



# Photoelectric Smoke Alarm User's Guide

Model: p9050CA



9V Battery Operated

ATTENTION: Please take a few minutes to thoroughly read this user's guide which should be saved for future reference and passed on to any subsequent owner.

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Kidde Canada Inc., P.O. Box 40, Apsley, ON KOL 1A0 Consumer Hotline: 1-800-880-6788 www.kiddecanada.com

Made in China. Patents Pending

### 1. Introduction

### Model p9050CA

Thank you for purchasing this smoke alarm. It is an important part of your family's home safety plan. You can trust this product to provide the highest quality safety protection. We know you expect nothing less when the lives of your family are at stake.

Please take a few minutes to thoroughly read this alarm manual, and save it for future reference. Teach children how to respond to the alarms, and that they should never play with the unit.

If you have any questions about the operation or installation of your alarm, please call our toll free Consumer Hotline at 1-800-880-6788.

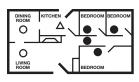
Image 1C will help you determine the correct location of safety products that will help make your home a safer place.

WARNING! Removal of the smoke alarm battery will render the smoke alarm inoperative.

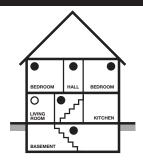
IMPORTANT! Read all instructions before installation and keep this manual near the alarm for future reference.

#### Recommended Locations

- Locate the first alarm in the immediate area of the sleeping rooms.
   Try to monitor the exit path, as the sleeping rooms are usually farthest from the exit. If more than one sleeping area exists, locate additional alarms in each sleeping area (Image 1A).
- Locate additional alarms to monitor any stairway as stairways act like chimneys for smoke and heat.
- Locate at least one alarm on every floor level (Image 1B).
- Locate an alarm in every sleeping room.
- Locate an alarm in every room where electrical appliances are operated (i.e. portable heaters or humidifiers).
- Locate an alarm in every room where someone sleeps with the door closed. The closed door may prevent an alarm not located in that room from waking the sleeper.
- Smoke, heat, and combustion products rise to the ceiling and spread horizontally. Mounting the smoke alarm on the ceiling in the center of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction.
- For mobile home installation, select locations carefully to avoid thermal barriers that may form at the ceiling. For more details, see Mobile Homes.
- When mounting an alarm on the ceiling, locate it at a minimum of 10 cm (4") from the side wall (Image 2A).
- When mounting the alarm on the wall, use an inside wall with the top edge of the alarm at a minimum of 10 cm (4") and a maximum of 30.5 cm (12") below the ceiling (Image 2A).
- Put smoke alarms at both ends of a hallway or large room if the hallway or room is more than 9.1 m (30 ft) long. For large rooms, one smoke alarm is recommended for every 500 square feet of floor space.
- Install smoke alarms on sloped, peaked or cathedral ceilings following the mounting guidelines outlined in Image 2B and 2C. Smoke alarms in rooms with ceiling slopes greater than 0.3 m in 2.4 m (1 foot in 8 feet) horizontally shall be located on the high side of the room (Image 2B and 2C).



- Required Smoke Alarms
- O Smoke Alarms for Additional Protection
- A Ionization Type Smoke Alarm with Hush® Control or Photoelectric Type



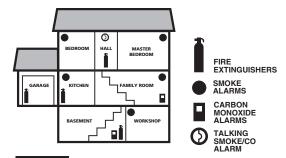
SINGLE FLOOR PLAN

IMAGE 1A

MULTIPLE FLOOR PLAN

**IMAGE 1B** 

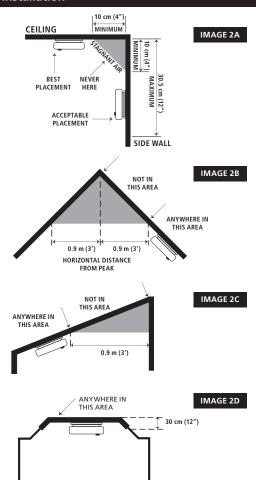
• In homes that are not well insulated, extreme heat or cold can be transferred from the outside to the inside through poorly insulated walls and roof. This may create a thermal barrier which can prevent the smoke from reaching an alarm mounted on the ceiling. If you are not sure about the insulation in your home, or if you notice that the outer walls and ceiling are either hot or cold, install the alarm on an inside wall. In such homes, install the smoke alarm with the top edge of the alarm at a minimum of 10 cm (4") and a maximum of 30.5 cm (12") below the ceiling (Image 2A).



 Install Smoke Alarms on tray-shaped ceilings (coffered ceilings) on the highest portion of the ceiling or on the sloped portion of the ceiling within 12" (305mm) vertically down from the highest point (Image 2D).

#### **Locations to Avoid**

- Do not install within 0.9 m (3') of the following: The door to a kitchen, or a bathroom that contains a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air-flow areas.
- Do not place the alarm where drapes or other objects will block the sensor. Smoke must be able to reach the sensor to accurately detect conditions.
- Do not install in peaks of vaulted ceilings, "A" frame ceilings or gabled roofs. In this area install as shown in images 2B and 2C.
- Install at least 30.5 cm (12") away from fluorescent lights as electronic noise may cause nuisance alarms.
- Keep out of insect infested areas. Avoid excessively dusty, dirty or greasy areas. Dust particles may cause nuisance alarms or failure to alarm
- Extreme temperatures may affect the sensitivity of the alarm.
   Do not install in areas where the temperature is colder than
   4.4°C (40°F) or hotter than 37.8°C (100°F), such as garages and unfinished attics.
- Do not install in areas where the relative humidity (RH) is greater than 85%. Very humid areas, with moisture or steam, can cause nuisance alarms.
- Avoid placing ionization smoke alarms (without an alarm silence feature) in kitchen areas. Normal cooking may cause nuisance alarms. If a kitchen alarm is desired, it should have an alarm silence feature or be a photoelectric type.
- Do not place in the garage. Particles of combustion are present when you start your automobile.
- Smoke alarms are not to be used with detector guards unless the combination (alarm and guard) has been evaluated and found suitable for that purpose.



### Mounting

#### CAUTION: This unit is sealed. The cover is not removable!

- Remove the mounting plate from the back of the alarm by holding the plate and twisting the alarm in the direction indicated by the "OFF" arrow on the alarm cover.
- To ensure aesthetic alignment of the alarm with the hall-way, or wall, the "A" line on the mounting plate should be parallel with the hallway when ceiling-mounted, or horizontal when wall mounted (Image 3A).
- Secure the mounting plate to the wall or ceiling with the anchors and screws provided (Image 3B).
- For aesthetic reasons, the suggested position for wall mounting is with the button facing down (Image 3C).
- NOTE: This alarm is battery powered and will not function without the use of one of the recommenced batteries. The battery must be in good working condition and installed properly.
- Press the battery reminder tab down into the battery compartment while inserting the battery (Image 3E).

### **Alarm Tamper Resist Feature**

 To make the smoke alarm tamper-resistant, a locking pin has been provided in the bag with the screws and anchors. Using this pin will help deter children and others from removing the alarm from the mounting plate. To use the pin, insert it into the hole in the side of the alarm after the alarm has been installed on the mounting plate (Image 3F).

NOTE: The tamper-resistant pin will have to be removed in order to change the battery. Use long nose pliers to pull the pin out of the hole. It is now possible to remove the alarm from the mounting plate.

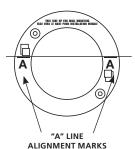


IMAGE 3A



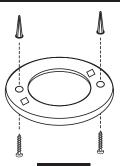
SUGGESTED WALL MOUNTING POSITION

IMAGE 3C



BATTERY REMINDER TAB

IMAGE 3E



**IMAGE 3B** 



ROTATE TO MOUNT OR TO REMOVE

IMAGE 3D



**IMAGE 3F** 

#### **Mobile Homes**

Modern mobile homes have been designed and built to be energy efficient. Install smoke alarms as recommended in Recommended Locations and Image 2A.

In mobile homes that are not well insulated compared to present standards, extreme heat or cold can be transferred from the outside to the inside through poorly insulated walls and roof. This may create a thermal barrier that can prevent the smoke from reaching an alarm mounted on the ceiling. In such units, install the smoke alarm on an inside wall with the top edge of the alarm at a minimum of 10 cm (4") and a maximum of 30.5 cm (12") below the ceiling (Image 2A).

If you are not sure about the insulation in your mobile home, or if you notice that the outer walls and ceiling are either hot or cold, install the alarm on an inside wall. For minimum protection, install at least one alarm close to the sleeping rooms. For additional protection, see Image 1A and 1B

WARNING: Test your smoke alarm operation after R.V. or mobile home vehicle has been in storage, before each trip and at least once a week during use.

# 3. Operation

CAUTION: Due to the loudness (85 decibels) of the alarm, always stand an arms-length away from the unit when testing.

 After installation, test by pushing the test button on the cover and hold it down for a minimum of 5 seconds. This will sound the alarm if all the electronics, circuitry, horn and battery are working. If the alarm does not sound and you have already replaced the battery, the alarm must be replaced.

The smoke alarm is operating once a fresh battery is installed and testing is complete. When the smoke alarm photoelectric sensor chamber senses products of combustion, the horn will sound a loud (85db) alarm until the sensing chamber is cleared of smoke particles.

# 3. Operation

### **False Alarms**

Smoke alarms are designed to minimize false alarms. Cigarette smoke will not normally set off the alarm, unless the smoke is blown directly into the alarm.

Combustion particles from cooking may set off the alarm if the alarm is located close to the cooking area. Large quantities of combustible particles are generated from spills or when broiling. Using the fan on a range hood that vents to the outside (non-recirculating type) will also help remove these combustible particles from the kitchen.

#### **Hush® Control Feature**

CAUTION: This feature should only be used to silence an alarm that was activated by a readily known non-hazardous condition, such as smoke from cooking.

Combustion particles from cooking may set off the alarm if the alarm is located close to the cooking area. Large quantities of combustible particles are generated from spills or when broiling. Using the fan on a range hood that vents to the outside (non-recirculating type) will also help remove these combustible particles from the kitchen. The Hush® button is extremely useful in a kitchen area or other areas prone to nuisance alarms.

The Hush® feature, activated by pushing the Test/Hush® button on the smoke alarm cover, temporarily desensitizes the alarm. If the smoke is not too dense, the alarm will silence, the Red LED will flash every 10 seconds and some units may chirp approximately every 40 seconds for up to 8 minutes.

The smoke alarm will automatically reset to normal sensitivity after approximately 8 minutes. If after this period particles of combustion are still present, the alarm will sound again.

The Hush® feature can be used repeatedly until the air has been cleared of the condition causing the alarm.

NOTE: Dense smoke will override the Hush® control feature and sound a continuous alarm.

# 3. Operation

### Testing

NOTE: WEEKLY TESTING IS REQUIRED

CAUTION: Due to the loudness (85 decibels) of the alarm, always stand an arms length away from the unit when testing.

The smoke alarm is operating once a fresh battery is installed and testing is complete. When the smoke alarm photoelectric sensor chamber senses products of combustion, the horn will sound a loud (85 db) alarm until the sensing chamber is cleared of smoke particles.

Test by pushing the test button on the cover and hold it down for a minimum of 5 seconds. This will sound the alarm if all the electronics, circuitry, horn and battery are working. If the alarm does not sound and you have already replaced the battery, the alarm must be replaced. DO NOT use an open flame to test your alarm, you could damage the alarm or ignite combustible materials and start a fire.

**Test the alarm weekly to ensure proper operation.** Erratic or low sound coming from your alarm may indicate a defective alarm, and it should be returned for service (see Warranty section).

This smoke alarm is equipped with a flashing red indicator light. The red LED is located under the test button and will flash every 40 seconds to indicate that the smoke alarm is receiving power.

When products of combustion are sensed, the unit sounds a loud 85db pulsating alarm, and the red LED rapidly flashes every 2 seconds, until the air is cleared.

Alarms failing an alarm test, or not operating normally, must be replaced with a new alarm. Similarly, alarms more than 10 years old must be replaced.

### 4. Maintenance

#### Alarm Removal

If the smoke alarm tamper resist feature has been activated, refer to the Alarm Tamper Resist Feature section for removal instructions.

To remove the alarm from the mounting plate, rotate the alarm in the direction of the "OFF" arrow on the cover.

### **Battery Replacement**

This alarm has a low battery monitor circuit which will cause the alarm to "chirp" approximately every 30-40 seconds for a minimum of seven (7) days when the battery gets low. Replace the battery when this condition occurs.

This model uses a 9 V carbon zinc battery (alkaline and lithium batteries may also be used). A fresh battery should last for one year under normal operating conditions.

Use only the following 9 volt batteries for replacement:

Carbon-Zinc Type Eveready 1222

Gold Peak 1604P or 1604S

Alkaline Type Energizer 522

Duracell MN1604 or MX1604

Gold Peak 1604A

Panasonic 6AM6, 6AM-6, 6AM-6PI,

6AM6X and 6LR61 (GA)

Lithium Type Ultralife U9VL-J

These batteries can be purchased at your local retailer.

WARNING: Use only the batteries specified above. Use of different batteries than the recommended ones, may have a detrimental effect on the smoke alarm. A good safety measure is to replace the battery at least once a year, or at the same time you change your clocks for daylight

# 4. Maintenance

### NOTE: WEEKLY TESTING IS REQUIRED!

### Cleaning the Alarm

The alarm should be cleaned at least once a year.

- To clean your alarm, remove it from the mounting plate as outlined in previous sections. You can clean the alarm by using compressed air or a vacuum cleaner hose with a soft brush attachment. Blow or vacuum around the perimeter of the alarm to remove dust and dirt. The outside of the alarm can be wiped with a damp cloth (do not use a wet cloth to avoid water entering the unit).
- After cleaning, reinstall your alarm and test your alarm by using the Test button. If cleaning does not restore the alarm to normal operation, the alarm should be replaced.
- Do not paint the unit. Paint will seal the vents and interfere with the sensor's ability to detect smoke. Never attempt to disassemble the unit or clean inside. This action will void your warranty.

#### Limitations of Smoke Alarms

### WARNING: Please read carefully and thoroughly.

- NFPA 72 states: Fire-warning equipment for residential occupancies are capable of protecting about half of the occupants in potentially fatal fires. Victims are often intimate with the fire, too old or too young, or physically or mentally impaired such that they cannot escape even when warned early enough that escape should be possible. For these people, other strategies such as protection-inplace or assisted escape or rescue would be necessary.
- Smoke alarms are devices that can provide early warning of
  possible fires at a reasonable cost; however, alarms have sensing
  limitations. Ionization sensing alarms may detect invisible fire
  particles (associated with fast flaming fires) sooner than photoelectric
  alarms. Photoelectric sensing alarms may detect visible fire particles
  (associated with slow, smouldering fires) sooner than ionization
  alarms. Home fires develop in different ways and are often
  unpredictable. For maximum protection, Kidde recommends that
  both ionization and photoelectric alarms be installed.
- A battery powered alarm must have a battery of the specified type, in good condition and installed properly.
- A.C. powered alarms (without battery backup) will not operate if the A.C. power has been cut off, such as by an electrical fire, an open fuse or circuit breaker.
- Smoke alarms must be tested regularly to make sure the battery and the alarm circuits are in good operating condition.
- Smoke alarms cannot provide an alarm if smoke does not reach the alarm. Therefore, smoke alarms may not sense fires starting in chimneys, walls, on roofs, on the other side of a closed door or on a different floor.
- If the alarm is located outside the sleeping room or on a different floor, it may not wake up a sound sleeper.

- The use of alcohol or drugs may also impair one's ability to hear the smoke alarm. For maximum protection, a smoke alarm should be installed in each sleeping area on every level of a home.
- Although smoke alarms can help save lives by providing an early warning of a fire, they are not a substitute for an insurance policy. Home owners and renters should have adequate insurance to protect their lives and property.

### **Good Safety Habits**

### Develop and practice a plan of escape!

- Make a floor plan indicating all doors and windows and at least two (2) escape routes from each room. Second story windows may need an escape ladder.
- Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
- Determine a place outside your home where you all can meet if a fire occurs.
- Familiarize everyone with the sound of the smoke alarm and train them to leave your home when they hear it.
- Practice a fire drill at least every six months, including fire drills at night. Ensure that small children hear the alarm and wake when it sounds. They must wake up in order to execute the escape plan. Practice allows all occupants to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do.
- Install and maintain fire extinguishers on every level of the home and in the kitchen, basement and garage. Know how to use a fire extinguisher prior to an emergency.
- Current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

#### What To Do When The Alarm Sounds

- Alert small children in the home.
- Leave immediately by your escape plan. Every second counts, so don't waste time getting dressed or picking up valuables.
- In leaving, don't open any inside door without first feeling its surface. If hot, or if you see smoke seeping through cracks, don't open that door! Instead, use your alternate exit. If the inside of the door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- Stay close to the floor if the air is smoky. Breathe shallowly through a cloth, wet if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- Call the fire department from your neighbor's home—not from yours!
- Don't return to your home until the fire officials say that it is all right to do so.
- There are situations where a smoke alarm may not be effective to protect against fire as noted by the NFPA and UL. For instance:
  - a) smoking in bed
  - b) leaving children home alone
  - c) cleaning with flammable liquids, such as gasoline
  - d) fires where the victim is intimate with a flaming initiated fire; for example, when a person's clothes catch fire while cooking
  - e) fires where the smoke is prevented from reaching the detector due to a closed door or other obstruction
  - f) incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located detectors.

#### **Additional Recommendations**

The National Fire Protection Association's Standard 72 provides the following information:

Smoke Detection. Where required by applicable laws, codes, or standards for a specific type of occupancy, approved single- and multiple-station smoke alarms shall be installed as follows:

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

Smoke Detection: Are More Smoke Alarms Desirable?

Required number of smoke alarms (as shown in Image 1A and Image 1B): 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, the use of additional smoke alarms for those areas for increased protection is recommended.

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, because these locations occasionally experience conditions that can result in improper operation.

Alarms should be installed in accordance with the National Fire Protection Association's Standard 72 (NFPA, Batterymarch Park, Quincy, MA 02269).

Notify your local fire department and insurance company of your smoke alarm installation.

#### TEN YEAR LIMITED WARRANTY

If after reviewing this manual you feel that your alarm is defective in any way, do not tamper with the unit. In many cases, the quickest way to exchange your alarm is to return it to the original place of purchase. Alternatively, you may return it for servicing to Kidde. If you have questions, call Kidde Customer Service at 1-800-880-6788.

Kidde warrants that the enclosed alarm (but not the batteries) will be free from defects in material and workmanship or design under normal use and service for a period of ten years from the date of purchase. The obligation of Kidde under this warranty is limited to repairing or replacing the alarm or any part which we find to be defective in material, workmanship or design, free of charge, upon sending the alarm with proof of date of purchase, postage and return postage prepaid, to: Kidde Canada Inc., P.O. Box 40, Apsley, ON KOL 1AO.

This warranty shall not apply to the alarm if it has been damaged, modified, abused or altered after the date of purchase or if it fails to operate due to improper maintenance or inadequate D.C. power. Any implied warranties arising out of this sale, including but not limited to the implied warranties of description, merchantability and fitness for a particular purpose, are limited in duration to the above warranty period. In no event shall the Manufacturer be liable for loss of use of this product or for any indirect, special, incidental or consequential damages, or costs, or expenses incurred by the consumer or any other user of this product, whether due to a breach of contract, negligence, strict liability in tort or otherwise. The Manufacturer shall have no liability for any personal injury, property damage or any special, incidental, contingent or consequential damage of any kind resulting from as leakage, fire or explosion.

Since some provinces do not allow limitations of the duration of an implied warranty or do not allow the exclusion or limitation of incidental or consequential damages, the above limitations or exclusions may not apply to you. While this warranty gives you specific legal rights, you may also have other rights which vary from province to province. The above warranty may not be altered except in writing signed by both parties hereto.

IMPORTANT: Do not remove unit back cover. Back cover removal will void warranty. Your Kidde smoke alarm is not a substitute for property, disability, life or other insurance of any kind. Appropriate insurance coverage is your responsibility. Consult your insurance agent.



Kidde Canada Inc., P.O. Box 40, Apsley, ON KOL 1A0

QUESTIONS OR FOR MORE INFORMATION

Call our Consumer Hotline at 1-800-880-6788 or contact
us at our website at www.kiddecanada.com