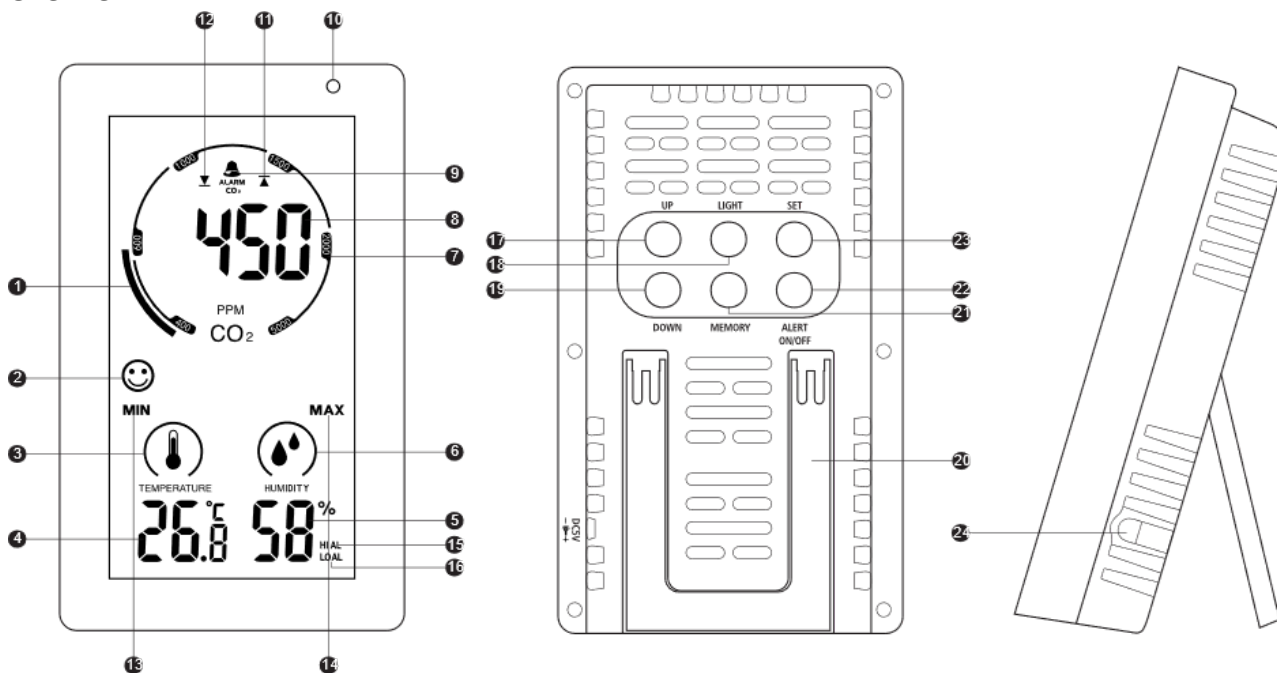


Instruction Manual: Carbon Dioxide Monitor (MX6055)

Main features

- Three-color displays for CO₂ level, temperature, and relative humidity
- Non-dispersive infrared gas (NDIR) sensor for CO₂ detection
- Broad CO₂ measurement range from 400 to 5000 PPM
- Color display of ventilation recommendations based on the CO₂ concentration in the air
- Instant and time weighted average CO₂ reading (15 minutes / 8 hours)
- Max-Min-Average value memory shown since start up
- Adjustable high or low CO₂ alarm with optional alarm sound for high alarm
- Adjustable high or low humidity alarm (visual only)
- Automatic calibration of baseline to CO₂
- Backlight with adjustable brightness levels
- Built-in memory chip for saving settings when power is turned off
- Table stand
- Power supply: 5V ~ 2A power supply (included)

Overview



- | | |
|--|------------------------------|
| 1. CO ₂ graph movement indicator | 13. MIN icon |
| 2. Comfort face | 14. MAX icon |
| 3. Temperature icon | 15. High humidity icon alarm |
| 4. Indoor temperature | 16. Low humidity icon alarm |
| 5. Indoor humidity | 17. UP button |
| 6. Humidity icon | 18. LIGHT button |
| 7. CO ₂ graphical measuring range indicator | 19. DOWN button |
| 8. CO ₂ reading | 20. Stand |
| 9. CO ₂ audible alarm icon | 21. Memory |
| 10. Light sensor | 22. Alert ON/OFF |
| 11. High CO ₂ icon | 23. SET button |
| 12. Low CO ₂ icon | 24. Power adaptor socket |

Installation

Connect the included 5V-2A AC / DC power adapter to the AC wall socket, then to the DC socket on the left rear side of MX6055. The display will turn on with the appropriate temperature and relative humidity.






Your CO₂ reading shows “150” and it starts counting down in seconds with a moving graph. The relevant CO₂ data will be displayed within 2.5 minutes.

It will continue to calibrate and display correct CO₂ data within 24 hours.


If the AC power is interrupted, the monitor does not function; the display and backlight are turned off.

Your device settings will be stored on the internal memory chip so your MX6055 will work again when AC power is restored.

Recommendation for ventilation based on the CO₂ concentration in the air.

Measurement range	Display indication
400~600ppm	
600~1000ppm	
1000~1500ppm	
1500~2000ppm	
above 2000ppm	

Your CO₂ monitor measures and displays CO₂ in PPM with recommendations for color ventilation:

The icons  will start flashing when the current CO₂ level is above 2000ppm.

Button descriptions

Operation Mode		□ SET】	【UP】	【DOWN/ C/F】	【ALERT ON/OFF】	MEMORY	LIGHT
		Normal	Press	---	C/F	Celsius or Fahrenheit change	CO ₂ ALERT ON or OFF selection
HOLD	Enter CO ₂ and humidity Exceed standard setting pattern		Enter manual calibration pattern. This process takes 20 minutes		---	---	---
Alert setting	Press	---	---	---	---	---	---
	HOLD	---	---	---	---	---	---

Operation

CO₂ : upper limit and lower limit exceeds standard setting



Single press Alarm sound on/off.



Press and hold to SET button to check following values: CO₂ > CO₂ > RH% > RH%

Long Press SET button about 2 seconds, CO₂/PPM/ shown on, value 400 flashes, press UP or DOWN button to set CO₂ lower limit exceed standard value (lower limit Max value cannot bigger than the upper limit Min value. The Min value is 400, setting unit is 10ppm/set). Long press UP or DOWN button make value run faster.

Long press SET button about 2 seconds, CO₂/PPM/ shown on, value 2000 flashes, press UP and DOWN button to set CO₂ upper limit exceed standard value (upper limit Min value cannot smaller than the lower limit Max value. The Max value is 5000, setting unit is 10ppm/set). Long press UP or DOWN button make value run faster.

Humidity : upper limit and lower limit exceeds standard setting

- 1) Press SET button, humidity and shown on, humidity value flashes, press UP or DOWN button to adjust:
 - lower limit humidity range (lower limit Max value cannot bigger than upper limit Min value, the Min value can be set to 25%, setting unit is 1%/set). Long press UP or DOWN button make value run faster.
 - upper limit humidity range (upper limit Min value cannot smaller than lower limit Max value. The Max value can be set to 90%, setting unit is 1%/set). Long press UP or DOWN button make value run faster.
- 2) After setting all values, press SET button to save desired value or keep it not moving for about 10 seconds.

Remarks:

Lower limit of humidity set as 30%, when humidity lower than 29%, only flashes.

Upper limit of humidity set as 80%, when humidity higher than 81%, only flashes.

CO₂ ALARM ON/ OFF

Default setting is OFF symbol disappears). Press ALARM ON/ OFF button activate CO₂ ALARM function symbol appears. When CO₂ value goes up to desired upper limit value, alert rings and flashes.

Alert mode	CO ₂ measuring range
Ring every 3 seconds	Lower than 200ppm
Ring every 1 second	Lower than 500ppm
Ring twice each second	Over 800ppm

Press AL ON/OFF button to quit alerts, alert period is 2 minutes.

Press ALARM ON/ OFF button, turn off CO₂ ALARM function disappears.

When CO₂ value goes up to desired lower limit value, only flashes, no alert will sound.

TECHNICAL DATA

Power consumption	AC adaptor
Specification	
Sensor Type	Long Life NDIR Sensor 400-5000ppm
Response Time	Within 15 seconds of any change in CO ₂
Operating Temp	32° to 122°F (0° to +50°C)
Temperature measuring range	32°C to 122°F (0° to +50°C)
Temperature resolution	0.1°C
Temperature accuracy	±1°C
Humidity measuring range	20 to 95% RH
Humidity resolution	1%
Humidity accuracy	± 5%
CO ₂ measuring accuracy	±(50ppm+5% reading value) (Example: reading value is 1000ppm, tolerance is 50+1000*0.05=100ppm, so it is 1000±100ppm)
Default settings	
CO ₂ alert	Low - 400, High – 2000
Humidity (RH%) alert	Low – 35%, High – 60%
Average value	15 minutes
CO ₂ voice alarm	Off
Display of outside measuring range	
CO ₂ – 400ppm (lower than 400 PPM)	HI (over 5000 PPM)
Temperature - LO (lower 0°C / 32°F)	HI (over 50°C/ 122°F)
Humidity (RH%) - 20% (lower than 20%)	95% (over 95%)

1. AUTO BASELINE CALIBRATION

Your monitor is equipped with an intelligent IC that automatically calibrates to reduce CO₂ sensor drift in case of prolonged use. It will calibrate automatically with the minimum CO₂ reading detected during 7 days of continuous monitoring.

Make sure the location where you put the monitor is well ventilated (with CO₂ levels close to 400ppm), you can put it close to window.

Manual CALIBRATION

- 1) The monitor location should be well ventilated (CO₂ levels close to 400ppm) for at least one hour a day, or move the monitor to such a well-ventilated room every day for several hours to perform an automatic Calibration baseline.
- 2) Press and hold UP button, enter manual calibration mode. CAL letter flashes. This process takes 20 minutes, after 20 minutes, CAL letter stop to flash, then the manual calibration finished.

2. C/F

Default setting is Celsius degree, press DOWN button change to Fahrenheit.

3. Backlight

- 1) Default setting is light, press LIGHT touch button to dim darker light.
- 2) Light sensor to dim backlight accordingly with sun light automatically. With bright sun light, CO₂ monitor with a bright light, on the contrary it becomes a little bit darker.
- 3) Press the LIGHT button to turn off back light.

4. Memory function

1) Memory display

- Press the MEM button once - to show the MAX value of temperature and humidity appears since boot.
- Continuous press the MEM button 2 times - to show the MIN value of temperature and humidity appears since boot.
- Continuous press the MEM button 3 times - to show the Average value of temperature and humidity of past 15 minutes appears.
- Continuous press the MEM button 4 times - to show the Average value of temperature and humidity of past 8hrs appears.
- If there is no movement for about 5 seconds, the display will go back regular mode.

2)Memory clearing

To clear all values, press and hold MEM button for about 3 seconds.

To clear specific values:

- Press the MEM button once - after shown the MAX value of temperature and humidity appears since boot, long press for 3 seconds.
- Continuous press the MEM button 2 times - after show the MIN value of temperature and humidity appears since boot, long press for 3 seconds.
- Continuous press the MEM button 3 times - after show the Average value of temperature and humidity of past 15 minutes appears, long press for 3 seconds.
- Continuous press the MEM button 4 times - after show the Average value of temperature and humidity of past 8hr appears, long press for 3 seconds.

Note: Wait for the CO₂ monitor to complete the calibration process by itself. Do not press the "UP" button or any other button during the process.

Temperature

In normal display mode, press the "DOWN" button to switch between ° C or ° F temperature display.

To adjust the brightness of the display press the "LIGHT" button to adjust the display brightness from high to low to off.

Troubleshooting

No display or function

Check that the AC / DC adapter is properly connected.

Low response time

Make sure the airflow paths on the back of the monitor are not blocked or covered.

CO₂ reading shows "Err"

The CO₂ sensor is not working properly. Disconnect the AC / DC adapter (C8) for 10 seconds to reconnect it to the monitor.

Care and maintenance

- 1) Place the monitor on a stable surface, away from direct sunlight, excessive heat, or moisture.
- 2) Clean the monitor with a soft cloth moistened only with mild soap and water. Stronger substances such as gasoline, thinner or similar materials can damage the surface of the item. Make sure the monitor is unplugged before cleaning.
- 3) Do not open the back cover or tamper with any part of this monitor.
- 4) Do not connect any other AC / AC or AC / DC adapter with incorrect specifications or voltage.

CO₂ levels and guidelines

General CO₂ benchmarks as follows

Value	Description / Action needed
400 ~ 600 ppm	Background (normal) outdoor air level.
600 ~ 1000 ppm	Typical level for occupied spaces with good air exchange.
1000 ~ 1500 ppm	Start ventilating the room.
1,500 ~ 2,000 ppm	The level associated with the symptoms of drowsiness and bad air. Ventilation recommended!
2000 ~ 5000 ppm	The level associated with headaches, drowsiness and stagnation, stale, stuffy air. You may also experience poor concentration, loss of attention, increased heart rate, and mild nausea. Ventilation strongly recommended!
> 5000 ppm	Exposure can lead to severe oxygen deprivation, causing permanent brain damage, coma and death. Requires immediate ventilation!