DETA

To be read in full before installation and kept for future reference

Installation Instructions

1141	Carbon Dioxide (CO_2) Monitor

Safety Instructions

- Always switch off the electrical supply before commencing installation.
- This product must be installed in accordance with the current edition of the IEE Wiring Regulations and Building Regulations, BS 7671.

If in doubt, contact a qualified electrician

Product Features

- Display shows Carbon Dioxide level in ppm
- Pressing the button shows average CO_2 level over the past 8 and 24 hour periods, and highest level over previous 24 hours
- Display has traffic light colours indicating action required: Green (no action required), Amber (improve ventilation) and Red (improve ventilation further)
- Alarm thresholds can be adjusted by the installer:
  - green / amber threshold 600 to 900ppm
  - amber / red threshold 200 to 500ppm above green/amber threshold
- CO_2 levels are logged every 10 minutes
- Surface mounting, or fixes to 1g flush back box

Installation Position

This safety device should be installed in rooms that are continuously occupied and are enclosed spaces, e.g. bedrooms

1. This product is surface mounting and is supplied with a mounting plate. This mounting plate can be easily fixed to a flush 1g back box
2. Decide on mounting position of the monitor, and whether to bring cable through the wall, or use a flush mounting box
3. This product must be connected to switched connection unit fitted with a 5A fuse.
4. Mounting Height 1.4-1.8m.
5. Mounting position must be easily visible and easily accessible
6. This monitor must not be positioned in 'dead air space' e.g. within 150mm of the ceiling or an adjacent wall, or where it can be obstructed by furniture or furnishings. It should not be positioned next to a door, window or air vent.

Installation Instructions

1. Remove the securing screw at the bottom of the monitor
2. Using a flat screw driver press in the securing clip whilst easing the monitor away from the back plate
3. Pull the bottom of the monitor away from the back plate to remove
4. If not using a flush mounting box, drill and plug the wall using the back plate as a guide for the fixing holes
5. Screw the back plate into position
6. Terminate the mains supply cables into the terminals in the back plate
   - L permanent live
   - N neutral
7. Offer the monitor up to the back plate top first and clip into place.
8. Insert the securing screw into the bottom of the monitor

- This monitor should be protected from dust ingress during all building works.

Adjustments

The ppm threshold for the display changing from green to amber and red can be set by adjust the DIP switches on the monitor

- green / amber threshold 600 to 900ppm
- amber / red threshold 200 to 500ppm above green/amber threshold

DIP switch settings

Green / Amber Threshold	DIP 1	DIP 2	Amber / Red Threshold above Green / Amber	DIP 3	DIP 4	
600ppm	■	□	200ppm	■	■	
700ppm	■	□	300ppm	■	■	default
800ppm	■	□	400ppm	■	■	
900ppm	■	■	500ppm	■	■	

Operation

The Carbon Dioxide (CO^2) Monitor displays the current Carbon Dioxide level in parts per million (ppm) and gives clear indication if increased ventilation is needed to improve air quality.

Poor air quality, particularly in continuously occupied and enclosed spaces, e.g. bedrooms, can lead to complaints of drowsiness and headaches.

By pressing the button once the display will cycle to show the 8 hour average, 24 hour average, 24 high highest and back to the default current level. Each reading will display for 5 seconds before changing. The background colour will change depending upon the settings – see Adjustments.

If background colour is Amber or Red, ventilation should be increased to improve air quality

It is recommended that the CO^2 level is checked each morning

Specification

Voltage	240V ac 50Hz	Response Time	< 2 minutes
Power Consumption	15mA	Warm-up Time	< 1 minutes
CO2 Range	0 – 5000ppm	IP Rating	IP 40
CO2 Accuracy	±50 ppm	Material	Flame Retardant ABS
Display Resolution	1ppm	Dimensions	125 x 86 x 36mm
Rated Temperature	0 – 50°C	Terminal Capacity	1 x 1.0mm²
Humidity	0 – 95% RH		

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