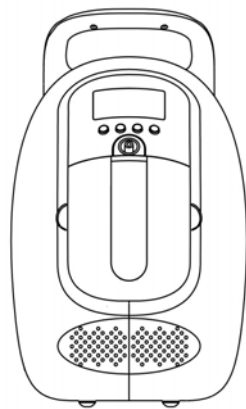


Oxygen Concentrator

ZH-J11



Instruction Manual

In this manual, the OSD menu or figure maybe changed and different from your real product's shown without further notice subject to keeping the right to update by us. Because this manual is just a sample to help you how to operate menu setting.



REV.1

I. Dear Customers

Thanks for purchasing this home health-care oxygen concentrator.

We strongly recommend that you read the safety and operation instructions

FOLLOW INSTRUCTIONS AND HEED ALL WARNINGS

II. Safety Information

Dealer: This manual MUST be given to the end user.

User: BEFORE using this product, read this manual and save for future reference.

Read all instructions before operating the oxygen concentrator. Important information is highlighted by these terms:

WARNING: Safety information for hazards that might cause serious injury or death.

CAUTION: Information for preventing damage to the product.

NOTE : Information to which you should pay special attention. Before connecting the AC power cord to the outlet, make sure that the voltage designation corresponds to the local electrical supply. **If you are unsure about your power supply, please ask the local power company.**

NOTE: In order to prevent oxygen concentrator power lost or broken down suddenly, it is necessary to provide other spare oxygen supply equipment (such as: oxygen bottle, oxygen bag, etc.) for who are urgently needed oxygen.

NOTE: Our oxygen concentrator is just for home health care and do not be as an equipment for life support or extension

NOTE: Our product and related accessories are not toy. Keep away from baby or children or other pets to avoid danger of any suffocation or destroy our product.

1.Before installation:

- A. No lying or place upside down for our oxygen concentrator. Please install our product horizontally, do not tilt or place upside down this product, and do not block the air outlet too.
- B. If the power voltage is unstable and exceed your local electrical supply,

please add to use voltage stabilizer firstly before using our product.

- C. Please use safe and good AC socket or socket-mobile with safety certificate.
- D. It's highly prohibited that non-operator or non-repairman should open the cabinet !

2.Working environment:

- A. Our product should be placed into ventilated place in room. To prevent overheating, these openings should not be blocked or covered. Never use the unit onto a bed, sofa, rug, or other uneven surfaces. Doing so may block the ventilation openings in the bottom of the unit. If you place our product in a bookcase or some other enclosed place, please make sure to provide adequate space for ventilation to ensure far away over 10cm from wall or other objects
- B. Far way areas under direct sun-light; far away fire and higher or lower temperature or with high humidity or high level of dust which may cause damages on the internal parts of the oxygen concentrator.
- C. Do not place other clutter and water or oil holder onto the cabinet.
- D. Do not place other clutter in bottom or rear cabinet's vents to make sure there is nothing blocking them. Otherwise it will cause working stopped or oxygen concentration dropping because of hot temperature in unit.

3. In working:

- A. **NO SMOKING** and **KEEP AWAY FROM LIGHT or SHADE FIRE** in oxygen concentrator working to avoid fire breaking out, because oxygen is a kind of combustion-supporting gas.
- B. Do not power on or off our oxygen concentrator frequently in a short time. Usually you could restart unit that is powered off 3~5 minutes later so that its compressor working life could be extended.
- C. Do not use any oil or grease substance for any part or component of our oxygen concentrator to avoid oxygen polluted and cause fire.
- D. Pour out water from humidification bottle during unit's transportation to avoid water backflow
- E. There is some intermittent exhaust voice in working because of operating principle. This is a normal phenomenon.
- F. Please use **Distilled Water** or **Cold Boiled Water** in humidification

bottle. And do not let water amount exceed the water line in bottle.
Please use our original or genuine humidification bottle to get best oxygen uptake effect.

III. Safety Precautions and General Warnings

- A. CAUTION—Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.
- B. **WARNING: Oxygen promotes rapid burning. Do not smoke when using this unit or when near a person receiving oxygen therapy. Do not operate the oxygen concentrator within a minimum of five feet (1.6m) from hot, sparking, or burning objects or naked flames. Do not use in rooms heated by paraffin or portable gas heaters.**
- C. Do not place a humidifier with an oxygen patient unless prescribed by a physician and then only a bubble-type humidifier should be used.
- D. Only operate the oxygen concentrator with all filters in place; do not operate if the air filter is wet.
- E. **WARNING: Electric shock hazard. Do not remove cabinet. The cabinet should only be removed by a qualified home care provider.**
- F. **WARNING: Disconnect the power cord from the wall outlet before attempting repairs on the unit. Extra care should be taken if it is necessary to operate the unit with the cabinet removed.**
- G. **WARNING: Do not use oils, greases, or any petroleum-based solvents/cleaners on or near the unit. Use only materials that are compatible with oxygen.**
- H. **WARNING: Electric Shock Hazard. When replacing the capacitor, do not touch the terminals or allow metal objects to come in contact with the terminals on the capacitor. The capacitor may hold a charge for several days after the unit is turned off. The capacitor is located in the base of the unit next to the cooling fan.**
- I. Use only original or genuine concentrator replacement parts and accessories.

J. Do not use regenerated sieve material.

IV. Product Features

1.Summary:

Indications:

Our product is designed as household appliances' standard, using for family oxygen supply.

Healthcare function:

Oxygen concentrator is used for improving oxygen supply system in our body, attaining complement of oxygen and health. It could be benefit for middle-aged and elderly people, who more prone to illness, pregnant woman, students and those have Physiological hypoxia. Also benefit for releasing from hard physical labour or brain work, good for recovery.

2. Working theory:

Our product is using AC voltage as power supply , air as raw material, To adopt AVIC 50 years' aero & aviation oxygen production & supply ability as key technology and advantage, with using imported molecular sieve,. We use the most advanced PSA (Pressure Swing Adsorption) technology for our oxygen concentrator to make up high purity oxygen.

3. Appearance:

Our product is used hard glossy safe engineering plastics as cabinet with streamline, comfortable, elegant design style. It is portable, fashionable and beautiful.

4. Features or performances:

Intelligent or smart control:

Large LCD screen display, to support intelligent operation and set oxygen supply time. It is very convenient for old people. Related data could be read in a screen. With timing function and could reach Max.999min.

Super quiet and power saving:

Operation noise is lower than 45dB, be suitable for long time oxygen uptaking, input power $\leq 90W$.

Intelligent infrared control system:



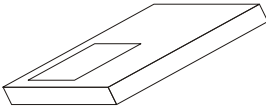


One key setting, easy for oxygen uptaking, so convenient.

Oxygen anion:

Our product could release anion when oxygen is concentrated, it can help lungs breathe faster, uptake more oxygen. Anion and oxygen could be concentrated to enhance each other and improve immunity、 brain vita、 myocardial function and sleeping quality.
This anion function is independent to open or close.

V. Unpacking

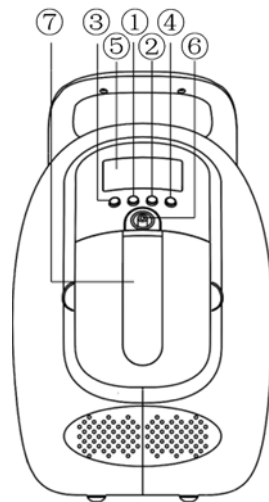
Please make sure that the following items are included with your product. If any item is missing, please contact your dealer.

<div></div> <div>Oxygen Concentrator Unit</div>	
<div></div> <div>Infrared remote control</div>	<div></div> <div>Operation manual</div>
<div></div> <div>Oxygen Headset</div>	<div></div> <div>Car power & adaptor (Optional)</div>

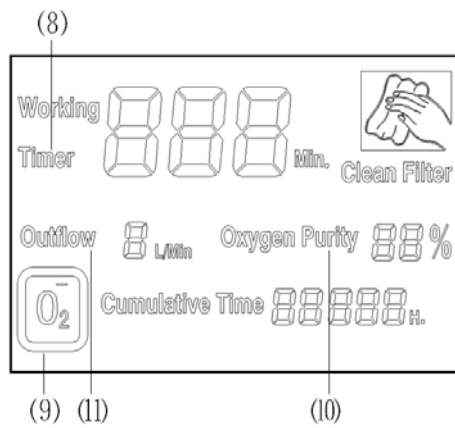
 <p>Nasal oxygen cannula</p>	 <p>Oxygen tube water collector</p>
 <p>Injector</p>	 <p>2pcs Seal Ring & 1 pc Rubber Plug</p>
 <p>First level filtering</p>	 <p>Second level filtering</p>
 <p>Power cord</p>	

VI. View of Unit

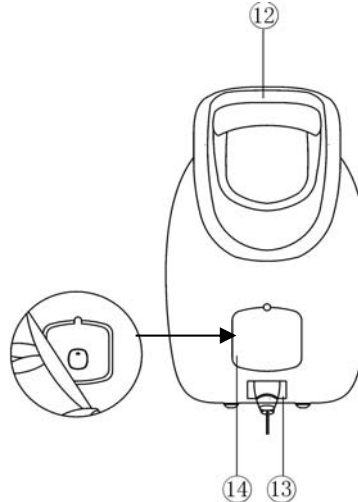
Front View



LCD display view



Rear View

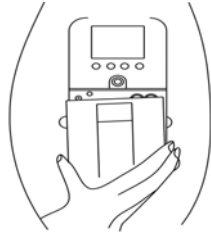


1. TIME+ button
2. TIME- button
3. On/Off button
4. Mode button
5. LCD display
6. Oxygen outlet
7. Humidifying water tank
8. Timer set display
9. Anion function display
10. Oxygen purity display
11. Outflow display
12. Handle
13. Power cord socket
14. Second level filtering rear cover

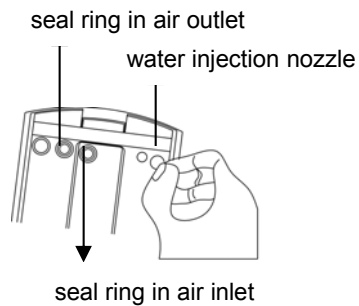
VII. Oxygen concentrator operation

NOTE:

When you use our this oxygen concentrator firstly, please place one side of unit into a flat position to cut and or pull up the bottom ribbon that be used for fixing compressor

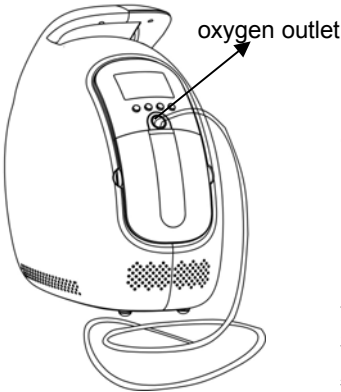
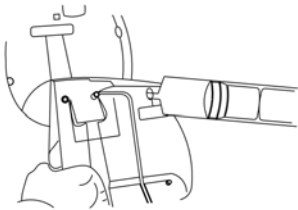


Please put your hand on to the dents of both sides in humidifying water tank and pull outward to take out it. (See left fig.)



To pull out the rubber plug in water injection nozzle on the right corner of humidifying water tank. Please check and ensure seal ring and water injection nozzle are in good condition. (See left fig.)

Please inject purified water or cooled boiled water into humidifying water tank no more than max. water line from water injection nozzle by injector .Then insert rubber plug tightly. (See below fig.)in order to ensure machine good performance, we recommend customers decrease water level when increase the flow. when it's at gear "4", or "5" , water level should be close to the lowest ! ↘



Please insert oxygen tube into oxygen outlet of unit tightly. And connect power cord between unit and power socket, press On/Off button to power on unit to use. the recommended flow rate is "2","3" gear position, and the continuous operation time of the machine should be below 4 hours.

1. Car power & adaptor operation(Optional)

Car power & adaptor is an optional part for our product.

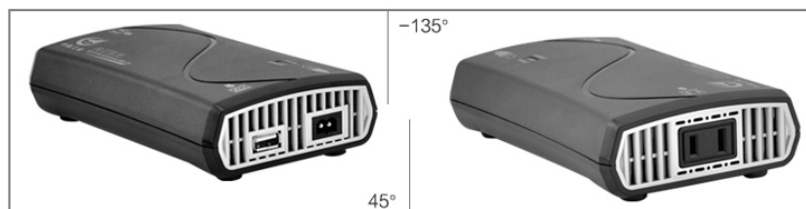
a. Suggested Car power & adaptor spec

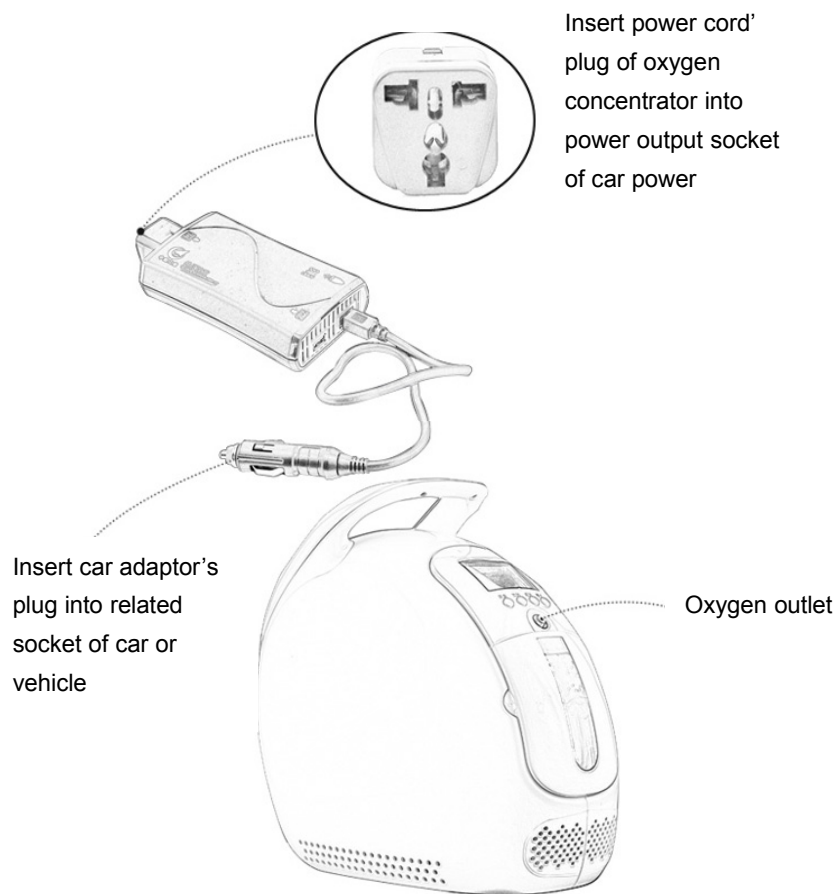
AC output:220V(or 110V)	Inversion Efficiency:≥90W
DC input:12V	Peak output power:200W
USB output DC5V/2.1A	Output frequency: 50Hz(or 60Hz)
Rated Power Consumption:100W	

b. Please ensure your car power spec. is suitable for over 240W (car adaptor

fuse \geq 20A);

Use car power & adaptor after your vehicle or car's engine is started. To avoid instant electric shock





2. Infrared remote control operation

- | | |
|--|-------------------|
| 1. Mode button | 5. Timing button: |
| To shift or adjust oxygen outflow or concentrator purity | 30 minutes timer |
| | 60 minutes timer |
| 2. Anion button | 90 minutes timer |
| To select oxygen anion function | 120 minutes timer |
| 3. On/Off button | |
| 4. - - button:Continuous work | |



Remote control battery installation and cautions

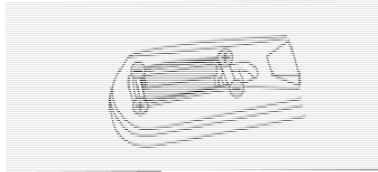
Replace battery by following the below steps:

Requires one pair of AAA batteries.

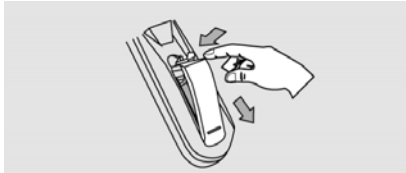
- a. Open the battery cover as shown below:



- b. Install the battery into the battery tray.



- c. Close the battery cover



3. Oxygen headset or nasal oxygen cannula connection operation

Please check below figs for connection, (before using the machine, customer should check the water collector (blue bottle), the slot must be mismatched, otherwise water may pushes out from the tube.

Fig.1 Oxygen headset connection

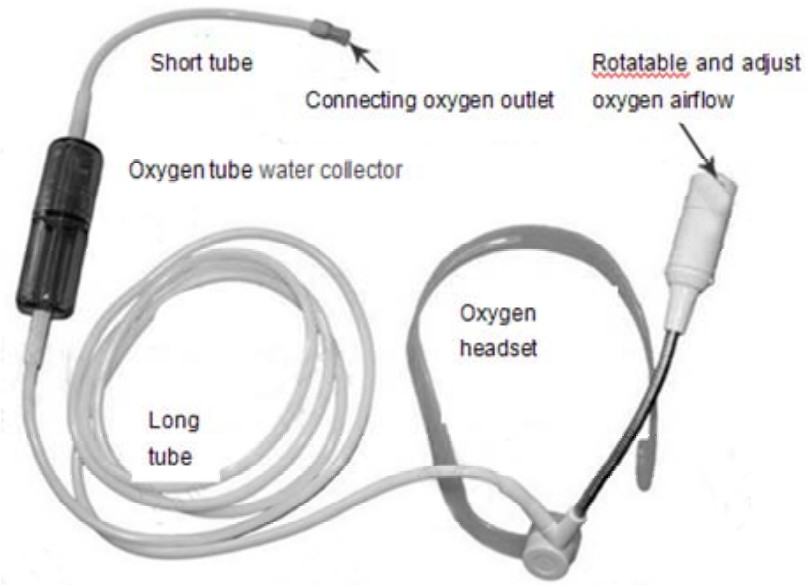
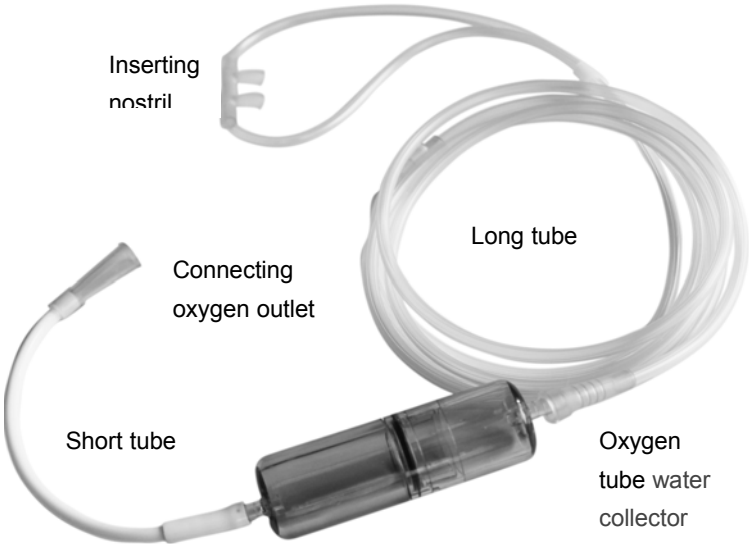


Fig.2 Oxygen cannula connection



VIII. Oxygen uptake operation

1. Power on

The LCD screen will show the initial state “000” when user power on and use this unit on the first time. And it will show the previous or last usage mode in the next time operation or use.

2. Mode

Press **MODE** button , the LCD screen will display corresponding value of a set of oxygen outflow rate and concentration purity ,you could press **MODE** button in turn by five modes shown on LCD screen to select or adjust according to your oxygen uptake.

Insert the air inlet terminal of oxygen tube into the oxygen outlet of oxygen Concentrator, then put on oxygen headset to start oxygen uptake. It is much much better to keep 30~60 minutes for every oxygen uptake

3. Anion

Press **MODE** button for 3 seconds, the screen will show “anion”. It means you select and open to use “anion” function. And press the **MODE** button for 3 seconds again, the anion function will be closed.

4. TIME + & TIME- function set

When user need set a timing oxygen uptake, could press **TIME +** button, the font “Timer” will flick onto screen. Now you could press **TIME +** or **TIME -** button to set the time of oxygen uptake you need. Press **TIME +** or **TIME -** button one time, means you add or reduce 1 minute for oxygen uptake. You could start oxygen uptake after being set.

5. Infrared remote control

6. Power off

When oxygen uptake is completed, please power off unit by pressing **ON/OFF** button. Unplug the oxygen concentrator when it is not being used for a long period.

IX. Maintenance

1. Clean Cabinet: Clean the cabinet once a month at least.

Power off unit firstly, to use a clean soft with soaked in disinfectant cloth to wipe, please avoid liquid dropping into cabinet's ventilation hole or other inner components.

2. Clean humidifying water tank

- (1) In order to keep the humidifying water tank clear and clean, purified water should be used and injected into this tank, and try to exchange water everyday.
- (2) Clean the water tank once a week, to wash with detergent or white vinegar first, and then use purified water to rinse and clean to ensure the health or clear oxygen.
- (3) Do not forget to insert the rubber plug back into the injection hole of water tank when it is cleaned. Avoiding oxygen leaking from the water injection hole to cause the situation that unit is normal operation while no oxygen flow output.

3. Clean oxygen uptake tube and inhaler

Usually user should clean them once a day. After using, the nasal uptake terminal of the nasal oxygen cannula should be cleaned and disinfected with 5% potassium permanganate solution for soaking 5 minutes, or use the alcohol to clean. It is suggested that the oxygen tube should be changed and replaced every year. (PS. Keep dry of the oxygen tube)

4. No be used or operated in long time or period

Before intending to stand idle oxygen concentrator for long time, please do some work as follow :

- (1) Take off the humidifying water tank firstly, pour off the water from tank, then put back tank onto unit.
- (2) Power off the power, and take back the power cord.
- (3) Keep the oxygen tube and oxygen inhaler dry and preserve in room temperature, avoid under direct sunlight and be polluted.

Want to use or operate unit again after being in idle long time, some work should be done before using:

- (1) Check the power cord to see if it is OK or not.

(2) Clean the oxygen tube and inhaler to see if there is anything wrong with them.

(3) Clean the humidifying water tank.

5. Clean or replace filter

(1).Clean or replace 1st level filtering

Pull outward to take out water tank.

And take up the 1st level filtering cover

to clean or replace 1st level filtering

(Usually you could clean this filter by water and dry in air in half a month for repeat use)

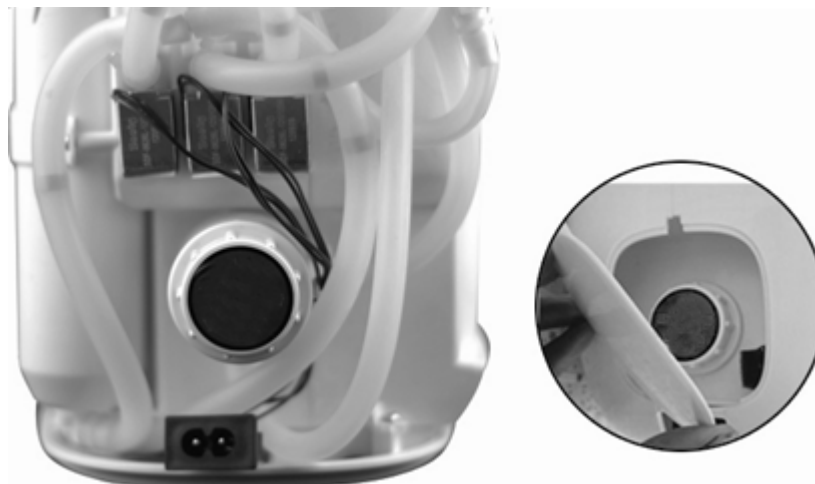
(2).Clean or replace 2nd level filtering

Open the rear cover to take out 2nd level filtering clean or replace 2nd level

filtering (Usually you could clean and dry in air this filter by water in a month

for repeat use. **Note: Do not use acid and alkaline detergent for this filter.**

Do not place this filter under the blazing sun for quite a long time to prevent deformation.)



X. Trouble Shooting

Should the unit no function, please check the system according to this table to find out the possible problem. If you still can't solve the problem, please ensure the product is repaired by qualified service personnel.

No.	Symptom	Problem Cause	Remedy or Solution
1	There is smell in airflow	It is the first usage of this unit, the connecting tube and other plastic parts will produce smell. This phenomenon is normal.	It is normal smell that produced by the silicone tube and ABS plastic, and be tested and inspected to show the smell is non-toxic and harmless. With the long use of unit, it will disappear gradually.
		The humidifying water tank is not cleaned or no changed water for a long time. To cause or produce this smell from water tank.	Clean the oxygen tube and the humidifying water tank.
2	Dropping water form oxygen outlet of unit.	More water in tank is above or over the highest waterline, so airflow presses the bubble into the oxygen tube.	To pour or reduce the water below or lower under the highest waterline.
		Long time use of the unit., water vapor from airflow has agglutinated in tube wall.	To pour off water in water tank, and inject water again when there is no water to drop from the oxygen outlet.
3	There is a voice or sound of "Ci" every few seconds.	It is the normal voice of nitrogen deflation from the unit, and it shows that machine is work well.	

4	There is bubble from tank and no or less oxygen from unit outlet, when you power on it	Internal or inner oxygen hose is bend, which cause airflow for clogging or jamming.	Connecting the oxygen hose again.
		Filter is clogged and jammed	Clean filter
		The rubber plug is not inserted well into water tank	Take off the water tank and insert rubber plug tightly into the injection hole of tank
5	When you power on unit, the indicator light shows to work well while unit do not work normally (the voice or sound of working is abnormal)	Compressor is failure.	Power off unit, and ask qualified service personnel for help or repair
		The surround working temperature is too higher, and the oil free compressor runs self-protection program.	It's a normal phenomenon. When the temperature is lower, the unit will reboot and run again.
		Distribution valve's problem	Power off unit, and ask qualified service personnel for help or repair
		The internal or inner connecting pipe or tube has dropped or fractured.	Power off unit, and ask qualified service personnel for help or repair

XI. Specifications

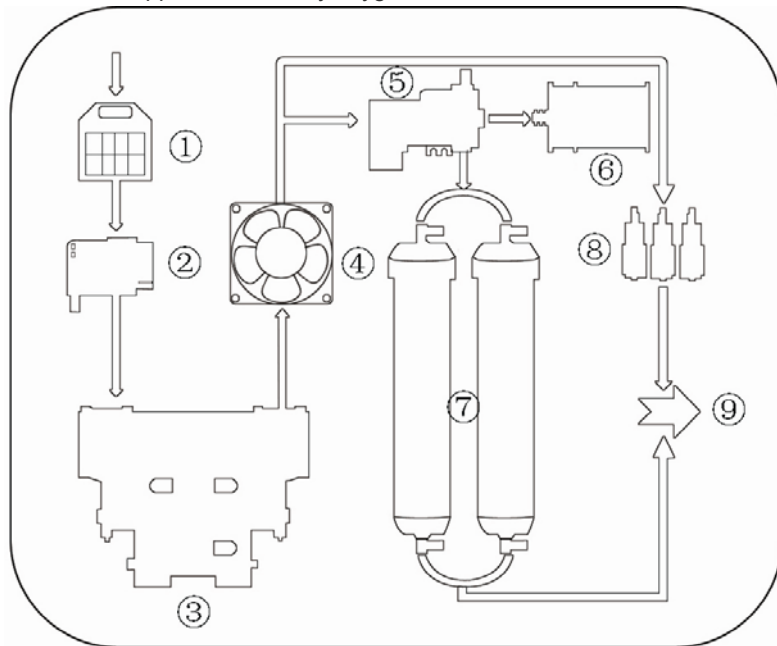
Working principle	PSA (Pressure Swing Adsorption)
Input power	≤90W
Voltage	AC220V±22V, 50Hz±1 Hz (Or AC110V±11V, 60Hz±1 Hz)
Rated current	0.8A
Oxygen concentrating:	90%~30% (Room temp. 0.1MPa)
Oxygen flow	1~5L/min
Oxygen anion output (Optional)	≥4million/min (Optional function)
Oxygen identification	Tasteless、colorless 、 combustion-supporting gas.
Working noise	≤45dB
Product size	325mm(L)*198mm(W)*323mm(H)
Net weight:	6kg
Working environment requirement: No corrosive gas and strong magnetic field around. ATTENTION: Beyond above mentioned condition may affect product 's working. If temperature is below 0℃, please do not use until putting it in room temperature for 1H.	Environmental condition: 6℃~40℃
	Relative humidity :30%~85%
	Atmospheric pressure: 70kpa~106kpa
Requirement for transportation and storage	Environmental condition: -20℃~45℃
	Relative humidity : ≤90%
	Atmospheric pressure: 50kpa~106kpa

* Design and specifications are subject to change without prior notice.

XII. Working principle diagram

1. The air pass through firstly from the 1st and 2nd level filtering in order, and enter into compressor.

2. The air pass through cooling system to enter into the molecular sieve tank by control valve.
3. To separating out nitrogen from molecular sieve tank
4. To control or select oxygen concentration by **MODE** button
5. Oxygen will pass through humidifying water tank for humidification and at last is supplied for user by oxygen tube



- | | |
|---------------------------|------------------------------|
| 1. First level filtering | 6. Muffler |
| 2. Second level filtering | 7. Molecular sieve tank |
| 3. Oil free compressor | 8. Pressure regulating valve |
| 4. Cooling System | 9. Oxygen |
| 5. Control Valve | |

Mild hypoxia	Always yawn, hands and feet feel cold frequently; Often have a weak chest, be flustered and shortness of breath in shopping mall or underground installation
Moderate hypoxia	When you climb or walk above more than two floors , have a weak chest and shortness of breath; Bad breath, acid stomach, constipation, dry skin, bad quality sleeping, more dream and be awoken, decline of memory, inattention and pale. After nervousness, dandruff increased, sweating, vision decline, blood pressure、 blood lipid、 blood glucose will be higher, poor resistance and easy to get a cold.
Severe hypoxia	Heart always uncomfortable, and sometimes be flustered、 memory decline、 mental fatigue and weak. Squat or sit up will be dizzy、 blacked out、 temples ached、 tinnitus、 dazzled. And get up in early morning to make a man feels backache, and easy to suffer arteriosclerosis、 coronary heart disease, stroke and chronic bronchitis、 asthma、 respiratory system diseases.

XIII. Hypoxia demand self-test table

Tips: People who need or be suit for oxygen uptaking

1. Students: It will help and improve study

Our brain will use and take out 25% oxygen of whole body. When you study long time, you need oxygen uptaking in time and could help you improve ability of memory and study.

2. White collars or office people: Could remove fatigue and work more efficient

Oxygen uptaking could relieve nervous and irritable emotion sub health, etc. Increasing your energy rise your vitality. Recover and improve your health from office syndrome、 such as fatigability、 feeling dizzy、 losing appetite.

3. Women: Keep body younger and beautiful

Plenty of oxygen uptaking will help women promote or improve skin's blood circulation, gear up to extract toxin and melanin to let your skin looks nutritious and younger.

4. Men: Make body stronger and more healthy

Enhance physiological index, keep strong energetic and improve life quality or recovery.

5 .Old people: Help to be vigorous and defer senility.

Old man's vital capacity goes downhill quickly, some vitals such as heart、brain、kidney、liver will be gradually. Oxygen uptaking would make up oxygenic shortage that caused by Physical Function Decline and keep every organ in good condition, also prevent disease to keep healthy and defer senility.

6. Pregnant woman:

Oxygen uptaking can help fetus get more oxygen in order to grow up healthily and become an "Oxygen Baby", To have inherent advantages during the pregnant time.

7. Special patients:

Oxygen uptaking could enhance absorption of medicine and modify disease. Patients are most necessary people who need oxygen uptaking, Especially for those who have Cardiopulmonary Diseases. oxygen uptaking can suspend illness to get worse, improve immunocompetence of pneogaster and our body. Oxygen uptaking can alleviate or remit shortness of breathe, to make you are refreshing and active and improve quality of life. Keep long time oxygen therapy, it will be important in recovering of disease absolutely.



“ELIMINATION OF RESIDUES OF ELECTRIC AND ELECTRONIC APPLIANCES BY CONSUMERS RESIDENT IN THE EUROPEAN UNION.”

This symbol on the product or in its packaging indicates that it must not be disposed off with other household waste produced in the user’s residence. It is the responsibility of the user to dispose off these types of appliances by depositing in a “recycling plant” or at a collection point for the recycling plant so that its electrical and electronic parts can be recycled. The selective collection and recycling of the harmful residues of electric and electronic home appliances and parts at the time its disposal will contribute towards the conservation of our natural resources and will guarantee that it will be recycled in a manner most beneficial to the environment and public health. To gain more information on the points of collection of electric and electronic appliances for recycling, please contact the office of your local municipality or with the recycling plant or return it back to the establishment from which the purchase was made

Disposal of Equipment and Accessories

This product has been supplied from an environmentally aware manufacturer that complies with the Waste Electrical and Electronic Equipment (WEEE) Directive 2013/96/CE. This product may contain substances that could be harmful to the environment if disposed of in places (landfills) that are not appropriate according to legislation.

Follow local governing ordinances and recycling plans regarding disposal of the device or components normally used in operation. The device does not generate waste or residue in operation. DO NOT dispose of the device or the battery module in the normal waste stream. The lithium battery module should be returned to your dealer/provider for recycling. Any accessories not part of the device MUST be handled in accordance with the individual product marking for disposal.

