



Carbon Monoxide Alarm

Safety Warning:

This user guide contains important information on operating and using this device. Keep this user guide in a safe place for future reference. These instructions are a part of this product – bear this in mind if you pass on this product to others. Please take a few minutes to thoroughly read the user guide and familiarise yourself with its operation.

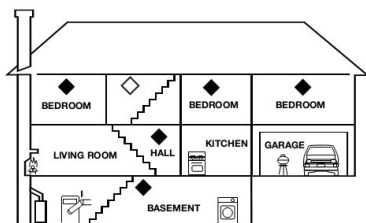
For your safety, this product must be installed in accordance with local Building Regulations. **This product MUST be installed by a competent person who is registered with an electrical self-certification scheme.**

Further information is available online or from your Local Authority. Please read carefully and use in accordance with these safety wiring instructions. Before commencing any electrical work ensure the supply is disconnected, and securely locked off. Wiring should be in accordance with the latest edition of the IET regulations (BS 7671).

Recommended location for alarms:

The following suggestions are intended to help you with the placement and installation of your CO alarm.

1. The recommended position for the unit is at least 1.8m (6ft) above floor level and it should be at least 150mm from ceiling.
2. Place out of the reach of children. Under no circumstance should children be allowed to handle the CO alarm.
3. Install in a bedroom or hallway located close to sleeping areas.
4. Locate 1-3m (3.3-10ft) away from all fuel burning appliances.
5. Placing at eye level allows for optimum monitoring of the red and green indicator lights.
6. If there is a partition in a room, the apparatus should be located on the same side of the partition as the potential source.
7. Ensure that all vents of the unit are unobstructed.
8. Do not install in dead air spaces such as peaks of vaulted ceilings, or gabled roofs.
9. Do not install near ceiling fans.
10. Do not place near fresh air vents or close to doors and windows that open to the outside.
11. Keep the CO alarm away from excessively dusty, dirty, or greasy areas. Dust, grease, and household chemicals can affect the sensor.
12. Keep out of damp and humid areas such as the bathroom. Avoid spraying aerosols near the CO alarm.
13. Do not install in areas where the temperature is below-10 C or hotter than 40 C.
14. Do not place behind curtains or furniture. CO must be able to reach the sensor for the unit to accurately detect CO.
15. Do not place near metal objects.
16. Do not place next to a door or window.
17. Do not place in the immediate vicinity of a cooking appliance.

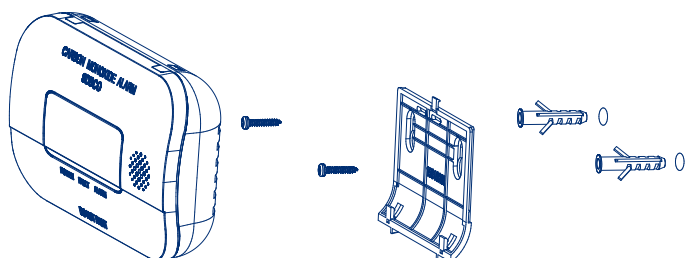


◆ REQUIRED

◆ SUGGESTED AREAS FOR INSTALLING ADDITIONAL CO ALARMS

Mounting Instructions:

1. Select the location for your CO alarm. Mark the position to drill the mounting holes with a pencil. The distance between the hole centres is 52mm. Drill two installation holes with a 5mm drill bit.
2. Insert two plastic plugs (provided) into the holes.
3. Insert the two screws provided until the screw heads are approximately 5mm from the wall.
4. To power up the alarm, add batteries (supplied) to the battery compartment of the alarm.
5. Test the device by using the TEST/SILENCE button. You should hear a loud siren and the red LED should flash.
6. Hook the unit over the screws on to key holes in the back of the unit.



When you install the device, it may sound for several minutes, then stop and enter normal operation mode. If it continues to emit a sound, please call our technical support team.

Replacing the batteries

Two chirps with a FAULT indicator (yellow) flashing every 40 seconds indicates a low battery.

To replace the batteries.

1. Take down the unit from screw heads of the wall.
2. Open battery compartment.
3. Remove the old batteries and replace with new batteries.
4. Check the alarm – the green LED should flash once a second for the first 60 seconds. If it does not do this, remove the batteries and put them in again.
5. Close the battery compartment.
6. Hook the alarm body over the screw heads on to key holes in the back of the unit.
7. Test alarm using the TEST/SILENCE button.

WARNING! – Use only the batteries specified (2 x GP GN15A or 2 x Raymax LR6). Use of different batteries may have a detrimental effect on the CO alarm. A good safety measure is to replace the batteries at least once a year.

Prepare an escape plan

- Make a floor plan which shows all doors and window, with at least two escape routes from each room.
- Have a meeting with all occupants to discuss the escape plan, showing everyone what to do in case of a fire.
- Designate a place outside where everyone can meet if a fire occurs.
- Practice a fire drill every 6 months, including fire drills at night. Ensure small children hear the alarm and wake when it sounds. They must wake up and it is important that they know what to do.
- Current studies have shown that smoke/CO alarms may not wake all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those individuals.
- When two people have reached the meeting place, one should leave to call the fire department while the second person stays to account for additional family members. Establish a rule that once you're out, you never re-enter under any circumstance!

What to do if the CO alarm sounds

The carbon monoxide (CO) alarm pattern is four quick beeps repeating every 5 seconds.

The ALARM indicator (red) will flash in the same pattern.

WARNING!

– Activation of your CO alarm indicates the presence of Carbon Monoxide (CO) which can KILL YOU.

If the alarm sounds:

1. Keep calm and open all doors and windows to increase ventilation. Stop using all fuel-burning appliances and ensure, if possible, that they are turned off, e.g. for gas appliances, isolate the emergency control valve.
2. If the alarm continues to sound, then evacuate the premises. Leave the doors and windows open, and only re-enter the building when the alarm has stopped. In multi-occupancy and multi-storey premises, ensure that all the occupants are alerted to the risk.
3. Get medical help for anyone suffering from the effects of carbon monoxide poisoning and advise that carbon monoxide inhalation is suspected.
4. Telephone the appropriate appliance servicing and/or maintenance agency or, when necessary, the relevant fuel supplier on their emergency number or the national Gas Emergency Service Provider, if appropriate, so that the source of carbon monoxide emissions can be identified and corrected. Unless the reason for the alarm is obviously a false alarm, do not use the fuel-burning appliances again, until they have been checked and cleared for use by a competent person according to national regulations.

- If problems are identified during this inspection, have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturers' instructions or contact the manufacturer directly for more information about CO safety and this equipment. Make sure that motor vehicles are not or have not been operating in an attached garage or adjacent to the residence.
- Never restart the source of a CO problem until it has been corrected.
- Never ignore the sound of the CO alarm!
- If the device is sounding, pressing the TEST/SILENCE button will silence the alarm. If the CO condition that caused the alarm in the first place continues, the unit will reactivate the alarm mode.
- If the device goes in to alarm mode again within about ten minutes, it is sensing high levels of CO which can quickly become a dangerous situation.

Important product information

CAUTION!

- This CO alarm was designed to detect carbon monoxide from any source of combustion in a residential environment. It is not designed for use in recreational vehicle (RV) or boat.
- This CO alarm was designed for indoor use only. DO NOT expose to rain or moisture. DO NOT knock or drop the detector. DO NOT open or tamper with the alarm as this could cause it to malfunction.
- This CO alarm is designed to detect carbon monoxide gas from ANY source of combustion. It is NOT designed to detect any other gas.
- This CO alarm will not protect against the risk of carbon monoxide poisoning when the battery has drained.
- Installation of the alarm should not be used as a substitute for proper installation, use and maintenance of fuel burning appliances including appropriate ventilation and exhaust systems.
- This device should be installed by a competent person.
- This CO alarm is not intended to alert hearing impaired individuals.

1. The TEST button accurately tests the CO alarm functions. Do not use any other test method. Test the device weekly to ensure proper operation.
2. If you're sure it isn't a real alarm, open windows or fan the air around the device to silence it.
3. Observe and follow all local and national electrical and building regulations for installation.
4. This CO alarm is designed to be used inside a single-family dwelling only. In multi-family buildings, each individual living unit should have its own CO alarm devices. Do not install in non-residential buildings.
5. This device is not a substitute for a complete alarm system.
6. Install a CO alarm in every room and on every level of the home. CO may not reach the CO alarm for many reasons. For example, if a fire starts in a remote part of the home, on another level, in a chimney, wall, roof, or on the other side of a closed door, CO may not reach the device in time to alert household members. This CO alarm will not promptly detect a fire or dangerous CO levels in rooms other than the room in which it is installed.
7. This CO alarm may not alert every household member every time. The alarm siren is loud in order to alert individuals to a potential danger. However, there may be some circumstances where a household member may not hear the alarm (i.e. outdoor or indoor noise, sound sleepers, drug or alcohol use, the hard of hearing, etc.). If you suspect that this device may not alert a household member, you should install and maintain other specialty CO alarm devices. Household member must hear the alarms' siren and quickly respond to it to reduce the risk of damage, injury, or death that may result from fire and CO inhalation. If a household member is hard of hearing, install another special CO alarm with lights or vibrating devices to alert occupants.
8. This CO alarm can only sound its' siren when it detects dangerous levels of CO in the air. It does not sense smoke, heat, flame, or other gases. The device is designed to give an audible warning of dangerous CO levels or a developing fire. However, many fires are fast-burning, explosive, or intentional, and others are caused by carelessness or safety hazards. In these circumstances, CO may not trigger the alarm quickly enough to ensure safe escape.
9. This CO alarm has limitations. The device is not fool proof and is not warranted to protect lives or property from fire. CO alarm are not a substitute for insurance. Homeowners and renters should insure their lives and property. In addition, it is possible for the device to fail at any time. For this reason, you must test the device weekly and replace the unit every 10 years.

Operation and testing

1. Start up

On initial power up, all three LED indicators (green/yellow/red) will light up briefly and the device confirms start-up with a beep. Once the power is on, the power indicator (green) flashes once per second for the first 60 seconds whilst the device calibrates. Once calibrated the power indicator (green) will flash every 40 seconds to indicate it is functioning correctly.

2. Normal operation

The POWER indicator (green) flashes every 40 seconds.

3. Fault warning

If the device chirps twice every 8 seconds, and the FAULT indicator (yellow) is flashing, this indicates that the device is malfunctioning, which in turn means your device will not detect or respond to CO.

4. Fault and low battery warning silence

When the device is indicating a fault, pressing the TEST/SILENCE button will silence this warning for about 9 hours, and the FAULT indicator (yellow) will continue to flash.

5. Low battery warning

If the device chirps once every 40 seconds, and the FAULT indicator (yellow) is flashing, this indicates the battery is low.
NOTE: You need to replace the battery as soon as possible when the alarm enters this state.
NOTE: The device will not protect against the risk of carbon monoxide poisoning when the battery has drained.

6. End of life warning

If the alarm chirps 3 times every 40 seconds with the Fault indicator (yellow) flashing, it indicates end of life of the CO alarm.

CAUTION! -When you hear the end-of-life signal please replace the alarm as soon as possible.

7. Silence end of life warning

Pressing the TEST/SILENCE button will silence this warning for about 9 hours, and the FAULT indicator (yellow) will continue to flash.

8. CO alarm warning

When the device detects a dangerous level of CO, the siren will activate. The siren pattern will be 4 quick beeps followed by 5 seconds of silence. This cycle repeats so long as a dangerous CO levels are present. The ALARM indicator (red) will flash with the same pattern.

This signal will repeat until the alarm resets after dissipation of CO or the alarm is manually silenced.

CO alarm sensitivity setting:

Conforms to EN 50291-1:2018 and BS EN 50291-1:2018

30PPM Without alarm before 120 minutes 50PPM Between 60 to 90 minutes

100PPM Between 10 to 40 minutes 300PPM Less than 3 minutes

CAUTION! – Refer to "What to do if the CO alarm sounds" when you hear the sounds of the CO alarm warning.

DANGER! – If the CO alarm sounds, and it is not being tested, it means the unit is sensing a dangerous level of CO, THE SOUND OF THE ALARM REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.

9. Alarm volume

If the device activates upon detection of CO, the siren will emit at a lower volume (<85dB) for around 10 seconds, and then increase to a normal volume (>85dB). This will avoid startling home occupants.

10. Test the device

To test the device, press the TEST/SILENCE button. You should hear the siren and see a corresponding ALARM indicator (red) flashing. This will stop when you release the TEST/SILENCE button. The alarm should make: 4 short beeps followed by a 5 second pause, and will repeat this pattern until the TEST/SILENCE button is released.

NOTE:

- After the TEST/SILENCE button is pressed, the alarm sounds and the red alarm light flashes. This does not indicate that CO is present.
- Test the unit weekly! If at any time your unit does not perform as described, replace it immediately.
- DO NOT use an open flame to test your alarm, you could damage the alarm or ignite combustible materials and start a fire.
- Due to the volume (85 decibels) of the alarm, always stand an arms-length away from the unit when testing.

11. CO alarm warning silence

When the CO alarm is activated, pressing the TEST/SILENCE button will silence the alarm sound for about 10 minutes. The ALARM indicator (red) will keep flashing whilst in CO alarm mode even when silenced.

NOTE: The audible alarm signal will reactivate 10 minutes after the time the TEST/SILENCE button is pressed if the concentration of CO surrounding the alarm remains at 50 PPM or greater.

NOTE: The siren cannot be silenced if the concentration of CO detected by the alarm is above 200 PPM.

NOTE: The alarm can only be silenced once when high levels of CO are detected.

WARNING! – Before silencing the CO alarm, you should assume that the alarm has activated because dangerous levels of carbon monoxide have been detected and the dwelling should be evacuated.

Product specifications

Product standards	EN 50291-1:2018 and BS EN 50291-1:2018
Type of apparatus	Type B
Power Supply	3V DC (2 x 1.5V AA)
Sensor of CO	Electrochemical
CO alarm sensitivity setting	30PPM Without alarm before 120 minutes 50PPM Between 60 to 90 minutes 100PPM Between 10 to 40 minutes 300PPM Less than 3 minutes
Product life	10 years
Standby Current	<20mA (average)
Alarm Current	<30mA (average)
Operation Ambient Condition	-10~+40 C, 30~95% non-condensing
Storage/Transport Ambient Condition	-20~+50 C, 10~95% non-condensing
Alarm Sound	≥85DB at 3m at 3.2±0.5KHz pulsing alarm
CO Alarm Silence	About 10 minutes
Other Warning Silence	About 9 hours
Installation Location	Wall of domestic premises
Detection Range	Max. 40 m ² within a room

NOTE: This CO alarm is designed to detect carbon monoxide gas from any source of combustion. It is not designed to detect any other gas.

NOTE: Test the alarm for correct operation using the test facility whenever the batteries are replaced.

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

Mild Exposure: Slight headache, nausea, vomiting, fatigue (often described as "Flu-like" symptoms).

Medium Exposure: Severe throbbing headache, drowsiness, fast heart rate.

Extreme Exposure: Unconsciousness, cardiorespiratory failure, death.

The above levels of exposure relate to healthy adults. Levels differ for those at high risk. Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities. 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. Also, young children and household pets may be the first effected. Familiarisation with the effects of each level is important.

WARNING!-Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities.

General Maintenance

To keep your CO alarm in good working order, please follow these simple steps:

1. Verify the unit's alarm sound and indicators are operating correctly using the TEST/SILENCE button once a week.
2. Remove the unit from the wall and clean the alarm cover and vents with a soft brush attachment once a month to remove dust and dirt.
3. Never use detergents or other solvents to clean the unit.
4. Avoid spraying air fresheners, hair spray, or other aerosols near the device.
5. Do not paint the device. Paint will seal the vents and interfere with the sensor's ability to detect CO. Never attempt to disassemble the unit or clean inside. This action will invalidate your warranty.
6. As soon as possible, place the CO alarm back in its proper location to ensure continuous protection from fire and carbon monoxide poisoning.
7. When household cleaning supplies or similar contaminants are used, the area should be ventilated.

warning:

- The following substances can affect the sensor and may cause false alarms: methane, propane, isobutene, isopropanol, ethylene, benzene, toluene, ethyl acetate, hydrogen sulphide, sulphur dioxides, alcohol-based products, paints, thinner, solvents, adhesives, hair sprays, aftershave, perfumes, and some cleaning agents.
- Your CO alarm will not be operational and will not monitor for CO levels without a battery.
- This apparatus 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.

Carbon Monoxide (CO) overview

- CO cannot be seen, smelled or tasted and can be fatal. The build-up of CO in the blood is called the carboxyhemoglobin (COHb) level and interferes with the body's ability to supply itself with oxygen. Depending on the concentration, CO can kill in minutes.
- The most common sources of CO are malfunctioning gas appliances used for heating and cooking, vehicles running in an attached garage, blocked chimneys or flues, portable fuel burning heaters, fireplaces, fuel powered tools and operating a grill in an enclosed space.
- Indications of carbon monoxide poisoning include symptoms similar to the flu, but with no fever. Other symptoms include dizziness, fatigue, weakness, headache, nausea, vomiting, sleepiness and confusion.
- Everyone is susceptible to the danger of CO, but experts agree that unborn babies, small children, pregnant women, senior citizens and people with heart or respiratory problems are at the highest risk for serious injury or death.
- Every year a qualified technician should inspect and clean your heating system, vents, chimney, and flues.

Guarantee

BG Electrical products are guaranteed against faulty materials and workmanship for a period of 10 years from date of delivery: products will be repaired or (at BG Electrical's discretion) replacements will be supplied or (at BG Electrical's discretion) a credit note will be issued. This guarantee is subject to BG Electrical's conditions of sale and in particular to the following conditions being met:

1. Notification of any defect is given to BG Electrical as soon as reasonably practicable after becoming apparent, and the products then returned to BG Electrical.
2. The products have only been operated under normal operating conditions and have only been subject to normal use.
3. No work (other than normal and proper maintenance) has been carried out to the products without BG Electrical's prior written consent.
4. The products have been assembled, or incorporated into other goods, by a qualified and recognised electrician and only in accordance with any instructions issued by BG Electrical.
5. The defect has not arisen from an item manufactured or supplied by a person other than BG Electrical. This guarantee does not affect any consumer statutory rights.

Batch Number Explanation

XX (year) XX (month) XX (date) X (serial number)

Address/Helpline

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If you have further technical assistance you can get in touch with our

Technical Helpline on:
+44 (0)3300 249 279
technical.support@bgelectrical.co.uk

Environmental Protection



This symbol is known as the "Crossed-out Wheeled Bin Symbol". When this symbol is marked on a product or battery. It means that it should not be disposed of with your general household waste. Some chemicals contained within electrical/electronic products or batteries can be harmful to health and the environment. Only dispose of electrical/electronic/battery items in separate collection schemes, which cater for the recovery and recycling of materials contained within. Your co-operation is vital to ensure the success of these schemes and for the protection of the environment.

