

Operations and Troubleshooting

Problem	Cause	Remedy
Alarm sounds and the Red LED is blinking rapidly.	Smoke has activated the smoke alarm.	Vacate the building and call the fire brigade (see what to do if alarm sounds).
Green LED ON.	240V Mains Power ON.	Normal Operating Condition.
Green LED OFF Mains power may be disconnected.	240V Mains Power OFF.	Check mains power ON. MCB may have tripped. Wiring could be reversed.
Red LED Flashes every 40 to 60 seconds.	Red LED indicates the smoke alarm is functioning correctly.	Normal Operating Condition.
Red LED not flashing.	Battery may be reversed. No Battery present. Battery completely flat.	Reinstall battery around the correct way or replace Battery.
Audible 'Beep' is heard every minute.	Low battery indicator is warning the battery needs replacing.	Replace 9V battery with a specified new battery.
When Test/Hush button is pressed for three seconds Alarm sounds briefly.	The Smoke Alarm horn is indicating all electronic circuitry, horn and battery are working.	Normal Test condition. Test weekly to ensure proper operation.
When 'Test/Hush Button' is pressed for three seconds alarm does not sound.	Check Green LED is ON and Red LED is flashing once every 40 to 60 seconds.	Turn mains power OFF and replace battery. If smoke alarm still won't 'TEST' replace.
Smoke Alarm is sounding and you press the 'test button' and it stops.	Hush feature has been activated for 10 minutes providing the smoke density does not increase.	Normal condition. Clear the smoke as soon as you can.
Smoke alarm is sounding and you press the 'Test/Hush' button and nothing happens.	Smoke Density is too high for the 'Hush' feature to activate.	Vacate the building and call the Fire brigade (see what to do if alarm sounds).
Smoke Alarm body will not close on the base.	9V battery not present.	Install a 9V Battery.

Maintenance, Repairs and Service

Maintenance: It is recommended that the Smoke Alarm is inspected monthly to ensure it is free from dirt or dust. The alarm can be vacuumed or brushed with a soft brush to remove dust, dirt or kitchen grease that has accumulated.

ALWAYS TEST THE SMOKE ALARM AFTER CLEANING.

Repairs/Service: The Smoke Alarm uses a very small amount of radioactive element, which is safely contained within the chamber assembly. If the Smoke Alarm is defective in any way, do not tamper with the unit. If the warranty period has expired then dispose of the unit as indicated below.

DO NOT, UNDER ANY CIRCUMSTANCES, TAMPER WITH THE SEALED RADIOACTIVE SOURCE.

This Smoke Alarm does not contain any user serviceable parts except for the battery. For disposal, please contact local authorities for advice. Some states permit disposal in household rubbish collection. Alternative disposal might not be permitted - contact local authorities for advice.

Limited One Year Warranty

PDL Electrical Solutions., (PDL) warrants your PDL product to be free from defects in material and workmanship for a period of one year from the date of purchase. The Warranty applies only to the original consumer purchaser and only to products used in normal use and service. If this product is found to be defective, PDL's only obligation, and your exclusive remedy, is the repair or replacement of the product, at PDL's discretion, provided that the product has not been damaged through misuse, abuse, accident, modifications, alteration, neglect or mishandling (excluding any labor cost relating to removal or re-installation of product and transport cost). This Warranty shall not apply to any product, which is found to be improperly installed, setup or used in any way not in accordance with the instructions supplied with the product. This Warranty shall not apply to any batteries used in the product or to any damage caused by such batteries. If your PDL product fails to operate satisfactorily, please return it to the point of purchase or PDL Electrical Solutions.

PDL DOES NOT WARRANT AND SPECIFICALLY DISCLAIMS ANY WARRANTY, WHETHER EXPRESS OR IMPLIED, OF FITNESS FOR A PARTICULAR PURPOSE OTHER THAN THE WARRANTY CONTAINED HEREIN. NOT IMPLIED WARRANTY ON THIS PRODUCT, CREATED BY STATE LAW, SHALL EXTEND BEYOND THE TERM OF THIS WARRANTY UNLESS SUCH LAW OTHERWISE PROVIDES. PDL SPECIFICALLY DISCLAIMS ANY LIABILITY AND SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE, INCLUDING, BUT NOT LIMITED TO, DAMAGES TO ANY EQUIPMENT WITH WHICH THIS PRODUCT IS USED.

No agent, representative, dealer, or employee of the company has the authority to increase or alter the obligations or terms of this Warranty.

This Smoke Alarm Complies With: AS3786 AS3100
Australian Electrical Authority Certificate of Suitability A/10825E

THIS DEVICE CONTAINS A SMALL QUANTITY OF RADIOACTIVE MATERIAL



Am 241 1.0 micro curie



Head Office
PO Box 3386, Tingalpa
Queensland 4173, Australia
Email help@pdl.com.au
Website pdl.com.au

National Customer Service Enquiries
1300 2025 25

National Customer Service Facsimile
1300 2025 56

You can find this brochure and many others online in PDF format at

pdl.com.au
pdl.co.nz



Smoke Alarm 3000SSA

Installation Instructions

240V a.c Mains Power Ionisation Smoke Alarm with 9V d.c Battery Backup.

PLEASE LEAVE THESE INSTRUCTIONS WITH THE OWNER. OWNER TO RETAIN THESE INSTRUCTIONS FOR THE LIFE OF THE ALARM. THIS SMOKE ALARM REQUIRES INSTALLATION BY A LICENSED ELECTRICAL CONTRACTOR.

Read all Instructions Before Installation and Operation

This Smoke Alarm has a recommended service life of at least 10 years under normal conditions. We recommend the Smoke Alarm be replaced after 10 years. The Smoke Alarm uses an extremely small amount of radioactive material in the ionisation chamber. DO NOT try to open or repair the Smoke Alarm yourself. No user serviceable parts are inside.

Specifications

Main Power Source:	230-240V a.c. 50Hz	Horn Level:	85dB at 3 meters minimum
Secondary Power Source:	9V d.c. Carbon Zinc or Alkaline Battery	Visual Indicators:	Green LED for Mains Power ON Red LED for Warning and Low Battery indication
Operating Current:	60mA	Approvals:	ActivFire Listed: AS3786 AS/NZS 3100
Battery Life:	1 year approximately	Certificate of suitability:	A/10825E.
Sensing Type:	Ionisation. Americium 241 – one micro curie		
Operating Temperature:	5°C to 45°C		
Ambient Humidity:	10% to 90%		
Inter-connecting:	12 Alarms over 150 metres maximum		

Information on Smoke Alarms

WHAT SMOKE ALARMS CAN DO

Smoke Alarms can only HELP protect your family and home against loss from a fire. For maximum protection install Smoke Alarms in every bedroom, and every other area of the home, making sure the people in the home will be able to hear and respond to the alarm sound.

WARNING – Smoke Alarms may give you a warning of fire and smoke but only if you install, use and maintain them as recommended in this instruction leaflet.

WHAT SMOKE ALARMS WILL NOT DO

A Smoke Alarm will not work without power – Your Smoke Alarm needs Mains Power (230-240V) and a good battery (9V) that is installed correctly to operate.

A Smoke Alarm will not sense a fire when smoke cannot reach the unit – If a fire starts in a chimney, wall, roof, the other side of a closed door or any other isolated area, the Smoke Alarm may not sense the smoke and may not give a warning. If you do not have a Smoke Alarm in the bedroom and sleep with the door closed, a fire inside the bedroom may not sound an alarm located in another room. Therefore it is recommended that a Smoke Alarm be installed inside and outside all bedrooms. A Smoke Alarm will not promptly sense a fire except in the area in which the Smoke Alarm is installed.

All types of Smoke Alarms have limitations – No type of Smoke Alarm can sense every kind of fire or smoke every time. Ionisation Smoke Alarms (such as this unit) are a good overall choice for reliability and fast response time since they quickly sense small 'invisible' smoke particles and also sense large 'visible' smoke particles.

Using a Smoke Alarm in a smokey area like a kitchen or in a high humidity area such as a bathroom can cause false alarms. Do not remove the battery to quieten the alarm, or take the alarm down. A Smoke Alarm will not protect you if it is not powered or if the unit is not present.

A Smoke Alarm may not always warn you about fires caused by the following:

- Smoking in bed
- Children playing with matches or lighters
- Incorrect storage of flammable materials
- Over-loaded electrical circuits.

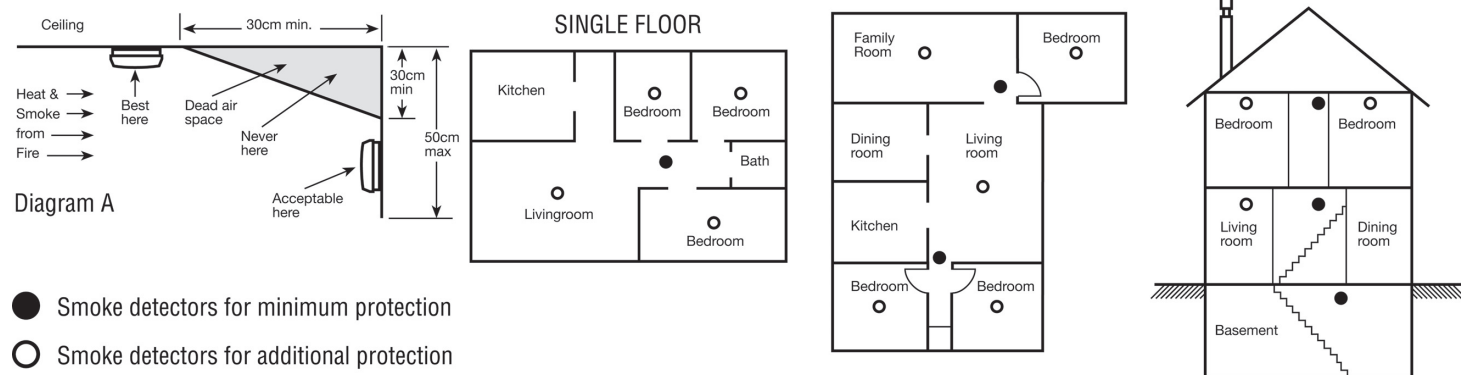
So please remain vigilant against fire risks at all times. Fire prevention is your best safeguard.

Avoid these Locations

- Do not install a Smoke Alarm within two metres of heating and cooling supply vents or within two metres of return air or fresh air vents. Smoke may be blown away from the Smoke Alarm by the supply vents, or could be diffused or reduced by being diverted into the return air vent.
- Do not install your Smoke Alarm in an area where the temperature may fall below 5°C or rise above 45°C. Smoke Alarms are designed to work safely only within these temperature ranges and failure to alarm, improper alarms or nuisance alarms may result from operation outside these temperature limits.
- Do not install a Smoke Alarm in a damp or very humid area such as bathrooms with showers, where the normal humidity may rise above 90%. Above this level, moisture may condense inside the smoke chamber and cause wrong or false alarms. The Smoke Alarm may also become unstable below 10% Relative Humidity.
- Do not install a Smoke Alarm in an area where particles of combustion are normally present, such as garages or kitchens as this can cause false alarms.
- Do not install a Smoke Alarm in dusty or dirty areas – such an installation cannot be relied on. An accumulation of dust and dirt in the sensing chamber may block the openings and prevent an alarm, or may get inside the alarm and cause false alarms. If a Smoke Alarm is required in such an area, vacuum it frequently and test it according to the 'Operation and Testing' section.
- Do not install a Smoke Alarm in the dead air space in the corner where the wall meets the ceiling. If in doubt as to the exact location of mounting, for your safety, contact your local Fire Department for help choosing a location.
- Do not install a Smoke Alarm where bugs or insects are present before eliminating or minimising the problem. Although all smoke Alarms built since 1985 are made to prevent bugs from entering the detection chamber, bugs may build up on chamber openings and prevent smoke from entering. If bugs are present, vacuum the unit frequently as described in the maintenance section.
- Do not install a Smoke Alarm within two metres of a fluorescent light. Electrical 'noise' may cause nuisance alarms.

Recommended Location of Alarm

- Locate the first alarm in the immediate areas of the bedrooms. Try to protect the exit path as the bedrooms are usually furthest from an exit. If more than one sleeping area exists, locate additional alarms in each sleeping area
- Locate additional alarms to protect any stairway as stairways act like chimneys for smoke and heat
- Locate at least one alarm on every floor level
- Locate an alarm in any area where a smoker sleeps or where electrical appliances are operated in sleeping areas
- Smoke, heat and other combustion products rise to the ceiling and spread horizontally. Mounting the detector on the ceiling in the centre of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction. However, in mobile homes, wall mounting on an inside partition is required to avoid the terminal barrier that may form at the ceiling
- When mounting alarm in the ceiling, locate it a minimum of 30cm from a sidewall and 30cm from any corner (see Diagram A)
- When mounting alarm on a wall, use an inside wall with the alarm a maximum of 50cm below the ceiling and at least 30cm from any corner (see Diagram A).

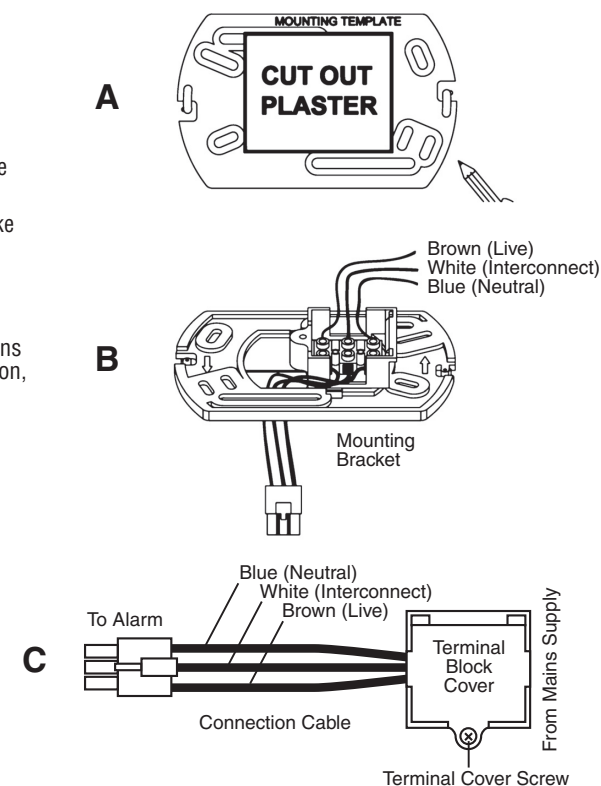
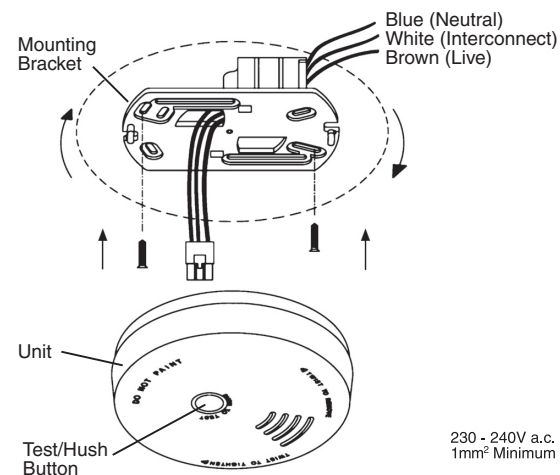


- Smoke detectors for minimum protection
- Smoke detectors for additional protection

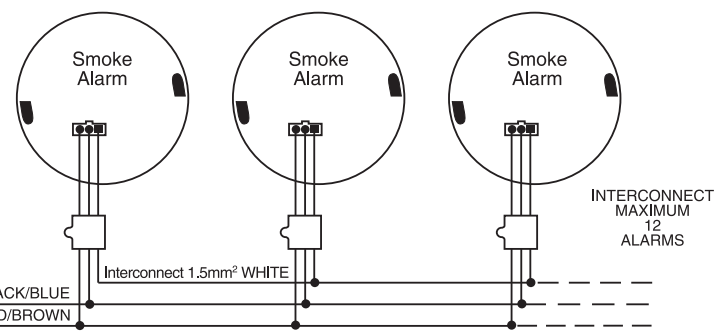
Installation

1. Mark out mounting holes and cut-out using the Mounting Bracket as a template
2. Secure the Mounting Bracket to the ceiling using the screw pack provided
3. Cut and strip the incoming mains supply cable
4. Remove the Terminal Cover Screw. Terminate supply cables as shown. Reinsert Terminal Cover Screw
5. Cut/drill hole in the ceiling to allow the Connection Cable to pass through the centre of the Mounting Bracket. Feed Connection Cable through into the room
6. Open the Battery Cover and insert a 9V battery into the Battery Compartment of the Smoke Alarm. Close the Battery Compartment Cover
7. Insert the Connection Cable Plug into the base of the Smoke Alarm unit
8. Secure the Smoke Alarm to the Mounting Bracket by twisting clockwise
9. Turn On the mains power and check the LED's function. The Green LED should show mains power is present. The Red LED will pulse every 40-60 seconds to indicate correct operation, and that the 9V battery is OK
10. Press the Test Button to check that the alarm is working correctly.

- This Smoke Alarm will function as a stand alone alarm, or can be installed with up to 11 other alarms (total of 12 maximum per network). All interconnected Smoke Alarm must be supplied from a single power circuit. A common Neutral must be used for the interconnect to function
- Incorrect wiring may damage the Smoke Alarm
- **Do not** leave the installation until the red and green LEDs and the alarm have been checked for correct operation
- **Do not** perform an insulation resistance test between Phase and Neutral on any circuit with Smoke Alarms fitted.



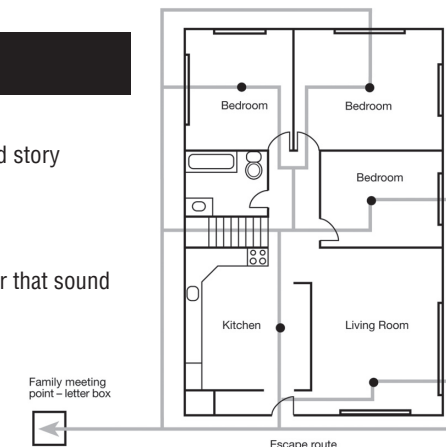
Use minimum of 1.5mm² 250V insulated wire for all wiring including interconnecting.
150 metres maximum between first and last interconnected Smoke Alarm



Develop and Practice a Plan of Escape

Basics of Escape Plan

- Make a floor plan indicating all doors and windows and at least two 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 all of you can meet if a fire occurs i.e. Letterbox
- Familiarise everyone with the sound of the Smoke Alarm and train them to leave your home when they hear that sound
- Identify childrens' bedrooms with red stickers placed in the upper left corner of the windows
- Practice a fire drill at least every six months. Practice allows you to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do!



What to Do if Alarm Sounds

- Leave immediately by following 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 it's surface. If hot, or if you see smoke seeping through cracks, don't open that door! Instead, use your alternate exit. If inside door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rushes in
- Stay close to the floor if 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 brigade from your neighbour's home – not from yours
- Don't return to your home until fire officials say that it is all right to do so.

Operation and Testing

Operation

Once the Mains Power (230-240V) is connected and the 9V Battery is present the Smoke Alarm is operating.

Operation once Smoke Is Detected.

The Smoke Alarm will sound a loud alarm (85dB) and the Red LED will flash rapidly. This will continue until the air is cleared.

Standby Condition

The Red LED flashes once every 40-60 seconds to indicate the Smoke Alarm and Battery are functioning correctly.

Green LED

The green LED glows when the Mains Power (230-240V) is on.

Testing

TEST THE SMOKE ALARM WEEKLY AND AFTER REPLACING THE BATTERIES TO ASSURE PROPER OPERATION

Test by pushing the centre test/hush button on the Smoke Alarm for three seconds until the alarm sounds.

The alarm sounds if all electronic circuitry, horn and battery are working.

If no alarm sounds check the battery is installed the correct way around or replace the battery.

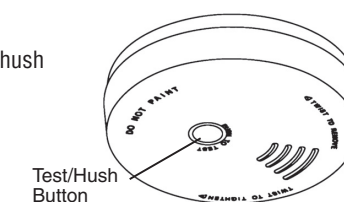
If the battery is new and installed correctly and the alarm still doesn't sound replace the Smoke Alarm.

If the Smoke Alarm is installed in a Mobile Home test weekly and after every journey.

Check all Interconnected Smoke Alarms operate during test.

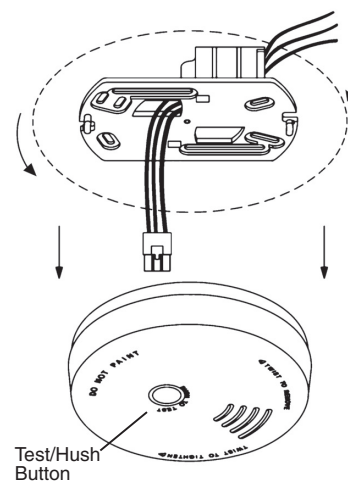
Hush or Silent Feature

- This Smoke Alarm has a built in Hush or Silence feature incorporated into the Test button
- If cooking or other non-hazardous sources cause the alarm to sound it can be temporarily silenced by pressing the test/hush button for three seconds
- The alarm then enters a dormant period for 10 minutes
- If the smoke density increases during this period (i.e. from a fire) the unit will go into alarm mode
- After the 10 minute dormant period the smoke alarm resumes normal operation and two beeps sound to indicate this.



Replacing the Backup Battery

- The secondary backup power for the Smoke Alarm is Supplied by a 9V carbon zinc or alkaline battery
- The battery should last at least one year under normal operating conditions
- It is recommended you replace the battery on a day you can remember every year i.e. birthday, daylight saving
- The Smoke Alarm has a battery low audible 'beep'. If the Smoke Alarm sounds a 'beep' once a minute, replace the battery with a new one.



- Turn off the mains power to the Smoke Alarm to replace the battery
- Twist counter-clockwise to remove from ceiling
- Unplug cable attachment
- Open battery compartment and replace battery
- Repeat in reverse order to re-install
- Test the alarm to ensure correct operation.

Recommended Batteries:

Duracell MN1604, Gold Peak 1604P/S/A, Energiser 522, Eveready 216
CAUTION: Always test the Smoke Alarm after replacing the battery.