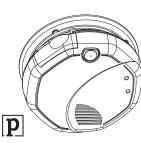
### **USER'S MANUAL SMOKE & CARBON** MONOXIDE ALARM

AC Powered Smoke & Carbon Monoxide Alarm with Voice and Location

120V AC with 2 1.5 V ∆lkaline AA battery back-up 0.09 Amps



#### **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.

Printed in Mexico





CERTIFIED TO ULC STD S531 & Model CSA STD 6.19-06 SC7010BVA

Newell Brands Inc. (NASDAQ: NWL) Customer Service Team (800) 323-9005 · www.firstalert.ca · www.brkcanada.ca All BRK® and First Alert® Smoke Alarms conform to regulatory

requirements, including ULC STD S531 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 photo-

electric 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.

may smolder for hours before bursting into flame. Sources of these fires may include cigarettes burning in couches or

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

### INTRODUCTION

Exclusive Voice Warning with Location will tell you the preprogrammed location of the initiating unit and danger detected. Programmable up to 11 locations (ex. "basement"). When alarms sounds, if programmed or basement it will say "Warning, evacuate, smoke in basement" Spread Spectrum Horn Tone. Lower and varying horn frequency nakes it easier for elderly with normal age related hearing loss to hear horn. Sweeps through the 2200 - 3400 Hz range. Smart Interconnect can be interconnected to BRK Smoke, CO, and Hear Alarms. One interconnect wire carries both smoke and CO alarm signals.

mode the alarm is in, pushing the button provides diff functions such as testing the alarm, silencing the alarm, re-testing the alarm when in silence and clearing the Latching features. 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.

Easy Installation/Maintenance features include a large opening in the mounting bracket for easy access to wiring. A battery pull

tab that keeps the battery fresh until the home is occupied. A Side Load Battery Drawer allows for easy battery replacement without removing the alarm from the ceiling or wall. End of Life Signal. Provides audible confirmation

Improved UV Resistance keeps the alarm from discoloring over time.

ELECTRICAL SHOCK HAZARD. Turn off the power to the area where the Smoke 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.

# **AWARNING!**

 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

- Installation of this unit must conform to the Canadia Electrical Code and any other local or building codes that may apply. Wiring and installation must be performed nsed electrician. Failure to follow these
- guidelines may result in injury or property damage sine wave 60Hz 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. This Alarm must have AC or battery power to operate. If the AC power fails, battery back-up will allow the alarm to sound for at least 4 minutes. If AC power
- fails and the battery is weak, protection should last for at least 7 days. 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 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

# ACAUTION!

Connect this unit ONLY to other compatible units. See "How To Install This Smoke 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

- This Smoke/CO Alarm has a battery drawer which 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.
- the openings to the sensing chambers and prevent the unit from operating properly.
- "This carbon monoxide alarming device is designed to detect carbon monoxide gas from ANY source of combustion. It is

This device is designed to protect individuals from the acute effects of carbon monoxide exposure. It will not fully safeguard individuals with specific medical conditions. If in doubt consult a medical practitioner.

### 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 (Sec "Regulatory Information For Smoke Alarms" for details on the 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 pedroom, and on every level of your home.

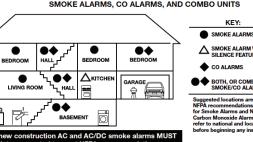
least 15 feet (4.6 meters) away from the furnace or fuel burning heat source where possible. In smaller homes or in manufactured homes where this distance cannot be maintained, install the Alarm as far away as possible from the furnace or other fuel burning source. Installing the Alarm closer than 15 feet (4.6 meters) will not harm the Alarm, but may increase the frequency of unwanted alarms.

#### In general, install combination Smoke and Carbon Monoxide Alarms:

- Inside every bedroom, especially if people sleep with the door partly
- 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

- For additional coverage, install Alarms in all rooms, halls, and storage areas, where temperatures normally remain between 40° F and 100° F.

# SUGGESTED AREAS FOR INSTALLING



- 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
- When installing on the ceiling, place the alarm as close to the center as possible.
- wall and ceiling meet. See "Avoiding Dead Air Spaces" for more

NOTE: For any location, make sure no door or other obstruction could

### 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 or

# WHERE THIS ALARM SHOULD NOT BE INSTALLED

# Do NOT locate this Smoke/CO Alarm:

- In garages, furnace rooms, crawl spaces and unfinished attics.
- 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 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 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) laundry room, utility room, or other source of high humidity.

# In direct sunlight

porches, and garages.

- 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 cra spaces, unfinished attics, uninsulated or poorly insulated ceilings,
- In insect infested areas. Insects can clog the openings to the sensing
- 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"

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

On a peaked, gabled, or cathedral ceiling, install 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.

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#### **HOW TO INSTALL THIS SMOKE/CO ALARM**

This Smoke/CO Alarm 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 (if allowed by local codes). Read "Where to Install This Alarm" and "Where This Alarm Should Not Be Installed" before you begin installation. Tools you will need: • Needle-nose pliers or utility knife • Standard flathead screwdriver • Wire strippers.

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.

#### THE PARTS OF THIS ALARM

The Mounting Bracket: To remove the mounting bracket from the Alarm base, hold the Alarm base firmly and twist the mounting bracket counterclockwise. The mounting bracket installs onto the junction box. It has a variety of screw slots to fit most boxes.



The Power Connector:
The power connector plugs into a power input block on the Alarm. It supplies the unit with AC power. • The black wire is "hot." • The white wire is neutral.

**FOLLOW THESE INSTALLATION STEPS** 

The basic installation of this Alarm is similar whether you want to install one Alarm, or interconnect more than one Alarm. If you are

Requirements For Interconnected Alarms" below before you begin

ELECTRICAL SHOCK HAZARD. Turn off power to the area where

you will install this unit at the circuit breaker or fuse box before

Connect the white wire on the power connector to the neutral

Tuck the orange wire inside the junction box. It is used for

Strip off about 1/2" (12 mm) of the plastic coating on the orange

Connect the white wire on the power connector to the neutral

Connect the black wire on the power connector to the hot wire

interconnect wire in the junction box. Repeat for each unit you

Activate the battery back-up by removing the "Pull to Activate Battery Back-Up" tab. Or, install battery back-up. Battery back-up.

cannot work until you install the battery in the correct position

Improper wiring of the power connector or the wiring leading to

the power connector will cause damage to the Alarm and may

If you are only installing one Alarm, restore power to the junction box.

If you are interconnecting multiple Alarms, repeat steps 1-5 for each Alarm in the series. When you are finished,

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

is complete may result in serious electrical shock, injury or death.

until the unit alarms. When testing a series of interconnected units you must test each unit individually. Make sure all units

If any unit in the series does not alarm, TURN OFF POWER and

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

If the Alarm ever fails to test properly, replace it immediately.

Position the base of the Alarm over the mounting bracket, and turn the Alarm clockwise (right) until the unit is in place. If wall mounted,

are interconnecting. Never connect the hot or neutral wires in the junction box to the orange interconnect wire. Never cross hot and

Connect the orange wire on the power connector to the

3. Plug the power connector into the back of the Alarm

Connect the black wire on the power connector to the hot wire

ning installation. Failure to turn off the power before

lation may result in serious electrical shock, injury or death.

interconnecting more than one Alarm, you MUST read "Special"

• The orange wire is used for interconnect. f you need to remove the power connector, turn POWER OFF first. Insert a flat screwdriver blade between the power connector and the security tab inside the power input block. Gently pry back the tab and pull the connector free.

ADANGER!

the junction box.

2. Using wire nuts, connect

Remove the mounting bracket

from the base, and attach it to

the power connector to the household wiring.

STAND-ALONE ALARM ONLY:

wire in the junction box.

INTERCONNECTED UNITS ONLY:

wire on the power connector.

wire in the junction box.

neutral wires between Alarms.

(Match "+" to "+" and "-" to "-").

adjust unit so words are level.

lead to a non-functioning Alarm.

INTERCONNECTED UNITS ONLY:

restore power to the junction box.

STAND-ALONE ALARM ONLY

power, replace it immediately

**WEEKLY TESTING** 

AWARNING!

alarm when each one is tested.

Check all connections.

**AWARNING!** 

in the junction box.

in the junction box.

interconnect only

# **Special Requirements For Interconnected Alarms**

# AWARNING! Failure to meet any of the above requirements could damage the units and cause them to malfunction, removing your

 AC and AC/DC 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 eries will continue to send and receive signals. AC powered Alarms will not operate.

Interconnected units can provide earlier warning of fire than stand-alone units, especially if a fire starts in a remote area of the dwelling. If any unit in the series senses smoke, all units will alarm. To determine which Alarm

#### 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)

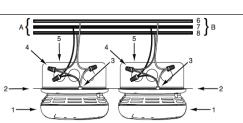
On Initiating Alarm(s) Red LED(s) On for 2 seconds/Off for 2 seconds On All Other Alarms Green LED(s) On, Red LED(s) Off

### **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: *BRK Electronics*° Smoke Alarm Models 9120, 9120B, SC9120B, 7010, 7010B, 4120, 4120B, 4120SB, 4919, 2002RAC. 100S, 5919, 5919TH; *BRK Electronics*° Heat Alarm Models HD6135F, HD6135FB; *BRK Electronics*° CO Alarm Models CO5120BN, CO5120PDBN; Smoke/CO Alarm Model SC6120B, SC7010BV, SC7010B; and First Alert® Smoke Alarm Models SA4120, SA4120B, SA4121B, SA4919B, SA100B.

#### Interconnected units must meet ALL of the following requirements • A maximum of 18 compatible units may be interconnected (Maximum of 12 Smoke Alarms).

- The same fuse or circuit breaker must power all interconnected
- 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 (NEC).



A. Unswitched 120VAC B. To additional units; Maximum = 18 total 60 Hz source (Maximum 12 Smoke Alarms)

7.	Make sure the Alarm is receiving AC power. Under normal operation, the Green power indicator light will shine continuously.	
8.	If the Green power indicator light does not light, <b>TURN OFF POWER TO THE JUNCTION BOX</b> 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.	
9.	Test each Smoke Alarm. Press and hold the Test/Silence button	

1. Alarm

Action:

2. Ceiling or Wall

4. Wire Nut Junction Box

# Neutral Wire (Wht) Power Connector

7. Interconnect Wire (Orange)

8. Hot Wire (Blk)

# STEP BY STEP GUIDE TO PROGRAMMING THIS ALARM For first time power up only (whether AC and/or batteries), not applicable when changing batteries while connecting to AC.

Alarm Will Say

	1
Insert batteries (2, AA batteries). and/or connect to AC.	"Welcome, First Alert Carbon Monoxide and Smoke Alarm." Followed by French translation. Press and hold test button to select French instructions during the French welcome message. "No location programmed" if <i>first time</i> powered up. "To select location, press and hold test button now."
Press & Hold Test Button if you would like to program the location or change the location of the Alarm. Release button after Alarm responds.	"To save location, press and hold test button after location is heard." Alarm will speak list of locations (see below).
After you hear the location of where you are placing the Alarm, Press & Hold the Test Button.	"[Location, example: "Basement"] location saved." If no location is chosen: "No location saved."

our Alarm has now been programmed for the location of your choice. Available locations:

Reset programming - disconnect AC and batteries momentarily, then				
Office	Hallway	Utility Room		
Family Room	No Location	Guest Bedroom		
Living Room	Dining Room	Master Bedroom		
Basement	Kitchen	Child's Bedroom		

# If the unit does not alarm during testing, DO NOT lock the battery

- Locking Pins (break out of Hot (Black) AC Wire
- Neutral (White) AC Wire

The Parts of This Unit

Mounting Slots

Mounting Bracket

- Interconnect (Orange) Wire
- Quick-Connect Power
- Turn this way to remove Turn this way to attach to
- bracket 10 Slide-Out Battery Drawer

the back of the Alarm

IMPORTANT!

# compartment! Install a new battery and test again. If the Alarm still does not alarm, replace it immediately. Using needle-nose pliers, detach one locking pin from the mounting bracket.

**LOCKING FEATURES** 

The locking features are designed to discourage unauthorized removal of the batteries or Alarm. It is not necessary to activate the locks in

To permanently remove either lock, insert a flathead screwdriver between the locking pin and the lock, and pry the pin out of the lock.

single-family households where unauthorized battery or Alarm removal is not a concern.

to the mounting bracket. You can choose to use either feature independently, or use them both.

one or both pins from the mounting bracket, depending on how many locking features you want to use.

Tools you will need: • Needle-nose pliers • Standard Flathead screwdriver.

TO LOCK THE BATTERY COMPARTMENT

battery and tested the battery back-up.

Do not lock the battery compartment until you have installed the

. Push and hold Test/Silence button until the alarm sounds

These Alarms have two separate locking features; one to lock the battery compartment, and the other to lock the Alarm

Both locking features use locking pins, which are molded into the mounting bracket. Using needle-nose pliers, remove

Always discharge the branch circuit before servicing an AC or AC/DC Alarm. First, turn off the AC power at the circuit breaker or fuse box. Next, remove the battery from Alarms with battery back-up. Finally, press and hold the Test/Silence button for 5-10 seconds to discharge

Once the Alarm is installed, you must disconnect it from the AC power

IMPORTANT!

ADANGER!

- of the locking pin, and gently pry it out of the battery compartment lock. (If you plan to relock the battery compartment, save the locking pin.)
- 5. Reconnect the power connector to the back of the Alarm, reattach

# the Smoke Alarm to the mounting bracket, and restore the power.

When replacing the batteries, always test the Alarm before relocking the battery compartment.

### TO LOCK THE MOUNTING BRACKET

Using needle-nose pliers, detach one locking pin from mounting

. Push the locking pin through the hole near the battery drawer on



Insert the locking pin into the lock located opposite from the battery drawer as shown in the diagram.

When you attach the Alarm to the mounting bracket, the locking pin's head will fit into a notch on the bracket.

# TO UNLOCK THE MOUNTING BRACKET

shock, injury or death **AWARNING!** 

Always discharge the branch circuit before servicing an AC or AC/DC Alarm. First, turn off the AC power at the circuit breaker or fuse box. Next, remove the battery from Alarms with battery back-up. Finally, press and hold the Test/Silence button for 5-10 seconds to discharge

- 1 Insert a flathead screwdriver between the mounting bracket pin and the mounting bracket.
- 2. Pry the Alarm away from the bracket by turning both the screwdriver and the Alarm

# WHAT YOU WILL SEE AND HEAR WITH THIS ALARM

**Under Normal Operations** Voice: Silent Power/Smoke LED: Constant Green

CO LED: Off

# Horn: Silent

Voice: "Testing." Horn: 3 beeps, pause, 3 beeps; Voice: "Warning, evacuate smoke in [Location, example: "Basement"].

Evacuate. Power/Smoke LED: Flashes Red in sync with the horn pattern CO LED: Off, followed by

Voice: "Warning, evacuate carbon monoxide in [Location, example: "Basement"]. Evacuate." Pause. "Highest carbon monoxide level was [CO level example: \_0\_ ppm]".

# CO LED: Flashes Red in sync with the horn pattern

Power/Smoke LED: Off

Horn: 4 beeps, pause, 4 beeps

If Battery Becomes Low or is Missing Voice: Replace battery in [Location, example "Basement"]." Repeated every 5 hours

Horn: chirps once a minute Power/Smoke LED: Flashes Green On for 2 seconds/Off for 2 seconds. Low Battery Latch is now engaged. CO LED: Off

# If Alarm is Not Operating Properly (MALFUNCTION SIGNAL)

Voice: "Detector error in [Location, example "Basement"], please see manual." Repeated every 5 hours Horn: 3 chirps every minute Power/Smoke LED: 3 Green Flashes approximately once a minute

Alarm has reached its End of Life Voice: "Detector error in [Location, example "Basement"], please see manual." Repeated every 5 hours **Horn:** 5 chirps every minute

er/Smoke LED: 5 Green Flashes approximately once a minute

### CO LED: Off Alarm Levels of CO are Detected

Horn: 4 fast beeps, pause, 4 fast beeps, pause\*

Voice: "Warning, evacuate carbon monoxide in [Location, example: "Basement"]. Evacuate." Pause. "Highest carbon monoxide level was [CO level example: ppm]".

Horn: 4 beeps, pause, 4 beeps, pause repeating 2 times followed by Voice Warning above Power/Smoke LED: Off

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. \*NOTE: If unit goes into CO alarm, the regular 4 beeps-brief pause cycle will repeat for fifteen minutes. After fifteen minutes, the pause

# Smoke is Detected

will increase to one minute.

Horn: 3 beeps, pause, repeating 8 times Voice: "Warning, evacuate smoke in [Location, example:

"Basement"]. Evacuate." Horn: 3 beeps, pause, repeating 3 times followed by Voice Warning

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.

Detector active.

Power/Smoke LED: Off

CO LED: Flashes Red

Horn: Off

#### CO LED: Off Smoke Alarm is Silenced CO Alarm is Silenced Voice: "Horn silenced Voice: "Horn silenced.

Detector active. Horn: Off Power/Smoke LED: Flashes CO LED: Off

# Failure to turn off the power first may result in serious electrical

# counterclockwise (left) at the same time.

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

his unit has been designed to be as maintenance-free as possible, but

- cleaners or solvents since they may damage the unit. • If the Smoke/CO Alarm becomes contaminated by excessive dirt,
- alarms, replace the unit immediately. Relocate the unit if it sounds frequent unwanted alarms. See "Where
- When the battery back-up becomes weak, the Alarm will "chirp about once a minute (the low battery warning), and the **Voice** will say "Replace battery in [Location, example "Basement"]." Repeated every 5 hours. This warning should last 7 days, but you should replace the battery immediately to continue your protection. The Low Battery Latch feature will be engaged. The Green Power/ Smoke LED will flash On for 2 seconds/Off for 2 seconds.

# Choosing a replacement battery:

Your Smoke/CO Alarm requires two "AA" Duracell MN1500 batteries. These batteries are available at many local retail stores.

Always use the exact batteries specified by this User's Manual. DO NOT use rechargeable batteries. Clean the battery contacts and also those of the device prior to battery installation. Install batteries correctly with regard to polarity (+ and -).

# Please dispose of or recycle used batteries properly, following any local regulations. Consult your local waste management authority or recycling organization to find an electronics recycling facility in your area. DO NOT DISPOSE OF BATTERIES IN FIRE. BATTERIES MAY EXPLODE OR LEAK.

### **AWARNING!** Keep battery out of reach of children. In the event a battery is

Actual battery service life depends on the Alarm and the environment in which it is installed. Constant exposure to high or low humidity can reduce battery life. All the batteries specified above are acceptable replacement batteries for this unit. Regardless of the manufacturer's

To replace the batteries (without removing Alarm from the ceiling

- 1. Open the battery compartment.
- 2. Press tabs A and B as shown in the diagram and remove each battery.
- 3. Insert the new batteries, making sure they snap completely into the battery compartment. Match the terminals on the ends of the batteries with the terminals on the unit.
- 4. Close the battery compartment, and then test the unit by pressing the Test/ Silence button.



NOT designed to detect smoke, fire, or any other gases".



### **INSTALLATION**

For CO Alarms, the National Fire Protection Association (NFPA)

NOTE: For added protection, install an additional Smoke/CO Alarm at

- On every level of your home, including finished attics and basements. or completely closed.
- (12 meters) long, install a unit at each end. The alarm should be heard from all sleeping areas.
- · At the top of first-to-second floor stairs.
- At the bottom of the basement stairs.
- (4.4° C and 37.8° C).

SMOKE ALARMS, CO ALARMS, AND COMBO UNITS

A SMOKE ALARM WITH SILENCE FEATURE CO ALARMS

# RECOMMENDED PLACEMEN

- In either case, install at least 4 inches (102 mm) from where the

Where combustion particles are produced. Combustion particles

**AVOIDING DEAD AIR SPACES** 

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, below typical "dead air"

# the wall/ceiling line.

void extremely dusty, dirty or greasy areas.

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.

# Products under warranty may be returned to the manufacture for replacement. See "Limited Warranty" at the end of this

ACAUTION! 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. You can test this Smoke/CO Alarm by pressing and holding the Test/Silence button on the Ålarm cover until Alarm **Voice** says "Testing" (typically 3-5 seconds). During testing, you will see and hear the following sequence:

damage and voids your warranty.

• The Alarm Voice will say "Testing." The Horn will sound 3 beeps, pause, 3 beeps. The Alarm **Voice** will say "Warning, evacuate smoke in [Location, example: "Basement"]. Evacuate." The **Power/Smoke LED** flashes Red and the **CO LED** will be Off. • Next the Horn will sound 4 beeps, pause, 4 beeps. The Alarm

Voice will say "Warning, evacuate carbon monoxide in [Location, example: "Basement"]. Evacuate." The Power/Smoke LED will be Off and the CO LED flashes Red.

If the unit does not alarm, make sure the batteries are correctly installed, and test again. If the unit still does not alarm, replace it

3

reconnect to initiate programming as above.

ELECTRICAL SHOCK HAZARD. Turn off the power to the area where the 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 **AWARNING!** 

TO UNLOCK THE BATTERY COMPARTMENT

the branch circuit.

1. Remove the Alarm from the mounting bracket. If the unit is locked to the bracket, see the section "To Unlock the Mounting Bracket."

before unlocking the battery compartment.

2. Disconnect the power connector by gently prying it away from the back of the Alarm. Insert a flathead screwdriver under the head

4. To relock the battery compartment, close the battery door and reinsert locking pin in lock.

# **IMPORTANT!**

ELECTRICAL SHOCK HAZARD. Turn off the power to the area where the Alarm is installed before removing it from the mounting bracket.

# REGULAR MAINTENANCE

the outside of the Smoke/CO Alarm using your household vacuum's soft brush attachment. Test the Smoke/CO Alarm. Never use water,

dust and/or grime, and cannot be cleaned to avoid unwanted

This Alarm Should Not Be Installed" for details.

**AWARNING!** 

swallowed, immediately contact your poison control center, your physician, or the Canadian Battery Ingestion hotline at 1-416-813-5900 as serious injury may occur. **IMPORTANT!** 

suggested battery life, you MUST replace the battery immediately once the unit starts "chirping" (the "low battery warning").



# 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

Thank you for choosing First Alert® for your Smoke and Carbon Monoxide Alarm needs. You have purchased a state-of-the-art Smoke & Carbon Monoxide 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.

**Optipath 360 Technology**™ provides 360 degrees of direct access to the smoke sensor. Single Button Test/Silence eliminates confusion. Depending on

Perfect Mount System includes a gasketless base for easy installation and a mounting bracket that keeps the alarm secure over a wide rotation range to allow for perfect alignment. Dust Cover is included to keep the alarm clean during construction

# alarm needs to be replaced.

away from the unit. The alarm will reset automatically

Do not paint over the unit. Paint may clog

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### IF YOUR SMOKE/CO ALARM SOUNDS WHAT TO DO FIRST-

### **IDENTIFY THE TYPE OF ALARM SIGNAL**

Refer to previous section "What you will see and hear with this alarm".

"ALARM-MOVE TO FRESH AIR"

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

### **AWARNING!**

ACTUATION OF THIS DEVICE 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 SIGNAL SOUNDS (4 BEEPS)

- . IMMEDIATELY MOVE TO FRESH AIR OUTDOORS OR BY AN OPEN DOOR OR WINDOW. CHECK THAT ALL PERSONS ARE ACCOUNTED FOR. DO NOT RE-ENTER THE PREMISES OR MOVE AWAY FROM THE OPEN DOOR/WINDOW UNTIL THE EMERGENCY SERVICES RESPONDERS HAVE ARRIVED, THI PREMISES HAVE BEEN AIRED OUT, AND YOUR ALARM REMAINS IN NORMAL CONDITION.
- 2. CALL YOUR EMERGENCY LOCAL SERVICE:

(ii) IF MALFUNCTION SIGNAL SOUNDS (3 BEEPS), OR YOUR CO ALARM reactivates within a 24-hour period, 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:

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."

#### **AFTER AN ALARM**

After the emergency responders arrive, the premises aired out, and your CO Alarm remains in its normal condition, you can check what the highest carbon monoxide level sensed was:

Action:	Alarm Will Say:
1. Press & Hold Test Button	"Highest carbon monoxide level was ppm. Please see manual."
_	"To clear highest carbon monoxide level, press and hold test button now."
Press & Hold Test Button, if you would like to clear the	"Highest carbon monoxide level cleared."
highest level sensed.	Alarm will say nothing.
If you would like to keep the highest level in memory, do not press anything	

# IF THE SMOKE ALARM SOUNDS

#### RESPONDING TO AN ALARM AWARNING!

- If the unit alarms and you are not testing the unit, it is warning you of a potentially dangerous situation that requires you immediate attention. NEVER ignore any alarm. Ignoring the alarm may result in injury or death.
- Never remove the batteries from a battery operated Smoke/CO Alarm to stop an unwanted alarm (caused by cooking smoke, etc.). Removing batteries disables the alarm so it cannot sense smoke, and removes your protection. Instead open a window or fan the
- If the unit alarms get everyone out of the house immediately

# 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
- 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.

# AWARNING!

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

# **USING THE SILENCE FEATURES**

Never remove the batteries to guiet 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

The Silence Feature can temporarily guiet an unwanted alarm for several minutes. You can silence this Smoke/CO Alarm by pressing the Test/ Silence button on the alarm cover for at least 3-5 seconds.

When the Smoke Alarm is Silenced	When the CO Alarm is Silenced:
The Smoke Alarm will remain silent for up to 15 minutes,	The CO alarm will remain silent for up to 4 minutes.
then return to normal operation.	After 4 minutes, if CO levels remain potentially dangerous
If the smoke has not cleared- or continues to increase-the device will go back into alarm.	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. However, **replace the** batteries as soon as possible, to maintain protection in event of a

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

### 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.

#### **LATCHING FEATURES**

Alarm Latch is activated after an Alarm is exposed to alarm levels of smoke or carbon monoxide. This feature will only work with AC power After smoke or CO levels drop below alarm levels, the "Smoke/Power or "CO" Red LED will begin to flash once every few 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 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

#### "SMART INTERCONNECT" FEATURE

This Alarm includes "Smart Interconnect" which enables the Alarm to be interconnected with other First Alert® and 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

### 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,

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**

THE FOLLOWING SYMPTOMS MIGHT BE RELATED TO CARBON MONOXIDE POISONING AND SHOULD BE DISCUSSED WITH ALL MEMBERS OF THE HOUSEHOLD:

MILD EXPOSURE: HEADACHES, FATIGUE, DROWSINESS, SHORTNESS OF BREATH, "FLU" - LIKE SYMPTOMS (WITHOUT FEVER), AND IMPAIRED MOTOR FUNCTIONS(LIKE DIFFICULTY WALKING OR PROBLEMS WITH BALANCE);

MEDIUM EXPOSURE: DIZZINESS, NAUSEA AND VOMITING, CHEST PAIN, POOR VISION, DIFFICULTY THINKING; EXTREME EXPOSURE: LOSS OF CONSCIOUSNESS, CONVULSIONS,

COMA AND DEATH WHEN FLU-LIKE SYMPTOMS WITH FEVER ARE EXPERIENCED. ENSURE THAT THE POSSIBILITY OF POISONING IS NOT AUTOMATICALLY RULED OUT. MANY CASES OF REPORTED CARBON MONOXIDE POISONING INDICATE THAT WHILE VICTIMS ARE AWARE THEY ARE NOT WELL, THEY BECOME SO DISORIENTED THEY ARE UNABLE TO SAVE THEMSELVES BY EITHER EXITING THE BUILDING OR CALLING FOR ASSISTANCE

### **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 sounds. However, people with cardiac or respiratory problems infants, uphors believe preparent methors or address propelled. problems, infants, unborn babies, pregnant mothers, or elderly people can be more quickly and severely affected by CO. If you experience mild symptoms of CO poisoning, consult your doctor immediately!

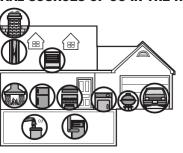
# FINDING THE SOURCE OF CO AFTER AN ALARM

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 · 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
- Vent pipe connections vibrating loose from clothes dryers, furnaces, or water heaters.

fresh air.

- Obstructions in or unconventional vent pipe designs which can
- 2. Extended operation of unvented fuel burning devices (range, oven,
- 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 or average, healthy adults.

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

- 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.
- 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
- 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

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 150 ppm of CO, IT MUST ALARM BETWEEN 10 and 50 MINUTES.

Approximately 10% COHb exposure at levels of 10% to 95% Relative

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
- An exposure to 400 ppm of CO may cause headaches in average, healthy adults after 35 minutes, but can cause death after 2 hours.

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

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

### **REGULATORY INFORMATION FOR SMOKE ALARMS** RECOMMENDED LOCATIONS FOR SMOKE ALARMS

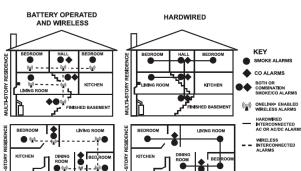
The National Fire Protection Association (NFPA), recommends one Smoke Alarm on every floor, in every sleeping area, and in every bedroom. In new construction, the Smoke Alarms must be AC powered and interconnected. See "Agency Placement Recommendations" for details. For additional coverage, it is recommended 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

# rom reaching the 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

# **IMPORTANT!**

Specific requirements for Smoke Alarm installation vary from state to state and from region to region. Check with your local Fire D 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.

'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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#### **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

Smoke/CO Alarms for Solar or Wind Energy users and battery backup power systems: AC powered Smoke/CO Alarms should only be operated with true or pure sine wave inverters. Operating this 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. Can be interconnected so if one

#### unit senses smoke, all units alarm. Smoke alarms are not to be used with detector quards 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 Smoke Alarm to install, refer to National Fire Protection Association (NFPA) Standard 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 n warehouses, industrial facilities, commercial buildings, and specialpurpose 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

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"

# **FCC Compliance**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to

However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the

- interference by one or more of the following measures
- Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference

received, including interference that may cause undesired operation.

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- Connect the equipment into an outlet on a circuit different from that of the receiver.
- Consult the dealer or an experienced radio or TV technician for help. Warning: Changes or modifications to the product, not expressly approved by First Alert / BRK Brands, Inc., could void the user's authority to operate the equipment

### **GENERAL LIMITATIONS OF SMOKE/CO ALARMS**

THIS PRODUCT IS INTENDED FOR USE IN ORDINARY INDOOF RESIDENTIAL AREAS . IT IS NOT DESIGNED TO MEASURE COMPLIANCE WITH COMMERCIAL AND INDUSTRIAL STANDARDS. IT IS NOT DESIGNED TO MEASURE CO LEVELS IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) COMMERCIAL OR INDUSTRIAL STANDARDS. THIS DEVICE S DESIGNED TO PROTECT INDIVIDUALS FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT WILL NOT FULLY BAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT CONSULT A MEDICAL PRACTITIONER. The Smoke Alarn portion of this device is not intended to alert hearing impaired residents. Special purpose Smoke Alarms should be installed for hearing impaired esidents (CO Alarms are not yet available for the hearing impa

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 . 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

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

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

be replaced immediately if it is not operating properly.

TROUBLESHOOTING GUIDE				
If the Alarm	Problem	You should		
Horn "chirps" about once per minute; Green "Smoke/CO" LED flashes Green On for 2 seconds/Off for 2 seconds. (Low Battery Latch is engaged.)	Low Battery Warning.	Install two new AA batteries*.		
Voice: "Replace battery in [Location]" every 5 hours				
Horn sounds 3 "chirps" every minute;	MALFUNCTION SIGNAL. Device is not working properly, and needs to be replaced.	Units under warranty should be returned to manufacturer for replacement. See "Limited Warranty" for details.		
Voice: "Detector error in [Location, example "Basement"], please see manual" repeated every 5 hours; LED has 3 flashes with "chirps".				
The light flashes (RED) and the horn sounds 5 "chirps" every minute;	END OF LIFE SIGNAL. Alarm needs to be replaced.	Immediately replace the Alarm.		
Voice: "Detector error in [Location, example "Basement"], please see manual" repeated every 5 hours.				
Carbon Monoxide Alarm ONLY:				
CO Alarm goes back into alarm 4 minutes after you Silence it.	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. Refer to "If The CO Alarm Sounds" for details.		
CO Alarm sounds frequently even though no high levels of CO are revealed in an investigation.	The CO Alarm may be improperly located. Refer to "Where to Install This Alarm" for details.	Relocate your Alarm. If frequent alarms continue, have home rechecked for potential CO problems. You may be experiencing an intermittent CO problem.		
Smoke Alarm ONLY:				
Smoke Alarm sounds when no smoke is visible.	Unwanted alarm may be caused by nonemergency source like cooking smoke.	Silence Alarm using manual button; clean the Alarm's cover with a soft, clean cloth. If frequent unwanted alarms continue, relocate your Alarm. Alarm may be too close to a kitchen, cooking appliance, or steamy bathroom.		
*For a list of acceptable replacement batteries, see "Regular Maintenance."				
If you have questions that cannot be answered by reading this manual, call The Customer Service Team at 1-800-323-9005,				

# **LIMITED WARRANTY**

BRK Brands. Inc., ("BRK") the maker of First Alert® brand products warrants that for a period of ten 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. his 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

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cover Acts of God, such as fire, flood, hurricanes and tornadoes or any batteries that are included with this unit.

**Service:** If service is required, do not return the product to your retailer In order to obtain warranty service, contact the Customer Service

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 iurisdictions 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** 

Team. 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.

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 replacement date that appears on the device is the date beyond which the device may no longer detect carbon monoxide accurately and should be immediately replaced.	

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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IF THE CO ALARM SOUNDS

smoke away from the unit. The alarm will reset automatical

If a door is cool, open it slowly. Don't open a hot door. Keep doors

AWARNING!

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

 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 for exhaust backflow from CO sources. Check the draft hood on an operating furnace for a backdraft. Look for cracks on

**REGULATORY INFORMATION FOR CO ALARMS** WHAT LEVELS OF CO CAUSE AN ALARM?

- If the alarm is exposed to 400 ppm of CO, IT MUST ALARM BETWEEN 4 and 15 MINUTES.
- If the alarm is exposed to 70 ppm of CO, IT MUST ALARM BETWEEN 60 and 240 MINUTES.

Humidity (RH).

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

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.

Installing Smoke Alarms in Single-Family Residences

- More specifically, install Smoke Alarms: