



# 10 Year Sealed Lithium Battery Photoelectric Smoke Alarm with Hush

---

## Smoke Alarm User Manual

---

Model Q1400



Photoelectric smoke alarms are designed to detect visible particles (associated with slow smouldering fires). Home fires develop in different ways and are often unpredictable. For maximum protection against fast flaming fires and slow smouldering fires, both ionisation and photoelectric alarms should be installed.

**Quell**® is a registered trademark of Chubb Fire & Security Pty Ltd  
Copyright © 2013 Chubb Fire & Security Pty Ltd. All rights reserved.

P/N:130414, 132820

0308-7206-02

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, Chubb recommends that both Ionisation and Photoelectric alarms be installed.

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

## **CONTENTS OF THIS MANUAL**

<b>Introduction</b> .....	<b>1</b>
<b>Installation</b> .....	<b>2-8</b>
<b>Operation</b> .....	<b>9-10</b>
<b>Maintenance</b> .....	<b>11-12</b>
<b>Fire Safety</b> .....	<b>13-14</b>
<b>Good Safety Habits</b> .....	<b>15</b>
<b>Warranty &amp; Contact Details</b> .....	<b>16-17</b>

## **ENVIRONMENTAL PROTECTION**

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with Local Authority or Supplier for recycling advice.



## **Introduction**

---

### **Model Q1400**

If you have any questions about the operation or installation of your alarm, please call 1800 654 435.

Figures 1A to 2B will help you determine the correct location of safety products that will help make your home a safer place.

**WARNING!** Removal of the smoke alarm battery will render the smoke alarm inoperative.

**IMPORTANT!** Read all instructions before installation and keep this manual near the alarm for future reference.

## Installation Instructions

---

**By law at least one smoke alarm must be installed on each level of your home (Figure 1B).**

### 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 put alarms at both ends.
- For maximum household protection see Figure 1C.

### Things to Consider:

#### For Ceiling Mounting:

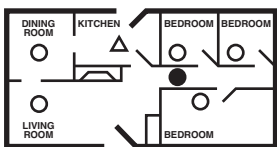
Smoke from a fire will rise to the ceiling and spread horizontally. Mounting the smoke alarm in the centre of the ceiling places it closest to all points in the room.

- When mounting an alarm on the ceiling, locate it at a minimum of 30cm 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).
- Smoke 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 10cm and a maximum of 30cm below the ceiling (Figure 2A).

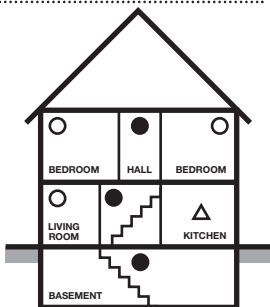
# Installation



- Smoke Alarms for Minimum Protection
- Smoke Alarms for Additional Protection
- △ Ionisation Type Smoke Alarm with Alarm Silencer (Hush®) or Photoelectric Type

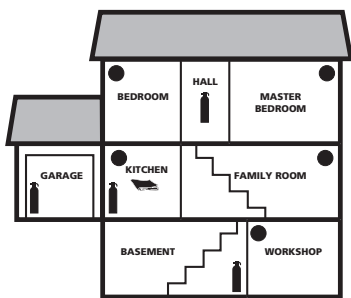
**SINGLE FLOOR PLAN**

**FIGURE 1A**



**MULTIPLE FLOOR PLAN**

**FIGURE 1B**

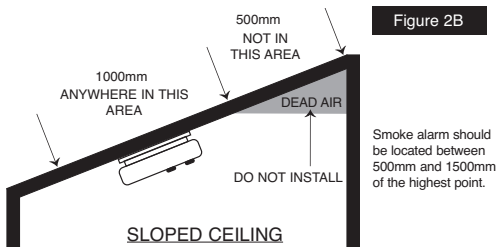
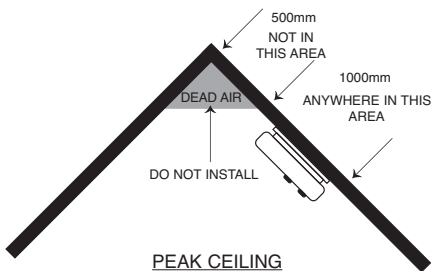
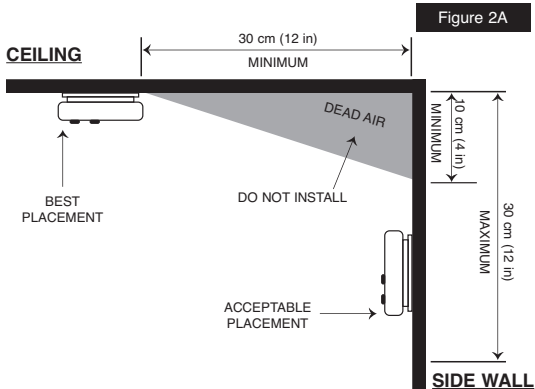


-  FIRE EXTINGUISHERS
-  SMOKE ALARMS
-  FIRE BLANKET

**FIGURE 1C**

**TOTAL HOME PROTECTION**

# Installation



## Installation

---

### **Mobile Home Installation:**

#### For Well Insulated Mobile Homes

Install smoke 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 smoke alarm on an inside wall with the top edge of the alarm at a minimum of 10cm and a maximum of 30cm 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 SMOKE ALARM OPERATION AFTER CARAVAN OR MOBILE HOME VEHICLE HAS BEEN IN STORAGE, BEFORE EACH TRIP AND AT LEAST ONCE A WEEK DURING USE

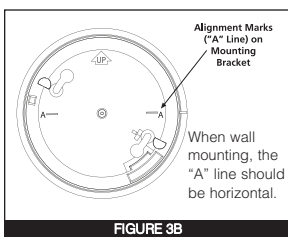
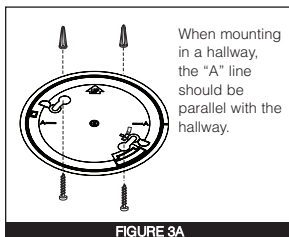
## Installation

To minimise nuisance alarms avoid these locations:

- Do not install within 0.9m of the following: The door to a kitchen, or a bathroom that contains a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or 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 30cm away from fluorescent lights.
- Keep out of insect infested areas.
- Avoid excessively dusty, dirty or greasy areas.
- Do not install in areas where the temperature is colder than 5°C or hotter than 45°C.
- Do not install in areas where the relative humidity (RH) is greater than 85%.
- If a kitchen alarm is desired, it should have an alarm silencer feature or be a **photoelectric** type.
- Do not place in the garage.
- 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.

N.B. - 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.

**CAUTION: THIS UNIT IS SEALED (INCLUDING THE BATTERY). THE COVER IS NOT REMOVABLE!**



## Installation

1. To ensure aesthetic alignment of the alarm with the hallway or wall, the "A" line on the mounting bracket should be parallel with the hallway when ceiling mounting or horizontal when wall mounting.

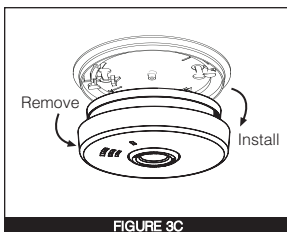


FIGURE 3C

2. After selecting the proper smoke alarm location as described in on Page 2, attach the mounting bracket to the ceiling as shown in Figure 2A. For wall mounting see Figure 3A. Place the mounting plate on the wall; be sure the "A" line is horizontal (parallel to the floor). Use the screws and cavity fixings provided to secure the mounting bracket (use 3/16" drill bit for cavity fixings.)
3. This alarm has a battery permanently sealed inside the alarm. No battery installation or maintenance is necessary.

**Note: Extensive cycling between high and low temperatures will significantly reduce battery life. Long term exposure to high temperatures will degrade the battery over time. Chubb recommends locating this alarm in a controlled temperature environment (20-30°C) for optimum life.**

### ACTIVATING THE ALARM

**Once activated, the battery will supply power to the alarm for the life of the alarm (10 years). Ensure that the mounting bracket is mounted correctly before installing the alarm on the mounting bracket.**

1. To activate the alarm, install the alarm on the mounting bracket (Figure 3C) and rotate the alarm clockwise (as indicated on the alarm cover) until the alarm snaps into place .

**The alarm is now activated!**

**WARNING: Alarm will not operate if it is not fixed on mounting plate.**



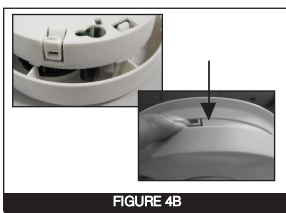
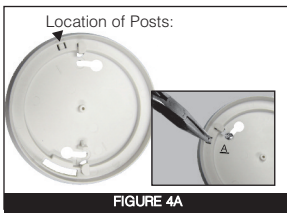
## Installation

- After installation/activation, test your alarm by depressing and holding down the Test button for a minimum of 1 second (or until the alarm sounds). This should sound the alarm. The alarm will sound at a low level to avoid discomfort. If the Test button is pressed for greater than 5 seconds, the alarm will sound at the full 85 decibels and may cause some discomfort

### TAMPER RESIST FEATURE

#### Smoke Alarm Tamper Resist Feature

- To make the smoke alarm tamper-resistant, a tamper resist feature has been provided. To activate this feature you must break out the tamper-resist posts on the mounting plate (Figure 4A). Use a small screwdriver.
- Using this feature will deter children and others from removing the alarm from the mounting plate. With the blocks removed, the tamper-resist feature will be activated when the alarm is installed on the mounting plate.
- The tamper-resist tab will have to be released in order to remove alarm from mounting plate. Using a tool (small screwdriver) push the tab away from the mounting plate (Figure 4B) and rotate the alarm anti-clockwise in the "OFF" direction.
- After re-installation, test the alarm by depressing and holding down the Test button for several seconds. This should sound the alarm.



## Operation

---

### TESTING:

Test by pushing the Test/Hush button on the cover and holding it down for a minimum of 1 second (or until the alarm sounds).

Note: the first test sequence will be at a lower volume.

Holding the Test/Hush button for longer than 5 seconds will result in the full 85 decibel sound output. This will sound the alarm if the electronic circuitry, horn, and battery are working. If no alarm sounds, the unit has a defective battery or other failure. **DO NOT use an open flame to test your alarm, you could damage the alarm or ignite combustible materials and start a structure fire.**

**SMOKE SENSING CHAMBER OPERATION:** This alarm will "chirp" every 30 seconds (with red LED flash at the same time) if it detects a problem with the smoke sensing chamber.

### NOTE: WEEKLY TESTING IS REQUIRED.

TEST THE ALARM WEEKLY TO ENSURE PROPER OPERATION. Erratic or low sound coming from your alarm may indicate a defective alarm, and it should be returned for service.

### OPERATION:

The smoke alarm is operating once the alarm is activated (see "Activating the Alarm") and testing is complete. When products of combustion are sensed, the unit sounds a loud 85db pulsating alarm until the air is cleared. If there is any question as to the cause of the alarm, it should be assumed that the alarm is due to an actual fire and the dwelling should be evacuated immediately.

### HUSH™ CONTROL:

**NOTE:** Hush control and Test button are a single button. The HUSH™ feature has the capability of temporarily desensitising the alarm circuit for approximately 10 minutes. This feature is to be used only when a known alarm condition, such as smoke from cooking, activates the alarm. The smoke alarm is desensitised by pushing the HUSH® button on the smoke alarm cover. The alarm will silence immediately, and the LED will flash every 10 seconds to signal that the alarm is in Hush mode. The smoke alarm will automatically reset after approximately 10 minutes. The HUSH™ feature can be used repeatedly until the air has been cleared of the condition causing the alarm. Pushing the Test/Reset button on the alarm will end the temporarily desensitised period.

## Operation

---

**NOTE: DENSE SMOKE WILL OVERRIDE THE HUSH™ CONTROL FEATURE.**

**CAUTION: BEFORE USING THE ALARM HUSH™ FEATURE, IDENTIFY THE SOURCE OF THE SMOKE AND BE CERTAIN A SAFE CONDITION EXISTS.**

**FLASHING LED LIGHT:** This smoke alarm is equipped with a flashing red indicator light with the following modes of operation:

- The LED will flash every every 60-70 seconds in the stand-by mode signifying that the alarm is receiving power.
- The LED will flash every 0.5 seconds when the alarm is sounding. The flashing LED and pulsating alarm will continue until the air is cleared.
- The LED will flash every 10 seconds while in Hush mode.
- The LED will flash twice every 30 seconds when the alarm is within 30 days of end of life.
- The LED will flash every 30 seconds (with a chirp every 60 seconds) when the alarm is at end of life (**replace alarm immediately**)
- The alarm will chirp every 30 seconds without an LED flash to indicate a fault condition with the processor of the alarm.

If your alarm regularly **nuisance alarms** (see "Nuisance Alarms") when cooking, this indicates the alarm may be mounted too close to the source e.g. kitchen. However, by pressing the **Hush** button prior to cooking, you can densitise the alarm for approximately 10 minutes.

## Maintenance

---

Smoke alarms are designed to minimise nuisance alarms.

Cigarette smoke will not normally set off the alarm.

Combustion particles from cooking may set off the alarm if the alarm is located close to the cooking area. 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 remove these combustible products from the kitchen.

This model Q1400 has a HUSH™ control that is extremely useful in areas prone to nuisance alarms. For more information refer to OPERATION AND TESTING" section.

If the alarm does sound, check for fires first. If a fire is discovered, get out and call the fire service. If no fire is present, check to see if one of the reasons listed on the Installation section, "To minimise nuisance alarms avoid these locations", may have caused the alarm.

## MAINTENANCE

### BATTERY ACTIVATION AND DEACTIVATION

NOTE: One Lithium-Ion battery, permanently sealed inside the alarm, powers this unit; no battery installation or replacement is necessary for the life of the alarm.

### **WARNING! DO NOT ATTEMPT TO OPEN THE ALARM FOR ANY REASON!**

To activate the alarm, attach the alarm to the mounting bracket by rotating in the direction of the arrows on the cover, see ACTIVATING THE ALARM in the INSTALLATION section.

This alarm has a low battery monitor circuit which will cause the alarm to "chirp" every 60 seconds (with a red LED flash every 30 seconds), for a minimum of 30 days, at the end of the life of the alarm to indicate that the alarm needs replacement. Prior to the low battery chirp the LED will flash twice every 30 seconds for a period of 30 days. The purpose of this is to alert the user that the alarm will be entering low-battery and allows the alarm to be changed at a time of convenience to the user (i.e. chirping can be avoided during unsociable hours).

To deactivate the alarm remove the alarm from the mounting bracket by rotating the alarm in the direction indicated by the arrows on the cover of the alarm. **NOTE: TAMPER RESIST FEATURE** in the **INSTALLATION** section explains how to remove alarm from base.

## Maintenance

---

### **CLEANING YOUR ALARM**

#### **YOUR ALARM SHOULD BE VACUUMED ONCE A MONTH**

If the tamper resist feature has been activated you will need to follow the instructions on Page 8 to remove your alarm for maintenance.

To clean your alarm, remove it from the mounting bracket as outlined in the beginning of this section. 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, re-install 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.

## Fire Safety

---

**WARNING:** Please read carefully and thoroughly.

- Australian Standard AS 1670.6 states the purpose of installing smoke alarms is to provide early warning of a potentially life threatening condition and provide the maximum possible exit time.
- Smoke 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, both ionisation and photoelectric alarms should be installed.**
- A battery powered alarm must have a battery of the specified type, in good condition and installed properly.
- AC powered alarms (without battery backup) will not operate if the AC power has been cut off, such as by an electrical fire or an open fuse.
- Smoke alarms must be tested regularly to make sure the batteries and the alarm circuits are in good operating condition.
- Smoke alarms cannot provide an alarm if smoke does not reach the alarm. 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.
- If the alarm is located outside the bedroom 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.
- Although smoke alarms can help save lives by providing an early warning of a fire, they are not a substitute for an insurance policy. Home owners, landlords and tenants should have adequate insurance to protect their lives and property.
- \* There are situations where a smoke alarm may not be effective enough to protect against fire. For instance:
  - a) smoking in bed
  - b) leaving children home alone
  - c) cleaning with flammable liquids such as gasoline

**IMPORTANT:** This alarm is not designed to alert hearing impaired individuals.

## Fire Safety

---

### Additional Information

Smoke Detection - Where required by applicable laws, codes, or standards for the specified occupancy, approved single and multiple-station smoke alarms shall be installed as follows:

- In all sleeping rooms with the exception: Smoke alarms shall not be required in sleeping rooms in existing one and two-family dwelling units.
- Outside of each separate sleeping area, in immediate vicinity of the sleeping rooms.
- On each level of the dwelling unit, including basements.  
Exception: In existing one and two-family dwelling units, approved smoke alarms powered by batteries are permitted.

### Smoke Detection

Are more smoke alarms desirable? The required number of smoke alarms might not provide reliable early warning protection for those areas separated by a door from the areas protected by the required smoke alarms. For this reason, it is recommended that the householder consider the use of additional smoke alarms for those areas for increased protection.

The additional areas include the basement, bedrooms, dining room, furnace room, utility room, and hallways not protected by the required smoke alarms.

## 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.
- Current studies have shown smoke alarms may not awaken all sleeping individuals, and that 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.
- Make a floor plan indicating all doors and windows and at least two escape routes from each room. Second storey 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 a fire.
- Determine a place outside your home where you 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.

### What to do when the Alarm Sounds

- Alert small children in the home.
- Leave immediately by your escape plan. Every second counts, so don't waste time getting dressed or picking up valuables.
- In leaving, don't open any inside door without first feeling its surface. If hot, or you see smoke seeping through cracks, don't open that door! Instead use your alternative 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 brigade on 000 from your neighbour's home or a call box – 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 unsupervised.
  - c) cleaning with flammable liquids, such as gasoline
  - d) fires where the victim is intimate with a flaming initiated fire; for example, when a person's clothes catch fire while cooking.
  - e) incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located detectors.

**Installation Date:** \_\_\_\_\_

**Alarm Model(s):** \_\_\_\_\_

**Installer/Landlord:** \_\_\_\_\_

**Tel:** \_\_\_\_\_

Chubb Fire & Security Pty Ltd  
 ABN 47 000 067 541  
 A UTC Climate, Controls & Security Company  
 149-155 Milton Street, Ashfield NSW 2131 Australia  
 Telephone: 1800 654 435  
 Website: www.quell.com.au

Chubb New Zealand Limited  
 A UTC Climate, Controls & Security Company  
 3 Fisher Crescent, Mt Wellington, Auckland  
 New Zealand  
 Telephone: 09 270 7288  
 Website: www.quell.co.nz



## 9. Warranty & Contact Details

### TEN YEAR LIMITED WARRANTY

#### Warranty

Chubb warrants to the original consumer purchaser that each new smoke 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, Chubb 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 Chubb
- 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 or special loss or damage of any kind

**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 Chubb 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 Chubb 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 Chubb 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:

Chubb Fire & Security Pty Ltd  
ABN 47 000 067 541  
A UTC Climate, Controls & Security Company  
149-155 Milton Street, Ashfield NSW 2131 Australia  
Telephone: 1800 654 435  
Website: [www.quell.com.au](http://www.quell.com.au)

Chubb New Zealand Limited  
A UTC Climate, Controls & Security Company  
3 Fisher Crescent, Mt Wellington, Auckland, New Zealand  
Telephone: 09 270 7288  
Website: [www.quell.co.nz](http://www.quell.co.nz)



AS 3786 Lic 1377  
SAI Global