



Thank you for purchasing this Rely smoke alarm model 4500. This model is a photoelectric smoke alarm device. With the photoelectric technology, it is more sensitive to detecting slow smolder fires which generates thick, black smoke and may smolder for hours before bursting into flames. The smoke alarm device does not contain the radioactive material which is harmless to the environment. A DC 9V External battery and warns you when the battery is low. THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION'S STANDARD 72 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269).

Typical installation drawing layouts for the unit(s) indicating recommended locations and wiring methods which shall be in accordance with the applicable requirements outlined in the following:

- 1) C22.1-12, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations;
- 2) CAN/ULC-S553, Standard for Installation of Smoke Alarms.
- 3) National Electrical Code, NFPA 70, Wiring Methods and Materials;
- 4) National Fire Alarm and Signaling Code, NFPA 72, Single- and Multiple-Station Alarms and Household Fire Alarm Systems for US requirement.

The National Fire Protection Association (NFPA) and the manufacturer recommend replacing this alarm ten years from the date code on back of alarm. This instruction manual contains important information on starting operation and using the device. Please take a few minutes to thoroughly read the instruction manual and familiarize yourself and your family with its operation and save it for future reference.

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1. What to Do if the Smoke Alarm Sounds

Smoke alarm pattern is three long beeps , and three long beeps repeating.

The smoke alarm takes precedence when smoke is present.

1.1 What to do in case of fire.

1. Do not be panic, stay calm.
2. Leave the building as quickly as possible. Touch doors to feel if they were hot before opening them. Use an alternate exit if necessary. Crawl along the floor, and do not stop to collect anything.
3. Meet at a prearranged meeting place outside the building.
4. Call the fire department or 911 from outside the building.
5. Do not go back inside a burning building. Wait for the fire department to arrive.

NOTE: These guidelines will assist you in the event of a fire, to reduce the chance that fires will start, practice fire safety rules and prevent hazardous situations.

1.2 Practice fire safety.

If the smoke alarm sounds, and you have not pushed the test button, it is warning of a dangerous situation, your immediate response is necessary. To prepare for such occurrences, develop family escape plans, discuss them with all household members, and practice them regularly.

1. Expose everyone to the sound of a smoke alarm device and explain what the sound means.
2. Determine two exits from each room and an escape route to the outside from each exit.
3. Teach all household members to touch the door and use an alternate exit when the door is hot, instruct them not to open the door if the door is hot.
4. Teach household members to crawl along the floor to stay below dangerous smoke, fumes and gases.
5. Determine a safe meeting place for all members outside the building.

2. Product Important Information

CAUTION! -This Smoke alarm will not protect against the risk of smoke poisoning when the battery has drained.

WARNING! - There are situations where a smoke alarm may not be effective to protect against fire as stated in the NFPA Standard 72. For instance:

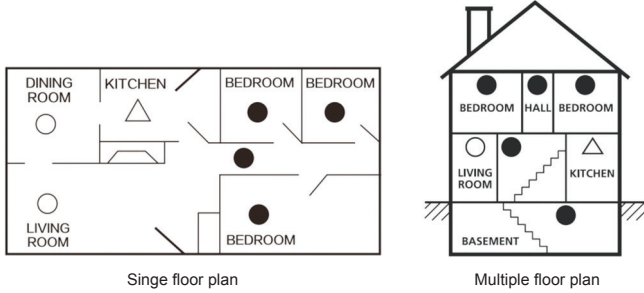
- a) Fires where the victim is intimate with a flaming initiated fire; for example, when a person's clothes catch fire while cooking;
- b) Fires where the smoke is prevented from reaching the smoke alarm due to a closed door or other obstruction;
- c) Incendiary fires where the fire grows so rapidly that an occupants egress is blocked even with properly located smoke alarms.

WARNING! -Smoke alarms are not to be used with smoke alarm guards unless the combination has been evaluated and found suitable for that purpose.

- 1) The TEST/SILENCE button accurately tests the device functions. Do not use any other test method. Test the device weekly to ensure proper operation. Do not install in non-residential buildings. And the device is not a substitute for a complete alarm system.
- 2) If you're sure it isn't a real alarm, open windows or fan the air around the device to silence it.
- 3) Observe and follow all local and national electrical and building codes for installation.
- 4) This smoke alarm is designed to be used inside a single family only. In multifamily buildings, each individual living unit should have its own smoke alarm devices.
- 5) Install a smoke alarm in every room and on every level of the home. Smoke may not reach the smoke alarm for many reasons. For example, if a fire starts in a remote part of the home, on another level, in a chimney, wall, roof, or on the other side of a closed door, smoke may not reach the device in time to alert household members. This Smoke alarm will not promptly detect a fire danger except in the area or room in which it is installed.
- 6) This smoke alarm may not alert every household member every time. The alarm horn is loud in order to alert individuals to a potential danger. However, there may be some circumstances where a household member may not hear the alarm (i.e. outdoor or indoor noise, sound sleepers, drug or alcohol usage, the hard of hearing, etc.). If you suspect that this device may not alert a household member, should install and maintain other specialty smoke alarm. Household member must hear the alarm's warning sound and quickly respond to it to reduce the risk of damage, injury, or death that may result from fire. If a household member is hard of hearing, install other special smoke alarm with lights or vibrating devices to alert occupants.
- 7) This Smoke alarm can only sound their alarms when they detect smoke or detect combustion particles in the air. They do not sense heat, flame, or other gas. The device is designed to give audible warning of a developing fire. However, many fires are fast - burning, explosive, or intentional, and others are caused by carelessness or safety hazards. In this circumstance, smoke may not make it to the unit alarm QUICKLY ENOUGH to ensure safe escape.
- 8) This smoke alarm has limitations. The device is not foolproof and is not warranted to protect lives or property from fire. Smoke alarm is not a substitute for insurance. Homeowners and renters should insure their lives and property. In addition, it is possible for the device to fail at any time. For this reason, you must test the device weekly and replace every 10 years.

3. Installation Instructions

WARNING! -To prevent injury, this device must be securely attached to the ceiling/wall in accordance with the installation instructions.

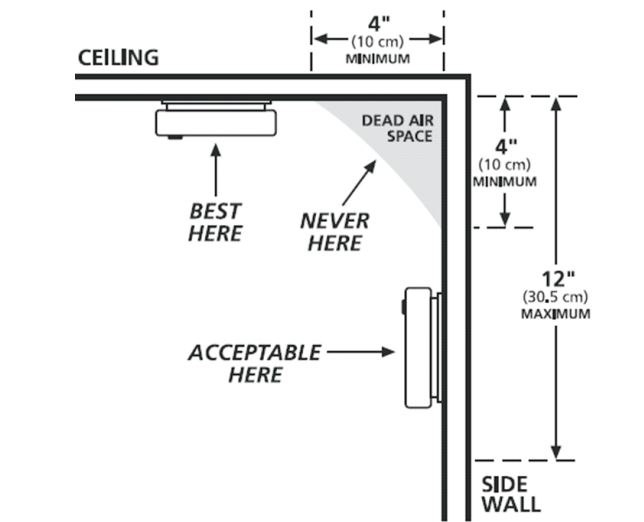


- Smoke alarms for required protection
- Smoke alarms for additional protection
- △ Smoke alarms with alarm silence feature for additional protection

3.1 Recommended location for alarms

The following suggestions are intended to help you with the placement and installation of your smoke.

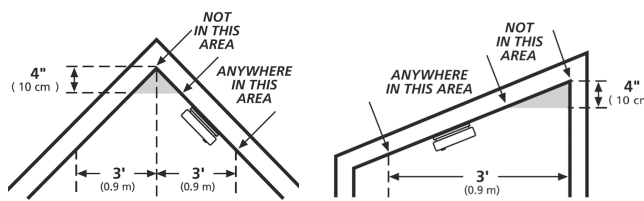
- 1) In all sleeping rooms and guest rooms.
- 2) Outside of each separate dwelling unit sleeping area, within 21 ft (6.4 m) of any door to a sleeping room, the distance measured along a path of travel.
- 3) On every level of a dwelling unit, including basements.
- 4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics.
- 5) In the living area(s) of a guest suite.
- 6) In the living area(s) of a residential board and care occupancy.
- 7) 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.
- 8) When mounting a device on the ceiling, locate it at a minimum of 4 inch (10 cm) from the side wall.
- 9) When mounting the device on the wall, use an inside wall with top edge the alarm at a minimum of 4 inch (10 cm) and maximum of 12 inch (30.5 cm) below the ceiling.
- 10) Put the device at both ends of a bedroom hallway or large room if the hallway or room is more than 30 feet (9.1 m) long.
- 11) Install the device on sloped, peaked or cathedral ceilings at or within 3 feet (0.9 m) of the highest point (measured horizontally).



3.2 Locations to avoid

To ensure the Smoke Alarm work properly and provide detection performance, do not install the device in the following places:

- 1) Normal cooking may cause nuisance alarms. If a kitchen alarm is desired, it should have an alarm silence feature and should not be installed within 6 feet of cooking appliances.
- 2) Do not install within 6 feet of heating appliances.
- 3) In areas with high humidity, like bathrooms or areas near dishwashers or washing machines or directly above a sink. Install at least 10 feet away from these areas.
- 4) Avoid spraying aerosols near the device.
- 5) Next to a door or window, an extractor fan, air returns or heating and cooling supply vents. The air could blow smoke away from the device, interrupting its alarm.
- 6) In rooms where temperatures may fall below 4.4°C or rise above 37.8°C, or in humidity higher than 95%. These conditions will reduce battery life or cause a fault alarm.
- 7) In extremely dusty, dirty, or insect infested areas influence particles interfere with the device operation.
- 8) In the garage. Products of combustion are present when you start your automobile.
- 9) In an enclosed space (for example in a cupboard or behind a curtain).
- 10) Where it can be obstructed (for example by furniture).
- 11) Less than 4" (10 cm) from the peak of an "A" frame type ceiling.
- 12) Near fluorescent lights. Electronic noise may cause nuisance alarms.
- 13) Avoid installing where the unit will be exposed to direct sunlight.
- 14) Place out of the reach of children. Under no circumstance should children be allowed to handle the device.

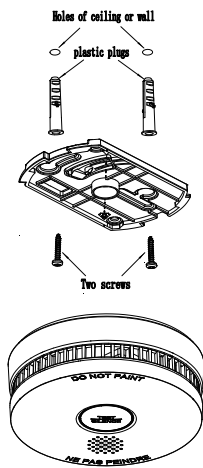


3.3 Installation instructions

WARNING! -This device should be located in an open and unobstructed area and shall not be located behind furniture, drapes, or any other object where it might not be seen or heard. The alarm shall be heard from all sleeping areas.

If you install only one device in your home, install the device near bedrooms, not in the basement or furnace room.

- 1) Drilling two 5 mm holes in the ceiling or wall, the distance between two holes center is 75 mm (2.95 inch), then inserting two plastic plugs provided into the holes.
- 2) Attach the bracket to the plastic plugs and fix tightly the screws into the plastic plugs. Do NOT over-tighten screws.
- 3) Install and rotate the alarm body on the bracket.
- 4) Test the device by using the TEST/SILENCE button. Ensure the device is working normally.



3.4 Un-installation instructions

Rotate clockwise for installation

Rotate counter clockwise for un-installation



4. Understanding Your Smoke Alarm

4.1 Product overview



1. ALARM indicator (Red LED)

The red indicator is used to indicate alarm status of the smoke alarm.

2. TEST/SILENCE button

The TEST/SILENCE button is used to test the device and to silence the unit during a smoke alarm. Press to keep it longer than 2 seconds to enable test function, or press once to enable silence function while alarm.

3. Sounder

The sounder is used to send out smoke alarm, abnormal warning information.

4.2 Other Alarm Visual And Audible Indicators

Operate mode	Visual (flash) and Audible (beep)
Standby	Red LED flashes once approx every 40 sec.
Test Mode	The TEST/SILENCE button is pressed for 2 sec once a week to verify proper alarm operation. Red LED flashes in time with alarm pattern. Alarm pattern(3 beeps, pause, 3 beeps).
Smoke Alarm	Red LED flashes in time with alarm pattern. Alarm pattern(3 beeps, pause, 3 beeps, repeat).
Silence Mode	When the smoke alarm occurs, press the button to enter the silence mode. The LED will flash once approx every 8 sec without sound. Silence time: Approx 8 minutes.

4.3 Troubleshooting Guide

Operate mode	Visual (flash) and Audible (beep)	Description/Action
Low voltage	Red LED flashes once approx every 40 sec. Chirp once approx every 40 sec. (Simultaneously with red LED flashing) Press TEST/SILENCE button once to silence mode for approx 10 hours. Silence mode: Red LED flashes once approx every 40 sec.	Replace new battery for your unit as soon as possible.
Fault alarm	Red LED flashes once approx every 40 sec. Chirp once approx every 40 sec. (Out of sync with red LED flashing) Press TEST/SILENCE button once to silence mode for approx 10 hours. Silence mode: LED flashes every 40 sec.	Review Cleaning Your Alarm section. Remove and dispose your unit, and replace as soon as possible.
End-of-life	Red LED flashes 3 times approx every 40 sec. Chirp 3 times approx every 40 sec.(Simultaneously with red LED flashing) Note: The alarm cannot be silenced while end-of-life warning.	Remove and dispose your unit, and replace as soon as possible.

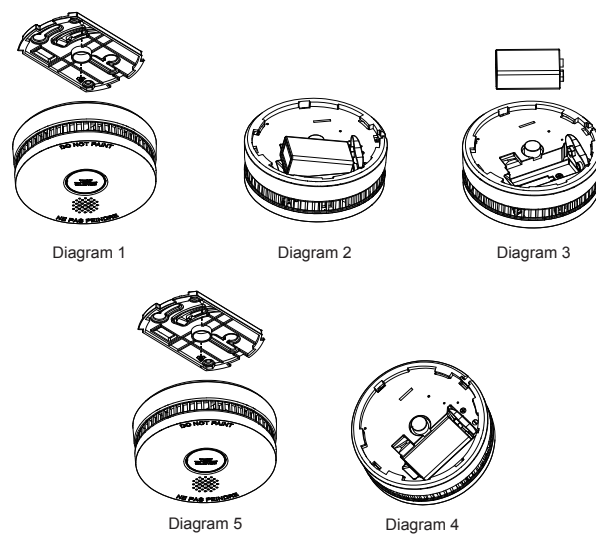
5. General Maintenance

To keep your Smoke alarm in good working order, please follow these simple steps:

1. Verify the unit's alarm sound and indicators operation by enabling the TEST/SILENCE button once a week.
2. Remove the unit from the ceiling and clean the alarm cover and vents with a soft brush attachment once a month to remove dust and dirt.
3. Never use detergents or other solvents to clean the unit.
4. Avoid spraying air fresheners, hair spray, or other aerosols near the device.
5. Never attempt to disassemble the unit or clean inside. This action will void your warranty.
6. As soon as possible, place the Smoke alarm back in its proper location to assure continuous protection from fire.
7. When household cleaning supplies or similar contaminants are used, the area should be ventilated.

6. Battery Information

Replace the battery: (See Diagram 1-5)



CAUTION: Test the alarm for correct operation using the test facility whenever the battery is replaced.

6.1 Battery type

This alarm is powered by DC 9V External battery located in a battery compartment. Under normal conditions, a new battery should last at least one year.

NOTE: Battery installation or replacement is necessary for the life of the device.

NOTE: Constant exposure to high or low humidity may reduce battery life.

6.2 Battery deactivation

This alarm is equipped with a low battery monitor circuit. If the battery capacity is near the point where it can no longer provide adequate power for all alarm functions, the low battery condition will occur. See Troubleshooting Guide. The battery must be replaced within 7 days of the first occurrence of the low voltage indication to provide continuous alarm protection.

Replace battery with one of the following approved brands:
9V Carbon zinc Battery: GP1604S
EVEREADY 1222

These batteries can be purchased at your local retailer.

 **WARNING!**-Use only the batteries specified. Use of different batteries may have a detrimental effect on the alarm.

NOTE: Do not use lithium batteries in this unit. A good safety measure is to replace the battery at least once a year.

6.3 Battery disposal

 **WARNING!**-Fire, explosion, and severe burn hazard. Do not recharge, crush disassemble, heat above 100°C, incinerate or expose contents to water.

1. Not to dispose of battery (or the device) as unsorted municipal waste, but collect it separately.
2. Dispose of in accordance with all applicable federal, state and local regulations.

7. Product Specifications

Model: 4500

Model Type: Independent photoelectric smoke alarm

Product standards: Smoke Alarms UL STD 217 9th ED
Standard for Smoke Alarms CAN/ULC STD S531

Power Supply: 9V Carbon zinc Battery (GP1604S / EVEREADY 1222, Replaceable)

Product Lifetime:10 years

Indicator Light: Red LED

Smoke alarm silence: Approx. 8 minutes

Alarm Mode: Sound and light signal

Alarm Volume: ≥ 85dB(A) @ 3 meters

Flame Retardant Rating: UL94 V2

Installation Location: Ceiling or wall

Temperature Operating Range: 40°F (4.4°C) to 100°F (37.8°C)

Humidity Operating range: 10-95% RH non-condensing

Size: Φ100*35mm

Weight: About 137g (including battery)

8. Recognizing Nuisance Alarms

Smoke Nuisance

SILENCE: If you know why the alarm is sounding, and you can verify that it is not a life threatening situation, you can push the button silence the alarm for approx 8 minutes. If the smoke is not too dense, that unit will silence. After the SILENCE period, the smoke alarm will automatically reset and sound the alarm if particles of combustion are still present. You can use SILENCE repeatedly until the air has been cleared of the condition causing the alarm.

NOTE: Dense smoke will override SILENCE and sound a continuous alarm. If no fire is present, check to see if one of the reasons listed in "Locations to avoid" may have caused the alarm. If a fire is discovered, get out and call the fire department or 911.

This alarm is designed to minimize nuisance alarms. Cigarette smoke will not normally cause the unit to alarm, unless the smoke is blown directly into the alarm. Combustion particles from cooking may set off the alarm if it is located too close to a cooking appliance. Large quantities of combustible particles are generated from spills or when broilling. Using the fan on a range hood which vents to the outside (non-recirculating type) will also help prevent nuisance alarms from occurring by removing these combustible products from the kitchen.

9. Manufacturer Information

RELY
ADDRESS: 555 Matthews Drive, Canton, MS 39046
WEB: www.relysafety.com

10. Warranty Information

THREE YEAR LIMITED WARRANTY

Our products are subject to strict quality controls. However, if this device should unexpectedly not function perfectly, please get in touch with us at the customer service address provided in the Manufacturer and Customer Service Info section.

THE WARRANTY PERIOD IS 36 MONTHS AND BEGINS ON THE DAY OF PURCHASE

Please retain your receipt as proof of purchase. Warranty claims can only be made for possible defects caused by material and production faults. During the warranty period, if service is required, do not return the product to your retailer. For Warranty Service, defective devices can be sent to the customer service address provided (postage paid). A new or repaired device will be returned to you. After the warranty period has expired, you still have the option of sending the defective device for repair to the customer service address. Repairs carried out after the warranty period must be paid for.

In the event of misuse or improper treatment, use of force, or intervention not carried out by our authorized service branches, the warranty is no longer valid. This warranty does not restrict your legal rights. In the event of a warranty claim, please return the receipt and completed warranty card with fault description along with the defective device.

The warranty does NOT cover the batteries supplied.

11. Warranty Card

Last Name: _____

First Name: _____

Phone: _____

Address: _____

Country: _____

Zip Code: _____

Fault description: _____

Date of purchase: _____

Signature: _____