MODEL: AR8200

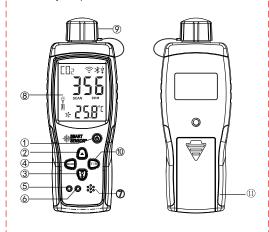
Carbon Dioxide Detector Instruction manual



As this device is an intellectual precise measurement apparatus, it is very important that you read through these instructions before using this device.

1. Explanation of the appearance

- ① **ዕ** :ON/OFF
- ② Decrement button(▲)
- ③ Increment button / backlight (▼♥)
- MODE : Measurement mode button
- ⑤ The first siren (green indicator)
- 6 The second siren (red indicator)
- ⑦ Buzzer
- **®** LCD Display
- Sensor
- 10 T / R: Temperature / relative humidity button
- Battery compartment cover

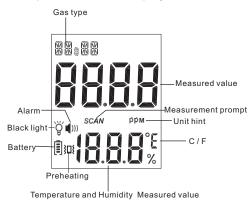


2. Technical features

Function	Range	Resolution	Accuracy
CO2	0 to 5000ppm	1ppm	±50ppm±5%rdg
	Pressure dependence: +1.6% reading per kPa deviation from normal pressure, 100kPa		
Temperature	-10 to 60°C 14 to 140°F	0.1°	±0.6°C/0.9°F
Humidity	0.0 to 99.9%	0.1%	±3%(10 to 90%) ±5%(< or > 10 to 90%)
Wet Bu l b	-5 to 60°C 23 to 140°F	0.1°	Calculated from RH and
Dew Point	-20 to 60°C -4 to 140°F	0.1°	Temperature

- Over measurement range display:--OL--
- Alarming method: acoustic-optic alarming
- Working principle of the sensor : electrochemical sensor
- The service life of the sensor : 2years(it can be replaced)
- Power supply: 3 X 1.5V AA battery
- Battery service life: about 100 hours of continuou use (when the backlight is off).
- Size:182*66*32(mm)

3. Explanation of the display



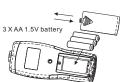
4.Introduction

This Carbon Dioxide detector can detect the Carbon Dioxide content between the 0~5000PPM and shows the Carbon Dioxide volume with an LCD. The product features:

- As it uses the imported Carbon Dioxide sensor, it is very
- precise and its performance is stable. • It uses the intellectualized design and has
- gotten multiple functions.
- With highlight backlight display and acoustic-opti alarming, it is easily configured.
- The embedded temperature compensation can

make the meter measuring the correct value in the environment temperature of -10~40°C.

- As its case is ergonomically designed ,it looks handsome, feels good and is easy to carry. Applications:
- Carbon Dioxide manufacturing workshop
- Petroleum refining and petrochemical plants
- Carbon Dioxide content detecting in trains and automobiles
- Carbon Dioxide content detecting in minerals
- Carbon Dioxide content detecting during mountain climbing and in sealed place
- Other industries and plants using Carbon Dioxide.



5. How to operate it

A. Push the cover downwards to open it and put new 3 X 1.5V AA battery in.

B.Power on/off

Press the " ϕ " to power on. the system will start preheating process, 120 seconds the countdown will be displayed in the LCD, after completion of the countdown, namely into the normal state of measurement. If during press the power switch " ψ " key, you can skip preheat condition, directly into the normal state of measurement.



C.Backlight On/Off

You can switch the backlight on or off by slightly touching

D. How to set up the alarming grade for the meter In the measurement of "SCAN" state, press the "MODEL" keyboard will enter setup state, the default into the first is 4 level alarm value settings, according to the up ▲ and down ▼♥ key, set 0 ~ 9 number, press the "T/R" choice

set bit. press the "MODEL" key, save 4 level alarm value, and enter the 2 level alarm value settings, according to the up ▲ and down ▼ 👸 key, set 0 ~ 9 number, press the "T/R" choice set bit. then click "MODEL" key, save 2 level alarm value, and return to boot measuring state "SCAN". (the factory default Settings value is: 4 level alarm value is 2000 PPM. 2 level alarm value 4500 PPM)

E.Meter alarming

The meter alarming when the meter measurement value is less than the preset value .The buzzer alarming and the green indicator flickers when the meter measurement $% \left(\mathbf{r}\right) =\left(\mathbf{r}\right)$ value is less than the value preset for the grade 4 alarming-line; and the buzzer alarms and the red indicator flickers when the meter measurement value is less than the value preset for the grade 2 alarming-line.

6.Attentions:

- 1). This meter is a precise measurement apparatus. To avoid damaging the meter, keep it away from water and hot objects (more than 60°C).
- 2). If the meter will be measuring for a long time, please turn off the backlight to save power consumption and prolong the service life of the battery.
- 3). When " is displayed, the battery is fully; the small black frame in the battery sign reduces as the battery power volume reduces . When " ; " is show the meter cannot work normally . Please promptly replace. First turn off the meter , then take out the unused battery and put new batteries in.
- 4). The meter is automatically power off if no button is pressed in 10minutes.
- 5). When the buzzer alarms, the measured value is less then the alarming-line you have set up; so please take measures to protect people's lives and property.

6). If you don't plan to use the meter for a long time, please close instrument and remove the battery to avoid the battery exudates damage.

7. Different concentrations of carbon dioxide to the influence of human body

	Carbon dioxide content	Table Ming
	350~450ppm	With general outdoor natural air environment
	350~1000ppm	Fresh air, breathe smoothly
	1000~2000ppm	Feel the air turbidity, and began to feel drowsy
	2000~5000ppm	Feel headache, sleepiness, dull, difficulty concentrating, rapid heartbeat, mild nausea
	>5000ppm	May cause serious lack of oxygen, cause permanent brain damage, coma and even death

8. Pay special attention to

The Sensing tip is high precision parts, When in use must be careful to protect, Don't dirty broke. This component cannot repair, not in warranty scope.



