

OPERATION MANUAL

CO2, HUMIDITY, TEMP. WALL MOUNT/DESKTOP MONITOR

Model:7729

INTRODUCTION

This is an accurate, fast, smart and easy-to-use indoor air quality monitor. In addition to measuring the CO_2 concentration, it also measures the ambient temperature, relative humidity and display the hazardous level. This monitor is developed to detect the presence of CO_2 in ambient air and helps user to take care of Indoor Air Quality.

Features:

- Large LED displays CO_2 value, humidity and temperature.
- Wall mount display with light bar to provide easy reading from far distance
- Touch panel to program the setting
- NDIR (non-dispersive infrared) waveguide CO_2 technology
- 3-color lightbar (green / yellow / red) gradually changes color with CO_2 concentration.
- CO_2 **a**utomatic **b**ackground **c**alibration(called ABC) for long time drift compensation
- Buzzer alarm function is included
- Areas of application: Widely used in the office building, school, exhibition hall, shopping mall, meeting room, fitness center, restaurant and other public places where personal comfort and healthy are important.

MATERIAL SUPPLIED

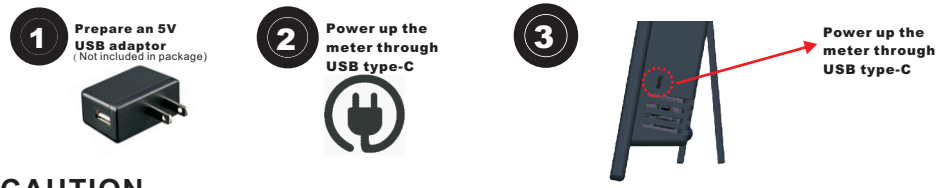
The standard package contains below:

- CO_2 monitor x 1pc
- USB-C cable x 1pc

  NOTE: provided USB-C cable is for power charging only, can't be used for data transfer.
- Operation manual x 1pc
- Sticker & Screws for wall mount hanging x 1 pack

POWER UP

This CO_2 meter is designed as wall mount & desktop use. It is powered up by 5VDC through USB-C cable. For mobility, you may also use power bank for temporary use. Once CO_2 is powered, the LED will auto turn on.



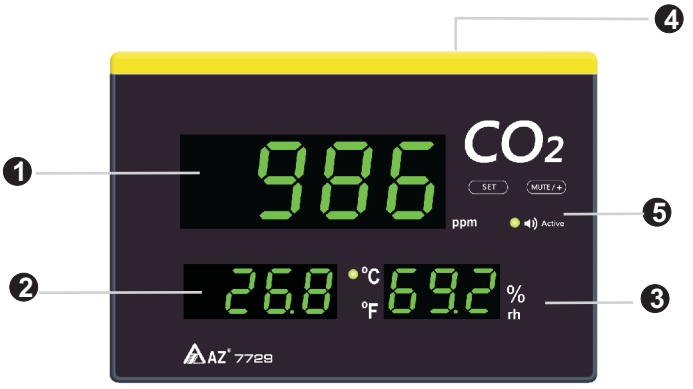
CAUTION

Please take off the AC power adapter and store it well when this CO_2 monitor left idle for long. Please use a standard USB power supply (such as PC's USB port, universal AC adapter with USB port). Improper power supply can cause serious damage to the device, or result in injury or death to the user.

The vents allow the air circulation liquid for measurement of the CO_2 concentration and the ventilation should not be blocked.

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DISPLAY , KEYPAD, SPECIFICATION



1. CO_2 concentration, parts per million (ppm). NDIR CO_2 sensor, display up to 9999ppm
2. Ambient temperature. ˚C/˚F switchable. Range -10~60˚C(14~140˚F)
3. Relative humidity. Range 0.1~99.9%RH
4. Three color light bar. The status of measured CO_2. Default: <800ppm 800~1000ppm >1000ppm
5. CO_2 concentration alarm buzzer. Buzzer is default as OFF and can be activated through keypad

SET

-Setting modes. Long press to enter setting mode

MUTE /+

-While buzzer sounds, short press to mute
-While in setting mode, press to adjust value



SPECIFICATION			
Measuring range		Response time	
CO_2	0~9999 ppm,	CO_2	<30 seconds (63% step change)
Temperature	-10.0~60.0°C (14.0~140.0°F)	Tair	<2 mins (90% step change)
Humidity	0.1~99.9% RH	Humidity	<20 minutes (90% step change)
Resolution	1ppm, 0.1°C/°F, 0.1%RH	Operating	0~50°C , 0~95% RH (avoid condensation)
Accuracy		Storage	-20~ 60°C,0~95%RH(avoid condensation)
CO_2	±50ppm±5% of reading(0~2000ppm) Other range is 10% of reading	Power supply	5VDC USB type C port
Temperature	±0.6°C/±0.9°F	Power consumption	<500mA
Humidity	±5%RH (at 25°C, 10~90%RH) ; ±7%RH (at 25°C , other range)	Meter size	226 x 152 x 45 mm (L x W x T)
		Weight	450g
		Standard package	Meter, manual, USB type C cable ,Hanging accessories.

OPERATION



3 different colors

SET | MUTE/ +

2 functional keys for setup purpose

1. Power on and Measure:

-Connect the USB-C cable to a PC or 5VDC wall adapter or power bank to power on the device.
-After power on, the LED count down for 10 seconds during warm-up.
-The device will start to measure CO_2 concentration, ambient temperature and relative humidity after warm-up.

2. Light bar :

Besides the value display, this meter is also equipped with programmable light bar feature.
There are 3 different light bar color for CO_2: Green, Yellow and Red. The color auto switches according to the measured Co_2.

The default status of measured CO_2. <800ppm 800ppm~1000ppm >1000ppm

3. Buzzer & How to turn off buzzer:

Buzzer function is default OFF in case of using in quiet places. It is required to activate buzzer function in setting mode while audible alarm is needed. While buzzer is activated and measured CO_2 is over alarm threshold, buzzer sounds once a second till pressing "**MUTE**" key to stop.

4. Setting:

Long pressing **"SET"** key to enter the settings. And then press **"SET"** key to select setting modes in sequence: AL (Alarm setting), Unit (temperature unit), Buzzer, ABC (auto background calibration) and bL (Brightness of light bar).
Press **" + "** key to adjust the parameters.
***Note: During the setting process, the device will return to the main screen after 25 sec of idle time.**

4.1 Alarm(AL): The default alarm setting is 1,000ppm. It is adjustable from 800ppm to 3,000ppm, the interval is 100ppm. This threshold is related to buzzer alarm trigger and red light bar trigger. Press **"+"** to adjust alarm threshold value.

4.2 Temperature unit: Press **"+"** to switch between °C and °F

4.3 Buzzer activation: Buzzer is default OFF for using in quiet places. Press **"+"** to turn it to ON.

4.4 CO_2 ABC function: ABC means the lowest measured CO_2 value in past 7 days will be used as 400ppm to auto calibrate the CO_2 sensor to reduce the long term drift. It is default as ON. However, **it is not suggested to turn on ABC feature in hospital, green house, winery or any less ventilated places where CO_2 has no chance to get low.**
Press **"+"** to switch between ON and OFF.

4.5 Bightness of light bar: The bightness of light bar is adjustable. From off to strong is 0 to 10, 0 is turned off and 10 is the strongest. Default as 6. Press **"+"** to adjust the brightness of light bar to fit your need. Though light bar might be set to off, it will still blink at weakest level 1 brightness while measured CO_2 is higher than alarm threshold.

5. Calibration

The meter is calibrated at standard 400ppm CO_2 concentration in factory. While you turn on the meter for the first time, simply leave it in fresh air condition to check if it is within specification. If it is, no need to do re-calibration.

Nevertheless, you may still do either ABC or manual calibration regularly to maintain good accuracy. Press **" SET"** + **"+"**keys at the same time till "**CAL**" is flashing. Long pressing **"SET"** key to start the calibration. During the calibration, **"CAL"** will flash on display with a 300 seconds count down. After 5 mins count down, the display return to normal measuring mode to indicate the calibration is done. During the calibration procedure, long pressing **"+"** key can quit the calibration function.

CAUTION: Do not calibrate the meter in the air with unknown CO_2 level. Otherwise, it will be taken as 400 ppm and leads to inaccurate measurement. The manual calibration is suggested to be done outdoor with good ventilation, fresh air and sunny day where CO_2 level is around 400ppm. Do not calibrate in rainy day because high humidity will affect the CO_2 level in air. Do not calibrate in places crowded with people or close to where exist high CO_2 such as ventilating outlets or fireplaces.

ERROR CODE AND SOLUTIONS

CODE	PROBLEM	SOLUTION
E01	CO_2 sensor is damaged	Send back to repair
E02	Measured reading is under the lower limit	For CO_2 E02: Re-calibrate. For other E02: leave the meter in room condition for 30 mins. If it not works, send back to repair
E03	Measured reading is above the upper limit	For CO_2 E03: put the meter in fresh air for 5 mins. For other E03: leave the meter in room condition for 30 mins. If it not works, send back to repair
E17	ABC mode of CO_2 sensor is fail	Send back to repair
E31 ▪ 34	Temp./RH measuring circuit is in error	Send back to repair

? Can't power on

Check whether the adaptor is well plugged and the 5VDC power supply is working.

WARRANTY & RETURN AUTHORIZATION

The meter is warranted to be free from defects in material and workmanship for a period of one year from the date of purchase. This warranty covers normal operation and does not cover misuse, abuse, alteration, neglect, improper maintenance, or damage resulting from leaking batteries. Proof of purchase is required for warranty repairs. Warranty is void if the meter has been opened.

Authorization must be obtained from the supplier before returning items for any reason. When requiring a RA (Return Authorization), please include data regarding the defective reason, the meters are to be returned along with good packing to prevent any damage in delivery and insured against possible damage or loss.

FAMILY PRODUCTS

Other related CO_2 products:

Portable:

a. Model 7752, 7755, 77532, 77535 Temp./CO_2 /RH meter

b. Model 77596 portable CO/CO2/Temp. Logger. high performance

c. Model 77597 portable CO/CO2/RH/Temp. Logger. high performance

Wall mount

a.Model 7721/7722/77231/772332 Temp./CO_2 /RH meter

b.Model 7530 Wall mount CO_2 controller.

Desktop:

a.Model 7787/88 deskop Temp./RH/CO_2 meter, general purpose.

b.Model 7798 desktop Temp./RH/CO_2 Logger, with relay.

c.Model 7728 deskop Temp./RH/CO_2 backlight meter.



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