a minute for 8 hours. After 8 hours, the low battery "chirp" will resume. The Alarm will continue to operate as long as AC power is supplied. Note, if battery is missing or dead, Low Battery Silence cannot be activated and alarm with continue to chirp approximately once per minute. However, **replace the batteries as soon as possible,** to maintain protection in event of a power outage.

To deactivate this feature: Press the Test/Silence button again. The unit will go into Test Mode and the low battery warning will resume (LED flashes and unit sounds "chirp" once a minute).

To silence Alarms in an interconnected series:
To silence an interconnected series of Smoke/CO Alarms, you must press the Test/Silence button on the initiating alarm (The unit with the flashing red light; the red light will be off on all other Alarms.). If you press the Test/Silence on any other Alarm, it will only silence that unit, not the whole interconnected series.

SILENCING THE END OF LIFE SIGNAL

This silence feature can temporarily quiet the End of Life warning "chirp" for up to 2 days. You can silence the End of Life warning "chirp" by pressing the Test/Silence button. The horn will chirp, acknowledging that the End of Life silence feature has been activated.

After approximately 2 days, the End of Life "chirp" will resume. After approximately 2-3 weeks the End of Life warning cannot be silenced.

LATCHING FEATURES

Alarm Latch is activated after an Alarm is exposed to alarm levels of smoke or carbon monoxide. After smoke or CO levels drop below alarm levels, the **"Smoke/Power"** or **"CO"** Red LED will begin to flash On 2 seconds/Off 2 seconds. It will continue to flash or "latch" until you clear it by testing the alarm.

This feature helps emergency responders, investigators, or service technicians identify which unit(s) in your home were exposed to alarm levels of smoke or carbon monoxide. This can help investigators pinpoint the source of smoke or CO.

Interconnected Alarms. Latching Alarm Indicator shows which Alarm(s) in the series were exposed to alarm levels of smoke or carbon monoxide.

The Latching Alarm Indicator stays ON until you clear it, so it can alert you to an alarm that occurred while you were away from home, even though smoke or CO present in the air has dropped below alarm levels.

Low Battery Latch is activated when the Alarm is in the "low battery condition". When this occurs, the **Smoke/Power** LED flashes Green On for 2 seconds/Off for 2 seconds. This feature is designed to help you identify which Alarm needs to have the battery replaced. Although, the Alarm will sound the low battery chirp approximately once every minute, sometimes during the initial stages of "low battery", the Alarm will chirp in greater intervals than one minute, sometimes up to several hours, until the battery reaches a steady low battery level. This innovative feature eliminates the frustration of waiting for and/or identifying which unit is chirping.

Latching Features Note: Without AC Power and running on battery only, Low Battery Latch or Alarm Latch are only engaged for about 15 minutes to conserve power. Low Battery Latch and Alarm Latch do not operate with a missing battery and no AC Power.

WEEKLY TESTING

⚠WARNING!

- **NEVER use an open flame of any kind to test this unit. You might accidentally damage or set fire to the unit or to your home. The built-in test switch accurately tests the unit's operation as required by Underwriters Laboratories, Inc. (UL). NEVER use vehicle exhaust! Exhaust may cause permanent damage and voids your warranty.**
- **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.**

⚠CAUTION!

It is important to test this unit every week to make sure it is working properly. Using the test button is the recommended way to test this Smoke/CO Alarm.

1. 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.
2. During testing, you will hear a loud, repeating horn pattern: 3 beeps, pause, 3 beeps, pause, while the red smoke LED flashes. Then you will hear a loud, repeating horn pattern: 4 beeps, pause, 4 beeps, pause, while the red CO LED flashes.
3. When testing a series of interconnected units you must test each unit individually. Make sure all units alarm when each one is tested.

If the Smoke/CO Alarm does not test properly:

1. Make sure the AC power is applied and battery is fresh and installed correctly.
2. Be sure the alarm is clean and dust-free.
3. Test the unit again.

If the Smoke/CO Alarm is still not working properly, replace it immediately. Refer to the "Limited Warranty" at the end of this manual.

⚠WARNING!

If there is still a problem, do not try to fix the Alarm yourself. This will void your warranty!

REGULAR MAINTENANCE

⚠WARNING!

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

This unit has been designed to be as maintenance-free as possible, but there are a few simple things you must do to keep it working properly:

- Test it at least once a week.
- Clean the Smoke/CO Alarm at least once a month; gently vacuum the outside of the Smoke/CO Alarm using your household vacuum's soft brush attachment. Test the Smoke/CO Alarm. Never use water, cleaners or solvents since they may damage the unit.
- If the Smoke/CO Alarm becomes contaminated by excessive dirt, dust and/or grime, and cannot be cleaned to avoid unwanted alarms, replace the unit immediately.
- Relocate the unit if it sounds frequent unwanted alarms. See "Where This Alarm Should Not Be Installed" for details.
- When the battery back-up becomes weak, the Alarm will "chirp" about once a minute (the low battery warning). This warning should last 7 days, but you should replace the battery immediately to continue your protection. **This Alarm must have AC or battery power to operate. If AC power fails, and the battery is dead or missing, the Alarm cannot operate.**

⚠WARNING!

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

CHOOSING A REPLACEMENT BATTERY:
This Smoke/CO Alarm requires one standard 9V battery. The following batteries are acceptable as replacements: Duracell #MN1604 or MX1604; Eveready "Energizer" 522. You can also use an Ultralife 9V lithium battery U9VL-J, U9VL-J-P for longer service life between battery changes.
These batteries are available at many local retail stores.

IMPORTANT!

Actual battery service life depends on the Smoke/CO Alarm and the environment in which it is installed. All the batteries specified above are acceptable replacement batteries for this unit. Regardless of the manufacturer's suggested battery life, you MUST replace the battery immediately once the unit starts "chirping" (the "low battery warning").

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.

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.

Continued...

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 sounds. 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!

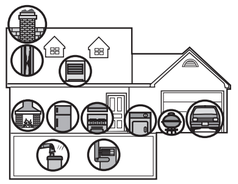
FINDING THE SOURCE OF CO AFTER AN ALARM

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.**

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 FROM CO POISONING?

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.

REGULATORY INFORMATION FOR SMOKE/CO ALARMS

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 if 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. 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.

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 at the Alarm, 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.

Gas Detection at Typical Temperature and Humidity Ranges: The CO Alarm is not formulated to detect CO levels below 30 ppm typically.

Audible Alarm: 85 dB minimum at 10 feet (3 meters).

REGULATORY INFORMATION FOR SMOKE ALARMS

RECOMMENDED LOCATIONS FOR SMOKE ALARMS

Installing Smoke Alarms in Single-Family Residences

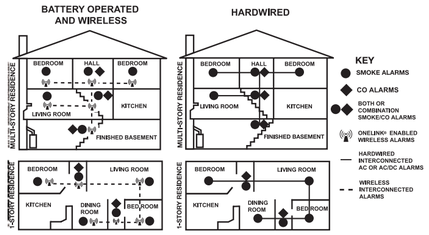
The National Fire Protection Association (NFPA), recommends one Smoke Alarm on every floor, in every sleeping area, and in every bedroom. In new construction, the Smoke Alarms must be AC powered and interconnected. See "Agency Placement Recommendations" for details. For additional coverage, it is recommended that you install a Smoke Alarm in all rooms, halls, storage areas, finished attics, and basements, where temperatures normally remain between 40˚ F (4.4˚ C) and 100˚ F (37.8˚ C). Make sure no door or other obstruction could keep smoke from reaching the Smoke Alarms.

More specifically, install Smoke Alarms:

- On every level of your home, including finished attics and basements.
- Inside every bedroom, especially if people sleep with the door partly or completely closed.
- In the hall near every sleeping area. If your home has multiple sleeping areas, install a unit in each. If a hall is more than 40 feet long (12 meters), install a unit at each end.
- At the top of the first-to-second floor stairway, and at the bottom of the basement stairway.

IMPORTANT!

Specific requirements for Smoke Alarm installation vary from state to state and from region to region. Check with your local Fire Department for current requirements in your area. **It is recommended AC or AC/DC units be interconnected for added protection.**



AGENCY PLACEMENT RECOMMENDATIONS

Standards: Underwriters Laboratories Inc. Single and Multiple Station Smoke Alarms 217.

NFPA 72 Chapter 29

"For your information, the **National Fire Alarm and Signaling Code**, NFPA 72, reads as follows:"

29.5.1* Required Detection.

29.5.1.1* Where required by other governing laws, codes, or standards for a specific type of occupancy, approved single and multiple-station smoke alarms shall be installed as follows:

(1)*In all sleeping rooms and guest rooms
(2)*Outside of each separate dwelling unit sleeping area, within 21 ft (6.4 m) of any door to a sleeping room, with the distance measured along a path of travel
(3) On every level of a dwelling unit, including basements
(4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics
(5)*In the living area(s) of a guest suite
(6) In the living area(s) of a residential board and care occupancy (small facility)

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California State Fire Marshal (CSFM)

Early warning detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: A Smoke Alarm installed in each separate sleeping area (in the vicinity, but outside bedrooms), and Heat or Smoke Alarms in the living rooms, dining rooms, bedrooms, kitchens, hallways, finished attics, furnace rooms, closets, utility and storage rooms, basements, and attached garages.

ABOUT SMOKE ALARMS

Battery (DC) operated Smoke Alarms: Provide protection even when electricity fails, provided the batteries are fresh and correctly installed. Units are easy to install, and do not require professional installation. However, they do not provide interconnected functionality.

AC powered Smoke Alarms: Can be interconnected so if one unit senses smoke, all units alarm. They do not operate if electricity fails. **AC with battery (DC) back-up:** will operate if electricity fails, provided the batteries are fresh and correctly installed. AC and AC/DC units must be installed by a qualified electrician.

Wireless Interconnected Alarms: Offer the same interconnected functionality as with hardwired alarms, without wires. Units are easy to install and do not require professional installation. They provide protection even when electricity fails, provided the batteries are fresh and correctly installed.

Smoke Alarms for Solar or Wind Energy users and battery backup power systems: AC powered Smoke Alarms should only be operated with true or pure sine wave inverters. Operating this Smoke Alarm with most battery-powered UPS (uninterruptible power supply) products or square wave or "quasi sine wave" inverters **will damage the Alarm**. If you are not sure about your inverter or UPS type, please consult with the manufacturer to verify.

Smoke Alarms for the hearing impaired: Special purpose Smoke Alarms should be installed for the hearing impaired. They include a visual alarm and an audible alarm horn, and meet the requirements of the Americans With Disabilities Act. These units can be interconnected so if one unit senses smoke, all units alarm.

Smoke alarms are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

All these Smoke Alarms are designed to provide early warning of fires if located, installed and cared for as described in the user's manual, and if smoke reaches the Alarm. If you are unsure which type of unit to install, refer to NFPA (National Fire Protection Association) 72 (National Fire Alarm and Signaling Code) and NFPA 101 (Life Safety Code). National Fire Protection Association, One Batterymarch Park, Quincy, MA 02269-9101. Local building codes may also require specific units in new construction or in different areas of the home.

SPECIAL COMPLIANCE CONSIDERATIONS

This Smoke Alarm is suitable for use in apartments, condominiums, townhouses, hospitals, day care facilities, health care facilities, boarding houses, group homes and dormitories provided a primary fire detection system already exists to meet fire detection requirements in common areas like lobbies, hallways, or porches. Using this Smoke Alarm in common areas may not provide sufficient warning to all residents or meet local fire protection ordinances/regulations.

This Smoke Alarm alone is not a suitable substitute for complete fire detection systems in places housing many people—like apartment buildings, condominiums, hotels, motels, dormitories, hospitals, health care facilities, nursing homes, day care facilities, or group homes of any kind. It is not a suitable substitute for complete fire detection systems in warehouses, industrial facilities, commercial buildings, and special-purpose non-residential buildings which require special fire detection and alarm systems. Depending on the building codes in your area, this Smoke Alarm may be used to provide additional protection in these facilities.

In new construction, most building codes require the use of AC or AC/DC powered Smoke Alarms only. In existing construction, AC, AC/DC, or DC powered Smoke Alarms can be used as specified by local building codes. Refer to NFPA 72 (National Fire Alarm and Signaling Code) and NFPA 101 (Life Safety Code), local building codes, or consult your Fire Department for detailed fire protection requirements in buildings not defined as "households".

GENERAL LIMITATIONS OF SMOKE/CO ALARMS

This Smoke/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. The Smoke Alarm portion of this device is not intended to alert hearing impaired residents. Special purpose Smoke Alarms should be installed for hearing impaired residents (CO Alarms are not yet available for the hearing impaired).

Smoke/CO Alarms may not waken all individuals. Practice the escape plan at least twice a year, making sure that everyone is involved – from kids to grandparents. Allow children to master fire escape planning and practice before holding a fire drill at night when they are sleeping. If children or others do not readily waken to the sound of the Smoke/CO Alarm, or if there are infants or family members with mobility limitations, make sure that someone is assigned to assist them in fire drill and in the event of an emergency. It is recommended that you hold a fire drill while family members are sleeping in order to determine their response to the sound of the Smoke/CO Alarm while sleeping and to determine whether they may need assistance in the event of an emergency.

Smoke/CO Alarms cannot work without power. Battery operated units cannot work if the batteries are missing, disconnected or dead, if the wrong type of batteries are used, or if the batteries are not installed correctly. AC units cannot work if the AC power is cut off for any reason (open fuse or circuit breaker, failure along a power line or at a power station, electrical fire that burns the electrical wires, etc.). If you are concerned about the limitations of battery or AC power, install both types of units.

This Smoke/CO Alarm will not sense smoke or CO that does not reach the sensors. It will only sense smoke or CO at the sensor. Smoke or CO may be present in other areas. Doors or other obstructions may affect the rate at which CO or smoke reaches the sensors. If bedroom doors are usually closed at night, we recommend you install an alarm device (Combination CO and Smoke Alarm, or separate CO Alarms and Smoke Alarms) in each bedroom and in the hallway between them.

This Smoke/CO Alarm may not sense smoke or CO on another level of the home. Example: This alarm device, installed on the second floor, may not sense smoke or CO in the basement. For this reason, one alarm device may not give adequate early warning. Recommended minimum protection is one alarm device in every sleeping area, every bedroom, and on every level of your home. Some experts recommend battery powered Smoke and CO Alarms be used in conjunction with interconnected AC powered Smoke Alarms. For details, see "About Smoke Alarms" for details.

Smoke/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 Smoke/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 Smoke/CO Alarm is not intended for people who are hearing impaired.

The Alarm may not have time to alarm before the fire itself causes damage, injury, or death, since smoke from some fires may not reach the unit immediately. Examples of this include persons smoking in bed, children playing with matches, or fires caused by violent explosions resulting from escaping gas.

This Smoke/CO Alarm is not a substitute for life insurance. Though this Smoke/CO Alarm warns against increasing CO levels or the presence of smoke, BRK Brands, Inc. does not warrant or imply in any way that they will protect lives. Homeowners and renters must still insure their lives.

This Smoke/CO Alarm has a limited life. Although this Smoke/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 this device weekly. The unit should be replaced immediately if it is not operating properly.

This Smoke/CO Alarm is not foolproof. Like all other electronic devices, this Smoke/CO Alarm has limitations. It can only detect smoke or CO that reaches the sensors. It may not give early warning of the source of smoke or CO is in a remote part of the home, away from the alarm device.

TROUBLESHOOTING GUIDE

⚠DANGER!

ELECTRICAL SHOCK HAZARD. Turn off the power to the area where the Alarm is installed BEFORE removing it from the mounting bracket or checking any electrical connections! Failure to turn off the power first may result in serious electrical shock, injury or death.

If your Alarm does this...	It means...	You should...
Green light is OFF. Unit will not alarm when you press the Test/Silence button.	Unit may not be receiving any power.	Check the AC power supply. Make sure the power connector is securely attached to the alarm. Make sure a fresh 9V battery is installed to power the battery back-up*.
Green light flashes ON, once a minute (horn is silent).	Alarm is not receiving AC power.	Unit is operating on battery back-up. Check the AC power supply.
Horn "chirps" about once per minute; Green **"Power/Smoke"** LED flashes Green On for 2 seconds/Off for 2 seconds. (Low Battery Latch is engaged.)	Low battery warning. Battery is low or missing.	Replace the battery, avoid interrupting AC power.
Once a minute, the alarm sounds 3 "chirps", and the green light flashes quickly three times.	**MALFUNCTION SIGNAL.** Unit needs to be replaced. Based on self-diagnostic tests, the unit has detected a fault.	Units under warranty should be returned to manufacturer for replacement. See "Limited Warranty" for details.
The light flashes (GREEN) and the horn sounds 5 "chirps" every minute.	**END OF LIFE SIGNAL.** CO Alarm needs to be replaced.	Immediately replace the CO Alarm.
Alarm goes back into alarm after you pressed the Test/Silence button to silence an alarm.	Smoke and/or CO levels are still potentially dangerous.	Refer to "If Your Smoke/CO Alarm Sounds" for details on how to respond to an alarm. If anyone is feeling ill, EVACUATE your home immediately and call 911.
Alarm sounds frequently even though no high levels of smoke or CO are revealed in an investigation.	The Alarm may be improperly located. Refer to "Where to Install This Alarm."	Relocate your alarm. If frequent alarms continue, have home rechecked for potential problems. You may be experiencing an intermittent smoke or 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 Consumer Affairs: 1-800-323-9005.

LIMITED WARRANTY

BRK Brands, Inc., ("BRK") the maker of First Alert® brand products warrants that for a period of seven 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 on 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 duration of 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. To assist us in serving you, please have the model number and date of purchase available when calling.

For Warranty Service return to: 1301 Joe Battle, El Paso, TX 79936

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

Visit **www.firstalert.com** for more information.

For your records, please record:

Date Purchased: _____

Where Purchased: _____

Date Installed: _____/_____**Month/Year**

Replace alarm 10 years after installation. Please write the date in the space provided:
_____/_____**Month/Year**

The alarm will also provide an audible End-of-Life Signal approximately 10 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.

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