WRONG WIRING REMINDER

Smoke alarm will beeps once every 2 seconds to warn of wrong wiring. Turn off the power supply circuit and fix the wiring issue. Depending on the type of mis-wiring, the alarm may have been damaged. After correcting the wiring and restoring power, perform a complete functional test to ensure proper operation. Replace with a new smoke alarm if it has been damaged.

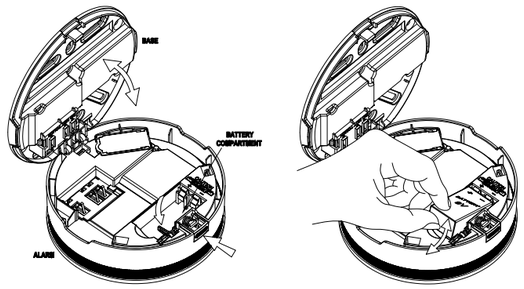
BATTERY REPLACEMENT

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

The battery should last at least 1 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 - Energizer 9V Battery.

De-energise alarm before battery replacement by removing the old battery and holding the test/hush button for more than 3 seconds.
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.



TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
The smoke alarm isn't making a sound during the test.	Make sure you activate the alarm before installing it.
The alarm beeps once with yellow LED flash once every 48 seconds.	Alarm beep can be silenced for a period by pressing the test button once on the low battery alarm. This will silence beep for a determined period whilst alarm remaining active. Beep will return after approximately 10 hrs. Failure to replace the battery after this time could result in you not being alerted in the case of a fire.
The alarm beeps twice with yellow LED flash twice every 48 seconds.	The alarm unit is displaying a fault mode status. Kindly contact the manufacturer.

INDICATION AND ACTION

If you notice any signals from the smoke alarm and are unsure of its condition, please refer to the table below for the “LED Indicator” and “Sound” descriptions. This table will help you identify the alarm’s current status and the appropriate action to take.
If you need additional assistance, we recommend contacting our technical support team. Contact details can be found in this manual.

Status	Description	LED Indicator	Sound
Standby Mode	Smoke alarm is operating normally	Red LED flashes once every 48 seconds	None
Fire Alarm Mode	Smoke detected	Red LED flashes together with the Pulse alarm sound every 1 second	Pulse alarm sound
Test Mode	Press and hold the Test/Hush button to check alarm function	Red LED flashes together with the Pulse alarm sound every 1 second	Pulse alarm sound until button released
Low Battery Warning	Battery voltage is below the threshold	Yellow LED flashes once every 48 seconds	1 “beep” sound
Fault Mode	Fault detected in the alarm signal	Yellow LED flashes twice every 48 seconds	2 “beep” sounds
Silence Mode	Press the Test/Hush button for 1 second during alarm. Temporarily silence the alarm for approx. 8 minutes	Red LED flashes once every 8 seconds	None
No Disturb Mode	Press the Test/Hush button once during Low Battery Warning or Fault Mode. Temporarily silence the alarm for approx. 10 hours	Red LED flashes once every 48 seconds	None
Alarm Memory	The alarm will indicate it has been triggered within 72 hours	Red LED flashes 3 times every 48 seconds	None
Wrong Wiring Reminder	Smoke alarm beeps once every 2 seconds	No Red LED flash	Beep once every 2 seconds
Lifetime Trigger Alarm History	Up to 20 triggered alarm history can be saved in the alarm's memory. Press the Test/Hush button four times within 4 seconds, with each history indicated by a beep and a single RED LED flash	Each Red LED flash indicates one past alarm trigger	Each beep indicates one past alarm trigger
"E" Memory Function	To identify a previous alarm event, press the Test/Hush button two times within 2 seconds to activate the “E” Memory function. The memory will automatically clear after 14 days, or it can be cleared by deactivating the alarm and then reactivating again. Within 1 hour of re-activating the alarm the memory will clear.	No Red LED flash = No previous event One Red LED flash = Previous low battery signal Two Red LED flashes = Previous fault signal Three Red LED flashes = Previous alarm triggered	No beep sound = No previous event One beep sound = Previous low battery signal Two beep sounds = Previous fault signal Three beep sounds = Previous alarm triggered

We recommend the installation of an Emerald Smoke Alarm Controller, which allows you to test, silence and locate triggered smoke alarms without the need to reach up to the alarms on the ceiling. This requires all interconnected alarms to be done via RF for full functionality of controller. In any issues persist, contact your retailer.

WARRANTY INFORMATION

K.P.S Australia Pty Ltd warrant this smoke alarm to the original purchaser.

K.P.S Australia Pty Ltd warrants each new smoke alarms is free from defects in material and workmanship under normal use and service for a period of 10 years from the date of manufacture.

This warranty does not cover damage resulting from accident, misuse, abuse, improper installation, or failure to use or maintain the product in accordance with the manufacturer’s instructions.

In no event shall K.P.S Australia Pty Ltd be liable for any incidental or consequential damages arising from the breach of this or any other warranty express or implied. Faulty products can be mailed to the following address with a detailed explanation of the problem.

K.P.S. AUSTRALIA PTY LTD
20 Kikuyu Road, Chevallum QLD, 4555, Australia
support@emeraldalarms.com.au
1300 316 552

2026.04

emerald alarms



Certified Product
Australian Standard
AS 3786:2023
Lic: SMK41650
SAI Global

SMOKE ALARM USER MANUAL

MODEL NUMBER: EVO2401

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 AS3786:2023.

MODEL NUMBER	EVO2401
DIMENSIONS	139x48 mm
WEIGHT	294g
WARRANTY	10 years
MOUNTING OPTIONS	Ceiling or wall mount
POWER - 240V	240V AC mains power Replaceable 9V alkaline battery
INTERCONNECT	Connects with up to 24 Emerald 240V alarms when hardwired Optional wireless radio frequency (RF) technology connects with up to 40 Emerald RF enabled alarms
WIRELESS DISTANCE	>20m (100m outside)
SENSOR	Photoelectric optical chamber
SOUND PATTERN	ISO 8201
ALARM VOLUME	>85dB(A) @ 3m
HUSH/SILENCE TIME	Approx. 8 minutes
NORMAL OPERATING AND STORAGE TEMPERATURE	0°C to 40°C
NORMAL OPERATING AND STORAGE HUMIDITY	≤93% relative humidity (non-condensing)
PACK INCLUDES	Smoke alarm, instruction manual, fixing screws, and mounting plate

DESCRIPTION

This smoke alarm uses advanced photoelectric smoke sensing technology with a dual emitter and single receiver smoke chamber, making it highly sensitive to slow smouldering fires, known for their thick, lingering smoke. This design results in fewer false alarms, offering you peace of mind. Please note this device does not detect flames, heat, carbon monoxide, or other hazardous gases. It offers advanced features for your convenience and safety.

INSTALLATION LOCATIONS

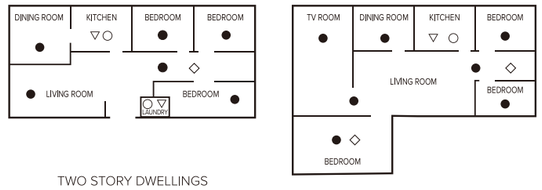
OPTIMAL ALARM PLACEMENT

For the highest level of protection, we strongly recommend installing multiple combination alarms in your home. Each alarm serves a specific purpose and adheres to certain rules and regulations.

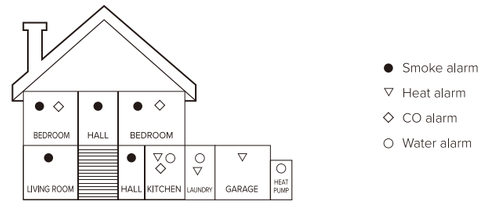
To ensure proper installation, we advise following the state based regulations and installation requirements.

The following graphs illustrate some best practices for alarm placement:

SINGLE STORY DWELLINGS



TWO STORY DWELLINGS



Note: These graphs are for illustrative purposes only and may not cover all potential scenarios. It is essential to assess your home’s layout and potential risks to determine the most effective alarm placement.

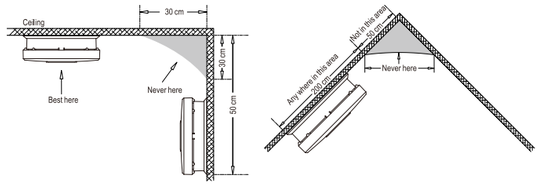
LOCATIONS TO AVOID

1. Don't place alarms in areas prone to steam, condensation, or exposure to normal smoke and heat from appliances, such as bathrooms, kitchens, and garages. These conditions may trigger false alarms.
2. In spaces with high humidity, like bathrooms or areas near dishwashers or washing machines, ensure the alarm is installed at least 3 meters away from these sources of moisture.
3. Keep alarms at least 1 meter away from air returns or heating and cooling supply vents. Airflow from these vents can disrupt the smoke detector's performance by blowing smoke away from it.
4. Do not install alarms in rooms where the temperature may drop below 0°C or exceed 40°C, as extreme temperatures can lead to nuisance or trigger false alarms.
5. Avoid placing alarms in extremely dusty, dirty, or insect infested areas, as particles in these environments may interfere with the proper operation of the alarm.
6. Keep alarms away from air conditioning or ventiliation grilles/louvres.

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.

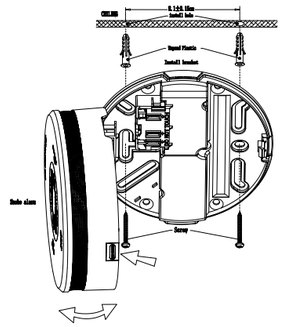
- When mounting an alarm on the ceiling, locate it a minimum of 30cm from the side wall.
- When mounting an alarm on the wall, position it a minimum of 30cm from the corner and a maximum of 50cm below the ceiling.
- Install smoke alarm/s on slopped, peaked or cathedral ceilings between 50cm and 200cm from the highest point of the ceiling.



ASSEMBLY AND INSTALLATION

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. Ensure neutral is connected to the terminal for hardwired interconnection.
5. A maximum of 24 smoke alarms can be installed on one circuit for wired interconnection with maximum cable length of 150 meters.
6. Alarm will not attach to mounting bracket unless battery is installed correctly.



ACTIVATION

The alarm will automatically activate upon inserting the battery. The backing plate will not close without the battery, making it a crucial component of the installation process.

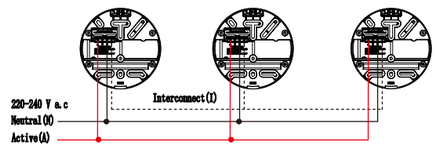
INTERCONNECTING SMOKE ALARMS

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 alarms.
Note: Never connect multiple EVO2401 with RF Modules and hard wire interconnection together. Please note that the interconnect terminal of the smoke alarm is solely intended for hard wireconnection directly to other smoke alarms.

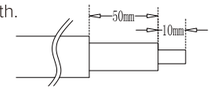
INTERCONNECTION WIRING DIAGRAM

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



WIRED CONNECTION

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



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.
   CAUTION: DO NOT USE IMPACT (ELECTRIC) DRIVERS FOR THE INSTALLATION OF THIS UNIT. FAILURE TO ADHERE MAY RESULT IN DAMAGE TO THE UNIT, CONSEQUENTLY VOIDING THE WARRANTY.



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 48 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.

Follow National/State Electrical Codes and any local state legislation requirements. Cable sizing must be in accordance with AS/NZS 3000: 2018 wiring regulations and adhere to state regulations a minimum of 1.0mm^2 250 V. Interconnect cable on alarms must be SDI cable. (No 4core/aircon wire to be used) Failure to follow will void warranty.
Terminal Provisions: active, neutral, earth and interconnect terminals, each accommodates 2x1.5mm^2.

OPERATION AND TESTING

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

Regular Mode
When there is no smoke present, the red LED should flash every 48 seconds indicating the alarm is operating correctly.

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 beeps twice with yellow LED flashes twice every 48 seconds.

No Disturb Mode
When the alarm device is in low battery warning or fault mode, to prevent disruptions during night time, press the test button once. This action will mute the beeping for about 10 hours. After this period, the warning chirp will resume. The red LED will flash once every 48 seconds during No Disturb Mode.

TESTING YOUR ALARM

It is recommended that you test your smoke alarm once a month to ensure the smoke alarm is working correctly. Test by pressing and holding the test button. The alarm will trigger if the alarm's electronic circuitry and battery are working. If there is no alarm trigger, the smoke alarm could have a defective battery, or another fault. All interconnected alarms will also trigger within 25 seconds.

> **Warning:** Do not use an open flame to test the alarm, as it could damage the unit and pose a fire hazard.

LOW BATTERY POWER

Should your smoke alarm have a low battery the unit will emit an audible "beep" once every 48 seconds and the yellow LED flashes once at the same time. When this occurs you must replace the battery immediately.

The low battery warning will persist for at least 30 days, but failure to replace the battery may result in insufficient power to alert you in a real-life emergency. Your smoke alarm relies on a fully operational battery to function effectively.

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 hush button. Your alarm will automatically return to standby mode after 8 minutes.

1. Press the Test/Hush button for 1 second during alarm.
2. Your alarm will silence for approximately 8 minutes.
3. The red LED will flash every 8 seconds indicating it is running in silence mode.
4. Your alarm will automatically return to standby mode 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.

ALARM MEMORY FUNCTION

The smoke alarm will remember if it has been triggered for a period of 72 hours. The red LED indicator flashes 3 times every 48 seconds during that period. If smoke alarm has been turned off during this 72 hours period, it will return to standby mode once it is re-activated.

This alarm also features a lifetime trigger alarm history that tracks triggered history.

Up to 20 triggered alarm events can be saved in the alarm's history. These can be accessed by pressing the test button four times within four seconds, with each event indicated by a beep and a single red LED flash.

"E" MEMORY FUNCTION

The E Memory function allows the smoke alarm to indicate if a previous alarm event has occurred.

Press test button twice within two seconds:
No beep sound = No previous event
One beep sound = Previous low battery signal
Two beep sounds = Previous fault signal
Three beep sounds = Previous Alarm Triggered

The alarm memory will automatically clear after 14 days. Alternatively, the memory can be reset by deactivating the alarm and then re-activating. An hour after re-activating the memory will reset.

ECHOTAG FUNCTION

The EchoTag function allows you to quickly retrieve product details through Emerald SafeLink APP. To activate:

1. Open the SafeLink APP on your mobile device.
2. Press the Test/Hush button on the alarm five times within five seconds.
3. The alarm will output product details via its buzzer, which will be displayed in the SafeLink APP.

MAINTENANCE AND CLEANING

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.

1. In addition to monthly testing, the alarm requires regular cleaning to remove dust, dirt, or debris.
2. Using a vacuum cleaner with the soft brush vacuum all sides and cover of the device.

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