

USER'S MANUAL FOR 0-1 LPM OXYGEN GENERATOR



Important

Please make sure you read this user manual carefully before using the Oxygen Generator.

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1. Foreword

Thank you for purchasing our products, hoping you will be satisfied with our products.

This operation manual contains function, operation steps, attention, basic trouble solution and so on. To ensure your efficient use of the machine, please have a close read of this operation manual before operating it.

Maybe there are some pictures, which are different from what you have seen in the real model in this manual.

2. Safety notice

- The device is not a medical device, so it is not considered for life support of life extension!
- The device shall be placed in an indoor ventilated place and protected from direct sunlight, and the distance from it to walls and other objects shall be more than 30CM.
- Please do not place any foreign matters or liquid containers on the chassis.
- It is forbidden to stack sundries at the side air holes of the machine, so as to prevent the high temperature caused by the blockage of air inlet and exhaust, which may cause shutdown or decrease of oxygen concentration.
- Ensure the bottom of the equipment is free from obstruction, to guarantee that the cooling air outlet is free to exhaust correctly during operating, or else the machine will be over-heated.
- It is not allowed to place the machine upside down or horizontally.
- If the power supply voltage is unstable and exceeds the normal voltage range of 15V, please connect the voltage regulator before use.
- Oxygen is combustion-supporting gas. Keep the device far away from naked lights or fire resource, no smoking. Keep this device far away from flammable and explosive areas.
- Do not start or stop the machine frequently. To restart the machine after turning off, please wait at least 5 minutes (namely, exhaust internal gas of the machine completely, for if air compressor turns on with pressure, its life will be shortened)
- Do not apply oil or grease on any part of the oxygen machine.
- Turn off the switch if not in use.
- Before cleaning the dust on the device, the power plug must be removed from the power socket, in order to safeguard electric shocks.

- In case there are quality problems, do not dismantle it unless the person is correctly qualified.
- If device is used for ozone generators, it should only be used by trained personnel.
- If device is used for ozone generators, please ensure that you are aware of the safety requirements associated with the use of Ozone. The directive issued by the Health and Safety Executive give a recommended level of exposure of 0.2 ppm over 15 minutes. The ozone generators with this machine will deliver much more ozone than this level. Avoid inhaling ozone gas directly from the outlet tube.

3. Attention

- Do not use the device without air filter. The intake air filter need to be replaced every 250 hours. if the local air is dirty , it might need to be replaced in even shorter time, such as 100 hours or 50 hours.
- When using the machine, avoid bending the oxygen output silicone tube.
- There is a small non-return valve inside the machine, but still be careful and do not allow water goes in to the equipment. Should this happened, switch off the main supply immediately.
- Turn up the flow meter switch immediately when power switch is turned on.
- The oxygen concentrator needs 2~5 min to warm up before reaching the correct operating condition. The oxygen concentration won't be high and stable after warming up.
- There is intermittent exhaustion sounds “chip - puff” during operating (a few seconds in intermission).
- The oxygen concentration will be up to 90%, only when the device is under 1 LPM flow rate, and under good condition. It is not allowed to use this device for medical ozone generators which request oxygen flow at very high purity and very high accuracy.
- When adjusting flow regulator for different flow rate, but the float remains stationary, turn off the machine immediately and check for the reason.

4. Product Description

This machine is designed according to the standard of household appliance, and can be used for home ozone generators which need oxygen source at low oxygen flow rate 0-1 Lpm .

This machine adopts air as raw material, using Pressure Swing Adsorption (PSA) method which

can separate oxygen from nitrogen and other gas from the air, to produce high-purity oxygen gas for supplementary oxygen for domestic use. The high quality mini oil-free compressor and long life molecular sieve are used, and the oxygen is generated by pure physical method and at constant flow. When the working temperature of the compressor is too high, the air compressor will stop working automatically to protect the itself and make sure the whole machine is under safety situation. It is suitable for the supplementary oxygen users or the mini ozone generator users.

5. Operating condition

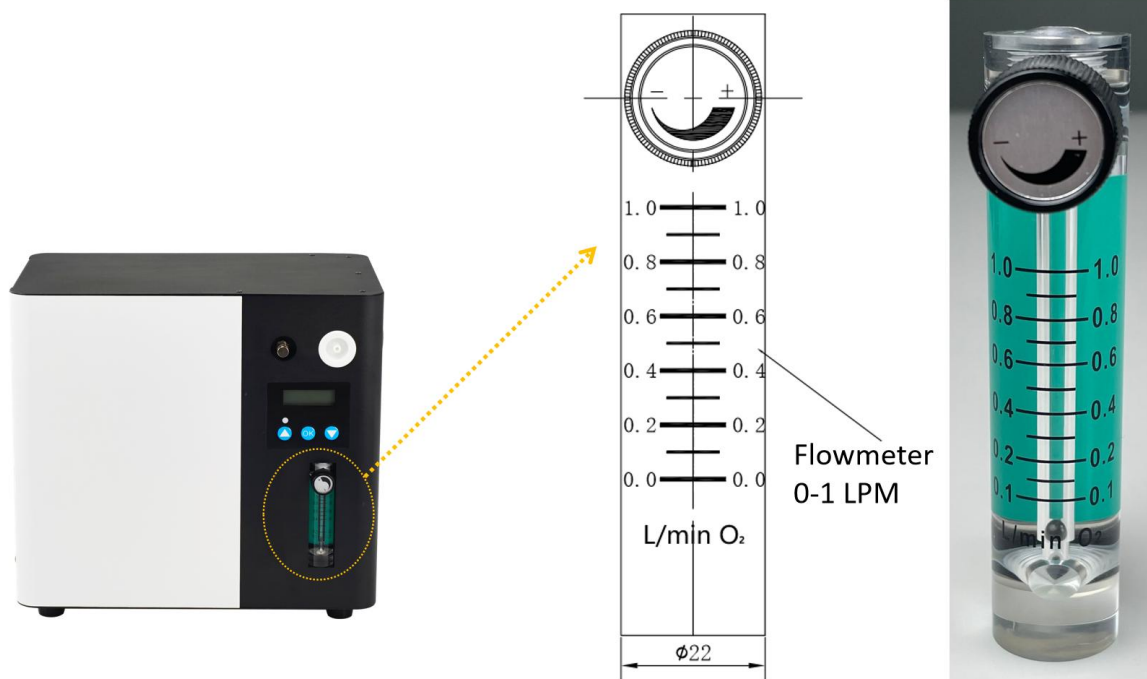
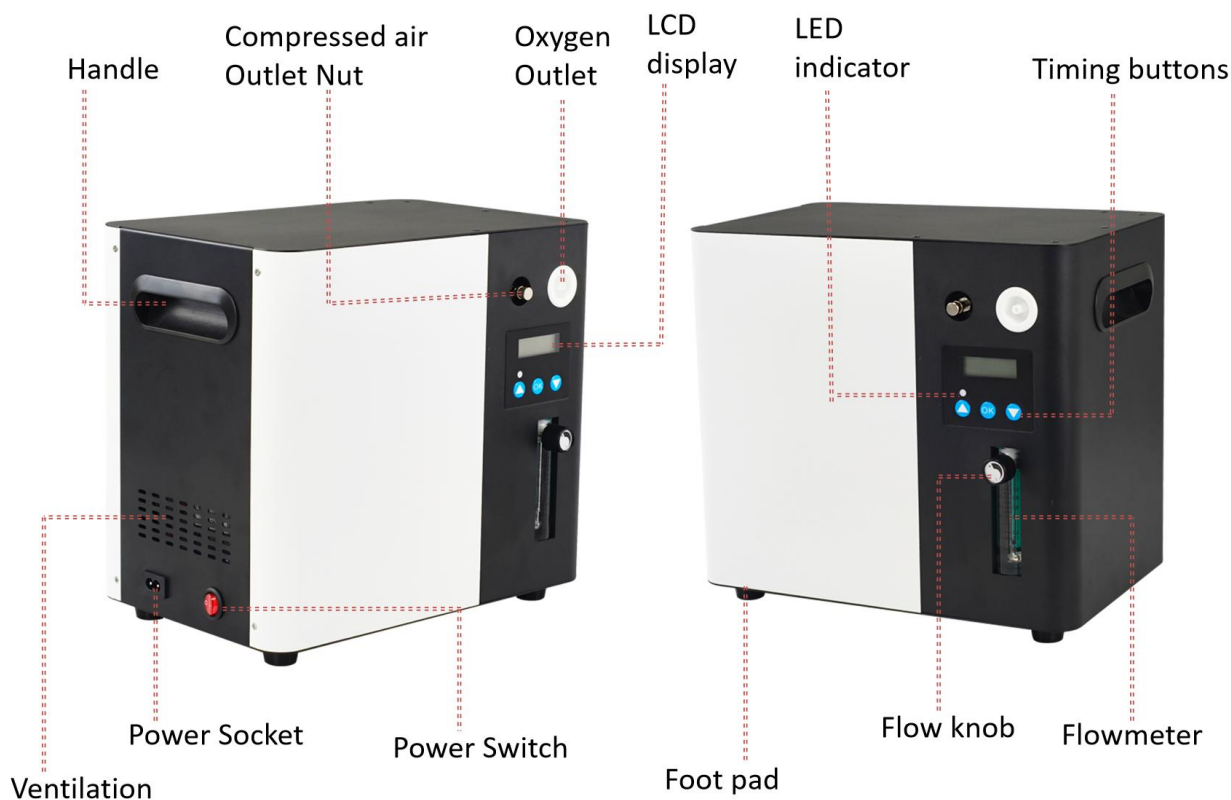
1. Ambient temperature: 10℃-40℃
2. Relative humidity: <80%
3. Air pressure: 30 kPa-70 kPa
4. No strong magnetic field in the surrounding area. When storage temperature is < 0℃, please place the device at normal temperature environment for over 4 hours before working.

6. Technical Parameters

Product name	0-1 LPM Oxygen Generator
Model	OX1L-02
Oxygen Production Method	PSA method
Oxygen flow	0.1 - 1 LPM
Flow scale	0.1
Oxygen Purity	90%±3%
Oxygen Outlet Pressure	20 - 70 kPa
Rated power	100 W (ave.)
Operation voltage (V/Hz)	220V AC, 50 Hz / 110V AC, 60 Hz
Timing for work	Count-down timer setting in minutes, or non-stop
Sound level	< 45dB (A)
Net Weight	11.2 Kg
Product Dimension	31 * 25 * 39 cm

Gross weight	12.5 Kg
Package Dimension	32 *23 * 30 cm

7. Appearance Diagram



8. Operation steps

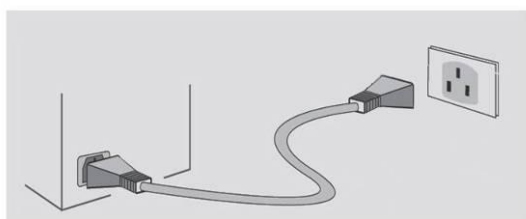
1. Unpack the package, and check the parts as following:

- ① Main machine
- ② Power cord
- ③ Silicone tubing
- ④ Spare part air filter
- ⑤ Instruction manual

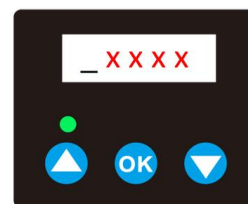
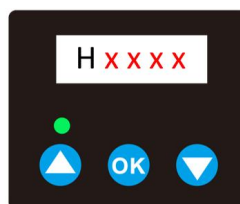
For any missing items, please contact the dealer for replacement in time.



2. Connect the power, insert the connector of the power cord into the power socket at the rear of the machine, and insert the plug at the other end of the cable into the power socket.



3. Press the power button next to the power socket. The machine will turn on and start working. The LCD display will show HXXXX for the first 15 seconds. It is the total cumulative working time in hours. After 15 seconds, it turn to show the _XXXX, the single working time in minutes.



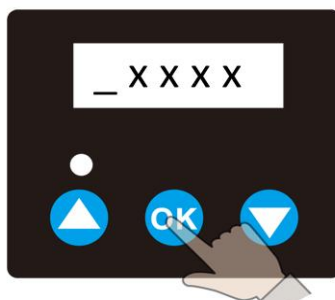
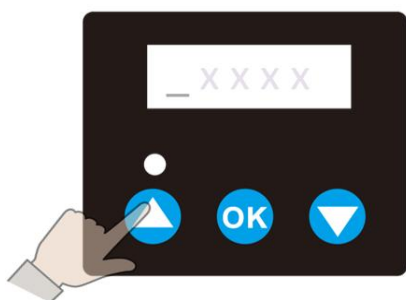
4. If for feeding oxygen to ozone generators, connect the silicon tubing to the oxygen outlet on this device, and the oxygen inlet on the ozone generator. Make sure the ozone machine is >30cm far from this device for safety, and ensure the silicon tubing are connected well without any blocks.

5. Adjust the oxygen output flow according to the requirement. (counterclockwise—on, clockwise—off). Make sure the air flow is >0.1L/min when working.

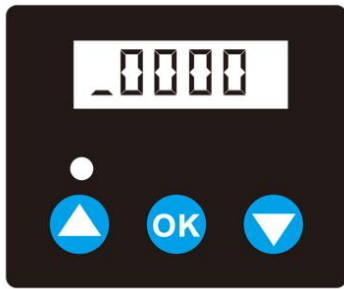


6 . If need timing operation, press ▲ button to enter timer setting mode.

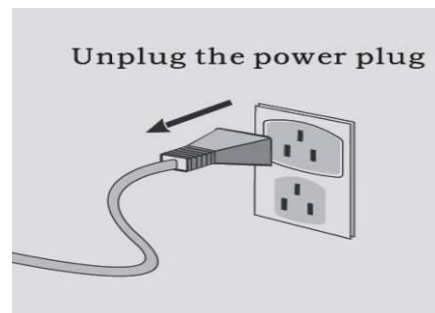
Press ▲, digital will flash. Countdown timer can be set under flashing status: Each press of ▲ for increasing 10 minutes; each press of ▼ for decreasing 1 minute. Machine will record the setting in 3 seconds. Press OK button to start working.



7. Machine will stop when timer countdown to zero. But the cooling fan will keep working for 5 minutes more to cool the machine down.



9. When finished producing oxygen, turn off the power switch; if there is discontinuous use, please unplug the power plug.



9. Compressed gas testing port

1. This compressed gas testing port is for test purpose only. No need to touch it if the machine works properly.
2. Only when there is no any oxygen output, even after recheck the oxygen flow knob on the flow meter, still no any oxygen coming out, the nut can be remove and do the test. This testing port will be available to test whether the air compressor is still in good condition or not.

10. Maintenance description

1. Clean the housing

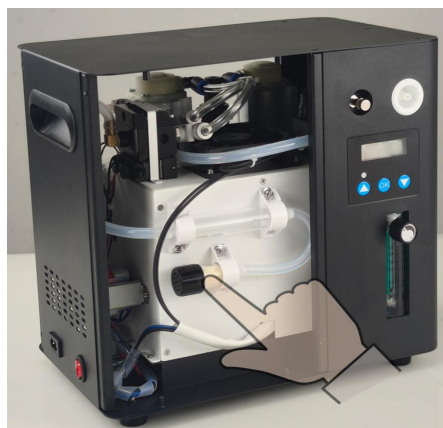
The housing surface shall be cleaned at least once a month. First, cut off the power supply and wipe it slightly with wet clean and soft cloth soaked with disinfectant, and prevent the liquid from seeping into the machine.

2. Check and replace the filter

Remove the front white metal panel, the air filter can be seen. It can isolate dust and purify air. The replacement of the air filter is very important to protect the compressor and molecular sieve

and prolong the service life of the oxygen generator. So please check or replace it in time. Generally, check it every 50 hours. When the machine makes bigger noise or gives less than 1 Lpm oxygen output, the filter must be checked or replaced.

The filter is installed on the wall of the air compressor casing. Use a screw driver to unscrew it, and replace to a new one.



Notice: Do not operate the oxygen generator when the filter is not installed or is wet, or it will damage the machine for a long time.

The actual replacement time of the filter shall be determined according to the actual working time and environmental impact. If the filter is dirty and blocked, it shall be replaced immediately no matter how long it is used.

Notice: the filter is recommended to replace to new one regularly as consumables.

11. Troubles and solution

No.	Trouble	Causes	Solution
1	No any operation after power connected	1. No connection between circuit of oxygen concentrator and power 2. No power from the power socket seat 3. Circuit of fuse protector broken	1. Check out whether switch, plug, power line in good connection. 2. Change to another power socket seat where has power. 3. Replace the fuse protector and find the cause

2	The display is normal, but no gas output or low outlet flow	1. Folded tubes, no smooth outtake 2. Filter clogged, air inlet flow too low 3. Capacitor of compressor broken 4. Compressor broken 5. The ambient temperature is too high, and the self-protection program of compressor is started 6. Electrical control board defect	1. Reconnect the tubes 2. Clean the filters 3. Replace start capacitor 4. Have the compressor replaced 5. Keep the machine at cool place and keep other stuff 30 cm far from it. 6. Replace electrical control board
3	Too noisy exhaust	1. The joint of exhaust muffler fallen off 2. Exhaust muffler broken 3. The air filter nearly blocks	1. Reconnect the joint well 2. Replace the muffler 3 Replace the air filter
4	The machine makes a “puff” sound every few seconds.	This is the sound generated during nitrogen emission. It is normal, and it is a sign of good operation of the machine.	No need repair.

12. Condition for transportation & storage

Environment temperature scale: -20-45℃

Comparative humidity scale: ≤80%

13. Quality Warrant

One year guarantee for the whole machine.

14. Diagram of Oxygen Generator

