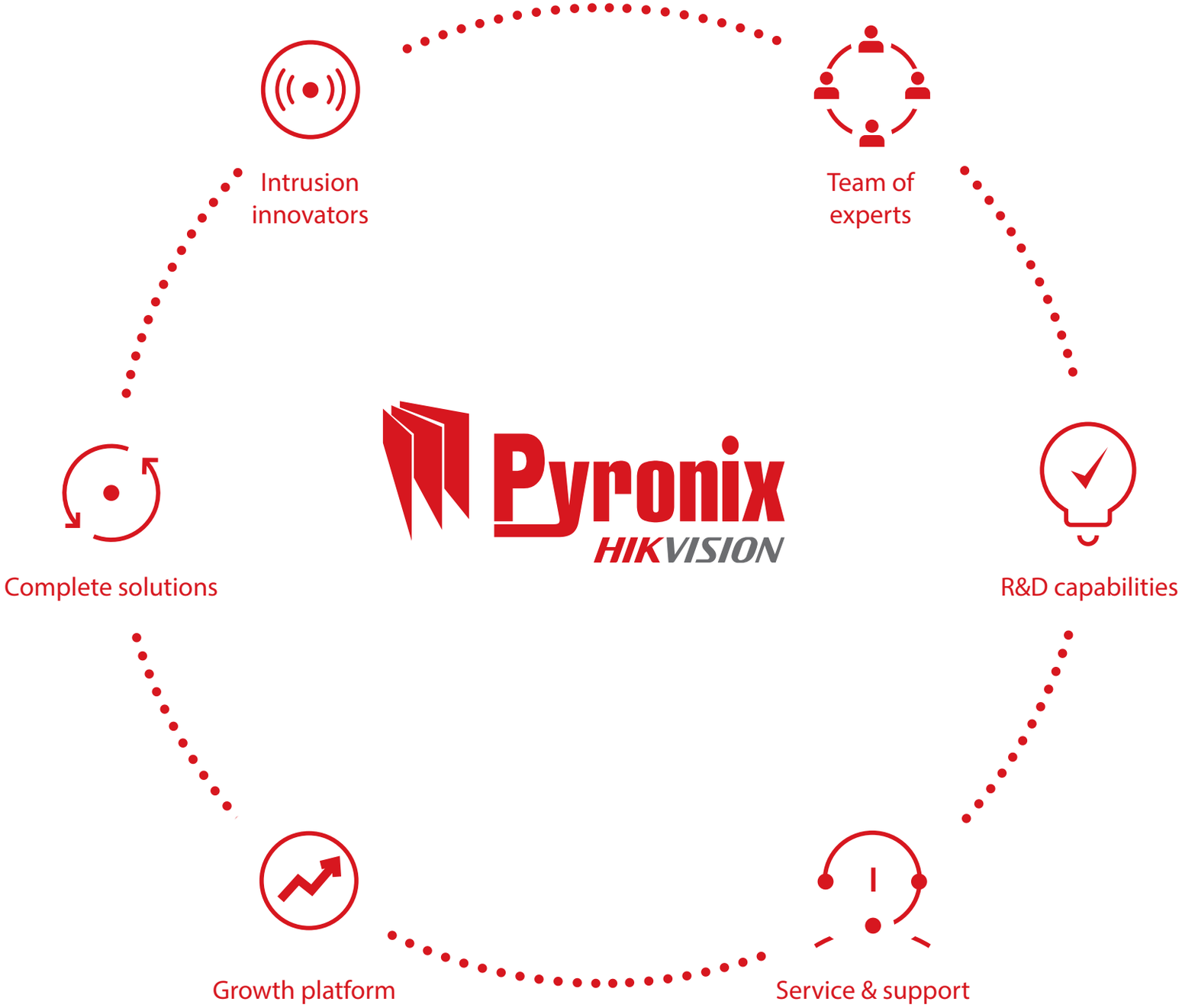
Pyronix
HIKVISION

CO-WE2
INSTALLATION GUIDE

Document SAP: 102028130-01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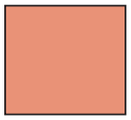
CONVENTIONS

DIAGRAMS

All diagrams in this manual are **not to scale** and are intended for illustrative and indicative purposes only.



This colour denotes important components in diagrams and does not reflect the physical product.

TECHNICAL SUPPORT

If you experience issues with the installation, please call our UK technical support team.

Alternatively if you do not require assistance straight away, you can always email the team who will reply to you as soon as possible.

Our office hours are: Monday to Friday 08:00 - 18:30.

0333 444 1280

technicalsupport@pyronix.com

Please note: In order to assist getting your issue resolved quickly, please have the software revision of the equipment you are currently working with.

CONTENTS

INTRODUCTION

ABOUT CARBON MONOXIDE

Carbon monoxide is produced by the incomplete combustion of fuels such as natural gas, propane, heating oil, kerosene, coal, charcoal, gasoline, or wood. The incomplete combustion of fuel can occur in any device which depends on burning for energy or heat such as furnaces, boilers, room heaters, hot water heaters, stoves, grills, and in any gasoline powered vehicle or engine (e.g. generator set, lawnmower). Tobacco smoke also adds CO to the air you breathe.

CARBON MONOXIDE DETECTOR

The electrochemical sensor detects carbon monoxide, measures the concentration and sounds a loud alarm before a potentially harmful level is reached.

Please note: These detectors can only provide pre-warning if they are located, installed, and maintained properly as described in this guide.

SPECIFICATIONS

DIMENSIONS AND WEIGHT

	CO-WE2
Dimensions (Ø x D)	120 x 37mm
Weight (including battery)	195g

PERFORMANCE

	CO-WE2
Detection	Carbon monoxide only
Sensor low voltage alert	2.6 - 2.7VDC
RF low voltage alert	2.5V +/- 5% @ 25C

	CO-WE2
Sensor standby | alarm current	25uA | 120mA
Sound level	85dB (A) @ 3 metres
Visual indications	Power, fault and alarm
Transmission frequency	868MHz FM transceiver narrow band
Transmission method and range	Fully encrypted rolling code, 300m
Operating temperature	-10 - 50°C
Humidity	5 - 90%
Sensitivity range	EN 50291-1: At 50ppm, the unit must alarm within 60-90 minutes At 100ppm, the unit must alarm within 10-40 minutes At 300ppm, the unit must alarm within less than 3 minutes
Standards	EN50291-1:2010+A1:2012

BATTERIES

	CO-WE2
Sensing element	This part is powered by 2 x 1.5V, AA and **are not replaceable**. When they reach the end of their life cycle, the whole unit will need replacing. Life expectancy ~10 years.
Radio TX and RX	The radio component is powered by 1 x 3V, CR123A and can be replaced when discharged. When this battery is low on charge, the unit will indicate to the control panel it needs to be replaced with a new one. Life expectancy ~2 years

INSTALLATION & LOCATION ADVICE

WHERE TO INSTALL

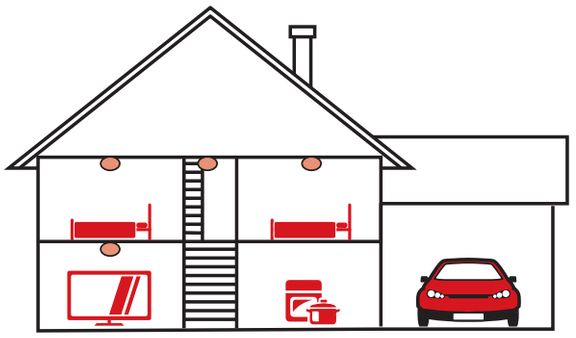
LOCATIONS IN THE HOME

Since CO gas moves freely in the air, the suggested location is in or as near as possible to sleeping areas of the home. The human body is most vulnerable to the effects of CO gas during sleeping hours.

For **maximum protection**, a CO detector should be located outside primary sleeping areas or on each level of your home.

Please see the image to the right for locations to install CO detectors in a multi-floor residence.

NOT TO SCALE



- CO detector

CAUTIONS

- This unit is only intended to be ceiling mounted or no more than 12 inches below the ceiling.
- An alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.
- The user shall actuate the test and/or alarm reset/silence feature remotely (via an electronic signal or aerosol test gas), or by use of a person's finger or thumb, and that the use of any other instrument(s) is strictly prohibited.

IMPORTANT

This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure compliance commercial or industrial standards.

50 parts per million (ppm). Safety level as specified by the Health and Safety Executive for a maximum of 30 minutes.

WHERE NOT TO INSTALL

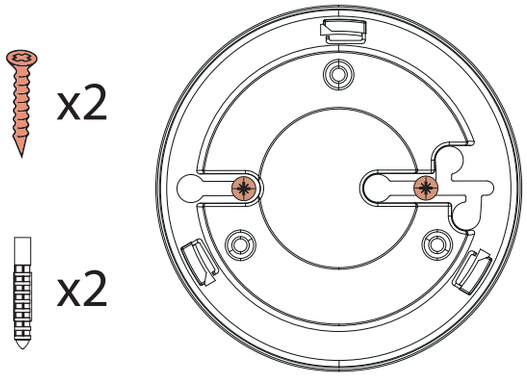
GENERAL

Do not install...

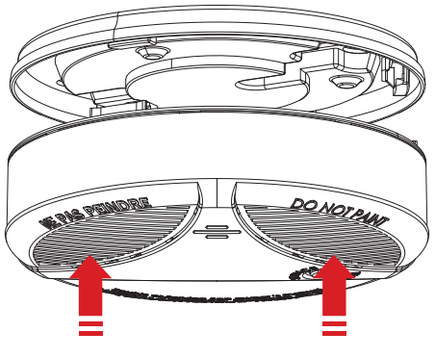
- In environments where the ambient temperature can exceed 40°C or be below 0°C
- In close proximity to anything that can create airflows such as air conditioning units, windows, vents or heaters.
- Anywhere that not easily accessible to silence false alarms or test/replace the battery.
- Near any objects that could cause electrical interference such as dimmer switches or proximity readers.

FITTING THE DETECTOR

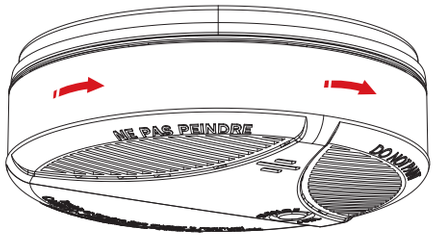
i NOT TO SCALE



ii NOT TO SCALE



iii NOT TO SCALE



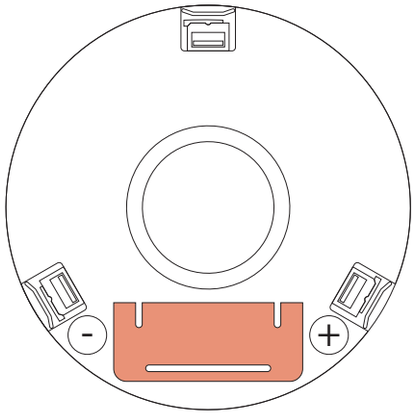
1. Put the mounting base against the surface it is to be fixed to.
2. Mark two screw holes, one in each of the keyhole slots.
3. Using a 5mm drill bit, drill two holes where the keyhole marks are.
4. Insert the two red wall plugs provided into the holes.
5. Use the two screws also provided to attach the bracket. (Fig i)
6. Line up the sensing unit making sure its clips are to the side of the clips on the base. (Fig ii)
7. Rotate the sensing unit to secure in place. (Fig iii)

Please note: Mounting base and sensing unit may differ in appearance to the diagram shown above however, installation remains exactly the same.

WIRELESS INTEGRATION

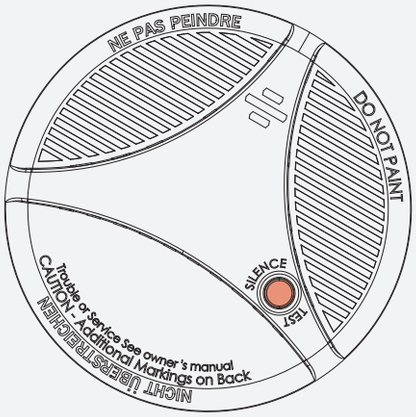
LEARNING THE DEVICE TO THE SYSTEM

iv NOT TO SCALE



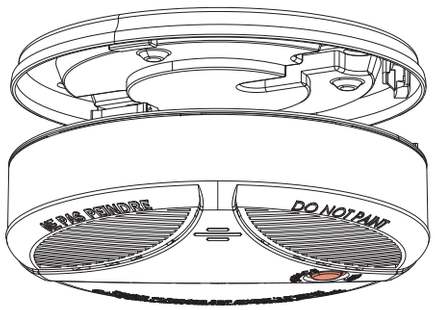
1. Put system into learning mode and insert the battery on the back of the unit.

v NOT TO SCALE



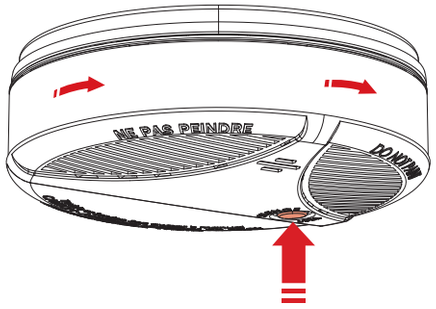
2. Locate the test/silence button on the front. Press and hold it down.

vi NOT TO SCALE



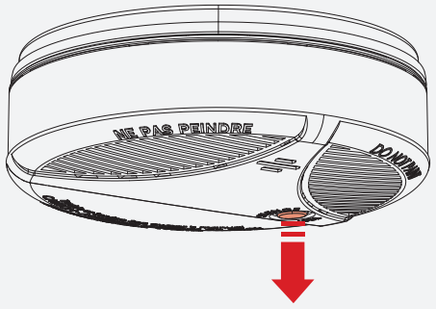
3. Keeping the button pressed, put the sensing unit on the mounting base...

vii NOT TO SCALE



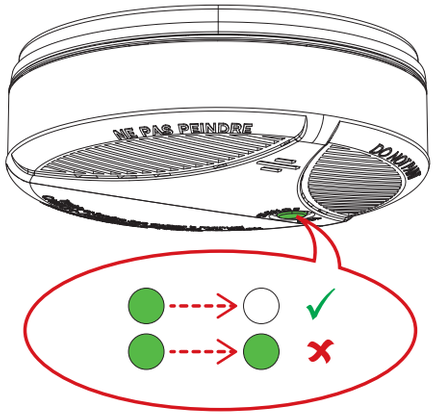
4. ...and rotate clockwise to secure in place.

viii NOT TO SCALE



5. Once the LED turns red, release the test button. The LED will turn green and the unit will signal to the system.

ix NOT TO SCALE



6. If the pairing is successful, the LED will extinguish. If the green LED stays on, press the test button so the LED turns red and release again.

SIGNAL STRENGTH TEST

1. Refer to the technical documentation that accompanies the control panel and prepare the system for a Remote Signal Strength Indicator (RSSI) test.

2. The system will count down and then display the signal strength of the wireless peripherals.

0 - No signal
1 - Weak signal
2 - Good
3 - Excellent

Please note: Press [YES] / [✓] to view each zone individually. This will also display a signal strength value between 0-100.

BATTERY TEST

1. Refer to the technical documentation that accompanies the control panel and prepare the system for a battery status test.

2. The system will count down and then display the battery status of the first wireless zone.

Good (G) - The battery has at least one month life
Replace (R) - The battery needs replacing as soon as possible.

Please note: Press [B] / [D] to view each zone individually.

If the **CR123A** battery needs to be replaced, the detector will indicate to the system and the system will display the fault.

Please refer to the technical documentation that accompanies the control panel for help locating and accessing the log to determine which zone has low battery.

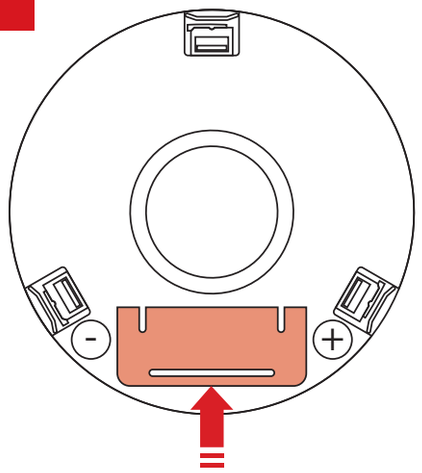
MAINTENANCE

BATTERY REPLACEMENT

1. Remove from mounting base by carefully turning the sensing unit anticlockwise.
2. Open battery compartment. (Fig x)
3. Making sure that the positive and negative are at the correct terminals ends, put the new battery in. (Fig xi)

x

NOT TO SCALE



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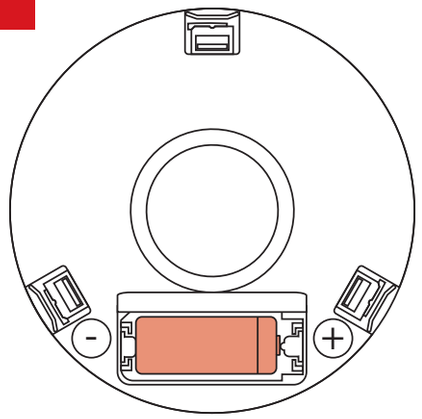


TESTING THE DEVICES

Test the detectors weekly by pressing firmly on the test button for approximately 1 second and the device will beep three times whilst flashing the red LED to confirm it is functioning correctly.

Please note: Once tested, the system will display that there has been an alarm on this zone. This can be cleared using a valid engineer or user code (subject to system programming).

TAKING CARE OF THE DEVICES

As well as testing the detectors weekly, it is important to keep the detectors clean.

CLEANING A CO DETECTOR

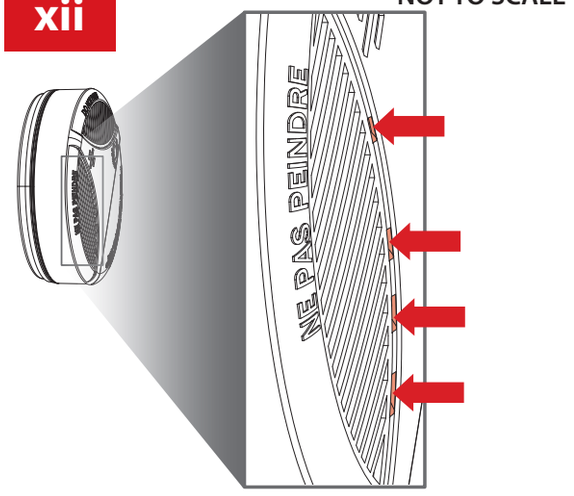
To ensure optimum performance, a carbon monoxide detector should be cleaned at least once per month.

1. Remove battery before cleaning.
2. Use the soft brush attachment on the vacuum to carefully remove any dust.
3. Once finished, replace the battery and test the detector to make sure the battery is working correctly.

- Never use water, or liquid cleaning products as they may damage the unit.

xii

NOT TO SCALE



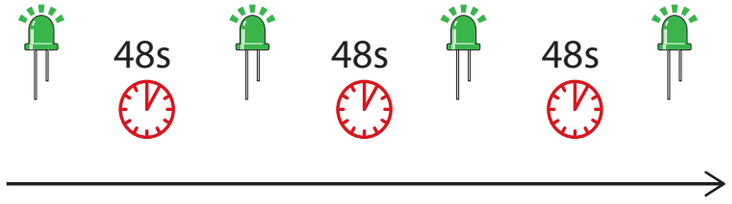
Please note: If the unit false alarms, refer to 'Installation & Location Advice' section to check whether the detector's location is suitable. Move the detector if it is not located as recommended.

SENSOR INDICATIONS & FEATURES

STANDBY MODE

VISUAL AND AUDIBLE PATTERN

Flashing green LED once every 48 seconds with no audible sound.



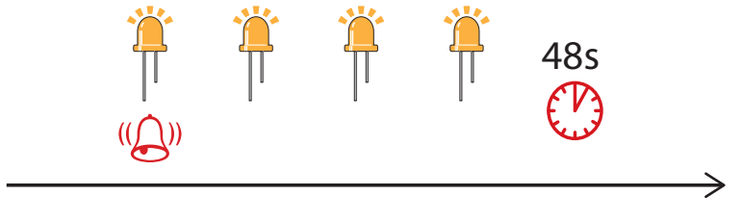
MEANING

In standby mode with no faults.

END OF LIFE

VISUAL AND AUDIBLE PATTERN

Yellow LED flashing 4 times with a beep on the first flash followed by a 48 second interval.



MEANING

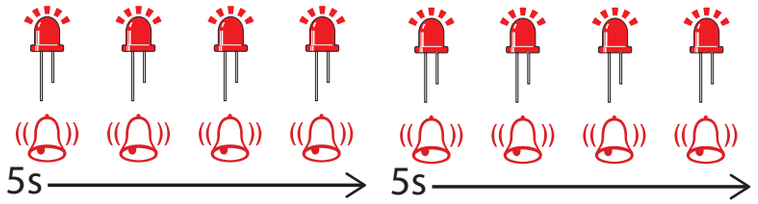
The batteries that power the sensor are now at the end of their life cycle and the whole sensor unit needs replacing.

Please note: These batteries are not replaceable and will last approximately 10 years.

ALARM

VISUAL AND AUDIBLE PATTERN

Red LEDs flashing 4 times with a beep on every flash every 5 seconds. After 4 minutes the device will pause for 60 seconds then repeat the pattern until silenced at the unit.



MEANING

The device has detected harmful carbon monoxide levels.

TO SILENCE THE ALARM

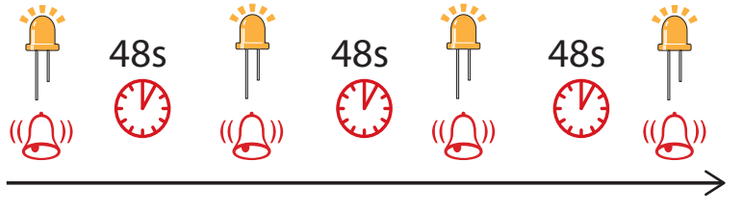
When the device is in an alarm condition, pressing the test button will silence the device for approximately 4 minutes. At the end of this timer, if the CO concentration is still at (or

above) alarm level, the device will re-alarm immediately.

SENSOR LOW BATTERY

VISUAL AND AUDIBLE PATTERN

Yellow flashing LED once every 48 seconds with a single beep at the same time.



MEANING

The device is indicating the 2 x 1.5V, AA batteries in the sensor are low but should last for up to 7 days before the sensor runs out of power completely.

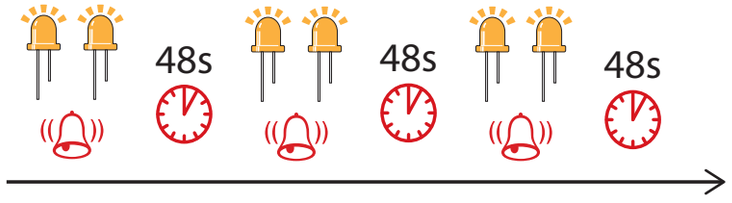
These batteries are expected to last approximately 10 years however, this can vary depending on factors such as frequency of testing, number of activations etc.

Please note: These batteries are not replaceable.

DETECTOR TROUBLE

VISUAL AND AUDIBLE PATTERN

Yellow LED flashing once on the third beep followed by a 48 second interval.

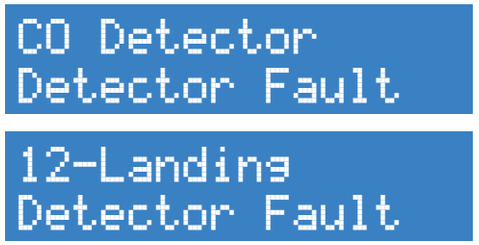


MEANING

The device has detected an issue that does not fall into any of the other fault categories. This would generally be a fault in the device electronics.

REAR SWITCH FEATURE

If the sensor unit is detached or not seated on the mounting base correctly for 5 minutes or more, immediately after being tested or powered up, the system will display a detector fault.



Please note: Once the system has indicated a 'Detector Fault', it must be cleared using a valid engineer or user code (subject to system programming).

During this time, the unit's LEDs will be completely extinguished and there will be no reaction to pressing the test button.

When reseated correctly, the device will beep and the green LED with flash. After this, test the device to make sure it is all working correctly. For help refer to 'Testing the devices'.

Once the device has indicated to the system that it is now on it's mounting base correctly, it will only send an update to the panel **once every 24 hours**.

Please note: During any time period when the device is not seated on the mounting base correctly, the sensor component of the device is fully powered down.

This means the sensor component of the device which detects carbon monoxide will be completely powered down and the device will provide no protection.

TEMPORARY FAULT MUTE FEATURE

This feature temporarily mutes fault warnings for an hour.

To enable, when the detector indicating a fault such as 'Sensor low battery', press the test button.

To disable the feature within the hour, press the test button and the detector will return back to an audible warning.

CARBON MONOXIDE SAFETY ADVICE

ON ACTIVATION

Activation of your CO detector indicates the presence of carbon monoxide (CO) which is hazardous and could kill you. If alarm signal sounds:

1. Operate reset/silence button.
2. Call your emergency services.
3. Immediately move to fresh air – outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Do not re-enter the premises nor move away from the open door/window until the emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition.

After following the above steps, if your alarm reactivates within a 24 hour period, repeat the steps and call a qualified appliance technician to investigate for sources of CO from fuel burning equipment and appliances, and inspect for proper operation of this equipment. 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 manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not been, operating in an attached garage or adjacent to the residence.

AFTER THE ISSUE HAS BEEN CORRECTED

Once the problem about the CO gas presence in the premises has been corrected, the alarm of the CO alarm unit should be off. After waiting for 10 minutes, push the Test button to test the CO alarm unit so that you can make sure that it is working properly again.

TYPICAL CARBON MONOXIDE GAS SOURCES

- Equipment problems, due to defects, poor maintenance, damaged and cracked heat exchangers.
- Collapsed or blocked chimneys or flues, dislodged, disconnected or damaged vents
- Downdraught in chimneys or flues. This can be caused by very long or circuitous flue runs, improper location of flue exhaust or wind conditions.

- Improper installation or operation of equipment, chimney or vents.
- Air tightness of house envelop/inadequate combustion of air.
- Inadequate exhaust of environment heaters or appliances.
- Exhaust ventilation/fireplace competing for air supply.
- Potential sources of carbon monoxide in your home or office include clogged chimney, wood stove, wood or gas fireplace, automobile and garage, gas water heater, gas appliance, gas or kerosene heater, gas or oil furnace, and cigarette smoke.

WARRANTY & COMPLIANCE

BATTERY INFORMATION

When disposing of the product, the battery must be removed and disposed of separately in accordance with the local regulations.

PRODUCT INFORMATION

For electrical products sold within the European Community. At the end of the electrical products life, it should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice in your country. This product is approved for use in the Residential, Commercial and Light Industrial Environments.

WARRANTY AND COMPLIANCE

This product is sold subject to our standard warranty conditions and is warranted against defects in workmanship for a period of **two years** (batteries excluded). In the interest of continuing care and design, Pyronix Ltd reserves the right to amend specifications without giving prior notice.

For further warranty information visit: https://www.pyronix.com/terms-conditions-sales/

The declaration of conformity and further compliance documentation may be consulted at: www.pyronix.com/product-compliance.php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