

User Manual

ACCUR8 CO2-6000

CO2 Monitor with Temperature & Humidity

1. Introduction

Thank you for purchasing this ACCUR8 product. This user manual is to be considered a component of the device. Read carefully before using the device. Keep in a safe place for future reference. When the device is sold or given to someone else, the user manual must be provided to the new owner/user of the product.

As part of our ongoing policy to improve the design and specification of our products, we reserve the right to change any detail given without prior notice. Tempcon Instrumentation Ltd shall not be responsible for any liability of any nature which may result from the use of any information provided in technical literature.

Errors and technical changes excepted.

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2. General Safety Instructions

Risk of electric shock

Only use the device as described in the manual; otherwise, you run the risk of an electric shock.

- Children must only use the device under adult supervision.
- Disconnect the device from the power supply before starting any cleaning of the device.
- Position your device so that it can be disconnected from the power supply at any time. The power socket should be installed near the device and should be easily accessible as the mains cable plug is used to disconnect the device from the power supply.
- To disconnect the device from the power supply, always pull on the plug. Never pull on the cable.
- Before starting up the device, check the device, the cables and the connections for signs of damage.
- Never use a damaged device or a device with damaged parts.
- Only use the display console in a dry environment and do not touch it with wet or moist parts of your body.

Risk of suffocation/choking

Improper use of this product can result in suffocation, especially for children. The following safety information must be observed at all times.

- Keep packaging materials away from children. They can cause suffocation.
- This product contains small parts that could be swallowed by children. There is a risk of choking.

Risk of fire/explosion

Improper use of this product can cause an explosion. The following safety information must be observed at all times to prevent an explosion.

- Do not expose the device to high temperatures. Excessive heat or improper handling could trigger a short circuit, a fire, or an explosion.

Risk of damage to property

Improper handling can result in damage to the device and/or to the accessories. Always observe the following safety information when using the device:

- Never disassemble the device. In the event of a fault, please contact your retailer.
- Do not expose this device to high temperatures and protect it from water and high humidity.
- Protect the device from severe shocks or excessive vibrations.
- For this device, only use accessories and spare parts that comply with the technical information.

Risk of voltage damage

The manufacturer is not liable for voltage damage through the use of an improper power adaptor.

3. Packing List

CO2 Monitor Unit

USB cable for Power (standard USB power adaptor plug required)

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4. Warnings

- The provided USB cable can be ONLY used as power supply for this device.
- Do not disassemble this device or change internal wiring.
- Do not store or use this product in high temperature, high humidity, flammable, explosive or strong electromagnetic environment.
- Do not restore factory defaults too often, as it will cause program damage.
- Keep the device away from your face, as the exhaled carbon dioxide will affect its accuracy.

5. Features at a Glance

Large Display

Touch Button Operation

15° Bevel Design, Easy to Read

Low Drift NDIR Sensor, Long Lifespan

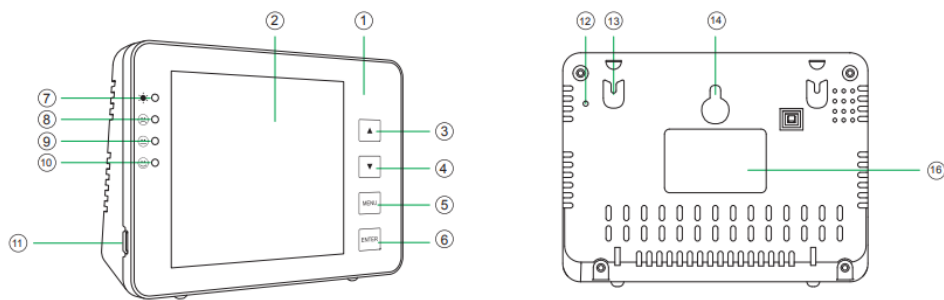
Audible and Visual Alarm

Temperature, Humidity and CO2 Monitor, Date and Time Display

Auto-Calibration and Manual Calibration

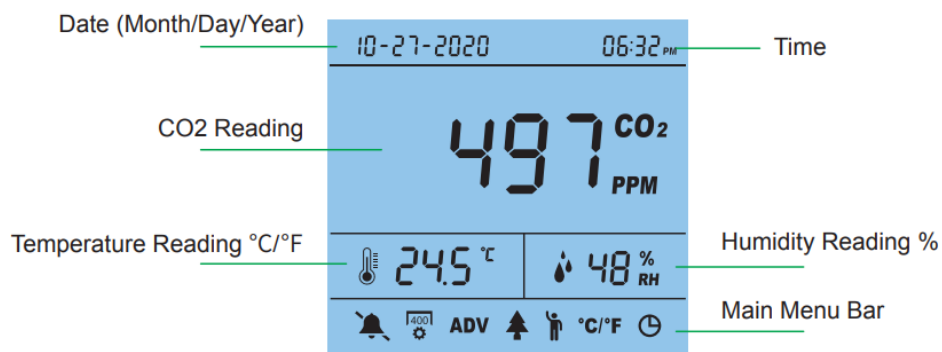
Wall mount or desktop

6. Overview



①	Front Panel	⑨	Orange Condition Indicator
②	LCD	⑩	Green Condition Indicator
③	UP Button	⑪	USB Port
④	Down Button	⑫	Hole for Buzzer
⑤	Menu Button	⑬	Hole for Rope
⑥	Enter/OK Button	⑭	Hole for Screws
⑦	Battery Indicator	⑮	Label
⑧	Red Condition Indicator		

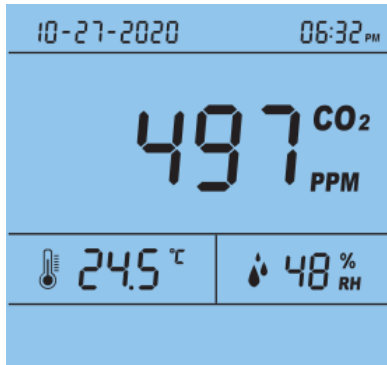
7. LCD Display



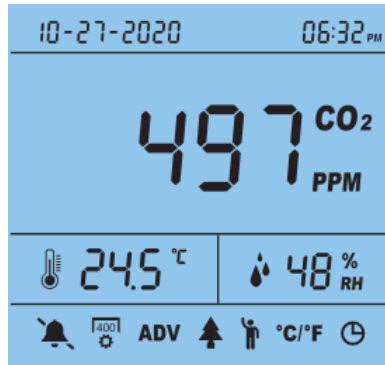
	Mute		Human Mode
	Audible Alarm		Degree Celsius
	Manual Calibration		Degree Fahrenheit
	Alarm Point Setting		Time
	Plant Mode		

8. Restore Factory Defaults

In Detection Panel (See image 1), hold the ENTER button for four seconds until an audible beep is heard.



(Image 1: Detection Panel)

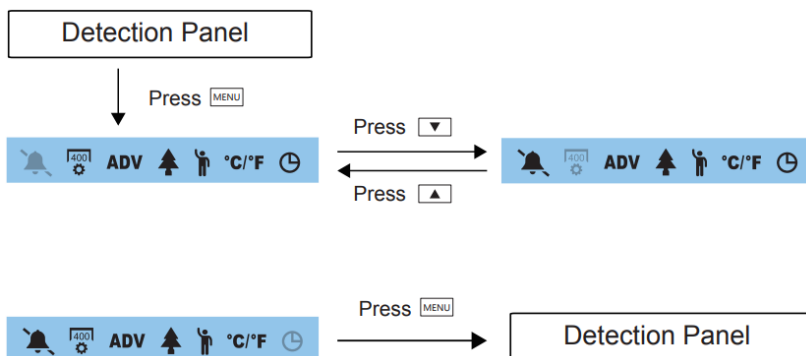


(Image 2: Operation Panel)

9. Menu Bar


Press the MENU button once to activate the menu bar, press arrow buttons to cycle and switch function options (press MENU to switch each option in turn until exit).

Notice: if the device is not operated in 30 seconds, the menu bar will disappear, and the display will return to the normal state.

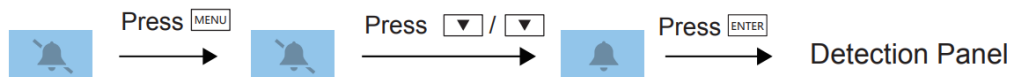


To set a particular function, press ENTER to enter this function when the icon is flashing, use arrow button to adjust the setting or figure, when it's done press ENTER to confirm and exit.

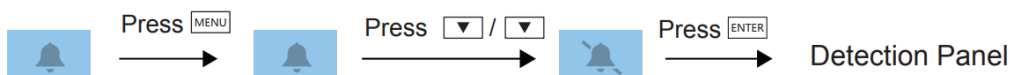
10. Alarm Buzzer

When it displays , an audible alarm will sound if the CO2 level exceeds a preset CO2 alarm value.

 means MUTE.



or



11. Plant Mode and Human Mode

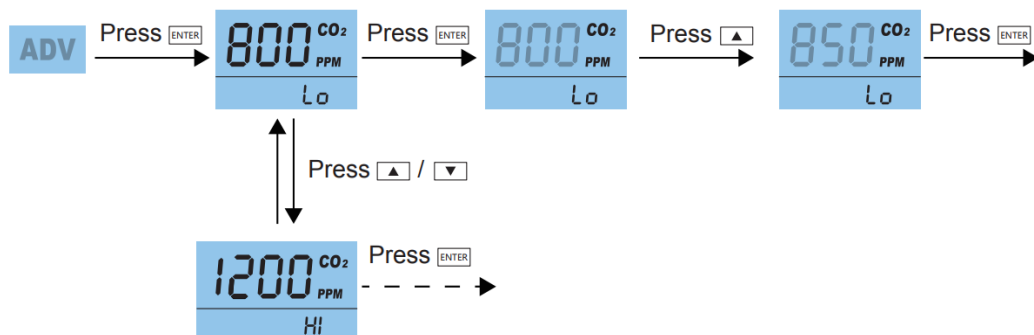
When  or  flashes, press ENTER to choose and enter that mode, and it will skip to the next icon.



12. ADV-Alarm Value

Use this function to set high and low alarm values for Human Mode and Plant Mode

Default alarm values are 800ppm and 1200ppm for both modes.



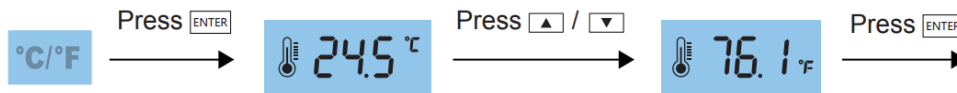
13. Alarm Indicator

In the Human mode, the GREEN light is on when the CO2 reading is lower than the low alarm value, the YELLOW light is on when it is between the high and low alarm values, and the RED light is on when it is higher than the high alarm value.

In the Plant mode, the RED light is on when the CO2 reading is lower than the low alarm value, the GREEN light is on when it is between the high and low values, and the YELLOW light is on when it is higher than the high value.

14. Temperature Unit

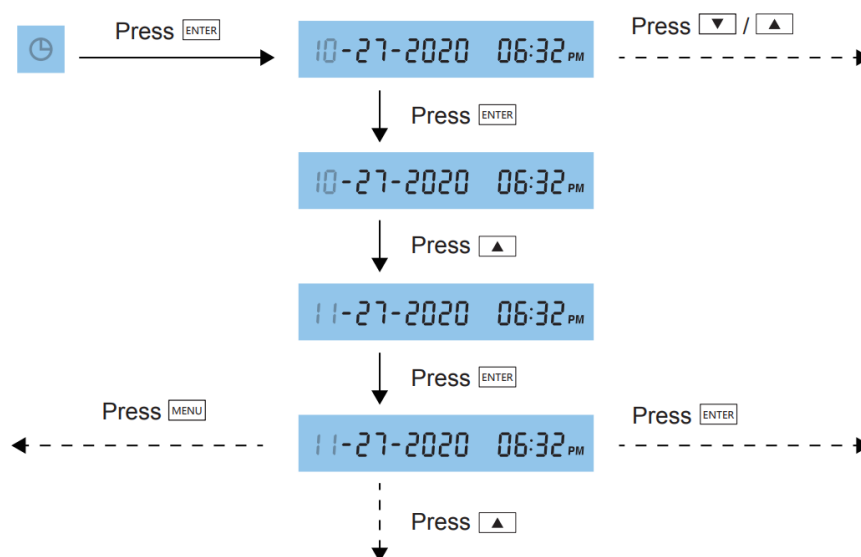
Use this function to choose between Celsius (°C) and Fahrenheit (°F) for the temperature unit display.



15. Time and Date

12-hour and 24-hour systems are both available for choice.

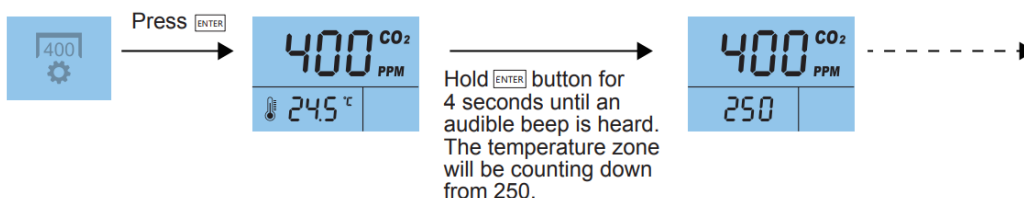
24-hour setting: when **AM** and **PM** flash at the same time, press **ENTER** to save the setting.



16. Calibration

Before calibration, run this device for at least 20 minutes with window open or in an outdoor environment with backup battery to reach an atmosphere with 400ppm CO₂.

Wait until the CO₂ reading is stable, then follow above steps for calibration. After calibration, leave it 10 minutes before normal use.



17. Specifications

Typical test conditions: Ambient Temp: $23 \pm 3^{\circ}\text{C}$, Humidity = 50%-70%, Altitude = 0-100 metres

Operating Temperature	32°F - 122°F (0°C - 50°C)
Storage Temperature	14°F - 140°F (-10°C - 60°C)
Operating & storage Humidity	0-95% (non-condensing)

CO2 Measurement

Measuring range	(0-5000)ppm
Display resolution	1ppm (0-1000); 5ppm (1000-2000); 10ppm (>2000)
Accuracy	(0-3000)ppm: $\pm 50\text{ppm} \pm 5\%$ of reading. (>3000)ppm: $\pm 7\%$ of reading
Temperature compensation	$\pm 0.2\%$ of reading per $^{\circ}\text{C}$ (reference of 25°C)
Response time	<2 minutes for 63% of step change or < 4.6 min for 90% step change
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)
Response time	<20 minutes (63%)

Humidity Measurement

Measuring range	5-95%
Accuracy	$\pm 5\%$
Display resolution	1% Main interface display, 0.1% Max/Min display

Operating Voltage	DC(5 \pm 0.25)V
Dimensions	120*90*35mm
Weight	170g device only

18. Service

Please contact us for any questions regarding the product or claims, preferably by email.

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19. EC Declaration of Conformity

Tempcon Instrumentation Ltd has issued a declaration of conformity in accordance with applicable guidelines and corresponding standards. The full text of the EC declaration of conformity is available on request from the address above.

20. Disposal

Dispose of the packaging materials properly, according to their type, such as paper or cardboard. Contact your local waste-disposal service or environmental authority for information on the proper disposal.

Do not dispose of electronic devices in the household rubbish! Used electronic devices must be collected separately and recycled in an environmentally friendly manner.

Do not dispose of batteries and rechargeable batteries with the household waste. After they are used, the batteries can be returned to our point of sale or to a nearby location (for example, retailers or municipal collecting points).

Batteries and rechargeable batteries are marked with a symbol of a crossed-out dustbin and the chemical symbol of the pollutant. "Cd" stands for Cadmium, "Hg" stands for mercury and "Pb" stands for lead.

Document Version 1.0

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