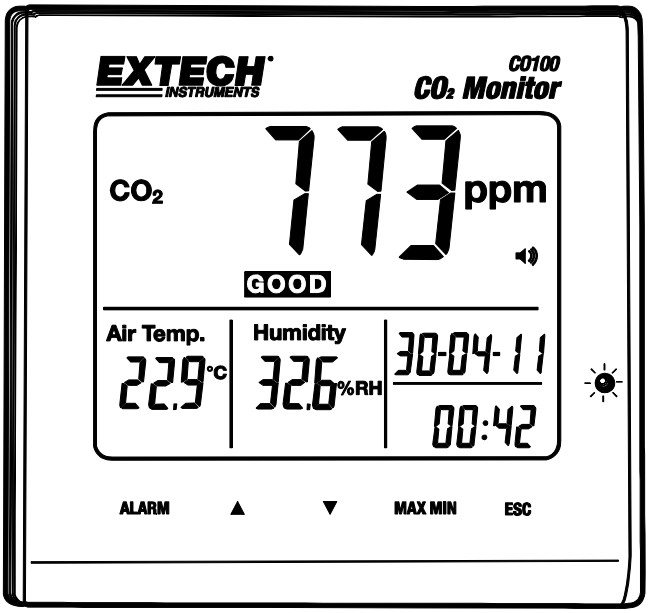
EXTECH INSTRUMENTS

User Manual

Desktop Indoor Air Quality Monitor

Model CO100

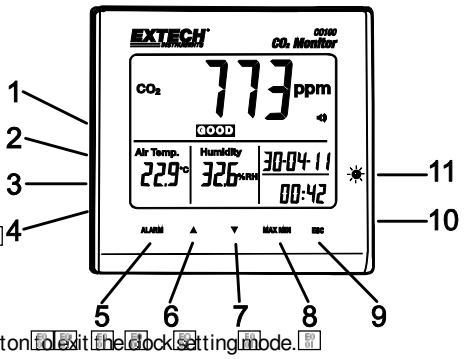


CE

Introduction

Congratulations on your purchase of this Extech meter. The Carbon Dioxide (CO_2) Monitor is designed for air quality control and health control by measuring Carbon Dioxide level in areas where CO_2 could be a concern. The measured CO_2 value in ppm (parts-per-million), Temperature, Humidity and Time will be displayed on the LCD along with three CO_2 status indications: Good (0 to 800ppm), Normal (800 to 1200ppm), Poor (>1200ppm). An acoustical alarm sounds when the CO_2 level exceeds a defined level. This meter is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.

Operation



1. Power button (rear)
   Turns the unit on or off.
2. HOLD button (rear)
   Freezes the current reading in the display.
3. °C/°F button (rear)
   Selects °C or °F.
4. Clock button (rear)
   Press and hold this button for 2 seconds to enter into clock mode. Press the "▲" or "▼" button to adjust the flashing digits. Press the clock button again to step through the settings (day:month:year;hour:minute). Press the "ESC" button to exit the clock setting mode.
5. Alarm button
   Press the Alarm button once to activate the Alarm mode. The 🔊 icon appears on LCD display. If the measured value exceeds the defined value, the alarm will sound and the display will flash. Press the button again to exit the Alarm mode.

   Alarm Value Setting
   Press and hold the ALARM button for 2 seconds to enter into setting mode. The 🔊 icon will flash.
   Press the ▲ or ▼ button to increase or decrease the value.
   Press the ESC button to exit the setting mode.

   "GOOD-NORMAL" and "NORMAL-POOR" Value Setting
   In the Alarm Value Setting mode, press the ALARM button to set the GOOD-NORMAL threshold value. "GOOD NORMAL" will appear in the display. Adjust the value as needed. Press the ALARM button again to set the NORMAL-POOR threshold value. "NORMAL POOR" will appear in the display. Adjust the value as needed.
   Press the ESC button to exit the mode.
6. ▲ button
   Press this button to increase a value. Press the "ESC" button to exit the function.
7. ▼ button
   Press this button to decrease a value. Press the ESC button to exit the function.
8. MAX/MIN button
   Press the button once, the "MAX" icon appears and the Maximum measured value of CO2, temperature and humidity will be displayed on the screen. The display will be updated only if a higher value is measured. Press this button again, the "MIN" icon appears and the Minimum measured value of CO2, temperature and humidity will be displayed on the screen. Press ESC button to exit the function.

9. ESC button
   Press this button to exit the current mode.
10. AC adaptor socket
11. Power ON LED

Backlight

Touch the button area below the LCD and the backlight will turn on. It will turn off automatically after 20 seconds of inactivity. Press "ESC" button at any time to exit the function.

ABC (Automatic Baseline Calibration)

ABC (Automatic Baseline Calibration) establishes a baseline calibration to eliminate the zero drift of the infrared sensor. The ABC function is always "ON" when the meter is turned on. ABC is designed to calibrate the meter at the minimum CO2 reading detected during 7 days of continuous monitoring (power on). It assumes that the area being tested receives fresh air with a CO2 level of approximately 400ppm at some period of time during the seven days. It is not suitable to use a desktop CO2 meter in enclosed areas with consistently high CO2 levels, 24 hours a day.

Maintenance

1. The meter should be cleaned with a damp cloth and mild detergent when necessary. Do not use solvents or abrasives.
2. Store the meter in an area with moderate temperature and humidity.

Specifications

Function	Range	Resolution	Accuracy
CO2	0 to 9999ppm	1ppm	±75ppm or ±5% of reading
Temperature	23 to 122°F (-5°C to 50°C)	0.1°	±1.5°C/2.7°F
Humidity	0.1 to 90.0%	0.1%	±5%

Display: LCD with backlighting

Sampling Interval: 2 seconds

Overload Indication: "-OL-"

Sensor Type: CO2: NDIR (non-dispersive infrared) technology

Operating Conditions: -5°C to 50°C (23°F to 122°F) at <90% RH

Storage Conditions: -5°C to 50°C (23°F to 122°F) at <90% RH

Power Supply: 110V~220VAC, output 6.0VDC 500mA (supplied)

Dimensions / Weight: 117x102x102mm (4.6x4x4"); 204g (7.2oz.)

ISO-9001 Certified
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