

CARBON MONOXIDE ALARM WITH ENHANCED SECURITY

GENERAL INFORMATION

The Carbon Monoxide Alarm (2GIG-CO8-345) is a battery powered wireless device for detecting the dangerous levels of Carbon Monoxide. It is intended to be used with a wireless control panel using the 345Mhz frequency. The intended use is with compatible 2GIG® wireless alarm systems.

To know the maximum number of transmitters that can be supported, see the appropriate 2GIG Security System Installation Guide.

IMPORTANT: This CO Alarm must be tested and maintained regularly following NFPA 720 requirements. This device is designed to protect individuals from the acute effects of carbon monoxide exposure. It will not fully safeguard individuals with specific medical conditions. If in doubt, consult a medical practitioner. It is intended for use in ordinary indoor locations of family living units. It is not designed to measure compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards.

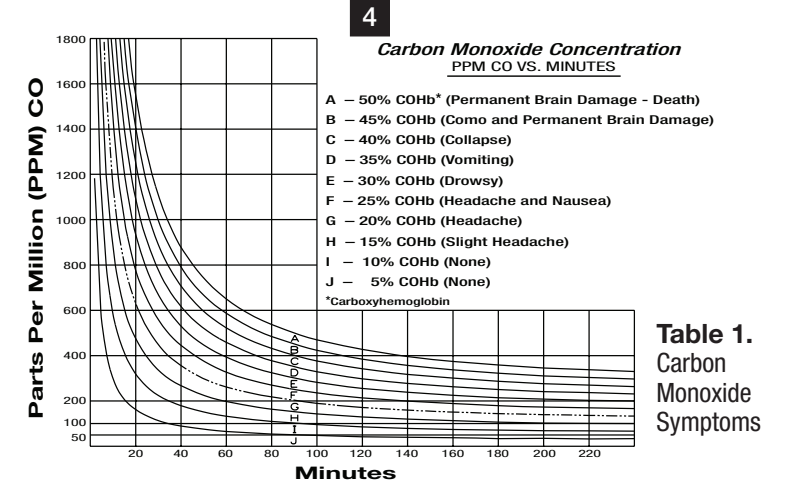


Table 1. Carbon Monoxide Symptoms

The following symptoms may be related to CARBON MONOXIDE POISONING and should be discussed with ALL members of the household:

Mild exposure: Headaches, running nose, sore eyes, “flu-like” symptoms

Medium exposure: Dizziness, drowsiness, vomiting

Extreme exposure: Unconsciousness, brain damage, death.

Many cases of reported CARBON MONOXIDE POISONING indicate that while victims are aware they are not well, they become so disoriented they are unable to save themselves by either exiting the building or calling for assistance.

If locating the CO Alarm in a room with a fuel burning appliance:

- If it is mounted on a wall, it should be located at a height greater than the height of any door or window but still be at least 6 inches from the ceiling.
- If it is mounted on the ceiling, it should be at least 1 foot from any wall or light fitting.
- The CO Alarm should be a horizontal distance of between 5 feet and 10 feet from the potential CO source.
- If there is a partition in the room, the CO Alarm should be located on the same side of the partition as the potential source.
- In rooms with sloped ceilings, the CO Alarm should be located at the high side of the room.

If locating the CO Alarm in a bedroom or in rooms remote from a fuel burning appliance:

- Mount the CO Alarm relatively close to the breathing zone of the occupants. Whatever position is chosen make sure it is possible to view the three light indicators, when in the vicinity of the Alarm.

WARNING: A CO Alarm should not be used as a substitute for proper installation, use and maintenance of fuel-burning appliances, including appropriate ventilation and exhaust systems.

Your alarm is intended for use in ordinary indoor locations of family units. It is not designed to measure compliance with OSHA commercial or industrial standards. Test the CO Alarm weekly by pressing and holding the test/hush button for a few seconds.

Replace Alarm when the “REPLACE UNIT BY” date has been reached. Check the label on the side of the Alarm. Do not fit Alarm until all building work is completed to avoid contamination.

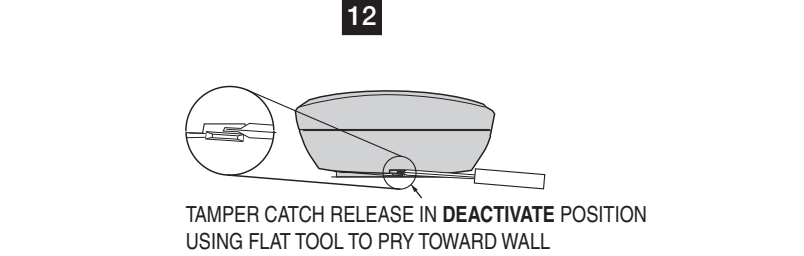


Figure 9. Tamper Catch in DEACTIVATE position.

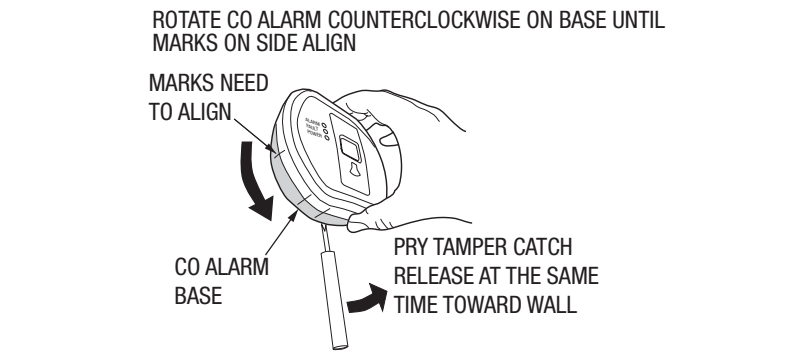


Figure 10. Tamper DEACTIVATION Procedure

1 Verify that the package includes the following:

- (1) Wireless CO Alarm and Mounting Plate
- (2) Plastic wall anchors
- (2) Phillips Screws
- (3) AAA batteries (installed). Replace only with Duracell MN2400 Alkaline AAA size batteries (obtainable from local retailer).

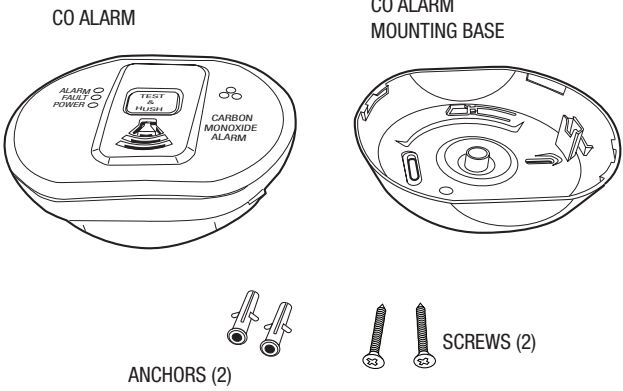


Figure 1. Box Contents

5 Placement of CO Alarm

Ideally a Carbon Monoxide Alarm should be installed in:

- Every room containing a fuel burning appliance.
- Remote rooms from the appliance where occupants spend a considerable amount of time.
- Every bedroom.

However if the number of Carbon Monoxide Alarms to be fitted is limited, the following points should be considered when deciding where best to fit the alarm(s):

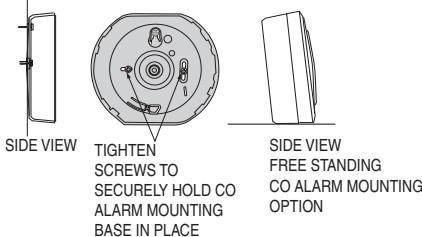
- If there is an appliance in a room where people sleep, place a CO Alarm in this room.
- Locate a CO Alarm in a room containing a flueless or open-flued appliance, Locate an Alarm in a room where the occupant(s) spend most of their time (e.g. sitting room).
- In a bedsite, the CO Alarm should be placed as far away from the cooking appliance as possible, but near to where the person sleeps.
- If the appliance is in a room not normally used, such as a boiler room, the CO Alarm should be placed just outside the room so that the Alarm will be heard more easily.

Individuals with health issues may consider warning devices which provide audible and visual signals for carbon monoxide concentrations under 30ppm.

NATIONAL FIRE PROTECTION ASSOCIATION REQUIRED PROTECTION
For your information the National Fire Protection Association’s Standard 720 advises as follows:

9 Installation of CO Alarm/Wall or Ceiling Mounting
Rotate CO alarm COUNTER CLOCKWISE to remove it from mounting plate.

Figure 4. Mounting Options for CO Alarm and Mounting Base



Select a wall or ceiling location for the CO Alarm.
Screw CO Alarm mounting base to wall or ceiling.
Another alternative, if desired, is to allow the CO Alarm to free stand on a flat surface with the mounting base attached (See Figure 4).

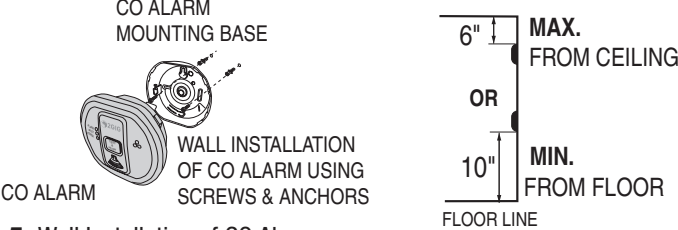


Figure 5. Wall Installation of CO Alarm

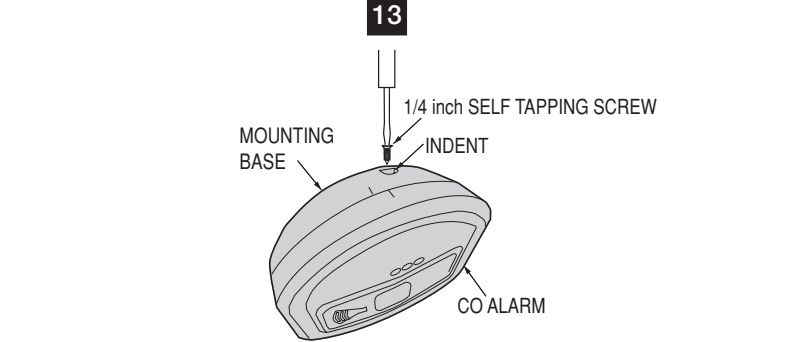


Figure 11. Tamper Option Using Screw to Fasten Mounting Base to Alarm

What happens when your CO Alarm detects Carbon Monoxide?
When the CO Alarm detects potentially dangerous levels of CO, it flashes the red alarm light immediately and then sounds a loud alarm if the CO persists. Table 2 shows how the CO Alarm reacts to different levels of CO concentration gas and exposure time. At higher levels of CO the Alarm turns on sooner. The rate of the flashing red light indicates the level of CO gas. If your CO Alarm sounds, follow the instructions in the “What to do when the Alarm Sounds” section of this manual.
WARNING: NEVER IGNORE THE ALARM!

2 Installation Tools Required

- Phillips Screw Driver
- Variable Speed Drill with 1/16” Drill Bit
- Flat Blade Tool (optional)

CO Alarm Description and Function

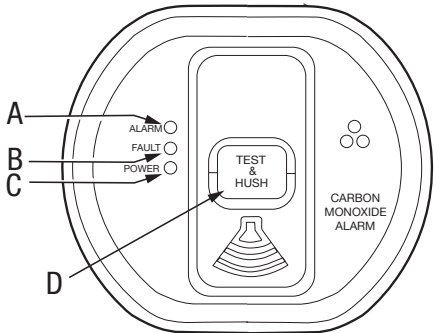


Figure 2. Alarm Top View

- A. ALARM:** Red LED
- B. FAULT:** Amber LED
- C. POWER:** Green LED
- D. Test/Hush** Button

1. Outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom.
 2. On every occupiable level of a dwelling unit, including basements but excluding attics and crawl spaces.
 3. Other locations where required by applicable laws, codes or standards.
- The equipment should be installed using wiring methods in accordance with the National Fire Protection Association’s Standard 72, 720. (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269)

Carbon Monoxide Alarms shall be installed as follows:

Suggested Alarm locations

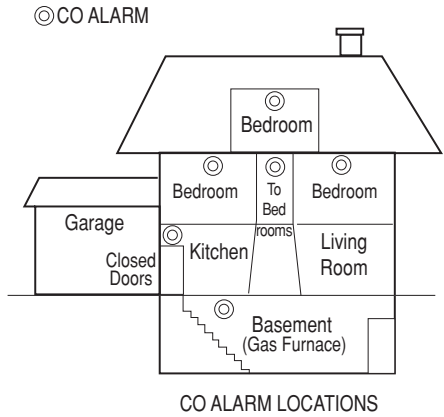


Figure 3. Alarm Locations

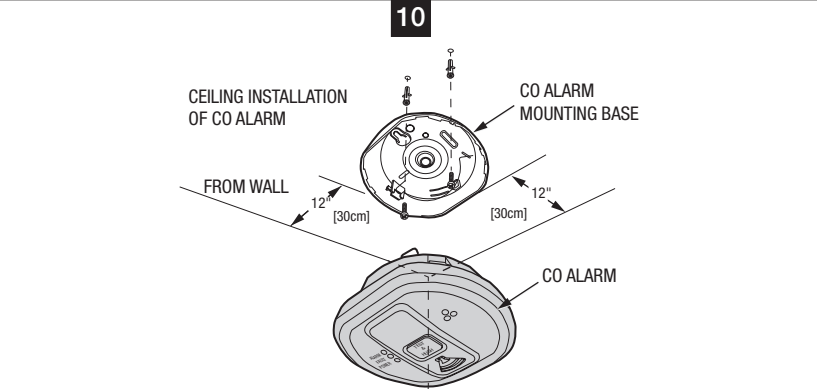


Figure 6. Ceiling Installation of CO Alarm

How to Tamper Proof the Alarm

The 2GIG-CO8-345 alarm can be made tamper proof. Break off the small pillar on the base of the CO Alarm (Figure 7). This will allow the tamper catch release to be activated and in the position shown in Figure 8. To remove Alarm from wall or ceiling it is now necessary to use a small flat tool (See Figure 9) to release the catch release.
Follow the procedure for removing the alarm that is shown in Figure 10. If necessary it is possible to further tamper proof the Alarm by using a #2 or #4 1/4 inch self tapping screw (not included) and installing it into the indent of the mounting base (Figure 11).

3 What is Carbon Monoxide?

Many people are killed each year, and many more suffer ill health from Carbon Monoxide (CO) poisoning. CO is an invisible, odorless, tasteless and extremely toxic gas. It is produced by appliances and vehicles burning fuels, such as coal, oil, natural/bottled gas, paraffin, wood, petrol, diesel, charcoal etc. CO is absorbed by red blood cells in the lungs in preference to oxygen - this results in rapid damage to the heart and brain from oxygen starvation.

High levels of CO in a house can be caused by:

- Incorrectly or poorly installed fuel-burning appliances.
- Blocked or cracked chimneys/flues.
- Blocked vents or draft-proofing which makes areas with fuel burning appliances or fireplaces airtight.
- Engines of cars, lawnmowers etc. left running in confined spaces.
- Portable paraffin or gas heaters in badly ventilated rooms.

7 Unsuitable Locations for CO Alarms
Do not place the CO Alarm in any of the following areas:

1. In the immediate vicinity of a cooking appliance (keep it at least 3 feet horizontally from it).
2. Outside the building.
3. In an enclosed space (e. g. in or below a cupboard).
4. In a damp or humid area.
5. Directly above a sink stove-top or oven.
6. Next to a door, window, air vent or anywhere that it could be affected by drafts.
7. Next to a ceiling or exhaust fan or air conditioning vents.
8. Over heat sources such as radiators or hot air vents.
9. Where it would be obstructed, e.g. by curtains or furniture.
10. In an area where the temperature could drop below 40°F or rise above 100°F.
11. Where dirt or dust could block the sensor.
12. Where it could be easily knocked or damaged, or where it could be accidentally turned off or removed.
13. In a bathroom or other areas where the CO Alarm may be exposed to water splashes, dripping or condensation (e.g. above an electric kettle).
14. Near paint, thinners, solvent fumes or air fresheners.

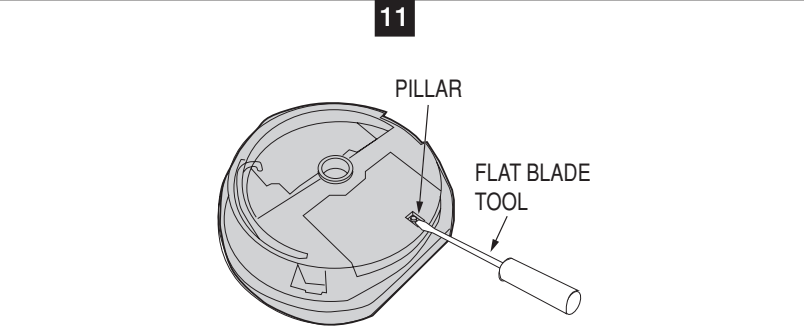


Figure 7. Breaking Off Tamper proof Pillar

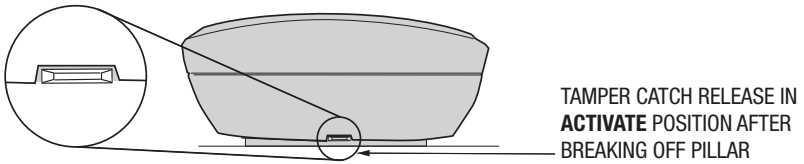


Figure 8. Tamper Catch in ACTIVATE position.

The Carbon Monoxide Alarm checks for CO gas every 4 seconds and when exposed to the CO gas. The red light will flash (as per Table 2) to confirm that it is detecting the CO gas.

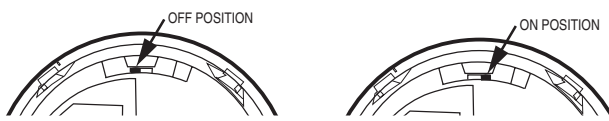
	Red Light (Pre-Alarm)	Sounder (Alarm)
CO Gas Level		
Approx. 30 ppm	Off*	Off
Approx. 70 ppm	1 flash every 3 seconds	on within 60 - 240 min (typical 90 min)
Approx. 150 ppm	1 flash every 2 seconds	on within 10 - 50 min (typical 30 min)
Approx. 400 ppm	1 flash every 1 second	on within 4 - 15 min (typical 9 min)

Table 2. CO Alarm Response

Warning!

Actuation of your CO Alarm indicates the presence of carbon monoxide (CO) which can KILL YOU. If an alarm signal sounds:

1. Operate reset/ Silence button (only operational at concentrations of [less than] approximately 400 ppm)
2. Call your local Fire Department or 911
3. Immediately move to fresh air – outdoors or by an open door/ window. Do a head count to ensure that all persons are accounted for. DO NOT re-enter the premises until the first responders have arrived, the premises have been aired out and your Alarm returns to its normal condition.

16 Pre-Alarm When the Alarm detects over 43 ppm CO, the red light flashes in accordance with Table 2. This helps locate CO leaks as the CO Alarm gives an indication straight away. (Without this feature the CO level would need to be at 43ppm CO for typically 72 minutes for an alarm sound to be given). Note the Pre-Alarm signal may be triggered by CO coming for example, from cooking with gas, from car engines or from nearby barbecues. This is usually not a concern, unless the pre-alarm signal persists until the Alarm sounds and the CO source is unknown. ✓ <i>Note: The CO Alarm may sound if cigarette smoke is blown into it, or aerosols are released nearby.</i> CO Alarm Memory The CO Alarm memory is an important feature of the CO Alarm where even if the house is unoccupied during an alarm condition it warns the homeowner that the CO Alarm has previously detected CO gas and been in alarm. The memory feature has two operation modes: - memory indication for 24 hour period after alarm - memory recall on demand 24 hour memory indicators: After alarm, the RED light will flash at different rates every minute (approx) depending on the level of CO detected (See Table 3). Memory recall on demand: To review the memory status after initial 24 hours, press and hold the test button, the red LED will flash in accordance to Table 3.	17 <table><tr><th>CO Gas Level</th><th colspan="2">Red Light Response</th></tr><tr><td></td><td>24 Hours</td><td>On Demand (Button Press)</td></tr><tr><td>approx. 70 ppm</td><td>1 flash every 50 sec.</td><td>1 flashes</td></tr><tr><td>approx. 150 ppm</td><td>2 flashes every 50 sec.</td><td>2 flashes</td></tr><tr><td>approx. 400 ppm</td><td>4 flashes every 50 sec.</td><td>4 flashes</td></tr></table> Table 3. CO Alarm Memory Indicators Monitoring The CO Alarm self checks vital functions to ensure that it is operating correctly. - Low Battery Fault - the battery voltage is measured and compared against a low voltage threshold. - Sensor Fault - the sensor is checked for electrical continuity and open circuit. - End of Life fault (EOL) - The Alarm is programmed to check when the useful life of the Alarm has been exceeded. The status of the Alarm can also be checked on demand by using the test/hush button. The table 4 shows the status response to both the self check and on demand testing. - If the Alarms are indicating a fault, pressing the test button will silence the beeps for a 24 hour period. This is for your convenience and can only be done once.	CO Gas Level	Red Light Response			24 Hours	On Demand (Button Press)	approx. 70 ppm	1 flash every 50 sec.	1 flashes	approx. 150 ppm	2 flashes every 50 sec.	2 flashes	approx. 400 ppm	4 flashes every 50 sec.	4 flashes	18 <table><tr><th colspan="5">Monitoring and Testing Summary</th></tr><tr><th>Status Result</th><th>Red LED (Alarm)</th><th>Amber LED (Fault)</th><th>Green LED Power</th><th>Sounder</th></tr><tr><td>Standby</td><td colspan="4">No visual or audible indication if unit is OK</td></tr><tr><td>Unit OK (Button Test)</td><td>Off</td><td>Off</td><td>On</td><td>On</td></tr><tr><td>Low Battery</td><td>Off</td><td>1 flash</td><td>Off</td><td>1 beep</td></tr><tr><td>Sensor Fault</td><td>Off</td><td>2 flashes</td><td>Off</td><td>2 beeps</td></tr><tr><td>End of Life (EOL)</td><td>Off</td><td>3 flashes</td><td>Off</td><td>3 beeps</td></tr></table> Table 4. Monitoring and Testing Summary Low Battery: When the battery level is low, the CO Alarm will beep and the Amber LED will flash every minute. The low battery beeps can be suppressed for 24 hours by pressing the test/hush button. IMPORTANT: It is recommended that this is done until a replacement CO Alarm is available so as to maintain protection against CO leaks.	Monitoring and Testing Summary					Status Result	Red LED (Alarm)	Amber LED (Fault)	Green LED Power	Sounder	Standby	No visual or audible indication if unit is OK				Unit OK (Button Test)	Off	Off	On	On	Low Battery	Off	1 flash	Off	1 beep	Sensor Fault	Off	2 flashes	Off	2 beeps	End of Life (EOL)	Off	3 flashes	Off	3 beeps	19 Testing Frequent testing of the Alarm is a requirement to ensure its power is present and the Alarm is functioning. The 2GIG-CO8-345 Carbon Monoxide Alarm can be tested by rotating the Alarm clockwise on the mounting base (Figure 12). This activates the on/off switch. The (3) three indicator lights will immediately flash in sequence to show that they are working. Wait 15 seconds after connecting the power before button testing. The power light is not illuminated during standby. It will flash green when the test button is pressed to indicate that power is present and alarm is functioning. Guidelines and best practices for testing are as follows: - After the system is installed. - Once weekly thereafter. - After prolonged absence from the dwelling (e.g. after holiday period). - After repair or servicing of any of the systems elements or household electrical work. To test the Alarm press and hold the test button. The Alarm will respond with one of the following status conditions: - The green LED will flash and the horn will sound to indicate the Alarm is powered and operating correctly. - If there is a fault condition the amber LED will flash and the horn will beep in accordance to Table 4. - If prior detection of CO gas is stored in memory, set the RED light will flash and the horn will give a full alarm sound (see section 2 - CO Alarm Memory). - When the battery level is reduced to where actual low battery beeps will soon begin to occur, the amber LED will flash once and the sounder will beep once as a courtesy "pre-alert" indicating that the batteries should be replaced presently.																																																					
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20 Quick Test with Carbon Monoxide: The Carbon Monoxide Alarm checks for CO gas every 4 seconds and when exposed to the CO gas, the red light will flash (as per Table 2) to confirm that it is detecting the CO gas. Solo C6 brand canned CO testing agent may be used to verify the Alarm's ability to sense CO. To gas test the Alarm, for 3 seconds spray the canned CO within 1/4" of the gas entry holes. Within seconds, the red light will begin to flash (as per Table 2) to confirm that the Alarm has detected the CO. To enter the accelerated functional gas test mode, press the Test button momentarily (approx. 1 second) while the Alarm is indicating CO presence. The Alarm will sound 2 x 4 temporal tone patterns to indicate an Alarm condition. To return the unit to standby, simply leave the Alarm in clean air for a few minutes until the red light is no longer flashing..  Figure 13. Power ON or Power OFF Switch Position on CO Alarm Maintenance Silencing (Hush) When the Alarm sounds, after sensing CO, pressing the test/hush button will immediately stop the horn (the red light will continue to flash). If CO is still present the red light and the horn will turn on again after about 4 minutes. The CO Alarm can only be silenced once during a CO incident. At levels > 150ppm CO the CO Alarm cannot be silenced.	21 Cleaning the Alarm: Clean the outside case by occasionally wiping with a clean damp cloth. Do not use any cleaning agents, bleaches, detergents or polishes, including those in aerosol cans. Avoid spraying air fresheners, hair spray, paint or other aerosols near the CO Alarm. Do not place air fresheners near the CO Alarm. Use the narrow nozzle of a vacuum cleaner to remove fluff and other contamination from the cover slots and gas entry holes. What to do when the Alarm sounds - Open the doors and windows to ventilate the area (see note). - Turn off all fuel appliances where possible and stop using them. (The Alarm can be silenced immediately by pushing the test/hush button provided the CO level is less than 150ppm). - Evacuate the property leaving the doors and windows open. - Get medical help immediately for anyone suffering the effects of Carbon Monoxide poisoning (headache, nausea), and advise that Carbon Monoxide poisoning is suspected. - Call your gas or other fuel supplier on their emergency number. Keep the number in a prominent place. - Do not re-enter the property until the Alarm has stopped. (If the Alarm has been silenced by pressing the test/hush button, wait at least 5 minutes so the Alarm can check that the CO has cleared). - Do not use the fuel appliances again until they have been checked by a registered installer or equivalent expert.	22 ✓ <i>Note: When ventilation is provided by leaving the window and doors open, the CO build up may have dissipated by the time help arrives and the Alarm may have stopped sounding. Although your problem may appear temporarily solved it is crucial that the source of the CO is determined and appropriate repairs made.</i> How to Protect your Family Follow these guidelines to reduce the risk of Carbon Monoxide poisoning. - Know and look out for tell-tale signs that Carbon Monoxide may be present. These include: - The CO Alarm warning of abnormal levels. - Staining, sooting or discoloration on or around appliances. - A pilot light frequently going out. - A strange smell when an appliance is operating. - A naked gas flame which is yellow or orange, instead of the normal blue. - Family members (including pets) exhibiting the "flu-like" symptoms of CO poisoning described above. If any of these signs are present get the appliance checked out by an expert before further use. If family members are ill get medical help. - Choose all appliances and vehicles which burn fossil fuels such as coal, oil,natural/bottled gas, paraffin, wood, petrol, diesel, charcoal etc. with care and have them professionally installed and regularly maintained.	23 - These appliances must "breathe in" air to burn the fuel properly. Know where the air comes from and ensure vents/air bricks etc. remain unobstructed (particularly after building work). - The appliances must also "breathe out" the waste gases (including the CO) –usually through a flue or chimney. Ensure chimneys and flues are not blocked or leaking, and get them checked every year. Check for excessive rust or cracks on appliances and pipe work. - Never leave your car, motor bike or lawnmower engine running in the garage with the garage door closed. Never leave the door from the house to the garage open if the car is running. - Never adjust your own gas pilot lights. - Never use a gas cooker or a barbecue for home heating. - Children should be warned of the dangers of CO poisoning and instructed never to touch, or interfere with the CO Alarm. Do not allow small children to press the test/hush button as they could be subjected to excessive noise when the CO Alarm sounds. - Leaving windows or doors slightly open (even a few inches) will significantly reduce the risk of high levels of CO occurring. The high levels of draft-proofing in modern houses reduces ventilation and can allow dangerous gases to build up. - Install CO Alarms in all the areas recommended in this booklet. - Recognize that CO poisoning may be the cause when family members suffer from "flu-like" symptoms when at home but feel better when they are away for extended periods.																																																																																																							
24 Limitations of CO Alarms - The CO Alarm will not work without good batteries. If the batteries have been drained the Alarm will not give protection. Button test the Alarm weekly and on return from holidays and other long absences. (Carbon Monoxide must enter the CO Alarm for it to be detected. There may be Carbon Monoxide in other areas of the house (e.g. downstairs, in a closed room etc) but not in the vicinity of the CO Alarm. Doors, air drafts and obstructions can prevent the CO reaching the Alarm. For these reasons we recommend CO Alarms are fitted both near and in bedrooms, particularly if bedroom doors are closed at night. Additionally install in rooms where members of the household spend much of their time, and in rooms with potential sources of CO gas. - The CO Alarm may not be heard. The sound output is loud but it may not be heard behind a closed door or if it is too far away. RF interconnecting CO Alarms greatly improves the probability that they will be heard. The Alarm may not wake up somebody who has taken alcohol or drugs. The Alarm sound may be masked by other sounds such as TV, stereo, traffic noise etc. Fitting CO Alarms on either side of closed doors will improve their chance of being heard. This CO Alarm is not designed for people with impaired hearing. - CO Alarms don't last indefinitely. CO Alarms are sophisticated electronic devices with many parts. Although the Alarm and its component parts have undergone stringent tests, and are designed to be very reliable, it is possible that parts can fail. Therefore, you should test your CO Alarm weekly. The CO Alarm must be replaced when the "REPLACE UNIT BY" date has been reached. Check the label on the side of the Alarm. (CO Alarms are not a substitute for life insurance. House-holders are responsible for their own insurance. The CO Alarm warns of increasing	25 - CO levels, but we do not guarantee that this will protect everyone from CO poisoning. - CO Alarms are not suitable as early warning Smoke Alarms. Some fires produce Carbon Monoxide, but the response characteristics of these CO Alarms are such that they would not give sufficient warning of fire. Smoke Alarms must be fitted to give early warning of fire. - The CO Alarm does not detect the presence of natural gas (methane), bottled gas (propane, butane) or other combustible gases. Fit combustion Gas Alarms to detect these. Note: Carbon Monoxide Alarms, with electrochemical sensors have a cross sensitivity to hydrogen. This means that they can alarm due to sensing hydrogen being produced by batteries being incorrectly charged such as on boats or with battery back-up systems such as those used with alternative energy systems. The CO Alarm will alarm with 500 ppm H2 after between 10 and 40 minutes exposure. - This CO Alarm is intended for residential use. It is not intended for the use in industrial applications where Occupational Safety and Health Administration (OSHA) requirements for carbon monoxide detectors must be met. This carbon monoxide alarming device is designed to detect carbon monoxide gas from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gases. Troubleshooting ALARM DOES NOT WORK WITH THE TEST BUTTON: - Check the Alarm is secured correctly on the mounting plate. - Wait 15 seconds after connecting the power before button testing. - Hold button down firmly for at least 5 seconds.	26 ALARM SOUNDS FOR NO APPARENT REASON: Follow the detailed instructions in 'What to do when the alarm sounds' section. If there are still problems: - Ensure there are no fuel burning appliances in the vicinity which could be leaking CO gas (e.g. even from next door). - Ensure there are no fumes in the area (e.g. paint, thinners, hair spray, chemical cleaners, aerosol sprays, damp proofing done with and aqueous emulsion such as Amino functional siloxane and Alkylalkoxysilane). - Ensure there is no outdoor source of CO in the vicinity (e.g. a car with engine running, heavy traffic, heavy air pollution, barbecue fumes etc). - Ensure there is no source of hydrogen such as batteries being charged (e.g. on boats or in Uninterruptible Power Supplies (UPS)). - Ensure there is not excessive smoke or fumes from devices such as Egyptian shisha, hookah or water pipes, especially those that use coal or charcoal to heat the tobacco. - If the Alarm is fitted with an RF Module, ensure that there are no problems with the other RF interconnected Alarms and that all Alarms are house coded correctly. - Press the test/hush button to silence the Alarm. If the CO Alarm continues to sound it is possibly defective and should be replaced. WHAT TO DO IF THE ALARM BEEPS: The CO Alarm will beep and the amber light will flash to indicate a fault condition.	27 <table><tr><th colspan="5">Indicator Summary</th></tr><tr><th>Normal Operation</th><th>Red LED</th><th>Amber LED</th><th>Green LED</th><th>Sounder</th></tr><tr><td>Power Up</td><td>1 flash</td><td>1 flash</td><td>1 flash</td><td>Off</td></tr><tr><td>Standby</td><td>Off</td><td>Off</td><td>Off</td><td>Off</td></tr><tr><td>Button Test (Weekly)</td><td>Off</td><td>Off</td><td>1 Flash (every second)</td><td>On</td></tr><tr><td>Unit Sensing CO gas itself</td><td>Flashing (as per table 3)</td><td>Off</td><td>Off</td><td>On</td></tr><tr><td>Fault Mode</td><td></td><td></td><td></td><td></td></tr><tr><td>Low Battery Condition</td><td>Off</td><td>1 flash (every 50 sec)</td><td>Off</td><td>1 beep</td></tr><tr><td>Sensor Fault Condition</td><td>Off</td><td>2 flashes (every 50 sec)</td><td>Off</td><td>2 beeps</td></tr><tr><td>End of Life Condition</td><td>Off</td><td>3 flashes (every 50 sec)</td><td>Off</td><td>3 beeps</td></tr></table> Table 5. Indicator Summary IMPORTANT: If the red, amber & green lights do not flash in sequence, the batteries may be installed incorrectly (reverse polarity). Remove the detector from the mounting bracket, remove the battery cover and check if the batteries are installed correctly. If the batteries were connected incorrectly and after correcting the polarity of the batteries, the detector may indicate CO is present by a flashing red LED for the first hour. Please note that during this period the detector will still activate as required during an actual CO event.	Indicator Summary					Normal Operation	Red LED	Amber LED	Green LED	Sounder	Power Up	1 flash	1 flash	1 flash	Off	Standby	Off	Off	Off	Off	Button Test (Weekly)	Off	Off	1 Flash (every second)	On	Unit Sensing CO gas itself	Flashing (as per table 3)	Off	Off	On	Fault Mode					Low Battery Condition	Off	1 flash (every 50 sec)	Off	1 beep	Sensor Fault Condition	Off	2 flashes (every 50 sec)	Off	2 beeps	End of Life Condition	Off	3 flashes (every 50 sec)	Off	3 beeps																																																					
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28 <table><tr><th colspan="6">Service Diagnostics</th></tr><tr><th>Diagnostics Modes</th><th>Action</th><th>Red LED</th><th>Yellow LED</th><th>Sounder</th><th>Action</th></tr><tr><td>Fault Checks</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Low Battery</td><td>Press & hold button</td><td>Off</td><td>1 flash</td><td>1 beep with flash</td><td>Replace Batteries</td></tr><tr><td>Faulty Sensor</td><td>Press & hold button</td><td>Off</td><td>2 flashes</td><td>2 beeps with flashes</td><td>Replace Alarm</td></tr><tr><td>End of Life (EOL)</td><td>Press & hold</td><td>Off</td><td>3 flashes</td><td>3 beeps with flashes</td><td>Replace Alarm</td></tr><tr><td>Alarm Memory</td><td>Action</td><td>Red LED</td><td>Green LED</td><td>Sounder</td><td></td></tr><tr><td>Up to 24 hours after event</td><td></td><td>Flashes as per Table 3</td><td>Off</td><td>Off</td><td></td></tr><tr><td>Long Term Memory</td><td>Press & hold button</td><td>Flashes as per Table 3</td><td>Off</td><td>On</td><td></td></tr><tr><td>Memory Erase</td><td>Keep button pressed after long term test</td><td>Flashes per Table 3</td><td>Wait for Green light then release button</td><td>On</td><td></td></tr></table> Table 6. Service Diagnostics	Service Diagnostics						Diagnostics Modes	Action	Red LED	Yellow LED	Sounder	Action	Fault Checks						Low Battery	Press & hold button	Off	1 flash	1 beep with flash	Replace Batteries	Faulty Sensor	Press & hold button	Off	2 flashes	2 beeps with flashes	Replace Alarm	End of Life (EOL)	Press & hold	Off	3 flashes	3 beeps with flashes	Replace Alarm	Alarm Memory	Action	Red LED	Green LED	Sounder		Up to 24 hours after event		Flashes as per Table 3	Off	Off		Long Term Memory	Press & hold button	Flashes as per Table 3	Off	On		Memory Erase	Keep button pressed after long term test	Flashes per Table 3	Wait for Green light then release button	On		29 <table><tr><th colspan="3">CO Alarm Fault Chart</th></tr><tr><th>Fault Condition</th><th>Fault Indication</th><th>Action</th></tr><tr><td>Low Battery</td><td>1 beep with 1 amber flash</td><td>Replace Battery</td></tr><tr><td>Faulty Sensor</td><td>2 beeps with 2 amber flashes</td><td>Replace Alarm</td></tr><tr><td>End of Life</td><td>3 beeps with 3 amber flashes</td><td>Replace Alarm</td></tr></table> Table 7. Alarm Fault Chart Technical Specifications <table><tr><td>Power</td><td>Two (2) Duracell Alkaline AAA MN2400BK</td></tr><tr><td>Transmitter Frequency</td><td>345 MHz (crystal controlled)</td></tr><tr><td>Unique ID Codes</td><td>Over (1) one million different code combinations</td></tr><tr><td>RF Supervisory Intervals</td><td>70 minutes</td></tr><tr><td>Test/Hush Button</td><td>Checks electronics, sounder, sensor, and batteries</td></tr><tr><td>Operating Temperature</td><td>40°F to 100°F (4°C to 38°C)</td></tr><tr><td>Humidity Range</td><td>15% to 95% R.H. (non-condensing)</td></tr><tr><td>Audible Alarm</td><td>85dB(A) at 10 ft (3m) minimum</td></tr><tr><td>Regulatory Listing</td><td>UL2075 2nd Edition, CAN/ULC-S588:2017, CSFM, FCC Part 15 and IC.</td></tr><tr><td>CO Alarm Memory</td><td>Indicates if CO Alarm was previously in alarm</td></tr><tr><td>Dimensions</td><td>4.724" x 4.134"x1.575" (120mm x 105mm x40mm)</td></tr><tr><td>Weight</td><td>6.53 oz (185g)</td></tr><tr><td>Equipment Code</td><td>1026</td></tr><tr><td>Panel Programming Sensor Loop</td><td>Loop 1</td></tr></table>	CO Alarm Fault Chart			Fault Condition	Fault Indication	Action	Low Battery	1 beep with 1 amber flash	Replace Battery	Faulty Sensor	2 beeps with 2 amber flashes	Replace Alarm	End of Life	3 beeps with 3 amber flashes	Replace Alarm	Power	Two (2) Duracell Alkaline AAA MN2400BK	Transmitter Frequency	345 MHz (crystal controlled)	Unique ID Codes	Over (1) one million different code combinations	RF Supervisory Intervals	70 minutes	Test/Hush Button	Checks electronics, sounder, sensor, and batteries	Operating Temperature	40°F to 100°F (4°C to 38°C)	Humidity Range	15% to 95% R.H. (non-condensing)	Audible Alarm	85dB(A) at 10 ft (3m) minimum	Regulatory Listing	UL2075 2nd Edition, CAN/ULC-S588:2017, CSFM, FCC Part 15 and IC.	CO Alarm Memory	Indicates if CO Alarm was previously in alarm	Dimensions	4.724" x 4.134"x1.575" (120mm x 105mm x40mm)	Weight	6.53 oz (185g)	Equipment Code	1026	Panel Programming Sensor Loop	Loop 1	REGULATORY INFORMATION FCC & IC Notice This device complies with Part 15 of the FCC Rules and Industry Canada license exempt standard(s). Operation is subject to the following two conditions: - This device may not cause harmful interference, and - This device must accept any interference received, including interference that may cause undesired operation. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: - L'appareil ne doit pas produire de brouillage, et - L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. This Class B digital apparatus complies with Canadian ICES-003 Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: - Reorient or relocate the receiving antenna. - Increase the separation between the equipment and receiver. - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help. Warning: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment. LIMITED WARRANTY This Nice North America LLC product is warranted against defects in material and workmanship for two (2) years. This warranty extends only to wholesale customers who buy direct from Nice North America LLC or through Nice North America LLC's normal distribution channels. 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Visit www.2gig.com/dealers/ for a list of distributors in your region. Nice Niceforyou.com ©2023 Nice North America LLC. 2GIG is a registered trademark of Nice North America LLC. All rights reserved. 10023441 Rev-E
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