

BESMOKEYV2 Series - User Manual

Smoke Alarm, Photoelectric, Surface Mount

220-240V AC, 9V Battery Back Up / Individual or Interconnected



Thank you for purchasing our smoke alarm. This instruction contains important information on the correct installation and operation of your smoke alarm.

Read this instruction fully before attempting installation and retain them for future reference.



Specifications:	
Type of smoke alarm	Type A; Photoelectric smoke alarm
Main Power Source	220-240V AC 50 Hz
Secondary Power Source	Suitable batteries: GP DC 9V carbon battery or PAKKO DC 9V carbon battery; or EVE DC 9V Lithium battery; or Raymax DC 9V Alkaline battery
AC Operating Current	<80mA
Interconnecting	Max. 24 alarms (wired 150m maximum)
Operating Temperature	0 °C to 40 °C
Ambient Humidity	5-95%
Alarm Sensitivity	0.100-0.180 dB/m
Alarm Volume	≥ 85dB(A) @ 3m
Sound Pattern	ISO8201(BI 0.5s - pause 0.5s - BI 0.5s - pause 0.5s - BI 0.5s - pause 1.5s, with the RED LED flashing, repeat this alarm pattern)
Comply with	AS 3786:2023 ISO 12239:2021

WARNING:

- This product must only be installed and serviced by appropriately qualified electrician;
- This product must only be used for the purpose described in these instructions and must be installed in accordance with the wiring rules and regulations in local location.
- Hazardous voltage may be presented at the wire leads of this product.
- Disconnect the AC power before installing or removing the smoke alarm.
- Ensure that the product has been correctly installed and tested for safe operation before reconnecting the electrical supply.
- DO NOT connect the interconnection wire to Live or Neutral.
- A non-pure sinusoidal power sources is not suitable for this smoke alarm (e.g. derived from square-wave invertors).
- A pure sine wave inverter must be used to provide power in cases where alternative power is used.
- Smoke alarms must be installed in their own electrical subcircuit to avoid false alarms and nuisance chirping that may be caused by electromagnetic interferences from other electrical equipment.
- Do not connect high-power electrical appliances in the same circuit of the alarm.
- The alarm cannot be operated from power derived from a square wave, modified square wave or modified sine wave, inverter. These types of inverters are sometimes used to supply power to the structure in off grid installations, such as solar or wind derived power sources. These power sources produce high peak voltages that will damage the alarm.
- If connecting to a power source that utilises an inverter, e.g. PV solar panel, the Total Harmonic Distortion (THD) must be less than 6%.
- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

Failure to follow these instructions may result in death or serious injury.

Product function description:

Function	Indication	Description
Standby status	The Red LED flashes about every 48 seconds.	The unit is working.
AC power indication	The Green LED illuminates continuously.	The unit is receiving AC power.
Low battery warning	The unit chirps with Red LED flashing about every 48 seconds.	The battery voltage is too low, must replace a new battery within 30 days.
Fault warning	The unit beeps twice and flashes twice every 48 seconds	The unit is faulty, get helps from the section: "Trouble Shooting".
Self-test fault warning	The Red LED flashes twice about every 48 seconds.	The buzzer fault or buzzer detection circuit fault.
End-of-life warning	The unit chirps between the Red LED two times flashing.	The unit will send end-of-life warning after working 10 years. Need to replace a new smoke alarm.
Test function	The Red LED flashes once every second with alarm sounding until the TEST button is released.	<ul style="list-style-type: none"> Test by pressing the TEST button on the smoke alarm at least 5 seconds. The alarm will sound if all electronic circuitry, horn and battery are working properly. If no alarm sounds, refer to "Trouble Shooting". Recommend testing the alarm Weekly by pressing the TEST button.
Silence function	The Red LED flashes every 8 seconds.	<ul style="list-style-type: none"> This smoke alarm has a built-in Silence feature. If cooking or other non-hazardous sources cause the alarm to sound, it can be temporarily silenced by pressing the HUSH button for above 2 seconds. The alarm enters silence mode for 10 minutes. After the 10 minute dormant period, the smoke alarm will resume normal operation.
Fire alarm	The Red LED flashes every second, with alarm sounds.	Generate alarm sounds when fire happening.
Fire alarm memory	The Red LED flashes twice every 24 seconds.	After the unit exits Fire alarm state, it enters the Fire alarm memory state, and the red LED flashes twice every 24 seconds for 72 hours.
Interconnection alarm	The unit generates alarm sounds without Red LED flashing.	The unit will enter the interconnection alarm mode when received wire interconnection alarm signals.
Interconnection alarm memory	The Red LED flashes once every 1 second.	After the unit exits Interconnection alarm state, it enters Interconnection alarm memory state, and the red LED flashes once every 1 second for 3 minutes.
Do not disturb	The Red LED flashes about every 48 seconds.	The unit will stop nuisance warning about 10 hours under low battery or fault mode when the HUSH button is pressed.

CAUTION:

- Before using the silence function, identify the source of the smoke and make sure a safe condition existing. After 10 minutes silence, the unit will resume to normal operation.
- DO NOT use an open flame to test your alarm which may damage the alarm or ignite combustible materials and result in a fire.
- If the alarm sounds, and it is not being tested, it means the unit detected smoke. **THE SOUND OF THE ALARM REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.**

Installation planning

- Recommended location of smoke alarms
- Standard guidelines should be followed and locations should be planned for optimum performance when installing the smoke alarms. The Building Code of Australia and regional Government Legislations provide direction.
- For optimal performance, alarms should be mounted as close to the centre of the rooms as practical and on the ceiling for residential applications (see diagram 2).
- Smoke alarms should be located in the vicinity of sleeping areas, bed rooms and along the path to the exit as the sleeping quarters are usually further from building exits.
- Smoke alarms should be mounted near each end of hallways longer than 9 metres.
- Smoke alarms on ceiling must be installed at least 300mm away from walls or corners (see diagram 3).
- Where it is necessary to mount smoke alarms on a wall, use the inside wall of the room and position them between 300mm and 500mm from the ceiling. (See diagram 3).
- The alarm should be at least 500mm away from the apex of any angled ceiling surface and no greater than 1500mm (see diagram 3).
- Alarms should be located in every room where electrical appliances are used.

Multi Storey

- Alarms should be installed on every floor level.
- Stairwells can act like chimneys as smoke can rise through them, so additional alarms should be located in these areas (see diagram 1).

Diagram 1

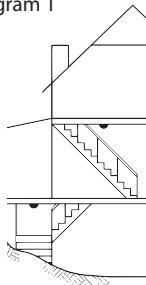


Diagram 2 - Suggest alarm location



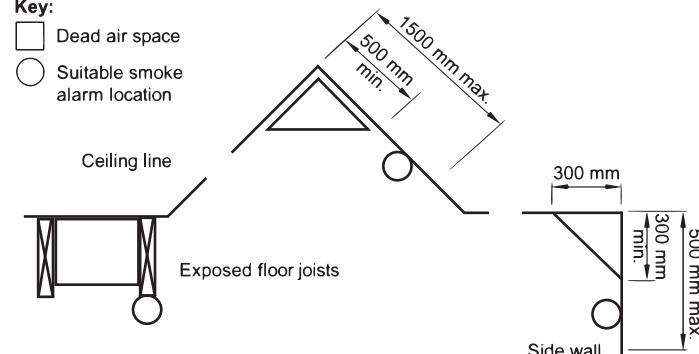
Mobile Homes

- For modern mobile homes or caravans with efficient insulation, install smoke alarms as recommended, refer 'Recommended location of smoke alarms'.
- For older and mobile homes and caravans that are not well insulated on external surfaces compared to current standards, external temperatures can vary to extreme heat or cold. In these cases the smoke alarm should be mounted on an inside partition between 300mm and 500mm from the ceiling surface. This is to overcome the problem where the temperature conditions on external surfaces may create a thermal barrier where smoke may not reach the ceiling.
- If unsure of the insulation in the mobile home it is recommended to install the alarm on an inside wall panel, and for minimum protection install at least one alarm near bedrooms.
- Note: for smoke alarm use in mobile homes it is recommended to test them before each excursion and at least once a week during use, particularly if travelling on rough roads.

Diagram 3

Key:

- Dead air space
- Suitable smoke alarm location



DEAD AIRSPACE AND PROPER MOUNTING OF SMOKE ALARMS ON SIDE WALLS

Locations to avoid:

- Air-conditioner ducts or appliance outlets that create airflow such as heaters where combustion heat particles rise and spread horizontally.
- Avoid locating the smoke alarms within 1 metre as it can cause nuisance triggering or smoke particles may be blown away from alarm.
- Avoid installation in kitchen areas as nuisance triggering can occur from cooking fumes, heat or smoke particles rising.
- Avoid installation in damp areas or extremely humid locations where relative humidity may reach 90%.
- Avoid installing in areas where there are large temperature variations such as 5 to 45 degrees as performance may vary in extreme conditions and battery life may be reduced.
- Avoid installing alarms in areas that are considered "dead air space" where smoke will unlikely reach the alarm (see diagram 3).
- It is recommended not to locate your alarm in the garage - products of combustion that are present when you start your vehicle may cause nuisance triggering.
- Do not locate your alarm less than 500mm from the peak of an "A" frame type ceiling (see diagram 3).
- Avoid dusty areas or areas where insects may infest the unit as it may cause nuisance triggering or premature failure.
- Avoid installation in close proximity to other electrical equipment or fluorescent lights as electromagnetic interference may cause nuisance triggering.

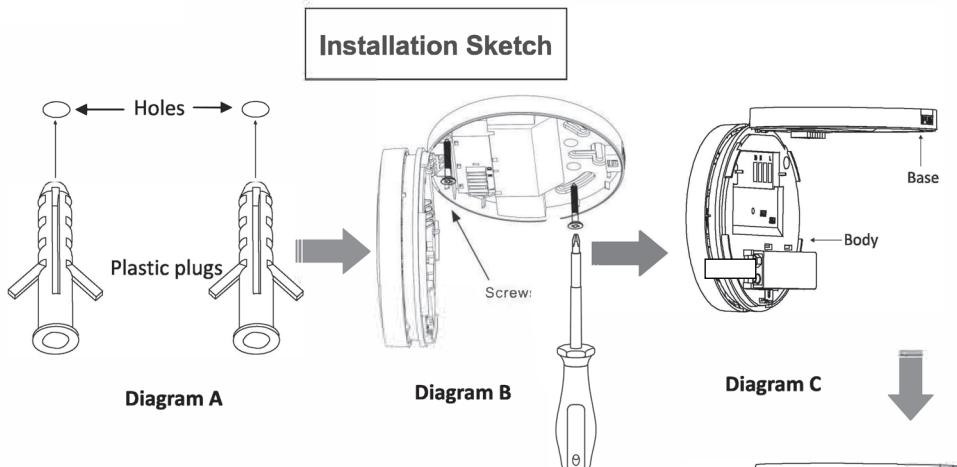
CAUTION:

- All interconnected smoke alarms must be supplied from the same circuit.
- A common Neutral wire must be used for Interconnect to function.
- MAX. Interconnected alarms: 24.
- MAX. Wiring length between first and last alarm: 150m.
- DO NOT connect the interconnect wires to Live or Neutral.
- Observe and follow all local and national electrical and building codes for installation.
- Use a minimum of 1.5 mm² 250V insulated wire for all wiring, including interconnecting wiring.

Mounting Instructions:

1. Turn off the AC power.
2. Select the proper location for your smoke alarm.
3. Press the base on the installation position, mark installation holes of the bracket with pencil.
4. Bore two installation holes on the sign with electric drill. Make diameter of holes 5mm. Strike the two plastic plugs into holes with hammer (See diagram A).
5. Wire Live, Neutral and Interconnection wire according to wiring instruction.
6. Attach the base to the plastic plugs and fix tightly the screws into the plastic plugs. (See diagram 8).
7. Remove battery pull tab and ensure the battery is connected. If necessary, adjust and insert fresh battery into battery housing (see diagram C).
8. Close the alarm body. (See diagram D).

WARNING: To prevent injury, this unit must be securely attached to ceiling in accordance with the installation instructions.

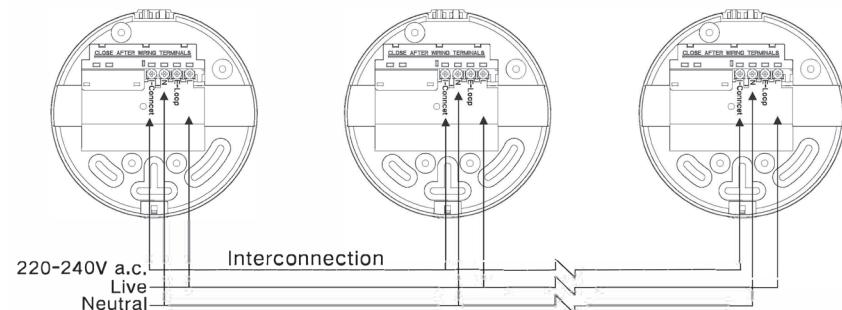


Wiring Instructions:



TERMINAL

L	:	Live
E-Loop	:	Earthing
N	:	Neutral
I-Connect	:	Interconnection



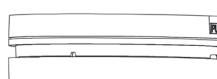
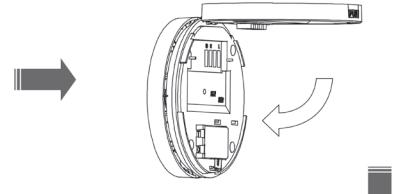
Replace Battery Instructions:

Note: After replacing battery press the TEST button to ensure it is connected and working correctly.

① Press the PUSH button



② Open the alarm body from base



④ Close the alarm body.

③ Replace a new battery

What to do if the Alarm sounds

1. Alert any small children and elderly persons.
2. Leave immediately by your plan of escape. Every second counts, so don't waste time getting dressed or picking up valuables.
3. 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.
4. Stay close to the floor if air is smoky. Breathe shallowly through a wet cloth if possible.
5. Once outside, go to your selected meeting place and make sure everyone is there.
6. Call the Fire Brigade on 000.
7. Don't return to your home until officials say that it is safe to do so. For further information on fire safety contact your local Fire Brigade.



Disposal:

Waste electrical products and batteries should not be disposed of with your other household waste.

The alarm is ideally suited for disposal within the waste electronic and electrical equipment (WEEE) recycling scheme.

Please recycle where facilities exist. Check with your local authority, retailer or contact our Technical Support team for recycling/disposal advice as regional variations apply.

Once the batteries are removed, the low battery warning chirp will stop. The batteries should always be removed before disposal.

10 Year Manufacturer's Warranty

This product has been manufactured to the highest quality standards.

This product is warranted to the original purchaser and is not transferable.

The product is guaranteed to be free from defects in workmanship and parts for a period of 10 Years from the date of purchase. Defects that occur within this warranty period, under normal use and care will be repaired, replaced or refunded. The benefits conferred by this warranty are in addition to all other rights and remedies of the consumer under Commonwealth, State and Territory laws in relation to the goods or services to which this warranty relates and Australian Consumer Law. Risk in regard to the product to be repaired shall at all times remain with the Purchaser. The warranty is given on the condition that the product to which it applies is used for the purpose and in the manner intended by its construction and for no other purposes whatsoever. GSM Electrical (Australia) Pty Ltd shall not be responsible for damage of any kind, caused by accidents, power surges, electrical storm damage, incorrect power current, infestation (vermin or insect), incorrect installation, incorrect electricity or plumbing installation, improper use of controls or failure to use the product in accordance with the operating instructions, general misuse or abuse or from normal wear and tear. Any attempt by an unauthorised person to repair or tamper with the equipment shall render the warranty null and void.

GSM Electrical (Australia) Pty Ltd's liability under this warranty is limited to the replacement and/or repair of the defective parts within the warranty period and does not extend to installation or removal of the product. Acceptance of liability by GSM Electrical (Australia) Pty Ltd contained herein is to the exclusion of any other remedy whatsoever and howsoever arising in respect of any equipment to which it applies.

Trouble Shooting:	
Problem	Cause and Remedy
The green LED does not light when AC power supplied	<ul style="list-style-type: none"> • Check the AC line is properly connected to the smoke alarm. • Ensure that the AC power is turned on.
The Red LED does not flash every 48s	<ul style="list-style-type: none"> • Ensure that the battery and the AC power are properly connected.
Smoke alarm does not sound when tested	<ul style="list-style-type: none"> • Ensure that the battery and the AC power are properly connected. • Clean the smoke alarm. Then take out the battery and turn off the AC power. Install battery and turn on the AC power after 3 minutes.
Low battery warning	<ul style="list-style-type: none"> • Ensure that the battery is properly connected. • Replace flat battery, refer to "Replace Battery" section.
Fault warning	<ul style="list-style-type: none"> • Clean smoke alarm. Take out the battery and turn off the AC power. Wait 3 minutes, then install battery and turn on the AC power.
Self test fault warning (reserved)	<ul style="list-style-type: none"> • Press the "TEST/HUSH" button at least 15s, then release.
False alarm	<ul style="list-style-type: none"> • Press the "TEST/HUSH" button to silence it. • Clean smoke alarm device. • Move the smoke alarm device to new location.
The alarm sounds different from it is used to	<ul style="list-style-type: none"> • Ensure that the battery is not low voltage. • Clean smoke alarm. Take out the battery and turn off the AC power. Wait 3 minutes, then install battery and turn on the AC power. .
The alarm can't interconnect	<ul style="list-style-type: none"> • Check the Live, Neutral, Interconnection wires are properly connected • Check the interconnected smoke alarms are supplied from the same circuit.
If the problem still exists, please return to your electrical wholesaler.	
If the unit is out of warranty, please replace another new alarm.	

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