



---

# Smoke Alarm

---

## Manual

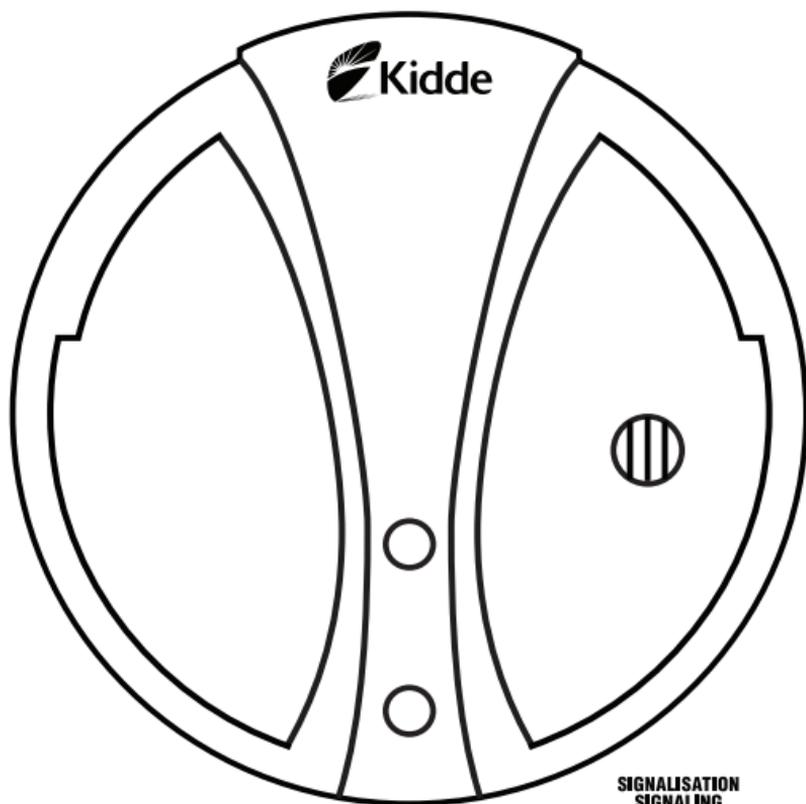
---

For alarm models:

i12020ACA

i12040ACA

PE120CA



Manual P/N 820-1193 Rev C 1235-7219-04

Note: This alarm has a low battery HUSH feature. If the alarm is sounding a low battery warning chirp, you can silence this chirp for approx 13 hours by pressing the Test/Hush button.

SIGNALISATION  
SIGNALLING



LISTED  
HOMOLOGUÉ

SINGLE AND/OR MULTIPLE STATION  
SMOKE ALARM

# Contents

---

Introduction .....	1
Installation .....	2-12
Operation .....	13-14
Maintenance .....	15-16
Fire Safety .....	17-20
Warranty .....	21



P.O. Box 40, Apsley, ON K0L 1A0  
Consumer Hotline: 1-800-880-6788  
[www.kiddecanada.com](http://www.kiddecanada.com)

Made in China. Patents Pending

## Introduction

---

### Models

#### i12020ACA, i12040ACA and PE120CA

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.

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

**Do not try to repair the smoke alarm yourself. Refer to the instructions in Warranty section for service.**

# Installation

---

This unit is suitable as a Single Station and/or Multiple Station alarm (interconnects with up to 24 devices), and has a five-year limited warranty.

**IMPORTANT:** Kidde alarms and accessories **CAN ONLY BE** interconnected with other Kidde alarms and accessories as well as specified brands and models of interconnect compatible alarms. Connection of Kidde products to a non-specified manufacturer's interconnect system, or connection with non-specified equipment from another manufacturer into an existing Kidde system could result in nuisance alarming, failure to alarm, or damage to one or all of the devices in the interconnect system. Refer to the User's Guide supplied with each Kidde product for interconnect compatible models, brands, and devices.

This alarm is interconnect compatible with the following alarms and accessories:

Smoke alarms: 1235CA, 1275CA, 1276CA, i12020ACA, i12040ACA, i12060CA, PE120CA, PI2000CA, P12040CA, PI2010CA

Smoke/CO alarms: KN-COSM-IBCA, KN-COSM-ICA

CO alarms: KN-COB-ICB-CA, KN-COB-IC-CA

Relay modules: 120X, SM120X, CO120X

Heat alarm: HD135FCA

Strobe Light: SL177I

Refer to respective manuals for specific application information.

Models **i12020ACA** and **i12040ACA** are designed to detect products of combustion using the ionization technique. They contain 0.9 microcurie of Americium 241, a radioactive material. Distributed under U.S. NRC License No. 32-23858-01E. Manufactured in compliance with U.S. NRC safety criteria in 10 CFR 32.27. The purchaser is exempt from any regulatory requirements. Do not try to repair the smoke alarm yourself. Refer to the instructions in **Warranty** section for service.

**WARNING:** Removal of the smoke alarm battery and disconnecting or loss of AC power will render the smoke alarm inoperative.

ELECTRICAL RATING: 120 V AC, 60 HZ, 80 mA maximum per alarm (maximum 80 mA for originating unit with 24 devices interconnected).

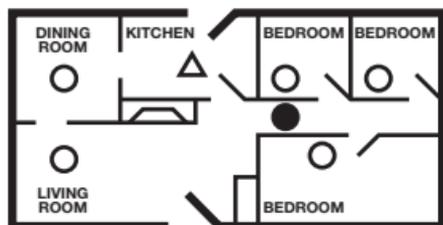
# Installation

---

## Recommended Locations

- Locate the first alarm in the immediate area of the bedrooms. Try to monitor the exit path, as the bedrooms 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.
- 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 bedroom hallway or large room if the hallway or room is more than 9.1 m (30') long.
- For mobile home installation, select locations carefully to avoid thermal barriers that may form at the ceiling. For more details, see **Mobile Homes**.

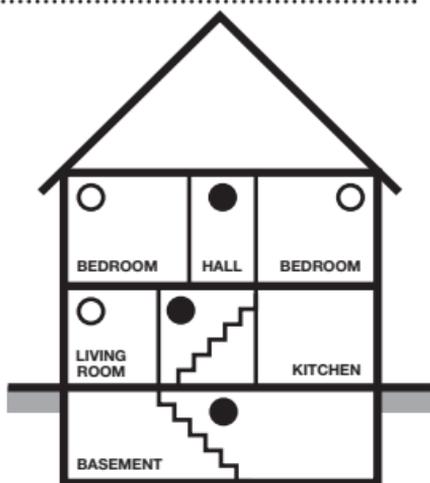
# Installation



- Smoke Alarms for Minimum Protection
- Smoke Alarms for Additional Protection
- △ Ionization Type Smoke Alarm with Hush® Control or Photoelectric Type

**SINGLE FLOOR PLAN**

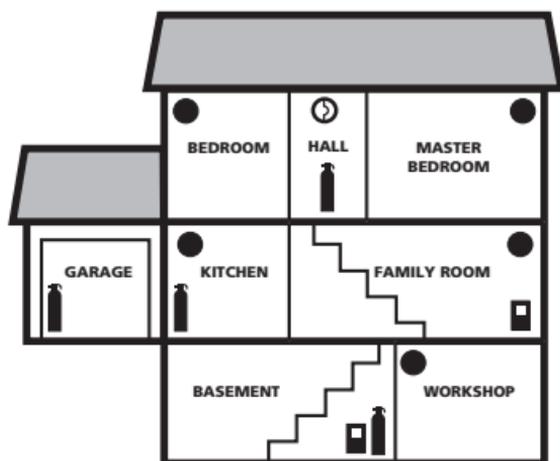
**IMAGE 1A**



**MULTIPLE FLOOR PLAN**

**IMAGE 1B**

- Install smoke alarms on sloped, peaked or cathedral ceilings at or within 0.9 m (3') of the highest point (measured horizontally). NFPA Standard 72 states: "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." NFPA Standard 72 states: "A row of detectors shall be spaced and located within 0.9 m (3') of the peak of the ceiling measured horizontally" (Image 2B).



-  FIRE EXTINGUISHERS
-  SMOKE ALARMS
-  CARBON MONOXIDE ALARMS
-  TALKING SMOKE/CO ALARM

**IMAGE 1C**

**TOTAL HOME PROTECTION**

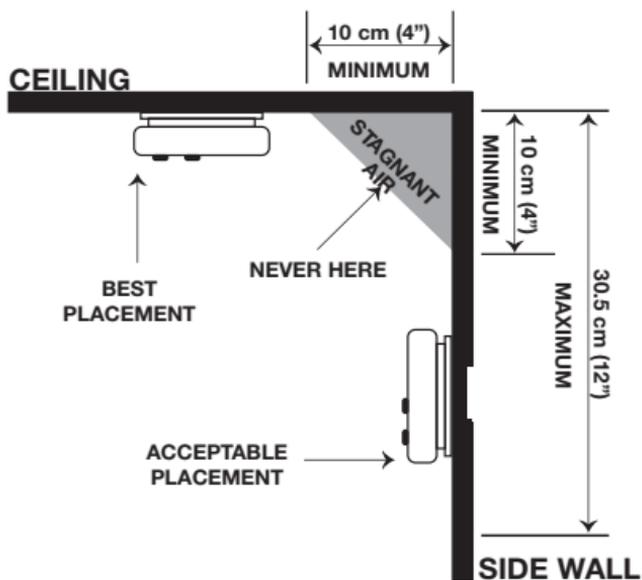
# Installation

---

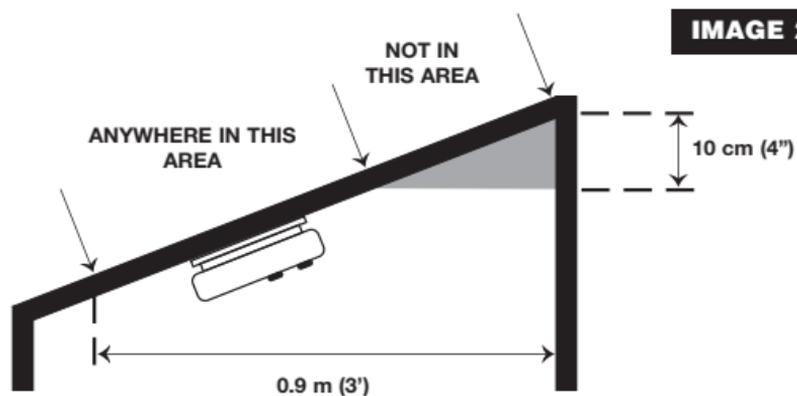
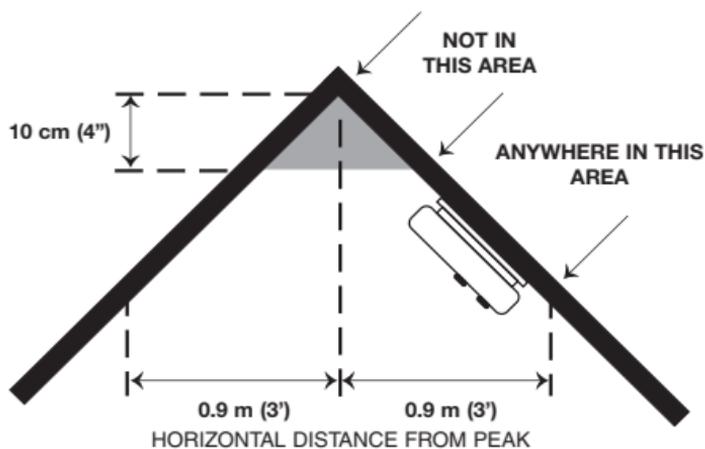
## Locations to Avoid

- 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. (Less than 10 cm (4") from the peak of an "A" frame type ceiling.)
- 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 effect 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 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.

# Installation



**IMAGE 2A**



**IMAGE 2B**

# Installation

---

## Mobile Homes

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

In older 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 bedrooms. For additional protection, see Image 1A.

**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.**

## Wiring

**CAUTION! Turn off the main power to the circuit before wiring the alarm.**

- This smoke alarm should be installed on a CSA listed or recognized junction box. All connections should be made by a qualified electrician and all wiring used shall be in accordance with articles 210 and 300.3(B) of the U.S. National Electrical Code ANSI/NFPA 70, NFPA 72 and/or any other codes having jurisdiction in your area. The multiple station interconnect wiring must be run in the same raceway or cable as the AC power wiring to the alarms. In addition, the resistance of the interconnect wiring shall be a maximum of 10 ohms.
- The appropriate power source is 120 Volt AC Single Phase supplied from a non-switchable circuit which is not protected by a ground fault interrupter.
- The alarm should not be operated on power derived from a square wave, modified square wave or modified sine wave inverter. These power sources produce high peak voltages that will damage the alarm.

# Installation

---

- For alarms that are used as single station, DO NOT CONNECT THE RED WIRE TO ANYTHING. Leave the red wire insulating cap in place to make certain that the red wire cannot contact any metal parts or the electrical box.
- When alarms are interconnected, all interconnected units must be powered from a single circuit.
- A maximum of 24 Kidde devices may be interconnected in a multiple station arrangement. The interconnect system should not exceed the NFPA interconnect limit of 12 smoke alarms and/or 18 alarms total (smoke, heat, carbon monoxide, etc.) With 18 alarms interconnected, it is still possible to interconnect up to a total of 6 remote signaling devices and/or relay modules.

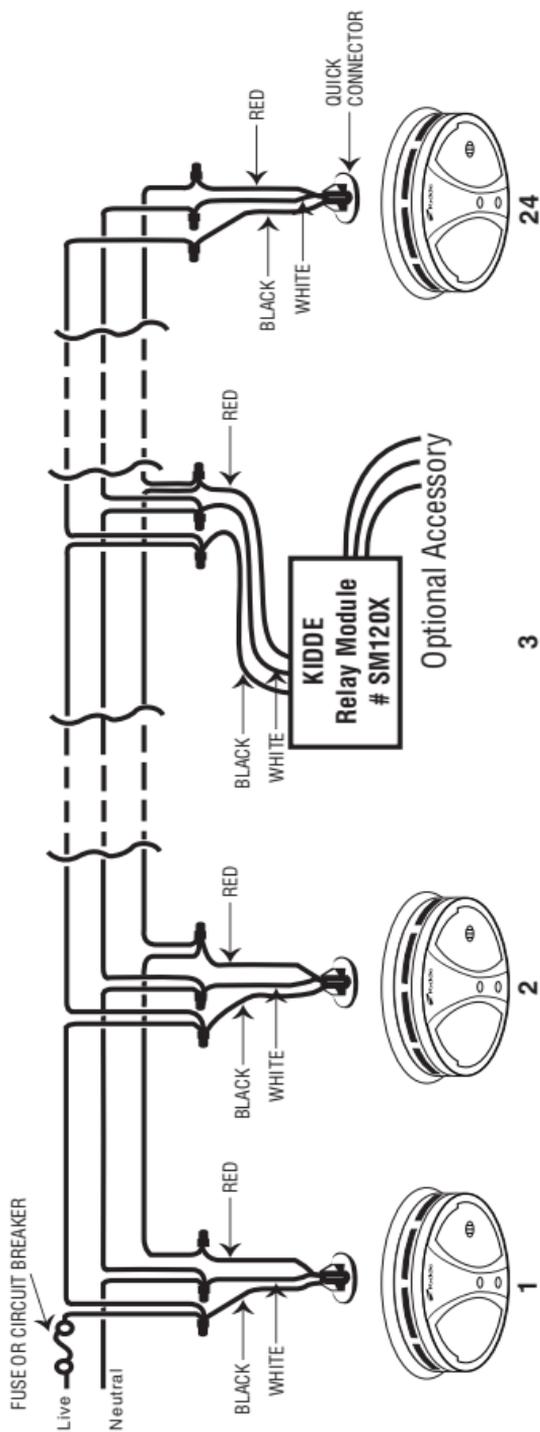
**IMPORTANT: Kidde alarms and accessories CAN ONLY BE interconnected with other Kidde alarms and accessories as well as specified brands and models of interconnect compatible alarms. Connection of Kidde products to a non-specified manufacturer's interconnect system, or connection with non-specified equipment from another manufacturer into an existing Kidde system could result in nuisance alarming, failure to alarm, or damage to one or all of the devices in the interconnect system. Refer to the User's Guide supplied with each Kidde product for interconnect compatible models, brands, and devices.**

- When mixing models which have battery backup with models without battery backup, be advised that the models without battery backup will not respond during an AC power failure.
- For more information about compatible interconnect units and their functionality in an interconnect system, visit our web site at: [www.kidde.ca](http://www.kidde.ca)
- The maximum wire run distance between the first and last unit in an interconnected system is 305 m (1000').
- Image 3 illustrates interconnection wiring. Improper connection will result in damage to the alarm, failure to operate, or a shock hazard.
- Make certain alarms are wired to a continuous (non-switched) power line. NOTE: Use standard CSA listed household wire (as required by local codes) available at all electrical supply stores and most hardware stores.

# Installation

**IMAGE 3**

**INTERCONNECT WIRING**



## WIRES ON ALARM HARNESS

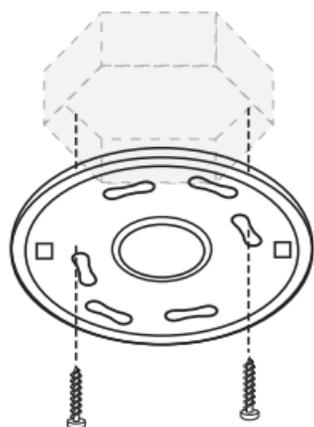
**Black** Connected to hot side of AC line.

**White** Connected to neutral side of AC line.

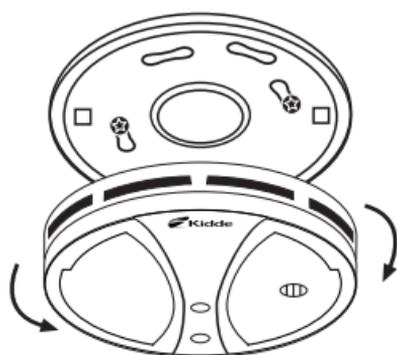
**Red** Connected to interconnect lines (red wires) of other units in a multiple station set-up.

# Installation

---

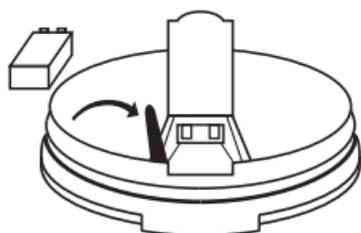


**IMAGE 4A**



**ROTATE TO MOUNT OR  
TO REMOVE**

**IMAGE 4B**



**BATTERY  
REMINDER TAB**

**IMAGE 4C**



**TAMPER-RESIST  
LOCKING PIN**

**IMAGE 4D**

# Installation

---

## Mounting

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

- Pull the AC Quick-Connect wire harness through the centre hole in the mounting plate and secure the plate, making sure that the mounting screws are positioned in the small ends of the keyholes before tightening (Image 4A).
- (For models **i12040ACA** and **PE120CA**) Press the battery reminder tab down into the battery compartment while inserting the battery (Image 4C).

**CAUTION:** If the battery reminder tab is not held down in the battery compartment by the battery, the battery door will not close and the unit will not attach to the mounting plate.

- Plug the AC Quick-Connect wire harness into the back of the alarm (Image 5), making sure that the locks on the connector snap into place. Push the excess wire back into the electrical box through the hole in the center of the mounting plate.



**ATTACHING THE AC QUICK-CONNECT WIRE HARNESS**

**IMAGE 5**

- Alignment marks are provided on the edge of the mounting plate and the alarm. After installing the mounting plate, place the alarm onto the mounting plate, making sure the alignment marks are lined up. Twist the alarm in the direction indicated by the “ON” arrow on the alarm cover (Image 4B) until it locks in place.

# Installation

---

## Battery Backup

Models **i12040ACA** and **PE120CA** with battery backup will not function without a properly installed battery. They are equipped with a battery lockout feature which prevents the battery door from closing if a battery is not installed correctly. See **Maintenance** section for additional information concerning battery installation.

## Testing

- To ensure proper operation of models **i12040ACA** and **PE120CA** with battery backup, press the Test button for at least 5 seconds, or until the alarm sounds (without the AC power connected). All interconnected, battery backed-up alarms, should respond.

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

- Turn on the AC power. The green LED power indicator should be lit when the alarm is operating from AC power.
- For all models: Confirm unit operation by pressing the Test button again.

The smoke alarm is operating once AC power is applied, a fresh battery is installed (only for battery backup models **i12040ACA** and **PE120CA**) and testing is complete. When the smoke alarm ionization sensor chamber senses products of combustion, the horn will sound a loud (85db) alarm until the sensing chamber is cleared of smoke particles.

## 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 4D).

**NOTE: The tamper-resistant pin will have to be removed in order to change the battery (models **i12040ACA** and **PE120CA**). Use long nose pliers to pull the pin out of the hole. It is now possible to remove the alarm from the mounting plate.**

# Operation

---

## Hush™ Feature

Model **i12020ACA** and **i12040ACA** only:

Smoke alarms are designed to minimize nuisance 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. The Hush® button is extremely useful in a kitchen area or other areas prone to nuisance alarms.

The Hush™ feature has the capability of temporarily desensitizing the alarm circuit for approximately 8 minutes. This feature is to be used only when a known alarm condition, such as smoke from cooking, activates the alarm. The smoke alarm is desensitized by pushing the “TEST / HUSH” button on the smoke alarm cover. If the smoke is not too dense, the alarm will silence immediately. The red LED will illuminate for 1.5 seconds every 10 seconds for 8 minutes. This indicates that the alarm is in a temporarily desensitized condition. The smoke alarm will automatically reset after approximately 8 minutes and sound the alarm if particles of combustion are still present. The Hush® feature can be used repeatedly until the air has been cleared of the condition causing the alarm. Pushing the Test/Hush button on the alarm will end the hush period.

If the alarm does sound, check for fires first. If a fire is discovered, get out and call the fire department. If no fire is present, check to see if one of the reasons listed in **Locations to Avoid** may have caused the alarm.

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

**CAUTION:** Before using the alarm Hush® feature, identify the source of the smoke and be certain a safe condition exists.

# Operation

---

## LED Indicators

This alarm is equipped with red and green LED indicators:

The **green LED** (when illuminated) indicates the presence of AC power.

The **red LED** (located under the test / hush button) has four modes of operation:

**Standby Condition:** The red LED will flash every 40 seconds to indicate that the smoke alarm is operating properly.

**Alarm Condition:** When the alarm senses products of combustion and goes into alarm, the red LED will flash one flash per second. The flashing LED and pulsating alarm will continue until the air is cleared.

WHEN UNITS ARE INTERCONNECTED, only the red LED of the alarm which senses the smoke or is being tested (the originating unit) will flash. All other units in the interconnect system will sound an alarm but their red LED's will NOT flash.

**Alarm Memory** (Models **i12020ACA** and **i12040ACA** only): This smoke alarm is equipped with an alarm memory, which provides a visual indication when an alarm has been activated. The red LED will illuminate for about 1.5 seconds every 20 seconds to indicate the memory condition. The memory will remain activated until pushing the test button resets it or will time-out between 11 to 13 hours. The memory will also reset if the battery voltage drops to 8 Volts DC and when no AC power is present. In an interconnected installation only the memory of the originating alarm will be activated.

**Hush® mode** (Models **i12020ACA** and **i12040ACA** only): The red LED will illuminate for 1.5 seconds every 10 seconds, indicating the smoke alarm is in the Hush® mode.

# Maintenance

---

## 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.**

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 electronic circuitry, horn and battery are working. If no alarm sounds, check the fuse or circuit breaker supplying power to the alarm circuit. If the alarm still does not sound, the unit has a defective battery or some other failure. **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).

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.

## 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. To disconnect the AC Quick-Connect wire harness, squeeze the locking arms on the sides of the Quick Connector while pulling the connector away from the bottom of the alarm (see Image 5).

# Maintenance

---

## Battery Replacement

Models **i12040ACA** and **PE120CA**

These alarms have a low/missing 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.

Models **i12040ACA** and **PE120CA** use 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 saving time. Be sure to follow the battery installation instructions printed on the back of the alarm.**

**SMOKE SENSING CHAMBER OPERATION: THIS ALARM WILL “CHIRP” IF ABNORMAL OPERATION OF THE SMOKE-SENSING CHAMBER IS DETECTED. THIS CHIRP WILL OCCUR APPROXIMATELY 20 SECONDS AFTER THE RED LED FLASH. REPLACE THE ALARM IF THIS CONDITION OCCURS.**

**NOTE: WEEKLY TESTING IS REQUIRED!**

# Fire Safety

---

**WARNING: Please read carefully and thoroughly.**

- NFPA 72 states: Life safety from fire in residential occupancies is based primarily on early notification to occupants of the need to escape, followed by the appropriate egress actions by those occupants. Fire warning systems for dwelling units are capable of protecting about half of the occupants in potentially fatal fires. Victims are often intimate with the fire, too old or 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-in-place or assisted escape or rescue are 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 smoldering 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.
- AC powered alarms (without battery backup) will not operate if the AC power has been cut off, such as by an electrical fire or an open fuse.
- Smoke alarms must be tested regularly to make sure the batteries 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 bedroom or on a different floor, it may not wake up a sound sleeper.

## Fire Safety

---

- 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, landlords and tenants should have adequate insurance to protect their lives and property.

## Good Safety Habits

Develop and practice a plan of escape!

- Install and maintain fire extinguishers on every level of the home and in the kitchen, basement and garage. Know how to use the fire extinguisher prior to an emergency.
- Make a floor plan indicating all doors and windows and at least two (2) escape routes from each room. Second-storey 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.
- 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.

# Fire Safety

---

## Alarm Exit Procedure

- 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 smokey. If possible do not breathe too deeply to avoid smoke inhalation. Breathe through a cloth (preferably 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. For instance:
  - Smoking in bed.
  - Leaving children unsupervised.
  - Cleaning with flammable liquids, such as gasoline.
  - Fires where the victim is intimate with a flaming initiated fire; for example, when a person's clothes catch fire while cooking.
  - Fires where the smoke is prevented from reaching the detector due to a closed door or other obstruction.
  - Incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located detectors

## NRC Information

Ionization type smoke alarms use a very small amount of a radioactive element in the sensing chamber to enable detection of visible and invisible combustion products. The radioactive element is safely contained in the chamber

# Fire Safety

---

and requires no adjustments or maintenance. This smoke alarm meets or exceeds all government standards. It is manufactured and distributed under license from the U.S. Nuclear Regulatory Commission.

## 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 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: In existing one- and two-family dwelling units, approved smoke alarms powered by batteries are permitted.

### 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, 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 the smoke alarms in the kitchen, attic (finished or unfinished), or garage is normally not recommended, as 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.

# Warranty

---

If after reviewing this manual you feel that your smoke 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.

## 5 Year Limited Warranty

Kidde warrants to the original purchaser that this smoke alarm (but not the battery) will be free from defects in material and workmanship or design under normal use and service for a period of five years from the date of purchase. The obligation of Kidde under this warranty is limited to repairing or replacing this smoke alarm or any part which we find to be defective in material, workmanship or design, free of charge to the customer, upon sending this smoke alarm with proof of date of purchase, postage and return postage prepaid, to Pyrene Corporation (a Kidde company), Customer Service Department, 130 Esna Park Drive, Markham, ON L3R 1E3. 1-800-880-6788.

This warranty shall not apply to this smoke 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 AC or DC electrical power.

The liability of Kidde or any of its parent or subsidiary corporations arising from the sale of this smoke alarm or under the terms of this limited warranty shall not in any case exceed the cost of replacement of this smoke alarm and, in no case, shall Kidde or any of its parent or subsidiary corporations be liable for consequential loss or damages resulting from the failure of this smoke alarm or for breach of this or any other warranty, express or implied, even if the loss or damage is caused by the company's negligence or fault.

Since some provinces do not allow limitations on 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.

Also, Kidde makes no warranty, express or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the battery.

The above warranty may not be altered except in writing signed by both parties hereto.