Sensorcon INS-CO-01

Sensorcon Inspector Portable Carbon Monoxide Detector User Manual

Model: INS-CO-01

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your Sensorcon Inspector Portable Carbon Monoxide (CO) Detector. This professional-grade device is designed to provide accurate and reliable detection of CO concentrations in various environments.
Key features include:

- **Professional-Grade CO Detection:** Equipped with an advanced electrochemical sensor and proprietary embedded software for accurate readings in parts per million (ppm).
- **Dual Alerts for Safety:** Triggers bright LED indicators and loud 80–85 dB alerts at pre-set thresholds (starting at 35 ppm, ceiling limit at 200 ppm).
- **Durable and Compact Build:** Features a shock-resistant, water-resistant, and IP67-rated housing for demanding environments.
- **Hands-Free Operation:** Lightweight and compact design with a rugged steel clip and lanyard loop for easy attachment to gear.
- **Long Battery Life:** Offers up to two years of battery life with minimal maintenance.

2. IMPORTANT SAFETY INFORMATION

WARNING: Carbon Monoxide (CO) is a colorless, odorless, and tasteless gas that can be fatal. This device is intended to assist in the detection of CO gas. It is not a substitute for proper maintenance of fuel-burning appliances or ventilation systems.
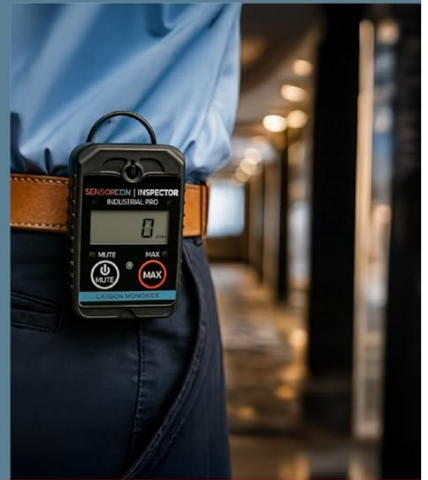
- Always ensure proper ventilation when using fuel-burning appliances.
- Do not block the sensor inlet.
- Regularly test the device as instructed in this manual.
- Seek fresh air immediately if an alarm sounds.
- Keep the device away from extreme temperatures and direct sunlight.

The following image illustrates carbon monoxide exposure risks at different PPM levels:

Creating Connections for Life
We build the tech behind life-saving products with precision and versatility

- **Automotive**
- **Trucking**
- **Boating**
- **Hotel and Resort**
- **Security Personal**
- **Everyday Situation**

This chart details the effects of carbon monoxide exposure: 0-25 PPM (Normal fresh air, Max TWA Exposure for 8-hr work-day), 100-400 PPM (Slight headache after 1-2 hours to life-threatening in 3 hours), 800-1600 PPM (Dizziness and headache after 45 minutes to dizziness in 20 minutes and death in 1 hour).

3. PRODUCT OVERVIEW

Familiarize yourself with the components of your Sensorcon Inspector CO Detector:

Carbon Monoxide
EXPOSURE RISKS

1600 PPM
800 PPM

From Dizziness and headache after 45 minutes to Dizziness in 20 minutes and death in 1 hour.

400 PPM
100 PPM

From sight headache after 1-2 hours to Life threatening in and around 3 hours.

25 PPM
0 PPM

From Normal fresh air with no CO to Max TWA Exposure for an 8-hr work-day.

SENSORCON

ΞENSORCON   *Inspector*

0 PPM

MUTE   MAX

MUTE   MAX

Carbon Monoxide

This image displays the Sensorcon Inspector CO Detector with the following labeled parts: Lanyard Loop & Clip, Sensor Inlet, LED Indicator Lights, LCD Display, Power/MUTE Button, Buzzer/Speaker, MAX Button.
The device is designed for portability and durability, featuring a robust housing and clear digital display.

The Sensorcon Inspector Portable Carbon Monoxide Detector shown with its retail packaging, highlighting its shock-resistant, visual, and audio alarm features.

4. SETUP

4.1 Battery Installation

The Sensorcon Inspector uses a CR123A 3V Lithium Battery. To install or replace the battery:

1. Locate the four Philips screws on the back of the device.
2. Unscrew them carefully.
3. Gently pull apart the casing.
4. Replace the old battery with a new CR123A 3V Lithium Battery, ensuring correct polarity.
5. Reassemble the casing and secure the screws.

4.2 Initial Power-On

Press and hold the Power/MUTE button until the device powers on and performs a self-test. The LCD will display CO readings, typically starting at 0 ppm in fresh air.

5. OPERATING INSTRUCTIONS

5.1 Reading CO Levels

The large LCD displays real-time CO concentrations in parts per million (ppm). Readings range from 1 to 1,999 ppm.

5.2 Alarm Functions

The detector features pre-set alarm thresholds. When CO levels exceed these thresholds, the device will activate:

- **Audible Alarm:** A loud buzzer (80–85 dB) will sound.
- **Visual Alarm:** Bright LED indicators will flash.
- **Vibrating Alert:** The device may vibrate to provide tactile notification.

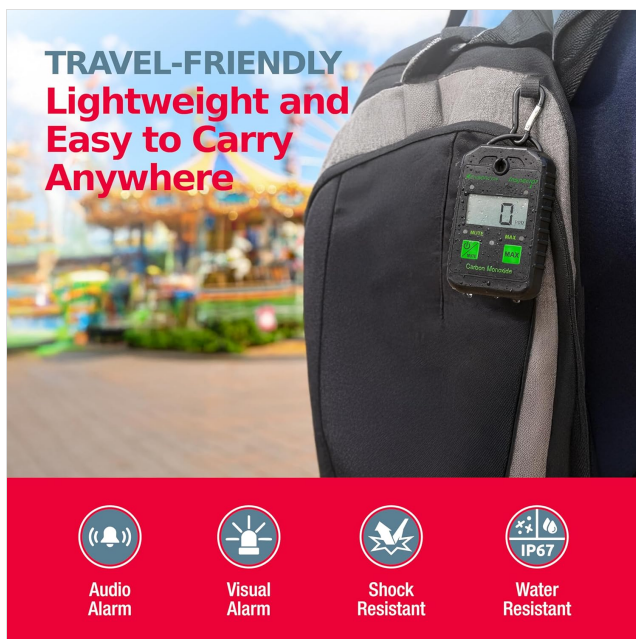The first alarm threshold is typically set at 35 ppm, with a ceiling limit alarm at 200 ppm.

5.3 Mute Function

Press the MUTE button to temporarily silence the audible alarm. Visual and vibrating alerts will continue to function.

5.4 MAX Button

Press the MAX button to view the peak CO reading detected since the last reset or power cycle. This feature is useful for monitoring maximum exposure levels.

The Sensorcon Inspector is versatile for various applications:

The Sensorcon Inspector CO Detector being held in a cafe, demonstrating its use for ambient monitoring in public spaces.

The Sensorcon Inspector CO Detector clipped to a backpack, illustrating its portability and hands-free carrying option for travel or outdoor activities.

6. MAINTENANCE

6.1 Battery Life

The device is designed for long-term use, offering up to two years of battery life. Replace the battery when the low battery indicator appears on the LCD.

6.2 Calibration

For optimal accuracy and performance, periodic calibration is recommended. While the device can function for up to two years without calibration, professional users may require more frequent calibration (e.g., every 6 months) depending on industry standards and usage. Refer to Sensorcon's official website or contact support for calibration services.

6.3 Cleaning

Clean the exterior of the device with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Ensure the sensor inlet remains clear of dust and debris.

7. TROUBLESHOOTING

- **No Display/Device Not Turning On:** Check battery installation and ensure the battery is not depleted. Replace if necessary.
- **Persistent Alarm:** If the alarm sounds in an area you believe to be free of CO, move to fresh air. If the alarm persists, contact emergency services and then Sensorcon support.
- **Inaccurate Readings:** Ensure the sensor inlet is clear. Consider professional calibration if readings are consistently questionable.

8. SPECIFICATIONS

Feature	Detail
Manufacturer	Sensorcon
Part Number	INS-COXX-01
Item Weight	3.84 ounces
Product Dimensions	3.2 x 2.2 x 0.9 inches
Item Model Number	INS-CO-01
Batteries Included?	Yes
Batteries Required?	Yes
Battery Cell Type	Lithium (CR123A 3V)
Date First Available	May 2, 2011

For a comparison of the Sensorcon Inspector with other detectors, refer to the following:

American Quality

★ ★ ★ ★ ★

Assembled and tested in the USA, with american made sensor

Lanyard Loop & Clip

Sensor Inlet

LED Indicator Lights

LCD Display

Max Button

Power/ MUTE Button

Buzzer/ Speaker

Sensorcon Inspector

Carbon Monoxide

This chart compares the Sensorcon Inspector's features (CO Detection Range: 0-500 ppm, Accuracy: ±10% or ±2 ppm, Real-time readings: Yes, Battery Life: 2 years, Water & Dust Protection: Yes) against typical CO detectors.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or to inquire about protection plans and calibration services, please visit the official Sensorcon website or contact their customer service department.

The Sensorcon Inspector is designed for reliability and longevity:

Your browser does not support the video tag.

This video demonstrates the Sensorcon Carbon Monoxide Monitor's features, including its waterproof design, real-time CO level display, and multiple alert options (audible, visual, vibrating). It highlights its versatility for use in homes, garages, RVs, boats, cars, and even planes, emphasizing its role in preventing CO poisoning.

Related Documents - INS-CO-01

[Sensorcon Industrial PRO Carbon Monoxide Inspector: Features, Specifications, and Applications](#)
Detailed information on the Sensorcon Industrial PRO Carbon Monoxide Inspector, a professional-grade gas detector for HVAC technicians, home inspectors, and safety professionals. Includes key features, technical specifications, and alarm functions.

[Sensorcon Inspector Series Carbon Monoxide Detector: Features & Specifications](#)
Detailed overview of the Sensorcon Inspector Series Carbon Monoxide detectors, including features, advantages, applications, technical specifications, and model comparisons for industrial and safety use.

[Sensorcon PROTECTOR PRO-CO-1000 Handheld Gas Detector Operating Manual](#)
Operating manual for the Sensorcon PROTECTOR PRO-CO-1000 handheld intrinsically safe and IP67-rated gas detector. Learn about its features, specifications, operation, calibration, bump testing, safety, and troubleshooting.

[Sensorcon Protector PRO-CO-1000: Portable Gas Detector for Industrial Safety](#)
Explore the Sensorcon Protector PRO-CO-1000, a robust and reliable single gas serviceable portable gas detector. It offers advanced safety features, rapid response times, and significant cost savings for industrial applications. Learn about its benefits, technical specifications, mobile connectivity, and fleet management capabilities.

[Sensorcon Protector PRO-CO-1000 Portable CO Gas Detector | Features & Specifications](#)
Discover the Sensorcon Protector PRO-CO-1000, a single gas serviceable portable CO detector designed for high safety and low operational cost. Features include an electrochemical sensor, intrinsic safety, IP67 rating, large display, fast response times, and connectivity options like Mobile Connect and Fleet Manager. View detailed technical specifications.

[Sensorcon Inspector Series Carbon Monoxide Detector: Features & Specifications](#)
Detailed overview of the Sensorcon Inspector Series Carbon Monoxide detectors, including features, advantages, applications, technical specifications, and model comparisons for industrial and safety use.