

ZG Series Application Software User Manual

Welcome to use the ZG series CO2 monitors. To enhance functions of CO2 monitors, specially design the application software to strengthen the value in use. The software functions include real-time data analysis, data analysis time, CO2 level prompted various parameter settings, calibration, window management, and so on.

This software can provide users: environment air quality, people or plant behavior changes in the environment CO2, such as data analysis, environmental improvement as the best aids.

Software Use Description:

(1) Screen Functions



File→ picture file output *.jpg, printing current screen

Setting→ parameter settings, cure smooth display, event analysis, display range, communication data format.

Calibration→ select CO2 sources, 1000ppm, outdoor air, or user-defined CO2 concentration.

Window→ select the window size.

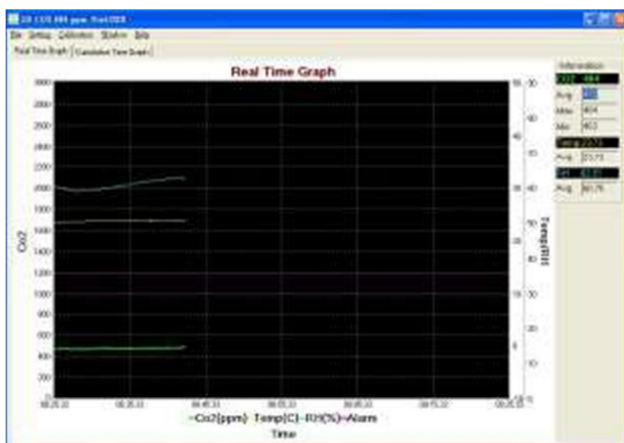
Help→ manual, help, about ZG view

Real Time Graph→ one hour real time span

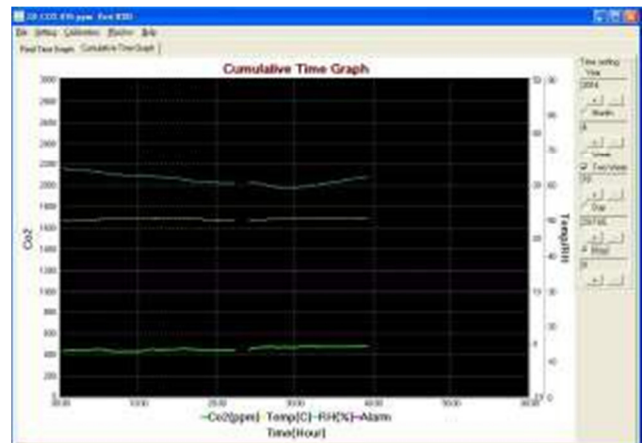
Cumulative Time Graph→ long time span

(2) Real-Time Graph (Picture 1) / Cumulative Time Graph (Picture 2)

Execute ZG series application software, the main screen will display "instant face-" (Picture 1) and show the timescale of one hour (hours: minutes: seconds). If you choose a long time screen, the screen will display the timescale of the right dialog window (Picture 2). Select the timescale display for hour, day, week, two week or month. To change timescale, please select options of the right window. For example, Picture 3, the selected timescale is 1 hour. For example, Picture 4, the selected timescale is day.



Picture 1



Picture 2

Time setting

Year

2014

+ -

☐ Month

4

+ -

☐ Week

☐ Two Week

18

+ -

☐ Day

29-TUE

+ -

☒ Hour

8

+ -

Picture 3

Time setting

Year

2014

+ -

☐ Month

4

+ -

☐ Week

☐ Two Week

18

+ -

☒ Day

28-MON

+ -

☐ Hour

8

+ -

Picture 4

(3) Parameter Setting

Select parameter setting, the screen displays as Picture 5 including interface, temperature unit, CO2 unit, CO2 range AL1 & AL2, show line, message define, message time, etc.

ZG Parameter Setting

<p>Interface Settings</p> <p><input checked="" type="radio"/> USB</p> <p><input type="radio"/> Rs232</p> <p>COM1</p>	<p>Temperatuer Settings</p> <p><input checked="" type="radio"/> C</p> <p><input type="radio"/> F</p>	<p>CO2 Settings</p> <p><input checked="" type="radio"/> ppm</p> <p><input type="radio"/> %</p> <p><input type="radio"/> mmHg</p>	<p>Low Message define</p> <p><input type="radio"/> Message 1</p> <p><input type="radio"/> Message 2</p> <p><input type="radio"/> Message 3</p> <p><input checked="" type="radio"/> Message 4</p> <p><input type="radio"/> Off</p>
<p>CO2 Range AL1</p> <p><input type="radio"/> 600 ppm</p> <p><input type="radio"/> 800 ppm</p> <p><input checked="" type="radio"/> 1000 ppm</p> <p><input type="radio"/> 1200 ppm</p> <p><input type="radio"/> 1500 ppm</p> <p><input type="radio"/> 1000</p>	<p>CO2 Range AL2</p> <p><input type="radio"/> 600 ppm</p> <p><input type="radio"/> 800 ppm</p> <p><input type="radio"/> 1000 ppm</p> <p><input checked="" type="radio"/> 1200 ppm</p> <p><input type="radio"/> 1500 ppm</p> <p><input type="radio"/> 1200</p>	<p>Show Line Settings</p> <p><input checked="" type="checkbox"/> CO2 Show</p> <p><input checked="" type="checkbox"/> Temp Show</p> <p><input checked="" type="checkbox"/> RH Show</p> <p><input checked="" type="checkbox"/> Limit Show</p>	<p>High Message define</p> <p><input type="radio"/> Message 1</p> <p><input type="radio"/> Message 2</p> <p><input type="radio"/> Message 3</p> <p><input checked="" type="radio"/> Message 4</p> <p><input type="radio"/> Off</p>
<p>Message time</p> <p><input type="radio"/> 0.5 sec</p> <p><input checked="" type="radio"/> 1 sec</p> <p><input type="radio"/> 2 sec</p> <p><input type="radio"/> 3 sec</p> <p><input type="radio"/> 4 sec</p> <p><input type="radio"/> 5 sec</p> <p><input type="radio"/> 10 sec</p>			

Save Exit

Picture 5

- (a) Interface Settings: There are two options, USB or RS232. If you use the RS232 interface, you need to confirm the connector number.
- (b) Temperature Settings: To select the unit of temperature, choose either °C or °F.
- (c) CO2 Settings: To select the unit of CO2, choose ppm, % or mmHg.

- (d) CO2 Range AL1 and AL2: Select a fixed range of 600~1500ppm, or a user-defined range. After AL1 and AL2 settings are completed, the screen will display the selected pictures of low message1~4 when CO2 value \geq AL1 setting. Likewise, the screen will display the selected pictures of high message1~4 when CO2 value \geq AL2 setting. If you select all pictures, the screen will sequentially display LowMsg1→LowMsg2→LowMsg3→LowMsg4, and then return to LowMsg1. The residence time of each picture is determined by message time.

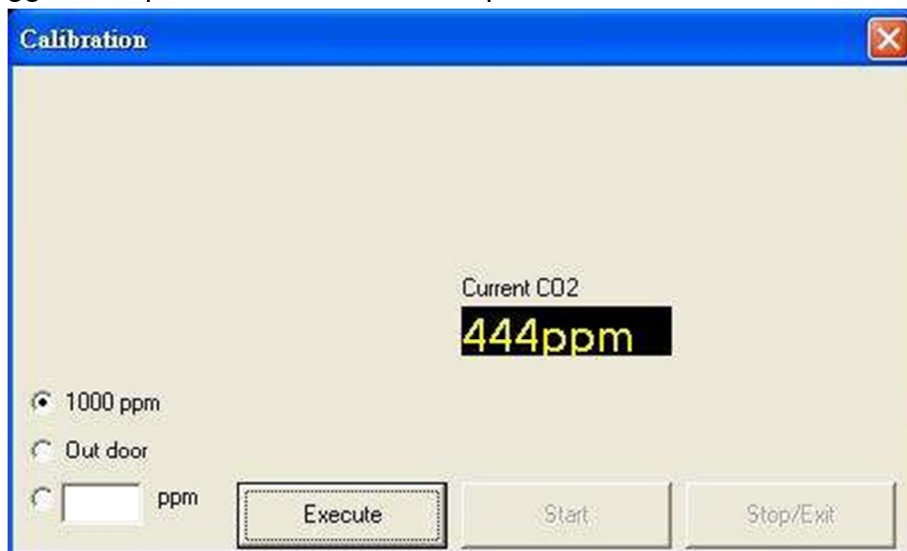


- (e) Show Line Settings: Select to display or hide CO2, temperature, humidity curves.
- (f) Low Message define and High Message define: The screen will display the pictures of low message when CO2 value \geq AL1 setting; likewise, the screen will display pictures of high message when CO2 value \geq AL2 setting. You can replace each picture with self-designed artwork and must use the original definition of the image file name, "LowMsg1~4" and "HighMsg1~4".
- (g) After all settings are completed, press "Save" button to save settings and then press "Exit" button to quit the program.

(4) Calibration

When you use instruments for a period of time, you need to proceed a simple single-point calibration. Use the calibration function. Choose CO2 standard bottles (1000 ppm), outdoor air (350~450 ppm) or other CO2 concentration (less than 1000ppm) to proceed the calibration.

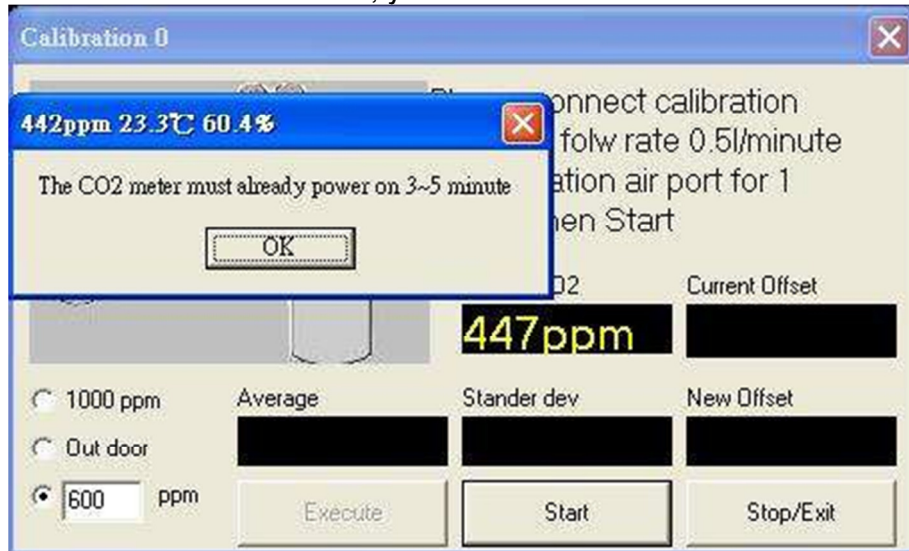
The entire process of calibration is within 5 minutes. It depends on the stability of supplying CO2 and suggests to provide 200CC~500CC per minute.



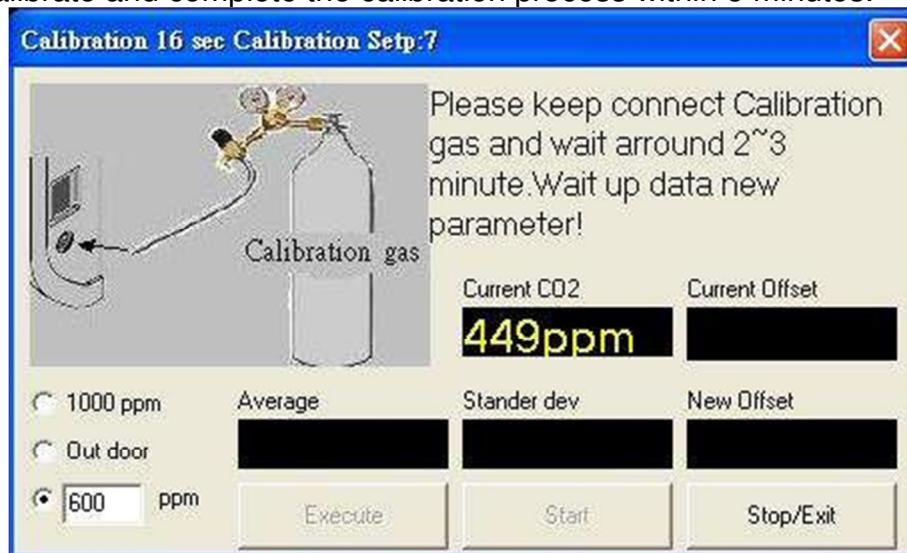
Operating Instructions:

- (a) Select CO2 sources: CO2 standard bottles (1000 ppm), outdoor air, or other CO2 concentration (less than 1000ppm)
- (b) Press "Execute" button

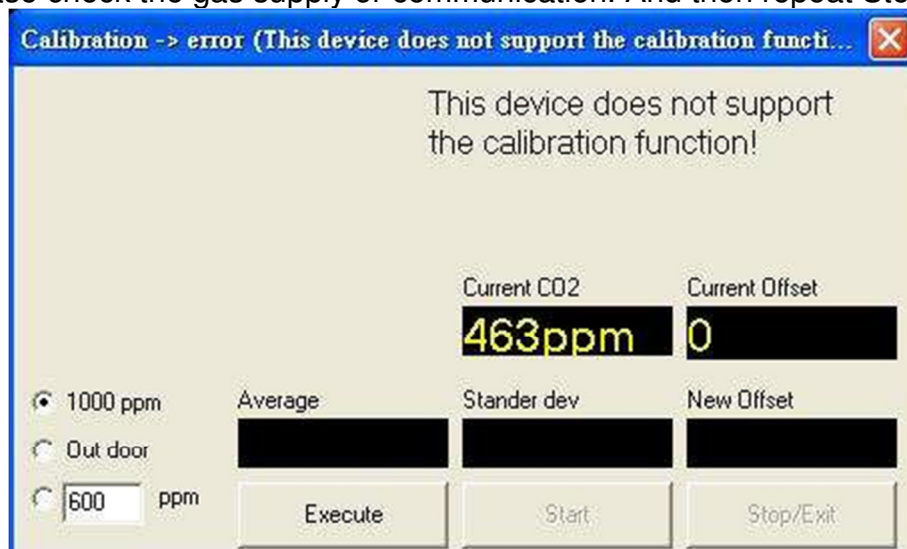
- (c) Confirm whether calibration gas is provided stably to the CO2 meter. If you select outdoor air to calibrate instruments, you need to wait for 30 minutes or more.



- (d) Start to calibrate and complete the calibration process within 5 minutes.

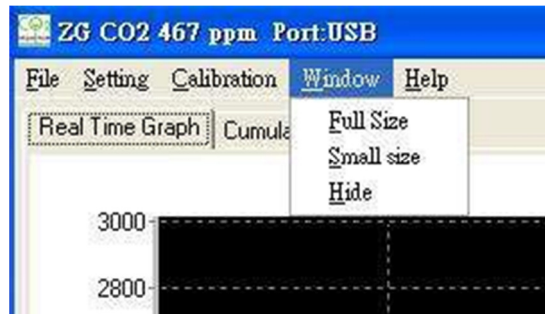


- (e) Confirm whether the reading is consistent with CO2 concentration of the standard bottle. CO2 concentration of outdoor air is about 400 ppm. If the reading differs more than 50 ppm, please check the gas supply or communication. And then repeat Steps (a)~(d).



- (f) Complete calibration procedure.

(5) Window Size Selection



- (a) Full size: Maximum display size
- (b) Small size: Minimum display size
- (c) Hide: Hide the window, but you can still see readings at the bottom of the screen.

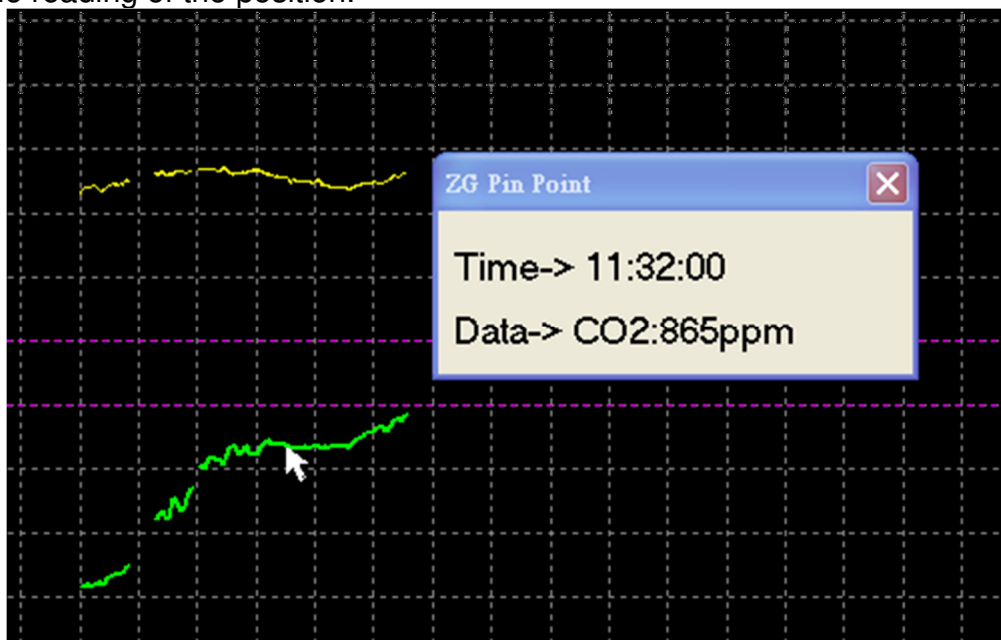


(6) Help

- (a) General Manual
- (b) What is IAQ
- (c) Plants with CO2
- (d) About ZG View

(7) Other Functions

- (a) Pin point indication: click on the curve line, and then press left side of primary button to display the reading of the position.



- (b) Select area average function: Display the readings of the points within range. (time, average, maximum, minimum value, etc.) The selected area is highlighted in white.

