

AC Powered Smoke & Carbon Monoxide Alarm

Two Latching Features Smart Interconnect Optipath 360 Technology™ Two Silence Features Alkaline Battery Backup



Model SC7010B

Printed in Mexico M08-0182-009 K1 09/10

IMPORTANT! PLEASE READ CAREFULLY AND SAVE This user's manual contains important information about your Alarm's

#### INTRODUCTION

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

operation. If you are installing the Alarm for use by others, you must

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eave this manual—or a copy of it—with the end use

against two deadly household threats. Spread Spectrum Horn Tone. Lower and varying horn frequency makes 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 Heat Alarms. One interconnect wire carries both smoke and CO alarm

Optipath 360 Technology™ provides 360 degrees of direct access to the smoke sensor.

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 features. Two Silence Features. Temporarily silence low battery chirp for up to

eight hours before replacing low báttery or silence an únwanted 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 mounting bracket that keeps the alarm secure over a wide on range to allow for perfect alignment.

Dust Cover is included to keep the alarm clean during construction 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 End of Life Signal. Provides audible confirmation alarm needs to be

Improved UV Resistance keeps the alarm from discoloring over time

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

 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.

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 ir serious electrical shock, injury or death.

#### AWARNING!

- This unit will not alert hearing impaired residents. ded that you install special units which use devices like flashing strobe lights to alert hearing impaired 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; 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 thes guidelines may result in injury or property damage.
- This unit must be powered by a 24-hour, 120VAC pure 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 pre vent 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 away from the unit. The alarm will reset automatically.

#### 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 operating properly.
- 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.
- Do not paint over the unit. Paint may clog the openings to the sensing chambers and prevent the unit from operat 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

For CO Alarms, the National Fire Protection Association (NEPA) 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.

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

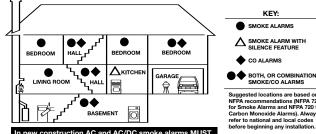
#### In general, install combination Smoke and Carbon Monoxide Alarms:

- On every level of your home, including finished attics and basements. 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
- (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° C and 38° C).

#### RECOMMENDED PLACEMENT

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

KEY:



- 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
- 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 insure of the amount of insulation, it is important to install units on

#### WHERE THIS ALARM SHOULD NOT BE INSTALLED

#### Do NOT locate this Smoke/CO Alarm:

- In garages, 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 ventilate 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 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° C) or hotter than 100° F (38° 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
- 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

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, below typical "dead air"

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.

2

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

The Power Connector

• The black wire is "hot."

and pull the connector free.

The white wire is neutral.

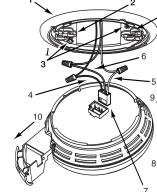
Make sure the Alarm is not receiving excessively noisy power. Examples of noisy power could be major appliances on the same circuit, power from a generator or solar power, light dimmer on the same circuit or mounted near fluorescent lighting. Excessively noisy power may cause

# 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.







# Mounting Slots

Locking Pins (break out of bracket) Hot (Black) AC Wire

The Parts of This Unit

Mounting Bracket

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

# **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 interconnecting more than one Alarm, you MUST read "Special Requirements For Interconnected Alarms" below before you begin

The power connector plugs into a power input block

on the Alarm. It supplies the unit with AC power.

• The orange wire is used for interconnect.

If you need to remove the power connector, turn

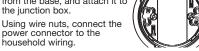
inside the power input block. Gently pry back the tab

POWER OFF first. Insert a flat screwdriver blade between the power connector and the security tab

#### **ADANGER!**

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.

Remove the mounting bracket from the base, and attach it to the junction box. Using wire nuts, connect the



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

#### interconnect only. INTERCONNECTED UNITS ONLY:

# Strip off about 1/2" (12 mm) of the plastic coating on the orange wire on the power connector.

- 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.
- 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 Alarms.

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 (Match "+" to "+" and "-" to "-"). Position the base of the Alarm over the mounting bracket, and turn

Plug the power connector into the back of the Alarm.

the Alarm clockwise (right) until the unit is in place. If wall mounted, adjust unit so words are level. Check all connections.

# AWARNING!

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:

- If you are only installing one Alarm, restore power to the junction
- INTERCONNECTED UNITS ONLY:
- If you are interconnecting multiple Alarms, repeat steps 1-5 for each Alarm in the series. When you are finished, restore power to the junction box.

#### ADANGER!

- 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. Make sure the Alarm is receiving AC power. Under normal
- operation, the Green power 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
- Test each Smoke Alarm. Press and hold the Test/Silence button until the unit alarms. When testing a series of interconnected units you must test each unit individually. Make sure all units alarm when each one is tested.

#### ADANGER!

replaced immediately.

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

#### **WEEKLY TESTING**

#### AWARNING!

- 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.
- . If the Alarm ever fails to test properly, replace it immediately. Products under warranty may be returned to the manufacturer 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 Alarm cover. During testing, you will see and hear the following



Next the Horn will sound 4 beeps, pause, 4 beeps. The Power/ Smoke LED will be Off and the CO LED flashes Red.

3

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.

#### THE PARTS OF THIS ALARM

# Special Requirements For Interconnected Alarms

. 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

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 All Other Alarms Red LED is Off

# On Initiating Alarm(s) Red LED(s) On for 2 seconds/Off for 2 seconds

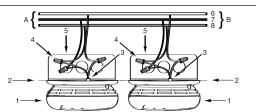
60 Hz source

2. Ceiling or Wall

3. Power Connector

1. Alarm

**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 and First Alert® Smoke Alarm Models SA4120, SA4120B, SA4121B



(Maximum 12 Smoke Alarms)

7. Interconnect Wire (Orange)

8. Hot Wire (Blk)

- AWARNING! Failure to meet any of the above requirements could damage the units and cause them to malfunction, removing your
- series will continue to send and receive signals. AC powered

initiated an alarm, see table:

# On Initiating Alarm(s) Red LED(s) flashes (flash) rapidly

After an Alarm (Latching):

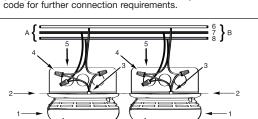
## On All Other Alarms Green LED(s) On, Red LED(s) Off

## Compatible Interconnected Units

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

## 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 and NFPA 70 (NEC). Refer to NFPA 72, NFPA 101, and/or your local building



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

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

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

TO LOCK THE BATTERY COMPARTMENT

battery and tested the battery back-up.

IMPORTANT!

the back of the Alarm

TO LOCK THE MOUNTING BRACKET

Insert the locking pin into the lock located

opposite from the battery drawer as

shown in the diagram.

**Under Normal Operations** 

When You Test the Alarm

Horn: 3 beeps, pause, 3 beeps

Horn: 4 beeps, pause, 4 beeps

If Battery Becomes Low or is Missing

CO LED: Off, followed by

Power/Smoke LED: Off

**Horn:** chirps once a minute

Horn: 3 chirps every minute

Alarm has reached its End of Life

Horn: 5 chirps every minute

Alarm Levels of CO are Detected

Power/Smoke LED: Off

will increase to one minute.

Smoke Alarm is Silenced

Power/Smoke LED: Flashes

Smoke is Detected

CO LED: Off

Horn: 4 beeps, pause, 4 beeps\*

Horn: 3 beeps, pause, 3 beeps

Horn: Silent

CO LED: Off

CO LED: Off

CO LED: Off

Do not lock the battery compartment until you have installed the

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

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.

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

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

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

WHAT YOU WILL SEE AND HEAR WITH THIS ALARM

Power/Smoke LED: Flashes Red in sync with the horn pattern

Power/Smoke LED: Flashes Green On for 2 seconds/Off for

If Alarm is Not Operating Properly (MALFUNCTION SIGNAL)

2 seconds. Low Battery Latch is now engaged.

ver/Smoke LED: 3 Flashes approximately once a minute

Power/Smoke LED: 5 Flashes approximately once a minute

CO LED: During Alarm: Flashes Red in sync with the horn pattern.
After Alarm: Flashes Red On for 2 seconds/Off for 2

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.

CO Alarm is Silenced

Power/Smoke LED: Off

CO LED: Flashes Red

Horn: Off

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

CO LED: Flashes Red in sync with the horn pattern

CO LED: Off

Power/Smoke LED: Constant Green

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

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

Both locking features use locking pins, which are molded into the mounting bracket. Using needle-nose pliers, remove one or both pins from the mounting bracket, depending on how many locking features you want to use.

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

#### TO UNLOCK THE BATTERY COMPARTMENT

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

#### ADANGER!

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

## AWARNING!

the branch circuit.

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

If the unit is locked to the bracket, see the section "To Unlock the Mounting Bracket."

the battery compartment.

**ADANGER!** 

- 2. Disconnect the power connector by gently
- prying it away from the back of the Alarm. 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 relock the battery compartment, save the

1. Remove the Alarm from the mounting bracket.

- locking pin.) 4. To relock the battery compartment, close the battery door and reinsert locking pin in lock.
- 5. Reconnect the power connector to the back of the Alarm, reattach

When replacing the batteries, always test the Alarm before relocking

#### the Smoke Alarm to the mounting bracket, and restore the power **IMPORTANT!**

TO UNLOCK THE MOUNTING BRACKET

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 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

2. Pry the Alarm away from the bracket by

**REGULAR MAINTENANCE** 

turning both the screwdriver and the Alarm counterclockwise (left) at the same time.

#### Use only the replacement batteries listed below. The unit may not operate properly with other batteries. Never use rechargeable patteries 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:

AWARNING!

- 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. The Low Battery Latch feature will be engaged. The Green Power/Smoke LED will flash On for 2 seconds/

Choosing a replacement battery:

To replace the batteries (without removing Alarm from the ceiling

# Your Smoke/CO Alarm requires two "AA" Energizer E91 batteries. These batteries are available at many local retail stores.

**IMPORTANT!** Actual battery service life depends on the 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").

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

4. Close the battery compartment, and

then test the unit by pressing the Test/Silence button.

terminals on the unit.

Type of Alarm

Open the battery compartment.

# 2. Press tabs A and B as shown in the diagram and remove each battery

What You See and Hear

#### IF YOUR SMOKE/CO ALARM SOUNDS WHAT TO DO FIRST-IDENTIFY THE TYPE OF ALARM SIGNAL

Carbon Monoxide (CO)	Horn: 4 beeps, pause, 4 beeps Power/Smoke LED: Off CO LED: Flashes Red
Smoke	Horn: 3 beeps, pause, 3 beeps Power/Smoke LED: Flashes Red CO LED: Off

Continued...

FO<sup>1</sup>

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

# A. Unswitched 120VAC B. To additional units; Maximum = 18 total

Wire Nut

Junction Box

Neutral Wire (Wht)

#### IF THE CO ALARM SOUNDS

"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 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 SIGNAL SOUNDS:

- Operate the Test/Silence button.
- 2. Call your emergency services, fire department or 911. Write down the number of your local emergency service here:
- 3. Immediately move to fresh air—outdoors or by an open door or window. Do a head count to check that all persons are accounted for Do not re-enter the premises, or move away from the open door or window until the emergency services responder has arrived, the premises have been aired out, and your CO Alarm remains in its normal condition.
- 4. After following steps 1-3, if your CO Alarm reactivates within a 24hour 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:

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."

#### 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 your 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 smoke away from the unit. The alarm will reset automatically.
- 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 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.

#### AWARNING! Alarms have various limitations. See "General Limitations of

Smoke/CO Alarms" for details.

#### **USING THE SILENCE FEATURES**

#### AWARNING! Never remove the batteries to quiet an unwanted alarm. Removing the batteries disables the alarm and removes your protect

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

When	the	Smoke	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

When the CO Alarm is Silenced

After 4 minutes, if CO levels

The CO alarm will remain silent for up to 4 minutes.

remain potentially dangerous the horn will start sounding again. continues to increase-the device will go back into alarm.

#### **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 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

#### **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) n 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, ever hough 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

#### "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

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**

These symptoms are related to CO POISONING and should be discussed with ALL household members. Mild Exposure: Slight headache, nausea, vomiting, fatigue ("flu-like"

Medium Exposure: Throbbing headache, drowsiness, confusion, fast

Extreme Exposure: Convulsions, unconsciousness, heart and lung failure. Exposure to Carbon Monoxide can cause brain damage, death.

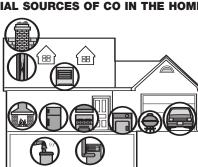
This CO Alarm measures exposure to CO over time. It alarms if CO This CO Alarm measures exposure to CO over time. It alarms II CO levels are extremely high in a short period of time, or if CO levels reach a certain minimum over a long period of time. The CO Alarm generally sounds an alarm before the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

#### 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 ea (like a garage or scree

**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
- 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.
- 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**

A CO Alarm is an excellent means of protection. It monitors the air and sounds a loud alarm before Carbon Monoxide levels become threatening

#### 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.
- Test and maintain all fuel-burning equipment annually. Many local gas or oil companies and HVAC companies offer appliance inspections for a nominal fee.
- flame on the burner and pilot lights. The flame should be blue. 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 nood on an operating furnace for a backdraft. Look for cracks on
- 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**

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

#### UL2034 Required Alarm Points\*:

- If the alarm is exposed to 400 ppm of CO, IT MUST ALARM BETWEEN 4 and 15 MINUTES:
- If the alarm is exposed to 150 ppm of CO, IT MUST ALARM BETWEEN 10 and 50 MINUTES.
- If the alarm is exposed to 70 ppm of CO, IT MUST ALARM BETWEEN 60 and 240 MINUTES.

Approximately 10% COHb exposure at levels of 10% to 95% Relative Humidity (RH)

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

#### **IMPORTANT!**

over time (in minutes).

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 CC 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. UL tested for false alarm resistance to Methane (500 ppm), Butane (300 on tested for laise alarm resistance to mentaire (500 ppm), but ppm), heptane (500 ppm), Ethyl Acetate (200 ppm), lsopropyl Alcohol (200 ppm) and Carbon Dioxide (5000 ppm). Values measure gas and

apor 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

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° C) and 100° F (38° C). Make sure no door or other obstruction could keep smoke

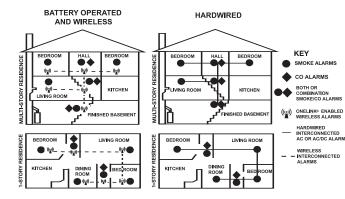
#### from reaching the Smoke Alarms. More specifically, install Smoke Alarms:

- 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
- At the top of the first-to-second floor stairway, and at the bottom of the basement stairway.

long (12 meters), install a unit at each end.

#### **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.



### **INSTALLING SMOKE ALARMS IN MOBILE HOMES**

For minimum security install one Smoke 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. Smoke Alarms should be installed where temperatures normally remain between 40° F (4° C) and 100° F (38° C).

#### **AGENCY PLACEMENT RECOMMENDATIONS**

Standards: Underwriters Laboratories Inc. Single and Multiple Station

#### NFPA 72 (National Fire Code) Chapter 11

"For your information, the National Fire Protection Association's Standard 72, reads as follows:"

## "11.5.1 One- and Two-Family Dwelling Units."

"11.5.1.1 Smoke Detection. Where required by applicable laws, codes. or standards for the specified occupancy, approved single- and multiple-station Smoke Alarms shall be installed as follows: (1) In all sleeping rooms. Exception: Smoke Alarms shall not be required in sleeping rooms in existing one- and two-family dwelling units. (2) Outside of each separate sleeping area, in immediate vicinity of the sleeping rooms. (3) On each level of the dwelling unit, including basements. Exception: n existing one- and two family dwelling units, approved Smoke Alarms powered by batteries are permitted."

**"A.11.8.3 Are More Smoke Alarms Desirable?**The required number of Smoke Alarms might not provide reliable early warning protection for those areas separated by a door from the areas protected by the required Smoke Alarms. For this reason, it is recommended that the householder consider the use of additional Smoke Alarms for those areas for increased protection. The additional areas include the basement, bedrooms, dining room, furnace room, utility room, and hallways not protected by the required Smoke Alarms. The installation of Smoke Alarms in kitchens, unfinished attics, or garages is not normally recommended, as these locations occasionally experience conditions that can result in improper operation

#### 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

#### **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.

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

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

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.

unit senses smoke, all units alarm.

All these Smoke Alarms are designed to provide early warning of fires i 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 the National Fire Protection Association (NFPA) Standard 72 (National Fire Alarm 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.

# AWARNING!

This unit alone is not a suitable substitute for complete fire detection systems in places housing many people—like apartment buildings, condominiums, hotels, motels, dormitories, hospitals, long-term health care facilities, nursing homes, day care facilities or group homes of any kind—even if they were once single-fam homes. 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 unit may be used to provide additional protection

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

#### 1. Single-Family Residence:

Single family home, townhouse. It is recommended this unit be installed on every level of the home, in every bedroom, and in each bedroom

individual apartments or condos, provided a primary fire detection system already exists to meet fire detection requirements in common areas like lobbies, hallways, or porches. Using this unit in commor areas may not provide sufficient warning to all residents or meet local fire protection ordinances/regulations.

3. Institutions:

suitable for use in individual patient sleeping/resident rooms, provided a primary fire detection system already exists to meet fire detection requirements in common areas like lobbies, hallways, or porches. Using this unit in common areas may not provide sufficient warning to all idents or meet local fire prótection ordinances/regulations 4. Hotels and Motels:

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

#### **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

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 hight, 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 anothe 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 nnected AC powered Smoke Alarms. For details, see "About

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

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

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*.				
Horn sounds 3 "chirps" every minute; LED has 3 flashes with "chirps".	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.				
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.				
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 non- emergency 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 Consumer Affairs at 1-800	0-323-9005, M-F 7:30 a.m. to 5:00 p.m. (CST)				

#### **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

nstructions, 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.

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 onsequential 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** 

caused by the breach of any express or implied warranty. Except to

For Warranty Service return to: BRK Brands, Inc., 25 Spur Drive, El Paso, TX 79906 Battery: BRK Brands, Inc. make no warranty, express or implied.

For your records, please record: Date Purchased: Where Purchased: Date Installed: Month/Year Replace alarm 7 years after installation. Please write the date in the space provided: The alarm will also provide an audible End-of-Life Signal approximately 7 years after installation to remind you to 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

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

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

**CO POISONING?** 

for average, healthy adults.

 Make regular visual inspections of all fuel-burning appliances.
 Check appliances for excessive rust and scaling. Also check the A yellow flame means fuel is not being burned completely and CO may be present. Keep the blower door on the furnace closed.

furnace heat exchangers.

#### However, they do not provide interconnected functionality WHAT LEVELS OF CO CAUSE AN ALARM?

the batteries are fresh and correctly installed. AC and AC/DC units must be installed by a qualified electrician.

and correctly installed. 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

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

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

# **SPECIAL COMPLIANCE CONSIDERATIONS**

## The following information applies to all five types of buildings listed

defined as "households."

2. Multi-Family or Mixed Occupant Residence: Apartment building, condominium. This unit is suitable for use in

Also boarding houses and dormitories. This unit is suitable for use inside individual sleeping/resident rooms, provided a primary fire detection system already exists to meet fire detection requirements in common areas like lobbies, hallways, or porches. Using this unit in common areas may not provide sufficient warning to all residents or meet local fire protection ordinances/regulations.

11

replacement.

12

Printed in Mexico M08-0182-009 K1 09/10

BRK shall not be liable for any incidental or consequential damage

written or oral, including that of merchantability or fitness for any particular purpose with respect to battery.

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