



**EMERALD  
PLANET**  
SMART SOLUTIONS

# SMOKE ALARM USER MANUAL

## MODEL NUMBER: EP-HW-240-Li10

Thank you for choosing this smoke alarm. Please take a few minutes to read the user's manual thoroughly and familiarise yourself and your family with its operation, and save it 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.

<b>POWER:</b>	AC220-240V 50Hz with 10yr Lithium battery backup
<b>BATTERY LIFETIME:</b>	10 years
<b>OPERATION CURRENT:</b>	<100mA
<b>ALARM VOLUME:</b>	> 85dB(A) at 3 meters
<b>ALARM SENSITIVITY:</b>	0.09-0.15dB/m
<b>HUSH/SILENCE TIME:</b>	approx. 8 minutes
<b>INTERCONNECTION:</b>	up to 12 smoke alarms, hardwired
<b>COMPLIES WITH:</b>	AS3786:2014
<b>SOUND PATTERN:</b>	ISO8201(BI 0.5s - pause 0.5s - BI 0.5s - pause 0.5s - BI 0.5s - pause 1.5s, with the RED LED flash, repeat this alarm pattern)



## DESCRIPTION

This unit uses a photoelectric smoke detection chamber. Photoelectric technology is more sensitive to detecting slow smoldering fires which generate thick, black smoke, a little heat and may smolder for hours before bursting into flames. Unlike previous ionizing alarms, this smoke alarm does not contain radioactive material and is harmless to the environment.

Emerald Planet recommends that smoke alarms be installed in every room (except bathrooms and kitchens), and every other area of the home, making sure all people in the home will be able to hear and respond to the alarm when activated.

Each state of Australia has its own legislation regarding smoke alarm requirements. Please refer to the following websites to check your states current installation requirements.

### NSW

[fire.nsw.gov.au/page.php?id=80](http://fire.nsw.gov.au/page.php?id=80)

### QLD

[www.qfes.qld.gov.au/community-safety/smokealarms](http://www.qfes.qld.gov.au/community-safety/smokealarms)

### SA

[mfs.sa.gov.au/site/community\\_safety/home\\_fire\\_and\\_life\\_safety\\_information\\_sheets\\_domestic/smoke\\_alarms\\_what\\_you\\_need\\_to\\_know.jsp](http://mfs.sa.gov.au/site/community_safety/home_fire_and_life_safety_information_sheets_domestic/smoke_alarms_what_you_need_to_know.jsp)

### WA

[dfes.wa.gov.au/safetyinformation/fire/fireinthehome/FireintheHomeManualsGuidelines/DFES\\_FireintheHome-SmokeAlarm-Legislative-Requirements-LAWS.pdf](http://dfes.wa.gov.au/safetyinformation/fire/fireinthehome/FireintheHomeManualsGuidelines/DFES_FireintheHome-SmokeAlarm-Legislative-Requirements-LAWS.pdf)

### TAS

[tfseducation.com.au/resources/publications](http://tfseducation.com.au/resources/publications)

### ACT

[esa.act.gov.au/community-information/home-fire-safety/smoke-alarms/](http://esa.act.gov.au/community-information/home-fire-safety/smoke-alarms/)

### NT

<https://nt.gov.au/emergency/community-safety/fire-safety-at-home/smoke-alarms>

## IMPORTANT SAFETY INFORMATION

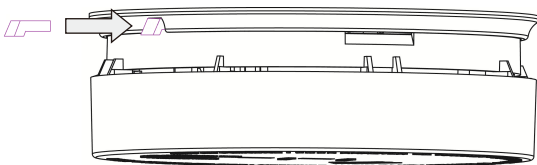
- 1: The test button accurately tests the smoke alarm functions. Do not use any other test method. Test smoke alarms weekly to ensure proper operation.
- 2: If you're sure it isn't a real alarm, open windows or fan the air around the smoke alarm device to silence it
- 3: Observe and follow all local and national electrical and building codes for proper installation.
- 4: This smoke alarm is powered by AC 220-240V mains voltage. The smoke alarm should only be installed by a licensed, qualified electrician. Observe and follow all local and national electrical and building codes to ensure compliant installation.
- 5: This smoke alarm is not suited for connection to non-pure sinusoidal power sources (e.g. derived from square-wave invertors). If installing on off grid premises, please check the supply is suitable.
- 6: Smoke alarms can only activate when they detect smoke or detect combustion particles in the air. They do not sense heat, flames, or gas. This smoke alarm is designed to give audible warning of a developing fire. However, many fires are fast - burning, explosive, or intentional, and others are caused by carelessness or safety hazards. In these circumstances, there may be insufficient smoke to activate the alarm QUICKLY ENOUGH to ensure safe escape.
- 7: Smoke alarms have limitations. This smoke alarm is not foolproof and is not warranted to protect lives or property from fire. Smoke alarms are not a substitute for insurance. Homeowners and renters should insure their lives and property. In addition, it is possible for the smoke alarm to fail at any time. For this reason, you must test the smoke alarm weekly and replace unit every 10 years.

## BATTERY REPLACEMENT

Note: This smoke alarm is supplied with a backup Lithium battery that is rated to last 10yrs of normal use. However, if the battery requires changing please follow the instructions below.

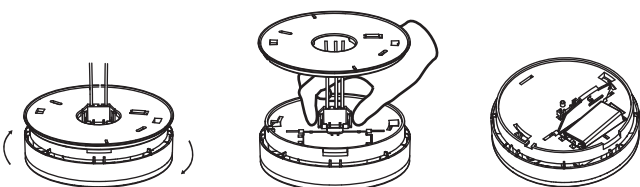
1. Remove the locking plug from between the bracket and the base of the smoke alarm if fitted. (See Diagram 1)

### DIAGRAM 1



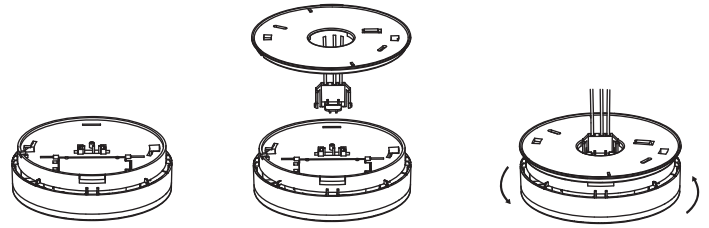
2. Remove the alarm body from the bracket.
3. Squeeze the locking arms on the sides of the AC Quick connector while pulling the connector away from the bottom of the alarm.
4. After alarm has been removed, you can open the battery cover and replace with a new battery. (See Diagram 2)

### DIAGRAM 2



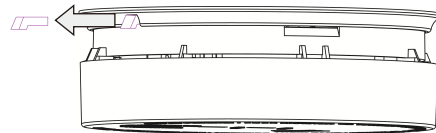
5. Close the battery cover.
6. Plug the AC QUICK CONNECTOR into the back of the alarm, making sure that the locks on the connector snap into place. The green LED will illuminate.
7. Fit the alarm body back onto the bracket and turn the alarm body clockwise (See Diagram 3).

### DIAGRAM 3



8. Insert the locking plug into the gap between the bracket and the base of the smoke alarm if desired. (See Diagram 4).

### DIAGRAM 4



Test the smoke alarm by pressing and holding the Test button, the alarm should beep 3 times then release the button.

The unit will now go into Hush/Silence mode for 8 minutes. During this period, the RED LED will flash once every 8 seconds. After 8 minutes, it will go into normal operating status and flash once every 32 seconds.

If there's no sound when the test button is pressed, it means that the smoke alarm is faulty or it has been installed incorrectly, please refer to the "Troubleshooting" section.

**CAUTION:** TEST THE SMOKE ALARM FOR CORRECT OPERATION USING THE TEST BUTTON WHENEVER THE BATTERY IS REPLACED.

## DO NOT INSTALL SMOKE ALARMS IN THE FOLLOWING PLACES

- 1: Near appliances or areas where normal combustion regularly occurs (kitchens, near furnaces, open fireplaces, hot water heaters etc.).
- 2: In areas with high humidity, like bathrooms or areas near dishwashers or washing machines. Install at least 10 feet away from these areas.
- 3: Near air returns or heating and cooling supply vents. Install at least 3 feet away from these areas. The air could blow smoke away from the detector, interrupting its alarm.
- 4: In rooms where temperatures may fall below 5° or rise above 45°, or in humidity higher than 85%. These conditions could reduce battery life or cause a false alarm.
- 5: In extremely dusty, dirty, or insect-infested areas influence particles interfere with smoke alarm device operation.

## OPERATION

### TESTING

Test the unit to ensure proper operation by pressing the test button, this will sound the alarm if the electronic circuitry, horn, and battery are working. If no alarm sounds, please refer to the "Troubleshooting" section for solution.

**DO NOT** USE AN OPEN FLAME TO TEST YOUR ALARM, YOU COULD DAMAGE THE ALARM OR IGNITE COMBUSTIBLE MATERIALS AND START A FIRE.

**CAUTION:** DUE TO THE LOUDNESS (85 DECIBELS) OF THE ALARM, ALWAYS STAND AT ARMS-LENGTH AWAY FROM THE UNIT WHEN TESTING. TEST THE ALARM WEEKLY TO ENSURE PROPER OPERATION. ERRATIC OR LOW SOUND COMING FROM YOUR ALARM MAY INDICATE A DEFECTIVE ALARM, PLEASE REFER TO "TROUBLESHOOTING" SECTION FOR SOLUTION.

**NOTE:** WEEKLY TESTING IS REQUIRED.

### LED INDICATORS

**Green LED illuminated:** indicates that the alarm is receiving AC power. This alarm is also equipped with a Red LED indicator, with two modes of operation.

**Red LED-Flashing once every 32 seconds:** indicates that the smoke alarm device is operating properly.

Red LED-Flashing when the test button is pressed, or when the smoke alarm device senses particles of combustion and goes into alarm (constant pulsating sound), the red LED will flash once per second. The flashing LED and pulsating alarm will continue until the air is cleared or test button is released.

**Red LED-Alarm silencer (Hush mode) indication:** The red LED will flash once every 8 seconds, indicating the smoke alarm device is in the alarm silence (Hush) mode.

**Low battery indication - An intermittent "chirp" with red LED flashes once every 32 seconds:** indicates that the smoke alarm device is low on battery, you may press the test button to pause the alarm for 10 hours, but it will reset automatically after 10 hours.

Fault indication - The alarm chirp occurs every 40 seconds.

**NOTE:** WHEN THE UNIT CHIRPS ONCE EVERY 40 SECONDS, YOU CAN PRESS THE TEST BUTTON TO TEMPORARILY PAUSE THIS WARNING TONE FOR 10 HOURS. IT CAN STILL NORMALLY DETECT SMOKE DURING THIS PERIOD, IT ONLY REMOVES NUISANCE WARNING TONE. YOU CAN REFER TO "TROUBLESHOOTING" FOR SOLUTION. IF THERE ARE STILL FAILURES, YOU MUST REPLACE IT WITH A NEW ALARM AT ONCE OR CONTACT YOUR RETAILER DURING WARRANTY PERIOD.

### ALARM SILENCE (HUSH MODE)

To silence an alarm, push the test button, it will pause the alarm for approx. 8 minutes. The red LED will flash once every 8 seconds, it indicates the smoke alarm is running in "silence mode". Smoke alarms are designed to minimise nuisance alarms. Combustion particles from cooking may set off the alarm if the alarm is located close to the cooking area. Large quantities of combustible particles are generated from spills or when grilling/frying. Using the fan on a range hood that vents to outside (non-recirculating type) will also help remove these combustible particles from the kitchen. The alarm silence (test button) is extremely useful in a kitchen area or other areas prone to nuisance alarms. The silence feature is to be used only when a known alarm condition, such as smoke from cooking activates the alarm.

The smoke alarm will automatically reset after approximately 10 minutes, if after this period, particles of combustion are still present, the alarm will sound again. The alarm silencer (silence mode) can be repeatedly until the air has been cleared of the condition causing the alarm.

**CAUTION:** BEFORE SILENCING THE ALARM IDENTIFY THE SOURCE OF SMOKE AND ENSURE THERE IS NO RISK OF FIRE.

**NOTE:** DENSE SMOKE WILL OVERRIDE THE SILENCE MODE AND THE ALARM WILL SOUND A CONTINUOUS ALARM AGAIN.

**DANGER:** IF THE ALARM SOUNDS, AND IT IS NOT BEING TESTED, IT MEANS THE UNIT IS DETECTING SMOKE AND REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.

## MAINTENANCE & CLEANING

The alarm should be cleaned at least once a year.

- To clean your alarm, remove it from its bracket on ceiling, you can clean it by using compressed air or a vacuum cleaner hose with a soft brush attachment. Blow or vacuum around the perimeter of the alarm to remove dust and dirt and debris. The outside of the alarm can be wiped with a damp cloth but you should avoid using a wet cloth in order to avoid water entering the interior of alarm.
- After cleaning, reinstall it and test it by pressing the Test button. The alarm should be replaced if cleaning can't restore the alarm to normal operation.

- This alarm has a low battery monitor which will cause the alarm to "chirp" approx. every 40 seconds and the red LED flash once at the same time for a minimum of thirty days when the battery gets low.

If there is a defective battery or other failures, you can refer to "Troubleshooting" for solution, or deactivate this alarm to stop nuisance alarm which is caused by a failure of their function. If there are still failures during warranty period, you can return to your retailer.

- Don't paint the unit. Paint will seal the vents and interfere with the sensor's ability to detect smoke.

### NOTE:

1. REGULAR WEEKLY TESTING IS RECOMMENDED.
2. ALARMS MUST BE REACTIVATED BEFORE USE IF THEY ARE DEACTIVATED.

## REPLACING THE ALARM

It is recommended this alarm should be replaced ten years from the date of manufacture. This date has been provided on the product label which is located on the back of the alarm

**IMPORTANT:** DO NOT ATTEMPT TO REMOVE THE COVER TO CLEAN INSIDE. THIS WILL AFFECT WARRANTY.

## REPAIR

If the alarm is not operating properly, and is still under warranty, return it to the original place of purchase. If the alarm is no longer under warranty, please replace it immediately with a comparable alarm.

**CAUTION:** DO NOT ATTEMPT TO REPAIR THE ALARM. IT WILL AFFECT YOUR WARRANTY.

## PRACTICE FIRE SAFETY

If the alarm sounds, and the test button has not been pressed, it is warning of a potentially dangerous situation. To prepare for such occurrences, develop family escape plans, discuss them with all household members, and practice them regularly.

- 1: Familiarise everyone with the sound of a smoke alarm and explain what the sound means.
- 2: Determine possible exits from each room and an escape route to the outside from each exit.

- 3: Educate all household members to touch the door and use an alternate exit when the door is hot, instruct them not to open the door if the door is hot.
- 4: Teach household members to crawl along the floor to stay below dangerous smoke, fumes and gases.
- 5: Determine a safe meeting place for all members outside the building.

### WHAT TO DO IN CASE OF FIRE

- 1: Do not panic, stay calm.
- 2: Leave the building as quickly as possible. Touch doors to feel if they are hot before opening them. Use an alternate exit if necessary. Crawl along the floor, and do not stop to collect anything.
- 3: Meet at a pre-arranged meeting place outside the building.
- 4: Call the fire department from outside the building.
- 5: Do not go back inside a burning building. Wait for the fire department to arrive.

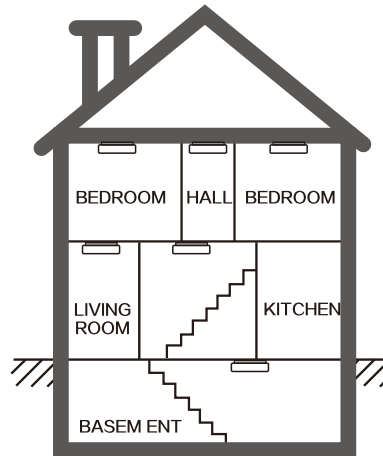
**NOTE:** THESE GUIDELINES WILL ASSIST YOU IN THE EVENT OF A FIRE, ALWAYS FOLLOW THE INSTRUCTIONS OF FIREFIGHTING PROFESSIONALS.

### INSTALLATION POSITIONING ADVICE

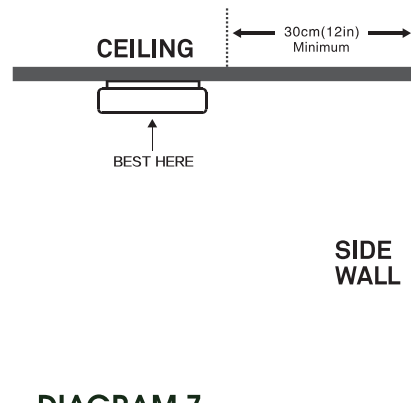
When mounting an alarm on the ceiling, locate it a minimum of 30 cm from the side wall (see Diagram 6).

- Put smoke alarms at both ends of a bedroom hallway or large room if larger than 10m long.
- Install smoke alarms on slopped, peaked or cathedral ceilings between 500 and 1500mm from the highest point of the ceiling. Smoke alarms in rooms with ceiling slopes greater than 1m in 8 m horizontally should be located on the high side of the room (See Diagram 7)

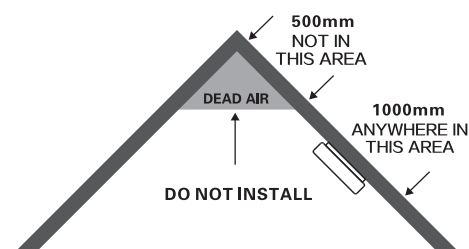
**DIAGRAM 5**  
MULTIPLE FLOOR PLAN



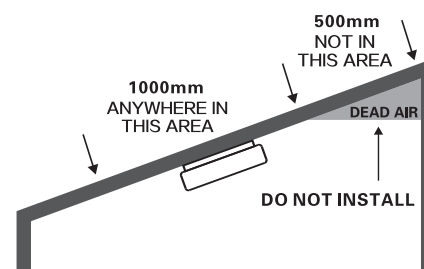
**DIAGRAM 6**  
CEILING PLACEMENT



**DIAGRAM 7**  
PEAK CEILING PLACEMENT



**SLOPED CEILING PLACEMENT**



Smoke alarm should be located between 500mm and 1500mm from the highest point.

## INSTALLATION

### WIRING INSTRUCTIONS:

- The appropriate power source is 220-240 volt AC single phase supplied. When installing or removing the smoke alarm you must turn off the AC power to ensure safety.
- Connecting wires are recommended to use a cross sectional area from 0.8 mm<sup>2</sup> to 1.5 mm<sup>2</sup>, or according to local wiring standard.
- The smoke alarm device shall be connected to an ALL-POLE MAINS SWITCH from a circuit within the household consumer unit. The ALL-POLE MAINS SWITCH shall have a contact separation of at least 3 mm in each pole.
- A terminal block should be used to connect the AC QUICK CONNECTOR to the AC main power supply. The terminal should allow the connection of conductors having nominal cross-sectional areas of between 0.4mm<sup>2</sup> and 1.5 mm<sup>2</sup>. (refer to Diagram 10)
- When alarms are interconnected, all interconnected units should be powered from a single circuit.
- A maximum of 12 Emerald Planet smoke alarms is recommended to be interconnected in a multiple station arrangement, over 12 devices maybe result in overload.
- Diagram 8 illustrates interconnection wiring, inappropriate connection may result in damage to the alarm, failure to operate, or a shock hazard.

### WIRES CONNECTED TO:

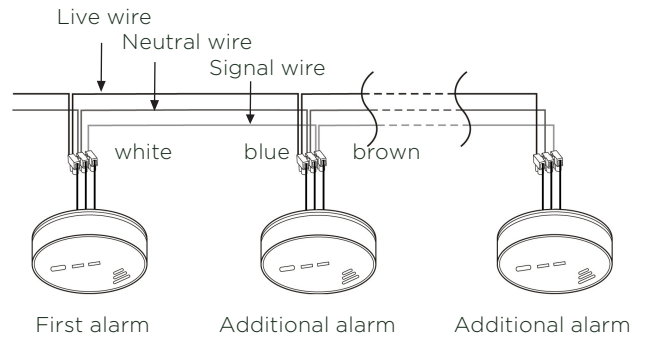
- Brown wire - Live wire of AC line
- Blue wire - Neutral wire of AC line
- White wire - I/O signal as interconnect line with other smoke alarms in a multiple station set up.

### MOUNTING INSTRUCTIONS:

- After selecting the proper location for your smoke alarm, wiring the AC QUICK CONNECTOR as described in the Wiring instructions (AC power should be turned off at this stage).
- Pull the AC QUICK CONNECTOR through the center hole in the bracket.
- Remove the plastic tab from the battery enclosure.
- Connect the AC QUICK CONNECTOR to the alarm body.

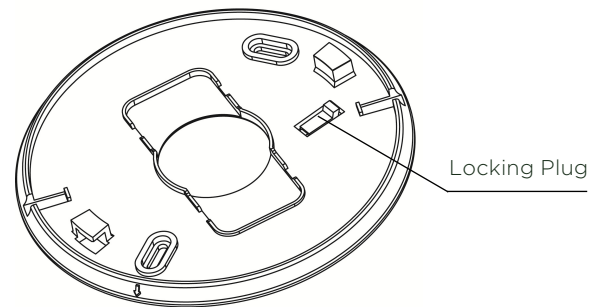
## DIAGRAM 8

### INTERCONNECTION WIRING



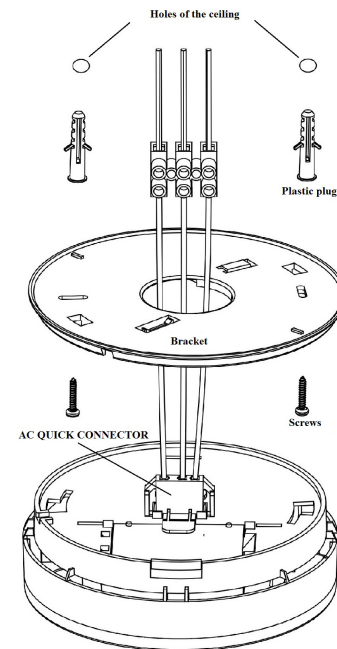
## DIAGRAM 9

### LOCKING PLUG

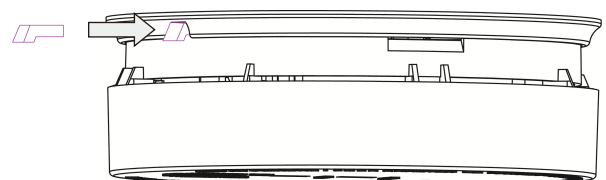


## DIAGRAM 10

### INSTALLATION SKETCH MAP



## DIAGRAM 11



## TROUBLESHOOTING

PROBLEM	TROUBLE SHOOTING
Green LED does not come on when connected to the power	<ol style="list-style-type: none"><li>1. Check the AC QUICK CONNECTOR is properly connected to the smoke alarm.</li><li>2. If problem persists, replace the smoke alarm.</li></ol>
Alarm does not sound during testing	<ol style="list-style-type: none"><li>1. Ensure Alarm is activated before installation. Refer to "Installation" section.</li><li>2. Clean smoke alarm. Refer to "Maintenance &amp; Cleaning" section.</li><li>3. Contact supplier for advice</li></ol>
The alarm "chirps" and red LED flashes every 32 seconds	<ol style="list-style-type: none"><li>1. The battery is low. Replace the smoke alarm.</li></ol>
The alarm "chirps" every 32 seconds. (no led Flash)	<ol style="list-style-type: none"><li>1. Clean smoke alarm. Refer to "Maintenance &amp; Cleaning" section.</li><li>2. Replace smoke alarm if problem persists.</li></ol>
Smoke Alarm sounds unnecessarily. (e.g. for no apparent reason, while cooking, when someone is showering etc.)	<ol style="list-style-type: none"><li>1. Press the "Test" button to pause the alarm.</li><li>2. Clean smoke alarm. Refer to "Maintenance &amp; Cleaning" section.</li><li>3. Move smoke alarm to new location if necessary and press the "Test" button.</li></ol>