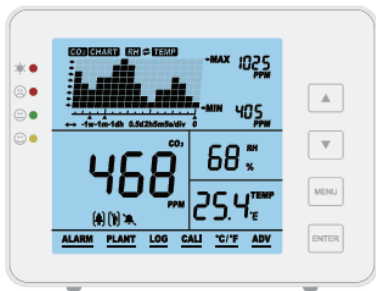


CO₂ MONITOR 1200P

Instruction Manual



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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

Mains adapter

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

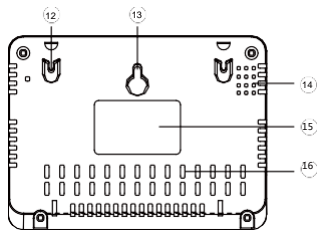
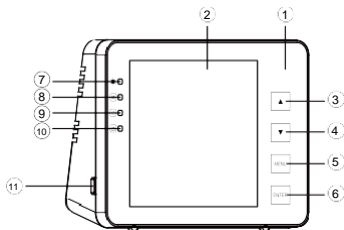
CO₂/RH/temperature monitor tracer





Auto calibration and manual calibration

Max/Min value display over a set time

















Overview

Monitor sketch and component list



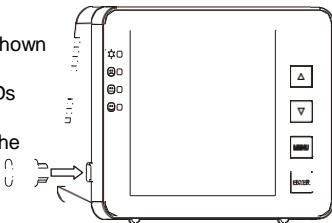
| Item | Description | Item | Description |
|------|--|------|------------------------|
| 1 | Front side | 9 | Good value |
| 2 | LCD | 10 | Low value |
| 3 |  button | 11 | USB port |
| 4 |  button | 12 | Hole for wall mounting |
| 5 |  button | 13 | Hole for screws |
| 6 |  button | 14 | Buzzer grille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

Operation and settings

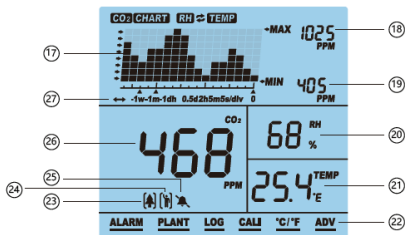
- Use the USB cable supplied to connect up the device. The device is ready for operation as soon as the countdown reaches zero. See p. 3.
- Press   to switch between time axis and CO2/RH/TEMP. The trend chart shows the recorded values over time for each of the three parameters. See p. 5.
- Reset to factory settings: Hold  pressed for 3 seconds until an acoustic signal sounds.
- Press  once to display the main menu. Press  /  to select the desired function. See p. 7.
- Press  to switch between Persons  and Plants mode . See p. 8.
- Press  to change the high/low alarm limits for persons  and plants . See p. 11.
- Press  to switch from loud  to mute . See p. 8.
- Press  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.




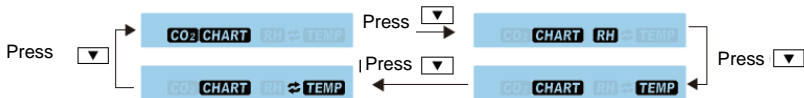
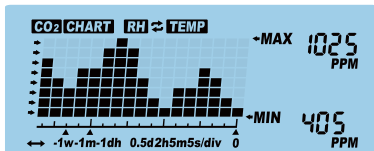
LCD monitor




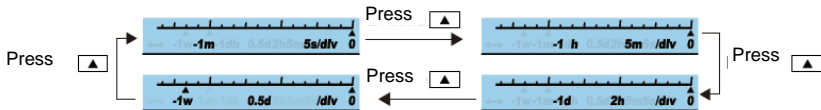
| Item | Name | Item | Name |
|------|-------------------------------|------|------------------------------------|
| 17 | CO2/RH/TEMP chart | 23 | Plants mode |
| 18 | Max. value of the chart | 24 | Persons mode |
| 19 | Min. value of the chart | 25 | Acoustic alarm ON/OFF |
| 20 | RH (relative humidity) | 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 (CO₂/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 |

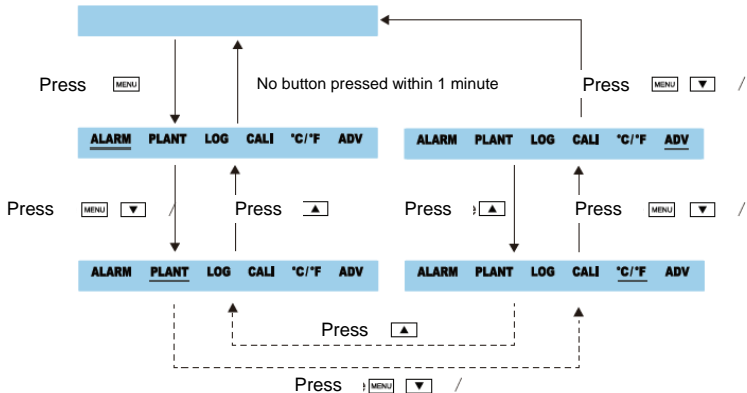
Max/Min

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).

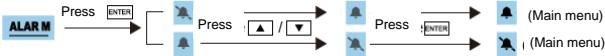


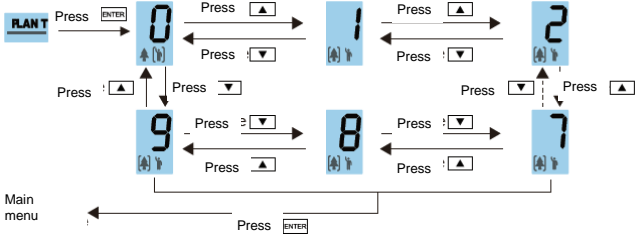

Functions in the main menu

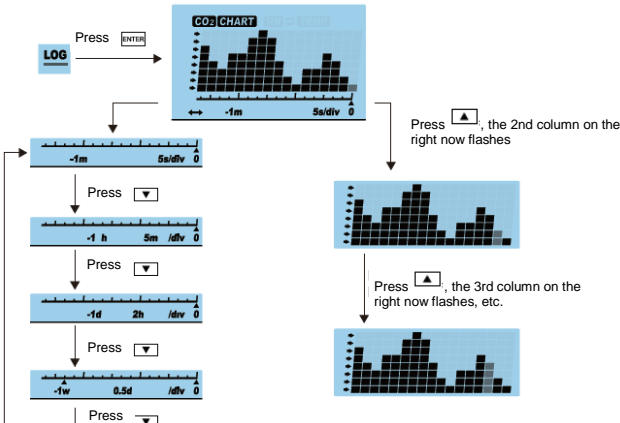
ALARM PLANT LOG CALI °C/°F ADV

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

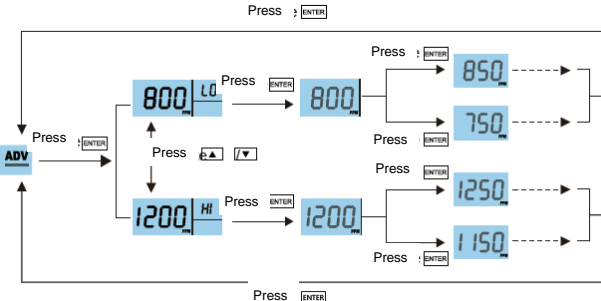


To select a function, press **ENTER** while it is underlined by the flashing cursor. Note that if no button is pressed within 1 minute, the main menu disappears and the device returns to normal mode.

| Function | Description |
|----------|---|
| ALARM |  <p>If ALARM  is displayed, an acoustic alarm will sound as soon as the CO2 value reaches the high or low limit.  means mute</p> |
| PLANT |  <p>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.</p> |

| Function | Description |
|----------|---|
| LOG |  <p>Press ENTER</p> <p>LOG</p> <p>CO₂ CHART 03-12-20</p> <p>-1m 5s/div 0</p> <p>Press ▼</p> <p>-1 h 5m /div 0</p> <p>Press ▼</p> <p>-1d 2h /div 0</p> <p>Press ▼</p> <p>-1w 0.5d /div 0</p> <p>Press ▼</p> <p>Press ▲, the 2nd column on the right now flashes</p> <p>Press ▲, the 3rd column on the right now flashes, etc.</p> <p>This function allows you to view historical data sets.</p> |

| Function | Description |
|----------|--|
| CALI | <p>Press ENTER → 400 <small>CO₂ ppm</small> <small>(CO₂ level display)</small></p> <p>Hold ENTER pressed for 3 seconds until an acoustic signal sounds → 250 <small>(Temperature display)</small></p> <p>→ 249 → → Main menu</p> <p>Press ENTER to go back</p> |
| | <p>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 CO₂. Wait until the CO₂ measured value is stable, then follow the steps above for calibration. After calibration, wait 10 minutes before starting normal operation.</p> |
| °C / °F | <p>Press ENTER → TEMP °C</p> <p>Press ▲ / ▼ → TEMP °F</p> <p>Press ENTER → TEMP °F</p> <p>Press ▲ / ▼ → TEMP °C</p> <p>Press ENTER → TEMP °C</p> |
| | <p>This function allows you to switch between Celsius (°C) and Fahrenheit (°F) for the temperature display.</p> |

| Function | Description |
|----------|---|
| ADV |  <p data-bbox="617 186 740 207">Press : </p> <p data-bbox="288 383 411 404">Press : </p> <p data-bbox="439 404 631 424">Press / </p> <p data-bbox="576 290 699 310">Press : </p> <p data-bbox="795 248 919 269">Press : </p> <p data-bbox="795 383 919 404">Press : </p> <p data-bbox="795 424 919 445">Press : </p> <p data-bbox="576 476 699 497">Press : </p> <p data-bbox="795 559 919 580">Press : </p> <p data-bbox="617 621 740 642">Press : </p> |
| | <p data-bbox="219 673 1248 797">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)</p> |

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) |
| CO2 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 |

| 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 |