CO_2 MONITOR 1200P
Instruction Manual
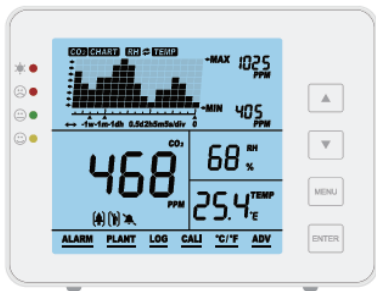
Table of contents

First steps

Thank you for your purchase!
This product can be used to monitor the CO2 concentration, relative humidity, temperature and room air quality.

Packing list

CO2 monitor unit
USB cable for power supply
User manual

Functions at a glance

Large display
Functions of the push-buttons
15° angled construction for easy reading
Low-drift NDIR sensor with long service life
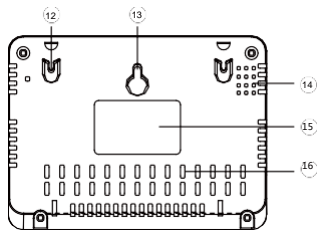Acoustic alarm
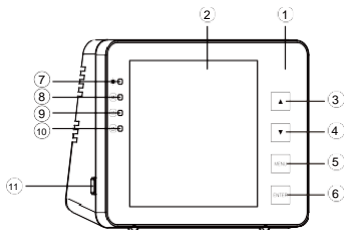Diagram with variable time zoom levels
CO2/RH/temperature monitor tracer
Auto calibration and manual calibration
Max/Min value display over a set time

Overview

Monitor sketch and component list

Item	Description	Item	Description
1	Front side	9	Good value
2	LCD	10	Low value
3	▲ button	11	USB port
4	▼ button	12	Hole for wall mounting
5	MENU button	13	Hole for screws
6	ENTER button	14	Buzzer grille
7	Operating display	15	Label
8	High value	16	Holes for sensors

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Operation and settings

- Use the USB cable supplied to connect up the device. The device is ready for operation as soon as the countdown reaches zero. See p. 3.

- Press ▲ ▼ to switch between time axis and CO2/RH/TEMP. The trend chart shows the recorded values over time for each of the three parameters. See p. 5.

- Reset to factory settings: Hold ENTER pressed for 3 seconds until an acoustic signal sounds.

- Press MENU once to display the main menu. Press MENU / ▼ to select the desired function. See p. 7.

- Press PLANT to switch between Persons [👤] and Plants mode [🌱]. See p. 8.

- Press ADV to change the high/low alarm limits for persons [👤] and plants [🌱]. See p. 11.

- Press ALARM to switch from loud 🔔 to mute 🔕. See p. 8.

- Press °C/°F to select °C or °F for the temperature display. See p. 11.

Instruction Manual

1. Plug in the device using the USB cable supplied as shown on the right.

2. After connection, the operating display and the 3 LEDs flash in turn.

3. The main display shows a countdown. You can use the product as soon as the countdown has reached zero. NO CALIBRATION necessary.

4
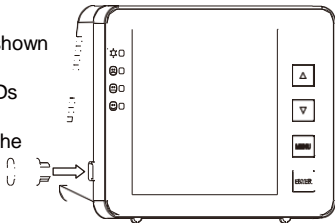
LCD monitor
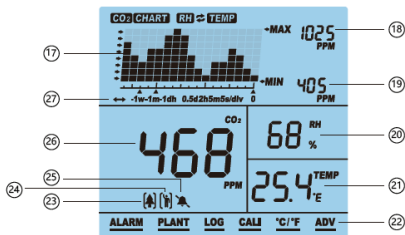
Item	Name	Item	Name
17	CO2/RH/TEMP chart	23	Plants mode
18	Max. value of the chart	24	Persons mode
19	Min. value of the chart	25	Acoustic alarm ON/OFF
20	RH (relative humidity)	26	CO2 value in ppm
21	TEMP (Temperature in °C / °F)	27	Displays the timeline of the chart
22	Main menu		

Trend chart display

The trend chart displays the measured values to date for each of the three parameters (CO_2/RH/Temp). There are 4 modes that can be selected with the ▲ button: CO2, TEMP, RH and "Cycle symbol" (-> alternates automatically between CO2/Temp/RH).
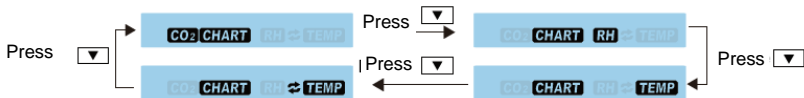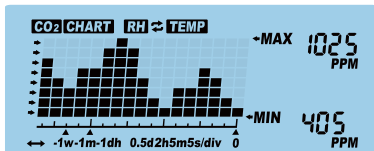
Press ▼ to switch between the available zoom levels for each parameter (minute/hour/day/week)
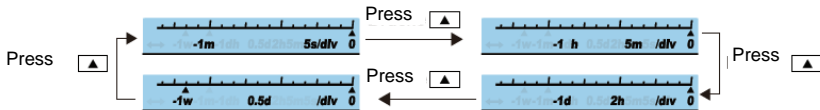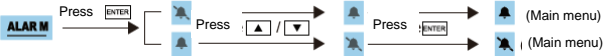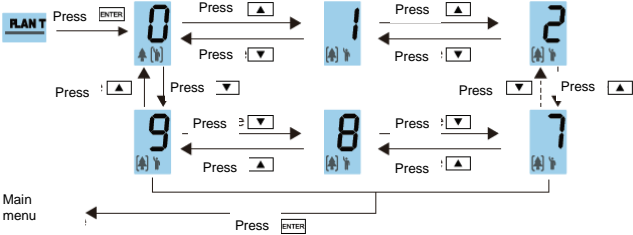
The available zoom levels for all the parameters CO2/RH/Temp and the increments in the different levels can be seen in the table below:
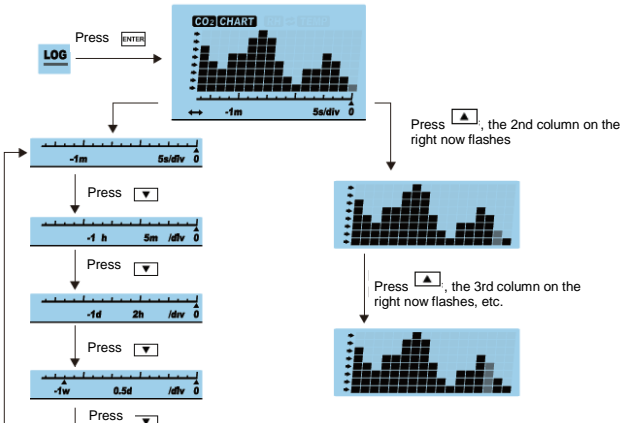
Zoom level (time interval)	Time per increment
1M (minute)	5 sec/increment
1H (hour)	5 m/increment
1D (day)	2 h/increment
1W (week)	0.5 d/increment

Max/Min
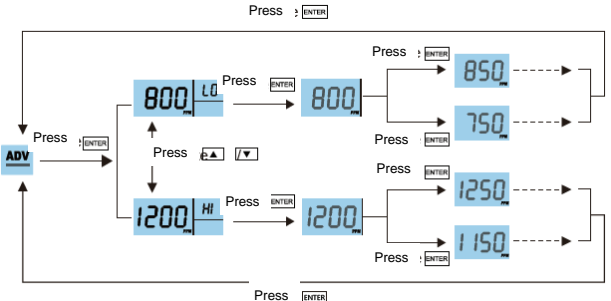
Two numerical indicators can be seen in the top right-hand corner of the display:
MAX and MIN. When the zoom level is changed, the MAX and MIN values reflect the highest and lowest values in the table for the selected parameter (CO2, RH and Temp).

Functions in the main menu

ALARM	PLANT	LOG	CALI	°C/°F	ADV

Press MENU to display the main menu. Press ▼ / MENU to change the selection; an underlined flashing cursor indicates the current selection.

To select a function, press ENTER while it is underlined by the flashing cursor. Note that if no button is pressed within 1 minute, the main menu disappears and the device returns to normal mode.

Function	Description
ALARM	If ALARM 🔔 is displayed, an acoustic alarm will sound as soon as thee CO2 value reaches the high or low limit. 🔕 means mute
PLANT	0 is the default setting for Persons mode. The default alarms for low and high values lie at 800 and 1200 ppm. Press "ADV" to change these settings, if necessary. To activate Plants mode, select one of the numbers 1-9 by pressing ▲/▼ . A description of the numbers and the respective plant types can be found on p. 14.

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Function	Description
LOG	
	This function allows you to view historical data sets.

Function	Description
CALI	
	Place the device in front of an open window or outdoors for at least 20 minutes before calibration in order to achieve an atmosphere with 400 ppm CO_2. Wait until the CO_2 measured value is stable, then follow the steps above for calibration. After calibration, wait 10 minutes before starting normal operation.
°C / °F	
	This function allows you to switch between Celsius (°C) and Fahrenheit (°F) for the temperature display.

Function	Description
ADV	
	Use this function to set high and low alarm limits for Persons mode (0) and the first option in Plants mode (1). The high and low alarm limits for the options 2-9 in Plants mode cannot be set. See details on page 14. (Annex)

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Specifications

Typical test conditions: ambient temperature: 23 +- 3°C, RH=50%~70%, altitude= 0~10 metres

Measurement	Specifications
Operating temperature	32°F ~ 122°F (0°C ~ 50°C)
Storage temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Relative humidity	0-95% (non-condensing)
CO_2 measurement	
Measuring range	0-5000 ppm
Display resolution	1 ppm (0-1000); 5 ppm (1000-2000); 10 ppm (>2000)
Precision	0~3000 ppm: ± 50 ppm ± 5% of the reading (take the max. value)
	(>3000) ppm: ± 7% of the reading
Repetition accuracy	20 ppm at 400 ppm
Temperature compensation	±0.1% of the reading per °C ±2 ppm per °C, referenced to 25°C
Reaction time	< 2 min for 63% of the level changes and < 4.6 min for 90%
Warm-up time	< 20 seconds

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Temperature measurement	
Operating temperature	32°F ~ 195°F (0°C ~ 90°C)
Display resolution	0.1°F (0.1°C)
Reaction time	< 20 minutes (63%)
RH (relative humidity) measurement	
Measuring range	5 ~ 95%
Precision	±5%
Display resolution	1% main menu display, 0.1% max/min display
Operating voltage	5±0.25 V DC
Dimensions	120*90*35 mm
Weight	170 g (6.0 oz) (without AC adapter)

Annex

No.	Meaning	Value for high/low alarm	Variable
0	Persons mode	800-1200 ppm	Yes
1	User-defined plants	600-900 ppm	Yes
2	Beans	600-900 ppm	No
3	Chillies	800-1000 ppm	No
4	Cucumbers	1000-1500 ppm	No
5	Grapes	800-1400 ppm	No
6	Orchids	800-1400 ppm	No
7	Potatoes	1200-1800 ppm	No
8	Strawberries	800-1200 ppm	No
9	Tomatoes	800-1200 ppm	No

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