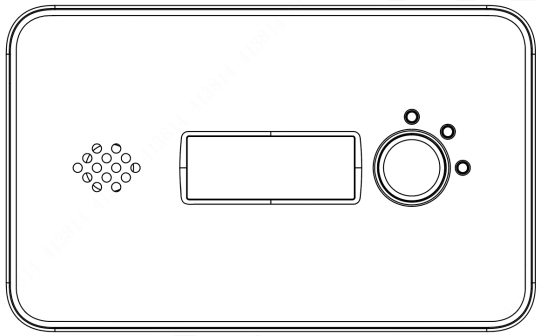
User Manual

Wireless Interconnected Carbon Monoxide (CO) Alarm



GT HIGH PERFORMANCE SMOKE ALARMS. V 1.0.1

1. Information on carbon monoxide

What is carbon monoxide (CO)?

Carbon monoxide is an odourless, tasteless, highly toxic, and flammable gas produced by the incomplete combustion of carbon-based fuels. Prolonged exposure to a CO-rich environment leads to serious tissue damage or even death.

Where does CO come from?

CO is caused by poor or incomplete combustion.

• A furnace, boiler, cooker, pellet stove, fireplace, wood stove or charcoal grill can be sources of CO, especially if they are not working properly or located in a poorly ventilated room.

• Vehicle exhaust gases in enclosed spaces (e.g. garages) can also become CO hazards.

• Using a paraffin heater, charcoal grill/BBQ indoors, or running a car in a garage, can cause the CO concentration to increase to dangerous levels causing unconsciousness or death

How do I know if CO is present?

CO poisoning is measured in a range called parts per million (ppm). This CO alarm monitors the level of CO in the air. If the CO concentration is too high, the device sounds a loud alarm. When the alarm sounds, warn all household members, go outside immediately and call emergency services (000 or 112).

What are the symptoms of CO poisoning?

• Mild exposure (about 100-200 ppm): mild headache, nausea, vomiting, fatigue (often described as “flu-like” symptoms).

• Medium exposure (about 400 ppm): violent throbbing headache, drowsiness, confusion, fast heartbeat.

• Extreme exposure (about 800 ppm): unconsciousness, convulsions, cardiorespiratory failure, death.

Parts per Million (ppm)	Effects on Adults
100	Mild headache, nausea, vomiting, fatigue.
200	Dizziness and headache within 2-3 hours.
400	Nausea, frontal headache, drowsiness, confusion and rapid heart rate. Risk to life after 3 hours of exposure.
800	Severe headaches, convulsions, vital organ failures. Death is possible within 2-3 hours.

How do I protect myself and my family from CO poisoning?
• Install one or more CO detectors in your home.
• Have your home's heating system and other gas, oil or coal appliances checked annually by a competent person or company and make sure they are well-ventilated.
• Have your chimney checked and cleaned every year.
• Use gas appliances as recommended. Never use a gas stove or oven to heat indoor areas.

What should I do if the CO alarm goes off?
The CO alarm activates when the CO concentration reaches a dangerous level.
• Inform all household members of the danger.
• Go outside immediately and call emergency services (000 or 112).
• Do not re-enter the premises until the alarm has stopped and an expert has dealt with the source of the leak.

2. Important Safeguards and Warnings
The manual will help you to use the device properly.
Read the manual carefully before using the device, and retain it for future reference.

Operation Requirements

⚠ WARNING
• Never ignore any alarm. Failure to respond may lead to serious injury or death.
• Do not attempt to open or disassemble the alarm. There is a risk of electric shock or malfunction if the alarm is tampered with.

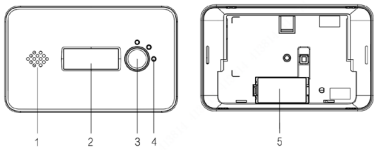
⚠ CAUTION
• Make sure that the power supply of the device works properly before use.
• Use the device according to the operating environment.
• Only use the device within the rated power range.
• Transport, use and store the device under allowed humidity and temperature conditions.
• Prevent liquids from splashing or dripping on the device. Make sure that there are no objects filled with liquid on top of the device to avoid liquids flowing into it.
• This CO alarm is designed to detect only the presence of CO; it cannot detect smoke, natural gas (methane), LP gas (propane/butane), heat or flames.
• Vapours or gases, e.g. in cleaning liquids, polishes, paints, cooking processes, etc., can affect the alarm's reliability in the short or long term.

Installation Requirements

⚠ WARNING
Failure to properly install and operate this device will prevent proper operation of the device and will prevent its response to carbon monoxide hazards. See Section 7 for proper installation.

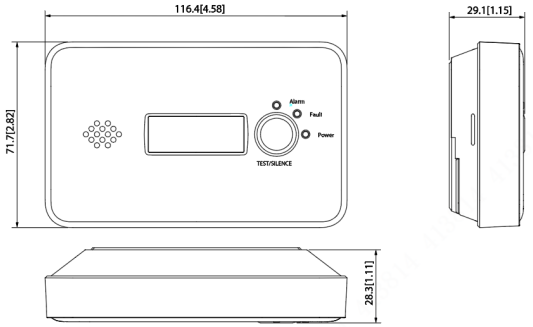
⚠ CAUTION
• Before installation, read Section 7 on the correct installation location of the CO alarm.
• Do not expose the device to direct sunlight or heat sources.
• The alarm must be installed by a competent person.

3. Introduction
3.1 Product Information
The Wireless Interconnected Carbon Monoxide (CO) Alarm (hereinafter referred to as the device) is designed to continuously monitor CO concentration. It is sensitive, responds quickly and offers stable performance with few false alarms. This detector can measure CO levels as low as 30 ppm (parts per million) using a high-quality sensor. As soon as the ambient CO concentration reaches the alarm value, the device sends out a loud 85 dB alarm and the alarm LED flashes rapidly. The LCD shows the CO level in PPM. With a built-in RF module, the device enables you to wirelessly connect up to 24 CO alarms, constructing an interlinked network. Once one device triggers an alarm, the alarm signal will be pushed to every alarm in the interconnected network, and they will all alarm together. This product is designed for residential applications such as family homes, townhouses or apartments, for locations such as living rooms, studies, bedrooms and corridors/hallways, particularly rooms with a combustion appliance. This device is certified under the latest European standard EN 50291-1:2018/AC:2021 for carbon monoxide detectors.

3.2 Product Profile


No	Name	Introduction
1	Buzzer	Alarm Sound: 85 d8 (A) at 3 m (9.84 ft)
2	LCD Screen	Displays the current CO concentration or peak reading
3	Test/Silence Button	• Check normal operation: press the **Test/Silence** button; the alarm beeps 3 times. The LCD will show 8888 for 3 seconds and all LED lights will flash 3 times. • Stop the alarm sound: press the **Test/Silence** button and the device will temporarily silence the alarm sound (45 seconds).
4	Indicator LED	• Standby: Green power LED flashes once per minute • Alarm: Red alarm LED flashes • Fault: Yellow fault LED flashes
5	Battery Compartment	Replaceable CR123A 3 V lithium battery

3.2 Product Dimensions
Figure 3-1 Product Dimensions (mm[in])



4. Technical Information

Specification	Introduction
Detection gas	Carbon monoxide (CO)
Alarm triggered at the specific CO level within the time period	• 50 ppm: 60-90 minutes • 100 ppm: 10-40 minutes • 300 ppm: < 3 minutes
Operating voltage	3 V DC
Alarm method	Visual and audible alarm
Alarm volume	≥ 85 dB (A) @ 3m
Operating current	• Monitoring current: ≤ 20 μA • Alarm current: ≤ 20 mA
Operating temperature	-10 °C to +55 °C (+ 14 °F to + 131 °F)
Operating humidity	< 95% RH (non-condensing)
Operating frequency	925 MHz
Maximum number of interconnected units	24 units
Radio signal range	Up to 1000 m (3280 ft) in open air
Installation	Mounting plate for wall-mounting
Dimensions	116.4 mm x 71.7 mm x 29.1 mm (4.58" x 2.82" x 1.15")
Installation	Wall-mount
Battery life	7 years
Muting/Silence	Supported
Alarm silence duration	45 seconds
Certification	EN 50921-1:2018/AC:2021, RCM: AS/NZS 61000.6.3:2021

⚠ CAUTION
This device is intended for use in ordinary indoor locations of family living units. It should be installed in every room with a combustion appliance. For added safety, also install the device in living rooms and bedrooms.

5. Interconnection
Prerequisite
• Remove the insulating film from the battery compartment to turn on the device.
• Make sure all carbon monoxide alarms are powered up to ensure a successful interconnection.

⚠ WARNING
Make sure that only 2 carbon monoxide alarms enter the same interlinked network, and make sure only one carbon monoxide alarm enters the interconnecting mode at a time.

How to interconnect
Step 1: Press the **Test/Silence** button on device 1 continuously 4 times (the interval between each press should be less than 1 second), this device will emit 1 short quick beep and the red LED indicator will flash slowly, indicating that device 1 has entered the interconnecting receiving mode.

To ensure that all carbon monoxide alarms enter the same interlinked mode. Make sure that only 2 carbon monoxide alarms are powered on at a time to ensure successful interconnection. Otherwise, the interconnection will fail, or device malfunction may occur.

Step 2: Press the **Test/Silence** button on device 2 twice (the interval between each press should be less than 1 second), this device will emit 1 short quick beep and the red LED indicator will flash rapidly (about 4 times a second), indicating that device 2 has entered the interconnecting transmission mode.

Step 3: If the devices are interconnected successfully, the red LED indicator of device 1 flashes continuously, and the green LED indicator of device 2 flashes for 3 minutes until device 1 exits the interconnecting mode. The LCD screen will show "8888" for 3 seconds.

Device 1 will be in interconnecting mode for 3 minutes with the red LED indicator flashing twice a second. During this period, you can pair several wireless interconnected carbon monoxide alarms one by one. If needed, you can press the **Test/Silence** button to make device 1 exit the interconnecting mode, the green LED indicator will illuminate solid for 3 seconds, and then device 1 will emit 1 short quick beep. The LCD screen will show "8888" for 3 seconds, indicating the device has already quit the interconnecting mode and entered the normal standby state. Once you press the button on device 1, device 2 will follow device 1 to exit the interconnecting mode and enter the normal standby state.

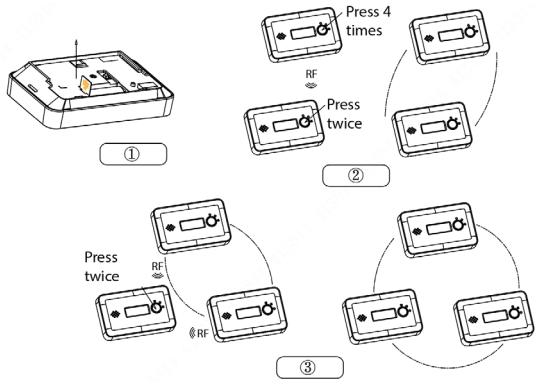
Step 4 (Optional): Interconnect device 3.
1) If device 3 is in the interconnecting receiving mode of device 1 within 3 minutes, then press the **Test/Silence** button on device 3 to enter the interconnecting transmission mode. If the interconnecting receiving mode of device 1 exceeds 3 minutes, then press the **Test/Silence** button on either of the two previously interconnected devices 4 to enter the interconnecting receiving mode, then press the **Test/Silence** button twice on device 3 to join the interconnected network.
2) If device 3 joins the interconnected network successfully, the green LED indicator on device 3 will flash continuously until device 1 exits the interconnecting mode, or the **Test/Silence** button on device 3 is pressed to force it to exit the interconnecting mode and enter the normal standby mode. After 3 seconds, all the green LED indicators on all devices will illuminate solid for 3 seconds, the devices will emit a short quick beep. The LCD screen will show "8888" for 3 seconds. You can press the **Test/Silence** button on device 3 to force it to enter the normal standby state immediately.

Step 5: If you want to connect more devices, please repeat Step 4 for each additional device.

Up to 24 wireless carbon monoxide alarms can be interconnected this way.

Step 6: Refer to "Chapter 6 Operation" and test all wireless interconnected carbon monoxide alarms before installation to ensure they are correctly interconnected.

Figure 5-1 Interconnect device



How to disconnect

Step 1: Continuously press the **Test/Silence** button 4 times on the device that needs to unpair with other carbon monoxide alarms, and the device will emit 1 short quick beep with the red LED indicator flashing continuously.

Step 2: Press and hold the **Test/Silence** button until the green LED indicator illuminates solid, then release the button. If the disconnection succeeds, the green LED indicator on all carbon monoxide alarms in the interconnected network will illuminator solid for 3 seconds and the devices will emit 1 short quick beep, then the LCD screens will show "8888" for 3 seconds.

Please disconnect all the wireless interconnected carbon monoxide alarms if you want to use them in another interconnected network.

6. Operation

After the interconnection, installation of the device or regular maintenance, a test must be carried out to confirm that the device is operating properly. Refer to the "Frequently Asked Questions" and "Maintenance" section if any defects are found during testing, and then retest the device. If it fails to complete the test successfully, please send the device to the manufacturer for repair.

6.1 For a single carbon monoxide alarm

Test

Press the **Test/Silence** button, all LED indicators will flash 3 times (once per second) and the buzzer will beep 3 times continuously. The LCD screen will show "8888" for 3 seconds.

Silence/Pause the alarm

When the carbon monoxide concentration reaches the predetermined threshold, the red LED indicator flashes with the buzzer beeping once per second. The LCD screen shows real-time CO concentration for 1 hour. Press the **Test/Silence** button on the device to temporarily mute the alarm sound and the device will be in silence mode for 45 seconds.

6.2 For interconnected carbon monoxide alarms

Test

Press and hold the **Test/Silence** button on any interconnected carbon monoxide alarm until other interconnected devices in the network start to beep. The initiating device will beep continuously with the red LED indicator flashing. After receiving a signal, the other interconnected devices in the network start beeping with the red and green LED indicators flashing alternately. Release the **Test/Silence** button on the initiating interconnected device, the initiating device will stop flashing and beeping, and the other interconnected devices will exit the test mode after a few seconds.

Silence/Pause the alarm

When the carbon monoxide concentration reaches the predetermined threshold, the red LED indicator flashes with the buzzer beeping once per second, and after several seconds the other interconnected devices will beep and flash quickly.

Press the **Test/Silence** button on the initiating device – all interconnected devices are temporarily silenced.

Press the **Test/Silence** button on any other interconnected device – that device will be temporarily silenced, but the initiating interconnected device will keep beeping.

7. Device Installation

7.1 Packing List

Check the package according to the following checklist. If you find device damage or anything missing, please contact the supplier.

Table 7-1 Checklist

Name	Quantity
CO alarm	1
Drilling template	1
Set of screws/plugs	1
CR123A battery	1
User's manual	1

7.2 Installation Position

In which room should the detector be installed?

Preferably install a carbon monoxide detector in every room with a combustion appliance. For added safety, also install detectors in living rooms and bedrooms. Ensure that you can always hear the detector when it sounds the alarm.

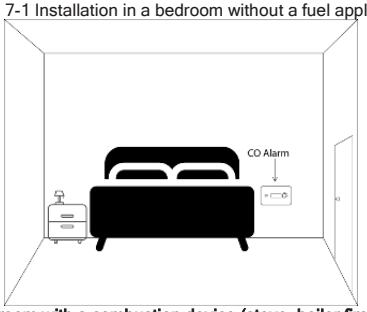
Where in the room should the detector be installed?

Install in a bedroom **without a combustion device.**

- Install the alarm at the occupants' breathing height.
- Never install the device on or near the floor – CO mixes with air and does not sink

Installation in bedroom without a combustion device:

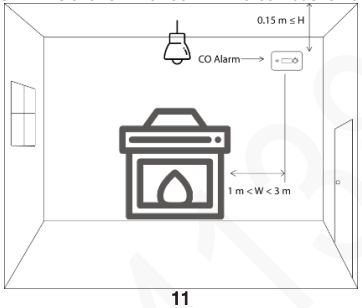
Figure 7-1 Installation in a bedroom without a fuel appliance



Installation in a living room with a combustion device (stove, boiler fireplace, gas fire):

- Install the device above the combustion device. CO rises to the ceiling due to the hot gases from the combustion device.
- Install the device at least 15 cm from the ceiling.

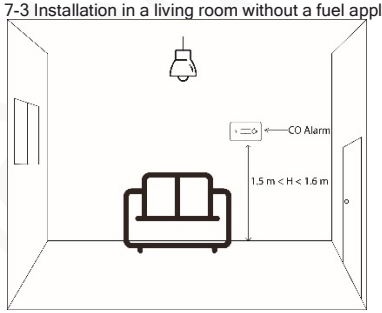
Figure 7-2 Installation in a room with a combustion device



Installation in a living room without a combustion device:

- Install the device on a wall about 1.5 metres to 1.6 metres above the floor.
- Never install the alarm on or near the floor – CO mixes with air and does not sink

Figure 7-3 Installation in a living room without a fuel appliance



Do not install a CO alarm here:

- Dusty, greasy, or damp areas.
- In poorly ventilated kitchens, garages, boiler rooms, and confined spaces (e.g. in a cupboard or behind a curtain) where smoke or fumes circulate under normal working conditions.
- Near stoves, cookers, and other hot and easily contaminated places.
- Against or near the floor.
- Directly above the source of heat and steam.
- In direct sunlight.
- Near obstructed areas (e.g. by furniture)
- Next to a door or window, exhaust fan, air vent or other similar ventilation openings.
- In rooms where the temperature may drop below -10 °C or rise above 55 °C.

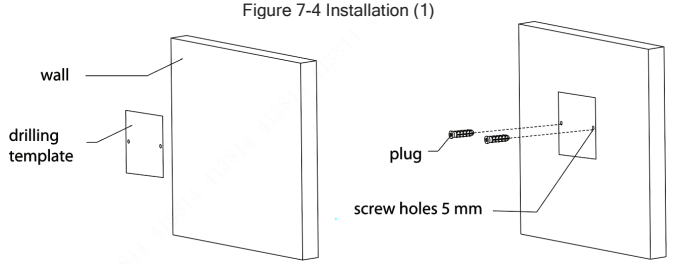
7.3 First Use

Carefully remove the plastic tab from the battery.

Step 1: Select a suitable location for placing the drilling template.

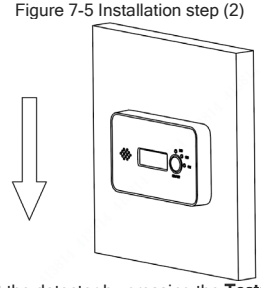
Step 2.1: Drill screw holes (5 mm) according to the drilling template on the mounting surface, and then insert the dowels/expansion bolts into the holes. Then insert the screws.

Figure 7-4 Installation (1)



Step 2.2: Attach the device to the mounting surface

Figure 7-5 Installation step (2)



Step 3: After installation, test the detector by pressing the **Test/Silence** button. Check that the LED lights, buzzer and LCD screen are working properly.

8. Device Status

LCD	LED Status	Alarm Sound	Unit Status	Solutions
Shows 8888 for 3 sec.	All LEDs flash 3 times	Buzzer beeps 3 times	Self-test	N/A (normal)
-	Power LED blinks once per minute	-	Normal operation (standby)	N/A (normal)
CO level ppm	Alarm LED flashes once per second	Buzzer beeps once per second	CO level exceeds alarm level	Evacuate everyone, call 000 or 112
	-	-	Peak volume measured	See below
Lb	Yellow Fault LED flashes once per minute	Buzzer beeps once per minute	Battery low	Replace the battery immediately
Err	Yellow Fault LED flashes twice per minute	Buzzer beeps 2 times per minute	Failure	Refer to Section 11 FAQ
End of life	Yellow Fault LED flashes 3 times per minute	Buzzer beeps 3 times per minute	End of life	Replace the detector immediately

Peak Volume Measurement

This alarm displays previously measured levels of CO on the LCD. This peak volume is displayed in ppm and remains on the LCD until the peak reading is reset. Reset Peak Volume by removing the battery from the product. The LCD Peak Volume display will turn off after the **Test/Silence** button is pressed.

⚠ CAUTION

If the LCD screen is on for an extended time, this will affect the battery life. Please check the LCD screen regularly.

⚠ CAUTION

A peak CO reading on the LCD screen indicates a high CO level was detected in the past. Ventilate where possible and contact a professional or installer to have your combustion appliances checked.

9. Maintenance

To keep your device in good working condition, please follow these requirements.

- Simulated alarm test: Test the device once a week, by pressing the **Test/Silence** button while in normal standby condition to verify normal operation. If there is a malfunction, please attend to it immediately.
- Clean the device at least once a year by cleaning the housing using a soft cloth or the soft brush of a vacuum cleaner. Do not use cleaning agents to avoid possible contamination of the sensor.

10. Battery Replacement

When the detector gives a low battery warning, replace the battery immediately. Test the device every time you replace the battery. When replacing the battery, pay close attention to the positive (+) and negative (-) polarity markings.

NOTE

Please only use a fresh, quality brand CR123A lithium battery. Do not use rechargeable or used batteries.

11. Frequently Asked Questions (FAQ)

Problem	Solution	
The green Power LED does not blink once per minute	The battery is not inserted	Pull out the plastic seal or tab.
	The LED is faulty	Contact the supplier
No response when pressing the **Test/Silence** button	Flat battery	Check/replace the battery
	Device is faulty	Contact the supplier
No response to detected carbon monoxide	Flat battery	Check/replace the battery
	Device is faulty	Contact the supplier
The device continuously emits a sharp, high-pitched sound	There is a large amount of volatile substances, such as alcohol, perfume, petrol or paint present	Move the device to clean air (outside) and let it operate for 2 hours to allow the gases to escape the device

12. Disposal

Waste electrical products should not be disposed of with your other household waste. Please dispose in an environmentally - friendly manner, and strictly follow the local regulations regarding the disposal or recycling of the electrical device.

⚠ WARNING

Do not burn or dispose of in fire.

13. Warranty and Contact

If you need after-sales service, please contact your place of purchase, or scan the QR code below.

Australian Importer: Smoke Alarms Australasia Pty Ltd
Address: Po Box 545 Bulimba Qld 4171

For more information, please scan the QR code or visit
https://www.gtsmokealarms.com.au