

9V Wireless Smoke Detector

--- Ionisation type ---

FEATURES

- 9 Volt Alkaline battery operation
- TEST button for circuitry and horn testing.
- Auto-test feature with red LED indication.
- Rapid flashing red LED alarm light indication .
- Twist on twist off mounting base for easy installation and maintenance.
- Suitable for wall and ceiling mount.
- Loud 85dB pulsating alarm.
- Tamper resistant
- Battery "chirp" indication when battery is low.



SPECIFICATIONS

Detection Method	Dual ionisation chamber.
Circuitry	Complementary MOS integrated circuit providing maximum stability and minimum power consumption.
Sensitivity	Preset to normal 1% obscuration level.
Operating temperature range	5°C to 45°C
Humidity range	5 - 95% R.H.
Alarm	Sound level at 85dB at 3 metres.
Low battery indicator	Sounds a "chirp" at 30 - 40 second interval for minimum of 7 days to a maximum of 30 days to signal a low battery.
Alarm Duration	As long as smoke is present. Automatically resets when smoke is clear.
Power Requirement	9 Volt dc battery
Transmission	Not above 25mW
Range	Approximately 50m line of sight (subject to area and conditions)
Transmitting frequency	433.925MHz
Compliance	Tested and passed to AS 3786-1993 EMC EN 50081-1 (smoke sensor only without transmitter module)
Dimension	36mm(D) x 125mm(Diam)

PRODUCT ORDER CODE: SMODETW

OPERATION

The SMODETW is a high quality Gas Ionisation Smoke Detector, which is battery operated and communicates with a receiver via radio transmission (RF).

This detector is easy to install, provides excellent detection sensitivity and has a long battery life (approximately 3 years).

The SMODETW can transmit three different codes to your RXPRO Receiver:

1. Alarm
2. Supervision
3. Low Battery

Whenever the smoke detector sounds, (i.e when a fire is detected or when you push & hold the test button on the detector), the alarm code signal will be transmitted to your RXPRO receiver.

LOW BATTERY WARNING

This Smoke Detector has an automatic low battery warning system. When the battery is getting low, the detector will emit a warning chirp every 40 seconds (approx.) for a minimum of 7 days. Replace the battery as soon as possible.

Replacement Battery: Use only a good quality 9 Volt Alkaline Battery.

- The RXPRO receiver can be programmed to activate a "low battery" output to indicate to your alarm panel that the detector has a flat battery.

SUPERVISION

All of your individual wireless detectors (PIR's, Reeds or Smoke Detectors) can send a supervision report to your RXPRO receiver to confirm that they are fully functional.

If supervision mode is enabled for a particular channel, the receiver will be expecting to receive the supervision code from the detector learnt into that respective channel every 2.4 hours i.e. at least 10 reports per day, per detector.

The RXPRO only requires one report from each detector during the 24 hour period to satisfy the supervision criteria. An extra 9 reports are still given to ensure that the supervision report is received.

If all 10 supervision reports are missed from one detector during the 24 hour time frame, then the supervision output will be activated.

NOTE: If you remove a detector, you must disable the supervision report for that channel, otherwise the supervision output will be activated as detailed below. Please refer to your RXPRO Instruction Manual.

INSTALLATION

IMPORTANT: READ ALL INSTRUCTIONS BEFORE INSTALLATION.

Do not repair the smoke alarm yourself.

WARNING: UNLESS A 9VDC BATTERY IS INSTALLED IN THIS SMOKE ALARM, IT WILL NOT OPERATE.

The smoke alarm uses an extremely small amount of a radioactive element in the dual ionisation chamber.

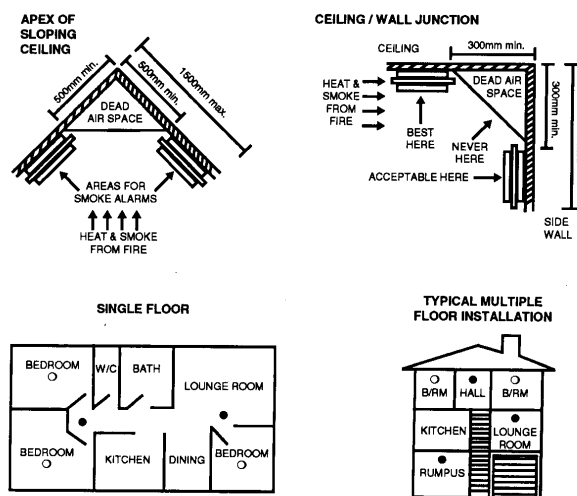
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1. RECOMMENDED LOCATIONS OF ALARMS

- 1.1 Locate an alarm for each separate sleeping area in the immediate vicinity of the bedrooms. Try to protect the exit path as the bedrooms are usually farthest from an exit. If more than one sleeping area exit, locate additional alarms in each sleeping area in the immediate vicinity bedrooms. (refer to drawings overleaf)
- 1.2 Locate additional alarms to **PROTECT** any stairway as stairways act like chimneys for smoke and heat.
- 1.3 Locate at least one alarm on every floor level.
- 1.4 Locate an alarm in every room where a smoker sleeps.
- 1.5 Locate an alarm in every room where electrical appliances are operated (i.e. portable heaters or humidifiers).
- 1.6 Locate an alarm in every room where someone sleeps with the door closed. The closed door may prevent the alarm from waking the sleeper.
- 1.7 Smoke, heat and other combustion products rise to the ceiling and spread horizontally. Mounting the alarm on the ceiling in the center of the home places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction.
- 1.8 For mobile home installation select location carefully to avoid thermal barrier that may form at the ceiling. For more details see Mobile Home installation overleaf.
- 1.9 When mounting alarms on the ceiling locate it at a minimum of 300mm from the side wall and 300mm from any corner.
- 1.10 When mounting alarms on a wall, use an inside wall with the alarm of a maximum of 300mm below the ceiling but not exceeding 600mm.
NOTE: The performance of smoke alarms mounted on walls is unpredictable and that this mounting is not recommended when ceiling mounting can be implemented.
- 1.11 When mounting the alarm at the apex of a sloping ceiling it should be located a minimum of 500mm from the apex but not exceeding 1500mm. (See diagram).
- 1.12 Locate smoke alarm at both ends of a bedroom hallway if the hallway is more than 9m long.
- 1.13 We do not recommend installation in areas of high condensation such as bathrooms due to potential for false alarms.

INSTALLATION OF SMOKE ALARM:



IMPORTANT: INCORRECT ORIENTATION OF SMOKE ALARMS MAY DECREASE OPERATIVE EFFECTIVENESS

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

INSTALLATION OF SMOKE ALARM

2. MOBILE HOME INSTALLATION

- 2.1 Mobile homes built in the past five to seven years have been designed and insulated to be energy efficient. Install smoke alarms as recommended (refer to recommended locations).
- 2.2 In 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 600mm from the ceiling.
- 2.3 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.

3. AVOID THESE LOCATIONS

Do not locate your alarm in:

- 3.1 the garage - products of combustion are present when you start your automobile.
- 3.2 in front of forced air ducts used for heating and air conditioning and other high air flow areas.
- 3.3 in the peak of an "A" frame type of ceiling.
- 3.4 in areas where temperatures may fall below 5°C or above 45°C.
- 3.5 in dusty areas, dust particles may cause smoke alarm to false alarm or fail to alarm.
- 3.6 in very humid areas or near a bathroom, moisture can cause false alarm.

4. FALSE ALARMS

- 4.1 This smoke alarm is designed to minimize false alarms. Smoking will not normally set off the alarm unless smoke is blown directly into the alarm.
- 4.2 Combustion particles from cooking may set off the alarm if the alarm is located close to the kitchen cooking surface.
- 4.3 Large quantities of combustion particles are generated from spills or broiling.
- 4.4 An alarm with a Hush Control device is preferable near a kitchen environment for this reason.
- 4.5 If the alarm does sound, check for fire first. If a fire is discovered, escape quickly and call the Fire Brigade. If no fire is present, check to see if one of the reasons listed above may have caused the alarm.

5. INSTALLATION

- 5.1 CAUTION: THIS UNIT IS SEALED. THE COVER IS NOT REMOVABLE!
- 5.2 A mounting plate is provided on the back of alarm.
- 5.3 Remove the mounting plate from the back of the alarm by holding the mounting plate and twisting the alarm in the direction indicated by the "OFF" arrow on the alarm cover.
- 5.4 To insure aesthetic alignment of the alarm with the hallway or wall, the "A" line on the mounting plate must be parallel with the hallway when ceiling mounting or horizontal when wall mounting.
- 5.5 After selecting the proper smoke alarm location as described in Section 1, attach the mounting plate to the ceiling as shown in Figure 1. For wall mounting see Figure 2. Place mounting plate on the wall. Be sure the "UP FOR WALL MOUNTING" text and arrow are facing up. Use the screws and anchors provided to secure the mounting plate.
- 5.6 Battery compartment markings are provided on the inside of the battery door. To ensure proper installation of the SMOKE ALARM battery follow the instructions.
- 5.7 When installing the battery, press the battery reminder finger down into the battery compartment and install the battery (see Figure 3).

CAUTION! IF THE BATTERY REMINDER FINGER IS NOT HELD DOWN IN THE BATTERY COMPARTMENT BY THE BATTERY, THE BATTERY DOOR WILL NOT CLOSE AND THE UNIT WILL NOT ATTACH TO THE MOUNTING PLATE.

- 5.8 Alignment marks are provided on the edge of the mounting plate and the alarm. After installing the mounting plate, place the alarm on the mounting plate with the alignment marks line up. Twist the alarm in the direction indicated by the "ON" arrow on the alarm cover (see Figure 4) until lock in place.

When mounting in a hallway the "A" line should be parallel with the hallway.

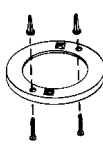


Fig. 1

When wall mounting the "A" line should be horizontal and the UP FOR WALL MOUNTING arrow must be pointing up

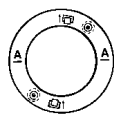


Fig. 2

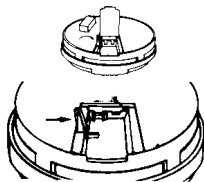


Fig. 3

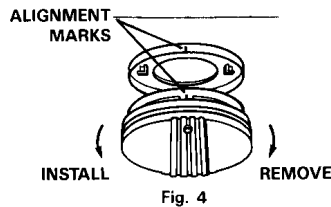


Fig. 4

- 5.9 USING TAMPER RESIST LOCKING PIN: To make your smoke alarm somewhat tamper resistant, a locking pin has been provide in the bag with the screws and anchors. Using this pin will the alarm from the mounting plate. To use the pin, insert it into the hole in the side of the alarm after the alarm has been installed on the mounting plate (see Figure 5).

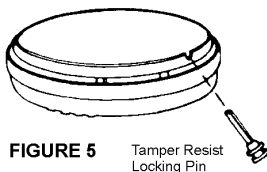


FIGURE 5

Tamper Resist Locking Pin

NOTE: THE TAMPER RESIST PIN WILL HAVE TO BE REMOVED IN ORDER TO CHANGE THE BATTERY. USE A LONG NOSE PLIERS TO PULL THE PIN OUT OF THE HOLE. IT IS NOW POSSIBLE TO REMOVE THE ALARM FROM THE MOUNTING PLATE.

5.10 After installation, test your alarm by depressing and holding down the test button for several seconds. This should sound the alarm (See section 6.2).

CAUTION! EARLY WARNING FIRE DETECTION IS BEST ACHIEVED BY THE INSTALLATION OF FIRE DETECTION EQUIPMENT IN ALL ROOMS AND AREAS OF THE HOUSEHOLD AS FOLLOWS ; SMOKE ALARMS INSTALLED IN EACH SEPARATE SLEEPING AREA (IN THE VICINITY OF-BUT OUTSIDE OF THE BEDROOM) AND HEATOR SMOKE ALARMS IN THE LIVING ROOM, DINING ROOM, KITCHEN, HALLWAYS, ATTIC, FURNACE ROOMS, CLOSETS, UTILITY STORAGE ROOMS, BASEMENTS AND ATTACHED GARAGES.

6. OPERATION, TESTING AND MAINTENANCE

6.1 OPERATION: The smoke alarm is operating once the battery is connected. When products of combustion are sensed, the unit sounds a loud pulsating alarm until the air is cleared.

6.2 TESTING: We recommend a periodic WEEKLY battery test. Test by pushing test button on cover and holding button down for a minimum of 2 seconds. This will sound alarm if all electronic circuitry, horn and battery are working. If no alarm sounds the unit has a defective battery or other failure.

WARNING: Test smoke alarm operation in Mobile Home/Caravan after vehicle has been in storage, before each trip and at least once per week during use.

6.3 MAINTENANCE: The smoke alarm is virtually maintenance free. However, periodically, vacuum hose should be used to clear the sensing chamber of dust. Do not remove smoke alarm cover when vacuum is used.

6.4 BATTERY REPLACEMENT: The smoke alarm is powered by one 9V Alkaline battery. The battery should provide operation for at least 2-3 years under normal operating conditions. The smoke alarm has a low battery monitoring indicator which will 'chirp' at approximately 40 second interval for a minimum of 7 days. Replace battery when chirping occurs.

WARNING: Use only the battery specified. Use of different batteries may cause a malfunction of the smoke alarm.

7. REPAIRS AND SERVICES

7.1 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.

Please note: It is illegal to send radioactive material through Australia Post. Check for similar conditions with any forwarding agency before sending this article. Return the unit to:

Rhino Electronic Security

9 Hannabus Place

McGraths Hill NSW 2756 AUSTRALIA

WARNING: DO NOT TAMPER WITH RADIOACTIVE SOURCE

8. GOOD SAFETY HABITS

The use of this product should not be seen as a substitute for basic safety precautions in the prevention of FIRE.

There are situations where a smoke alarm may not be effective in protecting against fire risks such as:

- 8.1 smoking in bed;
- 8.2 leaving children home alone; and
- 8.3 cleaning with flammable liquids, such as petrol.

9. THE LIMITATIONS OF SMOKE ALARMS

9.1 Smoke alarms are devices that can provide early warning of possible developing fires at reasonable cost.

9.2 Alarms have sensing limitations. Ionisation type alarms offer a broad range of fire sensing capability but are better at detecting fast flaming fires than slow smouldering fires.

9.3 Photo-electric type alarms sense smouldering fires better than flaming fires. 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.

9.4 Smoke alarms have certain limitations. For battery powered smoke alarms, the battery must be in good condition and installed properly.

9.5 Smoke alarms must be tested regularly to make sure the batteries and alarm circuit are in good operating condition.

9.6 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.

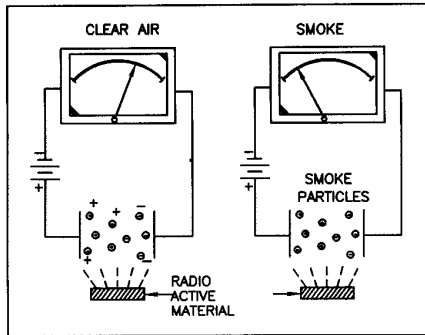
9.7 If the alarm is located outside the bedrooms, or on a different floor, it may not wake up a sound sleeper. A smoke alarm in the bedroom, therefore, is also recommended.

9.8 Smoke alarms have been significant in saving lives in many parts of the world. However, U.S. Government research indicates that they may not give early enough warning in up to 35% of fires. Hence, the use of this product does not substitute for basic prevention and total protection.

9.9 Although smoke alarms can help save lives by providing early warnings of a fire, they are not a substitute for an insurance policy.

OPERATING PRINCIPLES OF IONISATION SMOKE ALARMS

IONISATION CHAMBER



A man-made radio-active element, Americium 241 is used in this design. This element ionises the air round it and as a result, excellent conductivity is possible (refer to illustration showing 'Clear Air'). Current supplied by either the mains power (where applicable), or the battery would pass through the gap with ease without causing any alarm. However, in the event of particles arising from combustion or dust particles (refer illustration showing 'Smoke') entering the Sensing Chamber, it encapsulates the ionised air. This interaction causes an increased resistance to conductivity. When this occurs, the alarm is activated.

10. DEVELOP AND PRACTICE A PLAN OF ESCAPE

Basics of an escape plan:

- 10.1 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.
- 10.2 Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
- 10.3 Determine a place outside your home where all of you can meet, if a fire occurs.
- 10.4 Familiarize everyone with the sound of the smoke alarm and practice leaving your home when they hear it.
- 10.5 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 that they know what to do!

11. WHAT TO DO WHEN THE ALARM SOUNDS

- 11.1 Leave immediately by your plan of escape. Every second counts, so don't waste time getting dressed or picking up valuables.
- 11.2 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 inside door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- 11.3 Stay close to the floor if air is smoky. Breathe shallowly through a wet cloth if possible.
- 11.4 Once outside, go to your selected meeting place and make sure everyone is there.
- 11.5 Call the Fire Brigade from your neighbour's home - not from yours!
- 11.6 Don't return to your home until officials say that it is all right to do so.

For Further information on fire safety contact your local Fire Brigade.

13. WARRANTY AND LIABILITY

- 13.1 Cornick Pty Ltd ACN 001 621 610 (T/as Rhino Electronic Security) warrants that for 12 months from the date of purchase of the smoke alarm, it will repair or replace the smoke alarm (at the option of Rhino) due to any manufacturing defect, at the cost of Rhino (excluding any labour costs relating to removal or re-installation of product, and transport costs). This warranty does not extend to the battery.
- 13.2 This warranty shall not apply to the smoke alarm if it has been damaged, modified, abused or altered after the date of purchase, or if it fails to operate due to improper maintenance.
- 13.3 To the extent permitted by law, the liability of Cornick Pty Ltd arising from the sale of this smoke alarm or under the terms of this limited warranty shall not in any case exceed the cost of replacement of smoke alarm and subject to this clause. In no case shall Cornick Pty Ltd be liable for consequential loss or damages resulting from the failure of the smoke alarm 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 owner's manual.
- 13.4 To the extent permitted by law, Cornick 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 battery.
- 13.5 This warranty is an addition to and does not exclude the rights of consumers under the Australia Trade Practices Act 1974, or any other law which may not be excluded.

Warranty Form

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 : _____

This smoke alarm has a recommended service life of at least 10 years under normal conditions of use.

THIS SMOKE ALARM HAS BEEN TESTED AND PASSED TO AS3786

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

<p>9µCi  Am 241</p>	<p>CAUTION : RADIOACTIVE MATERIAL WHEN THIS PRODUCT IS NO LONGER REQUIRED DISPOSE BY RETURNING TO PSA PRODUCTS PTY LTD. 17 MILLICENT STREET, BURWOOD, VICTORIA 3125, AUSTRALIA. OR YOUR STATE HEALTH DEPARTMENT. ALTERNATIVE DISPOSAL IS NOT PERMITTED.</p>
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