

**QUELL** /

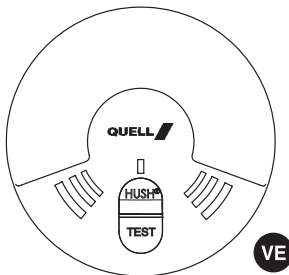
# Ionisation Smoke Alarm with Hush

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## Manual

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Model Q946



Ionisation smoke alarms are designed to detect invisible particles (associated with fast flaming 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.

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This smoke alarm uses an extremely small amount of radioactive element in the ionisation chamber (see warning on page 18). Do not try to repair the smoke alarm yourself. Refer to the instructions in the warranty section.



**QUELL**

Manufactured in China for:  
 Chubb Fire & Security Pty Ltd  
 33-39 Talavera Road  
 Macquarie Park, NSW 2113 Australia  
**Telephone:** 1800 654 435  
**Website:** [www.quell.com.au](http://www.quell.com.au)

## Introduction

### Model Q946

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!** Repeat 3 long beeps (ISO 8201) indicates the particles of combustion have been detected.

**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

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**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:

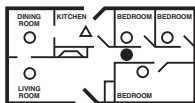
Smoke from a fire will rise to the ceiling and spread horizontally. Mounting the smoke alarm in the centre of the ceiling places it closest to all points in the room.

- 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).

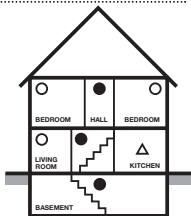
## Installation



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

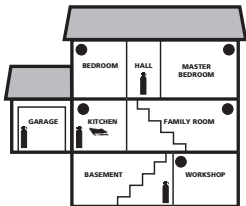
**SINGLE FLOOR PLAN**

**Figure 1A**



**MULTIPLE FLOOR PLAN**

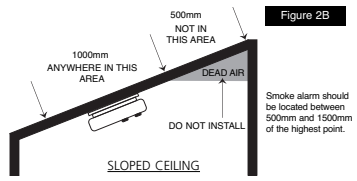
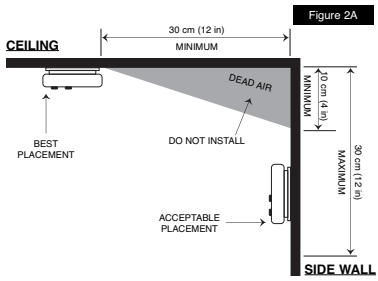
**Figure 1B**



**Figure 1C**

**TOTAL HOME PROTECTION**

## Installation



## Installation

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### 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 0°C or hotter than 40°C.
- Do not install in areas where the relative humidity (RH) is greater than 93%.
- Avoid placing smoke alarms in kitchen areas. 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.

## Installation

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### Mounting

**CAUTION:** This unit is sealed. The cover is not removable!

- The smoke alarm is suitable for wall mounting.
- Remove the mounting plate from the back of the alarm by holding the plate and twisting the alarm anti-clockwise. As indicated by the "OFF" arrow on the alarm cover.
- Hold the mounting plate against the selected installation location (wall or ceiling) and mark the centre of the holes with a pencil. To ensure aesthetic alignment of the alarm with the hallway, or wall, the "A" line on the mounting plate should be parallel with the hallway when ceiling mounted, or horizontal when wall mounted (Figure 3A and 3B).
- Drill a hole through the pencil marks and use the enclosed screws and anchors to secure the mounting plate. Use a 3/16 inch drill bit to screw the anchor holes.
- Press the battery reminder tab down into the battery compartment while inserting the battery (Figure 3E).

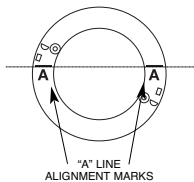
**WARNING:** Please ensure batteries are inserted correctly with positive and negative terminals connected to the corresponding point on the smoke alarm.

**CAUTION:** If the battery reminder tab is not held down in the battery compartment by the battery, the unit will not attach to the mounting plate.

Place the alarm onto the mounting plate, making sure the alignment marks are lined up. Twist the alarm clockwise in the direction indicated by the "ON" arrow on the alarm cover (Figure 3D) until it locks in place.



## Installation



"A" LINE  
ALIGNMENT MARKS

Figure 3A

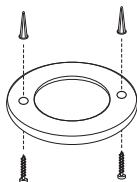
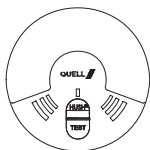
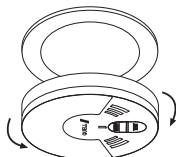


Figure 3B



WALL MOUNTING  
POSITION

Figure 3C



ROTATE TO MOUNT OR  
TO REMOVE

Figure 3D



BATTERY  
REMINDER TAB

Figure 3E

## Installation

### Alarm Tamper-Resist Feature

- A tamper resist feature has been provided. To activate this feature you must break out the tamper-resist blocks 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.
- The tamper-resist tab will have to be released in order to change the battery. 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 installation, test the alarm by depressing and holding down the Test button for several seconds. This should sound the alarm.

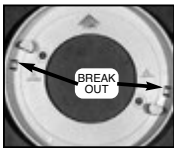


Figure 4A



Figure 4B

## Operation

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### Testing

Test the unit, to ensure proper operation, by pressing the Test button for at least 5 seconds (or until the unit sounds). This will sound the alarm if the electronic circuitry, horn, and battery are working.

**CAUTION:** Due to the loudness (85 decibels) of the alarm, always stand an arms-length away from the unit when testing.

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 fire.

Test the alarm weekly to ensure proper operation. Erratic or low sound coming from your alarm may indicate a defective alarm (see Warranty section).

**NOTE: WEEKLY TESTING IS REQUIRED.**

### LED Indicators

This alarm is equipped with a red LED indicator, with three modes of operation.

Red LED - Flashing every 32–48 seconds: Indicates that the smoke alarm is operating properly.

Red LED - Flashing: When the Test button is pressed, or when the smoke alarm senses particles of combustion and goes into alarm (constant pulsating sound), the red LED will flash once per second. The flashing LED and repeat 3 long beeps will continue until the air is cleared.

Red LED - Alarm silencer (Hush™ mode) indication: The red LED will flash every 8-12 seconds, indicating the smoke alarm is in the alarm silencer (Hush™) mode.

**NOTE: WEEKLY TESTING IS REQUIRED.**

## Operation

### Alarm Silencer (Hush™)

The alarm silencer (Hush™ button) is extremely useful in a kitchen area or other areas prone to nuisance alarms.

The alarm silencer (Hush™) has the capability of temporarily desensitising the alarm circuit for approximately 8 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 and releasing the alarm silencer (Hush™ button) on the smoke alarm cover. If the smoke is not too dense, the alarm will silence immediately. The red LED will illuminate every 8-12 seconds to indicate that the alarm is in a temporarily desensitised condition.

The smoke alarm will automatically reset after approximately 8 minutes. If after this period particles of combustion are still present, the alarm will sound again.

The alarm silencer (Hush™) can be used repeatedly until the air has been cleared of the condition causing the alarm.

**NOTE:** Dense smoke will override the alarm silencer (Hush™) and sound a continuous alarm.

**CAUTION:** Before using the alarm silencer (Hush™), identify the source of the smoke and be certain a safe condition exists.

### Alarm Removal

To remove the alarm from the mounting plate, rotate the alarm anti-clockwise in the direction of the "OFF" arrow on the cover. If the tamper-resist feature has been used, refer to Alarm Tamper-Resist Feature section for removal instructions.

## Maintenance

This smoke alarm uses a 9 volt battery (carbon zinc, alkaline and lithium batteries may be used). A fresh battery should last for one year under normal operating conditions.

This alarm has a low battery monitor which will cause the alarm to "chirp" approximately every 40 seconds for a minimum of 30 days when the battery gets low.

Replace the battery when this condition occurs. The low battery chirp will occur approximately 10 seconds after the red LED flash.

Continued chirping after battery replacement may indicate defective circuitry and alarm should be replaced.

Use only the following 9 volt batteries for replacement:

Carbon-Zinc Type    Eveready 1222; Gold Peak 1604S

Alkaline Type        Energizer 522  
                              Duracell MN1604 or MX1604  
                              Gold Peak 1604A  
                              Panasonic 6AM6, 6AM-6, 6AM-6PI,  
                              6AM6X or 6LR61(GA)

Lithium Type        Ultralife U9VL-J

These batteries can be purchased at your local retailer.

**WARNING!** Use only the batteries specified above.

- To the extent permitted by law, Chubb Fire & Security Pty Ltd excludes all liability for loss or damage to the extent caused by the use of batteries other than Eveready 1222; Gold peak 1604S; Energizer 522; Duracell MN1604 or MX1604; Gold Peak 1604A; Panasonic 6AM6, 6AM-6, 6AM-6PI, 6AM6X or 6LR61 (GA); Ultralife U9VL-J.
- The use of other batteries may have a detrimental effect on operation of the smoke alarm or may cause the battery to explode resulting in injury or fire.

A good safety measure is to replace the battery at least once a year, or at the same time you change your clocks for daylight saving time. Be sure to follow the battery installation instructions printed on the back of the alarm.

**NOTE: REGULAR WEEKLY TESTING IS REQUIRED!**

## Maintenance

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### Cleaning the Alarm

The alarm should be cleaned at least once a year.

- To clean your alarm, remove it from the mounting plate as outlined in previous sections. You can clean the alarm by using compressed air or a vacuum cleaner hose with a soft brush attachment. Blow or vacuum around the perimeter of the alarm to remove dust and dirt. The outside of the alarm can be wiped with a damp cloth (do not use a wet cloth to avoid water entering the unit).
- 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.
- Do not paint the unit. Paint will seal the vents and interfere with the sensor's ability to detect smoke. Never attempt to disassemble the unit or clean inside. This action will void your warranty.

### Replacing the Alarm

**It is recommended this alarm be replaced ten years from the date of manufacture.** This date has been provided on the product label which is located on the back of the alarm.

## 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 smoldering 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.

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

## Fire Safety

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### 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. The installation of the smoke alarms in the kitchen, attic (finished or unfinished), or garage is normally not recommended, as these locations occasionally experience conditions that can result in nuisance 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 (AUS) or 111 (NZ) from your neighbour's home or a phone 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 Limited  
 ABN 47 000 067 541  
 A UTC Climate, Controls & Security Company  
 33-39 Talavera Road, Macquarie Park, NSW 2113 Australia  
 www.quell.com.au

Chubb New Zealand  
 A UTC Climate, Controls & Security Company  
 3 Fisher Crescent, Mt Wellington,  
 Auckland, New Zealand  
 www.chubb.co.nz

Detach and display next to your Consumer Unit/Fuse Box.

## WARRANTY & CONTACT DETAILS

**Chubb**

Chubb Insurance

### 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

## 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 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  
 33-39 Talavera Road  
 Macquarie Park, NSW 2113 Australia  
 Telephone: 1800 654 435  
 Website: [www.chubb.com.au](http://www.chubb.com.au)



ABN 47 000 067 541



Chubb New Zealand  
 3 Fisher Crescent, Mt Wellington, Auckland, New Zealand  
 Telephone: 09 270 7288  
 Website: [www.chubb.co.nz](http://www.chubb.co.nz)



AS 3786:2014  
 Lic 1377  
 SAI Global

# Chubb

United Technologies

**WARNING:** Radiative material Americium 241 1.0 microcuries. Do not tamper with sealed source. When this alarm is no longer required, it's recommended that the preferred method of disposal for small numbers of Smoke Alarms is to include them in the domestic rubbish.