

Vent Check



- Dual display of CO₂ and temperature
- Stable NDIR sensor for CO₂ detection
- Statistics of weighted averages
- BS8494 compliant (from 10 - 60 °C)
- Backlight for working in dark areas
- Audible CO₂ warning alarm
- Easy manual fresh air correction on CO₂ and humidity
- PC connection via RS232 interface

Operation

Press button 1 to turn the meter on and off.

After a 30 second warm-up the meter is ready to use and will display the normal operating screen (Fig. 2).

Pressing button 4 will cycle through current air temperature.

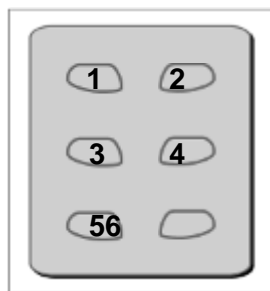
Pressing button 6 will cycle through minimum CO₂, maximum CO₂, Time Weighted Average (TWA - weighted average of CO₂ in the past 8 hours) and Short Time Exposure Limit (STEL - weighted average of CO₂ in the past 15 minutes) readings since power on.

Pressing button 5 will hold all current readings except TWA and STEL.

Pressing and holding button 2 for more than a second will turn the backlight on and off.

The unit will turn off automatically after 20 minutes of inactivity. To override this function, turn the unit off then restart it by holding buttons 1 and 5 together.

The meter will take a new reading every second. When the operating conditions change, the unit will respond in 30 seconds for CO₂.

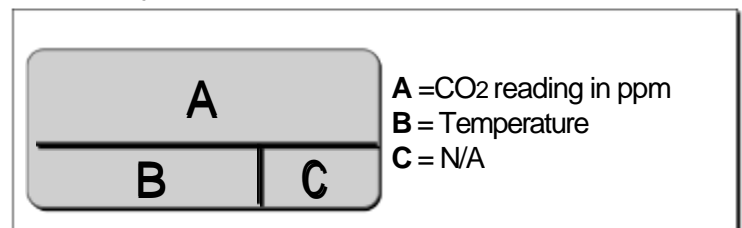


Keypad (Fig. 1)

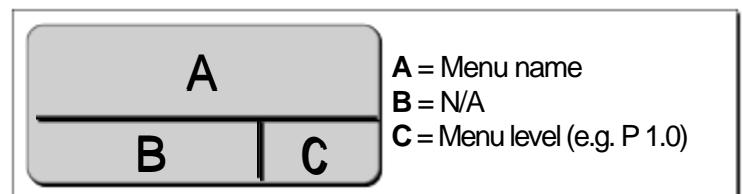
When battery supply is low, 'Lob' will be displayed. Change the batteries or connect a DC adaptor (not supplied.)

NOTE: Do not hold the meter close to the face as exhalation can affect CO₂ readings.

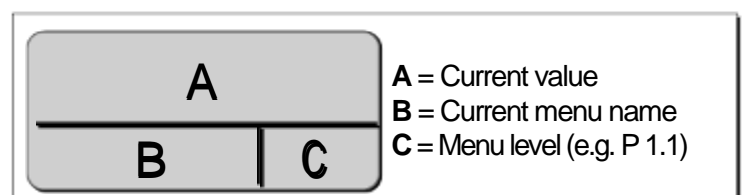
Display



Normal Operation (Fig. 2)



Menu Mode - Top Level (Fig. 3)



Menu Mode - Lower Level (Fig. 4)

Setup

To enter the setup mode (Fig. 3) press and hold button 1 for more than a second.

From here use buttons 2 (UP) and 4 (DOWN) to cycle through the menu screens and button 6 to access the selected menu screen (Fig. 4).

Buttons 2 and 4 can then be used to alter the alarm

threshold on menu P 1.1 and the temperature scale on menu P 3.1 (Fig. 4).

Use button 6 to save the current setting and return to the main menu screen (Fig. 3).

Press button 3 at any time to exit the setup menu.

Fresh Air Correction & Calibration

CO₂ Fresh Air Correction

It is strongly suggested that the unit be corrected in a sunny, outdoor environment that is well ventilated. Do not correct the unit in places crowded with people or close to areas with high CO₂ concentration such as ventilating outlets or fireplaces.

To correct the unit for CO₂, place the meter in the calibration site and press and hold buttons 2 and 3 simultaneously. The unit will flash continually for about 5 minutes, then return to normal operation.

To abort correction at any time, simply turn the meter off.

CAUTION: The meter is corrected at ambient air of around 400ppm. Do not correct the meter in an environment with an unknown CO₂ concentration. Doing this could lead to inaccurate measurements.

Specification

- **CO₂**
 - Range of 0 - 9999ppm
(maximum alarm threshold 9900ppm)
 - Resolution of 2ppm
 - Accuracy $\pm 75\text{ppm} \pm 5\%$
- **Temperature**
 - Range of -10 - 60 °C (14 - 140 °F)
 - Resolution of 0.1 °C (0.1 °F)
 - Accuracy ± 0.6 °C
- **Warm Up**
 - 30 seconds
- **Operating Ranges**
 - From 0~50°C , 0 ~ 95% RH (avoid condensation)
- **Storage**
 - From -20 ~ 60 °C , 0 ~ 99% RH (avoid condensation)
- **Power**
 - 4 pcs AA batteries, DC Adaptor (**not supplied**)
- **Battery Life**
 - > 10 hours (Alkaline)

Troubleshooting

- **Can't power on**
 - Press button 1 for more than 0.3 seconds and try again. Check whether batteries are in good contact and correct polarity is observed.
- **Fixed readings**
 - Check whether data hold function was activated.
- **Slow response**
 - Check whether the air flow channels on the rear are blocked.
- **Error messages**
 - E01: CO₂ sensor damaged
 - E02: The value is under range
 - E03: The value is over range
 - E04: The original data error results in this error
 - E07: Voltage to measure CO₂. Replace batteries or use an adaptor
 - E17: Retry CO₂ calibration
 - E31: Temperature sensor damaged