

# PHOTOELECTRIC SMOKE ALARM WITH RF INTERCONNECT

240V AC, 50Hz, 15mA max, 9V back up, Standalone or Interconnected (46 units maximum)

## **User Manual**

Model: Q2300W





Tested and Approved to Australian Standard AS 3786:2014

You do NOT need a home wi-fi system to use these units. Multiple wireless units create their own independent wireless RF interconnect network.

Photoelectric smoke alarms are designed to detect visible particles (associated with slow smouldering fires).



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Thank you for purchasing this smoke alarm. It is an important part of your family's home safety plan. You can trust Quell to provide the highest quality safety products.

Please take a few minutes to thoroughly read this user guide, and save it for future reference. Teach children how to respond to the alarms, and that they should never play with the smoke alarm.

If you have any questions about the operation or installation of your alarm, please call our toll free Customer Service at 1800 654 435

### 1. Product Features

Model Q2300W is powered from a 240V AC supply, and has a DC battery back-up source. AC/DC smoke alarms ensure protection in the event of a power failure.

- Hush feature silences unwanted alarms for up to 10 minutes.
- Alarm memory identifies which alarm has activated when interconnected.
- The smoke alarm will sound a short beep about once every 40 seconds if the battery is low.
- Multi-purpose green and red LEDs indicate that the smoke alarm is connected to the AC supply (green), is working normally, or is in alarm (red).
- Loud alarm sounder 85 dB
- Interconnect up to another 23 Quell RF smoke alarms
- Interconnect up to another 23 Quell smoke alarms via hardwire
- · RF link button / Amber LED emit a series of LED flashes as the unit (s)
- Search for an RF interlink network.
- Insect mesh protection over sensor.
- · Quick slide base plate for easy installation

A WARNING! REMOVAL OF SMOKE ALARM BATTERY AND DISCONNECTING OR LOSS OF AC POWER WILL RENDER THIS UNIT INOPERATIVE.

The smoke alarm is a sealed unit, return to supplier for any repairs.

# 2. Product Specifications

Model:	Q2300W
Electrical Rating	240V AC 50HZ, DC battery back up (9V battery ).
Radio Frequency	925MHz
Sensor	Photoelectric
Hardwire interconnect Smoke And Heat Alarms	Up to any combination of 23 other alarm models. Compatible Models include: Q2300, Q2300LL, Q2300W
Wireless Interconnecting Smoke Alarms	up to any combination of 23 QUELL wireless smoke alarms models. Compatible models are Q2300W and Q4000 Series
Wireless Range	At least100m line of sight. Distance vary depending on obstructions.
Operating Temperature:	0 °C to 40°C
Operating Humidity:	Up to 93% Humidity(Non-Condensing)
Storage and Transport Conditions:	-20° C to +60° C, 5-95%RH (non-condensing)
Loud alarm:	85 decibels at 3 metres

### 3. Recommended Locations for Alarms

This alarm must only be wired to a 240VAC 50Hz sine wave supply.

Laws on smoke alarms vary from state to state and you should be aware of what the requirements are in your state - for more information please refer to your local fire emergency services or state regulations.

#### Recommended Locations

- In each room where an occupant sleeps with the door closed. (A closed door may prevent an alarm located outside the room from waking the occupant).
- In the immediate area of bedrooms and the exit path from all sleeping areas (<u>Figure 1A</u>).
- · In stairwells, as stairwells act like chimneys for smoke and heat.
- In any room where large electrical appliances are operated (e.g. portable heaters or humidifiers).
- · If a hallway or room is more than 7m long install alarms at both ends.
- · For maximum household protection see Figure 1C.

#### Things to Consider

#### For Ceiling Mounting:

Smoke, heat and other combustion products will rise to the ceiling and spread horizontally. Mounting the alarm in the centre of the ceiling positions it closest to all points in the room.

- When mounting an alarm on the ceiling, locate it at a minimum of 300mm from the side wall (Figure 2A).
- For sloped, peaked or cathedral ceilings the alarm should be placed between 500mm and 1500mm from the highest point of the ceiling (<u>Figure 2B</u>).
- The alarms in rooms with ceiling slopes greater than 1m in 8m horizontally, should be located on the high side of the room (<u>Figure 2B</u>).

#### For Wall Mounting:

 When mounting the alarm on the wall, use an interior wall with the top edge of the alarm at a minimum of 100mm and a maximum of 300mm below the ceiling (<u>Figure</u> 2A).





#### TOTAL HOME PROTECTION

Figure 1C



### 3. Recommended Locations for Alarms

 When mounting the alarm on a sloping ceiling, it should not exceed 1500mm away from the apex. The spacing of additional alarms, if any, should be based on a horizontal distance measurement, not a measurement along the slope of the ceiling (see Figure 2B)



- In rooms with open joists or beams not exceeding 300 mm, ceiling mounted alarms shall be located on the bottom of such beams. (See <u>Figure</u> 2C)
- Alarms installed on an open-joist ceiling shall have the smooth ceiling spacing reduced to no more than half of the listed spacing when measured at right angles to the solid joist. (See <u>Figure</u> 2C)



### 3. Recommended Locations for Alarms

#### Mobile Home Installation:

#### For Well Insulated Mobile Homes

Install alarms as recommended on the previous pages.

In mobile homes that are not well insulated extreme heat or cold can be transfered through poorly insulated walls and roofs. This may create a thermal barrier which can prevent the smoke from reaching an alarm mounted on the ceiling.

### For Poorly Insulated Mobile Homes

Install the alarm on an inside wall with the top edge of the alarm at a minimum of 100mm and a maximum of 300mm below the ceiling (<u>Figure 2A</u>).

For minimum protection, install at least one alarm close to the bedrooms. For additional protection, see Figure 1A.

 $\bigtriangleup$  Warning: test your alarm operation after caravan or mobile home vehicle has been in storage, before each trip and at least once a week during use.

### 4. Locations To Avoid

- · Smoke alarms should not be installed within 0.9m(3 ft)
  - · of the door to a bathroom containing a tub or shower
  - · forced air supply ducts used for heating or cooling
  - · ceiling or whole house ventilating fans
  - · other high air flow areas
- Areas where curtains or other objects will block the sensor. Smoke must be able to reach the sensor to accurately detect conditions.
- Install at least 300mm away from a light fitting.
- No closer than 400 mm outside the circumference of a ceiling fan.
- · Keep out of insect infested areas.
- Avoid excessively dusty, dirty or greasy areas.
- Do not install in areas where the temperature is colder than 0°C or hotter than 40°C.
- Do not install in areas where the relative humidity (RH) is greater than 93%.
- Normal cooking may cause nuisance alarms. If a kitchen alarm is desired, it should have an alarm silence feature and should not be installed within 3m of cooking appliances.
- Avoid dead air spaces such as the peak of an "A" frame ceiling.
  "Dead Air" at the top may prevent smoke from reaching the alarm in time to provide early warning. Refer to Figure 2A and 2B.

Note: Smoke alarms are not to be used with detector guards unless the combination (alarm and guard) has been evaluated and found suitable for that purpose.

### 5. Installation

▲ DANGER: ELECTRICAL SHOCK HAZARD. Turn off power at the main fuse box or circuit breaker by removing the fuse or switching the circuit breaker to the OFF position and securing it.

## A WARNING: THIS SMOKE ALARM MUST BE INSTALLED BY QUALIFIED (LICENSED) ELECTRICIANS ONLY.

### Wiring Requirements

- This smoke alarm must be installed with an AS/NZS Wiring Rules approved cable or equipment. All connections must be installed by a qualified electrician and be in accordance with the relevant requirements of the AS/NZS Wiring Rules AS 3000 Standards.
- The appropriate power source is 240VAC 50Hz continuous single phase sine wave current supplied from a non-switchable circuit which is not protected by a RCD.

▲ WARNING: This alarm cannot be operated from power derived from a square wave or modified square wave inverter. These type 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.

#### Wiring Instructions

## ▲Caution! Turn off the main power to the circuit before wiring the alarm.

- For alarms that are used as single station, interconnect cable terminal (I/C) on alarm is unused.
- When alarms are hardwired interconnected, all hardwire interconnected units must be powered from a single AC circuit.
- A maximum of 24 Quell safety devices may be hardwire interconnected in a multiple station arrangement. The hardware interconnect system should not exceed the interconnect limit of 24 units.
- The maximum wire run distance between the first and last unit in an interconnected system is 250 meters and installed in accordance with ASINZS 3000. Figure 3 illustrates interconnection wiring. Improper connection will result in damage to the alarm, failure to operate, or electrical shock hazard.
- Make certain alarms are wired to a continuous (non-switched) final sub-circuit.
- Do not hardwire interconnect the wireless alarm to another wireless interconnected smoke alarm.

Note: Use approved listed Australian Standards cable 1.0mm<sup>2</sup> TPS or larger as required by local codes.

### FIGURE 3 "INTERCONNECT WIRING DIAGRAM"



NOTE : AC power should be turned off at this stage.

## $\triangle$ Caution! Turn off the main power to the circuit before wiring the alarm.

- Select a suitable alarm location as per the guidance in Pages 4 and 5
- For surface mount cable applications where the cable is housed in a suitably approved surface mount cable duct:
- 1. Install the duct to terminate at the side of the alarm base.
- Remove a 'knock out' / 'cable access' on one side of the alarm base. There is one on each side of the base. (refer to <u>Figures</u> 4A)
- Position the duct to the alarm base, so the channel in the base aligns with the duct.
- 4. The cable can transition from the duct to the base.
- It may be necessary to remove the outer sheath prior to securing the base to the ceiling. (Excess cable may restrict the terminal cover from securing shut).
- Terminate the cables in the terminals provided to meet with relevant local code requirements. Insert the cables into the terminals clamping the terminal to the copper by tightening the screw on each terminal.
- Secure the alarm base to the surface with the fixings provided. (refer to <u>Figures</u> 4D).

Note: The Q2300W alarm will not require the I/C terminal to be use.

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To connect all wireless alarm use only the Active and Neutral lines, do not connect to the I/C terminal. See diagram below.



To expand an existing interconnected system, connect a wireless alarm to one alarm of the hardwired system and then additional wireless alarm at each new location.

DO NOT HARDWIRE THE I/C TERMINAL OF TWO ALARMS WITH WIRELESS FUNCTION TOGETHER.



### 5. Installation

- For concealed cable applications where the cable is running through the wall space or roof space, and the cable will enter from the rear of the alarm base:
- It may be necessary to remove the outer sheath prior to securing the base to the ceiling. (Excess cable may restrict the terminal cover from securing shut)
- Terminate the cables in the terminals provided to meet with relevant local code requirements. Insert the cables into the terminals clamping the terminal to the copper by tightening the screw on each terminal.
- Secure the alarm base to the surface with the fixings provided. (refer to Figures 4A and 4B).
- Prior to closing the terminal cover ensure that there are no wires obstructing its path.
- 5. Close terminal cover. You will hear a 'click' as it is secured.
- If alarm is not being interconnected by hardwiring to other alarms devices, the interconnect cable terminal (I/C) on alarm mounting base remains unused.



### 6. Mounting Instructions

### **Battery Activation**

See Battery replacement (page 23) for battery installation.

· To activate the battery, pull out the battery pull tab.

NOTE : If the battery compartment is empty, the alarm cannot mount on the mounting base.

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 Connect the alarm to the base tail first, and then swing the alarm closed onto the base until a "click" is heard. (See Figure 5)

### A.Mounting on the ceiling



### B.Mounting on the wall



NOTE: Please ensure that battery is installed prior to mounting of smoke alarm.

### 7. Activation and RF Interconnect Network

This model is capable of wireless interconnecting with Q2300W models in domestic residential applications. When one RF interconnect unit sounds an alarm, all other compatible RF units in the RF interconnect network will alarm. Follow the steps in section 5.1 to interlink up to 24 units in your network. If you have problems during setup, see section 7.3 to start over.

NOTE : Wireless units will emit a series of LED flashes as the unit(s) search for an open RF interconnect network.

### Definitions of key terminology:

Host: The wireless network master unit that is the key communicator with the other wireless units. This assignment remains until the host is reset (section 7.3). The host unit should be installed in a central location of the residence.

Peer: The other wireless units that connect with the host.

General Reset mode: Resets a unit to Out-of-Box condition, before it was first powered up.

For easiest first-time setup, we recommend unpacking all units together on a desk, table, or counter and using the steps in the following table. If you prefer to install the alarms on the ceiling before enrolment, attach all baseplates to the ceiling first, and then choose a central location unit to start with step 2 below.



## 7.1 Setting Up an RF Interconnect Network

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	User Input	Detector Response	Timeout
Step 1	Have an electrician mount the smoke alarm bases.		
Step 2	Gather all smoke alarms. Select one smoke alarm and pull yellow tab to activate battery. This smoke alarm will be know as the host. Push the RF button two times on the host(first powered) device.	Amber LED flashes every 2 seconds. The host has now opened the network for smoke alarms to join.	Join Mode will timeout in 15 minutes after last unit joins.
Step 3	Power up Remaining Devices: Power up by pulling out battery yellow battery tab on the rest of Q2300W smoke alarms. They will automatically join the open network.	Amber LED ashes 3 times every 2 seconds after joining the network.	Join Mode will timeout in 15 minutes after last unit joins.
Step 4	Pick Any Connected Device: Push the RF button twice on any unit after all the smoke alarms have joined the network.	Amber LED stops ashing on each unit as network is now closed.	Join Mode will timeout in 15 minutes after last unit joins.

## 7.2 Adding A Smoke Alarm To An Existing RF Interlink Network

At some point, you might want to add another smoke alarm unit to your existing RF interlink network for additional protection, or to replace an old unit. Follow the steps in the following table.

	User Input	Detector Response	Timeout
Step 1	Press the RF button twice on any existing unit.	Unit will response two quick flashes every 2 seconds if it is the Host of the Network; three quick flashes every 2 seconds if it is an Peer in the Network - Join Mode is open.	Join Mode will timeout in 15 minutes
Step 2	Power up unit(s) to be added - by mounting the smoke alarm onto the baseplate mounted by an Electrician. For previous units that have been RF button twice to enter Join Mode.	Amber LED flashes three times every 2 seconds to indicate its configured (as a Peer) in the network	Join Mode will timeout in 15 minutes
Step 3	After new unit(s) have joined, press RF button twice on any unit in the network to close Join Mode.	Amber LED on each unit will power off indicating Standby Mode	Join Mode will timeout in 15 minutes
Step 4	Test to verify interconnect operation.		

### 7.3 Resetting

This section explains how to perform a general reset on a Q2300W alarm. This restores the unit to when it was first powered up. This procedure can also remove a unit from a network.

Follow the steps below to resolve any of these situations:

- \* If you have problems connecting the Q2300W alarm to a wireless network.
- \* If a Q2300W is consistently out of range, and needs to be removed from the wireless network.
- \* If you decide to transfer a Q2300W from your network to another wireless network.

	User Input	Detector Response	Timeout
Step 1	Press the RF button.	The unit will enter Join Mode and flash its Amber LED either:	
		(1) Twice every 2 seconds - denotes Host	
		(2) Three times every 2 seconds - denotes Peer OR (3) 1 second ON, then 1 second OFF - denotes Network Search.	
Step 2	Press and hold its RF button for 4 to 5 seconds to reset the Q2300W unit.	The Amber LED will blink four times, which is repeated, to indicate the unit has been reset. It is now in standalone mode, and is not part of any network until its RF button is pressed twice to re-enter Join Mode.	
Step 3	Press the RF button twice on any other wireless unit to close the Join Mode.	Amber LED on each unit will power off indicating Standby Mode	
Step 4	To re-join a network, please start over with Section 7.2 If any issues occur, please call Technical Support.		

## 8. Wireless FAQs

ID	FAQ	Answer
1	What happens if units are powered up for the first time but no buttons are pressed?	Units will search for a network for 15 minutes after which all units will go into Standby and the LEDs will be turned off. To retry, press the RF button twice quickly to re-enter Join Mode. See Section 7.1 for details.
2	What happens if a Peer doesn't find a network during the joining process (eg. due to defective radio link, being out of range, or couldn't find a Host)	Unit will go into standby and Amber LED will flash every 2 seconds indicating Network not found. The unit will then become a stand alone smoke alarm with no interconnect.
3	What happens if a Host doesn't find any Peer to join after being set as Host.	Host times out after 15 min, becomes a stand alone smoke alarm with no interlink. Peer times out after 15 minutes, becomes a stand alone smoke alarm. Amber LED will flash every 2 seconds indicating that they are not joined.
4	What happens if an Peer drops from the network?	The Peer will enter fault mode after approximately 30min.
5	What happens if an Peer drops from the network and comes back online?	Nothing within ~30min. After 30 minutes it will go into error mode - network fault. Once the Peer comes back online, pressing the Fb button twice on any unit in the network will allow it to re-join.
6	What happens if the Host drops from the network?	IF no other units can hear the Host AND Peer1 can hear all the others: Peer unit 1 becomes the Host after 30 min and other Peer's will re-join.

## 8. Wireless FAQs

ID	FAQ	Answer
7	What happens if the Host drops from the network and comes back online?.	Nothing within 30min. After 30 min, push RF button twice, and then push/hold RF button for approx 4 seconds. Unit is reset. Push RF button twice to reopen network and rejoin. See section 7.3. (assuming Peer 1 unit 1 took over). The ex-Host unit can be joined to the network as Peer unit, network issue clears.
8	How can a unit be added to the network?	Push RF button twice on any existing networked unit. Power on new unit and wait for it to join. Push any RF button twice to close network. See Section 7.2.
9	Can the joining process be reset/ restarted?	Yes. Push RF button twice to open network. Press & hold the RF button until it flashes four times. Press the RF button twice to re-open its wireless network. See Section 7.3 for details.
10	Is there a way to get more information about a trouble status?	In fault mode press RF button for Amber LED error code. Count the number of Amber LED flashes and report to customer support.
11	What happens if the user created more than one Coordinator?	Only one Host is allowed per network. See Section 7.3 to reset the extra Host; for reconnection as a Peer unit.
12	How do I check the number of wireless units in the network?	While in join mode, press and release RF button on any joined unit. Amber LED will blink out number of units.
13	Is it possible to check if a unit is the Host or an Peer	Press the RF button twice quickly to place the unit into Join Mode. If the unit flashes twice every two seconds, it is a Host. And if it flashes three times every two seconds, it is a Peer device.
14	If the mains power to the smoke alarm is turned off, will the RF remain on?	Yes, the RF wireless will remain on as it is powered by the smoke alarm backup battery.

### 9. Operation And Test

### Operation

The smoke alarm is operating once AC power is applied, new battery is installed and testing is complete. When the smoke alarm senses smoke, the horn will sound a loud (85db) pulsating alarm(3 beeps repeating).

There are three LED indicators. Each of them has a unique function:

This smoke alarm features a red, green, yellow LED indicator.

The LEDs indicate the following:

#### Red LED

Standby mode: The Red LED will flash once every 5 minutes and 20 seconds to indicate the unit is functioning properly.

Alarm mode: The red LED will flash when unit goes into alarm, indicating that products of combustion have been detected. The flashing Red LED and three beeps (loud 85dBA at 3m) will continue until the air is cleared. For interconnected units, the originating smoke alarm Red LED will flash every 1 second. All other units will sound but their Red LED swill not flash.

#### Green LED

AC Mains-ON Indicator: Indicates the unit is operating on AC power. If this LED is Off, it indicates loss of AC power.

#### Amber LED

Amber LED flsh: indicates the unit is on each condition of wireless connected, more detail please see Sections 7.1, 7.2 & 7.3.

### 9. Operation And Test

#### Testing the smoke alarm

## A Warning: test each smoke alarm to be sure that each is installed correctly and is operating properly.

Stand at arm's length from the smoke alarm when testing. The alarm sounder is loud to alert you to an emergency and can be harmful to hearing when you are too close.

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Test the smoke alarm weekly and upon returning from holiday, or when the house has been unoccupied for several days.

#### Test all smoke alarms weekly by doing the following:

- Check the green LED above the test button is ON, confirming smoke alarm is receiving AC power.
- 2. Firmly depress and hold the TEST/Hush button for at least five (5) seconds, the smoke alarm will sound 3 long beeps, pause, 3 long beeps, repeating for up to 10 seconds, and then release the TEST/ Hush button. NOTE: If smoke alarms are interconnected, all smoke alarms should sound an alarm within three (3) seconds after any test button is pushed and the tested smoke alarm sources.
- 3. If the smoke alarm does not sound, turn off the power to the smoke alarm circuit at the main distribution board and check the wiring. Retest the smoke alarm. If the smoke alarm does not sound, please refer to Section 10: Visual And Audible Indications. If this doesn't work please contact your electrician.

#### △ WARNING: If alarm sounder activates, and smoke alarm is not being tested, the smoke alarm is sensing smoke. THE SOUND OF THE ALARM SOUNDER REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.

#### LOCATE FUNCTIONS

If the Q2300W are interlinked in a network, if one smoke alarm activates (initiating unit) other units will activate. For interlinked network of smoke alarms, only by pressing the HUSH button on the initiating smoke alarm will hush all the smoke alarms in the network.

If Q2300W smoke alarms are interlinked in the same network which had not hard wire (I/C) connect with other alarms, pressing the HUSH button on any non-initiating Q2300W smoke alarm will silence all smoke alarms EXCEPT for the initiating smoke alarm for 2 minutes. The LOCATE feature can be used repeatedly to find the initiating alarm or until the smoke has cleared.

### 10. Visual And Audible Indications

The following tables describes visual and audible indications the unit may emit during normal operation.

Mode	LED Indications	Audible Indications	Action/ Note:
Normal	Green LED steady ON	None	AC Mains power is present.
Normal	Red LED flashes every 5 minutes 20 seconds.	None	
Alarm mode (initiating unit)	Red LED flashing continuously.	Repeat 3 long beeps.(ISO8201)	
Alarm mode (interconnected units)	Red LEDs remain OFF	Repeat 3 long beeps(ISO8201)	
Hush mode	Red LED flashes once every 10 seconds	None	Hush Button has been pressed. Smoke Alarm will silence for about 10 minutes,and then automatically exit Hush mode.
Low Battery	Red LED flashes every 5 minutes	Single chirp every 40 seconds	Replace the 9V battery.
Smoke Alarm Memory (initiating unit)	Red LED flashes three times every 40 seconds.	Rapid chirps while Test Button is pressed.	
End of life		3 chirps every 40 seconds	Please replace with new alarm.

### **11. Nuisance Alarms and Hush Function**

This alarm is designed to minimise nuisance alarms. Cigarette smoke will not normally cause the unit to alarm, unless the smoke is blown directly into the alarm. Combustion particles from cooking may set off the alarm if it is located too close to a cooking appliance. Large quantities of combustible particles are generated from spills or when broiling. Using the fan on a range hood which vents to the outside (non-recirculating type) will also help prevent nuisance alarms from occurring by removing these combustible products from the kitchen.

### HUSH

If you know why the alarm is sounding, and you can verify that it is not a life threatening situation, you can push the button on the alarm to silence the alarm for up to 10 minutes. If the smoke is not too dense, that alarm will silence. After the Hush period, the smoke alarm will automatically reset and sound the alarm if particles of combustion are still present. You can use Hush repeatedly until the air has been cleared of the condition causing the alarm.

If an alarm occurs in an interconnected system of Quell units:

- Pushing the Hush button on the initiating alarm (Red LED flashing every second) will silence that alarm and all compatible interconnected units.
- Pushing the Hush button on any hard-wire smoke alarm will do nothing to silence an interconnected smoke alarm.

Note: Dense smoke will override Hush and sound a continuous alarm. If no fire is present, check to see if one of the reasons listed in scetion may have caused the alarm. If a fire is discovered, exit the building and call the fire brigade.

#### Smoke Alarm Memory

This smoke alarm has a memory function that can identify if the smoke alarm was the initiating unit since the TEST button was last pressed. Pressing the TEST button will cause the smoke alarm to chirp rapidly and the red LED to flash rapidly. The alarm memory is reset when the TEST button is released. This feature can be used after an alarm event, if the initiating smoke alarm had not been silenced by the Hush Button.

### 12. Battery Replacement

#### Alarm removal

Press down resist tab on mounting base, and then release the alarm from mounting base. (see Figure 6)



Battery Installation and Replacement:

After the alarm has been removed you can replace the battery. (see Figure 7).

NOTE : If the battery compartment is empty, the alarm cannot mount on the mounting base.



### 12. Battery Replacement

USE ONLY THE FOLLOWING 9VOLT REPLACEMENT BATTERIES: Alkaline type: ENERGIZER 522; DURACELL MN1604 or MX1604 Lithium type: FDK CP-V9Ju; ULTRALIFE U9VL-J-P Note: Weekly testing is recommended

△ Warning! Use only the batteries specified. Use of different batteries may have a detrimental effect on the alarm. Exposure to temperature extremes and / or high humidity may reduce battery life.

### 13. Cleaning Your Alarm

### YOUR ALARM SHOULD BE CLEANED AT LEAST ONCE A YEAR

To clean your alarm, remove it from the mounting bracket as outlined in "page 16 Battery Replacement or page 11, Figure 5". You can clean the interior of your alarm (sensing chamber) by using compressed air or a vacuum cleaner hose and blowing or vacuuming through the openings around the perimeter of the alarm. The outside of the alarm can be wiped with a damp cloth.

After cleaning, reinstall your alarm and test your alarm by using the test button. If cleaning does not restore the alarm to normal operation the alarm should be replaced.

After cleaning, reinstall your alarm and check that the green LED is on. Then test your alarm by using the test button.

### 14. Limitations Of Smoke Alarms

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lonisation sensing alarms may detect invisible fire particles (associated with fast flaming fires) sconer than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smouldering fires) sconer than ionisation alarms.

Home fires develop in different ways and are often unpredictable. For maximum protection, subject to applicable legal requirements in each State and Territory, Quell recommends that both ionisation and photoelectric alarms be installed.

Loose batteries, where fitted, must be of the specified type, in good condition and installed properly. AC only powered alarms will not operate if AC power has been cut off such as by an electrical fire, an open fuse or loss of mains supply. All alarms must be tested regularly to make sure the batteries and the alarm circuits are in good operating condition.

Life safety from fire in residential occupancies is based primarily on early notification to occupants of the need to escape, followed by the appropriate egress actions by those occupants. If the alarm is located outside the sleeping room or on a different floor, it may not wake up a sound sleeper. The use of aloch ol drugs may also impair one's ability to hear the smoke alarm. For maximum protection, a smoke alarm should be installed in each sleeping area on every level of a home. Smoke alarms cannot provide an alarm if smoke does not reach the unit. Therefore, smoke alarms may not sense fires starting in chinneys, walls, on roofs, on the other side of a closed door or on a different floor. Hearing impaired occupiers should consider fitting additional accessories to give a visual or tactile/Vibrating pad) alarm.

Although smoke alarms can help save lives by providing an early warning of a fire, they do not prevent property damage. Home owners and renters should have adequate insurance to protect their property.

If after reviewing this user guide you feel that your smoke alarm is defective in any way, do not tamper with the unit. Refer to Section 17 Warranty and Contact Details.

### DEVELOP AND PRACTICE A PLAN OF ESCAPE:

 Install and maintain fire extinguishers on every level of the home and in the kitchen, basement and garage. Know how to use a fire extinguisher prior to an emergency.

- Make a floor plan indicating all doors and windows and at least two (2) escape routes from each room. Second story windows may need a rope or chain ladder.
- Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
- Determine a place outside your home where you all can meet if a fire occurs.
- Familiarise everyone with the sound of the alarm and train them to leave your home when they hear it.
- Practice a fire drill at least every six months, including fire drills at night. Ensure that small children hear the alarm and wake when it sounds. They must wake up in order to execute the escape plan.
   Practice allows all occupants to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do.
- Current studies have shown alarms may not awaken all sleeping individuals. It is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

### 16. What To Do When The Alarm Sounds

- Leave immediately by your escape plan. Every second counts, so don't waste time getting dressed or picking up valuables.
- While 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 the inside of 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.
- Stay close to the floor if the air is smoky. Breathe shallowly through a cloth, wet if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- Call the fire department from your neighbour's home not from yours!
- Don't return to your home until the fire officials say that it is all right to do so.
- There are situations where a smoke alarm may not be effective to protect against fire.
- For instance:
  - a) smoking in bed
  - b) leaving children home alone
  - c) cleaning with flammable liquids, such as petrol

### TEN YEAR WARRANTY

### Warranty

Quell warrants to the original consumer purchaser that each new alarm will be free from defects in materials and workmanshipe. To orbit use for a period of 10 years from the date of purchase. To the extent permitted by law, Quell agrees to repair or replace (at our discretion) any defective product on presentation of the proof of purchase.

#### Australia warranty claims:

Where the goods are offered for sale in Australia, the benefits to the consumer given by this warranty are in addition to other rights and remedies of the consumer under the Australian Consumer Law and other applicable laws relating to the goods. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

### New Zealand warranty claims:

Where the goods are offered for sale in New Zealand, the benefits to the consumer given by this warranty are in addition to other rights and remedies of the consumer under relevant New Zealand consumer protection laws and other applicable laws relating to the goods. Our goods come with guarantees that cannot be excluded under relevant New Zealand consumer protection laws. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

### Exclusions

Subject to non-excludable laws, this warranty does not cover:

- · normal wear and tear to the product or parts
- batteries or other consumables included with this product (excluding sealed non replaceable battery models)
- damage to the product caused by accidents, misuse, abuse, lack of reasonable care, tampering or repair by a person not authorised by Quell
- any product that has not been installed, operated or maintained in accordance with the manual or operating instructions provided with the product
- any damage caused by improper power input or improper cable connection
- · any indirect, special or consequential loss or damage of any kind

### 17. Warranty & Contact Details

#### To make a claim

If a defect in the product appears within the time frame stated, you are entitled to submit a warranty claim by returning your product to the address shown below. Please contact Quell on the telephone numbers provided below, Monday to Friday during 9.00AM - 5.00PM AEST. When returning the product, please ensure it is properly packaged so that no damage occurs during transit. Any postage and packaging expenses required to return the product to Quell will be at your cost.

Please provide the original or a copy of the proof of purchase. Also, please make sure you have included an explanation of the problem.

If Quell elects to repair the product, please note that goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.

This warranty is provided by: Kidde Australia Pty Ltd ABN 68 006 252 428 10 Ferntree Place, Notting Hill VIC 3168 Telephone: 1800 672 171



Website: www.quell.com.au

