SmokeSight Residential Smoke Alarm

By Redbusbar

Part Number: SS10MAMA
Description: 240 VAC Mains Power Photoelectric Smoke Alarm with Option Card & 4xAA 1.5VDC Battery Backup

PLEASE LEAVE THESE INSTRUCTIONS WITH THE OCCUPANT, TO BE RETAINED FOR THE LIFE OF THE ALARM.
THIS SMOKE ALARM MUST BE INSTALLED BY A LICENSED ELECTRICIAN.

Read all Instructions before Installation and Operation

Regular testing of this smoke alarm is necessary to ensure the unit is functional and that the battery is in good condition. It is recommended that the smoke alarm be replaced after 10 years of normal service. The only user-serviceable parts are the replaceable backup batteries. Refer to 'Replacing the Backup Batteries'.

⚡ ⚠ DANGER

RISK OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

• This product must only be installed and serviced by appropriately qualified and/or licenced electrical personnel.

• This product must only be used for the purpose described in these instructions and must be installed in accordance with the local regulations.

• Hazardous voltages may be present at wires connected to this product.

• Before working on this product, isolate the electrical supply.

• Ensure that the product has been correctly installed and tested for safe operation before reconnecting the electrical supply.

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

⚠ CAUTION

EQUIPMENT INSTALLATION HAZARD

• This alarm cannot be operated from power derived from a square wave, modified square wave or modified sine wave inverter. These inverters are sometimes used in off grid installations such as solar or wind power sources. They produce high peak voltages that will damage the alarm.

• Ensure that the mains supply, active and neutral is wired to the correct terminals.

• Ensure that green LED is ON when mains supply is on.

• Ensure that red LED is not fast flashing.

• Smoke Test each interlinked alarm. Check to ensure every interlinked alarm, alarms correctly. If any unit fails to alarm, check all wiring and connections.
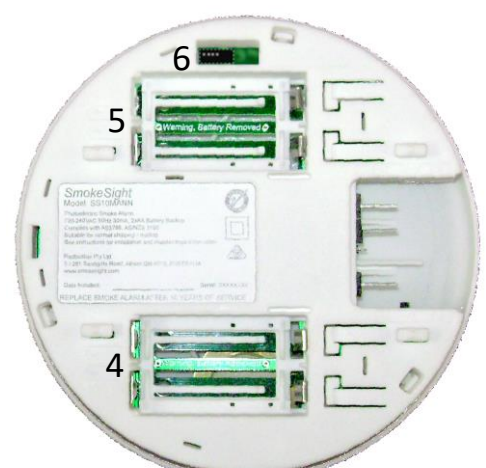
Failure to follow these instructions may result in equipment damage or injury.

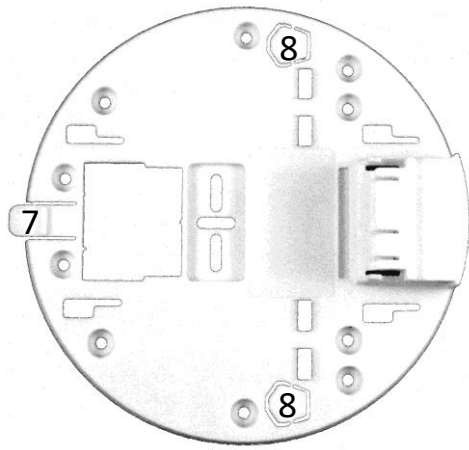**Smoke Alarm – Top View**

Smoke Alarm – Bottom View

1. Mains (Green) LED
2. Alarm (Red) LED
3. Option Card (White) LED
4. Smoke Alarm Battery Holder
5. Option Card Battery Holder
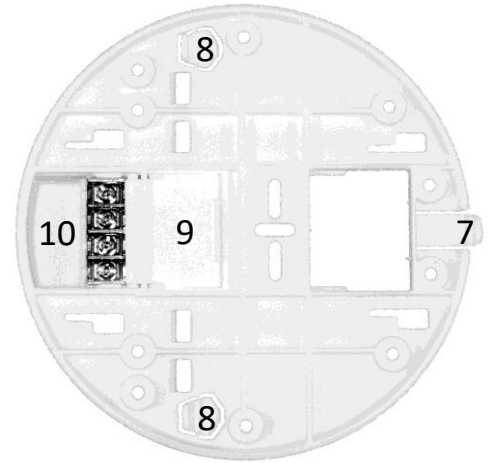6. Option Card Configuration Switches

Mounting Base – Top View

7. Locking Tab
8. Tamper Clip
9. Mains Lid
10. Mains, Loop and Interlink Terminals

Mounting Base – Bottom View


Specifications

Smoke Alarm

Application	Residential Smoke Alarm for domestic dwellings
Installation	Ceiling or wall mounted
Primary Power Supply	220/240VAC, 50Hz, 30mA
Terminals	4 Screw Terminals Voltage Rating: 300VAC Conductor Size: 2 × 1.5 mm2, min cable size: 1mm2
Secondary Power Supply	2 x 1.5VDC AA Batteries
Sensing Type	Photoelectric. The smoke alarm contains NO radioactive material
Environment	Altitude: 0m to 2,000m Temperature: 0°C to 40°C Humidity: 5% to 95%
Audible Indication	Alarm: 85dBA at 3m, ISO 8201 Battery Low: Chirp
Visual Indication	Mains Supply: Green LED Alarm: Red LED
Interlink	Wired: 40 alarms over 150 metres maximum
Compliance	AS 3786:2014, AS/NZS 60065, AS/NZS 60950.1, IEC 62599.2

Option Card

Application	Radio Interlink, Auto Test, Escape Lighting, Clap Silence
Power Supply	2 x AA Batteries
Interlink	Radio: 24 alarms over 150 metres free air maximum Gateway: 5 isolated, wired alarm segments maximum
Visual Indication	Status, Alert, Escape: White LED
Audible Indication	Alert: 50dBA at 3m Battery Low: Chirp

Locations

This smoke alarm can be used in all residential homes and apartments and positioned in accordance with building regulations and state legislation. Refer to figure below when deciding the number of and location of smoke alarms. Avoid dead air space positions. Install smoke alarms along exit paths from bedrooms. Locate alarms in stairways as stairways act as chimneys for smoke and heat. Locate a smoke alarm in any area where a smoker sleeps or where electrical appliances are used in bedrooms. Smoke, heat and other combustion materials rise to the ceiling and spread horizontally. In a residential dwelling, mount the smoke alarm in the centre of the ceiling. In mobile homes, wall mount the smoke alarm on an inside partition to avoid the thermal barrier that may form under the ceiling.

● Smoke alarms for minimum protection.
○ Smoke alarms for additional protection.
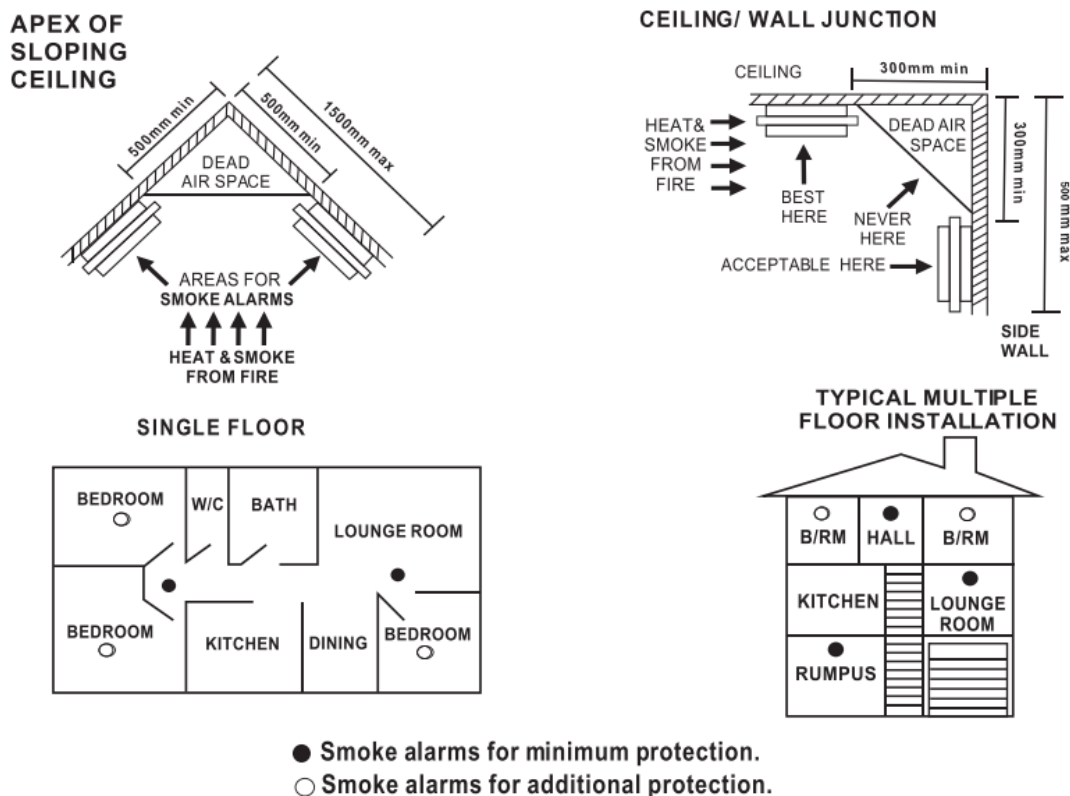
Alarm Locations to Avoid

- Within 1 metre of air conditioner ducts, ceiling fans and other high air flow areas. Smoke may be blown away or diffused in these areas.
- In areas where the temperature may fall below 0°C or rise above 45°C. Failure to alarm, improper alarms or nuisance alarms may result.
- In damp or very humid areas such as bathrooms or laundries, where the normal humidity may rise above 95% or fall below 5% relative humidity. False alarms and unstable operation may result.
- In areas where particles of combustion are normally present, such as garages or kitchens, as this can cause false alarms.
- In dusty or dirty areas, as an accumulation of dust and dirt in the sensing chamber may block the openings and prevent an alarm, or may cause false alarms.
- Where bugs or insects are present as they may block the openings and prevent an alarm, or may cause false alarms.
- Within 1 metre of electrical noise sources, e.g. fluorescent lights, LED lights and fan motors. Electrical noise may cause nuisance alarms.

Wired and Wireless Interlinked Smoke Alarms

Where an installation incorporates both wired and wireless interlinked smoke alarms (hybrid networks), special care is needed during setup to avoid an "alarm signal loop". An alarm signal loop causes all alarms to sound, without stopping, once one alarm has activated. To stop the alarms sounding, all wire interlinked alarms must be removed from their bases to break the loop. An easy way to avoid an alarm signal loop is to ensure that no more than one wired and wireless interlinked (SS10MAMA) smoke alarm in the dwelling, has its radio interlink enabled. Refer to the Enable Switches section below. Exceptions to this rule include very large dwellings or where difficult radio paths exist. In this case, use of multiple wireless networks linked by wired alarm segments can provide the solution.

Wired Interlinked Smoke Alarms

Interlinking smoke alarms ensures that if one alarm senses smoke, all of the connected alarms will operate (alarm). While all interlinked alarms will sound, only the alarm(s) that sensed smoke will fast flash their red LED. A signal is applied to the interlink wire (referenced to neutral) to connect to the other interlinked alarms. This smoke alarm also incorporates radio interlinking functionality. As such it can operate as a gateway device to connect wired and wireless interlinked alarms. Refer to 'Installation' for the interlink connection arrangement.
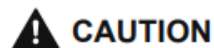
⚠ **CAUTION**

EQUIPMENT INSTALLATION HAZARD
• All interlinked smoke alarms must be supplied from the same circuit. A common Neutral must be used
• DO NOT connect the Interlink wire to Active or Neutral.
• Maximum of 40 interlinked smoke alarms.
• Only SmokeSight alarms can be interlinked.
Failure to follow these instructions may result in equipment damage or injury

Installation

1. If tamper prevention is required, prevents alarm removal without the use of a tool, remove the Tamper Clip from the mounting base by twisting it back and forth until it breaks loose.
2. Strip the Active, Neutral and Interlink (if used) wires. Use a minimum of $1mm^2$ 250VAC insulated wire for all wiring, including the interlink wiring.
3. Connect the wires to the correct terminals on the base and ensure that the terminal screws are tight.
4. Slide the terminal cover closed to avoid contact with the live terminals.

Mains Supply
 220-240VAC
Active (A) – Red
Neutral (N) – Black
InterLink (IL) - Optional
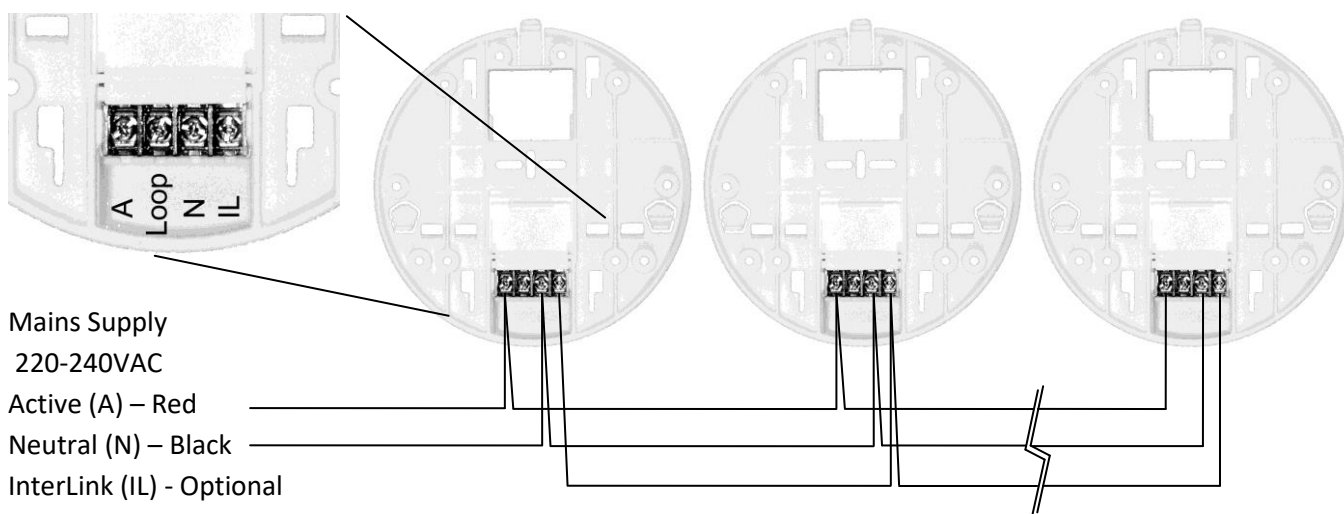
5. Screw the mounting base onto the ceiling or wall using appropriate fasteners. Screw diameter 8gauge/4mm.
6. If the Radio Interlink feature is required, refer to Option Card - Radio Interlinked Smoke Alarms – Initial Setup.
7. If the Auto Test feature is required, refer to Option Card - Auto Test – Initial Setup.

8. If neither the Radio Interlinked nor Auto Test feature was setup then apply option card power by installing 2xAA batteries into the into the top battery bay of the smoke alarm

9. Apply smoke alarm power by installing 2xAA batteries into the into the bottom battery bay of the smoke alarm (see also 'Replacing the Backup Battery').
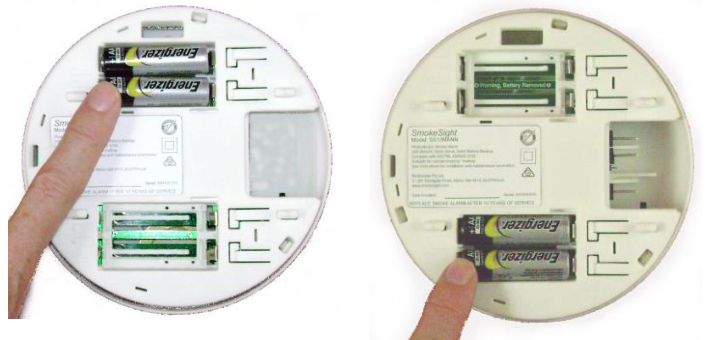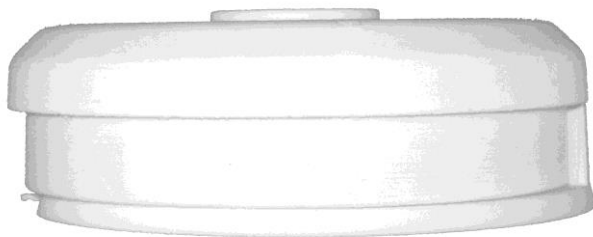
Option Card Batteries   **Smoke Alarm Batteries**

10. Engage and slide the smoke alarm along the mounting base until it is fully home and it 'clicks'. The smoke alarm will only travel home and click if the smoke alarm batteries are installed. Note: Do not attempt to slide the alarm onto the mounting base unless the smoke alarm batteries are installed as damage may result.

Ready to slide   **Engages with a 'click'**

Slide
➔

11. Turn on the mains power and check that the green, red and white LEDs function. The Green LED should illuminate to show mains power present. The Red and White LED will flash every 5mins and 45secs to indicate correct operation.

12. Press the Test+Hush button to check that the alarm sounds.

13. If tamper prevention is required, slide the Tamper Clip between the ceiling and the mounting base, locking tab. The Tamper Clip can be removed by gripping it with pliers and pulling the clip away from the smoke alarm.

Loose Tamper Clip   **Tamper Clip Installation**   **Tamper Clip Installed**

Installation is not complete until the green, red and white LEDs are functioning correctly and the alarm has been checked for correct operation.

Option Card

This section relates to option card operation only. For smoke alarm operation, refer below to the smoke alarm section.

Operation

This smoke alarm incorporates an option card that supports the following features:

- Auto Test – Automatic alarm, scheduled self-testing
- Clap Silence - Hush a false smoke alarm with a hand clap
- Escape Lighting –Escape path visibility during an alarm
- Radio Interlink – Allows one smoke alarm to activate all smoke alarms wirelessly

During normal operations the white LED flashes once every 5mins to indicate that the option card and battery backup is functional. The option card functions in two modes. In operation mode the option card displays option card alerts as well as accepts and responds to status requests. In the various configuration modes the option card functions can be configured. Option card status requests and configuration commands are made using sequential quick taps on the Test+Hush button. Responses from the option card include status, white LED flashes and beeps. Configuration command success is reported by one long flash/beep while command failure is reported by two long flashes/beeps. The current configuration mode (menu) is reported every 10secs if no command is received. If no command is received for a period of 2mins while the alarm is in a configuration mode, the option card returns to the operation mode. The modes are navigated as follows:
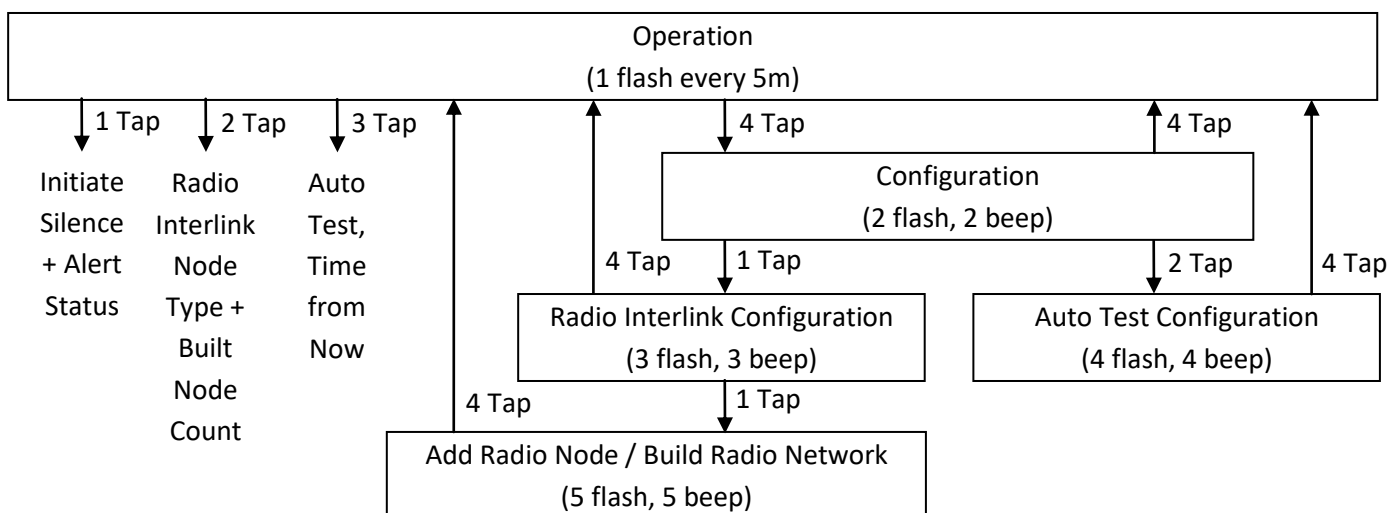
Detailed information regarding the mode options follows:

Operation Mode

Command (Taps)	Description	Response (White LED Flashes, Beeps)
0	Operation Mode Active	1flash every 300sec
0	Option Card Alert, Refer to Option Card Trouble Shooting	flash + beep every 60sec
2	Radio Interlink, Node Type (master = 1 Beep/Flash for 3secs or slave = 1 Beep/Flash for 1sec) + Built Node Count (node count = number of Beeps/Flashes). If no network 2 long Beep/Flash	Node Type + Built Node Count
3	Auto Test, Time from Now	Days, Hours
4	Configuration Mode	-

Configuration Mode

Command (Taps)	Description	Response (White LED Flashes, Beeps)
0	Configuration Mode Active	2flash + 2beep every 10sec
1	Radio Interlink, Configuration Mode – Requires Radio Interlink Switch = ON	-
2	Auto Test, Configuration Mode - Requires Auto Test Switch = ON	-
3	Spare	-
4	Return to Operation Mode	-
5,5	Return to Factory Defaults	-

Radio Interlink Configuration Mode

Command (Taps)	Description	Response (White LED Flashes, Beeps)
0	Radio Interlink, Configuration Mode Active	3flash + 3beep every 10sec
1	Add Radio Node / Build Radio Network Mode	-
2,2	Remove Slave Radio Node (not for removal of this node)	-
3,3	Delete Radio Network	-
4	Return to Operation Mode	-

Add Radio Node / Build Radio Network Mode

Command (Taps)	Description	Response (White LED Flashes, Beeps)
0	Add Radio Node / Build Radio Network Mode Active	5flash + 5beep every 10sec
4	Return to Operation Mode	-

Auto Test Configuration Mode

Command (Taps)	Description	Response (White LED Flashes, Beeps)
0	Radio Interlink, Configuration Mode Active	4flash + 4beep every 10sec
1	Weekly Frequency – Following 1 long flash beep, Tap 1,2,3	-
2	Days from Today – Following 1 long flash beep, Tap 1 to 7	-
3	Hours from Now – Following 1 long flash beep, Tap 1 to 24	-
4	Return to Operation Mode	-

Enable Switches

Some functions require activation using enable switches accessible through the base of the smoke alarm. Following activation of each function using the enable switches, configuration of the function is performed using the Test+Hush button and white LED to navigate the applicable configuration mode. Changing of any switch will require removing power to the option card for 1min before repowering.

Enable Switches

Switch Assignment

Switch	Function
1	Radio Interlink
2	Auto Test
3	Spare
4	Spare

Troubleshooting

If the option card is unresponsive to a tap of the Test+Hush button ie no white LED flash or beep then install/replace the option card batteries. An active alert is reported every 5mins in operation mode. Also, 1 Tap of the Test+Hush button will report the active alert. Following a 1 tap, 1 long LED flash/beep followed by the active alert is reported and beeps are silenced for 8 hours. Another 1 tap during this silence period will report the active alert again and restart the 8 hour silence period. The 8 hour silence period is not terminated if the active alert clears.

ALERT	CAUSE	REMEDY / ACTION
1 White LED Flash/Beep	Low battery warning.	Replace the 2xAA 1.5VDC batteries. Press the Test+Hush button to silence the low battery chirp for up to 8 hours.
2 White LED Flashes/Beeps	Radio Interlink Loss (Slave Lost) – After < 30mins	Where N = number of Radio Interlinked nodes, if: • N-1 nodes report 3 White LED Flashes/Beeps = Perform a 'Return to Factory Defaults' on all alarms and remove their option card batteries. Then, rebuild the radio interlink network using the 'Initial Setup' process.
3 White LED Flashes/Beeps	Radio Interlink Loss (Master or Network Lost) – After < 10mins	• Less than N-1 nodes report 3 White LED Flashes/Beeps = Perform a 'Return to Factory Defaults' on the lost slave alarm(s) (2 White LED Flashes/Beeps) and remove their option card batteries. Then re-add them to the network using the 'Add Radio Node' process. If unsuccessful, relocate the alarms closer to each other and repeat the process.
4 White LED Flashes/Beeps	Auto Test Fail	Replace the smoke alarm. Alternatively, press the Test+Hush button and if the smoke alarm sounds, disable Auto Test and perform manual tests for the remaining life of the alarm.

Radio Interlinked Smoke Alarms

Interlinking smoke alarms ensures that if one alarm senses smoke, all of the alarms connected to the radio network will operate (alarm). The smoke alarm, radio interlink is a separate network that the smoke alarms establish. A problem with a Wi-Fi network, for instance, will not affect operation of the radio interlink. The radio interlink, enable switch is required to be switched ON to allow network configuration and operation of each alarm that will be connected to the radio link network. Once the radio interlink network has been configured, it is saved internally such that replacing option card batteries will not result in loss of the configuration. Access to Radio Interlink, Configuration Mode is only possible if the Radio Interlink switch is switched to ON. The radio interlink network comprises one master node and one or more slave nodes. The node type (master = 1 Beep/Flash for 3secs, slave = 1 Beep/Flash for 1sec) followed by built node count (node count = number of Beeps/Flashes) can be determined in the operation mode. Failure of any node will not prevent alarm transmission as the network is self-healing.

Initial Setup

1. Switch on/Confirm that the Radio Interlink switch is set to ON. Refer to Configuration Switches for details.
2. Before powering any smoke alarm, place all smoke alarms and their two AA option card batteries on a table in readiness for radio interlink, network setup.

3. Apply option card power to the first smoke alarm by inserting its batteries into the top battery bay of the smoke alarm. The alarm will listen for a network that is in 'Add Radio Node / Build Radio Network Mode' for 30secs during which the white LED will flash every 2secs. If a network is not detected, this alarm will allocate a unique Home ID to this network and assign itself as the master node. It will then 1 Beep/Flash for 3secs confirming that it has established a network as the master and enter 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs.

4. Apply option card power to the second smoke alarm by inserting its option card batteries into the top battery bay of the smoke alarm within 2mins of the previous node being established. This slave node will then 1 Beep/Flash for 1sec confirming that it has joined the network as a slave and enter 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs.

5. Repeat step 4 above on the next alarm, and each subsequent alarm, on your network taking care to only apply power to each alarm following confirmation that the previously powered alarm has joined the network as a slave.

6. Once all alarms have been configured they will all be placed into 'Operation Mode' 2mins after the last alarm has joined the network as a slave or by 4Tap of any node's Test+Hush button to exit 'Add Radio Node / Build Radio Network Mode'. On any network alarm confirm that the built node count reported in 'Operation Mode' agrees with your expected node count.

Configuration after Initial Setup

Build Radio Network

If you are powering up your smoke alarm and setting up the radio interlink network for the first time use the 'Initial Setup' above procedure. Use this procedure if your network is not functioning correctly and it is not convenient to perform individual 'Return to Factory Defaults' on each smoke alarm eg the smoke alarms are mounted on a high ceiling. 'Return to Factory Defaults' would allow the 'Initial Setup' procedure to be repeated. It is assumed that the Radio Interlink switch is set to ON for the smoke alarm(s) requiring this function.

1. Confirm that either no or only one network exists by proceeding to each smoke alarm and securing its node type + built node count. From 'Operation Mode' this can be achieved by 2Tap of the Test+Hush button. Any alarm reporting a node count less than another alarm's node count should have its network deleted using 'Delete Radio Network'. Alarms reporting only one node do not belong to a network so they don't need to be deleted.

2. At any smoke alarm select 'Add Radio Node / Build Radio Network Mode'. From 'Operation Mode' this can be achieved by 4Tap, 1Tap, 1Tap of the Test+Hush button. The alarm will listen for a network that is in 'Add Radio Node / Build Radio Network Mode' for 30secs during which the white LED will flash every 2secs. If a network is not detected, this alarm will allocate a unique Home ID to this network and assign itself as the master node. It will then 1 Beep/Flash for 3secs confirming that it has established a network as the master and enter 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs. If a network is detected but this alarm is not a member, this slave node will then 1 Beep/Flash for 1sec confirming that it has joined the network as a slave and enter 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs. If this alarm is already part of the network it will simply enter 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs.

3. Proceed to the next alarm that is not indicating it is active in 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs and select 'Add Radio Node / Build Radio Network Mode'. From 'Operation Mode' this can be achieved by 4Tap, 1Tap, 1Tap of the Test+Hush button within 2mins of the previous node being established. This slave node will then 1 Beep/Flash for 1sec confirming that it has joined

the network as a slave and enter 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs.

4. Repeat step 3 above on the next alarm, and each subsequent alarm, on your network taking care to only add each alarm following confirmation that the previously powered alarm has joined the network as a slave.

5. Once all alarms have been configured they will all be placed into 'Operation Mode' 2mins after the last alarm has joined the network as a slave or by 4Tap of any node's Test+Hush button to exit 'Add Radio Node / Build Radio Network Mode'. On any network alarm confirm that the built node count reported in 'Operation Mode' agrees with your expected node count.

Add Radio Node

This function adds a new alarm node to an existing network. Refer to 'Initial Setup' or 'Build Radio Network' if you are setting up an entire network.

1. Before powering the smoke alarm that you wish to add, select 'Add Radio Node / Build Radio Network Mode' on any networked alarm. From 'Operation Mode' this can be achieved by 4Tap, 1Tap, 1Tap of the Test+Hush button. All alarms on the network will enter 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs.

2. Apply option card power to the new smoke alarm by inserting its option card batteries into the top battery bay of the smoke alarm within 2mins of all network alarms entering 'Add Radio Node / Build Radio Network Mode'. This new slave node will then 1 Beep/Flash for 1sec confirming that it has joined the network as a slave and enter 'Add Radio Node / Build Radio Network Mode' indicated by 5flash + 5beep every 10secs.

3. Repeat step 2 above on the next alarm, and each subsequent alarm, on your network taking care to only apply power to each alarm following confirmation that the previously powered alarm has joined the network as a slave.

4. Once all alarms have been configured they will all be placed into 'Operation Mode' 2mins after the last alarm has joined the network as a slave or by 4Tap of any node's Test+Hush button to exit 'Add Radio Node / Build Radio Network Mode'. On any network alarm confirm that the built node count reported in 'Operation Mode' agrees with your expected node count.

Remove Slave Radio Node

This function removes an existing alarm node from an existing network. First check the Node Type (master or slave) of all of the nodes that you wish to remove. From 'Operation Mode' this can be achieved by 2Tap of the Test+Hush button. If one of the nodes you wish to remove is the master you will need to perform 'Delete Radio Network'.

1. If the existing alarm or alarms that you wish to remove are functional perform a 'Return to Factory Defaults' on those alarms only. From Operation Mode this can be achieved by 4Tap, 5Tap, 5Tap of the Test+Hush button on those alarms to be removed only.

2. Remove power to the existing alarm or alarms that you wish to remove from the network.

3. On any remaining smoke alarm select 'Remove Slave Radio Node'. From 'Operation Mode' this can be achieved by 4Tap, 1Tap, 2Tap, pause, 2Tap of the Test+Hush button. The network will then check to see which alarm nodes are active and will remove any inactive alarm nodes from the network. This alarm only will remain in 'Radio Interlink Configuration Mode' as indicated by 3flash + 3beep every 10secs.

4. This smoke alarm will be placed into 'Operation Mode' 2mins after the last tap of the Test+Hush button or by 4Tap of the Test+Hush button. On any network alarm confirm that the built node count reported in 'Operation Mode' agrees with your expected node count.

Delete Radio Network

This function deletes an existing radio interlink network.

1. Select 'Delete Radio Network' on any networked alarm. From 'Operation Mode' this can be achieved by 4Tap, 1Tap, 3Tap, pause, 3Tap of the Test+Hush button. The master node will then remove all alarm nodes, including

itself from the network. All alarms will remain in 'Radio Interlink Configuration Mode' as indicated by 3flash + 3beep every 10secs.

2. All smoke alarms will be placed into 'Operation Mode' 1hr after the last tap of the Test+Hush button or by 4Tap of the Test+Hush button. On any network alarm confirm that the built node count reported in 'Operation Mode' agrees with your expected node count.

Auto Test

The Auto Test function provides scheduled, automatic testing of the smoke alarm. Testing consists of momentarily simulating smoke internal to the smoke alarm which activates the smoke alarm's siren. The option card listens for the correct smoke alarm tone and reports an option card alarm if the test failed. The test establishes, on a regular basis, that the smoke alarm's smoke sensor, controller and siren are functional. Test duration is 5secs and can be configured to be performed at a convenient time. The Auto Test establishes that only the local smoke alarm, on which the test is performed, is functional. While interlinked alarms may also sound, Auto Test does not confirm operation of interlinked smoke alarms. Access to Auto Test, Configuration Mode is only possible if the Auto Test switch is switched to ON.

Setup

1. Switch on/Confirm that the Auto Test switch is set to ON. Refer to Configuration Switches for details. The factory default, test settings are every two weeks from the day and time that the option card is first supplied with power. Continue with the following steps only if you wish to change Auto Test times.
2. Select 'Auto Test Configuration Mode' - From Operation Mode this can be achieved by 4Tap, 2Tap of the Test+Hush button. Confirmation of this mode is reported by 4flash+4beep.
3. If you wish to alter the test 'Frequency' 1Tap, followed by 1Tap for every week, 2Tap for every two weeks, 3Tap for every four weeks.
4. If you wish to alter the test day 'Days from Now' 2Tap, followed by 1Tap for tomorrow, 2Tap for two days time up to 7Tap for the current day ie 0 days from now.
5. If you wish to alter the test hour 'Hours from Now' 3Tap, followed by 1Tap for 1 hour from now, 2Tap for two hours from now up to 24Tap for the current hour ie 0 hours from now.
6. The smoke alarm will be placed into 'Operation Mode' 2mins after the last tap of the Test+Hush button or by 4Tap of the Test+Hush button. Confirm that the Auto Test Time from Now reported in 'Operation Mode' agrees with your expected test time.

Example
Now:	8am, Tuesday
Desired Auto Test Time:	12 Noon, Friday, Fortnightly
Configuration:	Frequency = 2Tap (Fortnightly)
	Days from Now = 3Tap (Tuesday to Friday = 3 days)
	Hours from Now = 4Tap (8am to 12 Noon = 4 hours)
Confirmation:	3 beep/flash, 4 beep/flash (3 days from today, 4 hours from now)

Clap Silence

If the smoke alarm is in alarm state, two loud hand claps in quick succession immediately below the alarm is equivalent to pressing the Test+Hush button on that alarm. An alarm in alarm state is evidenced by its red LED flashing rapidly. As clap volume and timing may vary, you may need to repeat clap silence more than once. The alarm must incorporate an option card for clap silence to function.

Escape Lighting

If the smoke alarm is in alarm state or receives an interlink signal from a smoke alarm that is in alarm state, the option card, white LED flashes in high intensity mode. This feature assists evacuation by illuminating the escape path or could be used to better signal an alarm to a hearing impaired resident.

Replacing the Option Card Batteries

The power to the smoke alarm option card is supplied by two AA 1.5VDC alkaline batteries, located in the top battery bay of the smoke alarm. The batteries should last a minimum of 5 years under normal operating conditions. If you experience white LED flash/beep refer to Troubleshooting above. It is recommended to replace the batteries on a memorable day eg 1st April, April Fool's Day.

RECOMMENDED BATTERIES: Energizer E91, Duracell MN1500, Fujitsu LR6
TEST THE OPERATION OF THE SMOKE ALARM BY PRESSING THE TEST+HUSH BUTTON AFTER BATTERY REPLACEMENT

Smoke Alarm

This section relates to smoke alarm operation only. For option card operation, refer above to the option card section.

Operation

Once the mains supply is connected and the batteries are installed correctly, the smoke alarm is operational. If smoke is detected the alarm will sound and the red LED will flash rapidly. This will continue until the air is cleared of smoke. During normal operations the red LED flashes once every 5mins and 45secs to indicate that the smoke alarm and battery backup is functional. The green LED is illuminated when the mains power is applied.

When the Alarm Sounds

1. Alert small children in the home.
2. Leave immediately by your plan of escape. Don't waste time getting dressed or picking up valuables.
3. When 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 the 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 from your neighbour's home - not from yours!
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.

Testing

TEST THE SMOKE ALARM ONCE PER MONTH TO ENSURE CORRECT OPERATION. Test by pushing the Test+Hush button on the smoke alarm until the alarm sounds. The alarm will sound if all electronic circuitry, siren and battery are functional. Any Interlinked alarms will also sound. If no alarm sounds, check that the battery is installed correctly or replace the battery. If the battery is new and installed correctly and the alarm still doesn't sound, replace the smoke alarm. If the smoke alarm is installed in a mobile home, test weekly and after every journey. After the Test+Hush button has been pressed, wait 10mins before any additional testing is conducted to avoid any false alarm responses as the alarm is in reduced sensitivity mode during this period. Refer to 'Hush'.

IMPORTANT: If premises are unoccupied for a period of time (more than a few days) then a battery test should be undertaken upon return. If the low battery warning sounds, test and replace the battery if necessary.

Never use an open flame of any type to test your alarm. Check that all interlinked smoke alarms operate during the test.

Hush

This smoke alarm has a built-in Hush feature incorporated into the Test button. If cooking or other non-hazardous sources cause the alarm to sound, it can be temporarily silenced by pressing the Test+Hush button. The alarm then enters a low sensitivity period for 9mins. If the smoke density increases during this period from a smoke or fire event, the unit will go into alarm mode.

Before using the alarm HUSH feature, identify the source of smoke and be certain that a safe condition exists.

Replacing the Smoke Alarm Backup Battery

The backup power to the smoke alarm is supplied by two AA 1.5VDC alkaline batteries, located in the bottom battery bay of the smoke alarm. The batteries should last a minimum of 5 years under normal operating conditions. An audible chirp once per minute indicates that the battery needs to be replaced. Pressing the Test+Hush button will silence the low battery chirp for up to 8 hours. It is recommended to replace the batteries on a memorable day eg 1st April, April Fool's Day.

RECOMMENDED BATTERIES: Energizer E91, Duracell MN1500, Fujitsu LR6

TEST THE OPERATION OF THE SMOKE ALARM BY PRESSING THE TEST+HUSH BUTTON AFTER BATTERY REPLACEMENT

Troubleshooting

	CONDITION	CAUSE	REMEDY / ACTION
ALARMS & HUSH	Alarm sounds and the red LED is blinking rapidly.	Smoke has activated the smoke alarm	If the cause is unknown, vacate the building immediately and call the Fire and Emergency Services.
	Alarm sounds but the red LED if OFF.	Smoke has activated an interlinked alarm, located somewhere else in the dwelling.	
	Smoke alarm is sounding, it does not stop when Test+Hush is pressed.	Smoke density is too high, even in low sensitivity mode, for the Hush feature to activate.	If the cause is known to be a false alarm, see "False Alarm" section below.
	Smoke alarm is sounding, it stops when Test+Hush is pressed.	Low sensitivity mode has been activated for 9mins	Make sure you are safe and have eliminated the source of the smoke. See "False Alarm" section below.
	While the Test+Hush button is pressed the alarm sounds	The smoke alarm is indicating that all electronic circuitry, siren and battery are functional.	Normal test condition. Test regularly to ensure proper operation
	While the Test+Hush button is pressed the alarm does not sound	The smoke alarm may not be operating correctly.	Check that the green LED is ON and the red LED flashes once every 5mins. If problem persists contact an electrician for replacement.
CHIRP	One audible chirp every 40 to 50secs	Low battery warning.	Replace the 2xAA 1.5VDC batteries. Press the Test+Hush button to silence the low battery chirp for up to 8 hours.
	Three audible chirps every 40 to 50secs	The smoke alarm may not be operating correctly.	Clean smoke alarm according to "Maintenance, Repairs and Service" section. If problem persists contact an electrician for replacement.
LED	Green LED ON.	240VAC mains supply ON.	Normal operating condition
	Green LED OFF.	240VAC mains supply OFF.	Check that mains power is ON. Main circuit breaker may have tripped. Wiring could be incorrect.
	Red LED flashes every 5mins.	The smoke alarm is functioning correctly.	Normal operating condition.
	Red LED flashes every 8 to 12secs.	The smoke alarm is in low sensitivity mode. Test+Hush button has been pressed.	Wait 10mins to return to normal operating mode.
OTHER	Smoke alarm will not slide along the base until it clicks.	Battery or batteries missing	Install missing battery or batteries

False Alarm

In the event of a false alarm (alarms are sounding without any smoke present):

1. Identify which smoke alarm/s are in alarm state – Look for the alarm/s sounding and with red LED fast flashing.
2. On each smoke alarm in alarm state press the Test+Hush button to silence the alarm
3. Disconnect all smoke alarms in the alarm state by removing them from their base.
4. Clean smoke alarms in accordance with the "Maintenance, Repairs and Service" section.
5. Re-install and test all the smoke alarms.

IMPORTANT: If the above process fails, contact a licenced electrician to investigate.

Maintenance, Repairs and Service

It is recommended that the smoke alarm is inspected monthly to ensure it is free from dirt, dust and insects. The alarm can be vacuumed or brushed with a soft brush to remove dust, dirt or kitchen grease that has accumulated.

ALWAYS TEST THE SMOKE ALARM AFTER CLEANING.

If the smoke alarm is defective in any way, do not tamper with the smoke alarm. The smoke alarm does not contain any user-serviceable parts. As the smoke alarm does not contain any radioactive material, disposal with domestic rubbish is permitted in Australia and New Zealand.

Warranty

Redbusbar Pty Ltd, warrants this product to be free from defects in materials and workmanship for a period of 5 (five) years from the date of installation. Refer to the Redbusbar terms of sale for full warranty conditions
http://www.redbusbar.com/Terms-and-Conditions.html

Redbusbar reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in this document are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein. © Redbusbar 2018. Redbusbar acknowledges that the Activfire Certified logo is a trademark of CSIRO.

This page is intentionally left blank