

PHOTOELECTRIC SMOKE ALARM WITH RF INTERCONNECT

3V 10 Year Sealed Lithium Battery, Standalone or Interconnected (32 units maximum)

User Manual

Model: Q5000DCS-WCLH, Q5000DCS-WCB





Tested and Approved to Australian Standard AS 3786:2014

You do NOT need a home wi-fi system to use these units.

Multiple wireless units create their own independent wireless RF interconnect network.

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

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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.

1. Product Features

Models Q5000DCS-WCHL and Q5000DCS-WCB are powered from a non-replaceable battery. The smoke alarm ensures protection in the event of a power failure.

- Hush feature silences unwanted alarms for up to 10 minutes.
- Alarm memory identifies which alarm has activated when interconnected.
- The smoke alarm will sound a short beep about once every 48 seconds if the battery is low.
- Multi-purpose red LEDs indicate that the smoke alarm is working normally, or is in alarm.
- Loud alarm sounder 85 dB.
- · Interconnect up to another 31 Quell Q5000 series smoke alarms.
- · Learn switch for simple network setup.
- Insect mesh protection over sensor.
- · Quick twist on base plate for easy installation.

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

2. Product Specifications

Model:	Q5000DCS	
Electrical Rating	3V sealed lithium battery	
Radio Frequency	924.365MHz	
Sensor	Photoelectric	
Wireless Interconnecting Smoke Alarms	Up to any combination of 32 QUELL wireless smoke alarms models. Compatible models are Q5000 Series	
Wireless Range	At least 100m line of sight. Distance vary depending on obstructions.	
Operating Temperature:	0 °C to 40°C	
Operating Humidity:	Up to 93% Humidity(Non-Con- densing)	
Storage and Transport Conditions:	-20° C to +60° C, 5-95%RH (non-condensing)	
Loud alarm:	85 decibels at 3 metres	

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 AS 1670.6 or your local fire emergency services or state regulations.

Recommended Locations

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

Things to Consider

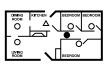
For Ceiling Mounting:

Smoke, heat and other combustion products will rise to the ceiling and spread horizontally. Mounting the alarm in the center 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 and 2C).
- The alarms in rooms with ceiling slopes greater than 1m in 8m horizontally, should be located on the high side of the room (Figure 2C).

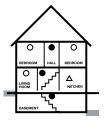
For Wall Mounting:

 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).



- Smoke Alarms for Minimum Protection
- O Smoke Alarms for Additional Protection

 ∆ Not within 3m of cooking appliances



SINGLE FLOOR PLAN

Figure 1A

MULTIPLE FLOOR PLAN. Figure 1B

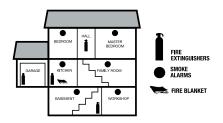
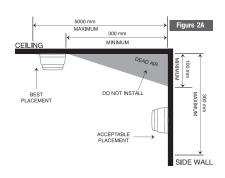
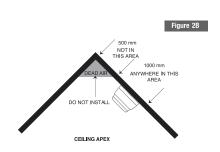


Figure 1C

TOTAL HOME PROTECTION

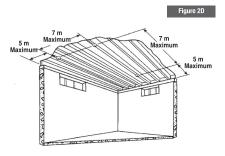




 When mounting the alarm on a sloping ceiling, it should not exceed 150mm away from the apex. The spacing of additional alarms, if any, should be based on a horizontal distance measurement, not a measurement along the slope of the ceiling (see Figure 2B)



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



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
- outer ingit all their 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, 2B and 2C.

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. Mounting Instructions

Note: The label on the product must not be removed

Use the mounting base ring to mark the screw holes on the ceiling



Screw the mounting base on the ceiling, using the enclosed screws and plugs



Once the mounting base installed, attach the alarm by twisting clockwise until it clicks



The safety lock can be inserted to secure the smoke alarm in position, a screwdriver is required to remove the lock



6. RF Interconnect Network

This model is capable of wireless interconnecting with Q5000 series models in domestic residential applications. When one RF interconnect unit sounds an alarm, all other compatible RF units in the RF interconnect network will alarm.

Follow the steps in section 6.1 to interlink up to 32 units in your network.

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

Definitions of key terminology:

Host: The wireless network master unit that is the key communicator with the other wireless units. This assignment remains until the host is reset (section 6.3). The host unit should be installed in a central location of the residence.

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

For easiest first-time setup, we recommend unpacking all units together on a desk, table, or counter and using the steps in section 6.1. If you prefer to install the alarms on the ceilling before enrolment, attach all baseplates to the ceiling first, and then choose a central location unit to start with section 6.2.

6.1 Setting Up an RF Interconnect Network

All alarms that need to be connected in the house should be put into 'Learn Mode' by sliding the switch on the back of the alarm to the 'Learn Mode' position.



Press the button on the top of one alarm only. This alarm will become the 'Host' and will start sending out a specific house code to the other alarms (take note of which alarm is the 'Host' you may need this for adding extra devices in future).



The red LED will flash.
As the other alarms receive the specific house code, they will also flash the LED light.

When all alarms flash the red LED, they are connected and can be switched out of 'Learn Mode' and installed.



6.2 Adding A Smoke Alarm To An Existing RF Interlink Network

All Q5000 series alarms range can be added to the system, place the 'Host' and new device into 'Learn Mode', and press the button on the Host to send out the house code, once the red LED flashes on the added smoke alarm they are connected and can be switched out of 'Learn Mode' and installed.

Always test connection to all devices by repeating the test function (Section 8) after adding alarms

6.3 Resetting the Network

To reset the network, simply place all devices in Learn Mode and follow instructions in section 6.1 $\,$

7. Wireless FAQs

ID	FAQ	Answer	
1	What happens if units are powered up for the first time but no buttons are pressed?	They operate independently of other smoke alarms	
2	What happens if a Peer doesn't find a network during the joining process (e.g. due to defective radio link, being out of range, or couldn't find a Host)	Operates independently of other smoke alarms	
3	What happens if a Host doesn't find any Peer to join after being set as Host.	Operates independently of other smoke alarms	
4	What happens if an Peer drops from the network?	Operates independently of other smoke alarms	
5	What happens if an Peer drops from the network and comes back online?	The peer automatically reconnects to the network	
6	What happens if the Host drops from the network?	The host operates independently of other smoke alarms, while the peers are all interconnected	
7	What happens if the Host drops from the network and comes back online?.	The Host automatically reconnects to the network	
8	How can a unit be added to the network?	Follow instructions in section 6.2	
9	Can the joining process be reset/restarted?	Yes, place all devices into learn mode as per section 6	
10	How do I check the wireless units in the network?	Press test for 6 second on one device and then walk around and connected devices will generate a single beep every 8 seconds indicates that the alarms are connected and functioning.	

8. Operation And Test

The smoke alarm is operating once installed in the base. When the smoke alarm senses smoke, the horn will sound a loud (85db) pulsating alarm (3 beeps repeating).

The RED LED indicates the following:

Standby mode: The Red LED will flash once every 48 seconds to indicate the unit is functioning properly.

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

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 and check all smoke alarms weekly by doing the following:

- 1. Visually inspect every week if the LED flashes correctly (every 48sec.).
- Press the test button on any alarm for at least 10 seconds. This will send out a test signal from the alarm; all other connected alarms should receive the signal within a short time.
- The alarms will emit a short beep and the LED will flash every 8 seconds for 2 minutes.

NOTE: Test function also transmits a weaker RF signal to ensure an optimal operation in normal conditions.

When the test signal is sent out, the alarms will respond in two ways:

- A single beep every 8 seconds indicates that the alarms are connected and functioning.
- Three short beeps every 8 seconds indicates a smoke sensor fault.The alarm should be cleaned by running the vacuum (on a low setting) around the smoke alarm chamber and tested again.

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.

9. Visual And Audible Indications

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

Mode	LED Indications	Audible Indications	Action/ Note:
Normal	Red LED flashes every 48 seconds	None	
Alarm mode (initiating unit)	Red LED flashing	Repeat 3 long beeps. (ISO8201)	
Alarm mode	Red LEDs remain OFF	Repeat 3 long beeps. (ISO8201)	
Hush mode	Red LED flashes once every 10 seconds	None	Hush Button has been pressed. Smoke Alarm will silence for about 10 minutes,and then automatically exit Hush mode.
Low Battery		Single chirp every 48 seconds	Please replace with new alarm
Sensor fault		Three short beeps every 8 seconds	Clean the alarm by running the vacuum (on a low setting) around the smoke alarm chamber and alarm test again
End of life		Short chirp every 48 seconds	Please replace with new alarm

10. Nuisance Alarms and Hush Function

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

HUSH

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

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

- Pushing the Hush button on the initiating alarm (Red LED flashing every second) will silence that alarm and all compatible interconnected units.
- Pushing the Hush button on any non-initiating 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 section 4 may have caused the alarm. If a fire is discovered, exit the building and call the fire brigade.

11. Cleaning Your Alarm

YOUR ALARM SHOULD BE CLEANED AT LEAST ONCE A YEAR

To clean your alarm, remove it from the mounting bracket. 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. 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 a

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 16 Making a Warranty Claim.

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 crack, don't open that door Instead, use your alternate exit. If the inside of the door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- Stay close to the floor if the air is smoky. Breathe shallowly through a cloth, wet if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- · Call the fire department from your neighbour's home not from yours!
- Don't return to your home until the fire officials say that it is all right to do so.
- There are situations where a smoke alarm may not be effective to protect against fire.

For instance:

- a) smoking in bed
- b) leaving children home alone
- c) cleaning with flammable liquids, such as petrol

TEN YEAR WARRANTY

Warranty

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

16. Making a Warranty Claim

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 place of purchase,

Please provide proof of purchase and brief explanation of the problem. Where necessary, any postage and packaging expenses incurred to return the product will be at your cost,

If a defect is found, the place of purchase can elect to replace the product, repair the product or refund you for the product.

If it is elected to repair the product, 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