User Manual

OXYGEN CONCENTRATOR

Apply to JLO-190P

Version Number: V1.0 Date of preparation:2024- 04- 12

CE
2862

Read the instructions carefully before using the device.

CAUTION: EU law restricts this device to sale by or on the order of a physician.
The unit should only be used as prescribed.

LIMITED WARRANTY

Shenzhen Homed Medical Device Co., Ltd (“Homed Medical Device”) is pleased to provide this warranty which is only for the benefit of the original purchaser of new equipment from Homed Medical Device or an authorized distributor. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Homed Medical Device warrants this product to be free from defects in material and workmanship for a period of three years from the date of purchase. If within such warranty period the product proves to be defective, the product will be repaired or replaced at the option of Homed Medical Device. This warranty provides for the replacement of defective parts and labor performed at Homed Medical Device Authorized Service Centers. This warranty does not include normal wear and tear, shipping charges, or routine maintenance items. Homed Medical Device’s sole obligation, and your exclusive remedy, under this warranty are limited to such repair and/or replacement.

For warranty service, please contact Homed Medical Device Technical Support at the toll-free number below. Do not return products or defective parts to Homed Medical Device without first contacting us for our prior consent.

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Shenzhen Homed Medical Device Co., Ltd
Room 1601-1614, A Building, Jinxiu lll, No. 85 Hudi Pai Songxuan Community,
Guanhu Street, Longhua District, Shenzhen, 518109, P.R. China
https://en.homedgroup.com
Technical Support: 86-0755-29821671

Authorized representative: Shanghai International Holding Corp. GmbH (Europe)
Eiffestrasse 80, 20537 Hamburg, Germany
Phone: +49-40-2513175

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1 Safety Instructions

⚠ Please make sure you have read and fully understood the instructions before using this product.

The source of oxygen emitted from an oxygen concentrator is generally from the atmosphere of the environment in which it is located

Note: When traveling, you should arrange for backup oxygen supply facilities to avoid accidents. Please have a backup oxygen source in case of power outage or mechanical failure that prevents you from using this device.

- The service life of this product is 5 years. The service life depends on the use environment and subsequent maintenance; a bad use environment will shorten the service life of the device.
- Some users cannot hear or see the alarm or cannot convey discomfort, so other guardians need to provide additional monitoring or attention when using this device.
- This product needs to be connected to a suitable nasal oxygen cannula for oxygen inhalation when used. Each device is equipped with a set of nasal oxygen cannulas. You can choose an anti-squeezing nasal oxygen cannula that fits the interface of this machine as needed. The nasal oxygen cannula must be a registered medical device.
- Increasing the length of the catheter can reduce the noise during oxygen transmission; when using a longer nasal oxygen cannula, you may need to increase the set flow rate. Please follow the doctor's advice.
- Please use the nasal oxygen cannula correctly according to the instructions for use of the nasal oxygen cannula.
- Due to the different materials used for the nasal oxygen cannula, some nasal oxygen cannulas may have odors.
- This product cannot be connected to other devices not permitted by the manufacturer.
- It is strictly forbidden to use power supplies or power cords, power adapters or other accessories other than those specified. Using non-specified accessories may cause safety hazards or damage the performance of the device.
- If you feel unwell while using this product, please stop using it immediately and seek medical attention.
- Oxygen helps combustion. It is strictly forbidden to use this device when smoking or in the presence of open flames.
- This product cannot be used for life support and life continuation purposes, and is not suitable for use on newborns and infants.
- Do not expose the device to precipitation or rain or snow. Do not operate the oxygen concentrator in the rain, which may cause electric shock and device damage.
- Do not expose the device to precipitation or rain or snow. Do not operate the oxygen concentrator in the rain, which may cause electric shock and device damage.
- Do not use this product in a high temperature and high humidity environment (such as an unmanned car in a high temperature environment or a high humidity bathroom) to avoid damage to the device.

- Non-professionals should not disassemble the oxygen concentrator at will. Any modification to the device may impair performance or damage the device and will invalidate your warranty.
- Although oxygen is not an addictive drug, unauthorized use of oxygen therapy can still be very dangerous. You must seek medical advice before using the oxygen concentrator, and please set it to the flow prescribed by the doctor according to the instructions in this manual.
- The oxygen concentrator should be placed in a well-ventilated place, out of direct sunlight, with all sides at least 10 cm away from walls, furniture and the like. Avoid piles of carpets, heaters, electric radiators or hot air ventilators. Do not place the oxygen concentrator in a confined are.
- The time required for the device to be ready for its intended use from the lowest storage temperature is 2 hours, when the ambient temperature is 20℃.
- The time required for the device to be ready for its intended use from the maximum storage temperature is 2 hours, when the ambient temperature is 20℃.

Warming

- This product should not be used close to or stacked with other devices. If it must be used close to or stacked, it should be observed and verified that it can operate normally in the configuration it is used in.
- Except for cables sold by the manufacturer as spare parts for internal components, the use of accessories and cables other than those specified may result in increased device emissions or reduced immunity
- Patients with strict requirements for oxygen concentration should follow the guidance of professional doctors and monitor the alarm indications of the device
- Patients with severe lung diseases should consult professional doctors about the amount of oxygen they choose
- This product does not support the use of tracheotomy patients.
- Do not use lubricants other than those recommended by the manufacturer.Do not lubricate the accessories,joints,pipes and other accessories of the oxygen concentrator to avoid the risk of fire.
- Excessive length of the power cord, connecting tube and nasal oxygen cannula may cause the risk of strangulation, please tighten the power cord, connecting tube and nasal oxygen cannula during use or place them in a place that avoids contact with the human body.

1.1 Maintenance

The maintenance cycle of the portable oxygen concentrator is approximately once a year. Only professionals in the maintenance center, such as authorized personnel or factory-trained personnel, can perform repairs or adjustments.

1.2 Radio frequency interference

Most electrical appliances are susceptible to radio frequency interference, so using portable communication equipment near the oxygen concentrator may cause interference to the machine.

1.3 Risk of personal injury such as burns, electric shock, fire, etc.

To reduce the risk of personal injury, please pay attention to the following:

- Do not use in the shower. If the patient needs to use it continuously, the oxygen machine must be placed at least 2.0M away from the bathroom.
- Do not touch the oxygen concentrator when your body is wet. Do not use or store the oxygen concentrator near water or other liquids that are easy to conduct electricity.
- It is strictly forbidden to touch the oxygen concentrator that falls into water or other liquids that are easy to conduct electricity. If it falls into it, please unplug the adapter power plug immediately.
- When the machine is not in use, the power plug must be unplugged
- When using the oxygen concentrator, please follow the doctor's instructions and the user manual. Once the patient or caregiver finds that the oxygen supply is insufficient, they should immediately contact the oxygen concentrator provider or medical staff. Unless under the guidance of medical staff, please do not adjust the oxygen flow.
- When children or people with limited mobility use it, someone must supervise it.
- Please use this machine according to the intended use of the product in the user manual.

1.4 Disposal of waste consumables

When disposing of the nasopharyngeal tube/filter cotton and other waste used in this oxygen concentrator, please follow the relevant regulations of the local government. This product has no impact on the environment and no pollution.

For electronic and electrical waste (such as batteries, circuit boards, etc.), do not discard them at will. Please contact the relevant department in accordance with the relevant regulations of the local government and properly dispose of them according to the corresponding instructions.

Attention:

1. Please breathe oxygen at the flow rate recommended by the doctor, and do not increase or decrease the flow rate at will.
2. Do not place the oxygen concentrator near a strong magnetic field or electromagnetic interference source, and do not use mobile phones or devices that emit electromagnetic fields near the oxygen concentrator.
3. Do not use other models of power adapters. This product cannot be connected to other devices except for the accessories it comes with.
4. If a foreign object falls into the machine, please stop the machine immediately, unplug the power plug, and ask a professional to check it.
5. To avoid electric shock, please do not open the oxygen concentrator casing by yourself, and do not disassemble, repair or modify the oxygen concentrator without authorization.
6. It is prohibited to drag the machine by pulling the nasal oxygen cannula or power cord.
7. Please do not use corrosive solvents to wipe the machine.
8. Please use the machine within the specified operating temperature range.

9. It is recommended to clean the machine before each use and after oxygen inhalation.
10. Please use the accessories and optional products specified for this product, and do not use other parts.
11. When the machine fails, contact the dealer or manufacturer in time for repair. If you need to replace parts, please contact the dealer or manufacturer.

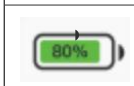
Warming

1.Oxygen is a flammable gas. Please do not smoke or use open flames when performing oxygen therapy or near users who are undergoing oxygen therapy.
2. Do not use petroleum or oil-based cleaning fluids or grease before and during oxygen therapy to avoid the risk of fire.
3.Do not use lubricants other than those recommended by the manufacturer.Do not lubricate the accessories, joints, pipes and other accessories of the oxygen concentrator to avoid the risk of fire.
4.Only use spare parts recommended by the manufacturer to ensure normal function and avoid the risk of fire.
5. At an altitude of more than 4000m or a temperature of 40ec or a relative humidity of more than 80%, the flow rate and oxygen content will be affected, and further affect the quality of treatment.
6.Oxygen makes it easier to catch fire and spread fire. When the oxygen concentrator is turned on and no one is breathing oxygen, do not place nasal oxygen cannulas or masks on bed covers or chair cushions because oxygen can easily ignite these materials. When the oxygen concentrator is not in use, it should be turned off to avoid oxygen enrichment.
7.If you feel uncomfortable or a medical emergency occurs during oxygen therapy, seek medical help immediately to avoid injury.
8. When the elderly, children or other patients cannot express discomfort, additional monitoring measures or distributed alarm systems can be used to convey discomfort and medical emergencies to the responsible caregivers to avoid injury.
9. Smoking during oxygen therapy is dangerous and may cause facial burns or death. Smoking is not allowed when there is an oxygen concentrator or any other accessory containing oxygen in the same room. If you plan to smoke, you should turn off the oxygen concentrator, remove the nasal oxygen cannula, leave the room where the nasal oxygen cannula or mask or oxygen concentrator is placed. If you cannot leave the room, you must wait 10 minutes after turning off the oxygen concentrator before smoking.
10.Open flames are dangerous during oxygen therapy and may cause fire or death. Open flames are not allowed within 2m of any accessory containing oxygen on the oxygen concentrator.
11. Do not perform maintenance or service on the equipment during oxygen therapy.

2 Symbol explanation

Description of the graphics, symbols, abbreviations and other identification symbols related to the use of this product

Symbol	Meaning	Symbol	Meaning
Warming	This behavior will endanger the personal safety of users. Ignoring it may cause serious harm	Attention	Precautions and service procedures must be followed; Ignoring them may result in minor injury or damage to the equipment
	AC Power		No one was breathing oxygen
	No smoking		Cannot throw it in the trash can and need to recycle it.
	No Open flame		Type BF applied part
	Warming		Type II device
	Do not use oil or grease		According to the instruction manual
	Do not disassemble without permission		No tumbling
	Up		Temperature limits
	Stacking level limit		Fragile items, handle with care
	There may be interference nearby		Fear of rain
IP22	Ingres of water or particular matter into ME EQUUIPMEN		

Symbol	Meaning	Symbol	Meaning
	Machine high temperature alarm		Low pressure alarm
	Compressor not working alarm		Gas line blockage alarm
	Low oxygen concentration		Oxygen enrichment concentration
	Power off charging symbol		Power on charging symbol
	Battery level display		Manufacturer

	Power on/off		Increased flow rate
	Silence the alarm sound		Flow rate reduction
	DC Power		

3 Product Introduction

3.1 Product Principle:

Portable oxygen generator refers to a device that uses the molecular sieve pressure swing adsorption principle to increase the oxygen concentration by absorbing nitrogen and other gas components. When the device is working, compressed air is injected into a closed adsorption tower equipped with a molecular sieve, causing the pressure in the adsorption tower to increase. The molecular sieve absorbs a large amount of nitrogen in the compressed air as the ambient pressure increases, while the oxygen in the compressed air still exists in the form of gas and is collected through a certain pipeline. This process is usually called the "adsorption" process. When the molecular sieve in the container adsorbs nitrogen to the critical state of adsorption saturation, the adsorption tower is blown to reduce the pressure. As the ambient pressure decreases, the molecular sieve's ability to adsorb nitrogen decreases, and the nitrogen is released from the inside of the molecular sieve and discharged as waste gas. This process is usually called "desorption". To ensure continuous and stable output of oxygen, oxygen generators usually use two (or more) molecular sieve adsorption towers, which are controlled by solenoid valves so that one adsorption tower is in the adsorption process while the other adsorption tower is in the desorption process. The two towers work alternately to complete the continuous oxygen production process.

This product uses the induction pulse mode to deliver oxygen. The induction pulse mode relies on the sensitive probe inside the machine to detect your breathing and deliver oxygen according to your breathing rate. It monitors your breathing rate, supplies oxygen when you inhale air, and stops supplying oxygen when you exhale air. This technology is usually used to better help you provide the appropriate amount of oxygen in all stages of daily activities and during rest.

3.2 Product structure:

The portable oxygen concentrator consists of an air compressor, a molecular sieve adsorption tower, an oxygen storage tank, a control system, an alarm system, accessories (nasal oxygen cannula, power adapter, lithium battery pack)

3.3 Product working conditions:

Operating temperature range:5℃ ~ 40℃

Operating humidity range: ≤80 % (non-condensing)

Operating pressure range: 62kpa ~ 106kpa

Altitude: ≤4000m

3.4 Power supply parameters:

AC Power: Input:100 ~240Va.c., 50/60Hz, 2.0A; Output: 19.0Vd.c. ⎓ 6.31A
Internal power supply: 14 .6V⎓ 6600mAh
Input Power: 120VA
Note: Check power supply every six months and replace if damaged

3.5 Product transportation and storage conditions

Transport and storage temperature range: -20 ~ 55℃
Transport and storage humidity range: 10% ~ 93% (non-condensing)
Store in a dry environment
Storage pressure range: 62kpa ~ 106kpa

3.6 Backup oxygen source

To prevent power outages or possible malfunctions of the oxygen concentrator, people who are in urgent need of oxygen and critically ill patients are prohibited from using this oxygen concentrator or must be equipped with other backup oxygen supply devices (such as oxygen cylinders, oxygen bags, etc.).
This machine is not suitable for use in emergency treatment of patients undergoing surgery or without spontaneous breathing function, as it may cause accidents, injuries or physical discomfort.

4 Product Performance specification

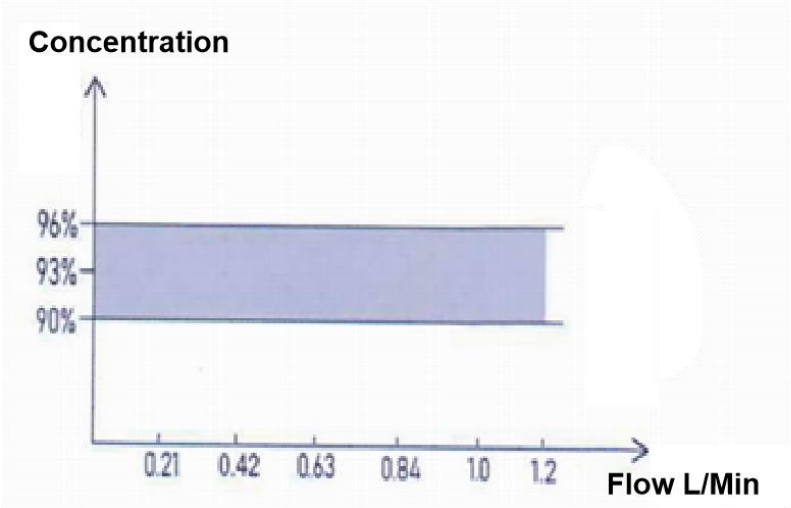
Product Name	Portable oxygen concentrator						
Product Model	JLO-190P						
Product size (length * width * height)	185× 90× 210mm						
Product Weight	2. 12kg (Batteries included)						
User Interface	2.8-inch color display						
Operating noise	≤60dB(A) @1 meter distance						
Audio alarm	≥60dB(A) @1 meter distance						
Warm-up time	2 min						
Oxygen concentration	93%±3%						
Maximum recommended flow	1.20 L/min, when setting level 6, oxygen concentration≥90%(v/v)						
Flow setting and pulse volume	Gear setting	1	2	3	4	5	6
	Respiratory rate times/min	Average pulse volume (mL)					
	15	14mL	28mL	42mL	56mL	70mL	84mL
	20	11mL	21mL	32mL	42mL	53mL	63mL
	25	8mL	17mL	25mL	34mL	42mL	50mL
	30	7mL	14mL	21mL	28mL	35mL	42mL
	35	6mL	12mL	18mL	24mL	30mL	36mL
	40	5mL	1lmL	16mL	21mL	26mL	32mL
	mL/breath, Deviation positive and negative 15% (Uncertainty of ±5%), refer to ISO 80601-2-67						

	Total flow per minute (mL/min)	210	420	630	800	1000	1200
	Under STPD (Standard Temperature, Standard Pressure and Dryness) conditions the allowable error is ±10% or ±200mL/min (The maximum value of the two)						
Maximum outlet pressure	≤26.1Psi (180kPa)						
Battery Duration	≥5H@setting 1 (under room temperature conditions)						
Battery charging time	≥3 hours						
Battery Specifications	14.6V, 6600mAh lithium battery						
Trigger pressure	It should not be greater than 60Pa						

4.1 Relationship between oxygen concentration and flow rate of oxygen concentrator output

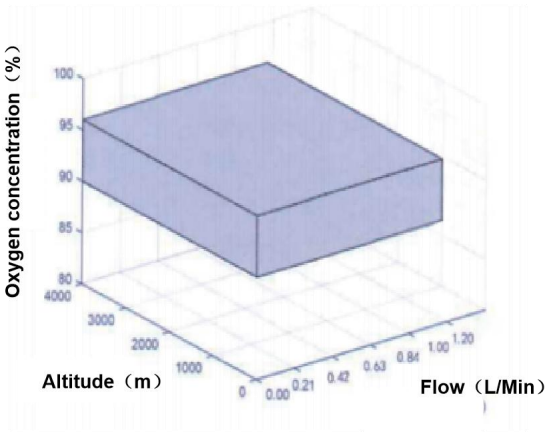
The oxygen concentrator has an electronic timer that can count the cumulative hours the concentrator has been used. The usage time is shown on the display when the concentrator is turned on.

When the nominal pressure at the oxygen generator outlet is zero, at the rated flow rate, the oxygen concentration is ≥90% (range fluctuation), and the relationship between the oxygen generator output oxygen concentration and flow rate is as follows:

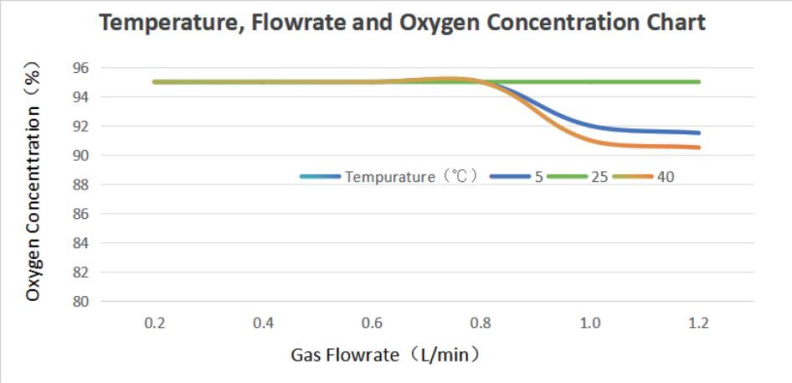


Relationship between oxygen concentration and flow rate of oxygen concentrator output

The oxygen concentration of the oxygen generator fluctuates between 90% and 96% under different air pressure conditions at altitudes ranging from 0 to 4000m. The relationship between the oxygen concentration and flow rate of the oxygen generator output is as follows:



Relationship between oxygen concentration and flow rate of oxygen concentrator under different air pressure conditions



Relationship between oxygen concentration and temperature of oxygen concentrator output

5 Scope of application/intended use, contraindications

5.1 Scope of application

This product is suitable for use in hospitals or at home.

This product is suitable for use by adults.

The patient is expected to be the operator.

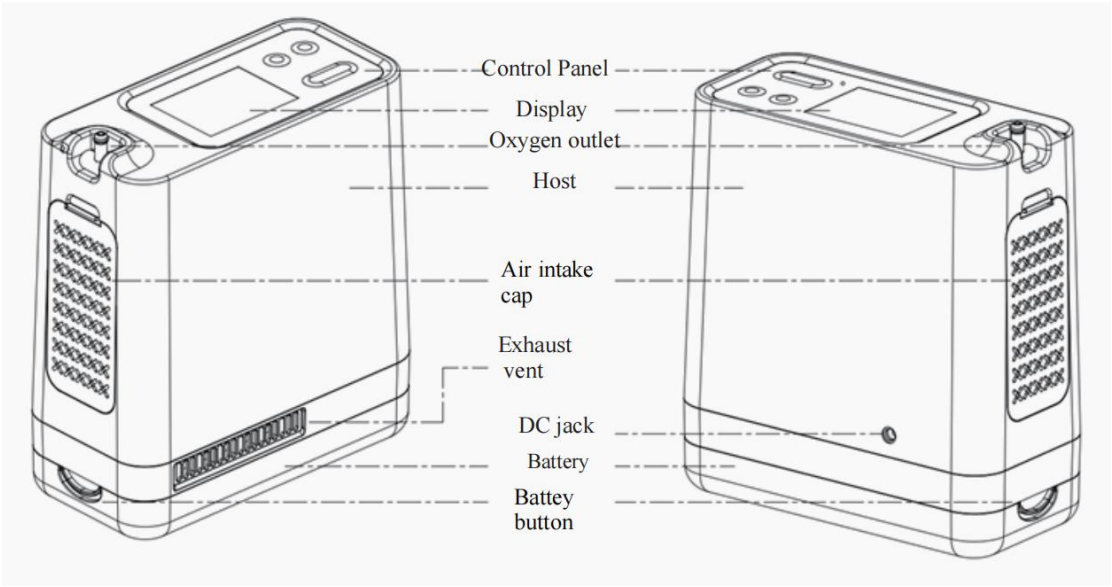
5.2 Intended use

Using air as raw material, the molecular sieve pressure swing adsorption process is used to produce oxygen-enriched air (93% oxygen) to supply oxygen to patients according to its clinical application range.

5.3 Contraindications

It is contraindicated for patients with oxygen poisoning or oxygen allergy.

6.Main Structure



⚠ Attention:

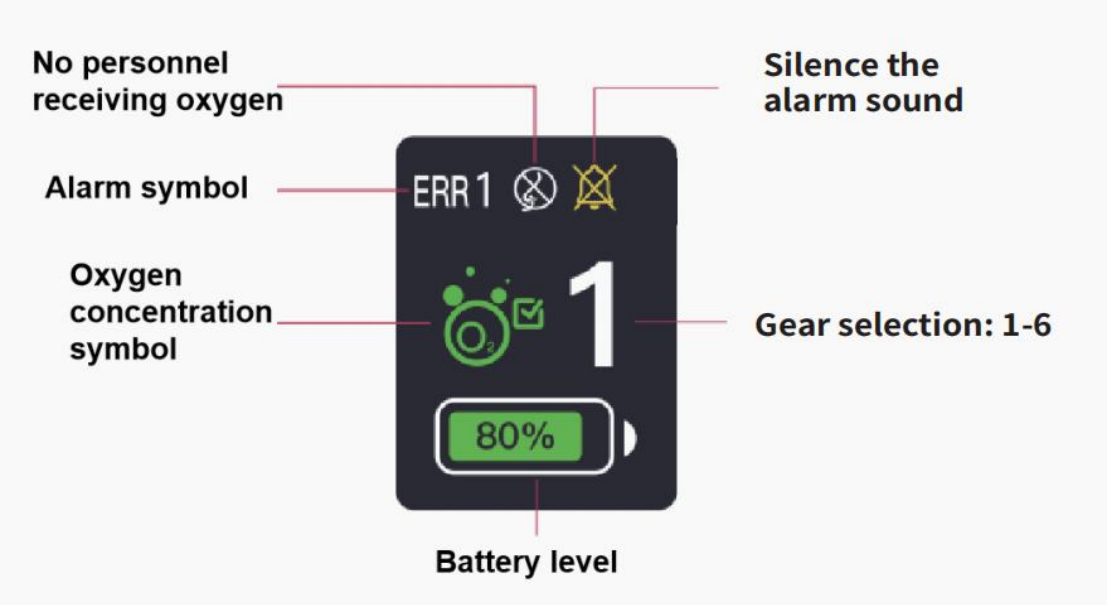
It is normal for the exhaust port to discharge hot air.

It is strictly forbidden to block the air inlet and exhaust port.

7 Display and alarm function

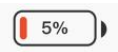
7.1 Boot interface

7.2 Main working interface



⚠Attention: The style and content of the main interface may change with the presence or absence of alarm information and gear changes. It is for reference only. The actual display is subject to the operating status of the equipment.

7.3 Alarm and prompt information

Display Location	Display Status	Interpretation
Battery level display		Currently charging with adapter
		Use only the remaining battery power
		Battery fully charged
		When the battery power is less than 15%, the battery power indicator turns yellow.
		When the battery power is less than 5%, the battery power indicator turns red.
Gear information	1~6	Currently selected flow rate
Alarm information	The alarm is displayed as Err1	Machine high temperature alarm, the machine temperature is higher than 60℃. High priority alarm.
	The alarm is displayed as Err2	Low pressure alarm, gas tank pressure failure alarm. High priority alarm
	The alarm is displayed as Err3	Compressor not working alarm, including compressor, solenoid valve and other faults. High priority alarm.
	The alarm is displayed as Err4	Gas path blockage alarm, no oxygen output at the oxygen outlet, nasal oxygen cannula blockage, etc. High priority alarm

	The alarm is displayed as Err5	When the battery level is less than 5%, a high priority alarm is triggered.
	The alarm is displayed as Err6	No one was breathing oxygen. Low priority alarm.
	The alarm is displayed as Err7	The battery level is less than 15%. Low priority alarm.
	The alarm is displayed as Err8	Oxygen concentration below 82%. Low priority alarm.
Tips		When the oxygen concentration is lower than 82%, it will be displayed in yellow and will fluctuate with the frequency of oxygen inhalation.
		When the oxygen concentration is higher than 82%, it will be displayed in green and will pulse with the frequency of oxygen absorption.
		No oxygen inhalation display
		Alarm inactive state (alarm sound off)

Alarm symbol description:

ERR1, ERR2, ERR3, ERR4, ERR5 are high priority alarms, with white characters on a red background;

ERR6, ERR7, ERR8 are low priority alarms, with white characters on a yellow background.

7.4 Key Function

 Power switch

When the device is off, press the button for about three seconds to turn on the device;
When the device is working, press and hold the button for about three seconds to turn off the device.
When the device is working, press and hold the button for about one second, the machine enters standby mode, and waits for 3 minutes. If there is no operation on the machine, it will automatically shut down.
When the device is on standby, press and hold the button for about one second, and the machine will start working again.

 Gear setting button

Use the "+" or "-" gear setting button to select the gear.
The display shows the current setting. There are 1 to 6 flow settings to choose from.

Attention:

When the device is turned on, its default flow setting is level 1.
When the alarm sounds, please pay close attention to the screen display of the alarm information and the alarm warning light to avoid ignoring the alarm information.

8 Installation and usage

When the machine is connected to the power supply and turned on, you can hear a “beep” prompt, the screen lights up, the compressor starts to work, there is oxygen output, and the machine enters the normal working state.

In the working state, the machine will automatically detect the internal power exhaustion, low oxygen concentration, high temperature, low pressure, airway blockage and other faults and send out an alarm sound.

1. Please remove all packaging materials for the first use, and put plastic packaging bags out of reach of children to avoid suffocation.
2. Read the instructions carefully before use to ensure that the accessories are installed in place and operated and used correctly.
3. Please connect the battery when using. Long-term use with battery connected to the adapter will not damage the battery. The battery is protected. When using the machine for the first time, after connecting the battery, you need to plug in the power adapter to charge and activate the battery.
4. When using this product, do not touch any live components with wet hands, such as plugs, power cords, adapter connections and other live parts, to avoid electric shock hazards.
5. Do not damage or break the power cord or plug. Do not use a plug with loose wires to avoid fire or electric shock.
6. Do not place heavy objects on the device to avoid damage to the device.
7. Do not place any part of your body near the exhaust port or other hot parts for a long time to avoid burns.
8. Please set the appropriate flow level as recommended by your doctor.
9. When using this product, the air inlet should be located in a well-ventilated place, and the air inlet and exhaust ports should not be blocked to avoid heat accumulation that may affect product performance or even cause a fire.
10. This product should be kept away from direct sunlight as much as possible to avoid local overheating.
11. This product should be kept away from fire sources when in use. Smoking is prohibited to avoid fire.
12. This product should be kept away from pollution, smoke and flammable, explosive and volatile items, such as alcohol, gasoline and other dangerous items, to avoid fire or explosion.
13. This product cannot be placed sideways or upside down when in use.
14. This product has a service life of 5 years from the date of manufacture. The life of consumables is related to the conditions of use. Please purchase and replace consumables in time according to the actual use.
15. The production date is shown on the product nameplate.

Failure to use the device in the manner specified may cause damage to the device and void the warranty.

1) Oxygen delivery settings must be determined individually for each patient and the equipment to be used (including accessories) must be configured.

2) Proper placement and positioning of the patient interface is critical for consistent operation of this equipment.
3) Some of the patient's breathing efforts may not trigger the oxygen delivery function of the oxygen concentrator.
4) Ensure compatibility of the oxygen saving device with all parts and accessories used to connect it to the patient prior to use.
5) Ensure that the oxygen delivery settings and the configuration of the equipment to be used, including accessories, are individually determined and documented for the patient.
6) Re-evaluate the effectiveness of the therapeutic environment at regular intervals.

9 Operation Guidelines

9.1 Connect the power supply

Select appropriate power connection conditions according to the usage environment.
When using only batteries.
Install the battery for this device into the device battery port. Note that the battery should be installed firmly.

- Align the battery with the left end of the front of the machine.
- Slide it from the left to the right until you hear a "click" and confirm that the battery is installed in place.

When using the AC power adapter

- Connect the AC power adapter and power cord firmly, and connect the input plug to the socket.
- Required input: AC voltage is 100-240V, frequency is 50/60Hz, 2.0A
- Connect the output plug of the AC power adapter to the DC power input of the device.
- After connecting the AC power adapter, the device will enter the standby interface

The power adapter equipped with the product meets the safety requirements of IEC60601-1:2020 standard.

Attention:

- When the battery is not in use, please take care to protect the battery interface and the battery interface on the device, and do not touch the conductor or touch it directly with your hands.
- When the device is powered by a battery alone and automatically shuts down due to an "empty battery" alarm, do not restart the device using the empty battery alone to avoid affecting the battery life and device performance.

Warming

a) There is a risk of fire associated with oxygen enrichment during oxygen therapy. Do not use near sparks or open flames.
b) Smoking during oxygen therapy is dangerous and can result in serious injury or death to patients and others due to fire.
c) To ensure that you receive a therapeutic amount of oxygen delivery based on your medical condition, the JLO-190P Oxygen Concentrator must be

- Be used with your accessories in settings that are individually determined or prescribed for your activity level.

- Used with a specific combination of parts and accessories that meet the manufacturer's specifications for the oxygen conservator or accessory.

d) The settings of this JLO-190P oxygen concentrator may not be the same as continuous flow oxygen.

e) Other models or brands of oxygen therapy equipment do not have the same settings as the JLO-190P oxygen concentrator.

f) Use only water-based lotions or creams that are compatible with oxygen before and during oxygen therapy. Do not use petroleum or oil-based lotions or ointments to avoid the risk of fire and burns".

g) Do not lubricate oxygen conservator fittings, connections, tubing or other accessories to avoid the risk of fire and burns.

h) Use only spare parts recommended by the manufacturer to ensure proper functioning and to avoid the risk of fire and burns.

i) Wind or strong air currents can adversely affect the accurate delivery of oxygen therapy.

j) The use of this equipment at temperatures higher than 4000 meters above sea level or exceeding -5°C to 40°C can adversely affect the quality of treatment.

k) Oxygen makes it easier for fires to start and spread. If the oxygen reservoir is turned on but not in use, do not leave the nasal cannula on the bedspread or chair cushion; oxygen makes the material flammable. Turn off the oxygen reservoir when not in use.

l) If you feel ill or experience a medical emergency while receiving oxygen therapy, seek medical help immediately to avoid injury.

m) Geriatric, pediatric, or any other patient unable to express discomfort may require additional monitoring to avoid injury.

n) Smoking during oxygen therapy is dangerous and may result in facial burns or death. Smoking or open flames are not permitted in the same room as the oxygen reservoir or any oxygen carrying accessories. If you smoke, you must always turn off the oxygen reservoir, remove the cannula and leave the room where the cannula or oxygen reservoir is located. If you are unable to leave the room, you must wait 10 minutes after the oxygen stops flowing.

o) The oxygen flame arrestor is an accessory device that reduces the spread of fire for patient safety when delivering oxygen to the patient.

Warming:

- It is prohibited to use adapters that are not provided with the product or other adapters that do not meet the safety requirements of IEC60601-1:2020.
- It is prohibited to use lithium batteries that are not provided with the product.

9.2 Start-up preheating

Press the device power button, and after hearing a "beep" power-on prompt tone, enter the power-on screen. After the system starts, the device enters the preheating state. The device preheating time is about 2 minutes. After the preheating is completed and the device status meets the normal use requirements, you can wear the equipped nasal oxygen cannula for normal use.

Attention:

- When the power is turned on, you should hear a warning sound, and the display should light up after startup.
- During the machine preheating period, the device will automatically spray oxygen to evacuate the internal air. At this time, the output flow and concentration of the device may not meet the standard, and the oxygen concentration will display a yellow symbol. Do not connect the nasal oxygen cannula for use.

9.3 Connect the nasal oxygen cannula

Note: The proper placement and positioning of the PATIENT interface is critical to the effectiveness of the therapy.

- Connect one end of the factory-equipped nasal oxygen cannula to the oxygen outlet connector of the device, ensure that the connection is reliable and leak-free, and be careful not to kink or block the nasal oxygen cannula to avoid causing device-related alarms and affecting normal use.
- If you need to purchase a nasal oxygen cannula yourself, please contact the device provider or, under the guidance of professional medical staff, select a nasal oxygen cannula that is compatible with this device and has obtained a formal medical registration certificate.
- If it does not meet the requirements, do not use it and contact the device provider in time.

Attention:

- This device is a pulse oxygen supply mode. When using this device, it must be connected to a nasal oxygen cannula;
- In order for the oxygen concentrator to correctly detect breathing and deliver pulse oxygen, please ensure that the nasal oxygen cannula is correctly installed and that the oxygen tube is not kinked or blocked;
- Please follow the manufacturer's instructions for the nasal oxygen cannula. Replace the nasal oxygen cannula according to the manufacturer's or equipment supplier's recommendations. Other accessories can be purchased from the equipment supplier;
- Do not use a nasal oxygen cannula that is not suitable for this device or purchased without the equipment provider or under the guidance of professional medical staff, so as not to affect the normal operation of the device and the normal use of the user.
- The randomly delivered nasal oxygen cannula is a single-use product, please do not reuse it to avoid infection. After use, please dispose of it in accordance with local medical waste disposal laws.

9.4 Adjust the flow rate

Please set the flow rate according to the oxygen flow rate recommended by the doctor. Before the doctor makes a suggestion, please communicate with the doctor about the performance of this device to avoid the doctor making a gear recommendation that is not suitable for this device.

9.5 Shutdown

- When the device is working normally, press and hold the power button for about 3 seconds, the device will emit a "beep" prompt sound and enter the shutdown interface, and the device will automatically shut down.
- If the machine is connected to the adapter and in use, after the machine is shut down, the standby interface will show that the machine is in charging state. Please manually disconnect the adapter to power off the device.
- If the device is installed with a battery during operation, the screen will display the current battery power and a reminder that it is charging after shutting down. After the battery is fully charged, please manually disconnect the adapter to power off the device.
- If the device is shut down when powered only by battery, the device will be completely powered off directly.

9.6 Battery

Powered by batteries, when the battery power shows 10% remaining, it is expected to be used continuously for 10 minutes. The user needs to charge the battery, or use a backup oxygen source to prevent the machine from stopping working and being unable to absorb oxygen due to battery exhaustion. The battery can be charged and recharged nearly 500 times, the battery life can reach 3.5 hours in the first gear.

⚠ Note:

- When the reminder sound sounds, please pay close attention to the device status to prevent yourself from not fully understanding the device operation.
- It is forbidden to remove the battery while the device is running.
- Please replace the lithium battery correctly. Unsuitable lithium batteries cannot be installed and used. Please contact your dealer or contact the manufacturer for replacement.
- User/operator who replace lithium batteries need to be trained, otherwise it can lead to dangerous situations.
- Do not place the ME equipment in a position that makes the disconnect device difficult to operate.

10 Daily maintenance

10.1 Maintenance frequency

Name	Maintenance cycle	Maintenance	Remark
Air intake cap	Once a week	User cleaning	Wash with tap water and dry
Air intake filter	Once a month	User Replacement	Replace the air intake filter cotton

Molecular sieve components	Once a week	User boots up and runs for more than 0.5 hours	Maintaining the best molecular sieve effect
	Once a year	Paid replacement	Contact Supplier
Nasal oxygen cannula	/	Replace according to the instructions	No special instructions are required when using the nasal oxygen cannula
Battery	Once every two months	Charge to 30%	Maintenance

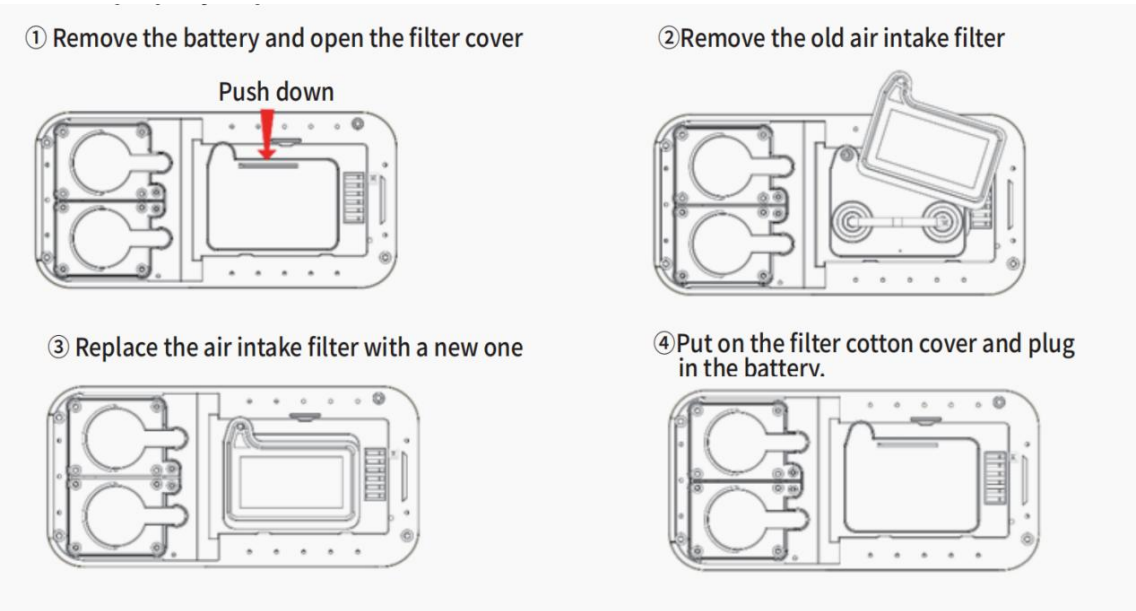
⚠ Note:

- The maintenance cycles in the table are recommended values. The actual maintenance cycles will vary with the actual use environment and actual use conditions. Please pay close attention to the equipment use conditions and related alarm prompts.
- The effects of degraded sensors and electrodes, or loosened electrodes, that can degrade performance or cause other problems, Maintenance calibration is recommended once a year.

10.2 Replacement of air intake filter

- Turn off the device, disconnect the power supply and remove the battery.
- Take out the air intake filter and replace it with a new one.
- When taking out the air intake filter, please note that the air intake filter may absorb and accumulate a lot of dust after long-term use. Please operate carefully and take precautions to avoid inhaling dust.
- Install the new filter in the correct direction.
- Reinstall the filter cover.

Please properly dispose of the discarded filter.



⚠ Attention:

■ Failure to install or replace the filter cotton for a long time may affect the performance of the equipment or damage the equipment. Please replace the filter cotton in time. The replacement cycle depends on the use environment and usage.

■ The filter cotton is a consumable. Please contact the equipment provider to purchase it when it needs to be replaced.

10.3 Replacement and maintenance of molecular sieves

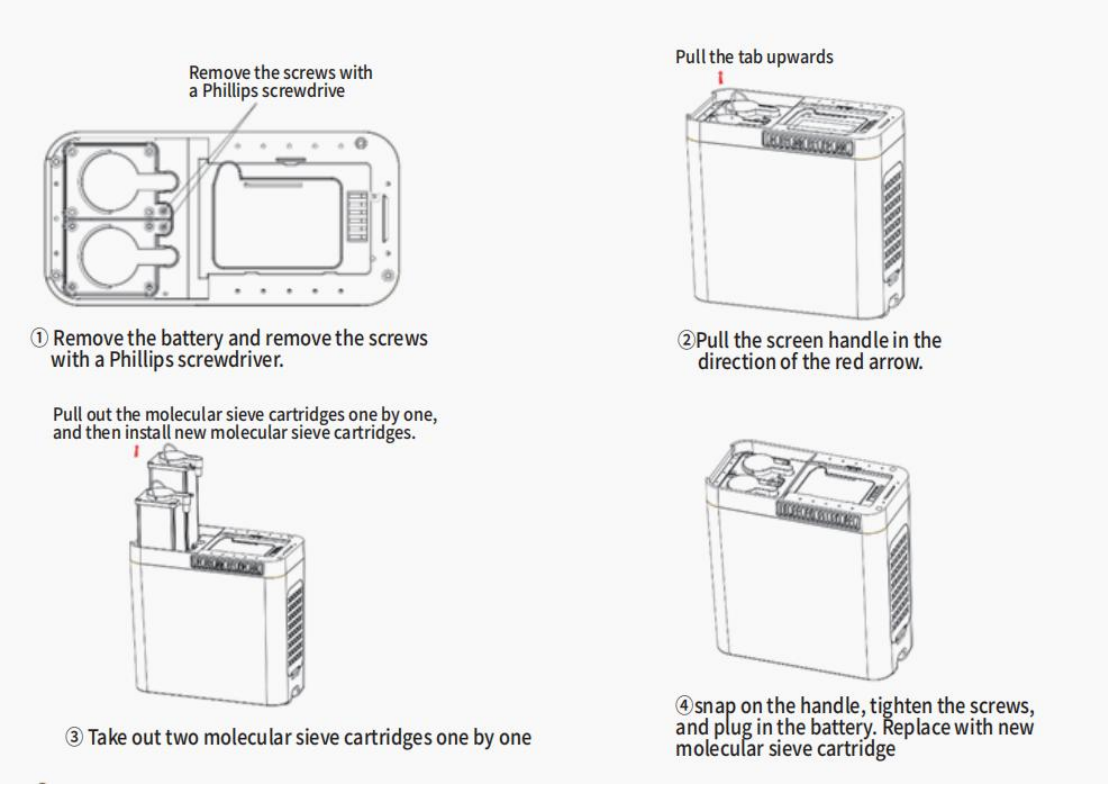
● When the equipment indicates that the oxygen concentration is low and the molecular sieve needs to be replaced, please contact the designated seller in time.

● Long-term storage may shorten the service life of the molecular sieve.

● Long-term operation in a humid environment may shorten the service life of the molecular sieve.

● When the molecular sieve is close to the service life, it may cause the internal pressure to increase, the noise to increase, and the oxygen concentration to decrease, affecting the performance and normal use of the equipment. Please pay attention to the pressure, concentration reminder and other related alarm information in time.

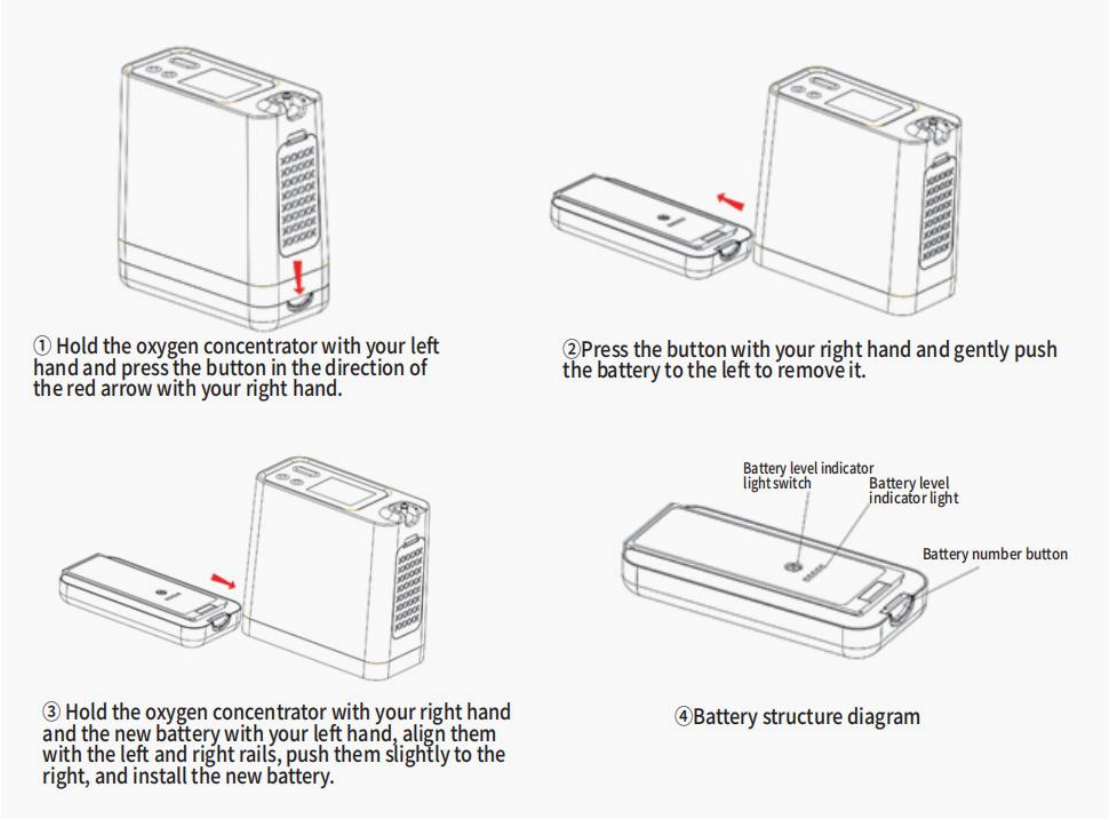
⚠ **Note:** Particular attention be given to the disposal of the molecular sieves, after replacement, the molecular sieve should be treated according to the local medical waste disposal method.



⚠Warming: Do not dismantle the machine to replace the molecular sieve without permission. Only the equipment supplier or a qualified maintenance engineer can dismantle the machine to replace the molecular sieve.
⚠Attention: Molecular sieve is a consumable. Please contact the equipment provider to purchase it in time when replacement is needed

10.4 Battery Replacement and Maintenance

- This device requires a factory-equipped special battery, and one battery is standardly shipped. Users can contact the designated seller to purchase batteries as needed.
- Battery life: 500 cycles of charge and discharge. After 500 cycles of charge and discharge, the capacity drops to 80%.
- When not in use for a long time, please remove the battery from the device and pay attention to protecting the battery electrodes. Do not contact with metal and other conductors.
- Prevent fire and other hazards.
- When storing batteries, please place them out of the reach of children to avoid danger.
- Batteries that are not used for a long time need to be charged and maintained regularly. It is recommended to keep the power level at around 30% when storing.



⚠Warming: It is prohibited to use lithium batteries other than those provided with this product.
⚠Attention: Batteries are consumables. Please contact the equipment provider to purchase them when replacement is required.

10.5 Nasal oxygen cannula replacement

The machine is equipped with 1 set of nasal oxygen cannula at the factory. The nasal oxygen cannula equipped with the device at the factory meets the medical device product registration requirements. Users can purchase nasal oxygen cannula as needed, but they need to ensure that the following conditions are fully met:

1) Please contact the equipment provider or purchase under the guidance of professional medical staff.

2) Please purchase from regular channels, and the nasal oxygen cannula has obtained medical device certification;

3) . The rated flow rate of oxygen in the nasal oxygen cannula is 5 liters per minute;

4). It can fit well with the air outlet of this product without air leakage.

Please wear the nasal oxygen cannula correctly and use it according to the instructions for use of the nasal oxygen cannula.

⚠Warming

(1) Oxygen generating equipment and its parts and accessories are designated for specific flow rates.

(2) Incompatible parts or accessories can result in degraded performance.

(3) It is the responsibility of the responsible organization to ensure the compatibility of the oxygen generating equipment with all parts or accessories used to connect it to the patient prior to use.

10.6 Expiration date

Category	Expiration date
Oxygen generator host	5 years
Molecular sieve	1 year
Battery	500 full charge and discharge cycles or 1 year
Nasal oxygen cannula	Single use

When the oxygen concentrator is nearing the end of its service life, it may cause equipment performance degradation or equipment failure. Please pay attention to relevant alarm information such as flow, concentration, and failure.

When the battery is nearing the end of its service life, it may fail to charge, charge slowly, fail to discharge, or have a sharp drop in battery life. Please pay attention to the battery status in a timely manner.

⚠Attention: The service life in the table is a recommended value. The actual service life will vary with the actual use environment and actual usage. Please pay close attention to the device usage status and related alarm prompts.

10.7 Equipment cleaning

Note:

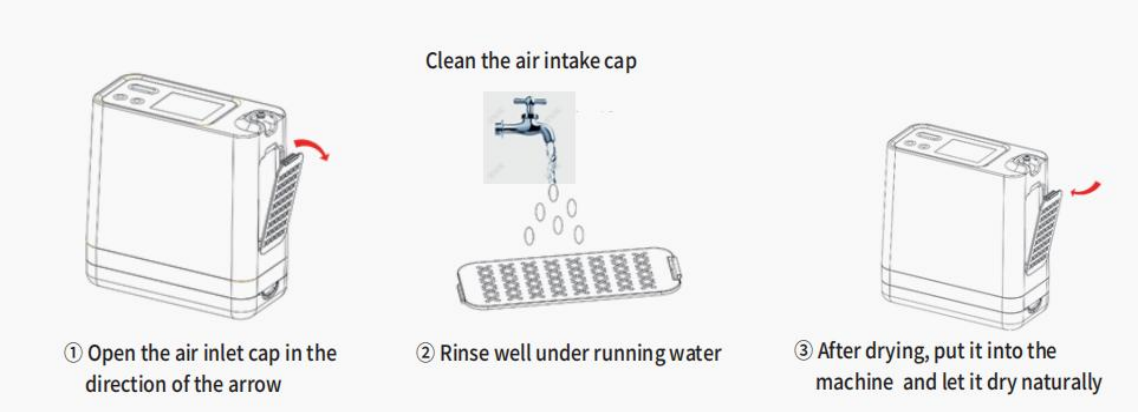
- Before cleaning, make sure the machine is turned off, unplug the power cord from the socket, and remove the battery.
- The power-off sequence should be to disconnect the wall power plug first, then disconnect the plug at the machine end.

- Do not allow the machine to get wet or get wet. Once this happens, the machine will malfunction or shut down, and it will also increase the risk of electric shock.
- Do not pour liquid directly on the machine. Chemical cleaners used on the plastic shell of the machine may damage the plastic shell of the device. These cleaners include but are not limited to the following list: highly concentrated chlorinated solutions (ethyl chloride), concentrated oxidant products (ethylene dichloride), and oil products (Clorox).

1). Only use a damp cotton cloth or sponge with a household neutral cleaning solution to clean the body, control panel and power cord, and then wipe the cleaned parts dry.
Be careful not to allow liquid to enter the machine. Pay special attention to ensure that there is no dust, water, or other particles at the oxygen outlet.

Do not use organic solvents or other flammable and explosive volatile substances for cleaning. Make sure the device is completely dry before use. Be careful not to lubricate replaceable parts to avoid the risk of fire and burns.

2) Remove the air inlet cover as shown in the figure below. The air inlet cover must be cleaned once a week to ensure that there is enough air passing through the device.



11 Common problems and solutions

Problem	Possible causes	Recommended Solutions
The device cannot be turned on	The battery is not installed correctly	Remove the battery and reinstall it correctly
	Battery drain	Plug the power cord into the charging port and connect the adapter to charge the battery
	Bad AC power connection	Check that the power connection is secure
No oxygen output	Kinked or blocked nasal cannula	Check the nasal cannula and its connection to the oxygen outlet
	Equipment failure	Contact equipment supplier
Insufficient oxygen concentration	The molecular sieve may need repair	Please contact the equipment supplier to replace the molecular sieve
Over temperature alarm	High temperature Operating temperature is too high	①Improper location, make sure the machine is not near any heat source or move it to a cooler place. ②Make sure the airflow is not blocked; ③Contact the equipment supplier.
Compressor stall alarm	Compressor failure	Contact equipment supplier
Oxygen concentration below 82% alarm	Low oxygen concentration	Contact equipment supplier
Gas tank low pressure alarm	Low Flow	Contact equipment supplier
Other tips	/	Perform a full power cycle by following these steps: Remove the battery and disconnect the AC and DC external power supplies; Then re-install the battery and the power cycle is complete; Contact the equipment supplier.

The following status is not a fault

The exhaust port is a heat dissipation port. When the device is running for a long time or the ambient temperature is high, the temperature of the gas discharged by the device will rise. This is a normal phenomenon. The machine is equipped with high temperature protection. If the exhaust port is blocked or other reasons cause the device temperature to be too high, the device will issue a prompt.

12 Packing List

Serial number	Name	Quantity	Remark
1	Host	1	Standard configuration
2	Battery	1	Standard configuration
3	Adapter	1	Standard configuration
4	Power cord	1	Standard configuration
5	Nasal oxygen cannula	1	Standard configuration
6	Air intake filter	1	Standard configuration
7	Car adapter	1	Standard configuration
8	Carrying Case	1	Standard configuration
9	Manual	1	Standard configuration
10	Warranty card (on the back cover of the manual)	1	Standard configuration
11	Certificate	1	Standard configuration

13 Unpacking instructions

1. Check whether the packaging box is damaged. If there is any damage, notify the freight company and equipment supplier in time.

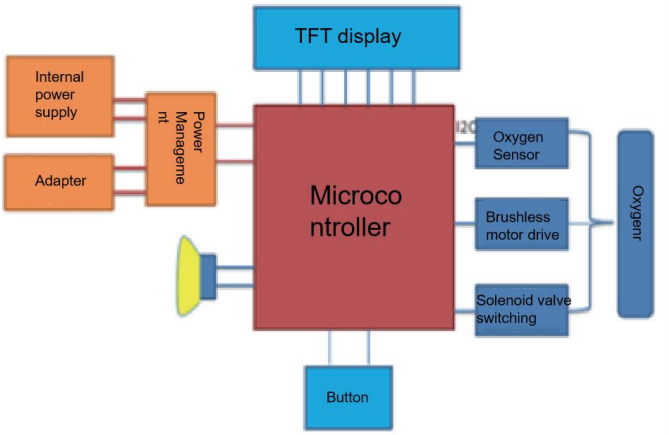
2. Carefully take out the whole machine and related parts, and compare them with the packing list. If there are any parts that do not match the packing list or have quality problems, please contact the equipment provider or after-sales service.

3. Please keep the packaging box and packaging accessories for storage and transportation.

14 Warranty Description

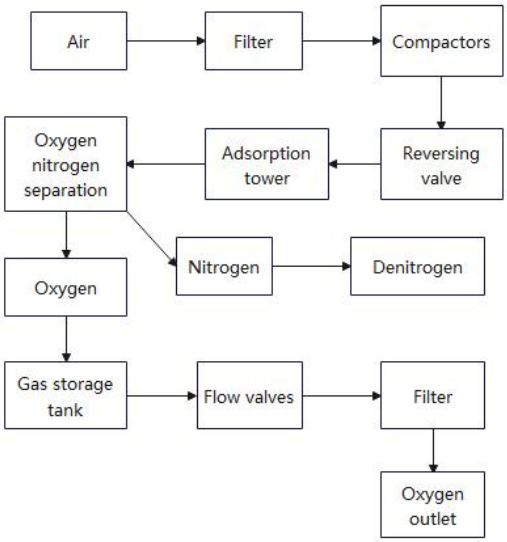
The oxygen generator host (excluding molecular sieve) is under warranty for 2 years from the date of purchase.
Molecular sieve, battery, AC adapter (with power cord) are under warranty for 1 year from the date of purchase.
All repair services must be performed by the designated repair service center.
During the warranty period, if the fault is not caused by human factors, the warranty is free.
Outside the warranty period, the repair cost will be charged.
If the damage is caused by improper use, paid repair service will be provided.
Consumable nasal oxygen cannulas and filter cotton are not covered by the warranty.

Annex 1 System Circuit Diagram



Annex 2: System gas path diagram

Schematic diagram of air path operation:



Removable parts: Intake filter cotton needs to be purchased by contacting the service provider and can be replaced by the user.

Other airline components cannot be replaced at will, and need to be contacted to the designated maintenance service center for

Annex 3: Alarm indication (need to clarify priority, response time, sound and light characteristics)

When the system fails, such as compressor failure, gas leakage failure, molecular sieve failure, cooling fan failure;

The current fault code will be displayed on the display screen, and an alarm will sound, prompting the user to suspend the use of the machine;

Troubleshoot according to the "Common Problems and Solutions" in the manual. If necessary, please contact the equipment provider in time.

The detailed fault items of the equipment are shown in the following table:

Fault name	Possible cause of failure	Fault indication
Internal power exhaustion alarm	Battery charge is less than 5%	Red indicator light, sound alarm
Low oxygen concentration alarm	Molecular sieve aging	Yellow low oxygen concentration symbol
Over temperature alarm	The cooling fan is not operating properly	The alarm symbol is displayed as ERR1
Gas tank low pressure alarm	Gas leakage	The alarm symbol is displayed as ERR2
Compressor stall alarm	Compressor failure	The alarm symbol is displayed as ERR3
Gas path blockage	No oxygen output from the oxygen outlet, nasal oxygen cannula blocked, etc.	The alarm symbol is displayed as ERR4

⚠Attention: Please pay close attention to the alarm warnings to avoid ignoring the alarm information.

15 Electromagnetic compatibility instructions

This product complies with the relevant requirements of the IEC60601-1-2 standard for electromagnetic compatibility.

Users should install and use the product according to the electromagnetic compatibility information provided in the accompanying documents.

Portable and mobile radio frequency communication equipment may affect the performance of the device. Avoid strong electromagnetic interference when using it, such as near mobile phones, microwave ovens, etc. For detailed guidelines and manufacturer's statements, please see Annex 4.

Annex 4 Guidance and manufacturer’s declaration

Electromagnetic compatibility

⚠Attention: JLO-190P complies with the relevant requirements of IEC60601-1-2 standard electromagnetic compatibility; users should install and use according to the electromagnetic compatibility information provided in the accompanying documents;

Portable and mobile radio frequency communication equipment may affect the performance of JLO-190P, avoid strong electromagnetic interference when using it, such as near mobile phones, microwave ovens, etc.;

For detailed instructions and manufacturer's statements, please see the attachment

⚠Warning:

JLO-190P should not be used close to or stacked with other equipment. If it must be used close to or stacked, it should be observed and verified that it can operate normally in the configuration it is used in;

Except for the cables sold by the manufacturer of JLO-190P as spare parts for internal components, the use of accessories and cables other than those specified may result in increased emissions or reduced immunity.

Serial number	Cable Name	Cable length	Whether to block
1	Adapter output line	2.0M	No
2	Power cord	2.0M	No

Table 1

Guidance and manufacturer's declaration - Electromagnetic emissions		
JLO-190P is intended to be used in the following electromagnetic environment. The purchaser or user should ensure that it is used in this electromagnetic environment.		
Emissions test	Compliance	Electromagnetic environment - Guide
RF Transmission CISPR 11 1990	Group1	The JLO-190P uses RF energy only for its internal function. Therefore, its RF emissions are low and are unlikely to cause any interference to nearby electronic equipment.
Time-frequency transmission CISPR 11 1990	Class B	
Harmonic emissionIEC16000-3-2	Class A	The JLO-190Pis suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Voltage fluctuation/flicker emission IEC16000-3-3	Complies	

Table 2

Guidance and manufacturer's declaration - Electromagnetic emissions			
JLO-190P is intended to be used in the following electromagnetic environment. The purchaser or user should ensure that it is used in this electromagnetic environment.			
Immunity test	IEC6061-1-2 Test level	Compliance level	Electromagnetic environment - Guide
Electrostatic Discharge (ESD) IEC61000-4-2	±8KV contact ±2KV,±6KV,±4KV,±8KV,±15KV	±8KV contact ±2KV,±6KV,±4KV,±15KVair	Floors should be wood, concrete or tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical Fast Transient Burst IEC61000-4-4	Power supply lines: ±2 kV 100 kHz repetition frequency	±2KV for power line	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC61000-4-5	±1KV line to line ±2KV line to ground	±1KV line to line	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power input lines IEC61000-4-11	0% UT; 0.5 cycle at 0, 45, 90, 135, 180, 225, 270 and 315 degrees, 0% UT; 1 cycle 0 degree 70% UT (30% dip in UT) for 25 cycle single phase at 0 degree 0% UT; 250 cycles	0% UT; 0.5 cycle at 0, 45, 90, 135, 180, 225, 270 and 315 degrees, 0% UT; 1 cycle 0 degree 70% UT (30% dip in UT) for 25 cycle single phase at 0 degree 0% UT; 250 cycles	Mains power quality should be that of a typical commercial or hospital environment. If the user of the JLO-190P requires continued operation during power mains interruptions, it is recommended that the JLO-190P be powered from an uninterruptible power supply or a battery.
Power frequency magnetic field(50/60Hz) IEC61000-4-8	30 A/m 50Hz/60Hz	3A/m,50Hz,60Hz	Power frequency magnetic fields should be characteristic of levels found in a typical location in a typical commercial or hospital environment.
Note: UT is the a.c. mains voltage prior to application of the test level.			

Table 3

<table>
<tr><td colspan="4">Guidance and manufacturer's declaration - Electromagnetic immunity</td></tr>
<tr><td colspan="4">JLO-190P is intended to be used in the following electromagnetic environment. The purchaser or user should ensure that it is used in this electromagnetic environment.</td></tr>
<tr><td>Immunity test</td><td>IEC60601 Test level</td><td>Compliance level</td><td>Electromagnetic environment - Guide</td></tr>
<tr><td>Radio Frequency Conduction IEC61000-4-6</td><td>3 VRMS 150kHz to 80MHz 6Vrms in ISM bands between 150kHz to 80MHz 80%AM at 1kHz</td><td>3V (Effective value)</td><td rowspan="2">Portable and mobile RF communications equipment should be used no closer to any part of the JLO-190P, including cables, than the recommended separation distance calculated from the equation appropriate to the frequency of the transmitter.
Recommended isolation distance
$d = 1.2\sqrt{P}$
$d = 1.2\sqrt{P}$ 80MHz to 800MHz
$d = 2.3\sqrt{P}$ 800MHz to 2.7GHz
Where, P- based on the transmitter manufacturer to provide the transmitter maximum fixed output power, in watts (W);
d - Recommended isolation distance, in meters (m). The field strength of a fixed frequency transmitter is determined by surveying the electromagnetic site C and should be lower than the coincidence level in each frequency range d.
Interference may occur in the vicinity of equipment marked with the following symbol.
  </td></tr>
<tr><td>Radio Frequency Radiation IEC61000-4-3</td><td>10 V/m 80MHz to 2.7GHz 80%AM at 1kHz</td><td>10v/m</td></tr>
<tr><td colspan="4">Note 1: At 80 MHz and 800 MHz, the formula for the higher frequency band is used.
Note 2: These guidelines may not be applicable in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</td></tr>
<tr><td colspan="4">a) Fixed transmitters, such as base stations for wireless (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast, their field strengths cannot be predicted accurately theoretically. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the JLO-190P is used exceeds the applicable RF compliance level above, the JLO-190P should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the JLO-190P.
b) In the entire frequency range of 150KHz~80MHz, the field strength should be less than 3V/m.</td></tr>
</table>

Table 4

Recommended isolation distance between portable and mobile RF communication equipment and JLO-190P			
JLO-190P is intended to be used in an electromagnetic environment where RF radiation disturbance is controlled. According to the maximum rated output power of the communication equipment, the purchaser or user can prevent electromagnetic interference by maintaining the minimum distance between portable and mobile RF communication equipment (transmitters) and JLO-190P as recommended below.			
Rated maximum output power of the transmitter W	Isolation distance corresponding to different transmitter frequencies/m		
	150KHz~80MHz $d=1.2\sqrt{P}$	80MHz~800MHz $d=1.2\sqrt{P}$	800MHz~2 .5GHz $d=2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23
For transmitters with maximum rated output power not listed in the above table, the recommended isolation distance d, in meters (m), can be determined using the formula in the corresponding transmitter frequency column, where P is the maximum rated output power of the transmitter provided by the transmitter manufacturer, in watts (W). Note 1: At 80MHz and 800MHz, the formula for the higher frequency band is used. Note 2: These guidelines may not be applicable in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

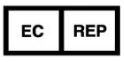
Table 5

Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment				
Test frequency (MHz)	Band [a] (MHz)	Service [a]	Modulation	IMMUNITY TESTLEVEL (vim)
385	380 to 390	TETRA 400	Pulse modulation [b] 18 Hz	27
450	430 to 470	GMRS 460, FRS 460	FM [c] ±5 kHz deviation 1 kHz sine	28
710	704 to 787	LTE Band 13,17	Pulse modulation [b] 217Hz	9
745				
780				
810	800 to 960	GSM 8OO/900，TETRA 8OO, iDEN 820，CDMA 850, LTE Band 5	Pulse modulation [b] 18 Hz	28
870				
930				

1720	1700 to 1990	GSM 1800;CDMA 1900;GSM 1900; DECT; LTE Band1,3,4,25;UMTS	Pulse modulation b) 217 Hz	28
1845				
1970				
2450	2400 to 2570	Bluetooth,WLAN,802.11 b/g/n, RFID 2450,LTE Band 7	Pulse modulation b) 217 Hz	28
5240	5100 to 5800	WLAN 802.11 a/n	Pulse modulation b) 217 Hz	9
5500				
5785				
If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME FOUIPMENT or ME SYSTEM may be reduced to 1 m, The 1 m test distance is permitted by IEC 61000-4-3.				
a) For some services, only the uplink frequencies are included. b) The carrier shall be modulated using a 50 % duty cycle square wave signal. c) As an alternative to FM modulation, the carrier may be pulse modulated using a 50 9 duty cycle square wave signal at 18 Hz. While it does not represent actual modulation, it would be worst case.				

Caution: Instructions for a correct disposal of the product
Disposal requirement: Comply with WEEE directive, it must be disposed of in accordance with the locally applicable regulations, not with domestic waste.

Shenzhen Homed Medical Device Co., Ltd
Address:Room 1601-1614, A Building, Jinxiu lll, No. 85 Hudi Pai Songxuan Community, Guanhu Street, Longhua District, Shenzhen,518109, P.R. China
TeL: 0755-29821671/29821673/29821675.



Shanghai International Holding Corp. GmbH (Europe).
Address: Eiffestrasse 80, 20537 Hamburg, Germany
Tel: +49-40-2513175