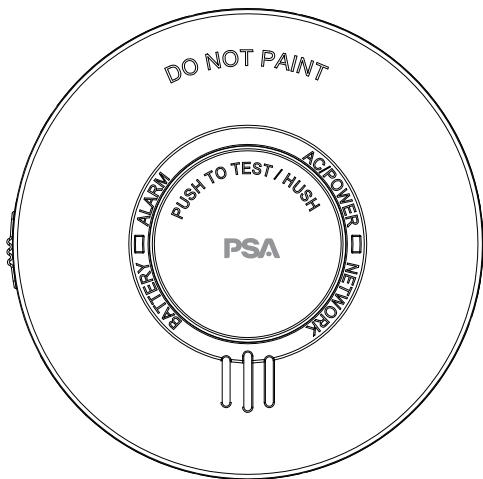


PSA HomeGuard

PHOTOELECTRIC SMOKE ALARM INSTALLATION AND USER MANUAL



Model HG140AC

Thank You for Purchasing this HomeGuard HG140AC Smoke Alarm

THIS SMOKE ALARM HAS AN EXPECTED SERVICE LIFE OF 10 YEARS UNDER NORMAL CONDITIONS. WE RECOMMEND THAT YOU SHOULD REPLACE THE SMOKE ALARM AFTER 10 YEARS FROM INSTALLATION DATE TO ENSURE NORMAL OPERATION.

Your HG140AC Smoke Alarm is design for use in a residential dwelling. It is not designed for use in a recreational vehicle (RV) or boat.

Note: Please thoroughly read this user guide and save the document for future reference and to pass on to any subsequent owner.

Product Support: 1300 772 776

Please write down the below information and have this at hand when you call.

Date Code (on back): _____

Date of Purchase: _____

Where Purchased: _____

Date to Replace: _____

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1. Smoke Alarm: What To Do When the Alarm Sounds

Smoke alarm pattern is three long beeps, a 1.5 second pause, and three long beeps repeating.

Alert small children in the home as well as anyone else that might have difficulty recognizing the importance of the alarm sounding or that might have difficulty leaving the area without help.

- 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.
- If the escape route requires you to go through smoke, stay close to the floor where the air is cleaner. Crawl if necessary, and 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 mobile phone outside, or from your neighbour'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:
 - a) smoking in bed
 - b) leaving children home alone
 - c) cleaning with flammable liquids, such as petrol or methanol.

2. Visual and Alarm Characteristics.

Mode	LED Indications	Recommendation
Normal	Green ON	Green LED indicate the AC mains power is present.
Normal	Red flashing every 40 -60 seconds.	The smoke alarm performs a self test every 40-60 seconds. The battery and electronics is tested for the life of the unit.)
Alarm mode	Red light flashing rapidly. Smoke alarm activated.	Repeat 3 long beeps(ISO8201) that indicate smoke alarm has activated and is in alarm mode.
Interconnected Alarm mode	Red Light is OFF. Smoke alarm activated.	Smoke alarm in full alarm, repeat 3 long beeps(ISO8201). Other interconnected units may have activated the alarm. Check other smoke alarms or devices.
Hush mode	Red light ON. Red light flashing every 10 seconds and no chirp.	The "HUSH" feature has the capability of temporarily desensitizing the alarm circuit for approximately 10 minutes.
Low Battery	Red light ON, flashing every 60 seconds.	Smoke alarm chirp every 60 Seconds. May indicate low battery status. Replace the battery.

3. Features and Important Information

FEATURES

- 240V~ Mains powered, 50Hz, <6 mA.
- Single station and / or inter-connectable to 48 units, 150m maximum for interconnection.
- Photoelectric Technology.
- 9V Replaceable battery back-up.
- Test & hush control.
- Low battery indication.
- Ambient humidity: 5% to 95%.
- Operating Temperature: 0°C to 45°C.
- Sound level: 85dB at 3m.

IMPORTANT INFORMATION

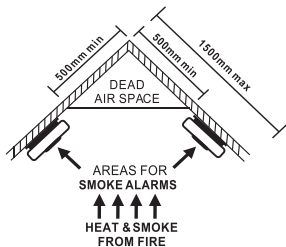
- Please read these instructions before installing the alarm.
- This product must only be installed and serviced by appropriately qualified and/or licensed electrical personnel.
- This product must only be used for the purpose described in these instructions and must be installed in accordance with the wiring rules and regulations in that location. Hazardous voltage may be present at the wire leads of this product.
- Isolate the electrical supply before doing any work on this product.
- Ensure that the product has been correctly installed and tested for safe operation before reconnecting the electrical supply.
- Make sure active and neutral from mains power are wired to the correct terminals.
- Make sure the green LED is ON when mains power is supplied.
- Test each unit one by one. Press and hold the Test button until a burst of 3 beeps has finished. Ensure every interconnected alarm is alarming correctly. If any unit fails to alarm, check all wiring connections.

4. Recommended Locations For Alarms

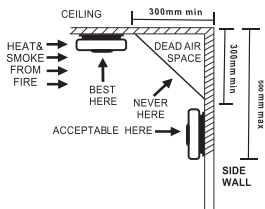
- Check specific State legislation in your area to ensure smoke alarms are correctly located according to local laws. Each State or Territory may differ in building codes and regulations. PSA Products can only recommend the locations.
- Locate an alarm for each separate sleeping area in the immediate vicinity of the bedrooms. Try to monitor the exit path as the bedrooms are usually farthest from an exit. If more than one sleeping area exist, locate additional alarms in each sleeping area in the immediate vicinity.
- Locate additional alarms to MONITOR any stairway because stairways act like chimneys for smoke and heat.
- Locate at least one alarm on every floor level.
- Locate an alarm in every room where a smoker sleeps.
- 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 other combustion products rise to the ceiling and spread horizontally. Mounting the 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 alarms on the ceiling locate it at least 300mm away from the side wall and 300mm away from any corner. (see diagram).
- When mounting alarms on a wall, use the inside wall. The recommended position is between 300mm and 500mm off the ceiling. (see diagram).

NOTE: The performance of smoke alarms mounted on walls is unpredictable and this mounting position is not recommended when ceiling mounting can be implemented.

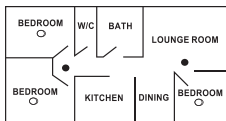
Location of smoke alarm



Apex Of Sloping Ceiling

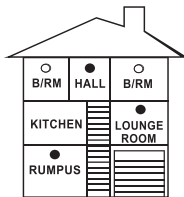


Ceiling / Wall Junction



- Smoke alarms for minimum protection
- Smoke alarms for additional protection

Single Floor



Typical Multiple Floor Installation

IMPORTANT: incorrect orientation of smoke alarm may decrease operational effectiveness

Mobile Home Installation

- Modern mobile homes have been designed and insulated to be energy efficient. Install smoke alarms as recommended (refer to RECOMMENDED LOCATIONS).
- In older mobile homes that are not well insulated compared to present standards, extreme heat or cold can be transferred from the outside through poorly insulated walls and roof. This may create a thermal barrier which can prevent smoke from reaching a smoke alarm mounted on the ceiling. In such units, install smoke alarm on inside partition between 300mm and 500mm from the ceiling.
- If you are not sure about the insulation in your mobile home, or if you notice the walls and ceilings are either hot or cold, install alarm on an inside wall. For minimum protection, install one alarm close to the bedrooms.
- For additional protection, see SINGLE FLOOR PLAN.
- Locate an alarm in every room where a smoker sleeps.

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

5. Locations To Avoid

- Do not locate your alarm in the garage - products of combustion are present when you start your automobile. Use Lifesaver Heat Alarm in this location.
- Do not locate your alarm in front of forced air supply ducts used for heating and air conditioning and other high air flow areas.
- Do not locate your alarm less than 500mm from the peak of an “A” frame type ceiling.
- Do not locate your alarm in areas where temperatures may fall below 0°C or rise above 40°C, or in humidity higher than 95% as these conditions may reduce battery life.
- Avoid dusty areas, dust particles may cause smoke alarm to false alarm or fail to alarm. Use Lifesaver Heat Alarm in this location to avoid false alarms.
- In dusty areas. Dust particles may cause nuisance alarm or failure to alarm.
- Avoid very humid areas or near a bathroom, moisture can cause false alarm.
- Avoid insect-infested areas.
- Do not locate alarm within 0.9m of the following: the door to a kitchen, the door to a bathroom containing a tub or shower, ceiling or whole house ventilating fans, or other high flow areas.
- Avoid locating near fluorescent lights or other electrical equipment. Electronic magnetic interferences or “noise” may cause nuisance alarms or chirping.
- Near fluorescent lights, including CFL lamps. Electronic “noise” may cause nuisance alarms.
- 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.

6. Installation

⚠ WARNING: THIS SMOKE ALARM MUST BE INSTALLED BY QUALIFIED (LICENSED) ELECTRICIANS ONLY.

WIRING INSTRUCTIONS:

- In the interests of safety, this smoke alarm and all wiring must be installed by a licensed electrician in accordance with the relevant requirements of the Wiring Rules - AS3000.
- DO NOT connect this smoke alarm on the base plate without the presence of 240V mains power.
- This Smoke Alarm can only interconnect with Homeguard Model HG140AC. Interconnection with other brands may cause damage or result in a shock or fire risk and void warranty.
- Due to “noise” from electromagnetic interference, up to 48 units of smoke alarms may be interconnected.
- There are four terminals in the supply terminal block, marked A, I, N, E-LOOP. It is important that the alarm be wired correctly to ensure correct operation. Incorrect wiring to the Smoke Alarm will damage the unit and void the warranty.
- A total maximum of 150 meters (492 feet) of wire can be used in interconnecting smoke alarms.
- All final sub-circuit conductors including the signal conductor must be a minimum size of 0.75 mm² with 250V grade insulation.
- Interconnected Smoke Alarms must be connected to the same final subcircuit.
- Do not use any wire that could later be confused with the normal house wires for the interconnect wire. For example, green/yellow earth wire.
- Do not connect AC power wires to I interconnect terminal. These will damage smoke alarms.
- Do not connect the I interconnect wire to any device, except the I interconnect terminal of smoke alarm. Otherwise, smoke alarm will be damage.
- Smoke alarms should be interconnected only within the confines of a single family living unit. If smoke alarms are interconnected between different units, there may be excessive nuisance alarms. Residents may not be aware that smoke alarms are being tested or that it is a nuisance alarm caused by cooking, etc.

Terminals are marked as follows:

MARKINGS

A ACTIVE

I INTERCONNECT (FOR INTERCONNECTION ONLY)

N NEUTRAL

E/LOOP EARTH OR LOOP

⚠ WARNING: Connecting the INTERCONNECT terminal to any other supply conductor may result in damage to the alarm, failure to operate or shock hazard and void the warranty of the alarm.

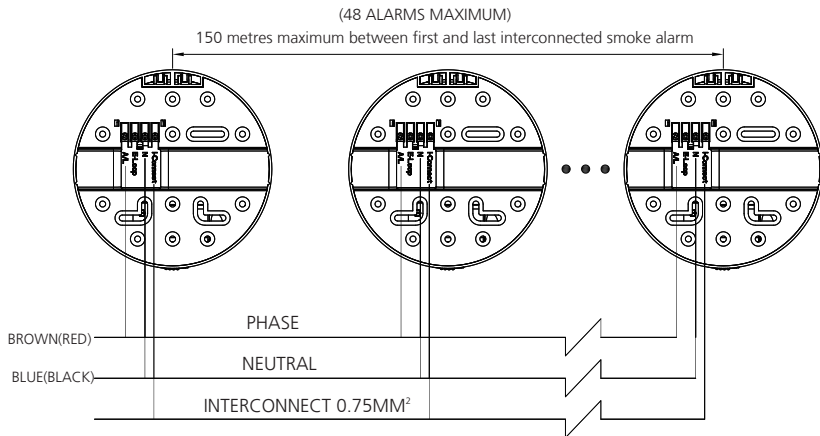
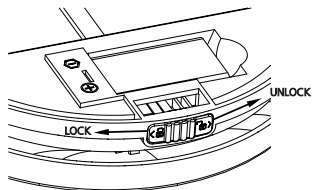
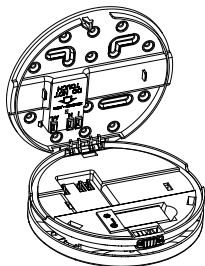
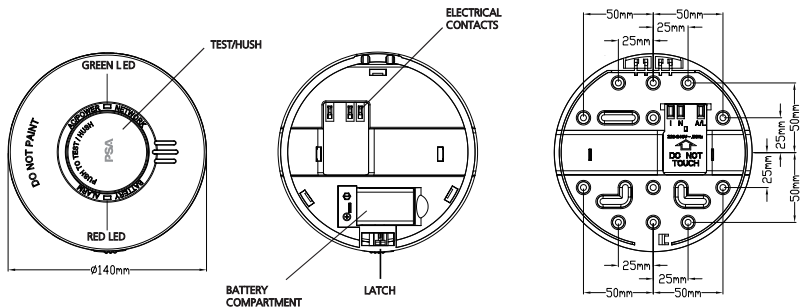


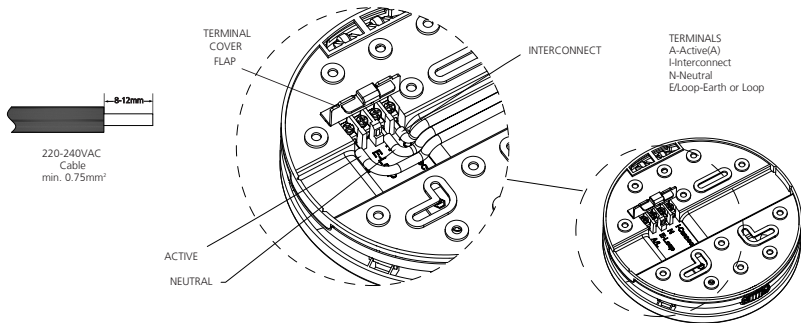
Figure 1

- When interconnected all Smoke Alarms will sound upon activation.
- **WARNING:** This alarm cannot be operated from power derived from a square wave, modified square wave or modified sine wave inverter. These type of inverters are sometimes used to supply power to the structure in off grid installations, such as solar or wind derived power sources. These power sources produce high peak voltages that will damage the alarm.
- PSA recommend the smoke alarms to be installed on its own subcircuit to avoid false alarms and nuisance chirping that may be caused by electromagnetic interferences from other electrical equipment.
- Connect supply cable to terminal block and fix terminal cover.(See Fig 1)
- Check the green light on alarm cover. It should be lit when mains power is switched on indicating that the smoke alarm is properly connected to the mounting base.
- Test alarm by pressing Test button.

Diagram



- Strip off the Active, Neutral, and Interconnect (if need) wires to the strip length shown below.
 - Connect the wires to the correct 3 terminals on the base and ensure the terminal screws are fully tightened. Connect the E/Loop wires if necessary.
 - Clip the terminal flap cover closed to avoid contact with the live terminals to prevent electric shock in case of carelessness. See the figure below with the arrow pointing.
 - Screw the mounting base onto the ceiling or wall using appropriate fasteners.
 - The battery of the smoke alarm comes with a plastic wrapper, which must be removed before installing the battery. The smoke alarm base will only be closed with a battery installed. Clip the smoke alarm onto the base and lock the latch.
- Note: Do not attempt to close the base unless a battery is installed.
- Power on the mains and check that the green and red LEDs function. The green LED should light up to show mains power is present. The red LED will flash every 40-60 seconds to indicate correct operation and that the 9V d.c. battery is okay.
 - Press the Test/Hush button to check if the alarm works.
 - CAUTION: Due to the loudness (85 decibels) of the alarm, always stand an arms-length away from the unit when testing. Installation is not complete until both LEDs are functioning correctly and the alarm has been checked for correct operation.



7. Operation and Testing

OPERATION

- The smoke alarm is operational once all wires are properly connected, a fresh battery is installed , The smoke alarm is correctly installed on the mounting base and the alarm has been tested.
- There are two LED indicators. Each of them has a unique function:

Red LED

- Stand-by condition: will flash once approximately every 40-60 seconds to indicate unit is functioning properly.
- Alarm condition: the Red LED will flash rapidly. For interconnected units, the originating smoke alarm Red LED will flash rapidly. All other units will sound but the Red LED will not be on or flashing.


Green LED

- AC Mains-ON Indicator: indicates that the unit is operating with AC power. If this LED goes out, it indicates that the AC power is off.

HUSH CONTROL FEATURE:

Note: Dense smoke will override Hush control feature and sound a continuous alarm.

- This smoke alarm has the capability of being temporarily desensitized for approximately 10 minutes.
- The smoke alarm is desensitized by pressing the “ Test / Hush ” button on the smoke alarm.
- After pressing the “ Test / Hush ” button, the alarm will silence immediately.
- The alarm will enter a dormant period. After the 10 minutes dormant period, the smoke alarm will resume normal operation.
- The “HUSH” feature may be used repeatedly until the air has cleaned.

 **WARNING:** Before using the alarm HUSH feature, identify the source of smoke and be certain that a safe condition exists.

8. Battery Installation, Replacement and Test

BATTERY INSTALLATION

- The smoke alarm uses one 9V battery to automatically provide back-up power to the alarm if AC power fails. The battery will operate the alarm for approximately one to three months with AC power off.
- The smoke alarm has a low battery indicator that will cause the unit to chirp and flash the Red LED at approximately 60 second interval. Missing battery with main power connected will cause the unit to chirp and flash the Red LED at approximately 60 second intervals.
- Replace battery when the Red LED flashing every 60 seconds and the beep occurs. To ensure proper operation, the battery should be replaced once a year.
- To replace battery, push the latch to the right to open the mounting base and remove the battery from compartment. Replace the old battery with a brand new one.

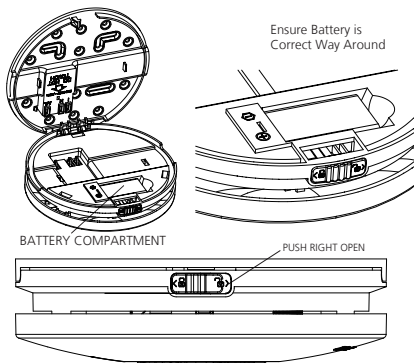
Use only the following 9 volt batteries for smoke alarm replacement.

Alkaline Type: 6LR61 or 6LF22A or 6AM6

These batteries can be purchased at your local retail outlet or supermarket.

⚠ Caution: Use only specified batteries. Use of different battery may have a detrimental effect on operation or may cause the battery to explode resulting in injury or fire.

- Use only batteries specified on the label .



⚠ WARNING: Use of inferior batteries or incorrect types may cause a malfunction of the alarm. When replacing the battery and on reconnection of the detector to the base plate, make sure that the detector is fully connected and flush with the base plate. Verify that the Green LED is ON after reinstalling the alarm on the base plate.

BATTERY TEST:

- Switch off mains power. The Green LED on the smoke alarm will be OFF.
- Test alarm by pressing on the Test Button for a few seconds. This should sound the alarm.
- If the battery module has a fault, the alarm will not be operating.
- Switch on mains power only when smoke alarm passes the above tests. The Green LED on the smoke alarm will come ON.

NOTE: WEEKLY TESTING IS RECOMMENDED!

INSTALLER PLEASE NOTE:

- Before you connect the mains power, check wiring polarity.
- Please check battery is correctly connected and fully charge over 9 Volts.
- If the alarm 'chirps' again, press the Test button to check the battery condition.
- If 'chirps' persists, replace smoke alarm and return to your supplier for replacement.

Please Note: When TEST button is pressed after detecting the smoke, the smoke alarm will automatically enter HUSH mode. Smoke alarm will be desensitized for 10 minutes. Smoke testers may not be effective during hush mode.

9. The Limitations of Smoke Alarms

⚠ Warning: please read carefully and thoroughly.

- Smoke alarms are devices that can provide early warning of possible developing fires at a reasonable cost.
- Alarms have sensing limitations. Ionisation sensing alarm may detect invisible fire particles (associated with fast flaming fires) sooner than Photo-electric alarms. Photo-electric sensing alarm may detect visible fire particles (associated with slow flaming fires) sooner than Ionisation alarms.
- Home fires develop in different ways and are often unpredictable. Neither type of alarm (photo-electric/ionisation) is always best and a given alarm may not always provide warning of a fire. We strongly recommend that both ionisation and photoelectric smoke alarms be installed to help insure maximum detection of the various types of fires that can occur within the home.
- Smoke alarms have certain limitations. For battery powered smoke alarms, the battery must be in good condition and installed properly.
- AC powered alarms will not operate if AC power has been cut off, such as by an electrical fault, open fuse or circuit-breaker, or fire. However, the battery back-up will activate the alarm if in good working order.
- Smoke alarms must be tested regularly to ensure that the batteries and alarm circuit are in good operating condition.
- Smoke alarms cannot provide an alarm if smoke does not reach the alarm. Therefore, smoke alarm 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 bedrooms, or on a different floor, it may not wake up a sound sleeper. A smoke alarm in the bedroom, therefore, is recommended.
- Smoke alarms have been significant in saving lives in many parts of the world. Hence, the use of this product does not substitute for basic prevention and total protection.
- Although smoke alarms can help save lives by providing early warnings of a fire, they are not a substitute for an insurance policy.

- This smoke alarm alone will not alert the hearing impaired. Use special purpose smoke alarm with lights or vibrating devices, for those hard of hearing.
- Heat alarms are available to offer greater security when used in conjunction with smoke alarms.
- 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.

10. Cleaning Your Alarm


YOUR ALARM SHOULD BE CLEANED REGULARLY.

Smoke alarms operate by monitoring the air and the environment around it. Small particles in the air such as dust, fumes, small insects may cause the smoke alarm to activate. We recommend the smoke alarm be regularly clean at least once a month using a soft brush vacuum cleaner to ensure dust and debris do not accumulate around the smoke alarm. Do not spray cleaners or detergent into the smoke alarm.

Please note – Do not attempt to remove the cover of the smoke alarm to clean inside. This will void your warranty.

To clean your alarm, remove it from the base plate. You can clean the interior of your alarm (sensing chamber) by using compressed air or a vacuum cleaner hose and blowing or vacuuming through the openings around the perimeter of the alarm. The outside of the alarm can be wiped with a damp cloth.

After cleaning, reinstall your alarm and test your alarm by using the button. If cleaning does not restore the alarm to normal operation the alarm should be replaced.

 **WARNING : Reinstall the Alarm as soon as possible to ensure continuous protection.**

11. 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 a 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 story windows may need a rope or chain 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.

RECOMMENDATIONS

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, utility room, and hallways not protected by the required smoke alarms. The installation of the smoke alarms in the kitchen, attic (or unfinished), or garage is normally not recommended, as these locations occasionally experience conditions that can result in improper operation.

12. Repairs and Services

- If the smoke alarm is defective in any way, do not tamper with the unit. Return the unit to your supplier (See warranty for instructions on in-warranty returns). There will be a service charge for repairing units out of warranty.

13. Warranty and Liability

1. PSA Products Pty Ltd warrants this product for a period of ten (10) years from the date of purchase to the original purchaser, as reflected by an invoice or receipt. For subsequent purchasers, the warranty is five (5) years from the date of manufacture. PSA will repair or replace the product (at the option of PSA) due to any manufacturing defect or workmanship excluding any labour costs relating to removal or re-installation of product and transport costs.
2. This warranty shall not apply to the product if it has been damaged, modified, abused or altered after the date of purchase, or if it fails to operate due to improper maintenance.
3. To the extent permitted by law, the liability of PSA Products Pty Ltd arising from the sale or under the terms of this limited warranty shall not in any case exceed the cost of replacement and subject to this clause. In no case shall PSA Products Pty Ltd be liable for consequential loss or damages resulting from the failure of the product or breach of this, or: Any other warranty, express or implied, loss or damage caused by failure to abide by the instructions supplied in the leaflets.
4. To the extent permitted by law, PSA Products Pty Ltd., makes no warranty, expressed or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the consumer replaceable battery if any. A product with non-serviceable built-in battery is covered under warranty of the product as per point 1.
5. This warranty is provided in addition to other rights and remedies you have under law: Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. What constitutes a major failure is set out in the Australian Consumer Law.
6. To make a claim under warranty, take the product (with a proof of purchase) to the store where you purchased the product or contact PSA Products Pty Ltd. Phone (03) 9888 9889. or Email: enquiry@psaproducts.com.au with details, proof of purchase or expense claim in writing.

14. Product Warranty Registration

Thank you for purchasing and installing the most trusted brand in fire, security and intercoms. To ensure you receive excellent after-sale product service we encourage you to register your products. There are a few important reasons to register your product:

1. It will ensure your investment is protected in case it is damaged or broken and we can effectively carry out any warranty claims.
2. Registration will also allow us to contact you in an unlikely event of product safety notification required under Consumer Product Safety Act.
3. Registration will also help us improve our product design to meet your needs.

Register at: www.psaproducts.com.au/register-product/

Register this product for warranty to ensure fast and effective service.

Otherwise, please retain this warranty section and complete the details below. When you claim Warranty for the product please present this section together with the faulty product.

Model: _____ Serial Number: _____

Date Of Purchase/ Installation: _____ Invoice No: _____

Installed By: _____

Owner's Details: _____

This smoke alarm has an expected service life of 10 years under normal conditions. We recommend that you should replace the smoke alarm after 10 years from installation date to ensure normal operation.

THIS SMOKE ALARM HAS BEEN TESTED AND COMPLIES TO AS3786:2014

DEAR INSTALLER:
PLEASE LEAVE THIS MANUAL FOR THE OWNER.
THANK YOU FOR CHOOSING THIS SMOKE ALARM.



Tested & Approved to AS3786:2014



PSA

PSA Products Pty Ltd
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VIC 3125 Australia.

T. 1300 772 776

enquiry@psaproducts.com.au
psaproducts.com.au