



**QUELL** 

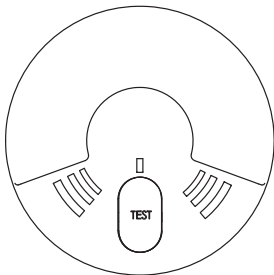
# Ionisation Smoke Alarm

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## Manual

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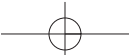
Model Q945



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.



P/N: 130593, 130594  
0945-7216-00



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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.



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

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### Model Q945

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

Image 1C 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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### Recommended Locations

- Install the first alarm in the immediate area of the bedrooms. Install additional alarms to monitor the exit path, as the bedrooms are usually farthest from the exit. If more than one sleeping area exists, locate additional alarms in each sleeping area (Image 1A).
- Install additional alarms to monitor any stairway as stairways act like chimneys for smoke and heat.
- Install at least one alarm on every floor level (Image 1B).
- Install an alarm in every bedroom.
- Install an alarm in every room where large electrical appliances are operated (i.e. portable heaters or humidifiers).
- Install an alarm in every room where someone sleeps with the door closed. The closed door may prevent an alarm located outside from waking the sleeper.
- Smoke, heat, and combustion products rise to the ceiling and spread horizontally. Mounting the smoke alarm on the ceiling in the centre of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction.
- When mounting an alarm on the ceiling, locate it at a minimum of 30 cm (12 in) from the side wall (Image 2A).
- For mobile home installation, select locations carefully to avoid thermal barriers that may form at the ceiling. For more details, see MOBILE HOME INSTALLATION on page 4.
- When mounting the alarm on the wall, use an interior wall with the top edge of the alarm at a minimum of 10 cm (4 in) and a maximum of 30 cm (12 in) below the ceiling (Image 2A).
- Put smoke alarms at both ends of a bedroom hallway or large room if the hallway or room is more than 9.1 m (30 ft) long.

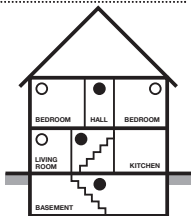
## Installation



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

SINGLE FLOOR PLAN

IMAGE 1A



MULTIPLE FLOOR PLAN

IMAGE 1B

- Install smoke alarms on sloped, peaked or cathedral ceilings between 500 and 1500mm from the highest point of the ceiling. Smoke alarms in rooms with ceiling slopes greater than 1 m in 8 m horizontally should be located on the high side of the room (See Image 2B).

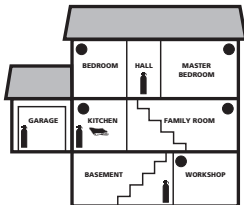


IMAGE 1C

TOTAL HOME PROTECTION

-  FIRE EXTINGUISHERS
-  SMOKE ALARMS
-  FIRE BLANKET

## Installation

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- **Mobile Home Installation**

Mobile homes built in the past five to seven years have been designed to be energy efficient. Install smoke alarms as recommended above (refer to RECOMMENDED LOCATIONS and Image 2A).

In mobile homes that are not well insulated compared to present standards, 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. In such units, install the smoke alarm on an inside wall with the top edge of the alarm at a minimum of 10cm (4") and a maximum of 30cm (12") below the ceiling (see Image 2A).

If you are not sure about the insulation in your mobile home, or if you notice that the outer walls and ceiling are either hot or cold, install the alarm on an inside wall. For minimum protection, install at least one alarm close to the bedrooms. For additional protection, see SINGLE FLOOR PLAN in Image 1A.

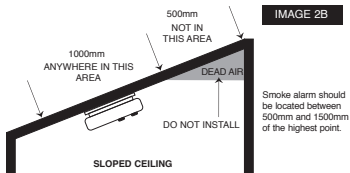
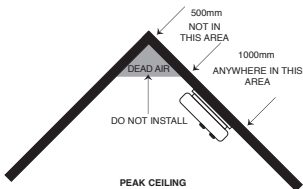
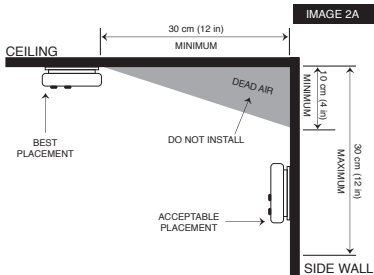
**WARNING: TEST YOUR SMOKE ALARM OPERATION AFTER CARAVAN OR MOBILE HOME VEHICLE HAS BEEN IN STORAGE, BEFORE EACH TRIP AND AT LEAST ONCE A WEEK DURING USE.**

## Installation

### Locations to Avoid

- Do not install within 0.9 m (3 ft) 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.
- Do not place the alarm where curtains or other objects will block the sensor. Smoke must be able to reach the sensor to accurately detect conditions.
- Install at least 30 cm (12 in) away from fluorescent lights as electronic noise may cause nuisance alarms.
- Keep out of insect infested areas. Avoid excessively dusty, dirty or greasy areas. Dust particles may cause nuisance alarms or failure to alarm.
- Extreme temperatures may effect the sensitivity of the alarm. Do not install in areas where the temperature is colder than 0°C or hotter than 40°C, such as garages and unfinished attics.
- Do not install in areas where the relative humidity (RH) is greater than 93%. Very humid areas, with moisture or steam, can cause nuisance alarms.
- Avoid placing smoke alarms in kitchen areas. Normal cooking may cause nuisance alarms. If a kitchen alarm is desired, it should have an alarm silencer feature or be a photoelectric type.
- Do not place in the garage. Particles of combustion are present when you start your automobile.
- 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.
- In 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 images 2A and 2B.

## Installation



## Installation

### 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 in the direction indicated by the "OFF" arrow on the alarm cover.
- After selecting the proper smoke alarm location as described previously, 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 (Image 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 for the screw anchor holes.
- Press the battery reminder tab down into the battery compartment while inserting the battery (Image 3E).

**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.

- Corresponding alignment marks are provided on the edge of the mounting plate and the alarm. After installing 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 (Image 3D) until it locks in place.



## Installation

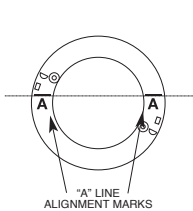


IMAGE 3A

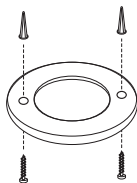


IMAGE 3B

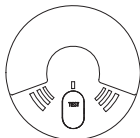
WALL MOUNTING  
POSITION

IMAGE 3C

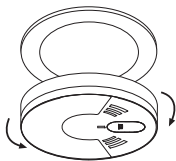
ROTATE TO MOUNT OR  
TO REMOVE

IMAGE 3D

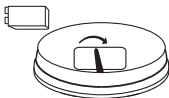
BATTERY  
REMINDER TAB

IMAGE 3E

## Installation

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### 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 blocks on the mounting plate (Image 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 change the battery. Using a tool (small screwdriver) push the tab away from the mounting plate (Image 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.

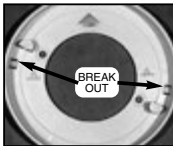


IMAGE 4A



IMAGE 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. 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.

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

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.**



## Operation

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### LED Indicators

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

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

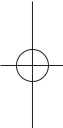
Red LED - Flashing: When the Test button is pressed, or when the smoke alarm senses particles of combustion and goes into alarm (constant pulsating sound), the red LED will flash once per second. The flashing LED beeps will continue until the air is cleared.

**NOTE: WEEKLY TESTING IS REQUIRED.**

### 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. Use of different batteries than the recommended ones, may have a detrimental effect on the smoke alarm. 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

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**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 are devices that can provide early warning of possible fires at a reasonable cost; 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 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.

## Fire Safety

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- 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.

### 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 storey windows may need an escape 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 smoke 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.



## Fire Safety

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### Alarm Exit Procedure

- 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 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. If possible do not breathe too deeply to avoid smoke inhalation. Breathe through a cloth (preferably 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:

- smoking in bed;
- leaving children unsupervised;
- cleaning with flammable liquids, such as gasoline.

## 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: (1) In all sleeping rooms with the exception: Smoke alarms shall not be required in sleeping rooms in existing one and two-family dwelling units. (2) Outside of each separate sleeping area, in immediate vicinity of the sleeping rooms. (3) 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.

Notify your local fire brigade and insurance company of your smoke alarm installation.

## WARRANTY & CONTACT DETAILS

**Chubb**  
CORPORATE MEMBER

### 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, special or consequential 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.quell.com.au](http://www.quell.com.au)



ABN 47 000 067 541

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



**Chubb**  
United Technologies



AS 3786:2014  
Lic 1377  
SAI Global

**WARNING:** Radiactive 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.