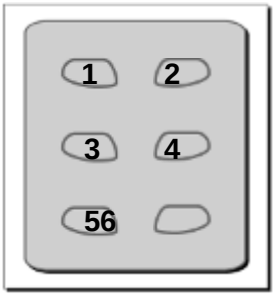
Vent Check

- Dual display of CO_2 and temperature
- Stable NDIR sensor for CO_2 detection
- Statistics of weighted averages
- BS8494 compliant (from 10 - 60 ºC)
- Backlight for working in dark areas
- Audible CO_2 warning alarm
- Easy manual fresh air correction on CO_2 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).



Keypad (Fig. 1)

Pressing button 4 will cycle through current air temperature.

Pressing button 6 will cycle through minimum CO_2, maximum CO_2, Time Weighted Average (TWA - weighted average of CO_2 in the past 8 hours) and Short Time Exposure Limit (STEL - weighted average of CO_2 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.

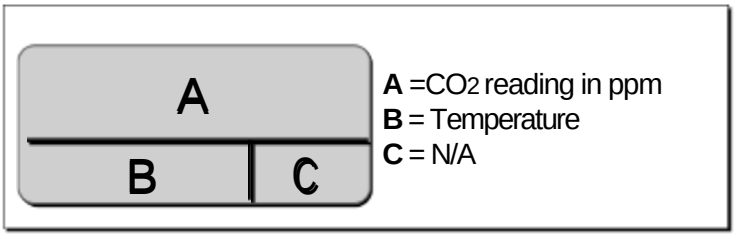
The unit will turn off automatically after 20 minutes of inactivity. To override this function, turn the unit off then restart it by holding buttons 1 and 5 together.

The meter will take a new reading every second. When the operating conditions change, the unit will respond in 30 seconds for CO_2.

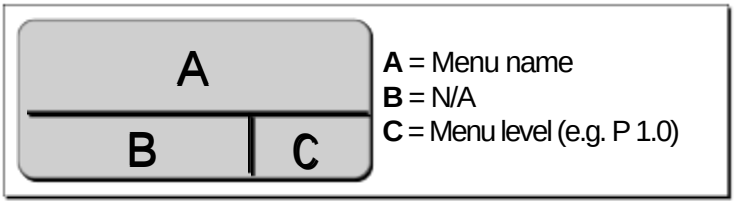
When battery supply is low, 'Lob' will be displayed. Change the batteries or connect a DC adaptor (not supplied.)

NOTE: Do not hold the meter close to the face as exhalation can affect CO_2 readings.

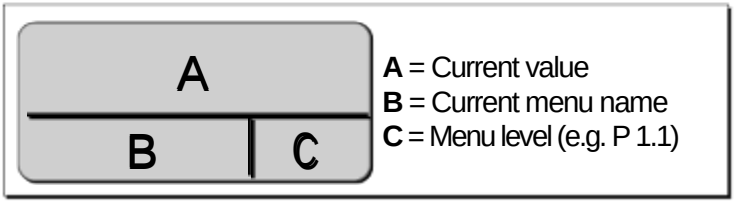
Display



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 accesss 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

CO_2 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 CO_2 concentration such as ventilating outlets or fireplaces.

To correct the unit for CO_2, 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 CO_2 concentration. Doing this could lead to inaccurate measurements.

Specification

- **CO_2**
  Range of 0 - 9999ppm
  (maximum alarm threshold 9900ppm)
  Resolution of 2ppm
  Accuracy ± 75ppm ±5%
- **Temperature**
  Range of -10 - 60 ºC (14 - 140 ºF)
  Resolution of 0.1 ºC (0.1 ºF)
  Accuracy ± 0.6 ºC
- **Warm Up**
  30 seconds
- **Operating Ranges**
  From0~50ºC , 0 ~ 95% RH (avoid condensation)
- **Storage**
  From -20 ~ 60 ºC , 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: CO_2 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 CO_2. Replace batteries or use an adaptor
  E17: Retry CO_2 calibration
  E31: Temperature sensor damaged

JMW Limited
The Calibration Lab
Warwick House
Perry Road
Harlow, CM18 7NF

Tel: 01279 307100
Fax: 01279 307101
www.jmwlimited.co.uk