

DZ-1W Oxygen generator

user's manual

Please read the manual before use

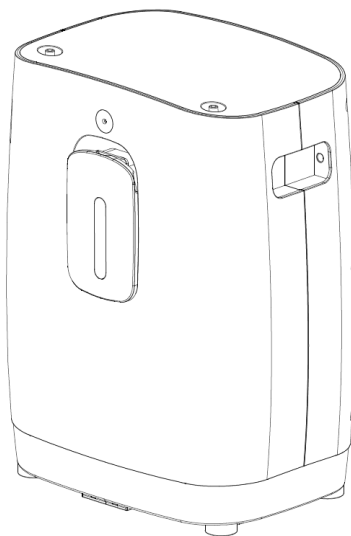


table of Contents

1 Overview	1
2. Precautions for safe use	2
3. Structural characteristics and working principle	3
4. Technical characteristics	5
5. Unpacking and installation	7
6. Use and operation	9
7 Fault analysis and troubleshooting	11
8. Maintenance and care	12
9. Transportation and storage	14
10. Warranty period and after-sales service	15
11. Packing list, supporting accessories specifications	16

1 Overview

Thank you for purchasing our oxygen generator.

In order to ensure that you can use this oxygen generator safely and correctly, please read this manual carefully before using it to fully understand and master the performance of the product and the correct operation and maintenance methods.

This manual describes the operation, use, and maintenance of the DZ-1W oxygen generator.

1.1 Product Features

The DZ-1W oxygen generator is one of the series of products produced by our company. The product uses molecular sieve as the adsorbent, uses the advanced pressure swing adsorption (PSA) principle, and uses air as the raw material to produce oxygen through physical means. The following features:

- 1) The air is taken from nature.
- 2) Adopt advanced pressure swing adsorption technology (PSA), advanced process flow and low energy consumption.
- 3) The product has a novel shape design, simple operation, stable operation and convenient maintenance.

2. Precautions for safe use

When using this product, please observe the following safety precautions:



Warn

oxygen is a combustion-supporting gas ,it is not allowed to use the oxygen generator in an environment with bright or dark fire source or with flammable or explosive danger. Smoking is strictly prohibited near the oxygen inhaler



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It is not allowed to place the oxygen tube under the bedspread or seat cushion . when there is no oxygen absorption ,turn off the power supply of the oxygen generator .



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The power supply must meet the requirements for safe use of electricity. if the power supply does not meet the requirements, do not use oxygen generator .



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Please turn off the power supply and unplug the power plug ,before cleaning ,maintaining or replacing the safety tube of the oxygen generator .



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Improper use of power cord and plug may cause burns or other electric shock hazards. do not use if the power cord is damaged . To avoid danger, it must be replaced by a professional authorized by the manufacturer .Unplug the power plug.



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Please select safe and qualified socket and wiring board with safety electrician .



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It is forbidden to plug in or unplug the power supply with wet hands . It is forbidden to drag the machine through the traction oxygen absorption pipe or power line.



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Personnel not authorized by the company shall not remove the cover for maintenance.

3. Structural characteristics and working principle

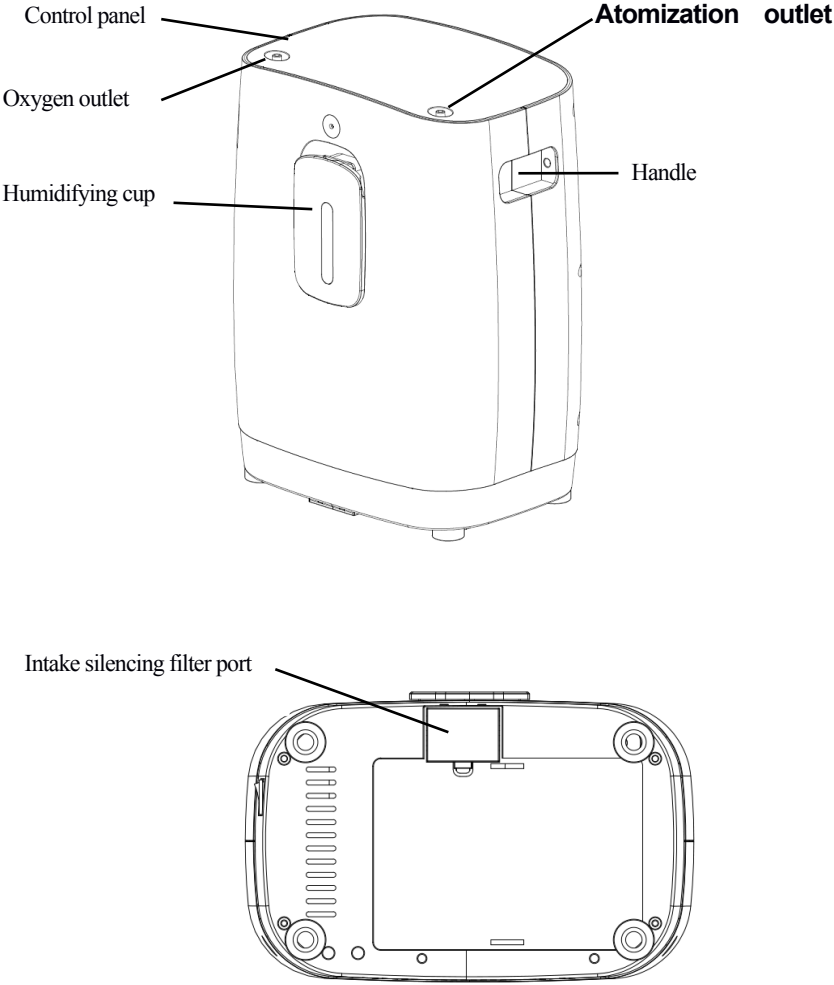


Figure 1 DZ-1W oxygen generator outline drawing

3. Structural characteristics and working principle

3.2 Working principle

The oxygen flow of DZ-1W oxygen generation mechanism is shown in Figure 2:

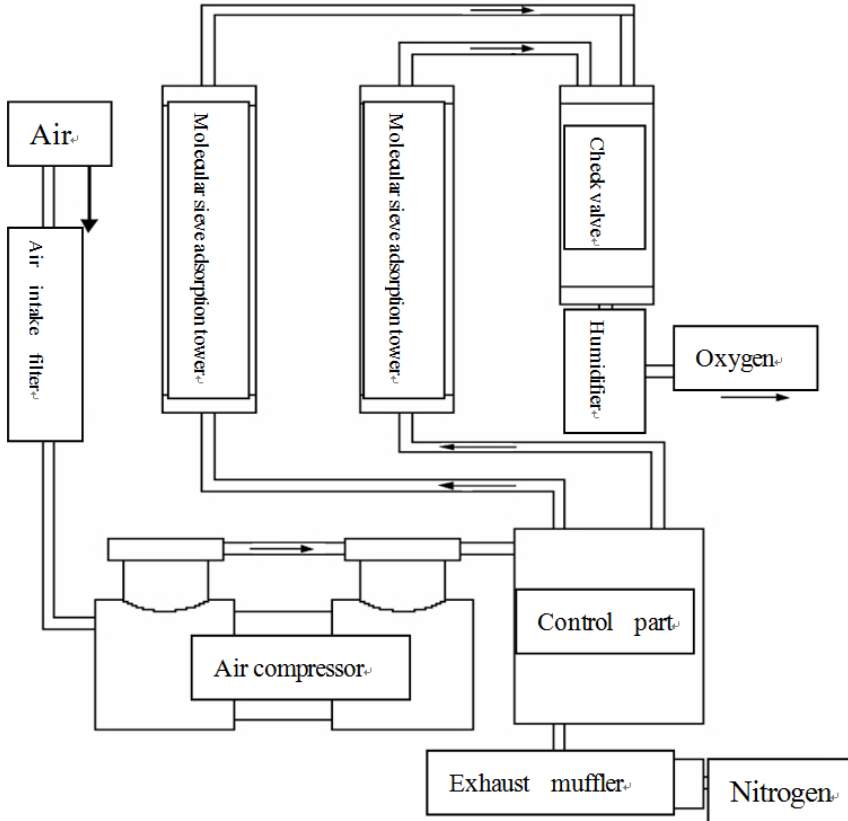


Figure 2 Oxygen flow diagram of the oxygen generation mechanism

The DZ-1W type oxygen generator uses molecular sieve as the adsorbent and uses the principle of pressure swing adsorption (PSA) to filter the air and send it to the molecular sieve adsorption tower for pressure adsorption and decompression. oxygen.

4. Technical characteristics

4.1 Use environment

Ambient temperature: 10 °C ~ 40 °C

Relative humidity 30% ~ 75%

Atmospheric pressure 86.0kPa ~ 106.0kPa

Supply voltage 220-240V (+5/-10V)

Power frequency 50Hz ± 1Hz

4.2 Working conditions

Impurities in raw air $\leq 0.3 \text{ mg / cm}^3$

Oil content in the air $\leq 0.01 \text{ ppm}$

The surrounding environment should be free of corrosive gases and strong magnetic fields

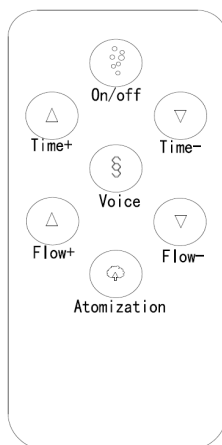
4.3 Product Features

Display mode: digital tube display, English characters

Timing function continuous running timing, timing running timing, automatic cumulative timing

Atomization function

Remote control function: infrared remote control operation



4. Technical characteristics

4.4 Technical indicators

Oxygen concentration (when the flow ≤ 1 liter) $90 \pm 3\%$ (v/v)

Carbon dioxide content $\leq 0.01\%$ (v/v)

Smell Odorless

Particle size of solid matter $\leq 10\mu\text{m}$

Solid matter content $\leq 0.5\text{mg}/\text{m}^3$

Product technical indicators:

Adjustment range (1 ~ 7 L/min) Adjustable

Running noise $\leq 60\text{dB}$ (A)

Timer error $\leq \pm 3\%$

Input power 150W

Machine weight about 6kg

Outline size 274×174×342mm

5. Unpacking and installation

5.1 Unpacking

Open the box from the top surface of the box, remove the foam, open the plastic bag, pull the back cover handle, and take out the oxygen generator.

5.2 Inspection

First check the oxygen generator for transportation damage, and then check the accessories and random documents according to the packing list.

5.3 Installation precautions

When installing the oxygen generator, please observe the following precautions:



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Installation Precautions

1. The oxygen generator should be installed in an indoor ventilation place free of dust, corrosion, toxic and harmful gases and oil mist. Avoid direct sunlight, and the distance from the wall and other objects should be greater than 20 cm.
2. The oxygen generator cannot be installed in a place with bright or dark fire sources, flammable, explosive danger, humidity, high or low temperature, or used in a closed room (space).
3. The air inlet of the oxygen generator (above the rear shell of the machine) should be well ventilated.
4. Keep the oxygen generator stable, otherwise it will increase the noise during operation.
5. It is forbidden to lay on the oxygen generator.
6. The oxygen generator uses single-phase AC power. If the grid voltage is unstable, it will affect the normal startup of the compressor. Please install a voltage stabilizer.
7. **Before using the oxygen generator, you must loosen (or withdraw) the Velcro strap under the fuselage.**

5.4 Installation


1) **Before use, first loosen the bottom Velcro strap to avoid vibration of the air compressor.**

2) Add water to the humidification Cup: in front of the oxygen generator, at the arc gap, extend the index finger into the humidification cup, and then pull out the humidification cup, remove the silica gel plug, add some pure water (the liquid level should be lower than the highest water level) into the cup, and then plug the humidification cup back into the two air holes of the front cover.

6. Use and operation

6.1 Precautions for use

When using an oxygen generator, please observe the following precautions:



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Precautions for use

1. Make sure that the exhaust of the bottom of the oxygen generator is unobstructed during use, otherwise it will affect the heat dissipation of the oxygen generator.
2. The specified performance can only be achieved after the oxygen generator is started for 10 minutes.
3. There is a gap of exhaust sound when the oxygen generator is in use (about once every 4 seconds).
4. Do not use oil, grease or other similar substances on or near the oxygen generator.
5. In use, when the water in the humidifying cup is insufficient, make up for it in time.
6. The oxygen generator cannot be started frequently. It should be restarted after 5 minutes after shutting down.
7. Molecular sieves will age due to factors such as the use time and the environment, which will cause the recoverability of the oxygen production to decrease. When this phenomenon is found, please contact the maintenance point or the manufacturer to replace the molecular sieve.
8. When the oxygen generator is stopped, you must unplug the power cord.
9. During the use of the oxygen generator, the shutdown due to the high ambient temperature and the thermal protection of the air compressor is a normal phenomenon. The power must be turned off and the machine cooled down before being used.

6.2 Use

The touch display control panel of DZ-1W oxygen generator is shown in Figure 3:

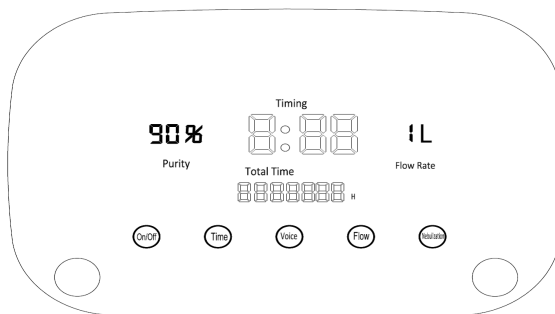


Figure 3 Control panel of DZ-1W oxygen generator

6. Use and operation

1) Power on: plug in the power cord and power on. Turn on the power switch (the position is at the lower left part of the concentrator), the concentrator will start, enter the power on state, the touch key of the concentrator will be fully on, and enter the standby state.

2) Continuous oxygen generation: touch the "oxygen generation" button on the control panel, and the oxygen generator will enter the "continuous oxygen generation" working state with the voice prompt of real person. The continuous oxygen making time of the oxygen generator is displayed on the screen, and the accumulated use time of the oxygen generator is displayed at the bottom of the screen.

3) Adjust the flow: touch the "flow" key on the control panel. With the voice prompt of the real person, the oxygen flow of the oxygen generator increases by 1L, which can be adjusted to 7L at most. After reaching the maximum 7L, touch the "flow" key on the control panel. With the voice prompt of the real person, the oxygen flow of the oxygen generator decreases by 1L, which can be adjusted to 1L at least.

4) Start to inhale oxygen: insert the oxygen pipe into the "oxygen port", confirm that there is oxygen output at the nose of the oxygen pipe, and then wear a good oxygen pipe (please refer to the instructions for use of the oxygen pipe for wearing the oxygen pipe) to start to inhale oxygen.

5) Atomization operation: first take out the oxygen absorption tube, then insert the atomizer silicone tube into the "atomization port", touch the "atomization" key on the control panel, and bring the atomizer to atomize. (please refer to the instruction manual of atomizer for atomizer and atomization dosing operation flow.) turn off the "atomization" key after atomization.

6) Time setting: touch the "timing" key on the control panel, and the oxygen generator will enter the "timing oxygen" state. Users can preset the oxygen making time according to their needs. Each time they touch the "timing" key, the preset time increases by 15 minutes, and the maximum timing is 9 hours and 45 minutes. When the timing exceeds 9 hours and 45 minutes, they touch the timing key again, and the time starts to accumulate from 0. After the countdown is reset to zero, the oxygen generator enters the standby working state and the compressor stops working.

7 Fault analysis and troubleshooting

If you have a problem using the oxygen generator, please read this chapter carefully before sending it for repair. You may be able to solve the problem yourself very easily.

If you cannot solve the problem successfully according to the suggestions in this chapter, please unplug the oxygen generator and send it for repair. Do not try to repair the oxygen generator or remove the casing of the oxygen generator yourself.

Examples of fault analysis and troubleshooting are shown in Table 1:

Table 1 Failure analysis and troubleshooting example table

Failure phenomenon	Cause Analysis	Method of exclusion
When turned on, the oxygen generator does not work and the display does not light up.	<ol style="list-style-type: none"> 1. Is the power on? 2. Is the fuse blown? 	<ol style="list-style-type: none"> 1. Check and tighten the power cord. 2. Replace the fuse.
When the oxygen generator is running, the air compressor does not rotate when it is rotated.	Unstable power supply voltage?	Configure a dedicated voltage regulator.
The oxygen generator is operating normally, but there is no oxygen output from the oxygen pipe.	<ol style="list-style-type: none"> 1. The oxygen pipe plug is not inserted properly. 2. The humidifier cup is not in place. 	<ol style="list-style-type: none"> 1. Plug the oxygen pipe plug in. 2. Install the humidifier in place.
Start up works normally, no bubbles in the humidification cup.	<ol style="list-style-type: none"> 1. The air intake filter is blocked by dust. 2. The oxygen suction tube is dead-folded or squeezed to block the outlet pipe 	<ol style="list-style-type: none"> 1. Clean or replace the filter. 2. Smooth out the oxygen suction tube.
Noisy running	<ol style="list-style-type: none"> 1.The oxygen generator is not placed smoothly. 2.Bottom cable tie is not loosened 	<ol style="list-style-type: none"> 1.Place the oxygen generator smoothly. 2. Loosen the bottom cable tie
Other faults		

8. Maintenance and care

8.1 Maintenance precautions

When performing maintenance, please observe the following precautions:



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Maintenance precautions

1. If the oxygen generator fails, you should contact the dealer or the manufacturer for repair. Only personnel authorized by the manufacturer can debug and repair the oxygen generator. Do not disassemble and repair it by yourself.
2. Under normal use, the humidification cup should be kept clean. The humidification cup should be filled with pure water and the water level should be below the maximum water level. It is recommended to clean the humidification cup, air filter cotton and air intake cover once a week to ensure Oxygen Hygiene.
3. The power cord is configured according to the power of the oxygen generator, please do not replace it at will.
4. Cleaning the oxygen suction tube, please follow the instructions in the instruction manual of the accessory.
5. Before using the oxygen generator for a long time, it should be turned on and checked before use, and it should be put into use after confirming that the functions are normal.

8.2 Cleaning the humidifier

Pull out the humidification cup in the direction shown in Figure 3, remove the rubber plug of the water injection hole and wash it with water. Generally, it can be washed with water.

After cleaning, sterilize (recommended with a disinfectant containing 500mg / L of effective chlorine) and rinse with pure water. Add an appropriate amount of pure water (the water level should be below the highest level) to the cup, and plug the rubber plug of the water injection hole Back (to prevent oxygen from leaking from the water injection hole), plug in the humidifier and use it.

8.3 Cleaning the oxygen generator

In the case of cutting off the power of the oxygen generator, you can use a soft towel dipped in a small amount of neutral household detergent to clean the whole area, and then dry it with a dry towel.

When wiping, care should be taken not to allow liquid to penetrate the gaps in the chassis.

8.4 Cleaning of Intake Silencer Filter

Clean the intake muffler and intake cover weekly.

8. Maintenance and care

8.5 Cleaning the oxygen pipe

The oxygen tube supplied by the oxygen generator is a single-use sterilized product and should be replaced by a special person. It should be replaced regularly. The nose of the oxygen tube should be cleaned and disinfected after each use. Wash it with water after soaking for 5 minutes; it can also be wiped with medical alcohol. It is recommended that the oxygen suction tube be replaced every one year after use. (Note: The oxygen suction tube should be kept dry.)

8.6 Replacement of the fuse

The fuse holder is located on the control board of the oxygen generator. The specification of the fuse is: f2.0al250v $\phi 5 \times 20$.

The replacement of the safety tube requires a professional or the company's maintenance service department.

8.7 Handling during long periods of inactivity

Before preparing to leave the oxygen generator for a long time, please do the following:

- (1) Remove the humidification cup, drain the water from the humidification cup, and put it back in place.
- (2) Cut off the power and retract the power cord.
- (3) Store the oxygen suction tube dry at room temperature to avoid direct sunlight and pollution.

After leaving the oxygen generator for a long time, before you prepare to reuse it, please do the following:

- (1) Inspect the power cord for damage.
- (2) Clean the oxygen suction tube, check whether it is blocked or discounted, and clean it up in time.
- (3) Clean the humidification cup.
- (4) Clean the intake silencer and the air intake cover.

9. Transportation and storage

9.1 Precautions for transportation and storage

Please observe the following precautions during transportation and storage:



Warn

Precautions for transportation and storage

1. Before the oxygen generator is transported or stored, the water in the humidification cup should be drained.
2. It is forbidden to place the oxygen generator upside down or horizontally during transportation and handling.
3. When the storage temperature is lower than 10 °C, the oxygen generator should be left in the normal working environment for 8 hours before use.
4. The oxygen generator has been disabled for a long time, and it should be turned on and checked before use, and it can be put into use after confirming that all functions are normal.

9.2 Environmental requirements for storage and transportation

Ambient temperature: -20 °C ~ 50 °C

Relative humidity ≤95%;

Atmospheric pressure 500hPa ~ 1060hPa.

9.3 Transport

The oxygen generator with complete packaging should avoid severe collision and direct rain and snow during transportation.

9.4 Storage

The oxygen generator should be stored in a well-ventilated room that avoids strong sunlight and non-corrosive gases.

10. Warranty period and after-sales service

10.1 Warranty period

Since the product was sold, the warranty period is as long as the requirements for handling, storage, use and maintenance are observed.

One year, and the product usage time is less than 3000 hours. If one of the following situations occurs, it does not belong to our company

Free warranty coverage:

- 1) Damage caused by the user's incorrect operation or use under abnormal conditions.
- 2) The damage caused by the user's own disassembly, repair and modification.
- 3) Damage caused by natural disasters.
- 4) Fragile, consumables and accessories that should be replaced by the user (such as oxygen suction tubes, insurance tubes, filters, etc.).
- 5) Cannot provide proof of purchase to prove the date of purchase.

10.2 Disclaimer

The company is not responsible for direct or indirect damages to users due to improper use or failure to operate in accordance with the instruction manual.

10.3 After-sales service

The company has maintenance points at various dealers to maintain products for life. It only charges maintenance costs and offers a variety of spare parts at a discount.

11. Packing list, supporting accessories specifications

11.1 Attentions for selecting accessories

When choosing accessories, please observe the following precautions:



Warn

Attentions for selecting accessories

1. The oxygen generator uses a special humidification cup. If you need repair or replacement, please contact the supplier.
2. The oxygen suction tube should use qualified products with medical device registration certificate, and can be tightly connected with the corresponding "oxygen output" socket of the oxygen generator. Users can purchase according to the sample specifications in the random accessories. Avoid adverse effects on safety.

11.2 Packing List

Table 2 Packing list of DZ-1W oxygen generator

Serial number	model	name	unit	Quantity	Notes
1	DZ-1W	oxygen generator	station	1	
2		Oxygen pipe	root	1	
3		Nebulizer	set	1	
4		remote control	Each	1	
5		Intake filter	Each	1	
6		Sealing ring	only	4	
7		user's manual	Share	1	
8		Certificate of inspection	Share	1	