



# SMOKE ALARMS

## Data Sheet



### R240

Smoke Alarm, Photoelectric, Surface Mount, 230V Battery Power

#### Key Information

Product brand	Red Smoke Alarms
Product or component	Smoke Detector
Device application	Early detection of smouldering fires and open fires
Electronic sensor type	Photo-electric sensor
Colour	White (RAL 9003)
Quantity per set	Set of 1
Type of packing	Carton

#### Complementary

Supply	Mains
Rated Supply Voltage	220...240 V AC
Backup Type	Battery
Battery Life	1 Year
Output Voltage Limits	Interconnection : 6.5...20V Low battery at 6.9... 7.5V
Detection Type	Smoke
Function Available	Hush Function Self-test of smoke detection Local alarm
Control Type	Button for test/ hush function
Number of Devices	Up to 40 pieces
Operating Distance	N/A indoor use line of sight 140m in free field
Response Time	Approx. 8s
Noise Level	85 dB at 3m minimum
Time Delay Range	10 min for hush
Local Signal	Sound : Alarm Sound : Signal Visual : 1 LED (red) for warning and low battery Visual : 1 LED (green) for ON status
Type of Installation	Indoor
Device Mounting	Surface
Mounting Support	Wall-mount Ceiling
Fixing Mode	By screws
Diameter	140 mm
Height	55 mm

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.

Neither Red Smoke Alarms PTY. LTD nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

Ambient Air Temperature for Operation	0...45°C
Relative Humidity	5...95%
Product Certifications	SAI
Standards	AS 3786 : 2014 / amdt 2:2018

## Offer Sustainability

Sustainable Offer Status	Not Green Premium Product
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R240**

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# SMOKE ALARM R240

240V, Mains Power Photoelectric Smoke Alarm with 9V Battery Backup



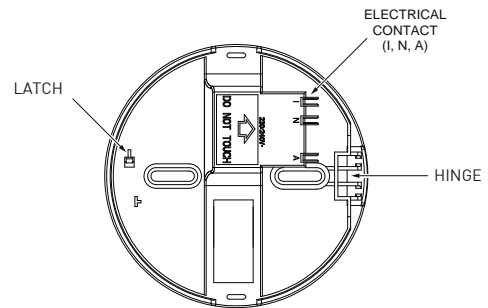
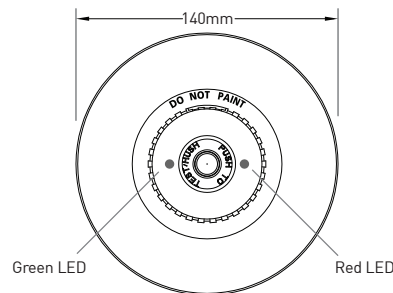
## INSTALLATION INSTRUCTIONS

**PLEASE NOTE:** READ ALL INSTRUCTIONS BEFORE INSTALLATION. NO USER SERVICEABLE PARTS INSIDE THIS SMOKE ALARM.

### Specifications:



Main Power Source	220-240V, 50Hz
Backup Battery	9V carbon zinc or alkaline battery
Operating Current	≤40 mA
Sensing Type	Type A Photoelectric smoke alarm - contains NO radioactive material
Temperature Range	0°C to 45°C
Humidity Range	5% to 95%
Interconnecting	40 alarms for wireless 40 alarms wired over 150 metres maximum
Terminals	Active, Neutral, Loop and Interconnect terminals, each accommodates 2 × 1.5 mm <sup>2</sup>
Sound Level	85dB at three metres minimum
Alarm Condition	Audible signal pattern (ISO 8201)
Visual Indicators	Green LED for mains power ON Red LED for warning and low battery indication
Approval	AS 3786:2014, UL S36341



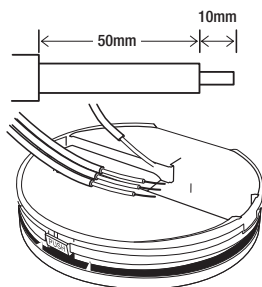
### Installation & Interconnecting Smoke Alarms:

- Strip the Active/Neutral and Interconnect (if used) wires back to the strip length shown below.
- Connect the wires to the correct terminals on the base and ensure the terminal screws are fully tightened.
- Screw the mounting base onto the ceiling or wall using plugs and screws.
- Clip the smoke alarm on to the base and install the 9V battery. The smoke alarm will not latch to the base unless the battery is installed.
- Turn on the mains power and check the green and red LED function. The Green LED should illuminate steady to show mains power present. The Red LED will pulse every 40-60 seconds to indicate correct operation and that the 9V battery is charged.
- Press the Test/Hush button for 3 seconds to check that the alarm functions. Installation is not complete until both LEDs are functioning correctly.

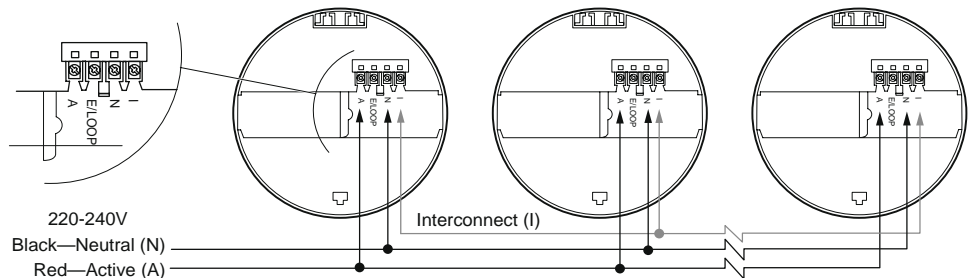
Use a minimum of 1.0 mm<sup>2</sup> 250 V insulated wire for all wiring, including interconnecting wiring.

#### NOTICE - EQUIPMENT INSTALLATION COMPLIANCE

This smoke alarm must be installed in accordance with the National Electrical Code and any local state legislation requirements. Failure to follow these instructions may result in a non-compliant installation.



TERMINAL	
A:	Active / Line
E/LOOP:	Earth or Loop
N:	Neutral
I:	Interconnect



### Battery & Battery Replacement:

#### Battery Instruction

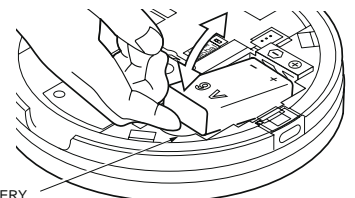
- The smoke alarm uses one 9V battery to automatically provide back-up power to the alarm if AC power fails. The battery will operate the alarm for approximately one to three months with AC power off.
- The battery should last at least one year under normal operating conditions. Recommended batteries included: Energiser 522
- To replace battery, unlatch unit from mounting base and remove the battery from compartment. Replace the old battery with a fresh one and close unit. Verify that the green LED is on.

#### Battery Replacement

- The battery should be replaced once a year.
- Smoke alarm cannot be closed properly without battery in place.

#### IMPORTANT

The operation of the smoke alarm must test with the test facility whenever the batteries are replaced.



BATTERY REMOVAL FINGER SLOT

#### IMPORTANT

##### EQUIPMENT INSTALLATION HAZARD

- All interconnected smoke alarms must be supplied from the same circuit.
- A common Neutral must be used for the Interconnect to operate.
- DO NOT connect the Interconnect wire to Active or Neutral.
- Maximum of 40 interconnected smoke alarms.
- Only Red smoke alarms can be interconnected.

**WARNING:** Failure to follow these instructions may result in equipment damage or injury.

#### CAUTION

- Red LED flashes very quickly (3 times per second) without sound. This means neutral connection is missing or wiring is incorrect. Please check wiring and connection of smoke alarms with flashing red LED and rectify wiring issue immediately.
- An optional wireless base (RWB) may be purchased separately if wired connection is not possible.

#### CAUTION

- Alternative Energy Sources - (Wind, Solar, UPS etc.) This product is designed to be connected to a Pure or True Sine Wave 230V AC supply.
- Alarm should not be connected to a power source that utilises an inverter, e.g. PV solar panel, the Total Harmonic Distortion (THD).
- Light Dimmer Circuits - The Alarms must not be powered from a light dimmer circuit

## Operation and Testing

### OPERATION

Once the mains power (220-240V) is connected and the 9V battery is installed correctly, the smoke alarm is operating.

### Once Smoke Is Detected

The smoke alarm will sound a loud alarm (85 dB) 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 is illuminated when the mains power (220-240V) is on.

### Memory Function

If one of the alarm indicators (RED LED) is flashing every 4 seconds, it indicates that a smoke alarm has previously been activated.

**Important information:** After the Test/Hush button has been pressed, wait 10 minutes before any additional testing is conducted to avoid any false alarm responses as product has reduced sensitivity during this period. Refer to 'Hush or Silence Feature' on the first page

## Hush or Silence Feature

- This smoke alarm has a built-in Hush or Silence feature incorporated into the Test/Hush 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 3 seconds.
- The alarm then enters a dormant period for 10 minutes.
- After the 10 minute dormant period, the smoke alarm will resume normal operation.

Note: After the Test/Hush button has been pressed, wait 10 minutes before any additional testing is conducted to avoid any abnormal responses as the smoke alarm is not sensitive to smoke during this period.

## Recommended Locations of Alarms:

- Install at least one alarm for each bedroom
- Install at least one alarm to protect any stairway
- Install at least one alarm on every floor level.
- Install an alarm in every room where a smoker sleeps as additional protection.
- Install an alarm in every room where electrical appliances are operated (i.e. portable heaters or humidifiers) as additional protection.
- Install an alarm in every room where someone sleeps with the door closed as additional protection. The closed door may prevent the alarm from waking the sleeper.
- When mounting an alarm on the ceiling install it at a minimum of 300mm from the side wall and 600mm from any corner (see diagram).
- When mounting an alarm on a wall, install it at a minimum of 300mm from the ceiling level but not more than 600mm from the ceiling level and any corner (see diagram)
- When mounting an alarm at the apex of a sloping ceiling it should be located a minimum of 500mm from the apex but should not exceed 1500mm (see diagram).

## Avoid These Locations:

Do not place alarm in the following locations:

- The garage. Gas released when you start your automobile may cause false alarms.
- In front of forced air supply ducts used for heating and air-conditioning and other high airflow areas.
- In the peak of an "A" frame type of ceiling.
- In areas where temperatures may fall below +5°C or rise above +50°C.
- In dusty areas, dust particles may cause smoke alarm to false alarm or fail to alarm.
- We do not recommend installation in or directly adjacent to areas of high condensation such as bathrooms & laundries due to potential for false alarms.
- Kitchen/cooking areas.

## Maintenance:

The smoke alarm is virtually maintenance free. However, under dusty or greasy conditions, a vacuum cleaner may be used to clean the exterior of unit (including slots on cover).

**DO NOT IMMERSE IN OR SPRAY WITH HOUSEHOLD CLEANERS.**

**If the unit gives a chirping sound every 60sec the battery may need to be replaced.**

### TESTING

**TEST THE SMOKE ALARM ONCE PER MONTH TO ENSURE PROPER OPERATION**

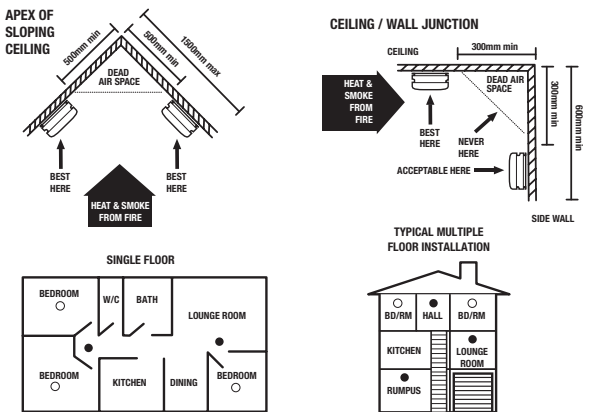
Test by pushing the Test/Hush button on the smoke alarm for three seconds until the alarm sounds. The alarm will sound if all electronic circuitry, horn and battery are working.

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.

**Never use an open flame of any type to test your alarm. Check that all interconnected smoke alarms operate during the test.**

## Installation of Smoke Alarms:



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

**IMPORTANT: INCORRECT ORIENTATION OF SMOKE ALARMS MAY DECREASE OPERATIONAL EFFECTIVENESS**

## Troubleshooting Guide:

Condition	Meaning	Resolution / Action
One audible beep every 40 to 60 seconds.	Low battery warning	<ul style="list-style-type: none"> <li>• Test and check the mains power connection.</li> <li>• Make sure the transport disconnect interlock is removed.</li> </ul>
Two audible beeps every 40 to 60 seconds.	The smoke alarm may not be operating correctly.	<ul style="list-style-type: none"> <li>• Clean smoke alarm according to "Maintenance, Repairs and Service". If the problem persists, contact an electrician for replacement.</li> </ul>
Red LED flashing every 4 seconds	The smoke alarm has previously been activated.	<ul style="list-style-type: none"> <li>• If there is evidence of an alarm event, be sure to investigate further</li> </ul>

## Warranty:

Red Smoke Alarms has a service life of at least 10 years under normal use. Red Smoke Alarms warrants this product to be free from defects in materials and workmanship for a period of ten (10) years from the date of installation. Refer to the Red Smoke Alarms terms of sale for full warranty conditions. <http://www.redsmokealarms.com.au>

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 and other information in this catalogue are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein.

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