

# Model: DVM-CBL30R

Thank you for purchasing our carbon monoxide detector. Take a few minutes to read the user manual thoroughly and familiarize yourself and your family with how the heat detector works. And save it for future reference.



## PRODUCT SPECIFICATIONS:

Warranty period: Lifetime = 10 years

After that, the carbon monoxide detector must be replaced. Look for the production date on the sticker of the detector. Power supply: Lithium battery 3 VDC, battery is not replaceable

Sensor: Type A, electrochemical

Ambient condition in operation: 0~40 °C, 25~90 % Relative Humidity

Complies with: EN50291-1:2018 **Alarm Volume:** >85dB (A) at 3 meters Alarm Pause: About 10 minutes

Sound Pattern: ISO8201 (Beep 0.5s – Pause 0.5s – Beep 0.5s – Pause 0.5s – Beep 0.5s - Pause 1.5s while the red LED flashes. This pattern is repeated over and over

Interconnectability: Wireless, up to 40 units

## **DESCRIPTION**

This is a carbon monoxide detector and is designed to detect carbon monoxide from any source of combustion. It is NOT designed to detect any other gases. Carbon monoxide gas or CO-gas, can be generated in situations where the supply of oxygen-gas is insufficient to allow a complete combustion. Carbon monoxide poisoning can lead to serious injuries and even death. The carbon monoxide detector has a display that shows the carbon monoxide level and many advanced features. It has a long service life (guaranteed  $10\,$ years) and an expected battery lifetime of 10 years, so no need to change the battery during its lifetime.

# RECOMMENDED LOCATIONS FOR CARBON **MONOXIDE DETECTORS**

The following suggestions are intended to help you to position and install your detector

- 1. Place out of reach of children. Under no circumstance should children be allowed to handle the detector.
- 2. Install in a bedroom or hallway located close to the sleeping area. Take special care to verify the alarm signal can be heard in sleeping areas.
- 3. It is recommended that a CO-detector is installed on each level of a multi-level home
- 4. Locate at least 1,5 m (5 feet) away from all burning appliances.
- 5. Placing at eve level allows for optimum monitoring of the red, green and yellow indicator lights.
- 6. Do not install in dead air spaces such as peaks of vaulted ceilings or garbled roofs (where fumes do not collect).
- 7. Do not install in turbulent air from ceiling fans.
- 8. Do not place near fresh air vents or close to doors and windows that open to
- 9. Keep the detector away from excessively dusty, dirty or greasy areas such as kitchens, garages and furnace rooms. Dust, grease and household chemicals can affect the sensor.
- 10. Keep out of damp and humid areas such as the bathroom. Avoid spraying aerosols near the detector.
- 11. Do not install in areas where the temperature is below  $0^{\circ}\text{C}$  or higher than 40 °C.
- 12. Do not place behind curtains or furniture. Carbon monoxide must be able to reach the sensor for the detector to accurately detect carbon monoxide.

# ACTIVATION:

Press and hold the test button for about 3 seconds until the LED lights up. Then release the test button within about 2 seconds. The smoke detector gives a beep signal to indicate that it is activated and enters the working state.

## WIRELESS INTERCONNECTION FUNCTION

- 1. Make sure all detectors are activated. You can combine smoke-, heat- and carbon monoxide detectors from DVM International into one wireless network! 2. Select one of the detectors as the MASTER detector. Treat all other detectors as
- 3. Press the master's test button three times within two seconds. The red LED flashes quickly. The MASTER detector is now in transmit mode for the radio signal. This mode lasts 48 seconds.
- 4. While the MASTER detector is in radio signal mode, press the test button of a SLAVE detector three times within two seconds. The SLAVE detector stores the signal from the MASTER detector and completes the pairing and gives a beep with flash as confirmation.

5. Repeat the above steps on all other SLAVE detectors.

#### Clear wireless connection function

- 1. Determine which SLAVE detector should have the connection function cleared.
- 2. Press the test button of the SLAVE detector three times within two seconds. The red LED flashes quickly.
- 3. Press and hold the test button again until the red LED goes out the first time, then release the test button immediately. The red LED will flash slowly.
- 4. Now press the test button again. The SLAVE detector beeps three times, which means that the SLAVE detector has erased the wireless connection.

#### ATTENTION:

All detectors must first be activated, otherwise it will not work.

The detectors are designed to be wirelessly paired with up to 40 other detectors. These detectors are not designed to be paired with wireless detectors from other series or manufacturers. The detectors must first be connected to each other in order to work in a coupled manner.

If one detector goes into alarm, all other, interconnected detectors, also go into alarm. Only detectors that are successfully linked can transmit the alarm. If you clear the pairing, only the slave detector pairing is removed. The MASTER detector cannot clear the link.

## **INSTALLATION**

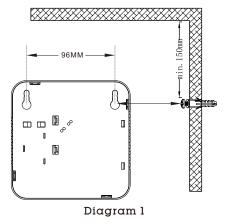
Caution: The detector should be installed by a competent person Location

When choosing your installation locations, make sure you can hear the alarm signal from all sleeping areas. If you install only one carbon monoxide detector in your home, install the detector near bedrooms, not in the basement. This detector must be mounted on a ceiling or wall.

# Installation steps

Please refer to Diagram 1.

- 1. Take off the bracket from the body of the detector.
- 2. Place the bracket to the desired installation position and mark the installation holes of the bracket with a pencil.
- 3. Drill two holes on the pencil marks with a 5 mm drill and then insert the two plastic plugs. When necessary, use a hammer to carefully insert the plugs.
- 4. Mount the bracket to the wall/ceiling by screwing the screws tightly into the plugs (see Diagram 1).
- 5. Click the detector onto the bracket.



# **OPERATION**

- 1. Install the detector to the wall/ceiling, see Diagram 1.
- 2. The green LED will flash once every 50 seconds, which indicates normal

Note: Test the detector immediately after installation.

# **TEST BUTTON**

The test button is used to test the electronics of the detector and to initiate the Alarm pause when a real alarm sounds.

# Performance test

Test the detector by pressing and releasing the Test button. The alarm sounds beep-beep-beep, while the red LED flashes rapidly.

Note: Test the detector every month! If at any time the detector does not perform as described, replace the detector immediately.

Note: When the test button is used and the alarm sounds and red LED flashes, this does not indicate that carbon monoxide is present.

## Alarm pause

If the alarm sounds in a real situation, press and release the Test button to stop the sound of the alarm for about 10 minutes. If, during the time of the alarm pause, the CO-concentration is over 150 ppm, the alarm will sound again

## Silencing the Fault-alarm or the End-of-life-alarm

When the Fault- or End-of-life-alarm sounds, press and release the Test button to stop the alarm sound for about 12 hours.

# **SOUND- AND LED-INDICATIONS**

- 1. If a dangerous level of carbon monoxide is detected, the red LED will flash continuously and the alarm will sound until the carbon monoxide is gone.
- 2. If a defective battery or low battery voltage is detected, the yellow LED flashes

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once every 50 seconds with the sound signal also beeping once.

- 3. If a sensor error is detected, the yellow LED flashes twice every 50 seconds with the sound signal also beeps twice.
- 4. When the detector has reached "End of Life", the yellow LED flashes **three times** every 50 seconds with the audio signal also beeps **three times**.

  5. If the detector is functioning normally, the green LED will flash every 50
- If the detector is functioning normally, the green LED will flash every 50 seconds.

## WHAT TO DO IF THE ALARM SOUNDS

**WARNING!** If the alarm goes off, it means a dangerous level of carbon monoxide has been detected! Carbon monoxide can be deadly!

When the alarm goes off:

- 1. Press the Alarm Pause button (=Test button) so you don't panic.
- 2. Turn off all combustion appliances and the gas tap in the meter box.
- 3. Immediately open doors and windows to let in fresh air and warn roommates to go outside together quickly. Check outside whether all inmates are present. Do not re-enter and stay by the open doors/windows until the emergency services arrive. The premises have been ventilated and the carbon monoxide detector has returned to its rest position.
- 4. If, after going through points 1-3, if the carbon monoxide alarm goes into alarm again within 24 hours, repeat steps 1-3 and contact a qualified combustion appliance repair company to determine the cause of the carbon monoxide and to repair the appliance.

Please note, any appliance that has not been examined by the qualified technician can be a source of carbon monoxide, so have all appliances examined. Also check that there are no motor vehicles running in the garage attached to the house, or outside near your house.

#### **GENERAL MAINTENANCE**

To keep your detector in good condition, follow these simple steps:

- 1. Check the operation of the alarm signal and the LEDs by pressing the Test button.
- 2. Remove the detector from the mounting plate and clean the outside of the detector and the vents once a month with a soft brush on the vacuum cleaner to remove dust and dirt.
- 3. Never use detergents or solvents to clean the detector.
- 4. Avoid using air fresheners, hairspray, or other aerosols near the detector.
- 5. Never paint the detector. Paint will clog the vents and interfere with the proper functioning of the carbon monoxide detector. Never disassemble the detector or clean the inside. This will void your warranty.
- 6. Place the detector back on the mounting plate immediately after cleaning, so that you are again protected against carbon monoxide poisoning.
- 7. When using household cleaning agents or similar agents (benzene, thinner, ammonia, etc.) the room should be ventilated.

**Warning:** The following substances can affect the operation of the detector and cause false alarms:

Methane, propane, butane, ethylene, benzene, toluene, ethyl acetate, hydrogen sulphide, sulphur dioxides, alcohol-based products, paints, thinners, solvents, adhesives, hairspray, aftershaves, perfumes and some cleaners.

Warning: Your CO detector will not function and will not sound a carbon

monoxide alarm if a battery is not installed.

Warning: Tampering with the CO detector is dangerous.

Warning: The detector cannot prevent chronic effects of carbon monoxide exposure.

Warning: The detector does not protect against specific risks.

Warning: The detector is designed to protect against the acute effects of exposure to carbon monoxide. The detector does not fully protect against specific medical ailments. If in doubt, you should consult a medical specialist. Warning: Installation of the detector should not be used to avoid the safe installation, use and regular maintenance of combustion appliances, including regular ventilation and an exhaust air system.

## **CARBON MONOXIDE OVERVIEW**

Carbon monoxide is invisible, odorless and tasteless and can be deadly. The build-up of carbon monoxide in the blood is called carboxyhemoglobin and interferes with the body's ability to oxygenate itself. Depending on the concentration of carbon monoxide, it can be deadly within minutes. The most common causes of carbon monoxide poisoning are malfunctioning combustion appliances, such as those used for heating and cooking, vehicles running in attached garages, clogged chimneys or flues, portable heating appliances, fireplaces, appliances with a fuel engine (chainsaw) and BBQing in an enclosed space.

Symptoms of carbon monoxide poisoning include a flu, but not a fever. Other symptoms include dizziness, tiredness, weakness, headache, nausea, vomiting, drowsiness and confusion.

Everyone is sensitive to the danger of carbon monoxide, but experts agree that unborn babies, pregnant women, the elderly and people with heart or respiratory problems are at the highest risk for serious consequences or death. Each year, a qualified technician should inspect and clean your heating system, vents, chimney and flue.

The following symptoms may indicate carbon monoxide poisoning and should be discussed with all roommates:

 ${\bf 35}$  ppm: The maximum allowable concentration for continuous exposure for healthy adults in an 8-hour period.

200 ppm: Slight headache, fatigue, dizziness, nausea after 2-3 hours.
400 ppm: Frontal headache within 1-2 hours, life-threatening after 3 hours.

**800 ppm:** Dizziness, nausea and convulsions within 45 minutes. Unconsciousness within 2 hours. Dead in 3 hours.

**1600 ppm:** Headache, dizziness and nausea within 20 minutes. Kill in 1 hour. **6400 ppm:** Headache, dizziness and nausea within 1-2 minutes.

The above exposure levels refer to healthy adults. The levels differ for those at high risk. Exposure to levels of carbon monoxide can be fatal or cause permanent damage and disability.

Many reported cases of carbon monoxide poisoning indicate that while victims are aware that they are not feeling well, they become so disoriented that they cannot save themselves by either leaving the building or calling for help. Also, young children and pets can be affected first. It is important to familiarize yourself with the effects of each level.

# **WARRANTY INFORMATION**

Guarantees from the producer to the end user (the consumer).

The manufacturer guarantees that each new carbon monoxide detector under normal use and maintenance, for a period of 10 years from the date of manufacture, is free from defects in materials and workmanship.

This warranty does not cover damage resulting from accident, misuse or misuse or lack of reasonable care for the product.

The manufacturer is in no way liable for any incidental or consequential damages in the event of breach of this or any other warranty, express or implied, of any kind whatsoever. Defective products can be returned to the seller with a detailed description of the problem.



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