

### USER'S MANUAL SMOKE ALARMS

# First Alert

## Battery Powered Photo & Ion Smoke Alarm

Model SA320 with SA320

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

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CONFORMS TO  
UL STD 217  
Model SA320

### INTRODUCTION

Thank you for choosing First Alert® for your Smoke Alarm needs. You have purchased a state of the art Smoke Alarm designed to provide you with an early warning of a fire. Please take the time to read this manual and make this Smoke Alarm an integral part of your family's safety plan.

**Photo & Ion Smoke Sensors:** Dual photoelectric and ionization smoke sensing technologies for optimal sensing of smoke particles produced in both flaming and smoldering fires.

**Optipath 360 Technology™:** Patented technology provides 360° of direct access to the smoke sensor.

**Two Silence Features:** Low Battery Silence temporarily silences low battery chirp for up to eight hours before replacing low battery. Alarm Silence silences an unwanted alarm for several minutes.

**Two Latching Features:** Alarm Latch remembers which unit initiated an alarm. Low Battery Latch visually identifies which unit is in low battery condition.

**Perfect Mount:** Mounting bracket keeps alarm secure over a wide rotation range to allow for perfect alignment.

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Consumer Affairs: (800) 323-9005  
www.firstalert.com • www.brkelectronics.com

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

**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 burning in a wastebasket, or a grease fire in the kitchen.**

**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 a fire burning in a wastebasket, or a grease fire in the kitchen.**

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

### FIRE SAFETY TIPS

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

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

### BEFORE YOU INSTALL THIS SMOKE ALARM

**Recommended Locations for Smoke Alarms** and **"Locations to Avoid for Smoke Alarms"** before beginning. This unit monitors the air, and when smoke reaches its sensing chamber, it alarms. It can give you more time to escape before the fire spreads. This unit can ONLY give an early warning of developing fires. If it is installed, maintained and located where smoke can reach it, and where all residents can hear it, as described in this manual. This unit will not sense gas, heat, or flame. It cannot prevent or stop a fire.

**Understand The Different Type of Smoke Alarms**

Battery powered or electrical? Different Smoke Alarms provide different types of protection. See "About Smoke Alarms" for details.

**Know Where To Install Your Smoke Alarms**

Fire Safety Professionals recommend at least one Smoke Alarm on every level of your home in every bedroom, and in every bedroom hallway or separate sleeping area. See "Recommended Locations For Smoke Alarms" and "Locations To Avoid For Smoke Alarms" for details.

**Know What Smoke Alarms Can and Can't Do**

A Smoke Alarm can help alert you to fire, giving you precious time to escape. It can only sound an alarm once smoke reaches the sensor. See "Limitations of Smoke Alarms" for details.

**Check Your Local Building Codes**

This Smoke Alarm is designed to be used in a typical single-family home. It alone will not meet requirements for boarding houses, apartment buildings, hotels or motels. See "Special Compliance Considerations" for details.

**WARNING!**  
This unit will not alert hearing impaired residents. It is recommended that you install special hearing units with devices like flashing strobe lights to alert visually impaired residents.

This Smoke Alarm must have battery power to operate.

The Smoke Alarm cannot work until you install the batteries in the correct position (Match "+" to "+" and "-" to "-").

Never remove the batteries from a battery operated unit to stop an unwanted alarm (caused by cooking smoke, etc.). Instead open a window or fan the smoke away from the unit. The Alarm will reset automatically.

**CAUTION!**  
Do not install this unit over an electrical junction box. Only AC powered units are intended for installation over junction boxes.

This Smoke Alarm has a battery drawer which rests closing unless batteries are installed. This warns you the unit will not operate under DC power without batteries.

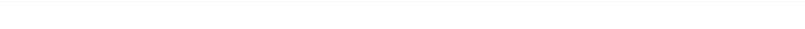
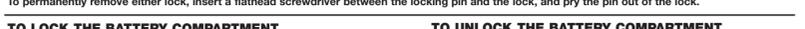
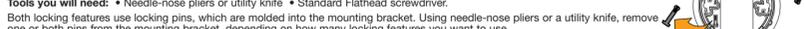
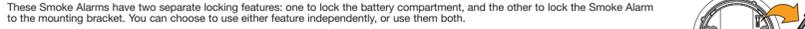
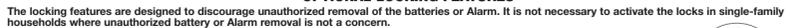
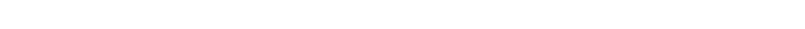
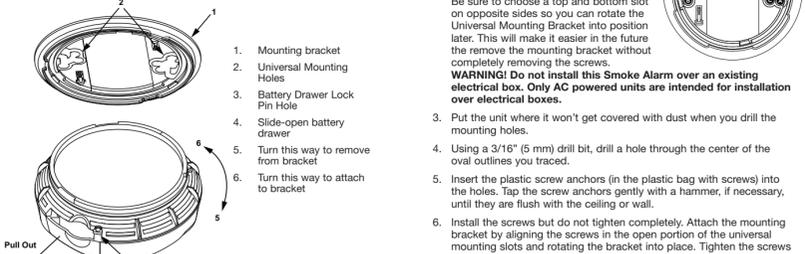
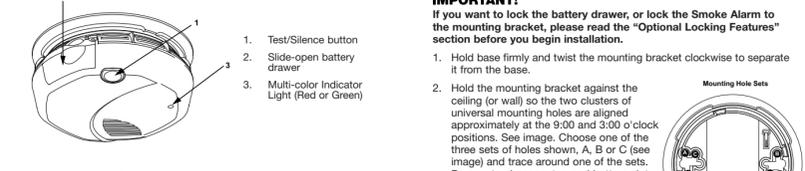
Do not stand too close to the unit when the alarm is sounding. It is loud to wake you in an emergency. Exposure to the alarm at close range may harm your hearing.

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

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## HOW TO INSTALL THIS SMOKE ALARM

### THE PARTS OF THIS SMOKE ALARM



## UNDERSTANDING THE INDICATOR LIGHTS AND ALARM HORN PATTERNS

<b>Normal Operation</b>	Flashing Green LED once/minute No Audible Alarm
<b>Test Condition</b>	Rapidly Flashing Red LED Audible Alarm
<b>Alarm Condition* (Initiating Unit)</b>	Rapidly Flashing Red LED Audible Alarm
<b>Silence Mode</b>	Rapidly Flashing Red LED Audible Alarm Off
<b>Low Battery</b>	Alarm "chirp" approx. once/minute
<b>Latching Alarm</b>	Red LED flashing 2 seconds on, 2 seconds off
<b>Low Battery Latch</b>	Green LED flashing 2 seconds on, 2 seconds off

**Note:** To conserve batteries, both "Latching" features last for 15 minutes and then turned off.

**WHAT TO DO IN CASE OF FIRE**

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

**WARNING!**  
Alarms have various limitations. See "Limitations of Smoke Alarms" for details.

**USING THE SILENCE FEATURE**

The Silence Feature can temporarily quiet an unwanted alarm for up to 15 minutes.

**WARNING!**  
The Silence Feature does not disable the unit—it makes it temporarily less sensitive to smoke. For your safety, if smoke around the unit is dense enough to suggest a potentially dangerous situation, the unit will stay in alarm or may re-alarms quickly. If you do not know the source of the smoke, do not assume it is an unwanted alarm. Not responding to an alarm can result in property loss, injury, or death.

**IMPORTANT!**  
The Silence Feature on these units can temporarily quiet an unwanted alarm for up to 15 minutes. To use this feature, press the Test/Silence button on the cover. If the unit will not silence and no heavy smoke is present, or if it stays in silence mode continuously, it should be replaced immediately.

**SILENCING THE LOW BATTERY WARNING**

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

Once the low battery warning "chirp" silence feature is activated, the unit continues to flash the green light once a minute for approximately 8 hours. After 8 hours, the low battery "chirp" will resume. Replace the batteries as soon as possible; this unit will not operate without batteries power!

**LATCHING FEATURE**

Alarm Latch is activated after an Alarm is exposed to alarm levels of smoke. After smoke levels drop below alarm levels, the Red LED will begin flashing 2 seconds on, 2 seconds off unless reset by test/silence button. It will continue to flash or "latch" for about 15 minutes, to give you time to determine which unit initiated the alarm.

This feature helps emergency responders, investigators, or service technicians identify which units in your home were exposed to alarm levels of smoke. This can help investigators pinpoint the source of smoke.

**Low Battery Latch** is activated when the Alarm is in the "low battery condition". When this occurs, the Green LED flashes 2 seconds on, 2 seconds off. This feature is designed to help you identify which Alarm needs to have the battery replaced. Although, the Alarm will sound the low battery chirp approximately once every minute, sometimes during the initial stages of "low battery", the Alarm will chirp in greater intervals than one minute, sometimes up to several hours, until the battery reaches a steady low battery level. This innovative feature eliminates the frustration of waiting for and/or identifying which unit is chirping. It will continue to flash or "latch" for about 15 minutes, to give you time to determine which unit has a low battery.

**WARNING!**  
Keep battery out of reach of children. In the event a battery is swallowed, immediately contact your poison control center, your physician, or the National Battery Ingestion hotline at 202-625-3333 as serious injury may occur.

**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").

To replace the batteries (without removing Alarm from the ceiling or wall!):

1. Open the battery compartment.
2. Press tabs A and B as shown in your 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 battery compartment.
4. Close the battery compartment, and then test the unit by pressing the Test/Silence button.

**WARNING!**  
Do NOT use rechargeable batteries. Clean the battery contacts and also those of the device prior to battery installation. Install batteries correct with respect 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.

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To replace the batteries (without removing Alarm from the ceiling or wall!):

## IF THIS SMOKE ALARM SOUNDS RESPONDING TO AN ALARM

During an alarm, you will hear a loud, repeating horn pattern: 3 beeps, pause, 3 beeps, pause.

**WARNING!**  
If the unit alarms and you are not testing the unit, it is warning you of a potentially dangerous situation that requires your immediate attention. NEVER ignore any alarm. Ignoring the alarm may result in injury or death.

Never remove the batteries to quiet an unwanted alarm. Removing the batteries disables the Alarm so it cannot sense smoke. This will remove your protection. Instead, open a window or fan the smoke away from the unit. The Alarm will reset automatically.

If the unit alarms get everyone out of the house immediately.

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

**WHAT TO DO IN CASE OF FIRE**

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

**WARNING!**  
Alarms have various limitations. See "Limitations of Smoke Alarms" for details.

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Once the low battery warning "chirp" silence feature is activated, the unit continues to flash the green light once a minute for approximately 8 hours. After 8 hours, the low battery "chirp" will resume. Replace the batteries as soon as possible; this unit will not operate without batteries power!

**LATCHING FEATURE**

Alarm Latch is activated after an Alarm is exposed to alarm levels of smoke. After smoke levels drop below alarm levels, the Red LED will begin flashing 2 seconds on, 2 seconds off unless reset by test/silence button. It will continue to flash or "latch" for about 15 minutes, to give you time to determine which unit initiated the alarm.

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