



240V MAINS PHOTOELECTRIC SMOKE ALARM

240V AC, 50Hz, 80mA max, 9V back up, Standalone
or Interconnected (24 units maximum)

User Manual

Model: Q1300



Australian
Standard
AS3786:2014
Lic: SMK1377
SAI Global

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P/N:130413, 132819
1385-7216-00 01/22

IMPORTANT: READ ALL INSTRUCTIONS BEFORE INSTALLATION
AND KEEP THIS MANUAL NEAR THE ALARM FOR FUTURE REFERENCE

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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 Q1300 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. The smoke alarm can be interconnected with up to 23 other Quell models as set out on page 2 – Product Specifications. Do not connect to any other type or model of smoke, or heat alarm not listed.

- Hush feature silences unwanted alarms for up to 7 minutes.
- Alarm memory identifies which alarm has activated when interconnected.
- The smoke alarm will sound a short beep about once every 30-40 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
- Test button checks smoke alarm operation.

 **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:	Q1300
Electrical Rating	240V AC 50HZ, DC battery back up (9V battery).
Sensor	Photoelectric
Interconnecting Smoke And Heat Alarms	Up to any combination of 23 other alarm models. Compatible Models include: Compatible Models include : Q2300 & Q2300LL and Q1300
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 every room where someone sleeps with the door closed. The closed door may prevent an alarm located outside from waking the sleeper.
- In the immediate area of bedrooms and the exit path from all sleeping areas ([Figure 1A](#)).
- In stairways, as stairways 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 9.1m 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 ([Figure 2B](#)).
- The alarms in rooms with ceiling slopes greater than 1m in 8m horizontally, should be located on the high side of the room ([Figure 2B](#)).

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 ([Figure 2A](#)).

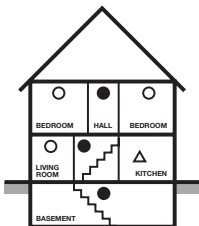
3. Recommended Locations for Alarms



- Smoke Alarms for Minimum Protection
- Smoke alarms for Additional Protection
- △ Not within 3m of cooking appliances

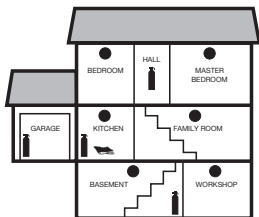
SINGLE FLOOR PLAN

Figure 1A



MULTIPLE FLOOR PLAN

Figure 1B

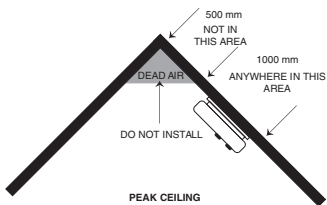
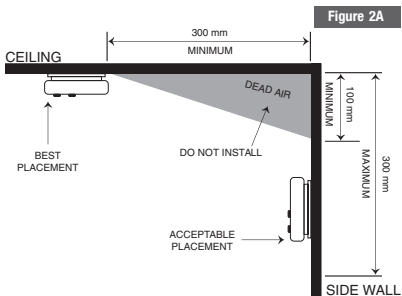


-  FIRE EXTINGUISHERS
-  SMOKE ALARMS
-  FIRE BLANKET

Figure 1C

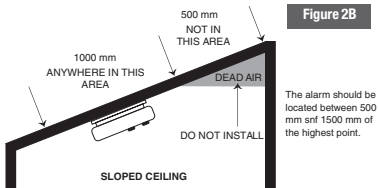
TOTAL HOME PROTECTION

3. Recommended Locations for Alarms

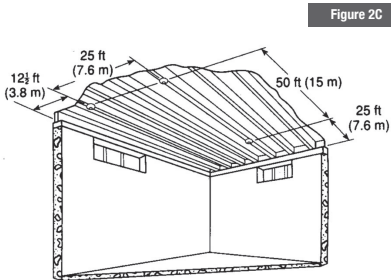


3. Recommended Locations for Alarms

- 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, all ceiling mounted alarms shall be located on the bottom of such beams. (See [Figure 2C](#))
- Alarms installed on an open-joint 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 [Figure 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 transferred from the outside to the inside through poorly insulated walls and roof. 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 (Figure 2A).

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

⚠ 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.

⚠ 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/O) on alarm is unused.
- When alarms are interconnected, all interconnected units must be powered from a single AC circuit.
- A maximum of 24 Quell safety devices may be interconnected in a multiple station arrangement. The 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 AS/NZS 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.

5. Installation

Note: Use approved listed Australian Standards cable 1.0mm² TPS or larger as required by local codes.

FIGURE 3 “INTERCONNECT WIRING DIAGRAM”

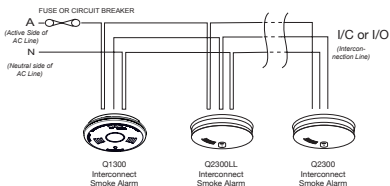


Figure 3

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

⚠ 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 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:
 1. 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)
 2. Insert the cables into the terminals clamping the terminal to each terminal.
 3. Prior to closing the terminal cover ensure that there are no wires obstructing its path.
 4. Close terminal cover.
 5. If alarm is not being interconnected by hardwiring to other alarms / devices, the interconnect cable terminal (I/O) on alarm mounting base remains unused.

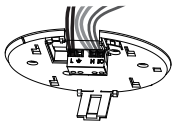


Figure 4A

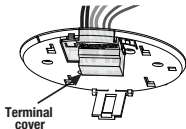


Figure 4B

6. Mounting Instructions

Battery Activation

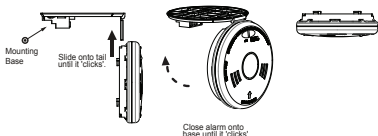
See Battery replacement (page 15) for battery installation.

- When installing new battery into the carrier or activate the battery, make sure that the polarity matches the markings printed of the label on the inside of the battery compartment.

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

- 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

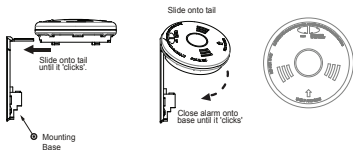


FIGURE 5

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

7. Operation And Test

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).

Red and Green LED indicators:

This smoke alarm features red and green LED indicators that can be seen through the Push-to-Test button or the LED lens above the test button.

The LEDs indicate the following:

GREEN

- ON – AC power is present.
- OFF – AC power is not present.

RED

- Red LED Flashes once 40 seconds
 - Mains power is present indicating normal operation.
- Red LED Flashes once a second
 - Smoke alarm senses smoke and simultaneously sounds an audible alarm
- Red LED Flashes once every 10 - 11 seconds
 - Smoke alarm is in hush mode.

Red LED OFF and unit is sounding alarm

- Another interconnected smoke alarm has sensed smoke and is signaling this alarm.

7. Operation And Test

Testing the smoke alarm

⚠ 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.

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:

1. 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 sounds.
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 page 15: Troubleshooting. 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.

8. 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 7 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 page 15. LOCATIONS TO AVOID may have caused the alarm. If a fire is discovered, exit the building and call the fire brigade.

9. Troubleshooting

PROBLEM	SOLUTION
Smoke alarm does not sound when tested. NOTE: Push and hold test button for at least five (5) seconds while testing.	<ol style="list-style-type: none">1. Check that AC power is turned on. Green LED should be illuminated.2. Check that battery is installed correctly as shown in page 15.
Single chirp about once every 40 seconds	Turn off AC power and replace battery. See "page 15: Battery Replacement".
Smoke alarm sounds unwanted alarms for example when residents are cooking, taking showers, etc.	Relocate the smoke alarm to a new location using a licensed electrician See "page 8: Installation Instructions" and "page 7: Locations to Avoid".
Interconnected smoke alarms do not sound when system is tested.	<ol style="list-style-type: none">1. Press and hold button for at least 5 seconds after the initiating unit sounds.2. Engage a licensed electrician to verify the interconnect wiring. See "Section 5 Wiring instructions".

NOTE: Contact Customer Service at 1800 672 171, if your alarm does not seem to operate correctly.

10. Battery Replacement

Alarm removal

Insert screwdriver in slot indicated to release locking tab. Whilst inserted push alarm hard with palm of hand in direction of arrow shown on alarm front.

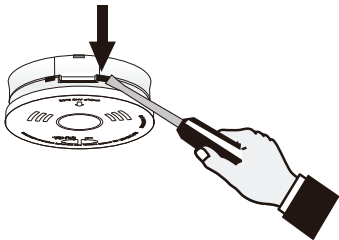


FIGURE 6

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.

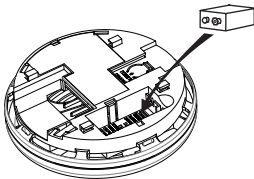


FIGURE 7

10. Battery Replacement

USE ONLY THE FOLLOWING 9VOLT REPLACEMENT BATTERIES:

Alkaline type: Eveready 1222; Energizer 522; Gold Peak 1604S, 1604A;
Duracell MN1604 or MX1604

Lithium type: 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.

11. 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.

12. Limitations Of Smoke Alarms

⚠ Warning! Smoke alarms are devices that can provide early warning of possible fires; however, alarms have sensing limitations.

Ionisation sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smouldering fires) sooner 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 alcohol or 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 chimneys, 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 15 Warranty and Contact Details.

13. Good Safety Habits

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.

14. 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

15. Warranty & Contact Details

TEN YEAR WARRANTY

Warranty

Quell warrants to the original consumer purchaser that each new alarm will be free from defects in materials and workmanship under normal 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

15. 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.** 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

Made in China