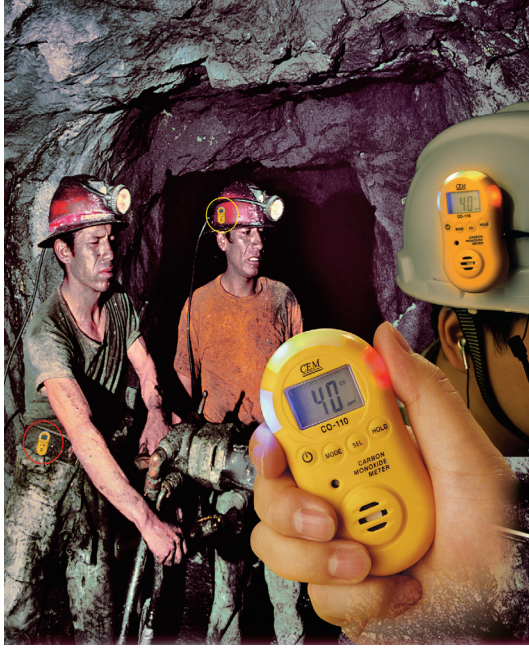

CO-110

CARBON MONOXIDE METER

This Meter detects the presence of Carbon Monoxide (CO) and measures concentrations between 1-1000 parts per million (PPM).
The Meter indicates the presence of Carbon Monoxide in three ways:

- By a reading on the LCD in PPM.
- By a beeper tone.
- By two color LEDs alarm.

Safety Information

0-1PPM	Normal background levels.
9 PPM	ASHRAE Standard 62-1989 for living areas.
50 PPM	OSHA enclosed space 8-hour average level. *
100 PPM	OSHA exposure limit. *
200 PPM	Mild headache, fatigue, nausea and dizziness.
800 PPM	Dizziness, nausea and convulsions. Death within 2 to 3 hours.

*U.S. Department of Labor, Occupational Safety & Health Administration (OSHA) Regulation 1917.24: The CO content in any enclosed space shall be maintained at not more than 50 PPM (0.005%). Remove employees from enclosed space if the CO concentration exceeds 100 PPM (0.01%).

What the Meter Does

The Meter indicates the presence of CO by displaying reading on the LCD and a beeper tone. The beeper functions much like clicking of a Geiger counter:

- Above 200 PPM of CO Concentration, the beeper sounds continuously with the red and blue flashlight.
- From 35 PPM to 200 PPM of CO Concentration, the beeper sounds continuously with the red flashlight.

CO-110 | Carbon Monoxide Meter

Technical Specifications

Temperature Operating: Storage:	0°C to + 50°C -30°C to + 60°C
Operating humidity	0-99% Relative humidity (non-condensing)
Measurement range	0 to 1000PPM
Measurement Resolution	1PPM
Accuracy	±5% or ±10 PPM
Warm up period	<2 seconds
Battery	3.6V lithium battery (CR2)
Sensor type	Stabilized electrochemical Gas-specific (CO)
Typical sensor life	3 years

Common Sources of CO

Common sources of potentially dangerous levels of CO are:
- Poorly maintained furnaces, gas heaters, or fireplaces.
- Dirty or plugged chimneys, or flue gas exhausts.
- Poorly maintained gas, oil, or kerosene appliances.
- Internal combustion engines (e.g., automobiles, lawnmowers, blowers).

CO and Appliance Malfunctions

The following table identifies typical problems that can produce high levels of CO.

Appliance	Fuel	Typical Problems
Gas furnaces Room heaters	Oil, natural gas, or LPG (liquefied petroleum gas)	1. Cracked heat exchanger 2. Not enough air to burn fuel properly 3. Defective/blocked flue 4. Maladjusted burner 5. Building not properly pressurized
Central heating furnaces	Coal or kerosene	1. Cracked heat exchanger 2. Not enough air to burn fuel properly 3. Defective grate
Room heaters Central heaters	Kerosene	1. Improper adjustment. 2. Wrong fuel (not K-1) 3. Wrong wick or wick height 4. Not enough air to burn fuel 5. System not properly vented
Water heaters	Natural gas or LPG	1. Not enough air to burn fuel properly 2. Defective/blocked flue 3. Maladjusted burner 4. Building not properly pressurized.
Ranges Ovens	Natural gas or LPG	1. Not enough air to burn fuel 2. Maladjusted burner 3. Misuse as a room heater 4. System not properly vented
Stoves Fireplaces	Gas, wood, coal	1. Not enough air to burn fuel properly 2. Defective/blocked flue 3. Green or treated wood 4. Cracked heat exchanger 5. Cracked firebox