

red SMOKE ALARMS

240V AC MAINS POWER HEAT ALARM WITH SEALED LITHIUM BATTERY BACKUP



MODEL: RHA240SL
(With Sealed Lithium Battery for Backup)

Main Features

- Interconnection up to 40 heat/smoke alarms
- 10 year lithium battery back up (included)
- Sound level 85dB at 3m
- Alarm condition. Audible signal pattern (ISO 7731)
- No need to change the battery
- Fast and easy installation
- Tested and approved to AS1603.3:2018
- Connects with RAC wireless wall controller & R10RF smoke alarms when fitted with RHARFM Wireless Module
- Connects with R240 and R240RC smoke alarms when fitted with RHARFM Wireless Module
- Connects with RHA10RF heat alarms when fitted with RHARFM Wireless Module

This instruction manual contains important information on the correct installation and operation of your heat alarm. Read this manual fully before attempting installation and retain for future reference.

SPECIFICATION

Power Source: 220-240Vac~ 50-60Hz with 3V battery back-up (battery included)
 Battery Back-up: 3V Sealed Lithium Battery
 Battery Back-up Life: 10 Year under normal usage
 In the event of a break in the mains supply the battery will give detector operation for 1 month minimum <40mA operation (In Alarm)
 Operation Current:
 Temperature Rating: 55-59°C Fixed temperature only
 Maximum Ambient: 40°C
 Recommended Coverage: 56m²
 Recommended Spacing: 13.5m
 Maximum Distance from wall: 7.7m
 Alarm Sound Level: 85 Decibels at 3metres (10ft)

LOCATING THE ALARMS

Heat alarms are intended to be supplementary to smoke alarms and should only be placed in areas where smoke alarms cannot be used. This heat alarm is a multiple station heat alarm and can only be connected to other alarms of the same make and type. This interconnect feature allows up to 40 heat alarms and / or smoke alarms to be connected together over 150 metres maximum, using either wired or wireless connection (when fitted with RARFM wireless module), and thus allowing all alarm to sound when any one, interconnected alarm is activated. This heat alarm cannot be connected to any other device such as a fire alarm panel.

This heat alarm gives a fire warning when the temperature at the unit reaches 55-59°C. It is ideal for kitchens, garages, cellars and other areas where there are normally high levels of fumes, smoke or dust which preclude the use of smoke alarms due to the risk of false alarms.

All the heat alarms and smoke alarms should be interconnected to ensure the early warning will be heard, particularly by somebody sleeping. A properly designed early warning fire system ensures an alarm is given to occupants of a dwelling before the escape routes become blocked with smoke. Therefore there must be Smoke Alarms along the escape routes as Heat Alarms would not give sufficient warning. However, a fire in a closed room (e.g. kitchen) adjoining the escape route, can eventually cause the corridor to become smoke-logged due to smoke leaking out from around the door before adequate warning can be given by detectors in the corridor. A heat Alarm in the closed room may give early warning of fire in that room

If your dwelling is on a single storey, for minimum protection you should fit a smoke alarm in a corridor or hallway between the sleeping and living areas. Place it as near to the living areas as possible and ensure the audible alarm can be heard when the bedrooms are occupied. See Figure 1 for examples.

If your dwelling is multi-storey, for minimum protection one smoke alarm should be fitted at the bottom of the staircase with further alarms fitted on each upstairs landing. This includes basements but excludes crawl spaces and unfinished attics. See Figure 2 for examples.

FIGURE 1 – SINGLE STORY DWELLING

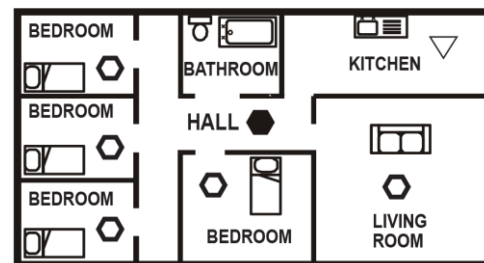
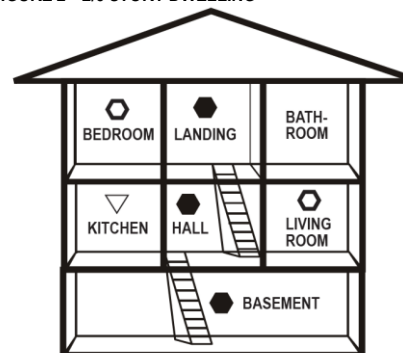


FIGURE 2 – 2/3 STORY DWELLING



- KEY**
- MAXIMUM PROTECTION (SMOKE)
 - MINIMUM PROTECTION (SMOKE)
 - ▽ MAXIMUM PROTECTION (HEAT)

POSITIONING THE ALARMS

Ceiling Mounting

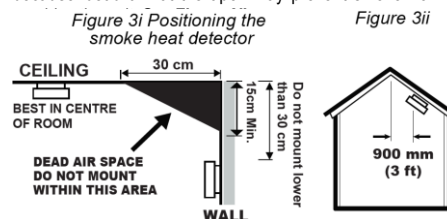
As hot smoke rises and spreads quickly, it is advisable to mount the unit on the ceiling in a central position. Avoid areas where there is no air circulation, e.g. corners of rooms and keep away from items which may prevent the free flow of air. Place the unit at least 300mm from any light fitting or decorative object which might obstruct smoke / heat entering the alarm. Keep at least 300mm away from walls. See Figure 3i.

Wall Mounting

Do not mount tight into the corners. Put the top edge of your smoke alarm between 150 and 300mm below the ceiling. Keep at least 300mm from room corners. See Figure 3i (Wall mounting is not recommended for heat alarms)

On a Sloping Ceiling

In areas with sloping or peaked ceilings install your heat alarm 900mm from the highest point measured horizontally because "dead air" at the apex may prevent smoke from



Areas to be avoided include the following :

- Situations where the temperature may fall below -10°C or rise above 40°C
- Humid areas such as bathrooms, kitchens, shower rooms where the relative humidity may exceed 90%
- Near a decorative object, door, light fitting, window molding etc., that may prevent smoke or heat from entering the alarm.

- Adjacent to or directly above hot components such as radiators or wall vents that can effect the direction of air currents.
- In very dusty or dirty environments such as workshops.
- Locate unit at least 1.5m and route wiring at least 1m away for fluorescent light fittings as electrical "noise" and/or flickering may affect the unit. Do not wire into the same circuit as fluorescent lights or dimmers.
- Do not locate in insect infested areas. Insects and contamination on the heat alarm sensor can increase its response time.

INSTALLING THE HEAT ALARM

WARNING – This heat alarm is mains powered and must be installed by a licensed electrician.

The circuit used to power the heat alarm must be a dedicated permanent supply that cannot be switched off accidentally by the normal user. Before installing ensure the electrical supply is isolated.

WARNING : To prevent injury, this heat alarm must be securely attached to the ceiling/wall in accordance with the installation instructions.

The heat alarm will function correctly either as a stand-alone alarm or interconnected. All interconnected heat alarms must be supplied from a single power circuit. A common neutral must be used for the interconnection to function.

- Disconnect the AC main power from the circuit that is going to be used.
- Having established the mounting location install a junction box suitable for locating the termination point. Ensure that there is no other electrical wiring or pipe work in the area adjacent to the mounting surface.
- **To fix the mounting base into position**
 1. Use a Screw driver to remove the Wiring Cover. **See Figure 5.**
 2. Connect the wires to the correct terminals (on the mounting base) to incoming supply. If the smoke/heat alarm are to be interconnected, link out the interconnection terminals. Ensure the screws are fully tightened. **See Figure 6.**
 3. Fix mounting base in position.
- **Wire connection instruction to the mounting base**
 1. Strip the Active/Neutral and Inter-connect (if used) wires.
 2. The alarm must be wired in accordance with National wiring codes.

LIVE	Connect to house wires coloured Brown, Red or marked with L.
NEUTRAL	Connect to house wires coloured Blue, Black or marked with N.
INTER-CONNECT	Normally not used except to hardwire interconnect to the mains smoke/heat (Garvan model GNS-Series.) Never use EARTH wire for interconnect wire.

WARNING: Do not connect the Interconnect wire to Live or Neutral.

- **Assemble alarm unit to the mounting base**
 1. Before assembling the alarm unit to the mounting base, test the correct operation of the heat alarm (operating from the battery only) by pressing the test button on the front of the alarm. The unit should emit a loud pulsating alarm.
 2. Assemble the alarm unit onto the mounting base by sliding it in according to the direction of the arrows.
 3. Restore the AC supply
 4. Test the correct operation of the heat alarm by pressing the test button on the front of the detector. The unit should emit a loud pulsating alarm.
- **To remove the alarm unit from the mounting base**
 1. Use a screw driver to release the alarm unit from the mounting base by pushing up the temporary latch with a screw driver. **See Figure 4**
 2. Slide the alarm unit out from the mounting base.

Figure 4 – Release Temporary Lock

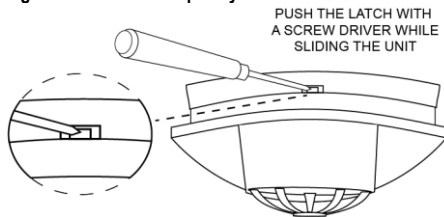


Figure 5 – Remove Wiring Cover

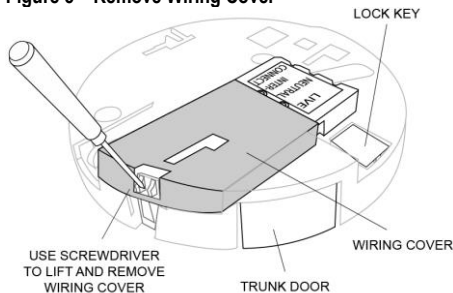
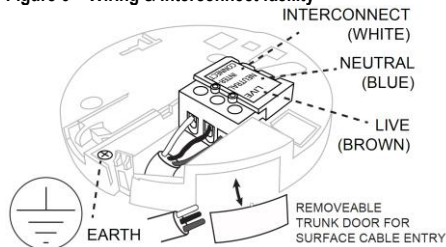


Figure 6 – Wiring & Interconnect facility



WARNING: Connection to the EARTH terminal is not needed for correct functioning of the heat alarm. It is just for conveniently terminating any earth supply wire coloured green or green/yellow. It does not provide protective Earth for the heat alarm.

OPERATING YOUR HEAT ALARM

Once the heat alarm has been installed a small GREEN indicator light (LED) should be visible through the alarm grill indicating that AC supply is healthy. A RED indicator light (LED) should also flash approximately once a minute to indicate the battery is healthy and the unit is operating properly.

When the heat alarm senses temperature above 60°C (plus or minus a few degrees), the unit will emit a loud (85dB) pulsating alarm until the temperature drops below 60°C. During the alarm condition, the LED indicator light (LED) will flash quickly.

TESTING YOUR HEAT ALARM

It is recommended that you test your heat alarm once a week to ensure the detector is working correctly.

Push and hold the test button for approximately 3 seconds. A loud pulsating alarm should sound and a RED flashing indicator light (LED) can be seen to indicate the correct function.

NOTE – for multiple interconnected Smoke / heat alarms, only the RED indicator light (LED) of the originating unit will flash rapidly. All other units in the interconnect system will sound an alarm but their RED indicator light (LED) will **NOT** flash. Test each alarm checking that the alarm is triggered on all other alarms installed.

MAINTAINING YOUR HEAT ALARM

Clean your heat alarm at least once every six months to prevent dust build up. This can be done using a vacuum cleaner with the brush attachment. Clean gently around the front grilled section and sides.

WARNING: The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

LOW BATTERY WARNING

If the heat alarm emits a short 'beep' once every 40 seconds the battery is at the end of its life and this detector should be replaced immediately. This low voltage warning will be given for at least 30 days. If the red indicator light (LED) does not flash every 40 seconds then replace the whole heat alarm unit. Note: the other interconnected units in the system which are NOT in low battery condition will also chirp, however only for a few seconds, once an hour, for as long as the detector with the "dead" battery beeps. The Heat alarm that chirps every 40 seconds is the only heat alarm that needs to be replaced.

WARNING: BATTERY IS NON-REPLACEABLE

The secondary backup power for the heat alarm is supplied by a non-removable rechargeable lithium battery. The battery is sealed in the heat alarm and cannot be replaced. If the red indicator light (LED) does not flash every minute then replace the heat alarm.

IMPORTANT SAFEGUARDS

Installation of your heat alarm is only one step in your safety plan. Other important steps should be taken to further improve your safety:-

Install the heat alarm properly, following this instruction manual
 Test your Heat Alarm weekly
 Do not smoke in bed
 Keep matches & lighters away from children
 Store flammable materials in a proper manner and never use them near naked flames or sparks
 Maintain emergency equipment such as Fire Extinguishers, escape ladders etc and ensure all occupants know how to use them correctly.

- Plan an escape route/s from your building in advance and ensure all occupants are aware of them. Re-enforce this awareness periodically through-out the year.
- Make sure escape routes remain free of any obstructions.

WARNING: IF THERE IS ANY QUESTION AS TO THE CAUSE OF AN ALARM IT SHOULD BE ASSUMED THAT THE ALARM IS DUE TO AN ACTUAL FIRE AND THE DWELLING SHOULD BE EVACUATED IMMEDIATELY.

THIS PRODUCT IS A SEALED UNIT AND CANNOT BE REPAIRED – IF THE UNIT IS TAMPERED WITH IT WILL INVALIDATE THE WARRANTY. IF THE UNIT IS FAULTY PLEASE RETURN IT TO YOUR ORIGINAL SUPPLIER WITH YOUR PROOF OF PURCHASE.

LIMITATIONS OF THE HEAT ALARM

Heat Alarms are not designed to be life saving devices against fire and smoke. In most fires, hazardous levels of toxic gases and smoke can build up before the Heat Alarm will operate. In cases where life safety is an issue, Heat Alarms should only be used to provide an added source of protection.

Heat alarms cannot provide an alarm if heat does not reach the alarm. Therefore, Heat Alarms may not sense fires starting on the other side of a closed door or on a different floor. Smoke alarms should be installed in each sleeping area, on every level of a home and be interconnected with each other and the heat alarms.

Home fires develop in different ways and are often unpredictable. No one type of alarm is always best, and a given alarm may not always provide warning of a fire.

YOUR HEAT ALARM GUARANTEE

These Heat Alarms are guaranteed to be free from defects in materials and workmanship under normal use and service for a period of ten years from date of manufacture. The company will not be obligated to repair or replace parts which are found to be in need of repair because of misuse, damage or alterations occur after the date of purchase. The liability of the company arising from the sale of this Heat Alarm shall not in any case exceed the cost of replacement of Heat Alarm and in no case shall the company be liable for consequential loss or damages resulting from the failure of the Heat Alarm. Interconnection to any other brand of heat or smoke alarm apart from RED, will void warranty on this product

RED SMOKE ALARMS PTY. LTD SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE, OR ANY SPECIAL INCIDENTAL, CONTINGENT OR CONSEQUENTIAL DAMAGE OF ANY KIND RESULTING FROM A FIRE. THE EXCLUSIVE REMEDY FOR BREACH OF THE LIMITED WARRANTY CONTAINED HEREIN IS THE REPAIR OR REPLACEMENT OF THE DETECTIVE PRODUCT AT RED SMOKE ALARMS PTY. LTD OPTION. IN NO CASE SHALL RED SMOKE ALARMS PTY. LTD'S LIABILITY UNDER ANY OTHER REMEDY PRESCRIBED BY LAW EXCEED THE PURCHASE PRICE. YOUR HEAT ALARM IS NOT A SUBSTITUTE FOR PROPERTY, DISABILITY, LIFE OR OTHER INSURANCE OF ANY KIND. APPROPRIATE COVERAGE IS YOUR RESPONSIBILITY. CONSULT YOUR INSURANCE AGENT.

This does not affect your statutory rights.

This alarm is only suitable for single occupancy private dwellings only and not intended for multi occupancy private dwellings or commercial or industrial dwellings.

Alternative Energy Sources - (Wind, Solar, UPS etc.) This product is designed to be connected to a Pure or True Sine Wave 230V AC supply. If connecting to a power source that utilises an inverter, e.g. PV solar panel, the Total Harmonic Distortion (THD) must be less than 5%. In if doubt please check with the manufacturer of the inverter. This also applies to battery powered UPS (Uninterruptible Power Supply) inverters.

Waste electrical products should not be disposed of with normal household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

Red Smoke Alarms reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in this catalogue are correct, no warranty is given in respect these of and the company shall not be liable for any error therein.

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