



KIDDE™

CO₂ MONITOR

Commercial reference: KCO2M10UK
Walter Kidde Portable Equipment

This Kidde Carbon Dioxide Monitor provides ambient and historical readings of CO₂ concentration levels, temperature and humidity. Warns users with sound alarm, voice commands and LED signs. All readings are provided directly on LCD screen with LED status indicators for quick reference.



Conforms to: EN 50543:2011+AC:2014

The CE mark affixed to this product confirms its compliance with the European Directives which apply to the product.



ENVIRONMENTAL PROTECTION
Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with Local Authority or Supplier for recycling advice.

Product contains sealed in lithium batteries. Removal can be done only by qualified professionals in recycling points.

All the trademarks listed herein are owned by their respective owners. © 2022 Carrier. All Rights Reserved

Walter Kidde Portable Equipment
1016 Corporate Park Drive
Mebane, NC 27302, USA
www.kiddesafetyeurope.co.uk
Made in China



1. PRODUCT OVERVIEW:

Sealed Back-up Battery, Long Life Carbon Dioxide Monitor.

Model KCO2M10UK carbon dioxide (CO₂), temperature and humidity monitor, adopt high-precision NDIR carbon dioxide sensor, temperature and humidity sensor chip, used for monitoring indoor carbon dioxide levels, temperature and humidity.

When carbon dioxide levels go beyond the recommended preset value, the monitor will provide visual and sound notification with:

- Alarm sound
- Voice alarm
- Traffic light LEDs red/yellow/green
- Alarm notification on display screen

This CO₂ monitor adopts build in automatic 24-hour CO₂ monitor calibration. If monitor is used in a high concentration CO₂ environment for a long time, regular manual calibration is required.

This product is suitable for indoor use.

2. CARBON DIOXIDE LEVELS AND GUIDELINES:

Parts per Million (PPM)	CO ₂ levels impact on human body
Below 400	Background (normal) outdoor air level
400-1000	Typical occupied indoor space with good air exchange
1000-2000	CO ₂ level associated with complaints of drowsiness and poor air
2000-5000	CO ₂ level associated with headaches, sleepiness and loss of concentration
Above 5000	Permissible exposure limit for daily workspace exposures
Above 40000	CO ₂ level is immediately harmful due to Oxygen deprivation

3. PRODUCT FEATURES:

- Large LCD display providing clear information:
 - CO₂ reading
 - Temperature reading
 - Humidity reading
 - Clock
 - 7-days CO₂ readings history (trend)
- Build in automatic 24-hour CO₂ monitor calibration
- CO₂ NDIR infrared sensor with 10-year lifetime

- “Traffic light” LED notification
- Alarm Sound and voice alerts in selectable languages (English/German/French/Italian/Spanish/Dutch)
- Over 12-hours build-in rechargeable battery back-up
- Self-adjusting LCD and LED brightness (night mode)
- 2 Multifunction touch buttons
- Wall mount or freestanding installation type



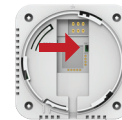
Number	Function	Number	Function
1	“Traffic light” LED notification	6	Touch buttons
2	Status Bar	7	CO ₂ readings history (trend)
3	CO ₂ concentration reading	8	Sound output
4	Temperature reading	9	Power switch
5	Humidity reading	10	Power adaptor connection

4. GET STARTED:

- Plug in the AC power adapter



- Turn on the power switch



- Welcome logo will be displayed on LCD screen

- The monitor requires 30 seconds for warm up and self calibration

5. INSTALLATION:

This CO₂ monitor can be installed on the wall as a permanent installation, or on the desktop freestanding.

CO₂ monitor requires a flow of air to operate

correctly, therefore, it should not be installed in an area that is likely to restrict the free movement of air.

CO₂ monitor should be installed:

- Between 1.4m and 1.6m above floor level
- If wall mounted, more than 150mm of the ceiling or a junction with another wall

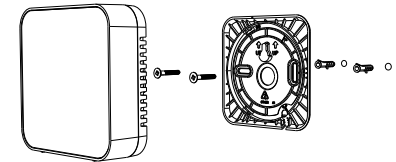
CO₂ monitor should not be installed:

- Where it can be obstructed (for example by curtains, blinds or furniture)
- Next to a door or window, or next to an air vent or similar ventilation opening

Method of wall installation:

- Choose a suitable installation location for the CO₂ detector. Make sure, that there are no wires or pipes nearby or inside the walls
- Use the backplate to mark location of mounting screws on the wall. Drill approx. 30~40 mm deep with a Ø 5 mm drill bit
- Place the provided dowels into pre-drilled holes, then secure the backplate to the wall by inserting the supplied screws into the dowels
- Alternative single-screw installation option with the center hanging hole: Use one of the provided screws and dowels, ensuring the screw protrudes 3-5 mm after wall insertion for secure backplate hanging

- Install the CO₂ monitor as shown on image below



Wall installation

Desktop installation

6. FUNCTIONALITY:

Notifications and alarms:

The default CO₂ concentration level pre warning value is set to 1000ppm and CO₂ alarm value starts at 1500ppm.

- When CO₂ concentration level is below 1000ppm, the warning window displays green color.
- When CO₂ concentration level is above 1000ppm to 1500ppm, the warning window shows yellow color.
- When CO₂ concentration level is above 1500ppm, the warning window displays red color, sound alarms is emitted with voice



- Temperature anomaly detection:
 - The temperature measurement range is -5 °C to 50 °C or 23 °F to 122 °F. When the ambient temperature exceeds the range, it will send out temperature anomaly alarm.
- RH anomaly detection:
 - The measurement range of humidity ranges from 0 to 99%RH. When the ambient humidity exceeds 99%RH, it will send out humidity anomaly alarm.

LED indicators – operating mode:

- The traffic light indicator window is always on when connected with AC powered
- The traffic light indicator window flashes when using backup battery
- The status bar indicates backup battery capacity
- When the backup battery is low, there is a voice reminder and the yellow light flashes every 4 seconds

Ambient light intensity detection functionality:

- When CO₂, temperature and humidity are in the normal range and the ambient light is low the brightness of the display screen and LED indicators will be automatically dimmed
- When CO₂ is detected or temperature and humidity is abnormal, the brightness will be resumed

CO₂ readings history (trend):

Swipe right both touch buttons to view readings history.



Display modes:

- Slide left to switch display mode: CO₂ temperature and humidity display mode, clock temperature and humidity display mode, CO₂ clock display mode
- Long touch the left button for 3 seconds – switch °C/°F temperature
- Switch to the clock display mode
- Touch both buttons simultaneously for 3 seconds to enter the time setting
- Short touch the left button to adjust hours
- Short touch the right button to adjust minutes

Autosave and exit from time setting will trigger if not operation is performed withing 15 seconds.

Sound and voice notifications:

- Long touch the right button for 3 seconds - to disable/enable voice notifications

Voice notifications language selection:

- Long touch the left and right buttons simultaneously for 10 seconds to open language selection menu

- LCD Screen displays selectable languages:

- EN: English
- DE: German
- FR: French
- IT: Italian
- ES: Spanish
- NL: Dutch

- Short touch the right button to cycle between 6 languages

Autosave and exit from time setting will trigger if not operation is performed withing 15 second or touch left button to exit.

7. CO₂ MANUAL CALIBRATION:

This CO₂ monitor adopts build in automatic 24-hour CO₂ monitor calibration.

If monitor is used in a high concentration CO₂ environment for a long time, regular manual calibration is required.

- Place the monitor outside in fresh air
- Long touch the left and right buttons simultaneously for 20 seconds to select manual calibration mode
- 240S will be displayed on the screen
- Short touch the right button to start/ pause countdown
- CO₂ concentration reading will be displayed 6 seconds after countdown completion
- CO₂ monitor has been calibrate to 400 ppm

Autosave and exit from time setting will trigger if not operation is performed withing 15 second or touch left button to exit.

Working voltage	DC 5 V (Power adapter 5 V/1 A)
Standby current	≤50 mA
CO ₂ Measuring range	400 ppm to 5000 ppm
Accuracy	±50 ppm ±5% of reading
CO ₂ Measure resolution and response time	1 ppm; T63 < 60 s
Temperature range	-5° to +50°
Temperature measurement error range	±1°
Temperature measurement resolution and response time	0.1°; T63 < 60 s
Humidity measurement range	0% to 99% RH
Humidity measurement error range	±5% RH
Humidity measurement resolution and response time	1%; T63 < 90 s
Backup battery running time	12 Hours
Warranty	24 months
Extreme working environment	Working temperature -5°C to 50°C, working humidity 0 to 90%RH (no condensation)
Storage environment	Storage temperature -10°C to 60°C, storage humidity 0 to 95%RH (no condensation)
Product service life	10 Years (End of product service life "End")
Protection grade	IP40

Overall dimensions	99mm x 99mm x 36mm
Product weight	Net weight: 230g

9. PRECAUTIONS:

Transportation, installation process and other operations during monitor operation may lead to detection accuracy reduction of the NDIR carbon dioxide sensor.

The calibration algorithm will correct the drift during 24hour working period.

If the first startup is obviously abnormal or exceeds 1500 ppm, the drift can be quickly corrected by entering manual calibration. For details, see Manual Calibration instruction.

CO₂ monitor should not be used in industrial environments with long time high CO₂ concentration levels.

CO₂ monitor used in industrial environments requires regular manual calibration.

CO₂ monitor should not be used in the environment with high dust density for a long time.

CO₂ monitor should operate away from heat source and avoid direct sunlight or other thermal radiation.

Do not use the device in potentially explosive rooms.

Do not remove any safety signs, stickers or labels from the device.

Do not open the device in case it is damaged.

Clean the device with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing.

Do not use any sprays, solvents, alcohol-based cleaning agents or abrasive cleaners.

This equipment must not be disposed of with the household waste at the end of its life due to build in battery.

UK Product Support:
Kidde Safety Europe Ltd, Ash House, Littleton Road, Ashord, TW15 1TZ, UK
www.kiddesafetyeurope.co.uk
admin.kiddesafety@carrier.com
0800 917 0722