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User Manual of Portable Oxygen Concentrator



MODEL: JAY-1

Important: Do not service this concentrator without first reading and understanding this manual!

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1 Foreword

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

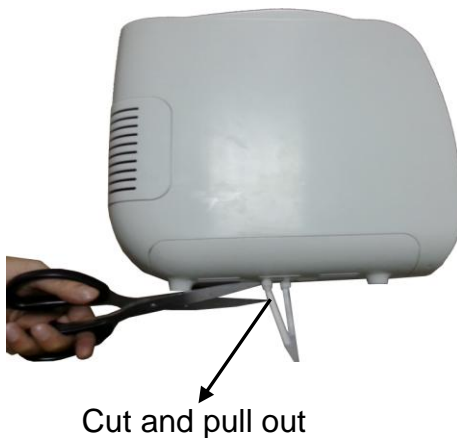
This operation manual contains function, operation steps, attention, basic trouble solution and so on.

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.



YOU MUST DO BEFORE START THE MACHINE!



2 Safety notice

This product cannot be used for life saving, it is suggested that if any patient who needs oxygen treatment, please follow doctor's advice to choose the right flow and period for oxygen before using the machine.

Please note the following special statements, used throughout this manual, and their significance:

Note: Explanatory information.



Damage: Action could result in damage to equipment.



ATTENTION: Action could result in personal injury.



WARNING: Action could result in fire and explosion.



ATTENTION: Consult Instructions For Use.



: The date of Manufacturer



: The Manufacturer

Before Installation



Damage: Only use stable and safe electrical power sources.



Damage: If the electrical power source becomes unstable, discontinue use.

Placement



ATTENTION: The oxygen concentrator should be set to use in an environment without dust, corruption or toxicological harm gas.



ATTENTION: The oxygen concentrator should be located in well-ventilated space, in case there are polluted air or smog in the oxygen.



ATTENTION: Always place the concentrator on a hard surface. Never place the concentrator on a surface such as bed or couch, where the concentrator may tip or fall.


Fire Warning




WARNING: For oxygen can be combustion-supporting, keep oxygen concentrator far away from naked light or fire resource, no smoking or naked light around the patient.





WARNING: Keep the concentrator away from flammable and explosive areas.

 **WARNING:** Textiles and other materials that normally would not easily burn, can ignite and burn with great intensity in oxygen enriched air.

 **WARNING:** A spontaneous and violent ignition may occur if oil, grease or greasy substances come in contact with oxygen under pressure. ALWAYS keep these substances away from the oxygen concentrator.

Maintenance


 **ATTENTION:** Before cleaning the dust on the net of oxygen concentrator, the plug must be pulled out in case electric attack.


 **ATTENTION:** The humidifier, filter cotton and filter are the items needed to clean, among which humidifier should be cleaned every 3 days, and external filter cotton should be cleaned every 100 hours, and internal filter should be cleaned every 3000 hours.

Radio Frequency Interference


Most electronic equipment is influenced by Radio Frequency Interference (RFI). When there is strong electromagnetic interference, maybe the LCD will be slightly affected, but the machine is still running. ALWAYS exercise CAUTION with regard to the use of portable communications equipment in the area around such equipment.


Additional Safety Warnings


 **WARNING:** Do not put nasal tube under bed or cushion, the oxygen that caused by machine turning on without breathing may be combustion-supporting.


 **WARNING:** DO not reach for a concentrator that has fallen into water. UNPLUG IT IMMEDIATELY.


 **WARNING:** NEVER leave the concentrator unattended when plugged in.


 **ATTENTION:** ALWAYS supervise closely when this product is used near children or those who require close supervision.


 **ATTENTION:** If any adverse reaction appeared or revealed during taking oxygen, please contact with equipment supplier or doctor as soon as possible.


 **ATTENTION:** For serious patients, set an indicating device additional, any adverse reaction appeared, please contact with equipment supplier or doctor as soon as possible.


 **ATTENTION:** Turn off the switch if no body takes oxygen.


 ATTENTION: In using the machine, do not open the cover at all. In case there are quality problem, do not dismantle it secretly. Any alarm or other abnormal phenomenon has been found, connect with equipment supplier or factor.


 ATTENTION: Ensure the bottom smooth exhaustion during operating, or else the machine will be over-heated.


 ATTENTION: There is intermitted exhaustion sound during operating (10 seconds in intermission).


 ATTENTION: 5 minutes are needed from oxygen concentrator from warming up to reach regular function.


 ATTENTION: The machine is only for medical oxygen supply, and the oxygen concentration will be up to 90% when air outlet reaches its nominal flow.

 ATTENTION: Humidifier shall adopt distilled water or cold boiled water, added water shall be kept under the scale line.


 ATTENTION: Use the humidifier together with the machine, do not replace it at will, or else it may cause patient uncomfortable or other harms.


 ATTENTION: In case the indicator shows abnormal oxygen, operator should declare to dealer or factory in favor of maintain.

 ATTENTION: Once open the adjust knob for flow in full, but flow meter shows zero, turn off the machine immediately and have a check for trouble.


 ATTENTION: Do not turn on or off frequently, To restart the machine after turning off, no less than 5 minutes are necessary (namely, exhaust internal gas of the machine completely, for if air compressor turns on with pressure, its life will be shortened)


 ATTENTION: Turn up the flowmeter switch immediately when power switch is turned on.

 ATTENTION: Refresh the water in the dampen bottle every 2-3 days, especially in summers. If do not use it in several days, please pour out the water completely, and wipe dry the bottle.

 ATTENTION: Use the oxygen tube and humidifier together with the machine or those of the same model, if change to use other model devices, please ensure close connection with the oxygen generator. The absorbing oxygen tube is only for the patient, and do not junk it at

will.

 **ATTENTION:** The oxygen tube, oxygen mask that have touched with the patient should keep clean, disinfected and sterilized.

 **ATTENTION:** The oxygen tube that have touched with the patient after each operation should be disinfected by wiping it with 75% medical use alcohol or other disinfecting methods. To prevent cross infection, do not share oxygen tube.

Requirement of environment protection

The materials used in the system won't create environment hazard. The packing materials of the system are recyclable, and they must be collected and disposed according to the related regulation in the country or region where the package of the system or its accessories is opened. The nasal oxygen tube is made of medical PVC, and if it is thrown away, it could not be bio-degradable, so it will cause the pollution. Any material of the system, that may cause pollution in the environment, must be collected and disposed strictly complied with the local rules and requirement.

3 Product introduction

JAY-1 product adopts pressure swing adsorption principle, which can separate oxygen, nitrogen and other gas from the air, at constant temperature, as soon as power is connected, the oxygen that meets medical use standards can be separated from air constantly. Oxygen is generated by pure physical method. The concentrator can supply ONE patient with steady oxygen flowing out, safe and reliable, low cost, adjustable flow. The key parts of the concentrator adopt anti-tiring and anti-aging design, and the planned life of the whole generator reaches up to 20,000 hours.

There is no influence on indoor oxygen percent during the generator operating.

4 Using condition

Ambient temperature: 10°C-40°C

Relative humidity: 30%-85%

Air pressure: 700 hPa-1060 hPa

No corrosive gas and strong magnetic field around.

5 Scope of application

This device is mainly used for health care.

6 Technical Parameter

Model description: JAY-1

J (company symbol)

A (company symbol)

Y (oxygen)

1(1 liter per minute of oxygen)

Model	JAY-1
Rated power (W)	75
Operation voltage (V/Hz)	AC220±10% 50±1 AC110±10% 60±1
Oxygen flow (L/Min)	1-5
Oxygen concentration (%)	90%-38%
Outlet pressure (Mpa)	0.041
Alarm	Power failure
Sound level (dB)	≤45
LCD display	accumulating timing; present timing; timing;
Net Weight (Kg)	6
Dimension (mm)	350(deep)*190(width)*320(height)
Fuse	F2A/250V
Vehicle Power	Input: DC 12V Output:AC220V/200W

7 Name and Function



1) Indicating Lamp

Total 6 indicating lights, and the code of them are 1,2,3,...6 from left to right, and their indication for each model are as follows:

O.P.: power switch (green lamp)

P.F.: power failure (red lamp)

L.P.: low pressure (yellow lamp)

H.P.: high pressure (red lamp)

H.T.: over heated temperature (red lamp)

L.O₂: oxygen purity is < 82%, (red lamp)

H.O₂: oxygen purity is ≥ 82%, (blue lamp)

2) Power switch

3) Oxygen flow meter

The location of float in the oxygen flow meter shows the outlet oxygen flow (L/min.).

4) Knob of oxygen flow meter switch

The other name of knob of oxygen flow meter switch is flow control valve.

It adjusts and controls the outlet oxygen flow. Do not rotate it over-forced, or else it is easy to damage the valve core. Rotate it counterclockwise to turn on, clockwise to turn off.

5) The flow regulation button

At the digital flow control model, the flow will be 1L/Min when the oxygen concentrator begins to run every time. Press (▲) to increase your favorite supplying flow by adding 1L/Min. Press the (▼) button to decrease the flow by reducing 1L/Min. The max is 5L/Min. When user select the flow, the screen will also show the purity accordingly.

6) Intake air filter

Once need to replace, replace it by special filter for the machine

7) LCD display



When the oxygen concentrator begin to run, and In one minute, the LCD shows the accumulating timing.



After one minute, the LCD shows the present timing automatically.



At the digital flow control model, when the user press the oxygen flow meter key of "UP" or "DOWN", the LCD will show the flow rate and purity. "1L" means the flow rate, "90" means the oxygen purity.

8) Timing keys

The two buttons are used for timing adjustment, and press the left key (▲) on to increase timing by adding 10min. And press the right key (▼) on to decrease timing by reducing 10min. the right key (▼) to reduce timing to "0", the machine will turn off automatically. The max timing

time is 40 hours.

9) Humidifier

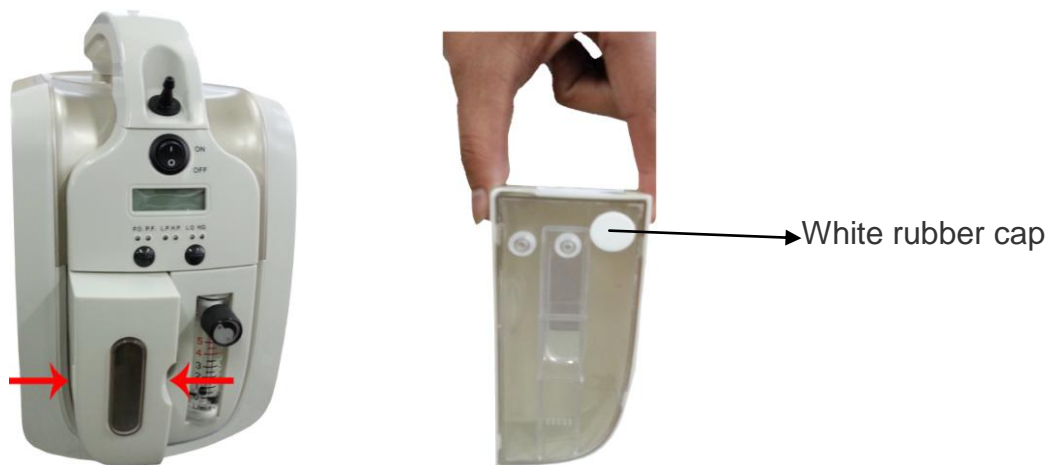
Humidifier which used for humidifying oxygen and preventing throat and nasal mucosa stimulated by dry oxygen and dry hard sputum difficult to spit out.

10) Back label

11) Power socket

8 Operation steps

1. Take down the Humidifier cup from the machine, take the top small white rubber cap out of the cup, fill the Purify or boiled water into the cup till the lane marked on the cup, put back the rubber cap.



2. Connect the harness to both Oxygen concentrator & home power supply plug, Press the switch to start the machine.

3. Adjust well oxygen output flow according to the request:

Method 1: Adjust the flowmeter knob, the float ball center position aligned with the scale(counter-clockwise on and clockwise off)

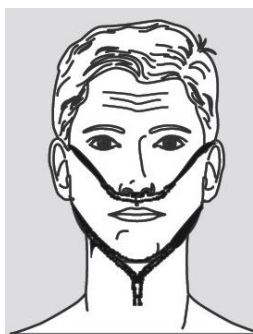


Method 2: Press " Δ UP" or " ∇ DOWN" buttons, the LCD screen will display the adjusted

flowrate, machine is turned on by default flow rate of 1 L/ min.



4. Insert the intake end of absorbing oxygen tube onto the oxygen outlet, then set the absorbing oxygen tube over patient's ears, insert the nasal tube into patient's nostrils to absorb oxygen; the best absorbing time for health care keeps 40-50 minutes per time, absorbing time for medical treatment shall be followed doctor's advice.



5. Once the oxygen therapy finished, press the switch to shut down the machine, please also un-plug the power supply at the same time.

6. Oxygen purity alarm(for optional): The oxygen purity will rise to the normal level in five minutes of operation. When oxygen purity is $\geq 82\%$, the blue lamp is on, when oxygen purity is $<82\%$, red lamp is on, indicating low purity.

7. In case oxygen generator is connect with power but the whole machine is still in the state of power off with alarm sound, please check out the connection part of power whether it is in good connection, or whether there is a power off in external power supply.

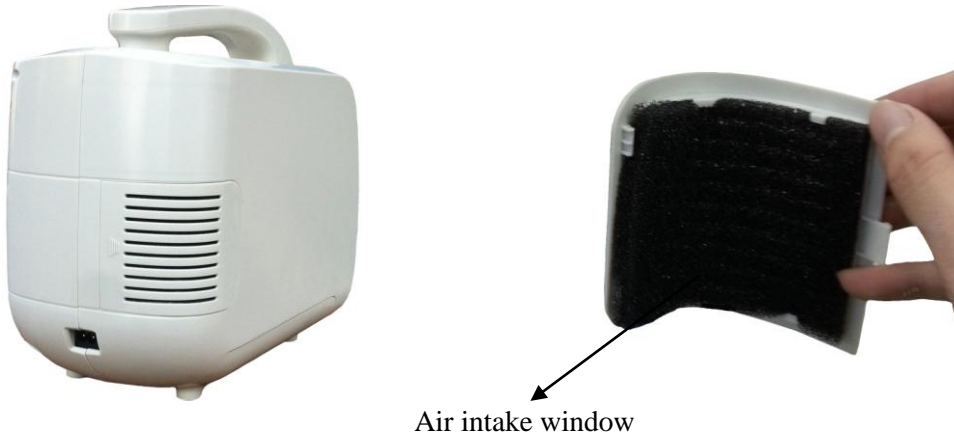
9 Maintenance

1. In the condition of power off, make a clean for the outside body by soft towel with little detergent, and then wipe it up with dry towel, once or twice per month.

2. It is a critical step for daily maintenance to clean filter net for gas intake, at least twice a

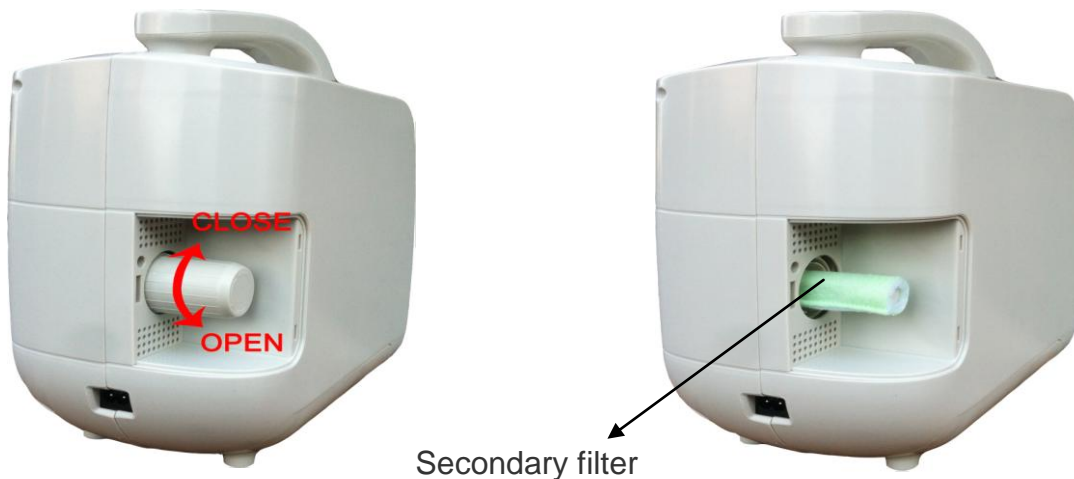
month.

Detail steps: take off the filter net, clean them with detergent and wash it clearly with clean water completely, get ride of extra water and dry up naturally, finally set back after dry up.



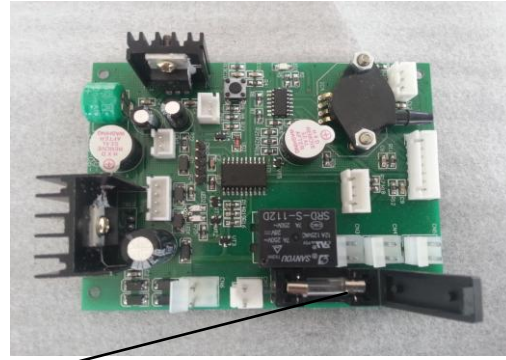
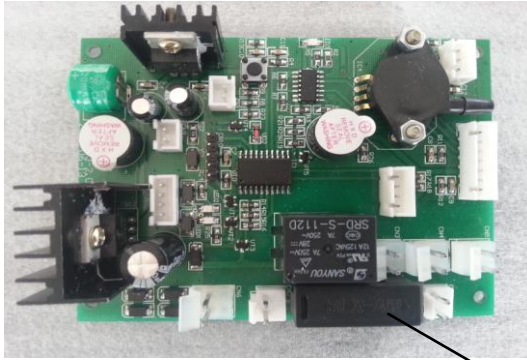
3. Clean secondary filter

Clean secondary filter an interval about 3000 hours, open the air intake window, then open the secondary filter cover in an anticlockwise direction and take off filter cloth, then clean it with detergent, and then clean it out with clean water completely, get rid of the extra water, and dry it naturally, finally set back after dry up.



4. Fuse replacement

The fuse is located nn the internal control PCB, please contact the professional service people to change this fuse.



FUSE

5. The battery of JAY Series medical oxygen concentrator model adopt NI-MH charge battery(3.6V/20mAh),it is welded on the main board and there is a charge circuitry in the board, so it could be used by a long time. But if you could not use the oxygen concentrator continually, the battery will be at the dormancy state and its life will be shorter. So please charge the battery one time every month if you could not use the oxygen concentrator continually.

10 Troubles and solution

No.	Trouble	Causes	Solution
1	No operation after power connected	1. No connection between circuit of oxygen generator and power 2. Circuit of fuse protector broken 3. Capacitor of compressor broken 4. Compressor broken	1. Check out whether switch, plug, power line in good connection. 2. Replace the fuse protector and find the cause 3. Replace start capacitor 4. Have the compressor replaced
2	No oxygen out or tiny outtake flow	1. Folded inside oxygen tube, no smooth outtake 2. Filter clogged, no smooth intake 3. Some pipes are leakage.	1. Connect the oxygen tube again 2. Clean the filter 3. Open the cover and check the gas pipes.
3	No exhaust sound	1. Air controller cannot work 2. Electrical control board	1. Have air control valve replaced 2. Have electric control board

		cannot work	replaced
4	Too noisy exhaustion	1. The joint of exhaustion muffler fallen off 2. Exhaustion muffler broken	1. Connect the joint well 2. Have the muffler replaced

11 Condition for transportation and storage

Environment temperature scale: -20-45℃

Comparative humidity scale: ≤95%

Air pressure scale: 500—1060 hpa

12 Quality Warrant

Scale for the whole machine repair: 15 months guarantee from the date two months after sailing.

Note: Please do place the machine at a good ventilation area, please make sure that the radiation port underneath the machine will not be covered.

13 Contact us

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