

**AC POWERED DUAL IONIZATION SMOKE ALARM WITH BATTERY BACK-UP AND SILENCE FEATURE**

Input: 240 VAC ~, 50 Hz, .042A  
Model 86RACQAUS

**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.

M09-0035-000 K/2 10/03 Printed in Mexico.

**TABLE OF CONTENTS**

Fire Safety Tips .....1  
 Before You Install This Smoke Alarm .....1  
 How To Install This Smoke Alarm .....2-3  
 Weekly Testing .....2-3  
 Regular Maintenance .....4  
 If This Smoke Alarm Sounds .....4  
     Responding To An Alarm .....4  
     What To Do In Case Of Fire .....4  
     Using The Silence Feature .....4  
 If You Suspect A Problem .....4  
 Recommended Locations For Smoke Alarms .....4-5  
 Locations To Avoid For Smoke Alarms .....5  
 About Smoke Alarms .....5  
 Limited Warranty .....5-6  
 Special Compliance Considerations .....6  
 Limitations Of Smoke Alarms .....6

BRK Brands, Inc., Master Distributors PTY LTD., 11 Howleys Road, PO Box 318, Mount Waverly, VIC 3149, Australia  
 All Rights Reserved. ©2003 BRK Brands, Inc.

**\*All BRK Electronics® Smoke Alarms conform to regulatory requirements, including AS 3786 and are designed to detect particles of combustion. Smoke particles of varying number and size are produced in all fires.**

**I**onization 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.

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

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

**FIRE SAFETY TIPS**

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

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

**BEFORE YOU INSTALL THIS SMOKE ALARM**

**IMPORTANT!** Read "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 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 extinguish fires.

**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.

**ADANGER!**

**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!**

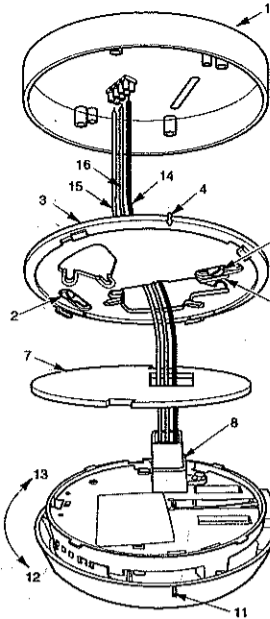
- This unit will not alert hearing impaired residents. It is recommended that you install special units which use devices like flashing strobe lights to alert hearing impaired residents.
- This unit must be powered by a 24-hour, 240V AC pure sine wave 50Hz circuit. Be sure the circuit cannot be turned 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 Smoke 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 up to 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.
- Do not install the Alarm where it may be exposed to dripping water or could be splashed.

**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.
- The battery compartment will not close unless a battery is installed. This warns you the unit will not operate under DC power without a battery.
- Do not stand too close to the unit when the alarm is sounding. It is loud to wake you in an emergency. Exposure to the horn at close range may harm your hearing.
- Do not paint over the unit. Paint may clog the openings to the sensing chambers and prevent the unit from operating properly.

**HOW TO INSTALL THIS SMOKE ALARM**

**THE PARTS OF THIS SMOKE ALARM**



- Optional ceiling pattress
  - Mounting slot and screw
  - Mounting bracket
  - Alignment arrow on mounting bracket
  - Mounting slot and screw
  - Wire strip gauge
  - Foam gasket
  - Terminal block and cover
  - Battery drawer (pull to open)
  - Locking tab for battery drawer
  - Alignment mark on Smoke Alarm
  - Turn this way to attach to bracket
  - Turn this way to remove from bracket
- Household AC-Main's Wiring (Installer Supplied)**
- Live (brown) AC-mains wire
  - Neutral (blue) AC-mains wire
  - Interconnect (orange) wire

This unit can be wall or ceiling mounted as necessary, using the "optional ceiling pattress" SMK839. Read "Locations to Avoid for Smoke Alarms" before installation.

**AWARNING!**

This Smoke Alarm should not be exposed to dripping or splashing.

**TO INSTALL YOUR SMOKE ALARM, FOLLOW THESE STEPS:**

**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.

- Install a ceiling pattress (BRK Model SMK839) where you plan to install the Alarm if a box is not already installed. Use standard 1.5mm<sup>2</sup> solid copper cable. Connect the cabling into the terminal blocks in the backbox or ceiling pattress.
- Install the mounting bracket on the junction box or ceiling pattress (ensure the larger of the two mounting bracket holes is not over the terminal block) using the screw slots that fit the junction box you are using.
- Activate the battery. Open the battery drawer. Remove and reposition the battery as follows: Match the terminals on the end of the battery with the terminals on the unit. Match "+" to "+" and "-" to "-". Push the battery in until it snaps in securely and cannot be shaken loose. If the battery is not snapped in completely, the unit cannot receive battery power. **Note: When the Smoke Alarm is in battery back-up mode (powered only by a fresh battery), the power indicator will flash approximately once every 40 seconds.**

**HOW TO INTERCONNECT ALARMS**

Interconnected units can provide earlier warning of fire than stand-alone units, especially if a fire starts in a remote area of the home. If any unit in the series senses smoke, all units will 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 Smoke Alarms will only work if they are wired to compatible units and all requirements are met. This unit can be interconnected with up to 12 BRK AC Alarms.

**Interconnected units must meet ALL of the following requirements:**

- A maximum of 12 units total may be interconnected.
- The same fuse or circuit breaker must power all interconnected units.
- The total length of wire interconnecting the units should be less than 300 metres.
- The interconnect wire should be double insulated.
- If an interconnect wire is not part of your household wiring, you will need to install one.
- The interconnecting wire should be 1.5mm<sup>2</sup> and be rated at least 300V.
- All wiring must conform to local electrical and building codes and Standards Australia Wiring Code.

**AWARNING!**

Failure to meet any of the above requirements could damage the units and cause them to malfunction, removing your protection.

**TO INSTALL AND INTERCONNECT MULTIPLE SMOKE ALARMS, FOLLOW THESE STEPS:**

**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.

- Install the mounting bracket on the ceiling or special mounting base you are using for installation.
- Activate the battery. Open the battery drawer. Remove and reposition the battery as follows: Match the terminals on the end of the battery with the terminals on the unit. Match "+" to "+" and "-" to "-". Push the battery in until it snaps in securely and cannot be shaken loose. If the battery is not snapped in completely, the unit cannot receive battery power.
- Test the battery back-up. Press and hold the test button on the unit's cover until the alarm sounds (about 5-20 seconds). If it does not alarm, retest it with a fresh battery. If it still does not alarm, the unit should be replaced immediately.
- Use standard 1.0 mm<sup>2</sup> copper wire for connection to AC power supply. Special mounting bases are available for mounting Alarms in areas where cables externally run or where conduit is used.
- Place the foam gasket against the back of the Smoke Alarm, lining up the cutouts on the gasket with the power connector terminal and black screw on the unit.

**IMPORTANT!**

You must install the foam gasket to insure proper operation of the Smoke Alarm.

- Test the battery back-up. Press and hold the test button on the unit's cover until the alarm sounds (about 5-20 seconds). If it does not alarm, retest it with a fresh battery. If it still does not alarm, the unit should be replaced immediately.
- Place the foam gasket against the back of the Smoke Alarm, lining up the cutouts on the gasket with the power connector terminal and black screw on the Smoke Alarm base. The gasket blocks air currents which could blow smoke away from the sensing chamber. It also prevents the ingress of dust and contamination.

**IMPORTANT!**

You must install the foam gasket to insure proper operation of the Smoke Alarm.

- Slip the terminal cover over the power/interconnect wires before connecting any wires to the power connector terminal on the Smoke Alarm.
- Connect the brown (or red/live wire) to the power connector block terminal marked "BROWN-LIVE." Connect the blue (or black)/neutral wire to the power connector block terminal marked "BLUE-NEUTRAL."
- The provided dust cover must be installed on the front of the Alarm after installation, to protect it from dust contamination by following trades. This cover must be removed immediately prior to occupation by the householder for the Alarm to function correctly.
- IF YOU ARE ONLY INSTALLING ONE SMOKE ALARM:** If you are installing a single unit, DO NOT connect anything to the "INTERCONNECT" terminal on the connector block — it is only used for interconnecting alarms. Connecting either main's wire to this terminal will damage the unit.
- IF YOU ARE CONNECTING MULTIPLE SMOKE ALARMS:** Read "How to Interconnect Alarms" now. Interconnected units will only work if they are wired to compatible units and all requirements are met.

**AWARNING!**

Installed units must NEVER be subject to a mega-testing (high voltage) procedure. Doing so will invalidate the warranty.

- Fasten the terminal cover to the back of the Alarm. Remove the black screw from the Smoke Alarm. Slide the terminal cover into position, lining up the hole on the terminal cover with the screw hole on the Alarm. Replace and tighten the black screw.
- Line up the alignment tab on the base with the alignment tab on the mounting bracket. Turn the unit clockwise (right) until you hear the unit snap into place.

**ADANGER!**

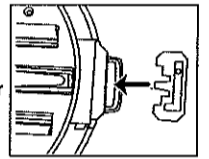
**ELECTRICAL SHOCK HAZARD.** Do not restore power until all units are completely installed. Restoring power before installation is complete may result in serious electrical shock, injury or death.

- Make sure the unit is receiving AC power. Under normal operation, the power indicator light will shine continuously. Push and hold the test/silence button until unit alarms.

**Installing the Optional Tamper-Resistant Battery Tab**

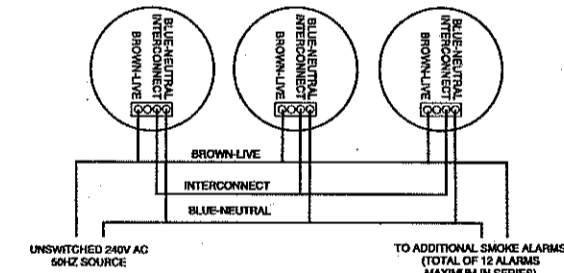
**To install the locking tab:**

If the Smoke Alarm tests properly, insert the locking tab—with the hook facing up—into the compartment above the drawer. The locking tab will snap into place and prevent the drawer from opening. Check to see drawer cannot be opened after installing locking tab.



**IMPORTANT!**

Once the locking tab is in place, any attempt to remove it will permanently damage the tamper-resistant feature and may damage the Smoke Alarm itself. It will also void the warranty.



**AWARNING!**

This unit does not require earth connection. Do NOT use earthing cable (green) wire for any installation of this Smoke Alarm.

- Fasten the terminal cover to the back of the Alarm. Remove the black screw from the Smoke Alarm. Slide the terminal cover into position, lining up the hole on the terminal cover with the screw hole on the Alarm. Replace and tighten the black screw.
- Fasten the Alarm to the mounting bracket. Align the arrow on the base with the arrow on the mounting bracket. Push and turn the Smoke Alarm clockwise until you feel it click into place. Push hard enough to compress the foam gasket. The mounting bracket locking tab will activate automatically. If you need to separate the bracket and Alarm, gently pry the tab back, and turn the Alarm counter-clockwise.
- After you finish connecting all Smoke Alarms, restore power to the junction box by throwing the appropriate circuit breaker or replacing the fuse.
- Test the interconnected system. Push and hold the test/silence button on each Smoke Alarm. **Make sure all units alarm when you test each one.**
- See "Installing The Optional Tamper-Resistant Battery Tab." The locking tab should be installed on all interconnected units.

**ADANGER!**

**ELECTRICAL SHOCK HAZARD.** Do not restore power until all Smoke Alarms are completely installed. Restoring power before installation is complete may result in serious electrical shock, injury or death.

**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 Standards Australia.

**ACAUTION!**

Do not use aerosol smoke to test the unit. Aerosol contaminants can clog the unit and prevent smoke from reaching the sensor in a fire emergency.

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 Alarm. Press and hold the test button on the cover of the unit until the alarm sounds (the unit may continue to alarm for a few seconds after you release the button). If it does not alarm, make sure the unit is receiving power and test it again. If it still does not alarm, replace it immediately. During testing you will hear a loud, repeating horn pattern: beep, beep, beep.

**For interconnected Alarms only:** When testing a series of interconnected units you must test each unit individually. Make sure all units alarm when each one is tested.

## REGULAR MAINTENANCE

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.

### ⚠WARNING!

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

- Test it at least once a week.
- Test units used in caravans after the vehicle has been in storage, before every trip, and once a week while in use. Failure to test units in caravans as described may remove your protection.
- Clean the Smoke Alarm at least once a month; gently vacuum the outside of the Smoke Alarm using your household vacuum's soft brush attachment. Test the Smoke Alarm. Never use water, cleaners or solvents since they may damage the unit.
- If the Smoke 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 "Locations to Avoid for Smoke Alarms" for details.
- When the battery becomes weak, the Smoke Alarm unit will "chirp" about once a minute (the low battery warning). This low battery warning should last for 7 days, but you should replace the battery immediately to continue your protection.
- Test for proper Smoke Alarm operation using the test button whenever the battery is replaced.

### Choosing a replacement battery:

This unit requires one standard 9V battery. The following batteries are acceptable as replacements: Eveready #PP3S, #6LF22; Duracell #MN1604. These batteries are available at many local retail stores.

### IMPORTANT!

Most carbon zinc batteries have an average service life of 1 year; most alkaline batteries have an average service life of 1-2 years. All the batteries specified above are acceptable replacement batteries for this unit. Regardless of the manufacturer's suggested battery life, you MUST replace it immediately once the unit starts "chirping" (the "low battery warning").

## IF THIS SMOKE ALARM SOUNDS RESPONDING TO AN ALARM

During an alarm, you will hear a loud, repeating horn pattern: **beep, beep, beep.**

### ⚠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 from a battery operated Smoke 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.

### ⚠DANGER!

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

**NOTE:** When an interconnected system of AC powered units is in alarm, the alarm indicator light on the unit that initiated the alarm will turn OFF. It will remain ON on the remaining units.

### 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 Brigade 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 Brigade for ideas on making your home safer.

### ⚠WARNING!

Alarms have various limitations. See the section of this manual titled "Limitations of Smoke Alarms".

### USING THE SILENCE FEATURE

The Silence Feature can temporarily quiet an unwanted alarm for several minutes. To use this feature, press the "PUSH TO SILENCE" button on the cover. The alarm will "chirp" about once a minute (for up to 15 minutes) to remind you the alarm has been silenced. The "chirping" will stop when the unit returns to normal operation.

### IMPORTANT!

If the unit will not silence and no heavy smoke is present, or if it stays in silence mode continuously ("chirps" for longer than 30 minutes), install a new battery and re-test it. If it still "chirps" or will not silence, the unit should be replaced immediately.

### ⚠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, it will stay in alarm, or may re-alarm 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.

## IF YOU SUSPECT A PROBLEM

Smoke Alarms may not operate properly because of dead, missing or weak batteries, a build-up of dirt, dust or grease on the Smoke Alarm cover, or installation in an improper location. Clean the Smoke Alarm as described in "Regular Maintenance," and install a fresh battery, then test the Smoke Alarm again. If it fails to test properly when you use the test button, or if the problem persists, replace the Smoke Alarm immediately.

- If you hear a "chirp" once a minute, replace the battery.
- If you experience frequent non-emergency alarms (like those caused by cooking smoke), try relocating the Smoke Alarm.
- If the alarm sounds when no smoke is visible, try cleaning or relocating the Smoke Alarm. The Alarm may be dirty or dusty.
- If the alarm does not sound during testing, try installing a new battery, and make sure it is snapped in securely.

### ⚠WARNING!

- This Smoke Alarm contains less than 1 microcurie of Americium 241, a radioactive material. This substance requires the Smoke Alarm to be returned to the manufacturer or the Department of Health for disposal. Do not dispose of it in any other way.

**Note:** Australia Post prohibits the sending of ionization type Smoke Alarms through their mail system. Alternate means of freight must be used.

**Do not try fixing the alarm yourself - this will void your warranty!**

If the Smoke Alarm is still not operating properly, and it is still under warranty, please see clause (b) in the Limited Warranty.

## RECOMMENDED LOCATIONS FOR SMOKE ALARMS

### Installing Smoke Alarms in Single-Family Residences

Minimum coverage, as recommended by the Building Code of Australia (BCA) E17, is one unit on every floor, in every sleeping area, or in every bedroom. For additional coverage, BRK Brands, Inc. recommends you install units in all rooms, halls, storage areas, finished attics, and basements, where temperatures normally remain between 5° C and 45° C.

### More specifically, install Smoke Alarms:

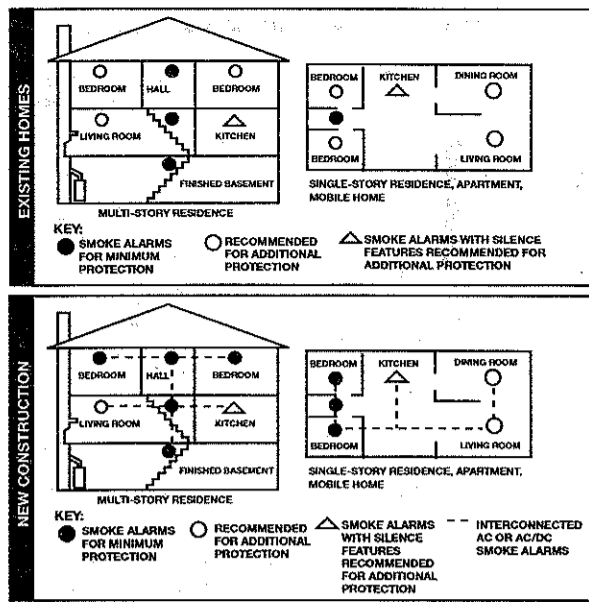
- On every level of your home, including finished attics and basements.
- Inside every bedroom, especially if people sleep with doors closed.
- In the hall near every sleeping area. If your home has multiple sleeping areas, install a unit in each.
- If a hall is over 12 metres (40 feet) long, install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

### IMPORTANT!

Specific requirements for Smoke Alarm installation vary from state to state and from region to region. Check with your local Fire Brigade for current requirements in your area.

See "Recommended Locations For Smoke Alarms" diagram on the following page.

## RECOMMENDED LOCATIONS FOR SMOKE ALARMS



## INSTALLING SMOKE ALARMS IN MOBILE HOMES & CARAVANS

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 5° C and 45° C. **WARNING:** Test units used in caravans after the vehicle has been in storage, before every trip, and once a week while in use. Failure to test units used in caravans as described may remove your protection.

## ALARM PLACEMENT RECOMMENDATIONS

Minimum coverage, as recommended by the Building Code of Australia (BCA) E17, is one unit on every floor, in every sleeping area, or in every bedroom. For additional coverage, BRK Brands, Inc. recommends you install units in all rooms, halls, storage areas, finished attics, and basements, where temperatures normally remain between 5° C and 45° C.

**Smoke Detection-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, attics (finished or unfinished), or garages is not normally recommended, as these locations occasionally experience conditions that can result in improper operation.

## LOCATIONS TO AVOID FOR SMOKE ALARMS

For best performance, it is recommended you AVOID installing Smoke Alarms in these areas:

- Where combustion particles are produced. Combustion particles form when something burns. Areas to avoid include poorly ventilated kitchens, garages, and furnace rooms. Keep units at least 6 metres (20 feet) from the sources of combustion particles (stove, furnace, water heater, space heater) if possible. Ventilate these areas as much as possible. **Note: If you must install Smoke Alarms closer than 6 metres (20 feet) from a source of combustion particles, keep the area well ventilated, and the Smoke Alarms clean.**
- In air streams near kitchens. Air currents can draw cooking smoke into the sensing chamber of a Smoke Alarm near the kitchen.
- In very damp, humid or steamy areas, or directly near bathrooms with showers. Keep units at least 3 metres (10 feet) away from showers, saunas, dishwashers, etc.
- Where the temperatures are regularly below 5° C or above 45° C, including unheated buildings, outdoor rooms, porches, or unfinished attics or basements.
- In very dusty, dirty, or greasy areas. Do not install a Smoke Alarm directly over the stove or range. Keep laundry room Smoke Alarms free of dust or lint.
- Near fresh air vents, ceiling fans, or in very drafty areas. Drafts can blow smoke away from the unit, preventing it from reaching the sensing chamber.
- In insect infested areas. Insects can clog openings to the sensing chamber and cause unwanted alarms.
- Less than 0.5 metres (18 inches) away from fluorescent lights. Electrical "noise" can interfere with the sensor.
- In "dead air" spaces. "Dead air" spaces may prevent smoke from reaching the Smoke Alarm.

### Avoiding Dead Air Spaces

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

**On ceilings,** install Smoke Alarms as close to the center of the ceiling as possible. If this is not possible, install the Smoke Alarm at least 10 cm (4 inches) from the wall or corner.

**For wall mounting** (if allowed by building codes), the top edge of Smoke Alarms should be placed between 10 and 30 cm (4 and 12 inches) from the wall/ceiling line, below typical "dead air" spaces.

**On a peaked, gabled, or cathedral ceiling,** install the Smoke Alarm within 0.9 metres (3 feet) of the peak of the ceiling, measured horizontally.

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

**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 can be interconnected so if one unit senses smoke, all units alarm.

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 them.

## LIMITED WARRANTY

- BRK BRANDS, INC. warrants its Smoke Alarm to be free from defects in materials and workmanship under normal use and service for a period of five years from the date of purchase.
- The obligations under this warranty shall be limited to repairing or replacing any part of the Smoke Alarm which BRK Brands, Inc. agrees is defective under normal use and service during the warranty period commencing with the date of purchase. Any Smoke Alarm requiring replacement should be sent to: Master Distributors PTY LTD., 11 Howleys Road, PO Box 318, Mount Waverley, VIC 3149, Australia.
- No agent, representative, dealer, or employee of the BRK Brands, Inc. has the authority to increase or alter the obligations of BRK Brands, Inc. under this warranty.
- This warranty does not apply to any Smoke Alarm that has been found to have been modified, repaired or altered in any way without the express consent of BRK Brands, Inc.
- This warranty does not apply to the battery.

### Other Statutory Rights

- BRK Brands, Inc.'s warranty is in addition to the benefit of any implied conditions and warranties in favour of the Purchaser, and all rights and remedies of you (the Purchaser), arising under the Trade Practices Act and any other relevant legislation. You may have statutory rights which cannot be excluded by BRK Brands, Inc. BRK Brands, Inc. does not exclude such statutory rights.
- Except for the express warranty in paragraph (a) and the benefits referred to in paragraph (b), all conditions and warranties (whether express or implied and whether contractual or otherwise) whether arising under statute, by implication of law or by custom or usage and all prior representations and warranties with respect to the goods shall not apply to the goods and such conditions and warranties and representations (if any) are expressly negated.
- BRK Brands, Inc. is not liable for any consequential or incidental damages for breach of this or any other warranty, expressed or implied whatsoever, even if the loss or damage is caused by BRK Brands, Inc. negligence or fault.

## SPECIAL COMPLIANCE CONSIDERATIONS

### ⚠WARNING!

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, long-term health care facilities, nursing homes, day care facilities, or group homes of any kind—even if they were once single-family 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 Smoke Alarm may be used to provide additional protection in these facilities.

### The following information applies to all four building types below:

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. Consult your Fire Brigade or local Building Codes for detailed fire protection requirements in buildings not defined as "households."

#### 1. Single-Family Residence:

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

#### 2. Multi-Family or Mixed Occupant Residence:

Apartment building, condominium. This Smoke Alarm is suitable for use in 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 Smoke Alarm in common areas may not provide sufficient warning to all residents or meet local fire protection ordinances/regulations.

#### 3. Institutions:

Hospitals, day care facilities, long-term health care facilities. This Smoke Alarm is 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 Smoke Alarm in common areas may not provide sufficient warning to all residents or meet local fire protection ordinances/regulations.

#### 4. Hotels and Motels:

Also boarding houses and dormitories. This Smoke Alarm 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 Smoke Alarm in common areas may not provide sufficient warning to all residents or meet local fire protection ordinances/regulations.

## LIMITATIONS OF SMOKE ALARMS

Smoke Alarms have played a key role in reducing deaths resulting from home fires worldwide. However, like any warning device, Smoke Alarms can only work if they are properly located, installed, and maintained, and if smoke reaches them. They are not foolproof.

**Smoke 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 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 Alarm while sleeping and to determine whether they may need assistance in the event of an emergency.

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

**Smoke Alarms cannot detect fires if the smoke does not reach them.** Smoke from fires in chimneys or walls, on roofs, or on the other side of closed doors may not reach the sensing chamber and set off the alarm. That is why one unit should be installed inside each bedroom or sleeping area—especially if bedroom or sleeping area doors are closed at night—and in the hallway between them.

**Smoke Alarms may not detect fire on another floor or area of the home.** For example, a stand-alone unit on the second floor may not detect smoke from a basement fire until the fire spreads. This may not give you enough time to escape safely. That is why recommended minimum protection is at least one unit in every sleeping area, and every bedroom on every level of your home. Even with a unit on every floor, stand-alone units may not provide as much protection as interconnected units, especially if the fire starts in a remote area. Some safety experts recommend installing interconnected AC powered units with battery back-up (see "About Smoke Alarms") or professional fire detection systems, so if one unit senses smoke, all units alarm. Interconnected units may provide earlier warning than stand-alone units since all units alarm when one detects smoke.

**Smoke Alarms may not be heard.** Though the alarm horn in this unit meets or exceeds Australian Standards (AS3786), it may not be heard if: 1) the unit is located outside a closed or partially closed door, 2) residents recently consumed alcohol or drugs, 3) the alarm is drowned out by noise from stereo, TV, traffic, air conditioner or other appliances, 4) residents are hearing impaired or sound sleepers. Special purpose units, like those with visual and audible alarms, should be installed for hearing impaired residents.

**Smoke Alarms 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.

**Smoke Alarms are not foolproof.** Like any electronic device, Smoke Alarms are made of components that can wear out or fail at any time. You must test the unit weekly to ensure your continued protection. Smoke Alarms cannot prevent or extinguish fires. They are not a substitute for property or life insurance.

**Smoke Alarms have a limited life.** The unit should be replaced immediately if it is not operating properly. You should always replace a Smoke Alarm after 10 years from date of purchase. Write the purchase date on the user's manual and keep in a safe place for future reference.

For your records, please record:

Date Purchased: \_\_\_\_\_ Where Purchased: \_\_\_\_\_