SMOKE ALARM USER MANUAL

MODEL NUMBER: EP-VC-240-10

Thank you for choosing Emerald Alarms.

This leaflet contains important information on the correct installation and operation of your smoke alarm.

Please read all the information before commencing installation and retain for future reference.

This unit has been designed to meet the latest safety standards demanded in Australia and complies with the requirements of AS3786:2014.

AS3786:2014

POWER:	220~240V AC 50-60Hz 10 years Lithium battery backup
OPERATION CURRENT:	<100mA
BATTERY LIFETIME:	10 years
ALARM VOLUME:	>85dB (A) at 3 meters
ALARM SENSITIVITY:	0.1-0.16dB/m
HUSH/SILENCE TIME:	approx. 8 minutes
INTERCONNECTION:	up to 40 smoke alarm/s, hardwired
COMPLY WITH:	AS3786: 2014
SOUND PATTERN:	ISO8201 (Bl 0.5s - pause 0.5s - Bl 0.5s - pause 0.5s - Bl 0.5s - pause 1.5s, with the red LED flash, repeat this alarm pattern
WIRELESS INTERCONNECTION ALARM SOUND PATTERN:	Bl - Bl - pause 0.5s, Bl - Bl - pause 0.5s, Bl - Bl - pause 1.5s, without the red LED flash, repeat this alarm pattern

DESCRIPTION

The unit is a photoelectric 220~240V, AC 9V DC battery back-up smoke alarm device. It is particularly sensitive for detecting visible micro-particles (associated with smoldering fires) and reacts faster than ionization alarms.

An example of such smoldering fires is a cigarette burning in a couch or bedding a common cause of devastating blazes.

Please note this device does not detect flames, heat, carbon monoxide or other hazardous gases. It has many advanced features and an extended operational life with the included battery.
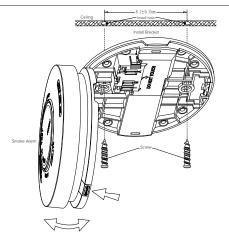
To enable interconnection with other Emerald RF smoke alarms add an RF module (EP-VC-RF-MOD).

ASSEMBLY

Failure to follow these instructions may result in injury and equipment damage/malfunction.

1. Smoke alarm/s must be installed by a licensed electrician.

2. All interconnected smoke alarms must be supplied from the same circuit.

3. A common neutral must be used for the interconnect to operate.

4. DO NOT connect the interconnect wire to active or neutral.

5. A maximum of 40 smoke alarms can be installed on one circuit (wired interconnection only).

6. Alarm will not attach to mounting bracket unless battery is installed correctly.

> **Warning:** This smoke alarm is not suitable for wall (vertical) mounting.

LOCATIONS TO AVOID

1. Don't place alarms in bathrooms, kitchens, garages or other rooms where the alarm may be triggered by steam, condensation and normal smoke/heat from appliances.

2. In areas with high humidity, like bathrooms or areas near dishwashers or washing machines, install at least 3m away from these areas.

3. Near air returns or heating and cooling supply vents, install at least 1m away from these areas. The air could blow smoke away from the detector, interrupting its alarm.

4. In rooms where the temperature may fall below 0°C or rise above 40°C (due to nuisance/false alarm activation).

5. In extremely dusty, dirty, or insect infested areas where particles may interfere/obstruct with Alarm operation.

6. Away from air conditioning or ventilation grilles/louvers.

LOCATION OF SMOKE ALARMS

For maximum protection smoke alarms should be installed in every room (except areas described in the previous section 'Locations to Avoid') to ensure people in the home will be able to hear and respond to the alarm. At the very least install one smoke alarm on every floor.
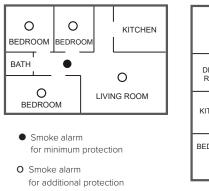
If you suspect a household member may not hear this smoke alarm i.e. outdoor or indoor noise, sound sleepers, drug or alcohol usage, the hard of hearing, etc install and maintain a specialty smoke alarm device.
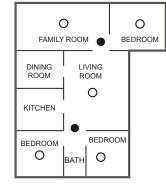
NOTE: In Australia each state has a different legislation when it comes to smoke alarms. Please visit the relevant authority in your state for specific legislation requirements.

TYPICAL SINGLE-STORY HOME

For maximum protection, a smoke alarm should be installed on the ceiling of each bedroom, living area, and hallway. Where a hallway is more than 10 meters long install a smoke alarm at each end. If there is a basement install a smoke alarm on the basement ceiling at the bottom of the stairwell.

Additionally, a smoke alarm should be installed in the hallway between the living areas (incl. kitchen) and bedrooms. Place it as near to the living areas as possible and ensure the smoke alarm is audible when bedrooms are occupied.

● Smoke alarm
  for minimum protection
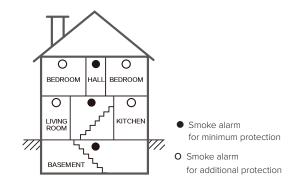
O Smoke alarm
  for additional protection

TYPICAL MULTI-STORY OR SPLIT LEVEL HOME

For maximum protection, a smoke alarm should be installed on the ceiling of each bedroom, living area, and hallway. Where a hallway is more than 10 meters long install a smoke alarm at each end. Also install a smoke alarm above each staircase.
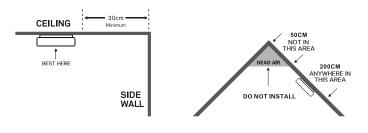
For minimum protection, a smoke alarm should be installed above each staircase, including the basement.

● Smoke alarm
  for minimum protection

O Smoke alarm
  for additional protection

POSITION OF SMOKE ALARMS

Smoke will spread horizontally after rising to the ceiling, so it's advisable to install the smoke alarm in the centre of the ceiling where possible. Avoid areas where there is no circulation.

• When mounting an alarm on the ceiling, locate it a minimum of 30cm from the side wall.

• Install smoke alarm/s on slopped, peaked or cathedral ceilings between 50cm and 250cm from the highest point of the ceiling.
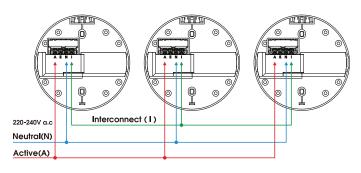
INTERCONNECTING SMOKE ALARMS

This smoke alarm offers a wired interconnection function. Interconnecting smoke alarms can be linked together so that if one alarm is activated all alarms linked on the circuit also sound.

NOTE: A 9V signal is applied to all interconnected wired smoke alarms. The maximum wiring length is 150m between smoke alarms.

INTERCONNECTION WIRING DIAGRAM

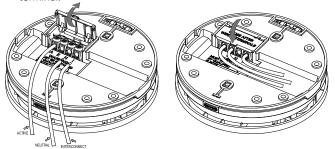(A) Active   (E) Earth Loop   (N) Neutral   (I) Interconnect

220-240V a.c
Interconnect (I)
Neutral(N)
Active(A)

WIRE CONNECTION

1. Strip the active, neutral and interconnect (if used) wires back to the strip length.

50mm
10mm

2. Connect the wires to the correct terminals on the base and ensure terminal screws are fully tightened. Check all wires are secure and not cross connected to either active or neutral terminations.

    Ensure the terminal cover is closed to avoid contact with the active terminal.

ACTIVE
NEUTRAL   INTERCONNECT

3. Screw the mounting base onto the ceiling using the supplied fittings.

4. Clip the smoke alarm onto the base.

    NOTE: The smoke alarm base will only close if a battery is installed. Do not attempt to close without a battery installed.

5. Turn on the mains power and check the smoke alarm's green and red LED. Green LED should illuminate to indicate mains power is present. Red LED will pulse every 40 seconds indicating correct operation of the battery back up.

6. Press the Test/Hush button to check the smoke alarm is working.

> **Warning:** Installation is not complete until both LEDs are functioning correctly and the alarm has been checked for correct operation. Wiring must be installed in compliance with local regulations.

Use a minimum of 1.0mm2 250V insulated wire for all wiring, including interconnecting wiring.

Terminal Provisions: active, neutral, loop and interconnect terminals, each accommodates 2x1.5mm2.

OPERATION AND TESTING

Smoke alarms are an important safety device in the home. It is important to check them regularly to ensure they are operating correctly.

Regular Mode

When there is no smoke present the green LED light remains on and the red LED should flash every 40 seconds to show the alarm is active.

Alarm Mode

When the alarm detects smoke, the red LED will flash once per second and the alarm will sound loudly. The flashing LED and alarm will continue until the air is cleared.

Fault Mode

The alarm will generate a 'chirp' every 48 seconds indicating a fault or a low battery.

TESTING YOUR SMOKE ALARM

It is recommended that you test your smoke alarm once a week to ensure the smoke alarm is working correctly. Test by pushing the test button on the cover. The alarm will sound if the alarm, electronic circuitry and battery are working. If no alarm sounds, the smoke alarm has a defective battery, or another fault.

> **Warning:** Do not use an open flame to test your alarm. You could damage the alarm or ignite combustible materials and start a structure fire.

LOW BATTERY POWER

Should your smoke alarm have a low battery the unit will emit an audible 'chirp' once every 48 seconds and the red LED light flashes once at the same time. When this occurs you must replace the battery immediately. Your smoke alarm will continue to warn of this low battery for at least 30 days. However, failure to change the battery after this time would mean your smoke alarm may have insufficient power to alert you in a real fire situation.

> **Warning:** Your smoke alarm requires the battery to have sufficient capacity of power to operate correctly.

SILENCE ALARM

If your smoke alarm emits the full alarm signal and you are not testing the unit, the smoke alarm is warning you of a potentially dangerous situation that requires your immediate attention. Only use the alarm silence function after making sure that there is no ongoing fire emergency situation.

Do not block the vents on the alarm or disable the smoke alarm in any way as this will remove your protection.

Smoke alarms can sometimes react to cooking fumes or other non emergency situations. In the event of a known false alarm your smoke alarm can be temporarily silenced by pressing the test button. Your alarm will automatically return to full sensitivity **within 8 minutes**.

1. Press and release the silence button, the alarm sound will stop.

2. Your alarm will silence and enter into a reduced sensitivity reset cycle for approximately 8 minutes.

3. During the reduced sensitivity reset cycle, the red LED will flash every 8 seconds indicating it is running in silent mode.

4. Your alarm will automatically return to full sensitivity on completion of the reset cycle and the red LED will revert to flashing once every 48 seconds.

> **Warning:** Never ignore any alarm. Ignoring the alarm may result in injury or death. If your smoke alarm activates and you are not absolutely certain of the source of the smoke, get everyone out of the house immediately.

BATTERY REPLACEMENT

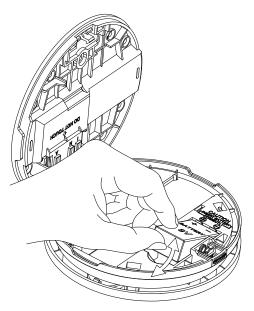The secondary backup power for the smoke alarm is supplied by a 9V lithium battery.

The battery should last at least 10 years under normal operating conditions (without wireless interconnection).

> **Warning:**
> Test the smoke alarm for correct operation using the test facility whenever the battery is replaced.
>
> Recommended battery replacement -
> Lithium Battery: EVE CR9V / P.

Insert the battery ensuring the positive and negative terminals on the battery and the smoke alarm match, then press the other side into the slot.

ROUTINE MAINTENANCE

Like other electrical accessories in the home, smoke alarms require maintenance to ensure efficient and effective operation. Proper maintenance can also reduce the likelihood of false alarms.

> **Warning:** Electrical shock hazard. Disconnect the AC mains at the fuse box or circuit breaker powering the alarm before following the cleaning instructions.

1. In addition to weekly testing, the alarm requires cleaning at least once a month to remove dust, dirt, or debris.

2. Using a vacuum cleaner with the soft brush vacuum all sides and cover of smoke alarm device.

NOTE: Do not attempt to remove the cover to clean inside. This will affect warranty.

> **Warning:**
> 1. Photoelectric smoke detectors can reduce the likelihood of a disaster, but they cannot guarantee a 100% safety.
>
> 2. To ensure your maximum security, please install all smoke detectors exactly according to this manual.
>
> 3. Keep the detectors clean. Do not allow dust to accumulate and test them at least once a week.
>
> 4. If they are not working properly replace them immediately.

WARRANTY INFORMATION

Emerald Alarms Pty Ltd warrants this smoke alarm to the original purchaser.

Emerald Alarms Pty Ltd warrants each new smoke alarm is free from defects in material and workmanship under normal use and service for a period of 7 years from the date of purchase.

This warranty does not cover damage resulting from accident, misuse or abuse or lack of reasonable care of the product.

In no case shall Emerald Alarms Pty Ltd be liable for any incidental or consequential damages for breach of this or any other warranty express or implied whatsoever. Faulty product can be mailed to the following address with a detailed explanation of problem.

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