



240Vac c/w 3V DC Battery Backup Photoelectric Smoke Alarm

Product Code: FSA-60000

Thank you for purchasing a MATElec Australia Smoke Alarm.

Please read this user's manual thoroughly to familiarise yourself with the operation of the smoke alarm before use.



Product specifications



Important Information

This smoke alarm MUST be installed in accordance with national and local council building regulations, state fire department requirements and the latest edition of the Australian and New Zealand wiring Rules AS/ NZS 3000. Building codes and regulations may vary from each state jurisdiction.

Distributor

MATElec Australia

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Sensing Type	Photoelectric (Type A - contains no radioactive material)
Power Supply	220-240V AC 50Hz
Back-up Battery (Power Supply)	Replaceable DC 3V battery: CR17450 10 year backup Lithium
Interconnectivity	Hard wired OR Wireless Module, FSA-50000 (supplied separately)
Interconnection	Maximum 24 paired alarms Max wiring length between first and last alarm: 150 m
Size	φ135mm x 45mm
Temp Range	0°C - 40°C *
Max Humidity	93%RH
Alarm Signal Pattern	ISO 8201
Alarm Volume	85dB at 3m
Hush Time	10 mins
Compliance	AS 3786: 2014
Certification	CSIRO Verification Service

*High temperatures can impact battery life.

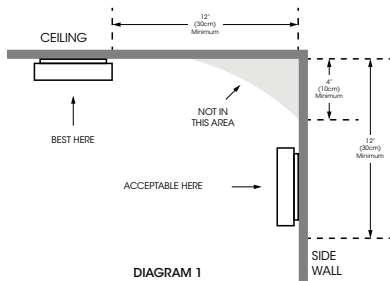


DIAGRAM 1

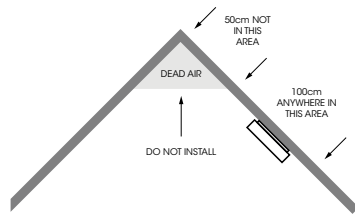


DIAGRAM 2

Install locations

NOTE: this information serves as a guide only. Ensure units are located and installed as per your local building codes and regulations.

1. As a minimum, smoke alarms should be located between sleeping areas and potential sources of fire such as a kitchen, heater or basement. In single story homes with one sleeping area, an alarm should be installed in the hallway outside the room. In single story homes with two or more sleeping areas, a minimum one alarm for each area is required. In multilevel dwellings, an alarm should be installed outside and inside each sleeping area, in the basement, and on every level of the home.
2. Wherever possible Smoke alarms should be installed on the ceiling and as close to the centre of the room as possible. (Avoiding dead air spaces, an area in which trapped hot air will prevent smoke from reaching the alarm). (Diagram 1).

Smoke alarms should not be placed within:

- 300mm of a corner of a ceiling and a wall
 - 300mm of a light fitting
 - 400mm of an air-conditioning vent
 - 400mm of the blades of a ceiling fan.
3. Larger rooms, in excess of 10m in length, should have multiple alarms installed.
 4. For buildings with a peaked, or cathedral type ceiling, the alarm must be installed at least 50cm from the apex (Diagram 2).
 5. Smoke alarms must be paired (interconnected) with every other smoke alarm in the residence so they all activate together.

Avoid these locations

Smoke Alarms are sensitive electrical equipment by nature.

To reduce the likelihood of nuisance or repetitive false-triggering smoke alarms, avoid installing:

1. Near cooking appliances, or close to heating and cooling vents or appliances.
2. In dusty or dirty areas.
3. In areas of excessive heat (eg, Garage)
4. In areas subjected to relative humidity outside the range of 10%-93% eg bathrooms, laundries.
5. Avoid installing where bugs or insects are present.

Installation

1. Remove the battery tab.
2. Complete wiring termination as per wiring diagram. The Green LED will illuminate once power is connected.
3. Place the bracket in the desired / recommended location and mark mounting holes. Mount the unit using the fixings provided.

NOTE: All interconnected units must be supplied from a single power circuit. (Hardwired interconnection must not be made across more than one circuit)

Test Procedure

Hardwired Interconnection

1. Ensure the **GREEN** LED remains on, on each unit. (This indicates 240V mains AC power is connected)
2. Pressing and holding the TEST button on any smoke alarm for at least 5 seconds will cause unit to ALARM and the **RED** LED to flash.

NOTE: all other interconnected smoke alarms will stop alarming when releasing the TEST button, and the RED LED will flash for 3 minutes.

3. Repeat this procedure for each alarm.

NOTE: The sending/test unit will only ALARM on initial pressing, not in unison at same time as receiving units.

NOTE: Smoke alarms CANNOT be HUSHED while in TESTING mode. When replacing battery, ensure unit is tested afterwards to confirm correct operation.

Interconnection Requirement

If more than one smoke alarm is installed all units must be interconnected or paired.

Interconnection can be achieved either by wiring the I-Connect terminals of the alarms together or pairing using the optional FSA-50000 wireless module (not included).

NOTE: Matelec Australia smoke alarms must not be interconnected with any other brands of smoke alarms or products & components. Doing so will void warranty.

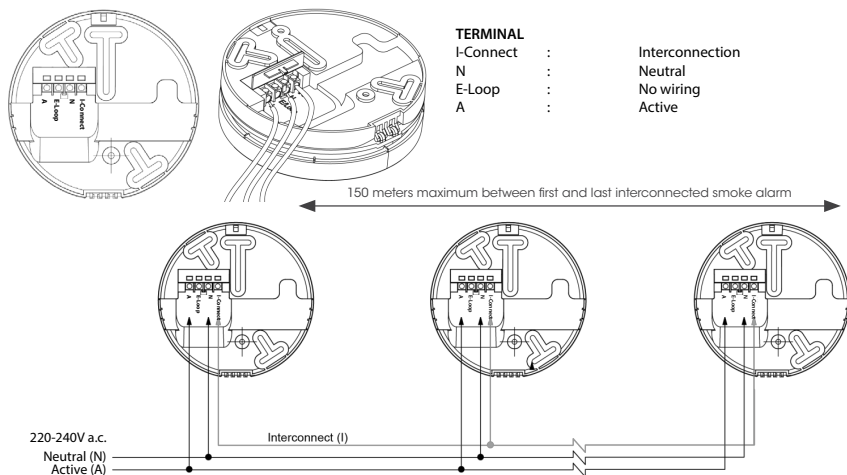
Operation

- The green LED remains illuminated when the unit is connected to mains power. This should always be on.
- In standby mode, the red LED will flash (very faintly) periodically to indicate that the unit is operating correctly.
- When smoke is detected, the unit will sound a loud audible alarm, and the red LED will flash continuously. The alarm will silence once the presence of smoke is removed

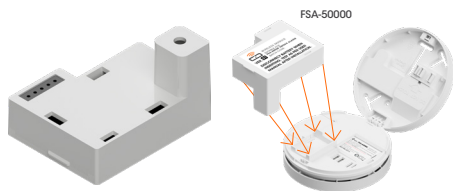
Wiring instructions

1. All interconnected alarms must be connected to the same sub/circuit
2. A common Neutral must be used for interconnect to function
3. Do not connect the interconnect wires to Active or Neutral.

Use minimum of 1mm² 250V insulated wire for all wiring including inter-connecting.



Wireless pairing (For use with Wireless Interconnection Module)



NOTE: Smoke alarms should be paired before mounting/installation.

1. Remove the blank module, replacing with Wireless Module (FSA-50000). Unit will CHIRP 3 times, signifying successful initiation.
2. Select a smoke alarm to be the MASTER unit. Use the MASTER sticker provided or mark this smoke alarm for ease of adding additional SLAVE smoke alarms in future.

(NOTE – The MASTER unit should be the smoke alarm that is to be installed in the central part of the residence. When using a combination of wireless and wired smoke alarms, it is recommended a centrally located, WIRED smoke alarm be selected as MASTER)

3. Press the TEST button on the MASTER smoke alarm 3 times within 2 seconds to enter "Pairing Mode". (RED LED will illuminate for 5 minutes)
4. The MASTER smoke alarm will now search for any slave alarms to pair with. (MASTER smoke alarm will exit pairing mode after 5 minutes of inactivity. If required, repeat step 4. to restart pairing process)
5. On the SLAVE smoke alarm press the TEST button 3 times within 2 seconds to enter pairing mode. If pairing with FSA-30000/s, the LED on FSA-30000 turns GREEN for 3 seconds, and FSA-60000/s, will CHIRP once.

Both indicates units have successfully paired. The MASTER (FSA-60000) alarm LED will then remain RED until another pairing request is received within 5 minutes.

Repeat pairing process for any additional SLAVE smoke alarms required.

NOTE: When all SLAVE smoke alarms have been paired successfully, press and hold the TEST button on the MASTER smoke alarm for 3 seconds to exit pairing mode, or wait 5 minutes to automatically exit. (RED light will extinguish)

NOTE: More SLAVE smoke alarms can be added into smoke alarm network at a later

date by repeating the pairing process but must pair with previous MASTER smoke alarm.

Wireless Test Procedure

1. Press and hold the TEST button on any smoke alarm for at least 2 seconds to test ALL smoke alarms. After a short delay, all paired smoke alarms will ALARM for 10 seconds. (FSA-30000 - RED LED will flash on front face twice a second for 5 minutes or until the CONTROL button is pressed again.) Check all smoke alarms are paired correctly, this way.

NOTE: Smoke alarms CANNOT be HUSHED while in TESTING mode.

NOTE: Smoke alarms CANNOT be TESTED more than once in 5 minutes. (Units commence recalibration in this time period).

Reset Wireless Module to factory default setting

1. Disconnect mains power and unhinge unit from base
2. Remove the battery.
3. Press and hold the TEST button while reinserting the battery. (RED LED on smoke alarm FACE will illuminate for 3 seconds.)
4. When the RED LED turns off, release the TEST button. (The RED LED will illuminate again for 3 seconds.) During these 3 seconds, press the TEST button ONCE to UNPAIR and RESET the smoke alarm. The alarm will CHIRP once and then 3 consecutive times. This indicates the smoke alarm has been returned to its original factory state.

Hush function

NOTE: If the alarm sounds, first ensure there is NO DANGER. Do not assume it is a false alarm. Carefully check residence for the presence of smoke.

1. While the unit is in ALARM mode, pushing the HUSH button for 2 seconds will HUSH the smoke alarm for approximately 10 minutes. The RED LED will flash once every 8 seconds to indicate the smoke alarm is running in HUSH mode.
2. After 10 minutes the alarm will resume normal operation. If the trigger source is still present, the smoke alarm will ALARM again.

1. The HUSH function can be repeated as many times as necessary.

NOTE: Where multiple alarms are interconnected, the **HUSH function WILL NOT OPERATE EXCEPT ON THE UNIT THAT THE ALARM WAS TRIGGERED FROM.** The triggered unit can be identified by the **RED LED** flashing.

Audio-visual guide

OPERATION	RED LED STATUS	SOUND
Power Up	Flash	No beep for no wireless interconnection. No beep for hard wired interconnection. Beep once when wireless module is installed & paired. Chirp 3 times when wireless module is installed but NOT paired.
Alarm functioning correctly (standby)	Low intensity 1x flash every 40 seconds	-
Alarm Memory	Triggered alarm Flashes Twice every 20 seconds for 1 week	-
Low battery warning	Flash every 40 seconds	One chirp every 40 seconds. Press HUSH button enter 'Do Not Disturb' Mode for 10 hours.
Fault warning	Flash every 40 seconds	One chirp every 40 seconds. Press HUSH button enter 'Do Not Disturb' Mode for 10 hours.
Self-test fault warning	Flashes twice every 40 seconds	-
HUSH mode	Flash once every 8 seconds for 10 min	-
Do not Disturb	Flash once every 40 seconds for 10 hours	-
Smoke detected on local alarm	Flash every second	Continuous alarm signal pattern. Press HUSH button to enter Silent Mode for 10 min. Initiate emergency plan
Smoke detected on interconnected or paired unit	-	Continuous alarm signal pattern. Press HUSH button to enter Silent Mode for 10 min
Test function	Flash every second	Continuous alarm signal pattern until TEST button released
Weekly self-test	Flash once	Chirps once every week
End of Life (10 year) Warning	Flashes once every 40 seconds	Chirps every 40 seconds Cannot enter 'Do Not Disturb' Mode.

Memory feature (on a triggered smoke alarm)

In an interconnected network, the **RED LED** on the triggered smoke alarm flashes **TWICE** approximately every 20 seconds for 72 hours. This can be used to identify the triggered unit in the event that residence is unoccupied at the time of an ALARM.

Troubleshooting Guide

PROBLEM	SOLUTION
Green LED not illuminated	Check mains power connection. If green power light still not visible, perform a reset of the unit; Remove the battery, press Test button twice, re-install battery.
Hard-wire interconnected smoke alarms don't alarm during test	Check if Smoke Alarms are in same circuit, interconnect cable is connected correctly as per wiring diagram and mains power is connected.
Wireless interconnected smoke alarms don't alarm during test	Check a wireless interconnect module is inserted in all units in network. Perform a reset and re-pairing of units in the network.
Alarms sound for no apparent reason	Always check for presence of smoke in all locations first. Check for presence of trigger sources. See Trigger Source guide for potential causes and rectify as necessary. Identify the alarm that was triggered by the flashing RED LED, press the Hush button on this unit. (Unit will not silence if it does not have a flashing RED LED) If the smoke alarm cannot be hushed, open the Smoke Alarm, and remove and replace battery. Perform reset and re-pairing of network.
1x Chirp every 40 seconds and cannot hush	Check if battery has been installed correctly. Replace battery. Perform reset and re-pairing of network.

If the above rectification steps do not rectify the issue at hand, contact MATElec for tech support.

Maintenance

Periodically use the Test Procedure to test the smoke alarm.

Periodically clean the smoke alarm by carefully vacuuming the outside of the unit to remove any dust build up and wipe gently with a damp cloth.

Do not spray any cleaning liquids directly onto/into the smoke alarm.

If the low battery alarm sounds, replace battery.

Test Smoke

Aerosol products, such as Smoke Alarm Test Smoke, (Although Photoelectric smoke detectors are less susceptible to trigger by this method) can be used to test the integrity of smoke alarms by simulating smoke conditions. If using an aerosol smoke alarm

testing product, from a distance of 1-2 metres, spray the can towards the smoke alarm for 2 seconds. Smoke alarms with built in time delay circuitry may require additional spray to trigger the alarm.

Excessive spraying at close range may permanently affect the smoke alarm's sensitivity.

Warranty

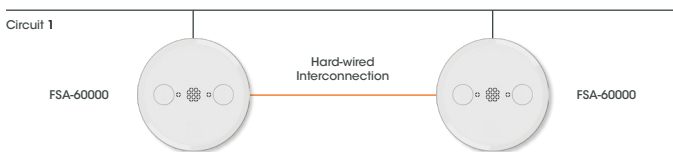
This MATElec Smoke Alarm is designed for use in residential dwellings and is warranted as such.

The FSA-60000 smoke alarm is warranted for a period of 7 years, to be free of defects in materials or workmanship, under normal use. In the event of a warranty issue, please contact MATElec Australia via email, at info@matelecaustralia.com.au.

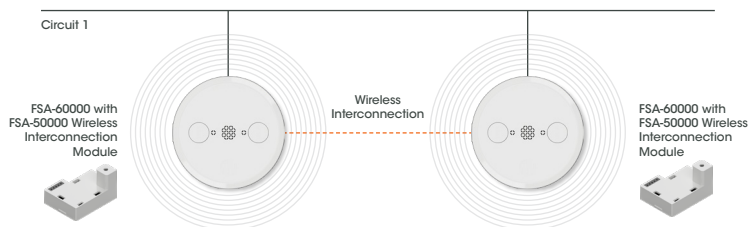
Please see the warranty card included with the smoke alarm package, for full details of the warranty.

Interconnect options

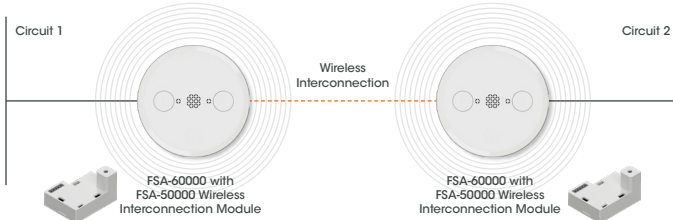
CONFIGURATION 1 - HARD-WIRED INTERCONNECTION, 1 CIRCUIT



CONFIGURATION 2 - WIRELESS INTERCONNECTION, 1 CIRCUIT



CONFIGURATION 3 - WIRELESS INTERCONNECTION ONLY, 2 CIRCUITS



SCAN ME

Scan QR code to view our video series giving you a comprehensive understanding of all technical and installation aspects of our Smoke Detectors.