Hyperbaric Oxygen concentrator user manual

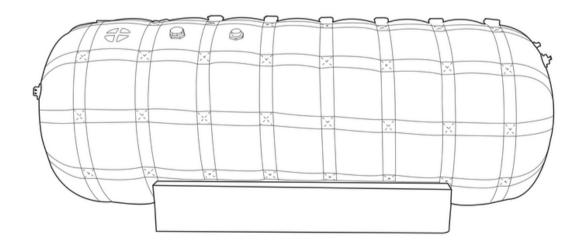


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REVIVEX

1. PRODUCT DESCRIPTION

The dedicated oxygen generator for the oxygen chamber is specially designed to be used with the oxygen chamber. It can fill the oxygen chamber with regular air and oxygen-enriched air at the same time. Among them, conventional air is produced by compressing the inhaled filtered air through an air compressor. Oxygen-enriched air is powered by AC power, air as raw material, molecular sieve as adsorbent, and pressure swing adsorption separation (PSA). Made based on the principle.

1.1 Product functions

By cooperating with the oxygen chamber for hyperbaric oxygen therapy, the patient's body is placed in a high-pressure environment. Under the action of high pressure, oxygen is input into the respiratory and microcirculatory systems and reaches various organs of the human body, thereby increasing the levels of arterial blood oxygen partial pressure and oxygen saturation., to promote human metabolism, eliminate fatigue, improve body resistance, help beauty, prevent the occurrence of geriatric diseases, and improve subhealth status.

1.2 Scope of application and contraindications

Scope of application: For medical institutions or families to use oxygen chambers for hyperbaric oxygen therapy.

1.3 Features

- 1) Sheet metal shell, novel design, simple operation, stable operation and easy maintenance.
- 2) Oxygen is produced by physical method, using air as raw material, no additives are used, only power supply is required, and the cost of use is low.
- 3) The pressure swing adsorption technology (PSA) using high-efficiency molecular sieves has a simple process and low energy consumption.

2. SECURITY SUMMARY

2.1 Safety Precautions

In order to ensure the safety of patients, please strictly abide by the following safety precautions when using this machine:



- 1. Users should use this machine in accordance with the provisions of this manual. The manufacturer is not responsible for any damages caused by violation of the provisions of this manual.
- 2. Individuals and families who use this machine with an oxygen chamber for treatment should follow the guidance of professional doctors.
- 3. This machine cannot be used for life support or life extension. Patients who are unable to express discomfort or recognize alarm signals require additional monitoring.
- 4. Patients with oxygen poisoning, oxygen allergy, and carbon monoxide poisoning are prohibited from using this equipment.
- 5. The power supply must comply with the regulations on safe use of electricity, otherwise it may cause personal injury.
- 6. This machine cannot be used in places with open or hidden fire sources, flammable or explosive hazards, humidity, high or low temperature, or in small and closed rooms (spaces). Smoking should be strictly prohibited near oxygen inhalers.
- 7. It is strictly prohibited to block or cover the heat dissipation vent at the bottom of the machine, otherwise overheating inside the device may cause malfunction.
- 8. Before cleaning and maintaining the machine, turn off the power and unplug the power plug. Failure to do so may result in electric shock.
- 9. The power cord and power plug of this machine should be checked frequently if any damage is found. Breakage should be replaced immediately.
- 10. If the equipment is out of service for a long time, it should be powered on and checked before use to confirm that all functions are normal before it can be put into use.
- 11. There is dangerous voltage inside this machine that may cause personal injury. It can only be debugged and repaired by authorized personnel of the company. No modifications can be made to this device; please do not open the device casing yourself to avoid the risk of electric shock. Any repairs and upgrades to the product must be performed by service personnel trained and authorized by the manufacturer.

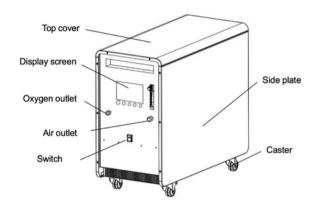
3. WORKING PRINCIPLE

It consists of an oxygen production circuit, an air circuit, and various detection circuits. For specific working principles, please consult the equipment supplier.

4. STRUCTURE

4.1 Structure and composition

It consists of shell, display screen, air outlet, oxygen outlet, switch, casters and internal structure.



5.TECHNICAL INDICATOR

5.1 Usage environment

- Ambient temperature: 5°C~40°C
- Relative humidity: 30% ~ 75% Atmospheric pressure: 860hPa~1060hPa
- Power supply voltage: AC220V
- Power frequency: 50Hz
- The surrounding environment should be free of corrosive gases and strong magnetic fields

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5.2 Product functions

Timing function: can display the cumulative working time of the machine.

Time setting: The oxygen chamber treatment time can be set according to the patient's needs.

Automatic shutdown: When the preset oxygen chamber treatment time is reached, the machine will automatically shut down.

Alarm function: When a power outage occurs, this machine can issue an alarm prompt. Remote control function: equipped with a remote control, which can remotely start or stop the machine.

5.3 Technical indicators

10L/min		
≥120L/min		
≥350Kpa		
≥200Kpa		
Chamber pressure, oxygen concentration, set		
pressure, set time, running time, accumulated		
working time		
760m*330mm*650mm		
58KG		
AC110V/220V;50/60Hz		

6. INSTALLATION PROCESS

6.1 Unpacking

The packaging box should be turned on its side, open the top, take out the foam, and lift out the machine.

6.2 Inspection

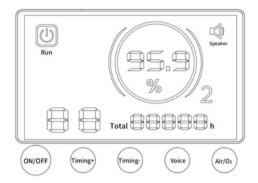
The machine and accessories should be checked for transportation damage, and then the accessories and accompanying documents should be checked according to the packing list.

6.3 Safety matters

During unpacking and inspection, it was found that the machine was damaged and should not be used to ensure safety.

7. PRODUCT USE

7.1 Operation



- 1.The display interface is as shown in the picture above. The screen displays oxygen concentration, cabin pressure and accumulated time;
- 2 Before starting the machine, connect the corresponding interfaces of the machine and the oxygen chamber one by one;
- 3 Connect the machine to the power supply, turn on the power switch, and the display will light up;
- 4 The person being treated enters the chamber and ensures that the cabin seal is complete;
- 5 The operator sets the running time by pressing Timing+ and Timing-.
- 6 Press the ON/OFF button to turn on the machine, and the oxygen chamber will
- start to be filled with pure air, and after a period of time, it will automatically switch to the state of simultaneous air and oxygen filling;
- 7 Press the Air/O2 button to turn on or off the air and oxygen outlets independently.

8. MAINTANANCE

8.1 Cleaning the machine

When cleaning, you should first cut off the power supply of the machine, then use a soft towel dipped in a small amount of neutral household detergent to wipe all parts of the casing, and finally wipe it dry with a towel. When wiping, be careful not to let liquid seep into the gaps in the chassis.

8.2 Filter replacement

Timely replacement of the filter is very important to protect the air compressor and molecular sieve and extend the life of the machine. The filter can be replaced after removing the top cover, and should be replaced in time as required.

9. TROUBLESHOOTING

9.1 Precautions for troubleshooting

When performing troubleshooting, please observe the following precautions:



TROUBLESHOOTING NOTES

Notice

If the problem cannot be successfully solved by following the suggestions in this chapter, please have the machine repaired. Do not attempt to repair or remove the casing yourself.

REVIVEX

9.2 Fault analysis and troubleshooting

If a problem occurs during use, please read this chapter carefully before sending it for repair. You may solve the problem easily by yourself.

Table 7 Fault analysis and troubleshooting example table

FAULT PHENOMENON	CHECK ITEM	SOLUTION	
There is no display on the display when the machine is turned on or running, and the machine sounds an alarm.	1. Is there a power outage?2. Is the power cord loose?	1. Use the machine again when the power is available 2. Check and plug in the power cord tightly.	
Oxygen concentration is too low	 Is the oxygen flow rate too large? Does molecular sieve age after long-term use? Is the filter clogged? Are the heat dissipation blocked? 	 Adjust oxygen flow. The molecular sieve needs to be replaced. Clean and replace the filter. Make sure the exhaust from the heat dissipation vent at the bottom of the machine is clear. 	
Noisy operations	Is the machine placed smoothly?	Place the machine firmly.	
Other faults	Contact the dealer or manufacturer, and do not let non-professionals perform repairs.		

10. Transportation and storage

10.1 Precautions for transportation and storage



Transportation and storage precautions

Notice

- 1. During transportation or handling, the machine should be kept vertically and is not allowed to be inverted or lying horizontally.
- 2. When the storage temperature is lower than 10°C, the machine should be placed in a normal working environment for 8 hours before use.
- 3. The machine that has been out of service for a long time should be powered on and checked before use to confirm that all functions are normal before it can be put into use.

10.2 Storage and transportation environmental requirements

- Ambient temperature: -20°C~+50°C;
- Relative humidity: 30%~93%;
- Atmospheric pressure: 500hPa~1060hPa.

10.3 Transport

The logo on the packaging box of this machine complies with the requirements of GB/TI91-2008 "Pictorial Markings for Packaging, Storage and Transportation". The packaging box is lined with shock-proof foam. The complete packaging of the machine is allowed to be transported by common means of transportation. During transportation, violent force should be avoided. Collision and direct exposure to rain or snow.

10.4 Storage

This machine should be stored in a well-ventilated room away from strong sunlight and corrosive gases.

11. Production date and expiration date

1.1 Date of production

The production date of this machine is shown on the nameplate behind the main unit.

11.2 Period of use

The service life of this machine is 2 years. The service life of this machine is related to the environment, usage and maintenance methods. Please use and maintain it according to the usage environment, usage and maintenance methods required in the manual.



PRECAUTIONS FOR USE PERIOD

Notice

The machine's lifespan is 2 years. Post this period, the manufacturer disclaims any liability for risks arising from extended use.

12. AFTER SALE SERVICE

12.1 Warranty period

If this product has quality problems that are not caused by human factors within three months from the date of sale, our company is responsible for guaranteeing returns, replacements, and repairs; under normal use and storage, this product has a two-year warranty (the cumulative use time does not exceed 8000 hours), if quality problems occur during the warranty period, our company will repair them for free; if quality problems occur after the warranty period, our company will charge maintenance costs. If the user is unable to provide an invoice, the warranty will be extended by one month based on the company's factory date.

12.2 Warranty coverage

The following situations are not covered by our company's free warranty:

- 1) Damage caused by incorrect operation by the user or use under abnormal conditions
- 2) Damage or deformation of the entire machine (including parts) due to collision or drop
- 3) Damage caused by user's own disassembly, repair and modification
- 4) Damage caused by natural disasters
- 5) Wearable and consumable items: filter foam, filter cotton, etc.

13. MATCHING ACCESSORIES



THINGS TO NOTE WHEN CHOOSING ACCESSORIES

Notice

Please do not use parts and accessories not approved by the manufacturer to avoid adverse effects on safety and product performance.

14. PACKING LIST

NAME	MAIN UNIT	FILTER	USER MANUAL	WARRANTY CARD	PRODUCT CERTIFICATION
Qty.	1	1	1	1	1