CO2METER.COM
CO2 MEASUREMENT SPECIALISTS

05/09/2020 PM 10:38

619
CO2 (ppm)

Good OK Poor

TEMP 70 °F
HUM 56 %
BARO 1038 hpa

CO2METER.COM

IAQ MAX

CO2 Monitor and Data Logger
Instruction Manual

Table of Contents

1. Product **Overview**

The **IAQ MAX** CO2 Monitor and Data Logger is designed to detect ambient Carbon Dioxide (CO2),Temperature (TEMP), Humidity (HUM) and Barometric Pressure (BARO) by enhanced sensing technologies and precise monitoring; all from a sleek, modern, digital LCD display.

2. Device Features

- Large, easy to read LCD display with CO2 3-color code indicator for **GOOD**, **OK**, or **POOR** air quality levels in real time
- NDIR CO2 sensor for fast, accurate measurements
- Visual alarm indication
- Built-in data log display table and downloadable software
- Fresh air calibration
- Powered by USB or Rechargeable Lithium-Ion batteries
- Clean, Modern Desktop Design

3. Considerations

Please read the instructions carefully before using this device.

Avoid covering the air intake areas located on the back of the device during use, to avoid inaccurate measurements. *(See page 5 - #4)*

Please keep the manual handy for quick reference and troubleshooting, or visit **www.co2meter.com** for easy manual and documentation download.

4. Product Specifications

- 4.3" LCD screen display
- CO2 Method : Infrared (NDIR)
- CO2 Range: 400 - 5000 ppm
- CO2 Resolution: 1 ppm
- CO2 Accuracy: ± (50ppm + 5% reading value)
- Sampling Time: 1.5 seconds
- Temperature (TEMP): -50°F to 122°F
- Humidity (HUM) 20% - 85%
- Barometric Pressure (BARO): 860hpa - 1060hpa
- Storage Temperature: 14°F to 140°F
- Data Logging Record: 10 min. intervals (default)
- Power source: Lithium battery with 3000 mAh capacity
- Battery Life: 5 hours
- 5V DC power charging via micro USB port
- Product Size: 5.7 x 3 x 3.8 in
- Product Weight: 0.46 lbs.

5. Product Content

-IAQ MAX CO2 Monitor and Data Logger
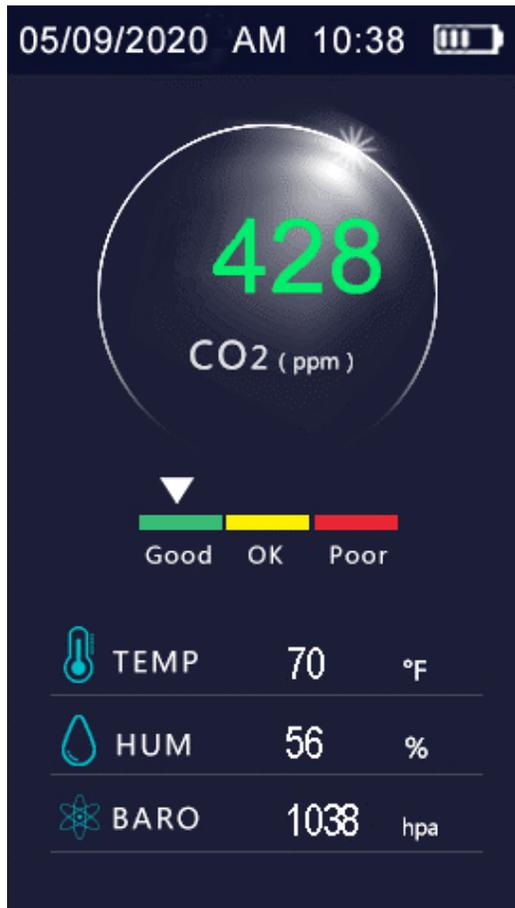-USB Cable
-Instruction Manual

6. Start Up Instructions

When you hold down the center power button the air quality monitor will boot up. The **IAQ MAX** detector will proceed through its warm-up sequence for about 3 minutes to allow sensors to settle in fresh ambient air. This is necessary for accurate and precise results.

1. **Power** ⏻ **/ OK / Menu Button** Used **to** turn the device on/off by pressing for 3 seconds or also used to **confirm highlighted options**

2. Facing back of device, Right Arrow ▶ = Decrease Button
3. Facing back of device, Left Arrow ◀ = Increase Button
   - **Arrows are used to scroll between display modes**
4. Ventilation Opening for Sensor
5. Temperature (TEMP) and Humidity (HUM) Sensor
6. Micro USB charging port

7. Home Screen Display

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CO2 (ppm)

Good   OK   Poor

TEMP   70   °F

HUM   56   %

BARO   1038   hpa

1) Carbon Dioxide (CO2) display area, and 3-color code indication showing the current CO2 level.
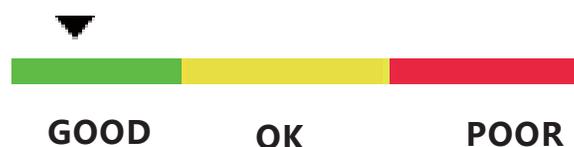
2) Temperature (TEMP) display area, showing the current temperature level.

3) Humidity (HUM) display area, showing the current humidity level.

4) Barometric Pressure (BARO) display area, showing the current air pressure level.

CO2 Indoor Air Quality Grade Range

Air Quality Level	CO2 Value (PPM)	Color Code
Good	400-799	Green
OK	800-1499	Yellow
Poor	≥1500	Red

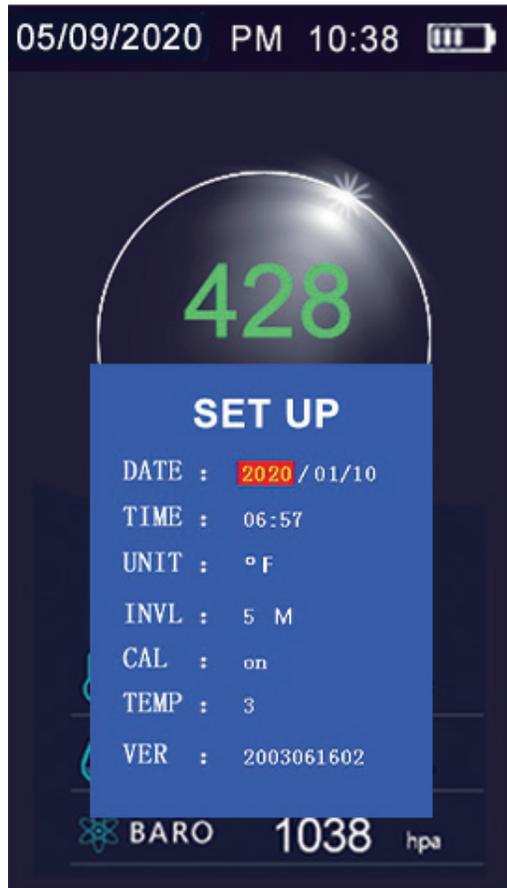GOOD   OK   POOR

6

8. CO2 Table Display

This display can be accessed by simply clicking either the ◀ or ▶ arrow keys on the back of the device. Real time Temperature (TEMP), Humidity (HUM), and Barometric Pressure (BARO) are shown in addition to a table that displays the last hour of CO2 readings.
The table updates on a 10 minute interval.

In order to download a comprehensive data set for further analysis, see section 13 - Data Log Download Procedure. Visit us at, CO2Meter.com/pages/downloads to download the free Gaslab Data Logging Software Setup file to your Windows PC.

9. Settings Display

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SET UP

DATE : 2020 / 01/10
TIME : 06:57
UNIT : °F
INVL : 5 M
CAL : on
TEMP : 3
VER : 2003061602

BARO 1038 hpa

SET UP MENU

DATE- User set date **TIME-** User set time **UNIT-** Choose °F or °C for Temperature

INVL- Data logging interval selection. 1 min, 5 min, 10 min, 30 min, 60 min **CAL-** (on/off) User has the ability to turn the auto calibration on/off

TEMP – Temperature adjustment allows user to adjust for temperature drift (+/- 10)

VER – Version number

To view the settings display screen and alter date, time, temperature, interval or calibration simply double click on the center ⏻ button. The ⏻ button can then be used to scroll through each setting. Use the ◀ and ▶ arrow buttons to adjust the highlighted setting. It will save each setting automatically.

10. Charging

When the battery icon is displayed with one bar, the device needs to be charged.

Insert the included or another compatible micro USB charging cable into the device.

Attach the other end to a USB DC charger (such as a smart phone charging port) that outputs DC 5V at >=1000mA. Fully charge for at least 2-3 hours before use. *Avoid charging with a USB computer port which only outputs 500mA, as this will provide a much slower charge.*

11. Calibration

The **IAQ MAX** has two different CO_2 calibration methods.

1) Auto Calibration - calibrated using ambient air. Ensure the **CAL** is "on" in the setup menu.

2) Ambient Air Calibration - to calibrate, place the device outside for 3-5 minutes and allow the CO_2 reading to level out before calibration.

*Press and hold the ◀ and you will slowly see the CO_2 level adjust to 400ppm. (*Please note, you can also adjust Temperature (TEMP) from the Set Up Screen.)*

11.1 Calibration Step-by-Step Procedure

Step 1) Enter the "Settings" menu for the device by pressing the middle power button on the back of the device, 2 times.

Step 2) Scroll down through the settings by using the power button until you reach "CAL".

Step 3) Press either arrow button to toggle the CAL feature "**OFF**".

Step 4) Continue scrolling through the complete settings menu. You must scroll through the entire menu for the settings to save.

Step 5) Next, take your IAQ-MAX outside and leave it outside, by itself for **5 minutes**.

Step 6) Do **not** breathe on or near your device as the CO2 from your breath will affect the calibration – Stay at least **6 feet away** from the device while it calibrates.

Step 7) Hold the device so that the color display is facing **you**. Using your right-hand reach around to the back of the device and find the right-hand arrow button. *You will need to use this button for step #8*.

Step 8) Press and hold the right-hand arrow button until the device beeps twice (could be up to 15 seconds). Then release the button. The beeping indicates that the device is about to begin its calibration procedure.

Step 9) Set the device down outside and walk away. **Do not approach the device for at least 10 minutes**.

Step 10) When you return after the 10-minute period the device should be calibrated. Depending on the outdoor air quality in your area the device will likely read between **400 - 450 ppm**.

Please Note, Do <u>not</u> place the IAQ-MAX in direct sunlight as this can negatively affect the calibration and operation of the device.
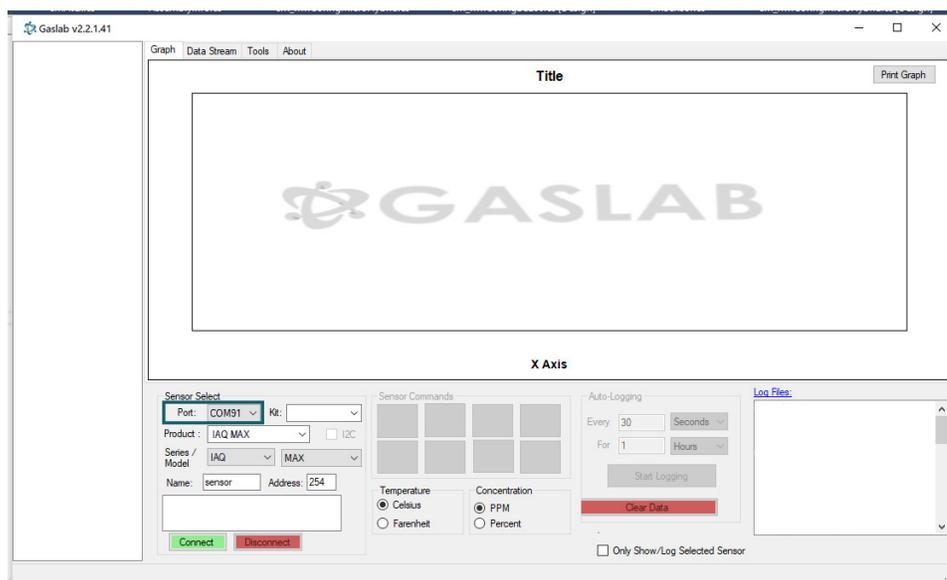
12. Data Logging Setup

The device will begin to data log upon power up. The data logging interval can be set to 1 min, 5 min, 10 min, 30 min, or 60 min. *Please note: The data log file will only hold one month of data. After 30 days, the oldest data will then begin to be overwritten with new data points.*

13. Data Log Download Procedure

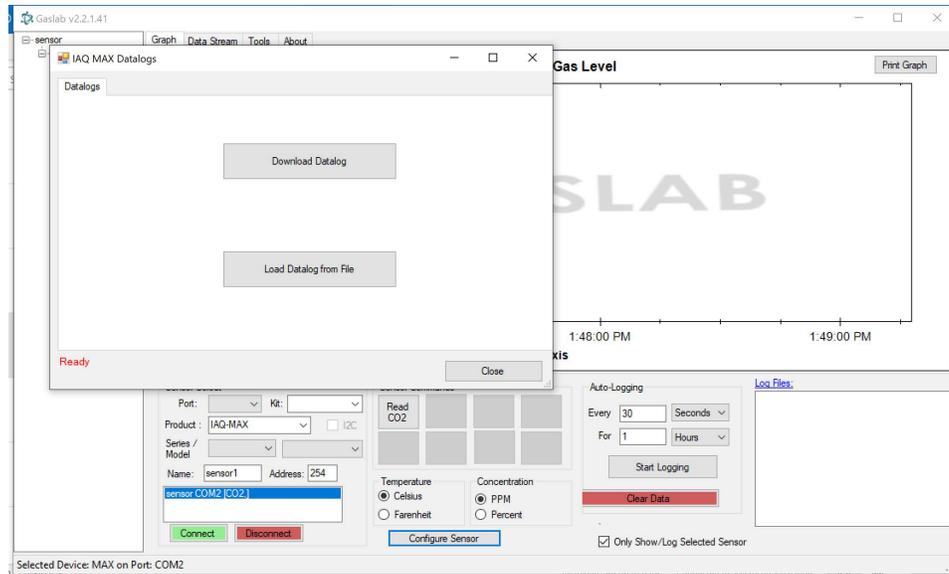**NOTE! **After Data Log download, the device memory will be cleared.****

1. Download the GasLab Software, at https://www.co2meter.com/pages/downloads
2. Plug in the **IAQ-MAX** to the PC with provided USB cable and ensure connection to *correct port*.
3. Open the GasLab Data Logging Software and select the IAQ Max Product, or IAQ Series and MAX Model from the GasLab Software drop downs, under "Sensor Select" and Click **CONNECT.**

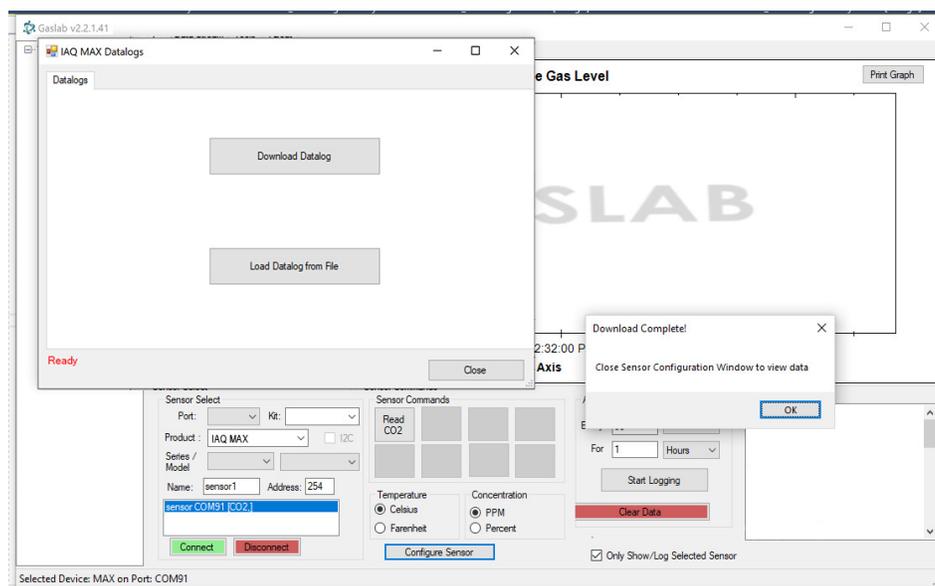**To ensure the correct port is chosen, test by removing USB and noticing which port disappears.**
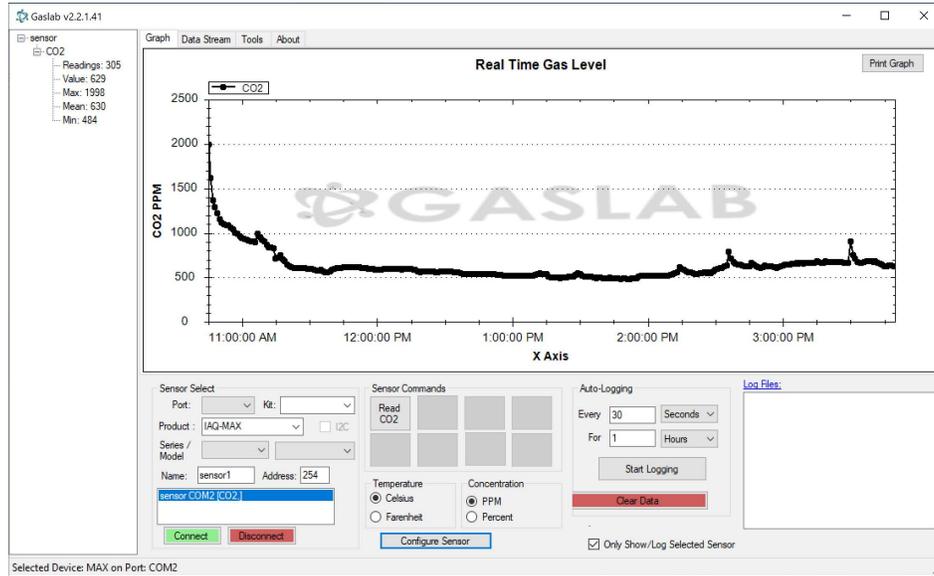
4. Click on "**Configure Sensor**"

5. Click on "**Download Datalog**", Save and Name the File appropriately as excel spreadsheet workbook **.xlsx** file. Press **"OK"** when prompted.

NOTE! **Users must SAVE data in file, downloading the data without saving will erase all information.**

6. Finally, View **real-time data analysis**

7. Locate and open your saved file for further analysis. This is an example below of the exported data set.

14. Product Care and Support

To ensure maximum benefit from this product, please observe the following guidelines:

1. Repair - Do **not** attempt to repair or modify the device in any way. Please contact a CO2Meter specialist directly if the product needs servicing, including replacement or technical service.
2. Cleaning - Do **not** use liquid cleaning agents such as benzene, thinner or aerosols, as these will damage the device. Do **not** splash the unit with water.
3. Maintenance - If for some reason this guide does not help you solve your problem, please contact us using the information below - we would be happy to assist.

CONTACT US

We are here to help!

support@co2meter.com

(386) 256-4910 (Technical Support)

(386) 872-7665 (Sales)

www.co2meter.com
See CO2Meter, Inc. Terms & Conditions at,
www.CO2Meter.com/pages/terms-conditions

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