

Portable Ozone Gas Sensor

User Manual QL-800-O3



Guangzhou Qili Environmental Equipment Co.,Ltd /www.qlozone.com

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Thanks for purchasing our product. Please kindly read the user manual carefully before using. QL-800-O3 is an essential equipment of continuous detection of ozone gas concentration, suitable for indoor ozone sterilization, ozone generator outlet concentration, can accurately detect the ozone density. With secondary light alarm function, greatly satisfy the scene of the industrial safety monitoring of equipment reliability requirement, this product is widely used in petroleum chemical industry, industrial production, flue gas, exhaust gas environment, biological pharmaceuticals, environmental protection, school laboratory, etc.

Features:

- ◆ Imported high precision electrochemical sensors
- ◆ USB high speed data transmission, data downloadable (optional)
- ◆ LCD dot matrix display technology, display gas type, gas unit
Gas density, maximum test value, local time, ambient humidity
- ◆ Chinese/English control interface
- ◆ Inner sample pump
- ◆ Explosion-proof conformity certification, Exia II CT4

Keys Operation:

	Turn on/off: long press for 3s to turn on/off the device, short press to confirm or save data.
	Menu: in detection mode, press this button to enter into parameter setting mode, and in parameter setting mode, press this button to move the cursor.
	Plus: in parameter setting mode, short press it to select items upward or add value. Long press for 3 seconds to turn on/off alarm function quickly.
	Minus: in parameter setting mode, short press it to select items downward or decrease value. Long press for 3 seconds to turn on/off air pump quickly.
	Exit: in parameter setting mode, short press it to go back to previous menu. Long press to shift the gas concentration unit quickly.

(Note: The long press function only works in detection mode. When you change or reset any data, please remember to click “ON/OFF” button to confirm and save the settings. Remember to turn on the pump when start the detection. Please turn off the pump when there is no need to detect, which will be helpful for the service life of the pump)

Power On

Press the “ON/OFF” for three seconds, the detector will be turned on and the pump will start to work. The screen displays the following interface successively: Brand and Logo, main parameter interface, initialing countdown. The countdown would be 60 or 120 seconds, which is to make sure that the sensors are fully activated. After countdown, the device enters normal detection interface.

Zero Calibration

Zero calibration must be done in clean air. Better to do once after alarming happens.

Press "MENU" to enter parameter setting mode, select the "calibrate zero", and press "ON/OFF" to enter the mode. Observe the value of "real time concentration". If the reading is not zero and the drifting is too big when the reading is stable, then it is necessary to conduct zero point calibration.

Press "ON/OFF", the real-time concentration will go back to zero, and press "ESC" to go back to detection mode, gas concentration values also back to zero.

Note: Zero calibration of oxygen detector, nitrogen detector and carbon dioxide detector (target gases are component of the air) can not be done in the air. Only the target point calibration (value of target point concentration is the standard concentration values in the clean air) can be done.

Process of Over-range incorrect operation

Users should avoid using gases which exceed the measure range to impact the sensor, because it will affect the lifespan and sensitivity of the sensor, even, "poison" the sensor. If there is any over-range incorrect operation makes the detector displaying an concentration at a large reading, the remedy is to take the device out of the environment immediately and put it in clean air for over half an hour, and then observe the reading, if it keeps going down, then wait until the reading back to zero before powering it off, and do the zero point calibration next time before using it. If the reading maintained at full scale, user should send the device back to manufacturer or agent for repair or replacing the sensor.



- ① — Air Inlet
- ② — Air Outlet
- ③ — air chamber
of sensor
- ④ — LCD
- ⑤ — PLUS
- ⑥ — MINUS
- ⑦ — MENU
- ⑧ — ESC
- ⑨ — ON/OFF

Target point calibration

Note: Calibration needs to be done by professionals and with necessary accessories and standard gas.

Prepare the standard gas before starting the target point calibration. In detection mode, press "MENU", select "calibrate span", press ON/OFF button to enter. Then you will need to enter password. (If you need password, please contact the manufacturer to get it)

After entering the password successfully, press ON/OFF to enter the target point calibration interface, as shown in the picture. The interface will display "concentration", "set value. The concentration is the result got from the calculation of several internal calibration parameters. The process of calibration is the process to recalculate the internal parameters of the device. The set value is the value need to be entered manually; it should be the concentration of the standard gas to be calibrated. Select the parameter under the current interface, modify its value with "PLUS" and "MINUS" button.

The calibration process is as below:

1. Connect the detector with standard gas cylinder by hose.
2. Enter the target point calibration interface, set the "SET value" as the standard gas concentration.
3. Release the standard gas to the detector in a flow rate of 500mL/min. The value of "concentration" will become larger gradually and become stable after 30seconds.
4. When the value of "concentration" is stable, press the "ON/OFF" button, the value of "concentration" will be same with or almost same with the "Set value". The calibration is finished.
5. Cut off the standard gas supply. Press "ESC" to go back to detection interface.

Technical Specification

Gas Detected	Ozone (O3)	Recovery Time	≤10S
Detection principle	Electrochemical principle	Linearity error	≤±1%
Sampling Method	Pump suction type ,	Display	Digital LCD backlit display
Measure Range	0-100ppm/0-10ppm/0-200ppm/0-500ppm/0-1000ppm	Gas unit	multiple gas units to switch the display
Resolution	0.01ppm	Humidity	0-95%RH
Precision	2%FS	Degree of protection	IP66
Response Time	≤10S	Operating time	100 Hr
Repeatability	≤±1%	Weight	300g
Zero shift	≤±1% (F.S/year)	Explosion-Proof	Exib II CT4
Operating language	Chinese/English	Alarm mode	Sound, light, vibration
Temperature	-40°C ~ 70°C	Dimensions	205*75*32mm

Warranty Card

Purchaser		Purchase Date	
Contact Person		Telephone & Email	
Address		Post code	
Product Name		Series Number	
Client Signature		Distributor Signature	

Ozone sensor producer: Guangzhou Qili Environmental Equipment Co.,Ltd /www.qlozone.com

Please fill in the table and send the card to our company.

After receiving this form, we will confirm to you and the warranty is valid