**WARNING:**

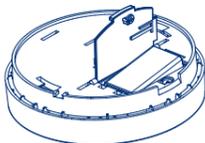
All interconnected alarms must be on the same circuit

• **ENSURE THE WIRING METHOD IS CORRECT, WRONG CONNECTIONS WILL DAMAGE THE ALARM. DO NOT CONNECT LIVE OR NEUTRAL TO THE INTERCONNECT TERMINAL.**

- A common Neutral must be used for the interconnection to function
- Maximum number on interconnected alarms: 12
- Maximum wiring length between first and last alarm: 150m
- Use a minimum of 1.5mm² 250V insulated wire for all wiring, including interconnecting wiring
- Do not connect these Alarms to any other model produced by another manufacturer. Doing so may damage the Alarms and could result in a shock or fire hazard

Replacing the backup battery

1. When replacing the battery, turn off the AC power.
2. Remove the alarm body from the base.
3. Once the alarm has been removed, open the battery cover and replace with a new battery (see below)



4. Close the battery cover and test the alarm by pressing the TEST button.
5. Fit the alarm body back on the bracket.

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.

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 siren has activated, pressing the TEST/SILENCE button will silence the alarm. If the CO condition that caused the alarm in the first place continues, the siren will be re-activated.

If the device activates again within about ten minutes, it is sensing high levels of CO which can quickly become dangerous.

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. This device is not a substitute for a complete alarm system.
5. 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.
6. 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 members must hear the alarm's 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 these occupants.
7. 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.
8. This CO alarm has limitations. The device is not fool proof and is not warrantied 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.

4. Understanding your CO alarm

4.1 Product overview

1. **POWER indicator (green)**
The green indicator is used to indicate power status of the device.
2. **FAULT indicator (yellow)**
The yellow indicator is used to indicate malfunctions or low battery warning status of the device.
3. **ALARM indicator (red)**
The red indicator is used to indicate alarm status of the CO alarm.
4. **TEST/SILENCE button**
The TEST/SILENCE button is used to test the device. Press and hold to enable the TEST function, or press and hold for about 0.2 seconds then release to silence a low battery warning.
5. **Siren**
The siren is used to send out CO alarm warning and fault warning information.



Operation and testing

1. **Start up**
After connecting the battery or AC power supply, three color 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) will flash every 3 seconds for around 40 seconds whilst the device calibrates. Once calibrated the power indicator (green) will have a constant green light whilst connected to the AC power supply.
2. **Normal operation**
The POWER indicator (green) will remain on constantly when connecting the AC power supply.
3. **AC disconnected**
The POWER indicator (green) will flash every 33 seconds when it is solely receiving power from the battery.
4. **Fault warning**
If the device chirps twice every 38 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.
CAUTION! –When a fault warning occurs, you can remove the alarm and replace the battery. If it continues to emit a fault warning, replace the device immediately.
5. **Low battery warning**
If the device chirps once every 33 seconds, and the FAULT indicator (yellow) is flashing, this indicates the battery is low.
NOTE: When the low battery warning occurs, the device can produce a CO alarm signal for at least 4 minutes for 30 days after the low battery warning signal first starts.
NOTE: You need 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 and the AC is disconnected.
6. **Low battery warning silence**
When the device is emitting the low battery warning, pressing the TEST/SILENCE button will silence this warning for about 9 hours, and the FAULT indicator (yellow) will continue to flash.
NOTE: The silence feature of low battery voltage warning is a temporary solution to silence the warning sound, however you need change the battery as soon as possible.
7. **Interconnected alarm**
If you have interconnected CO alarms in the system, when an interconnected alarm is triggered, the device will emit a loud alarm. The alarm signal pattern is 4 quick beeps followed by 5 seconds of silence.
CO alarm
8. When the device detects a dangerous level of CO, the device will emit a loud alarm. The alarm signal pattern is 4 quick beeps followed by 5 seconds of silence. This cycle repeats so long as a dangerous CO condition exists. 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 signal is manually silenced.

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.
Sound level

If the device detects CO, the siren will start sounding at a lower alarm volume (<85dB) for around 10 seconds, and then increase to a normal alarm volume (>85dB). This will avoid people being startled by the volume of the alarm.

Test the device

When testing the device using the TEST/SILENCE button, you should hear the alarm sound with a corresponding ALARM indicator (red) flashing. The alarm sound will stop after releasing the

9. TEST/SILENCE button. The test alarm sound pattern is: 4 short beeps, 5 seconds pause, and repeat this pattern until the TEST/SILENCE button is released.

10.

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. **End of life indication**

Your carbon monoxide alarm will give you an audible and visual warning when it reaches end of life (10 years). The device chirps three times every 33 seconds, with the FAULT indicator (yellow) flashing. The end-of-life signal cannot be silenced until a replacement has been purchased.
CAUTION! –When you hear the end-of-life signal please replace the alarm as soon as possible.

Technical

Product specifications

Product standards	BS EN 50291-1:2018
Type of apparatus	Type A
Mains Power Source	220-240V-50/60Hz, 5W
Secondary Power Source Battery Backup:	9V DC
Battery Life:	1 year
Sensor of CO:	Electrochemical
CO alarm sensitivity setting	Conforms to EN50291-1:2018 30PPM Without alarm before 120 minutes 50PPM Between 60 to 90 minutes 100PPM Between 10 to 40 minutes 300PPM Less than 3 minutes
Product life	10 years
Output signal:	Level signal
Operation Ambient Condition	-10-+55 C, 10-95%RH non-condensing
Storage/Transport Ambient Condition	-20-+55 C, 10-95% RH non-condensing
Alarm Sound	>85dB@3 m
Low Battery warning silence:	about 9 hours
Installation Location:	Ceiling (only in interior spaces)
Detection range:	Max. 40 m within a room.
Size:	φ127mm, T=39mm
Weight:	220g

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 battery is replaced. Do this before turning on the mains electricity supply.

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 ceiling 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, aftershaves, perfumes, and some cleaning agents.
- Your CO alarm will not be operational and will not monitor for CO levels without battery or AC power supply.
- 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.

Using the dust cover

This alarm is supplied with a red dust cover which should be placed over the alarm when painting or decorating to keep it dust free. This should then be removed when painting or decorating is completed.

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.

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

6.1 Mild Exposure:

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

6.2 Medium Exposure:

Severe throbbing headache, drowsiness, fast heart rate.

6.3 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.



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

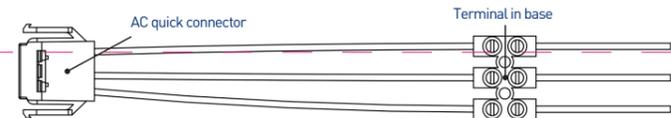
- Place out of the reach of children. Under no circumstance should children be allowed to handle the CO alarm.
- Install in a bedroom or hallway located close to sleeping areas. Take special care to ensure the alarm can be heard in sleeping areas.
- It is recommended that a CO alarm be installed on each level of a multi-level home.
- Locate 1-3 metres (3.3-10ft) away from all fuel burning appliances.
- Ensure that all vents of the unit are unobstructed.
- Do not install in dead air spaces such as peaks of vaulted ceilings, or gabled roofs.
- Do not install near ceiling fans.
- Do not place near fresh air vents or close to doors and windows that open to the outside.
- Keep the CO alarm away from excessively dusty, dirty, or greasy areas. Dust, grease, and household chemicals can affect the sensor.
- Keep out of damp and humid areas such as the bathroom. Avoid spraying aerosols near the CO alarm.
- Do not install in areas where the temperature is below -10 C or hotter than 40 C.
- Do not place near metal objects.

Mounting Instructions:

1. Turn off the AC power.
2. Select the location for your alarm.
3. Take out the base, then remove one of the 4 sections on the rim of the base using pliers or a similar tool. The 4 sections can be seen highlighted in black on diagram 1.
4. Press the base on the installation position, mark the installation holes of the bracket with a pencil.
5. Drill two installation holes with a 5mm drill bit. Fit the two plastic plugs into the holes with a hammer.(See diagram 2)
6. Attach the base to the ceiling using the 2.9 x 25mm screws provided.
7. Connect the external live wire, neutral wire, and interconnection wire to one side of the terminal of the base.
8. Connect the three wires with the AC quick connector, which is part of the product to be connected to the base, to the other side of the terminal blocks.

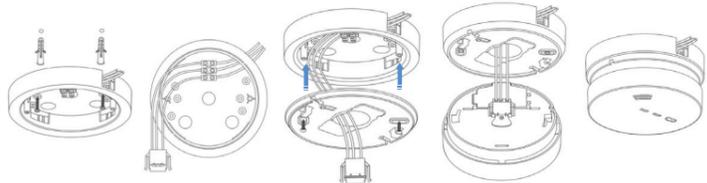
Diagram 1**Diagram 2**

WARNING: Improper wiring may result in damage to the alarm, failure to operate, or a shock hazard.



- Brown wire --- Live wire of AC line
- Blue wire --- Neutral wire of AC line
- White wire --- I/O interconnection line

9. Take out the bracket of the product which needs to connect with this base.
10. Pull the AC QUICK CONNECTOR through the centre hole in the bracket. Fix tightly the 2.9 x 10mm screws into the base.
11. Connect the AC QUICK CONNECTOR to the alarm body.
12. Fit the alarm on the bracket and turn the alarm body clockwise.



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.

Trouble shooting guide

Problem	Cause and Remedy
The device does not sound when pressing the TEST/SILENCE button.	<ul style="list-style-type: none">• The devices power is off. You need replace the battery and try again• The device is in "Fault warning" mode. Please ensure the device is under "Normal operation" mode then test the device• Clean the device. Please refer to "General maintenance". If there are still failures during the warranty period, you can return it to your retailer
The device chirps twice with FAULT indicator (yellow) flashing twice every 38 seconds.	MALFUNCTION SIGNAL Clean this device. Please refer to the " General maintenance " <ul style="list-style-type: none">• You can remove the alarm and replace the battery. If it is still in fault status replace the device immediately• If the device is under warranty, please return to your retailer for a replacement• If the device is out of warranty, please replace with another new device
The device chirps once with FAULT indicator (yellow) flashing once every 33 seconds.	LOW BATTERY SIGNAL Please replace the battery
The device chirps three times with FAULT indicator (yellow) flashing three times every 33 seconds.	END-OF-LIFE SIGNAL Please replace the alarm
The device sounds unwanted alarms when residents are cooking, taking showers, etc.	Open the window to improve ventilation
Interconnection function is not working	One or more of the alarms have been wired incorrectly. Check all of the alarms in your system to find the alarm that has been wired incorrectly, remove and replace this alarm with a new one.

Batch Number Explanation

XX [year] XX [month] XX [date] X [serial number]

Address/Helpline

Lucoco PLC
Stafford Park 1
Telford TF3 3BD
ENGLAND

[EU] Lucoco SE
C/ Bobinadora 1-5
08302 Mataró
SPAIN

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 Wheelie 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.

