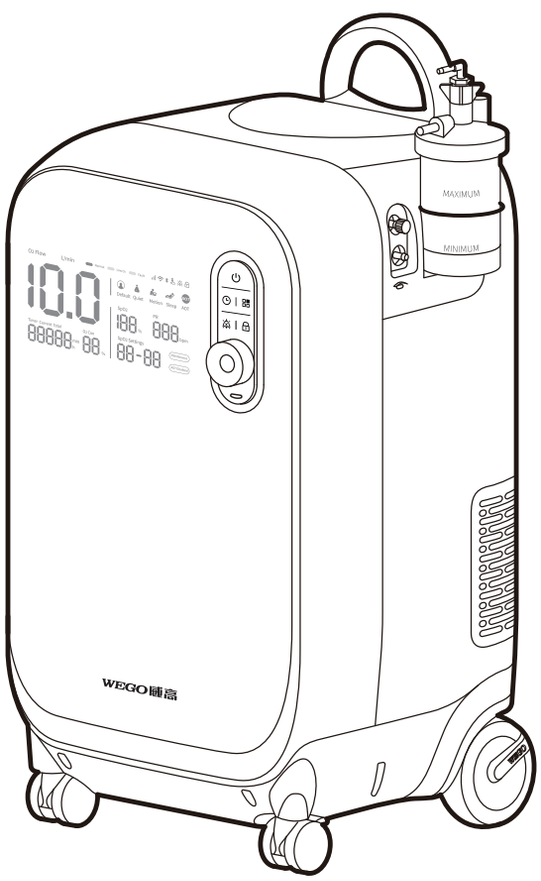
WEGO威高

Please read the user's manual closely before using!

Oxygen Concentrator User's Manual



Applicable models:

WO-S1010/ WO-S1011/ WO-S1012/ WO-S1013/ WO-S1014/ WO-S1015/ WO-S1016/
WO-S0910/ WO-S0911/ WO-S0912/ WO-S0913/ WO-S0914/ WO-S0915/ WO-S0916/
WO-S0810/ WO-S0911/ WO-S0812/ WO-S0813/ WO-S0814/ WO-S0815/ WO-S0816/
WO-S0710/ WO-S0711/ WO-S0712/ WO-S0713/ WO-S0714/ WO-S0715/ WO-S0716

Contents

1. Safety Instructions

This product is a medical molecular sieve oxygen concentrator (hereinafter referred to as "oxygen concentrator"). To prevent power outages or potential malfunctions of the oxygen concentrator, other backup oxygen supply devices (e.g., oxygen cylinders, oxygen bags, etc.) must be provided for those who urgently need oxygen or critical patients. This device is suitable for oxygen supplementation, but not for use in surgeries, emergencies, or for critically ill patients, and should not be used as a life-supporting or life-sustaining oxygen supply device.
To ensure correct and safe use of the product and to prevent harm or damage to the user or others, the following warnings and cautions are provided:

Legend	Content
⚠Warning	Indicates the possibility of personal injury or death due to improper use.
⚠ Caution	Indicates the possibility of personal injury or damage to the equipment due to improper use.
ⓘ	Indicates "General Mandatory", which refers to matters that must be followed when using the product.

1.1 Important Information

⚠ Caution

- This device should be used under the guidance of a professional doctor.
- There is a risk of electric shock, and disassembling the machine is not allowed. Please have qualified maintenance personnel carry out any repairs.

ⓘ Before operating the oxygen concentrator, please read the manual carefully.

1.2 Basic Information

ⓘ During transportation, to prevent damage, the oxygen concentrator must be kept in a vertical position. It should not be placed on its side or inverted, and it should be protected from severe shocks.
ⓘ If using an unstable power supply voltage, please install a voltage stabilizer before use.
ⓘ Please use safe, certified outlets and power strips with certified electrical engineering safety.

⚠ Caution

- Unauthorized personnel are not allowed to dismantle the shell.

1.3 Product Usage

⚠ Caution

- When using the product, avoid sharing a socket with other electrical appliances.
- Within 30 minutes of initial startup, the oxygen concentrator will reach the nominal oxygen concentration level: oxygen concentration ⩾ 90% at rated flowrate.
- Do not place the oxygen concentrator in an environment with obstructed airflow.
- The oxygen concentrator should not be placed in the following environments: near heat sources or open flames, in damp, uncovered, smoky, or polluted areas, or in environments with excessively high or low temperatures.

- Avoid placing the oxygen concentrator near pollutants or smoke.
- Do not place items or water/oil containers on top of the oxygen concentrator.
- The power cord of the oxygen concentrator is a dedicated power cord for this model and should not be used for any other purpose or replaced with another power cord.
- Do not place any items at the bottom of the oxygen concentrator, and avoid placing the machine on soft surfaces that may cause it to tilt or sink.
- Portable or mobile RF communication devices may affect the performance of the oxygen concentrator. Avoid strong electromagnetic interference, such as close to mobile phones, microwaves, etc., during use.

⚠ Caution

- Do not use this device in the presence of flammable anesthetics.
- Oxygen flow, oxygen content, and the oxygen absorbing effect may be affected when the altitude exceeds 1828 meters, the temperature exceeds the range of 5°C to 40°C, or the relative humidity exceeds 80%.
- If discomfort occurs during oxygen absorbing or if a medical emergency arises, seek medical assistance immediately to avoid injury.
- Elderly, children, or patients who are unable to express discomfort should have additional monitoring measures or distributed alarm systems to convey discomfort or medical emergencies to the responsible care personnel to avoid injury.

To ensure that the required amount of oxygen is provided based on the patient's medical condition, WEIGAO medical molecular sieve oxygen concentrator must:

① Be used only according to a prescription for one or more settings based on the patient's specific activity level;

② Use a combination of parts and accessories that comply with the manufacturer's specifications, and use them after determining the settings for the patient.

The oxygen concentrator should be placed in a well-ventilated indoor area, away from direct sunlight, with a distance of at least 10 cm from walls, furniture, and similar objects on all sides. Do not place the oxygen concentrator in a narrow space.

1.4 Fire Warning

⚠ Caution

- The oxygen concentrator should be kept away from flammable and explosive environments. Oxygen is an oxidizing gas. Smoking is prohibited during use, and it should be kept away from fire sources such as matches and lit cigarettes. Materials that would normally not burn, such as textiles, can easily ignite and burn intensely in an oxygen-enriched atmosphere.
- Users should be aware of the fire risk when inhaling oxygen. Some flammable materials in the environment can present a fire hazard in an oxygen-rich atmosphere. For safety, it is necessary to keep flammable sources away from the product.
- Oils and grease, when exposed to oxygen under certain pressures, can self-ignite and burn violently. They must be kept away from the oxygen concentrator and all accessories containing oxygen.
- Only water-based cleaning liquids or oxygen-compatible oils should be used before and during oxygen absorbing. Petroleum or oil-based cleaning liquids or oils should be avoided to prevent the risk of fire.
- Do not lubricate the oxygen concentrator's parts, joints, tubes, or other accessories to avoid the risk of fire.
- Only use manufacturer-recommended spare parts to ensure normal function and to avoid fire risks.
- Oxygen makes ignition and fire spread easier. When the oxygen concentrator is in operation, the nasal cannula should not be placed on flammable items (such as bed covers or cushions). Turn off the oxygen concentrator when not in use to avoid oxygen accumulation.
- Smoking is prohibited when the oxygen concentrator or any oxygen-containing accessories are in use in the same room with the user.
- Open flames are prohibited during oxygen absorbing. High-concentration oxygen may intensify fire situations, leading to injury or death. Open flames are not allowed within a 2-meter radius of the oxygen concentrator or any oxygen-containing accessories.

1.5 Machine Maintenance

⚠ Caution

- If the power supply is interrupted for no more than 30 seconds, after the machine is powered on again, the alarms and flow settings prior to the power loss will be automatically restored.

⚠ Caution

- Only authorized distributors or trained personnel may perform preliminary maintenance or performance calibration on the oxygen concentrator.

ⓘ It is recommended that the oxygen concentrator runs for no less than 30 minutes when first turned on. Do not frequently turn the concentrator on and off. After turning it off, wait at least 5 minutes before restarting to avoid affecting the lifespan of the compressor.

1.6 Safety Measures

⚠ Caution

- Do not place or store the oxygen concentrator in areas where it may be exposed to water or other liquids.
- Never leave the machine unattended after it has been powered on.
- Avoid using the oxygen concentrator while showering. If use is necessary, follow the doctor's advice, and ensure the oxygen concentrator is at least 2.5 meters away from the bathroom (bathtub).
- If the oxygen concentrator falls into water, do not touch it. Immediately cut off the power and contact a qualified distributor or manufacturer.
- Do not use components, accessories, or adapters that are not approved by the manufacturer. Using humidifiers and accessories not specified for this oxygen concentrator can reduce its performance.

⚠ Caution

- For detailed usage instructions, refer to the user manual. If the user or service personnel feel that the oxygen flow is insufficient, immediately contact the supplier or doctor, and adjust the flow according to the doctor's instructions.
- Do not drip or insert any substances into the machine's openings.
- Do not connect this product in parallel or series with other oxygen concentrators or oxygen cups.

ⓘ When using the product near children or individuals with limited mobility, please supervise its use.

ⓘ In certain environments, oxygen absorbing can be dangerous. The manufacturer recommends that users consult with a doctor before using this product.

ⓘ Avoid generating any sparks near medical oxygen, including those from static electricity due to friction.

ⓘ If the power cord or plug of the oxygen concentrator is damaged, or if the machine is not working properly, or if the machine is dropped or damaged, contact a qualified maintenance technician for inspection and repair.

ⓘ In the event of an accident during use, immediately call the emergency hotline and seek professional medical assistance.

ⓘ Keep the power cord away from heated or hot surfaces.

ⓘ Do not move the oxygen concentrator while it is powered on.

ⓘ During oxygen iabsorbing, there is a fire risk due to the increased oxygen concentration. Do not use the oxygen concentrator or accessories near sparks or open flames.

1.7 Electromagnetic Compatibility

This product should comply with the national standards Medical Electrical Equipment — Part 1-2: General Requirements for Basic Safety and Essential Performance — Collateral Standard: Electromagnetic Compatibility — Requirements and Tests (YY9706.102-2021) and Medical Electrical Equipment Part 2-69: Specific Requirements for Basic Safety and Essential Performance of Oxygen Concentrators (YY9706.269-2021). This device is suitable for use in environments such as hospitals, homes, and other buildings directly connected to the low-voltage power supply network.
Observe the following guidelines:

- Users should install and use the product based on the electromagnetic compatibility information provided in this user manual.
- Portable or mobile RF communication devices may affect the performance of the oxygen concentrator. Avoid strong electromagnetic interference, such as close to mobile phones, microwaves, etc., during use.
- The oxygen concentrator should not be placed close to or stacked with other devices. If it's necessary to do so, it should be observed and verified whether it can operate normally with proper configuration.
- Except for cables (transducers) sold as spare parts of internal components, the use of accessories and cables (transducers) that are not specified may result in an increase in emission or a decrease in immunity of the oxygen concentrator.
- When the voltage drops, the oxygen concentrator's compressor will briefly stop working. After the test, the EUT will automatically resume normal operation (or manually restart) and function properly, with no impact on the user's health.
- The function confirmed as basic performance: the ability to continuously separate oxygen from the air.

Table 1 Guidelines and manufacturer's statement - Electromagnetic emissions - for all ME equipment and ME systems

<table>
<tr><th colspan="3">Guidelines and Manufacturer's Statement– Electromagnetic emissions</th></tr>
<tr><td colspan="3">The oxygen concentrator is intended for use in the electromagnetic environment as specified below. The customer or the user of the device should ensure that it is used in such an electromagnetic environment.</td></tr>
<tr><td>Emission test</td><td>Compliance</td><td>Electromagnetic environment - Guidelines</td></tr>
<tr><td>RF emission GB4824</td><td>Group 1</td><td>The oxygen concentrator only uses RF energy for its internal functions. Therefore, its RF emissions are very low, and the chances of causing interference to nearby electronic devices are minimal.</td></tr>
<tr><td>RF emission GB4824</td><td>Class B</td><td rowspan="3">The oxygen concentrator is suitable for use in all facilities, including homes and those directly connected to the public low-voltage power supply network that supplies buildings for household purposes.</td></tr>
<tr><td>Harmonic emission GB17625.1</td><td>Class A</td></tr>
<tr><td>Voltage fluctuations/flicker emission GB17625.2</td><td>Complied</td></tr>
</table>

Table 2 Recommended isolation distances between portable and mobile RF communication devices and ME equipment and ME systems

--for non-life support ME equipment and ME systems

Recommended isolation distances between portable and mobile RF communication devices and oxygen concentrator			
The oxygen concentrator is intended for use in an electromagnetic environment where RF radiation disturbances are controlled. Based on the maximum rated output power of the communication device, purchasers or users can maintain the following recommended minimum distances between portable and mobile radio frequency communication devices (transmitters) and the oxygen concentrator.			
Rated maximum output power of transmitter/W	Isolation distance according to frequency of transmitter (m)		
	150kHz～80MHz $d=1.2\sqrt{P}$	80 MHz~800 MHz $d=1.2\sqrt{P}$	800 MHz~2.5 GHz $d=2.3\sqrt{P}$
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 rated at a maximum output power not listed above, the recommended isolation distance d, in meters (m), can be determined using the equation applicable to the frequency of the transmitter, where P is the maximum rated output power of the transmitter provided by the transmitter manufacturer, in watts (W). Note 1: For the frequency points at 80 MHz and 800 MHz, the formula for the higher frequency range should be used. Note 2: These guidelines may not be applicable in all scenarios as electromagnetic propagation is influenced by the absorption and reflection properties of buildings, objects, and the human body.			

Table 3 Guidelines and manufacturer's statement - Electromagnetic immunity - for all ME equipment and ME systems

Guidelines and manufacturer's statement– Electromagnetic immunity			
The oxygen concentrator is intended for use in the electromagnetic environment as specified below. The customer or the user of the device should ensure that it is used in such an electromagnetic environment.			
Immunity test	IEC60601 test level	Compliant level	Electromagnetic environment - Guidelines
Electrostatic discharge GB/T 17626.2	±6 kV contact discharge ±8 kV air discharge	±6 kV contact discharge ±8 kV air discharge	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%
Electrical fast transient/burst GB/T17626.4	±2 kV to power cord ±1 kV to input/output line	±2 kV to power cord Not applicable	The grid power should have the quality typical of commercial or hospital environments.
Surge GB/T 17626.5	±1 kV line-to-line ±2 kV line-to-ground	±1 kV line-to-line Not applicable	The grid power should have the quality typical of commercial or hospital environments.
Voltage dips, short interruptions and voltage variations on power supply input lines GB/T 17626.1	<5% U_T, for 0.5 cycle (>95% dip on U_T) 40% U_T, for 5 cycles (60% dip on U_T) 70% U_T, for 25 cycles (60% dip on U_T) <5% U_T, for 5s (>95% dip on U_T)	<5% U_T, for 0.5 cycle (>95% dip on U_T) 40% U_T, for 5 cycles (60% dip on U_T) 70% U_T, for 25 cycles (60% dip on U_T) <5% U_T, for 5s (>95% dip on U_T)	The grid power should have the quality typical of commercial or hospital environments. If the user of the upper arm type electronic blood pressure monitor needs to operate continuously during a power outage, it is recommended to use an uninterruptible power supply or battery power supply for it.
Power frequency magnetic field (50HZ) GB/T17626.8	3A/m	3A/m	The power frequency magnetic field should be at the level characteristic of a typical location in a typical commercial or hospital environment.
Note: U_T refers to the AC grid voltage before the test voltage is applied.			

Table 4 Guidelines and manufacturer's statement - Electromagnetic immunity - for non-life support ME equipment and ME systems

Guidelines and manufacturer's statement– Electromagnetic immunity			
The oxygen concentrator is intended for use in the electromagnetic environment as specified below. The customer or the user of the device should ensure that it is used in such an electromagnetic environment.			
Immunity test	IEC60601 test level	Compliant level	Electromagnetic environment - Guidelines
RF conduction GB/T17626.6 RF radiation GB/T17626.3	3V (RMS) 150kHz~80MHz 3V/m 80MHz~2.5GHz	3V (RMS) 3V/m	Portable and mobile RF communication devices should be used no closer to any part of the upper arm type electronic blood pressure monitor, including cables, than the recommended isolation distance calculated from the equation applicable to the frequency of the transmitter. Recommended isolation distance $d=1.2\sqrt{P}$ $d=1.2\sqrt{P}$ 80MHz~800MHz $d=2.3\sqrt{P}$ 800MHz~2.5GHz Where: P--maximum rated output power of the transmitter provided by the transmitter manufacturer, in watts (W); d--recommended isolation distance, in meters (m). The field strength of a fixed RF transmitter is determined by surveying the electromagnetic fielda, and in each frequency rangeb, it should be lower than the corresponding level. Interference may occur in the vicinity of devices marked with the following symbol. 
Note 1: For the frequency points at 80 MHz and 800 MHz, the formula for the higher frequency range should be used. Note 2: These guidelines might not be applicable in all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects, and human.			
a) For fixed transmitters, such as radio (cellular/cordless) phones, base stations for ground mobile radios, amateur radios, AM and FM radio broadcasting, and television broadcasting, their field strengths cannot be predicted with precision theoretically. To assess the electromagnetic environment of fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location where the upper arm type electronic blood pressure monitor is used exceeds the applicable RF compliant level, the upper arm electronic blood pressure monitor should be observed to verify its normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the upper arm type electronic blood pressure monitor. b) Within the entire frequency range from 150 kHz to 80 MHz, the field strength should be less than 3 V/m.			

2. Product Description

2.1 Scope of Application

This device uses air as the raw material to produce oxygen-enriched air (with an oxygen content of 93%) based on the molecular sieve PSA (pressure swing adsorption) process. The oxygen flow can be manually or automatically controlled according to clinical requirements to supply oxygen to patients.

2.2 Contraindications

Prohibited for patients with oxygen toxicity or oxygen allergy.

2.3 Structure and Composition

The medical molecular sieve oxygen concentrator consists of the air compressor, molecular sieve bed, oxygen tank, control system, alarm system, flowmeter, wireless transmission module (optional) and other accessories. The accessories include remote control (optional), power cord, nebulizing assembly, nasal cannula, humidifier and pulse oximeter (optional)..

2.4 Principle of Oxygen Production

This device uses a 22V AC power supply as the power supply and air as the raw material to produce medical-grade high-purity oxygen with a high-quality and efficient molecular sieve and the PSA (pressure swing adsorption) method, ensuring a sustainable and uninterrupted oxygen supply.

2.5 Function Configuration

⚠ Caution

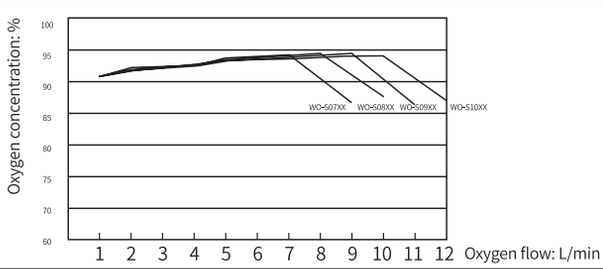
- If the model you have chosen does not feature the corresponding functions as described in the configuration table below, you can ignore the operating instructions for that particular function. If you have any further questions, please DO NOT hesitate to consult us or the distributor.

Config / Model	Flow range	Output pressure	Voice (control/reminder)	Wireless TMN (4G/Wi-Fi)	Wireless TMN (Bluetooth)	Remote control	Preset oxygen GEN (quiet/active/sleep)	Automatic oxygen flow control (AOT)
WO-S1010	1-10L/min	70±15kPa	Yes	Yes	Yes	Yes	Yes	Yes
WO-S1011	1-10L/min	70±15kPa	Yes	Yes	Yes	No	Yes	Yes
WO-S1012	1-10L/min	70±15kPa	Yes	Yes	No	No	Yes	No
WO-S1013	1-10L/min	70±15kPa	Yes	No	No	No	Yes	No
WO-S1014	1-10L/min	70±15kPa	No	No	No	No	Yes	No
WO-S1015	1-10L/min	70±15kPa	Yes	No	No	No	No	No
WO-S1016	1-10L/min	70±15kPa	No	No	No	No	No	No

Config / Model	Flow range	Output pressure	Voice (control/reminder)	Wireless TMN (4G/Wi-Fi)	Wireless TMN (Bluetooth)	Remote control	Preset oxygen GEN (quiet/active/sleep)	Automatic oxygen flow control (AOT)
WO-S0910	1-9L/min	70±15kPa	Yes	Yes	Yes	Yes	Yes	Yes
WO-S0911	1-9L/min	70±15kPa	Yes	Yes	Yes	No	Yes	Yes
WO-S0912	1-9L/min	70±15kPa	Yes	Yes	No	No	Yes	No
WO-S0913	1-9L/min	70±15kPa	Yes	No	No	No	Yes	No
WO-S0914	1-9L/min	70±15kPa	No	No	No	No	Yes	No
WO-S0915	1-9L/min	70±15kPa	Yes	No	No	No	No	No
WO-S0916	1-9L/min	70±15kPa	No	No	No	No	No	No
WO-S0810	1-8L/min	70±15kPa	Yes	Yes	Yes	Yes	Yes	Yes
WO-S0811	1-8L/min	70±15kPa	Yes	Yes	Yes	No	Yes	Yes
WO-S0812	1-8L/min	70±15kPa	Yes	Yes	No	No	Yes	No
WO-S0813	1-8L/min	70±15kPa	Yes	No	No	No	Yes	No
WO-S0814	1-8L/min	70±15kPa	No	No	No	No	Yes	No
WO-S0815	1-8L/min	70±15kPa	Yes	No	No	No	No	No
WO-S0816	1-8L/min	70±15kPa	No	No	No	No	No	No
WO-S0710	1-7L/min	70±15kPa	Yes	Yes	Yes	Yes	Yes	Yes
WO-S0711	1-7L/min	70±15kPa	Yes	Yes	Yes	No	Yes	Yes
WO-S0712	1-7L/min	70±15kPa	Yes	Yes	No	No	Yes	No
WO-S0713	1-7L/min	70±15kPa	Yes	No	No	No	Yes	No
WO-S0714	1-7L/min	70±15kPa	No	No	No	No	Yes	No
WO-S0715	1-7L/min	70±15kPa	Yes	No	No	No	No	No
WO-S0716	1-7L/min	70±15kPa	No	No	No	No	No	No

2.6 Main Technical Parameters

Performance indicators	Physicochemical properties of produced oxygen-enriched air (93% oxygen)	Oxygen concentration	⩾90% (mL/mL)
		Moisture content	⩽0.0067 (mL/mL)
		Carbon dioxide content	⩽0.01% (V/V)
		Carbon monoxide content	⩽0.0005% (mL/mL)
		pH	Take 0.3mL of methyl red indicator and 0.3mL of bromothymol blue indicator, add 400mL of water, boil for 5 minutes, then cool down; take 100mL each and place them into three test tubes A, B, and C; add 0.20mL of 0.01mol/L hydrochloric acid titrant to test tube B and 0.40mL to test tube C; then, pass 2000mL of the product through test tube B (flowrate of 4000mL per hour). The color in test tube B should not be darker than that in test tube C (red) or test tube A (yellow-green).
		Ozone and other gaseous oxidants	Compliant with Table 1 in GB/T8982
		Oxygen odor	Oxygen should be colorless, odorless, and tasteless
		Solid particles size	⩽100μm
		Solid particles content	⩽1mg/m^3
	Noise	Noise during normal operation of oxygen concentrator	⩽60dB(A)
	Oxygen output and concentration	After 15 minutes of operation, when the oxygen concentrator is in normal working condition, the oxygen output should meet the requirements specified in Section 2.5 Function Configuration, and the oxygen concentration should be ⩾90% (mL/mL)	
	Blood oxygen saturation and pulse rate display (only applicable to models with Bluetooth interface)	Blood oxygen saturation measurement range	Not less than 70%–100%
		Blood oxygen saturation measurement accuracy	a) For blood oxygen saturation between 70% and 100%, the error is ±3%; b) For blood oxygen saturation below 70%, no accuracy requirement
		Blood oxygen saturation display resolution	1%
		Pulse rate measurement range	Not less than 30bpm~240bpm
		Pulse rate measurement accuracy error	±2% or ±2bpm, whichever is larger
		Pulse rate display resolution	1bpm
	Oxygen output pressure of oxygen concentrator	Oxygen output pressure should comply with the range specified in Section 2.5 Functional Configuration	
	Oxygen outlet temperature of oxygen concentrator	The oxygen outlet temperature of the oxygen concentrator should be ⩽46°C	
	Alarm requirements	Power failure alarm	The oxygen concentrator emits an alarm sound if the mains power is interrupted or the power cord plug is loose during normal operation
		Low voltage alarm	If the mains power voltage drops below 187V, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E01
		Low flow alarm	If the oxygen output flowrate falls below 0.5L/min, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E02

Performance indicators	**Alarm requirements**	Low oxygen concentration alarm	If the oxygen concentration drops below 82% (V/V) or if oxygen is low within 120 seconds after startup, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E03
		High system pressure alarm	If the system pressure exceeds 220kPa, the compressor stops, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E04
		Low system pressure alarm	If the pressure drops below 40kPa, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E04
		Over-temperature alarm	If the internal temperature of the machine exceeds 60°C, the compressor stops, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E06
		Compressor fault alarm	If the compressor malfunctions, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E07
		Component fault alarm	If a component malfunctions, the machine emits an alarm sound and the yellow indicator will flash, displaying fault codes, including oxygen sensor E08, pressure sensor E09, cooling fan E10, and chassis temperature sensor E11
		Blood oxygen probe disconnection alarm	If the blood oxygen probe becomes detached from the finger during operation, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E12 (only applicable to models with Bluetooth blood oxygen interface)
		Oximeter communication failure alarm	If communication with the blood oxygen module is interrupted during operation, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E13 (only applicable to models with Bluetooth blood oxygen interface)
		Low blood oxygen alarm	If the blood oxygen saturation drops below the threshold of 85%, the machine emits an alarm sound and the yellow indicator will flash, displaying fault code E14 (only applicable to models with Bluetooth blood oxygen interface)
	Flow	Flow control	The flow range of oxygen concentrator should comply with the requirements specified in Table 1 of 1.1.3. The flow adjustment should be set to 0.5L/min or 1L/min
		Flow accuracy	The flow error should not exceed ±10% or ±0.2L/min, whichever is larger
	Nebulizing interface (only applicable to models with nebulizing assembly)	Flow accuracy	Under normal working conditions, the gas pressure at the nebulizer outlet should be within 30kPa–180kPa
		Gas flowrate at nebulizer startup	1-5L/min
		nebulizingrate	⩾0.15L/min
		Residual liquid after nebulizing	⩽2mL
		Continuous operating time	Under normal temperature conditions, continuous operation for more than 4 hours should maintain proper nebulizing function
		Median particle size and equivalent volume particle size distribution of mist particles	The median particle size is 3.9μm, with an error of no more than ±25%. The proportion of particles with a diameter ⩽5μm should be greater than 60%
	Outlet pressure	See outlet pressure in the function configuration table for details	70±15kPa
	Oxygen concentration as a function of oxygen flowrate when the outlet nominal pressure is zero		

Performance indicators	**Performance indicators**	Category by protection against electric shock	Class II ME equipment	
		Degree of protection against electric shock	Type BF applied part (applied part is the nasal cannula)	
		Non-AP or APG type equipment.		
	Software information	Software name	WEIGAO oxygen concentrator control software	
		Software release version	V1	
	Other parameters	Dimensions	394×365×770(mm)	
		Weight	30kg	
		Rated voltage	~220V,50Hz	
		Rated power	580VA	
		Circuit breaker	6A,~125/250V	
		Shell protection level	IP21	
		Operation mode	Continuous operation	
		Expected usage altitude	No reduction in oxygen concentration from sea level to 1828 meters. Efficiency drops below 90% from 1828 meters to 4000 meters	
		Service life	Main unit	5 years
			Accessories	Refer to respective manuals

⚠ Caution

- The safety requirements of the equipment comply with GB9706.1-2020 "Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance".

ⓘ When using the nebulizing function, adjust the oxygen flow to within the 1~2L/min range.

ⓘ When the storage temperature is below 5°C, the device should be placed in a normal working temperature environment for more than four hours before use.

ⓘ The oxygen concentrator should be stored in a well-ventilated indoor area, free from direct sunlight, corrosive gases, and strong vibrations. It should not be stored in a position where it is inverted or lying flat during transportation.

ⓘ Use only the nasal cannula approved by the manufacturer. Using a non-specified nasal cannula may affect the performance of the machine.

3. Operation Guide

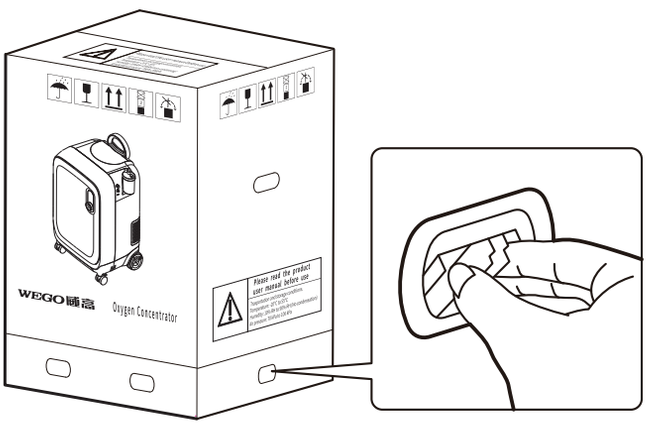
3.1 Unpacking

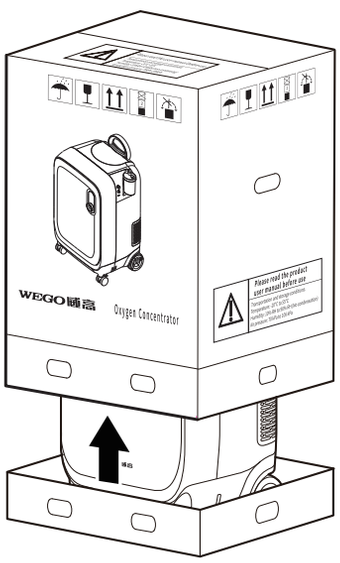
ⓘ Unless the oxygen concentrator is to be used immediately, the machine should be stored in the carton until it's being used again.

① Check for any obvious damage to the carton or its contents. If damage is evident please notify the carrier or local dealer;

② Remove all loose packing from the carton.

③ Carefully remove all the components from the carton.



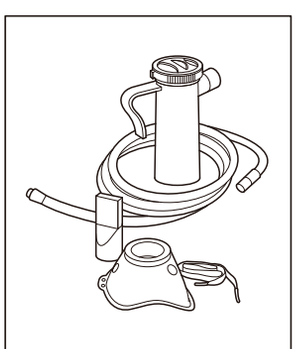


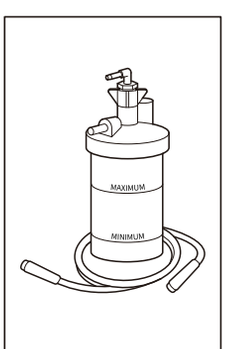
3.2 Inspection

① Count and inspect all components;

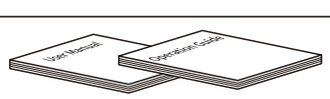
② If a nasal cannula or nebulizing assembly is included, check its packaging. If the packaging is damaged, do not use it;

③ Check the exterior of the oxygen concentrator for any scratches, dents, cracks, or other damage.

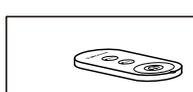

Nebulizing assembly

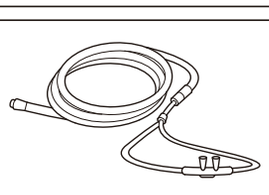


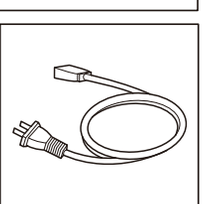
Humidifier and connecting hose

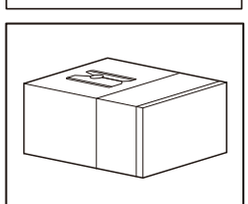


User manual and operating instructions


Remote control


Nasal cannula


Power cord

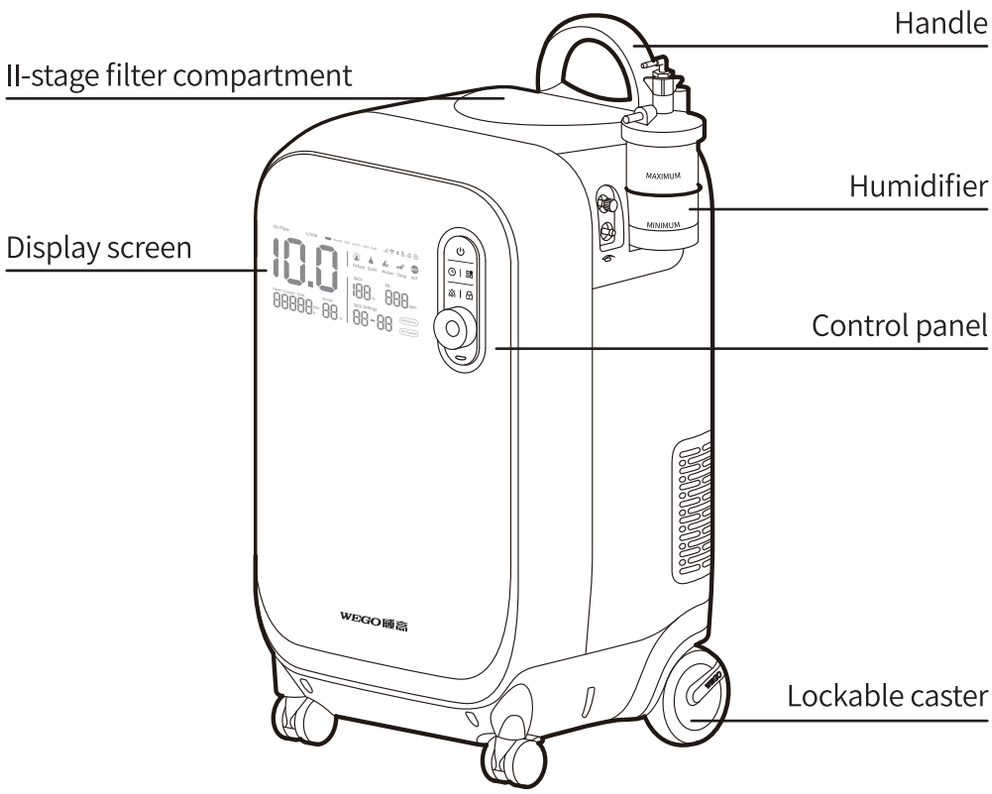

Pulse oximeter kit

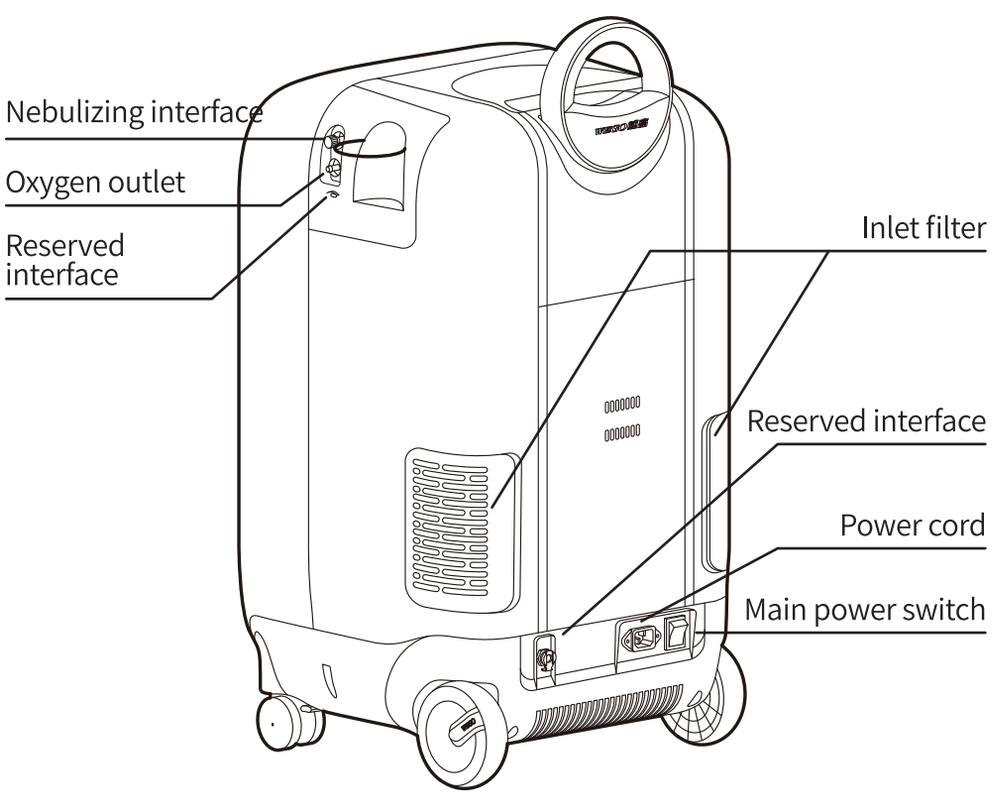
3.3 Storage

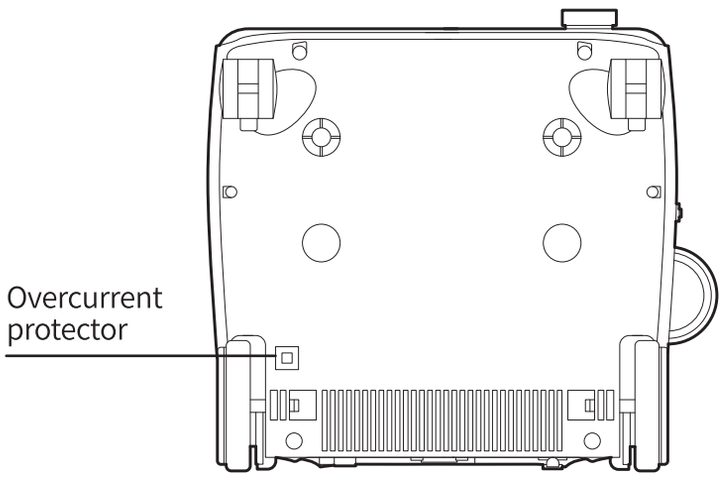
ⓘ Do not place other objects on top of the repackaged concentrator.

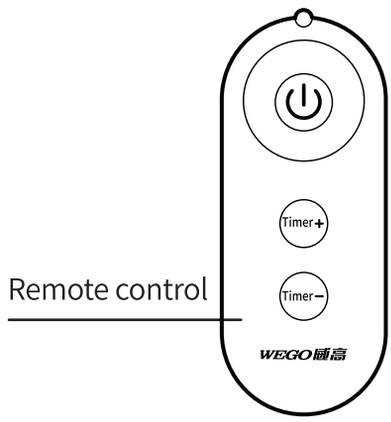
ⓘ Store the repackaged oxygen concentrator in a dry area.

4. Function Description



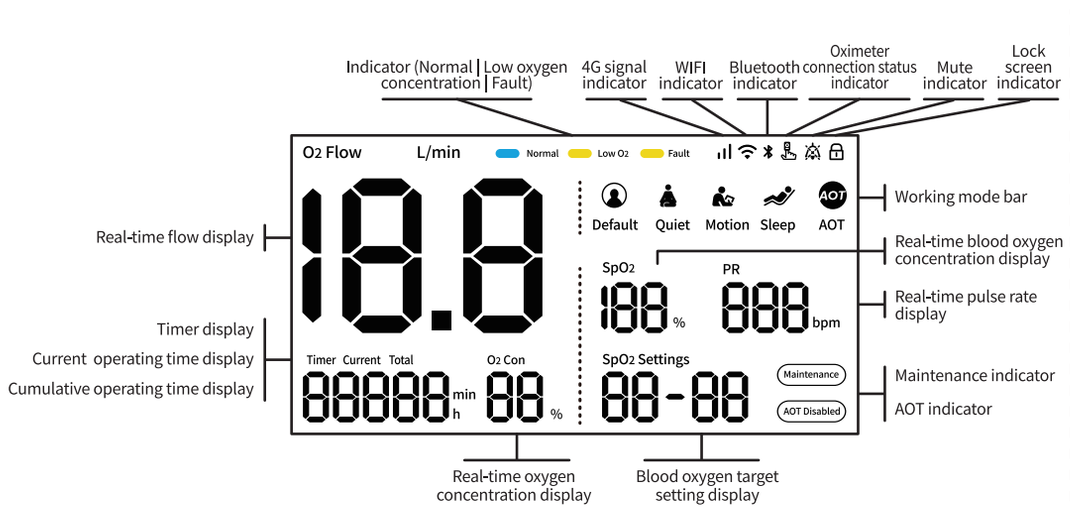


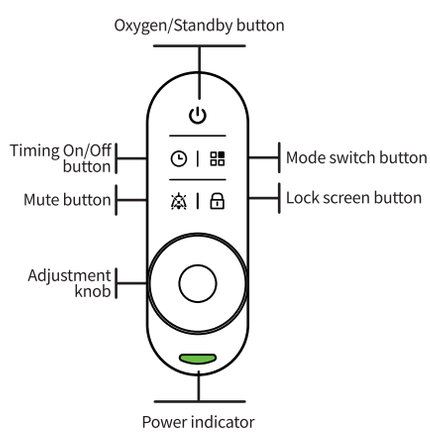




Control panel A

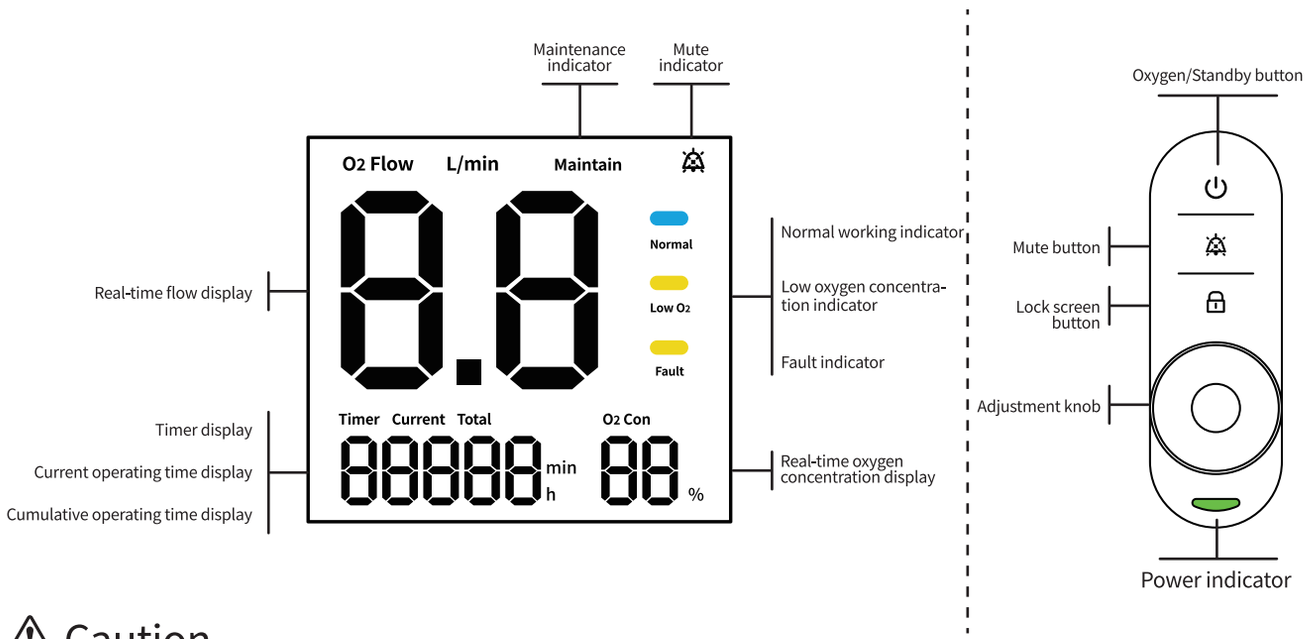
Applicable to WO-S101X series, WO-S091X series, WO-S081X series, WO-S071X series oxygen concentrators.





Control panel B

Applicable to WO-S101X series, WO-S091X series, WO-S081X series, WO-S071X series oxygen concentrators.



⚠ Caution

- The content of the interface style may change with the function configuration. The above interface is for reference only, and the actual display is subject to the operating state of the equipment.
- The effective distance of remote control is: the straight-line distance directly in front of the receiver ⩽ 3M.

4.1 Oxygen|Standby Button

1) When the device is in standby mode, press the " ⏻ " button once, and the device will begin oxygen production;
2) When the device is producing oxygen, press the " ⏻ " button once, and the device will stop oxygen production and enter standby mode.

4.2 Mute Button

1) When the oxygen concentrator emits an alarm sound, press the " 🔕 " button once, and the alarm sound will be silenced. The alarm sound will resume after 2 minutes until the fault is resolved.

⚠ Caution

- When the alarm sound is triggered, please pay close attention to the alarm information and indicator, and do not ignore the alarm information.

2) When the oxygen concentrator reaches 2000 hours of cumulative operating time, the screen will display a "(Maintenance)" prompt. Press the mute Button five times to clear the maintenance prompt, and the maintenance time will be reset.

4.3 Lock Screen Button

During normal operation of the oxygen concentrator, press the " 🔒 " buttononce to lock the current settings. Press the " 🔓 " button again to restore the settings to be adjustable.

4.4 Knob

1) Flow regulation: After turning on the machine, it will be in the default mode. Turn the "◎" knob to directly set the output oxygen flowrate.
2) Timer setting: Press the "🕒" button, turn the "◎" knob to set the timer value, and press the "◎" button to confirm.
3) Mode parameter setting: Press the "◎" button, turn the "◎" knob to select the oxygen mode. Long press the "▣" button for 3 seconds to enter the parameter editing mode for the selected mode, and the corresponding parameter area will begin to flash. At this point, turn the "◎" knob to set the parameter value, then press the "◎" button once to confirm the value. The oxygen concentrator will operate according to the new parameters.

4.5 Timing Button

During normal operation of the oxygen concentrator, press the "🕒" button once to set the shutdown time. The maximum timer value is 480 minutes. When the timer is ⩽120 minutes, the step size is 30 minutes per adjustment; when the timer is ⩾120 minutes, the step size is 60 minutes per adjustment. Turning the knob clockwise will increase the timer, while turning it counterclockwise will decrease it.

4.6 Mode Switch Button

Press the "▣" button and rotate the knob to select from the following modes: "Default", "Quiet", "Active", "Sleep", "AOT".

4.7 Remote Control

1) When the device is in standby mode, press the "⏻" button once, and the device will begin oxygen production;
2) When the device is producing oxygen, press the "⏻" button once, and the device will stop oxygen production and enter standby mode.
3) During normal operation of the oxygen concentrator, press the "Time+" button to increase the timer, and press the "Time−" button to decrease it. The maximum timer value is 480 minutes. When the timer is ⩽120 minutes, the step size is 30 minutes per adjustment; when the timer is ⩾120 minutes, the step size is 60 minutes per adjustment.

4.8 Wireless Transmission

4.8.1 WIFI Function (applicable only to models with WiFi function)

1) After powering on the oxygen concentrator, long press the "▣" button for 3 seconds and release. This will toggle between WiFi/4G (if available) and disabling the wireless function, and select WiFi function ;
2) Open the mobile device and follow the instructions to configure the network;
3) View the oxygen concentrator's operating status and patient oxygen data via account and password;
4) Press the "🔒" button four times consecutively to delete the WiFi configuration information and re-enter the network configuration process.

4.8.2 4G Function (applicable only to models with 4G function)

1) After powering on the oxygen concentrator, long press the "▣" button for 3 seconds and release. This will toggle among (if available), 4G and disabling the wireless function, and select 4G

function;
2) Scan the QR code on the machine (SN code);
3) Open the mobile device and view the oxygen concentrator's operating status and patient oxygen data via account and password.

4.8.3 Bluetooth Function (applicable only to models with a pulse oximeter)

1) Connecting the pulse oximeter (only applicable to models equipped with a pulse oximeter): After the oxygen concentrator is powered on and running normally, install the batteries in the pulse oximeter and power it on. The device will automatically pair successfully and begin receiving data from the pulse oximeter.
2) Connecting the mobile device:

a) After the oxygen concentrator is powered on and running normally, turn on the Bluetooth function on the mobile device and establish the pairing;
b) After successful pairing, view the oxygen concentrator's operating status and patient oxygen data on the mobile device.

4.9 Power Switch

After the oxygen concentrator is connected to the power supply, press the switch to the " | " position to start the machine. To turn off the power, press the switch to the "O" position to stop the machine.

4.10 Oxygen Outlet

The oxygen produced during the normal operation of the oxygen concentrator flows out from here. If the outlet is blocked, the buzzer will sound an alarm.

4.11 Display Screen

In standby mode, the accumulated operating time will be displayed. During operation, it shows the status indicator of the oxygen concentrator, oxygen concentration value, flowrate value, current runtime or timer shutdown time, current operating mode, blood oxygen saturation, pulse rate, etc.

⚠ Caution

- Blood oxygen saturation and pulse rate displays are only applicable to models equipped with a pulse oximeter.

4.12 LED Status Indicator

Blue (normal operation)/yellow (low oxygen concentration)/yellow (fault).

4.13 Flowmeter

Flow is adjusted by switching between different settings. The adjustable flow range is referenced in Section 2.5 Function Configuration, with flow adjustment steps of 0.5L/min or 1L/min.

4.14 Air Intake Window

The air intake window holds the I-stage air filter. Open the air intake window to perform maintenance and replacement of the I-stage filter.

4.15 II-stage Filter

The II-stage filter is located in the II-stage filter compartment. Open the window cover to inspect and replace the II-stage filter.

4.16 Circuit Breaker

When the machine's current is too high, the circuit breaker will automatically cut off the power to protect both the user and the machine. After cooling, press the "Reset" button to reconnect the power, and it can be used repeatedly.

4.17 Humidifier

For certain users, inhaling dry oxygen may cause discomfort in the respiratory tract. In such cases, it is recommended to use the humidifier to achieve humidified oxygen absorbing.

4.18 Power Cord

Use a two-core power cord to connect to the wall socket or power strip.

4.19 Nebulizing Interface and Plug

When the user requires nebulizing therapy, first reduce the oxygen output flowrate of the concentrator to <2L/min, then unscrew the nebulizing interface plug and connect the nebulizing assembly to enable the nebulizing function. When nebulizing is no longer needed, please replace and tighten the cap.

⚠ Caution

- Nebulizing reduces oxygen output performance. If the oxygen flowrate is not set to <2L/min, the machine may trigger a low oxygen alarm during nebulizing. After completing nebulizing, manually tighten the nebulizing interface plug, and the alarm will automatically stop as the oxygen production resumes.

4.20 Handle

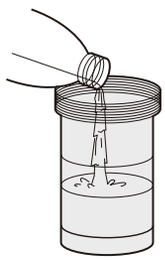
It facilitates easy parallel movement of the oxygen concentrator.

5. Prepare Work

1) Add purified water or distilled water to the humidifier between the "MAXIMUM" and "MINIMUM" markers (if necessary, follow the doctor's instructions to mix other medications into the water); tighten the cap and humidifier connector; plug in the humidifier connection tube; and snap it into the humidifier slot. (If humidified oxygen absorbing is not required, directly connect the nasal cannula to the oxygen output port of the oxygen concentrator.)

❶ Open the humidifier

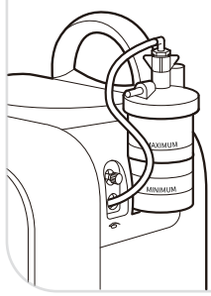
❷ Add room-temperature purified water



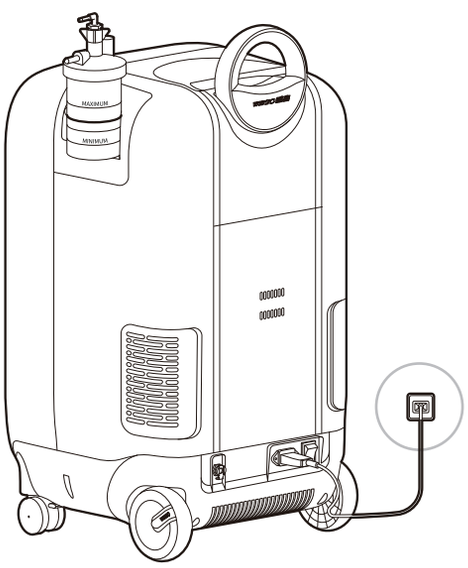
❸ Tighten the bottle cap clockwise

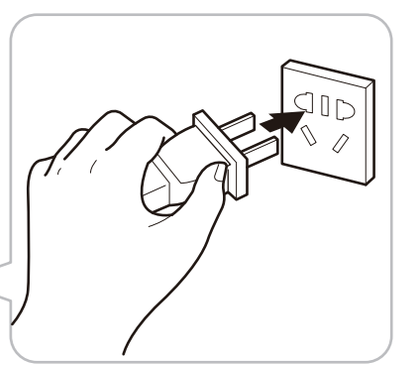
❹ Snap into the humidifier slot

If humidified oxygen absorbing is not required, directly connect the nasal cannula to the oxygen output port of the oxygen concentrator.



2) Insert the power cord: First, ensure the power switch of the oxygen concentrator is turned off, then connect the power plug to a safety-grounded socket with power output.





⚠ Caution

- Do not use extended power line.

3) After the oxygen concentrator has been removed from the lowest or highest storage temperature, allow it to stand at room temperature for 4 hours before use.

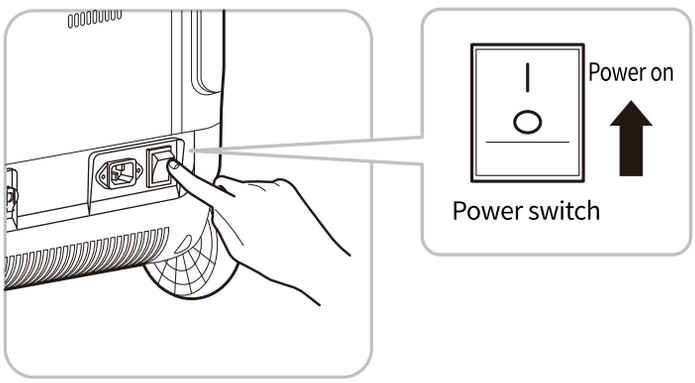
⚠ Caution

- Do not use an extended power line.

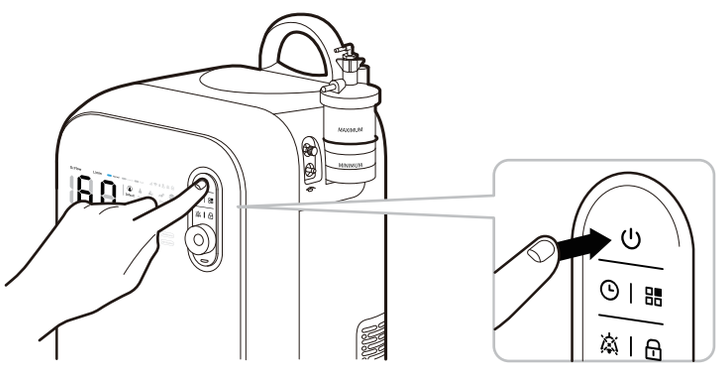
6. Oxygen Absorbing Operation

ⓘ The duration of oxygen absorbing, the oxygen flowrate, and the selection of oxygen tubes or masks should be followed according to medical advice!

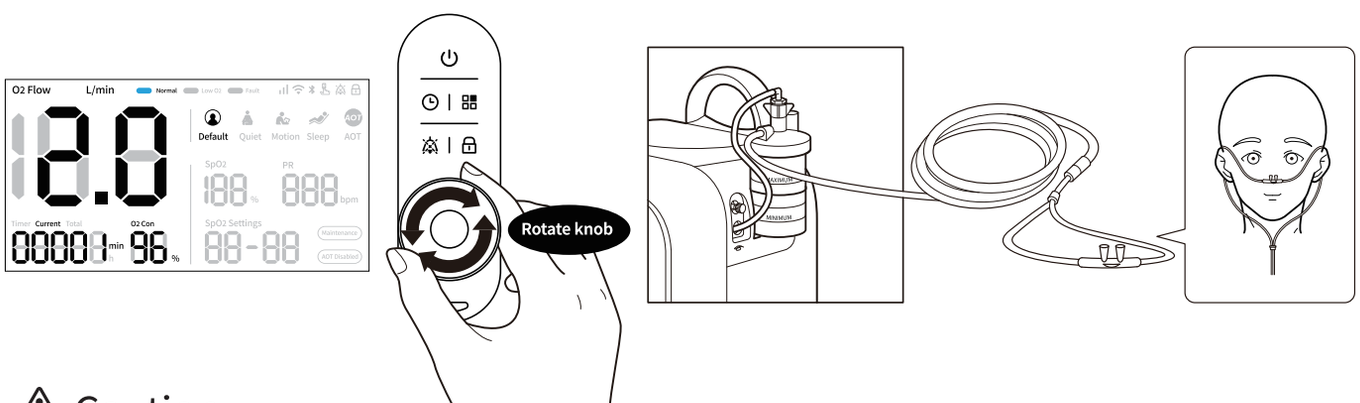
1) Turn the power switch to the " | " position, and the oxygen concentrator's indicator and display will light up. The voice prompt will say, "Welcome to use WEIGAO oxygen concentrator, the oxygen concentrator has powered on" to complete the system self-check.



2) Press the "⏻" button. At this point, the normal indicator (blue) will be on, accompanied by a horn sound. After 2 seconds, the oxygen concentrator will enter normal operation. While the device is working, a slight "tick" sound and exhaust noise are normal, indicating valve switching and azote release.



3) After the machine starts, adjust the electronic flow setting within the rated flow range. After about 5 minutes, the oxygen concentration will reach ⩾90%. Adjust the device knob to the desired flow setting (reading should be based on the screen display). Turning the knob clockwise will increase the flow, and turning it counterclockwise will decrease the flow (if the humidifier is connected, air bubbles will appear in the water). After wearing the nasal cannula, oxygen absorbing can begin.



⚠ Caution

- For certain patients with obstructive ventilation dysfunction, such as those with chronic obstructive pulmonary disease, follow the doctor's instructions for selecting the flowrate (generally not exceeding 3L).

7. Oxygen Mode Adjustment

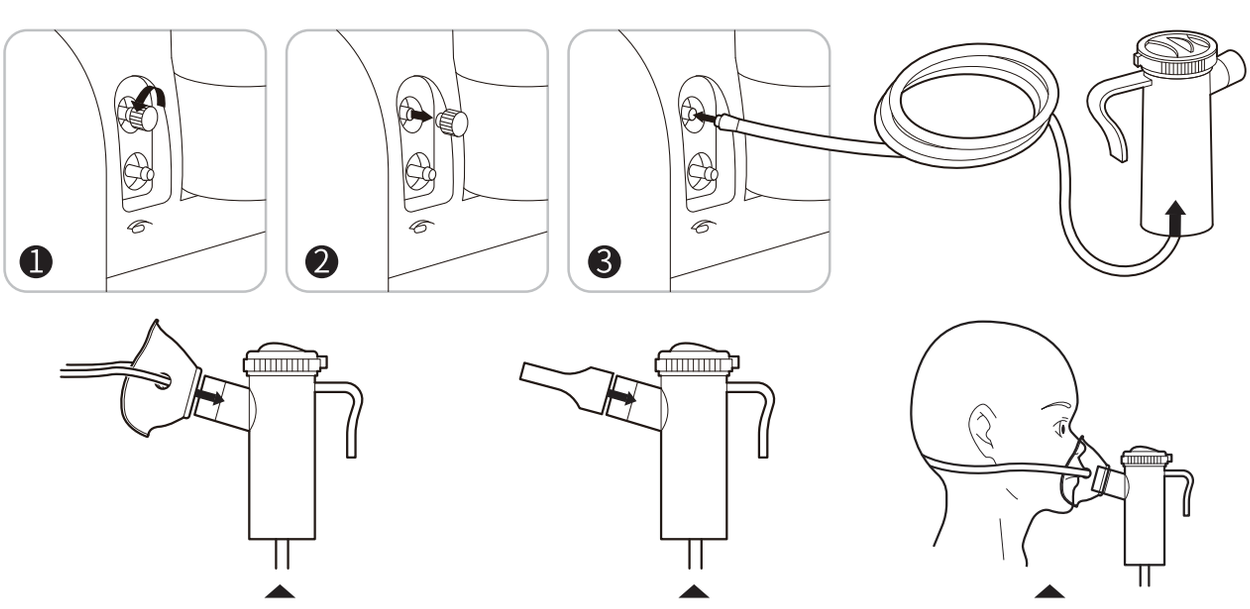
- Press the " ▣ " button and rotate the knob to select from the following modes: "Default", "Quiet", "Active", "Sleep", "AOT" (if any);
- After selecting the "Quiet", "Active" or "Sleep" mode, press and hold the knob for 3 seconds, then rotate the knob to adjust the flowrate corresponding to the selected mode. Press the knob once to confirm the value, and the oxygen therapy will begin in the selected mode;
- If the "AOT" mode is available, correctly wear the specified WEIGAO pulse oximeter. Once the screen displays the pulse oximeter parameters, you can enter the AOT mode for parameter adjustment. After selecting the AOT mode, press and hold the knob for 3 seconds, then rotate the knob to modify the lower limit of blood oxygen saturation. Press the knob once to confirm the change. Then rotate the knob to modify the upper limit of blood oxygen saturation, and press the knob again to confirm the change. Oxygen flow will be automatically controlled for oxygen therapy.
- In AOT mode, if the blood oxygen saturation value cannot reach the set range for a prolonged period, the machine will display a visual prompt: the AOT invalid indicator will light up.
- Precautions on the use of AOT oxygen therapy mode

⚠ Warning: Do not use a pulse oximeter that is not supplied by our company.

⚠ Caution: In AOT mode, please set the blood oxygen saturation range according to medical advice. If the blood oxygen saturation cannot reach the set range or improve for a prolonged time, seek medical attention immediately.

8. Nebulizing Operation

When nebulizing is needed, first reduce the oxygen flowrate to <2L/min, then manually unscrew the nebulizing interface plug. Connect one end of the nebulizing tube to the machine's nebulizing interface and the other end to the nebulizer. After manually adjusting the nebulizer's opening, place the mouth-piece in the mouth or wear the mask, and breathe slowly in and out to perform nebulizing.
To stop nebulizing, manually tighten the nebulizing interface plug to close the nebulizer.



Mask installation　　Mouthpiece installation　　Wearing

⚠ Caution Regarding the impact of nebulizing on oxygen concentration at the output port:

- Nebulizing may reduce oxygen output performance. It is recommended to keep the oxygen flowrate below 2L/min. During Nebulizing, the machine may trigger a low oxygen alarm.

9. Blood Oxygen Monitoring

(applicable to models equipped with pulse oximeter)

After connecting the pulse oximeter, the " " icon will light up, and the pulse rate and blood oxygen saturation display areas on the screen will show "-". When the pulse oximeter is correctly worn on the finger, the blood oxygen saturation and pulse rate values will be displayed in real time.

⚠ Caution

- Nail polish on the nails may interfere with the pulse oximeter's reading function and affect the accuracy of the blood oxygen index. Please carefully read the pulse oximeter's manual.
- When inserting the finger, ensure the light emitted by the sensor directly illuminates the nail side of the finger.
- The pulse oximeter is for single patient use.
- If the monitored blood oxygen saturation falls below 85%, the machine will issue a low blood oxygen alarm and display fault code E14.
- If the pulse oximeter is removed while in normal connection status, it means the probe has fallen off. The machine will issue an oxygen probe disconnection alarm and display fault code E12.
- If the pulse oximeter is in normal connection status but the Bluetooth connection is disconnected or the Bluetooth communication fails, the machine will issue a pulse oximeter communication fault alarm and display fault code E13.

10. Voice Control

(For models with this function)

ⓘ Before using voice control, you need to say the wake-up word. When the device successfully hears the wake-up word and responds, it enters the state of waiting for voice commands, and you can control it via voice commands. (If no voice command is given within 30 seconds after waking up, the device needs to be awakened again.)

NO.	Function Name	Voice Command	Voice Broadcast
1	Voice function enabled	Xiao Wei, Xiao Wei	Hello, Xiao Wei is at your service!
2	Power on/off	Power on	WEIGAO oxygen concentrator has been started. Do not use open flame. Do not smoke!
3		Power off	End of oxygen therapy
4	Timed power off	Increase time	Power off after 30 min
5			Power off after 60 min
6			Power off after 90 min
7		Decrease time	Power off after 120 min
8			Power off after 180 min
9			Power off after 240 min

NO.	Function Name	Voice Command	Voice Broadcast
10	Timed power off	Increase time Decrease time	Power off after 300 min
11			Power off after 360 min
12			Power off after 420 min
13			Power off after 480 min
14	Flow regulation	Increase flow Decrease flow	Set flowrate to 1L
15			Set flowrate to 1.5L
16			Set flowrate to 2L
17			Set flowrate to 2.5L
18			Set flowrate to 3L
19			Set flowrate to 3.5L
20			Set flowrate to 4L
21			Set flowrate to 4.5L
22			Set flowrate to 5L
23			Set flowrate to 5.5L
24			Set flowrate to 6L
25			Set flowrate to 7L
26			Set flowrate to 8L
27			Set flowrate to 9L
28			Set flowrate to 10L
29	Oxygen mode selection	Default mode	Default mode enabled
30		Quiet mode	Quiet mode enabled
31		Active mode	Active mode B enabled
32		Sleep mode	Sleep mode enabled
33		AOT mode	AOT mode enabled
34			Please connect and wear the oxygen module correctly

NO.	Function Name	Voice Command	Voice Broadcast
35	NA	NA	Screen locked
36			Unlock the screen
37			Set flow
38			Set upper limit of blood oxygen saturation
39			Set lower limit of blood oxygen saturation
40			Set time
41			Set lower limit of blood oxygen saturation to 88%
42			Set lower limit of blood oxygen saturation to 89%
43			Set lower limit of blood oxygen saturation to 90%
44			Set lower limit of blood oxygen saturation to 91%
45			Set lower limit of blood oxygen saturation to 92%
46			Set lower limit of blood oxygen saturation to 93%
47			Set lower limit of blood oxygen saturation to 94%
48			Set lower limit of blood oxygen saturation to 95%
49			Set lower limit of blood oxygen saturation to 96%
50			Set upper limit of blood oxygen saturation to 92%
51			Set upper limit of blood oxygen saturation to 93%
52			Set upper limit of blood oxygen saturation to 94%
53			Set upper limit of blood oxygen saturation to 95%
54			Set upper limit of blood oxygen saturation to 96%
55			Set upper limit of blood oxygen saturation to 97%
56			Set upper limit of blood oxygen saturation to 98%
57			Set upper limit of blood oxygen saturation to 99%

11. Timed Power Off

11.1 Machine Timing

Press the " ⏲ " button briefly, the "Timer" indicator will light up, and the numeric area will begin to flash. At this point, rotate the knob to set the timer value. Then press the knob once to confirm the value and activate the timer function. Turning the knob clockwise will increase the timer, and turning it counterclockwise will decrease the timer. The maximum timer value is 480 minutes. When the timer is ⩽120 minutes, the step size is 30 minutes per adjustment; when the timer is ⩾120 minutes, the step size is 60 minutes per adjustment.

11.2 Remote Control Timing (applicable to models with remote control function)

During normal operation of the oxygen concentrator, press the " Time+ " button on the remote control to increase the timer, and press the " Time− " button to decrease the timer. The maximum timer value is 480 minutes. When the timer is ⩽120 minutes, the step size is 30 minutes per adjustment; when the timer is ⩾120 minutes, the step size is 60 minutes per adjustment.

12. Power Off

When the oxygen concentrator is producing oxygen, press the "⏻" button once, and the device will stop oxygen production and enter standby mode. To completely disconnect the power, press the rocker switch at the bottom of the back of the machine to the " | " position, then unplug the power cord from the socket to fully disconnect the power.

13. Symbols

Symbol	Meaning	Symbol	Meaning
	Oxygen/Standby	**IP21**	Protection against vertically falling water drops
	No smoking		No open flames
	No sitting or lying		No unauthorized disassembly
	Warning: Refer to the accompanying documentation		No oil
	No bending		Class **II** equipment

Symbol	Meaning	Symbol	Meaning
	Type BF applied part		Follow the user manual
	Keep up		Fragile
	Maximum stacking layer limit		Keep dry
	Power on (main power)		Power off (main power)
	Non-ionizing radiation		Manufacturing date
LOT	Batch code	SN	Serial number
	No tumbling		

14. Network Security Description

(applicable to models with wireless transmission function)

14.1 User Access Control

1) 4G: Users can scan the device's QR code with their mobile phones and access related data using an account and password.
2) Wi-Fi: The oxygen concentrator connects via Wi-Fi, and users can access related data using an account and password.
3) Bluetooth: The oxygen concentrator connects with external Bluetooth devices within a 3-meter range to view related data.

14.2 Data Interface

1) The device has interfaces for 4G, Wi-Fi, or Bluetooth, which can be used for data transmission.
2) Wireless data transmission is carried out via the 4G module (LTE network communication protocol), Wi-Fi module (802.11 standard protocol), or Bluetooth module (standard Bluetooth communication protocol BLE4.0 and above).

15. Maintenance

⚠ Warning

- Before maintaining the oxygen concentrator, to prevent electric shock, always disconnect the power first, and do not open the machine case for repair! When replacing consumables (such as various filters), please choose products that match the model configured at the time of factory shipment or consult the manufacturer!
- No parts of this device require the addition of grease, oil, or other lubricants for maintenance!

15.1 Cleaning and Disinfection

15.1.1 Cleaning

1) The external shell should be wiped clean at least once a month.
2) First, unplug the power cord, then use a clean, soft, slightly damp cotton cloth or sponge to wipe it. Ensure no liquid enters the machine's seams.
3) Wait until the machine is completely dry before turning it on for use.

15.1.2 Disinfection

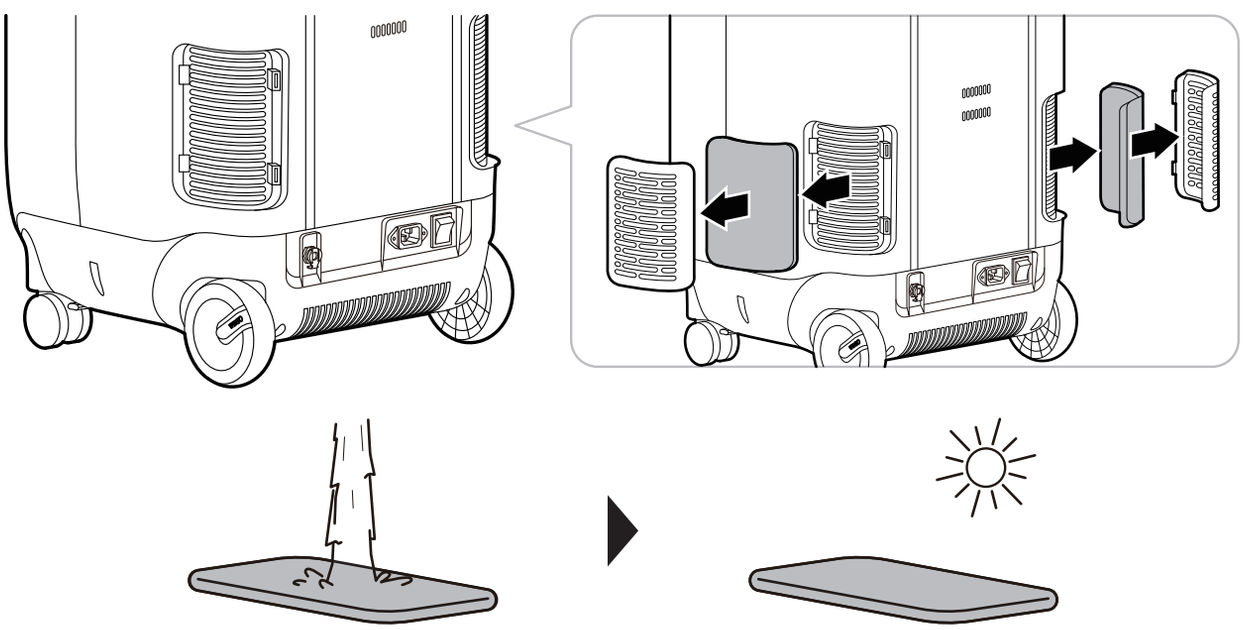
It is recommended to disinfect as follows:

1) Disinfection frequency: Use 70%-80% (by volume) ethanol to disinfect the main unit once before use; and clean the filters every two weeks.
2) Disinfection method: Wipe the surface and rinse the filters.
3) For the nasal cannula, nebulizer, and pulse oximeter, use certified products and follow the manufacturer's recommended disinfection and cleaning instructions.

15.2 Cleaning Filter

⚠ Warning

- Do not use the machine if the filter is not installed or is wet, as this could cause lasting damage to the device!

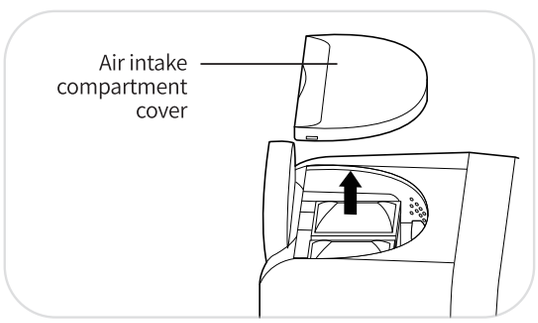


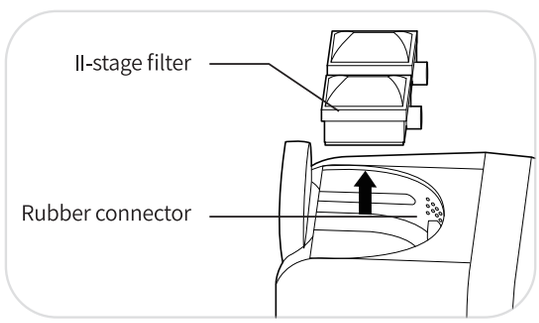
ⓘ The filter is located in the I-stage window and should be cleaned every two weeks.
1) When cleaning, remove the filter from the air intake window and rinse it with warm soapy water.
2) Then rinse with clean water and allow it to dry before reinstalling it.

ⓘ The filter is a consumable item, and if repeated cleaning causes aging or damage, it should be replaced promptly.

15.3 Replacing II-stage Filter

ⓘ Before performing this operation, ensure the oxygen concentrator is turned off and unplug the power cord from the socket. The II-stage filter should be replaced based on the degree of internal contamination, but it must be replaced at least every 2000 hours. The used filter should not be cleaned or reused. The II-stage filter is a consumable item.
1) Open the machine's air intake compartment cover and remove the II-stage filter .
2) Insert the new II-stage filter onto the rubber connector.
3) Finally, securely close the air intake compartment cover.





15.4 Replacing Sieve

The replacement cycle for the molecular sieve is typically between 10,000 and 15,000 hours, depending on the user's usage frequency and environment.

⚠ Warning

- The molecular sieve must be replaced by the manufacturer or an after-sales service provider authorized by the manufacturer.

15.5 Accessories

⚠ Caution

- It is recommended to use original factory accessories. If non-original accessories are used, the expected performance and overall machine performance cannot be guaranteed.
- Disposable components should not be reused.

1) Nasal cannula

Please clean or replace the nasal cannula according to the user manual instructions or contact the distributor.

Precautions:

① For single-use only;

② Dispose of as medical waste after use;

③ Avoid bending or twisting the tube during use;
④ Do not use if the product has exceeded its expiration date;
⑤ Do not use if the product packaging is damaged.

2) Nebulizing assembly

Please clean or replace the nebulizing assembly according to the user manual instructions or contact the distributor.

Precautions:

① The nebulizing cup should be kept upright and should not be tilted for more than 30°;
② Check if the nebulizer is working properly; do not bend the air hose;
③ This product is sterilized by ethylene oxide and is a single-use sterile product. Do not use if the packaging is damaged or the product is contaminated;
④ Do not use the product after the expiration date;
⑤ The product should not be used by children or individuals lacking consciousness without adult supervision;
⑥ Use medication as prescribed by a doctor;
⑦ The nebulizing cup is a disposable medical device. The disposal method after use: dispose of as medical waste.

⚠ Warning

- Do not use the product for individuals who are not suitable for nebulizing therapy.

3) Humidifier

Please clean or replace the humidifier according to the user manual instructions or contact the distributor.

⚠ Caution

- In normal and single fault conditions, the gas circuit of the product may be contaminated by the patient's body fluids or exhaled air.

4) Pulse oximeter

Please clean or disinfect the pulse oximeter according to the user manual instructions or contact the distributor.

⚠ Caution

- After use, clean the pulse oximeter and store it in a dry, dark environment.

15.6 Environmental Conditions

Environmental conditions of use	Temperature	5°C～40°C
	Humidity	⩽80%RH(non-condensing)
	Atmospheric pressure	86kPa～106kPa
Transportation and storage environmental conditions	Temperature	-20°C～55°C
	Temperature	10%RH～93%RH(non-condensing)
	Atmospheric pressure	70kPa～106kPa
• The product complies with GB/T14710 standard for low-temperature storage (-40°C). To ensure stable performance, it is recommended not to transport or store the product at temperatures below -20°C. • It takes about 15 min for the device to become ready for use when adjusted from the lowest or highest storage temperatures to an operating environment at 20°C.		

Transport: During transport of the oxygen concentrator, follow the instructions on the packaging to correctly stack and protect against heavy pressure, impact, severe vibration, and direct exposure to rain or snow. Other transport requirements should follow the terms specified in the purchase contract.
Storage: Store the packaged oxygen concentrator in a clean, well-ventilated indoor area free from corrosive gases and strong mechanical vibrations, at temperatures between -20°C and 55°C and relative humidity between 10% RH and 93% RH. Avoid direct sunlight and environment with high temperature, humidity, dust, or corrosive gases.

⚠ Caution: If stored or used outside the temperature and humidity range specified by the manufacturer, the system may fail to meet the stated performance specifications!

15.7 Environmental Protection

If the oxygen concentrator or any accessories become damaged or reach the end of their service life, do not dispose of them carelessly. Contact the manufacturer or their designated agency for proper disposal to avoid environmental pollution.
Inexperienced responsible parties must contact local authorities to determine the appropriate disposal methods for components and accessories that may pose a biological hazard.
ⓘ Disposal of wastes, residues, etc. shall meet the corresponding national legal regulations.

16. Alarm Information

NO.	Alarm Content	Alarm Type	Alarm Indicator	Indicator Status	Alarm Sound	Fault Code
1	Power failure alarm	Low priority	NA	NA	Toot-20s-toot-20s-toot-	NA
2	Low voltage alarm	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E01
3	Low flow alarm	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E02
4	Low oxygen concentration alarm	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E03
5	High system pressure alarm	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E04
6	Low system pressure alarm	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E05
7	Over-temperature alarm	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E06
8	Compressor fault alarm	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E07
9	Component fault	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	Oxygen sensor: E08 Pressure sensor: E09 Turbofan (2~3): E10 Chassis temperature sensor: E11
10	Blood oxygen probe disconnection	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E12

NO.	Alarm Content	Alarm Type	Alarm Indicator	Indicator Status	Alarm Sound	Fault Code
11	Oximeter communication (Bluetooth) failure	Low priority	Yellow	NO	Toot-20s-toot-20s-toot-	E13
12	Low blood oxygen alarm	Medium priority	Yellow	Blinking frequency:0.4~0.8H Duty cycle:20~60%	Toot-200ms-toot-200ms-toot (number of pulses: 3; pulse interval: 125~250ms)	E14

⚠ Caution

- Operator should be within 1 meter of the oxygen concentrator.

17. Troubleshooting

ⓘ If the oxygen concentrator emits an alarm or the yellow indicator stays on during use, the user should stop using the device and refer to the following table for troubleshooting measures. If the problem persists after following these solutions, please contact the distributor or manufacturer from whom the product is purchased!

Problem	Possible Cause	Recommended Solution
Device fails to start	Power cord NOT plugged in	Insert plug into outlet.
	The "overcurrent protection switch" of oxygen concentrator is disconnected	Press the "overcurrent protection switch" button to reset. The switch is located at the bottom of the rocker switch. If the same problem occurs again, try using a different socket. If the problem persists, contact your distributor.
	No power at outlet	Check the circuit breaker at home and restart it if necessary. If the same problem occurs again, try using a different socket. If the problem persists, contact your distributor.
Low flow alarm	Nasal cannula is twisted, blocked, or humidifier tube is clogged	Correct the twist, clogging, or replace the relevant parts to ensure smooth oxygen flow.
	II-stage filter is clogged	Replace with a new II-stage filter.
Low oxygen concentration alarm	Nebulizer is turned on	Check if the nebulizing interface plug is tightened; turn off the nebulizer.
	Inlet is clogged; II-stage filter is clogged; and exhaust outlet is clogged	Check the machine's air intake filter and II-stage filter, and check the exhaust holes at the bottom for clogging. Move the machine at least 10 cm away from furniture, walls, and curtains.
Over-temperature alarm	High temperature/operating temperature is too high	Incorrect placement, ensure the unit is not near any heat sources or move it to a cooler place. Ensure the intake and exhaust ports are not clogged.
Maintenance reminder	II-stagefilter has reached its usage limit	After replacing the filter, press the ute button 5 times to clear the maintenance reminder.

18. Others

18.1 Accessories

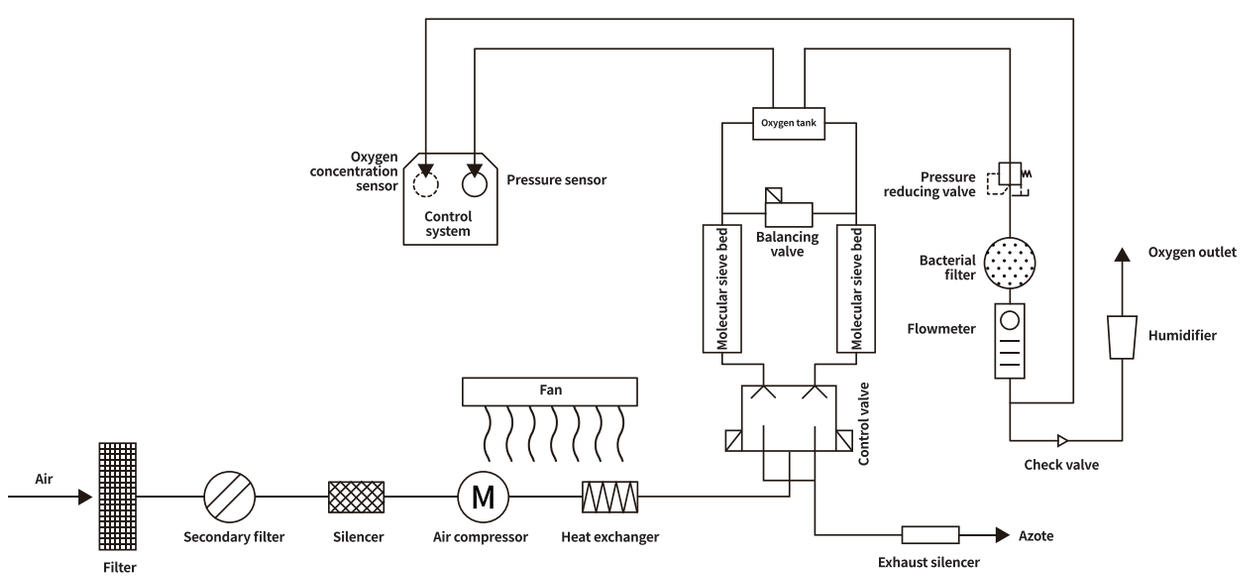
SN	Name	Quantity	SN	Name	Quantity
1	User's Manual	1 copy	2	Operation Guide	1 copy
3	Certificate of Conformity	1 pc	4	Nasal cannula	1 pc
5	Nebulizing assembly	1 set	6	Humidifier	1 set
7	Power cord	1 pc	8	Remote control (optional)	1 pc
9	Pulse oximeter (optional)	1 pc	10	Filter	1 pc or 1 set

⚠ Caution

- It is recommended that users use qualified products that have obtained a medical device registration certificate for the nasal cannula, nebulizing assembly, and humidifier. Examples include:
  1) Disposable nasal cannula produced by Mflab Medical Instruments Co., Ltd., Registration Certificate No.: ZXZZ 20182080480
  2) Disposable sterile nebulizer produced by Jing Kang Yu-Medical Technology Co., Ltd., Registration Certificate No.: GXZZ 20172080233
  3) Disposable humidifier cup produced by Hsiner Co., Ltd., distributed by Shanghai Rongjia Medical Technology Co., Ltd., Registration Certificate No.: GXZX 20162080086
- The pulse oximeter must be a product from the original manufacturer or a manufacturer-authorized product with a medical device registration certificate; otherwise, it will not function properly. Example:

1) Pulse oximeter produced by Contec Medical Systems (Qinhuangdao) Co., Ltd., Registration Certificate No.: JXZZ 20232070178.

18.2 Gas Circuit Diagram



18.3 Other Statements

- The manufacturer reserves the right to make technical and appearance changes to the product. Please note that we may make changes without prior notice.
- The product has a safe usage period of five years when used correctly according to this manual, excluding consumables and easily worn parts.
- The manufacturing date can be found on the certificate of conformity or packaging.

⚠ Caution

- If repairs are needed, circuit diagrams and other necessary materials will be provided. If you have any questions regarding circuit overhaul, please contact the manufacturer.

18.4 Chassis Removal Procedure

18.4.1 Disconnect Power

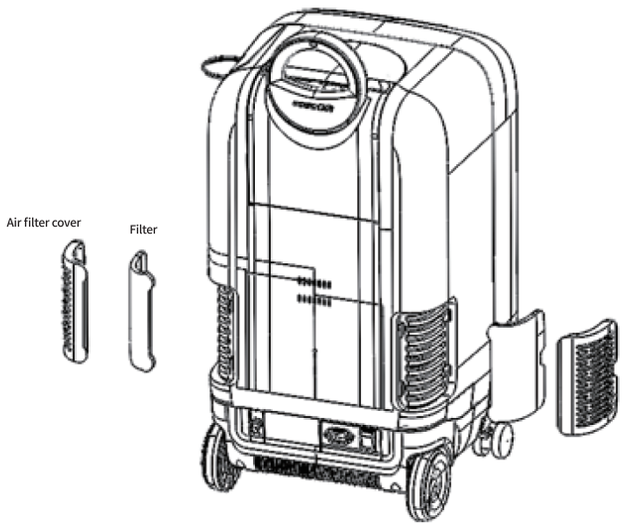
- Set the power switch to the "O" position;
- Unplug the power cord and disconnect it from the machine, as shown in the figure below.

18.4.2 Remove Humidifier

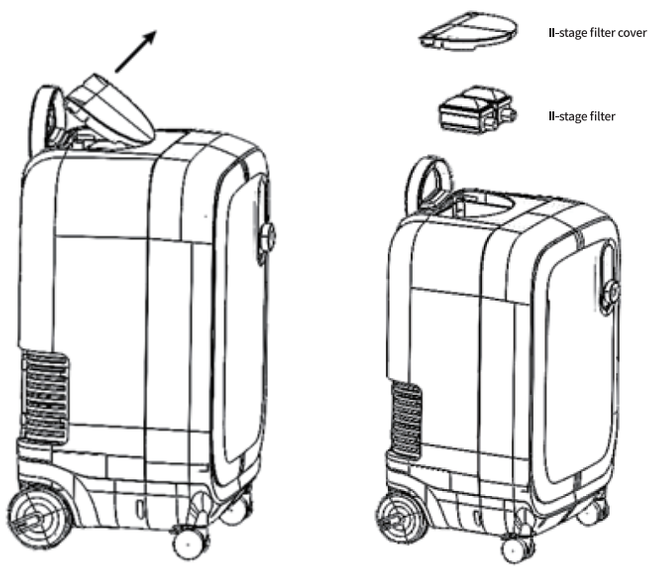
- Pull the connecting tube outward and remove the humidifier from its fixed position, as shown in the figure below.

18.4.3 Remove Filter Component

- Remove the air filter cover and filter, as shown in the figure below.

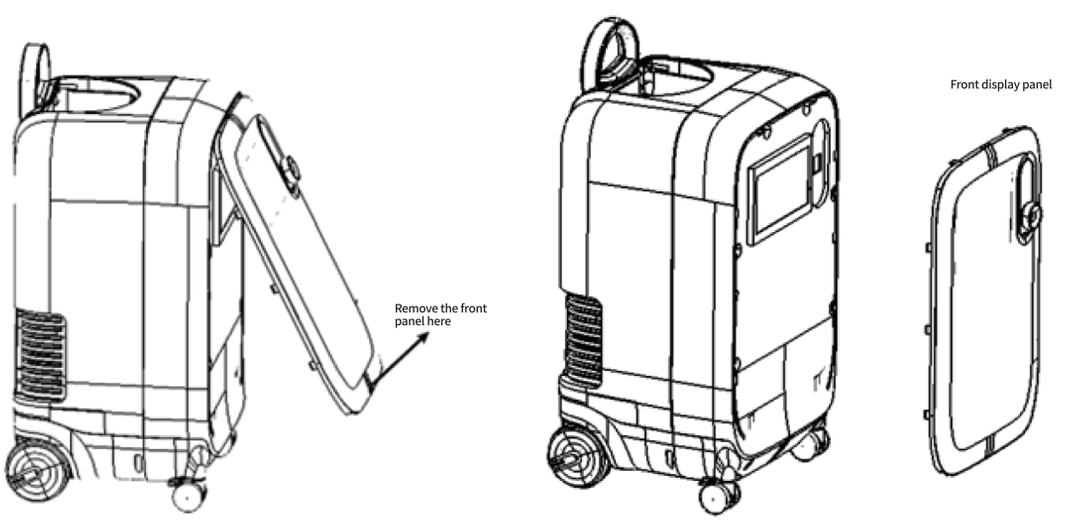


- Remove the II-stage filter cover and II-stage filter, as shown in the figure below.



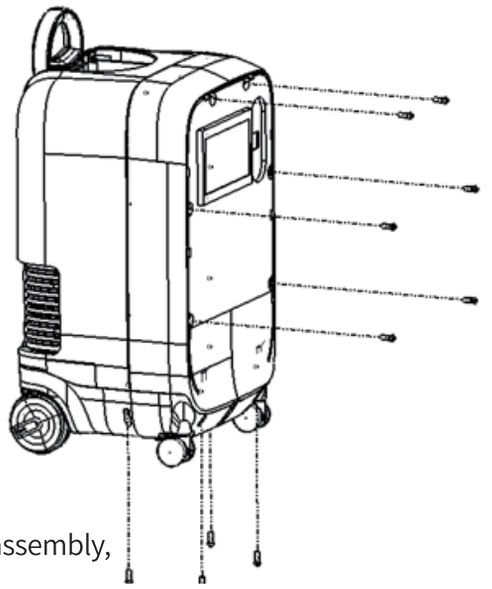
18.4.4 Remove Front Panel

- Pull out the front panel from the bottom, as shown in the figure below.

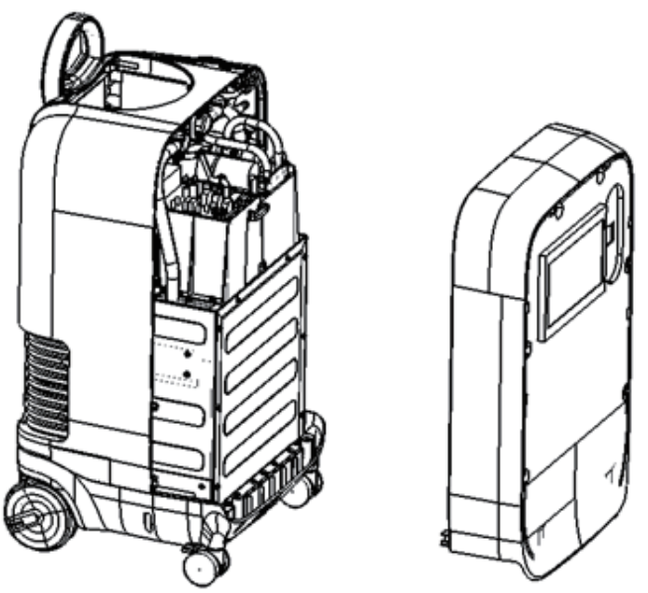


18.4.5 Remove Front Shell

- First, remove the 10 screws indicated in the diagram, as shown in the figure below.

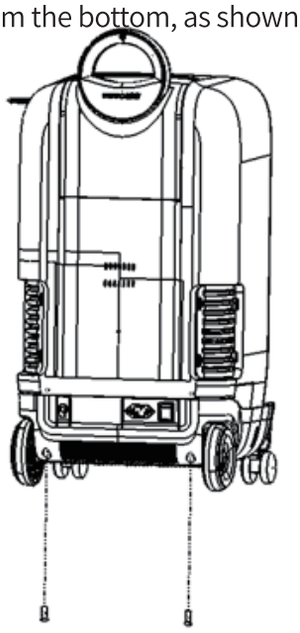


- Then remove the front shell assembly, as shown in the figure below.

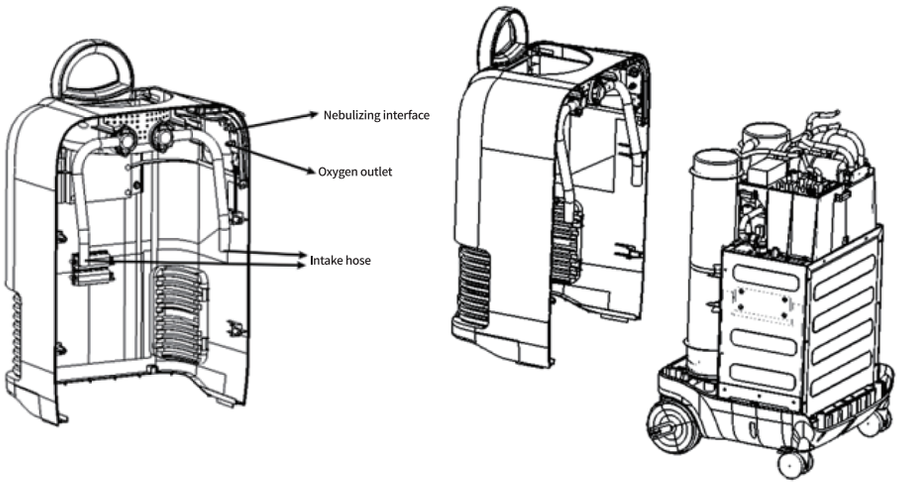


18.4.6 Remove Rear Shell Assembly

- Remove the remaining two screws from the bottom, as shown in the figure below.

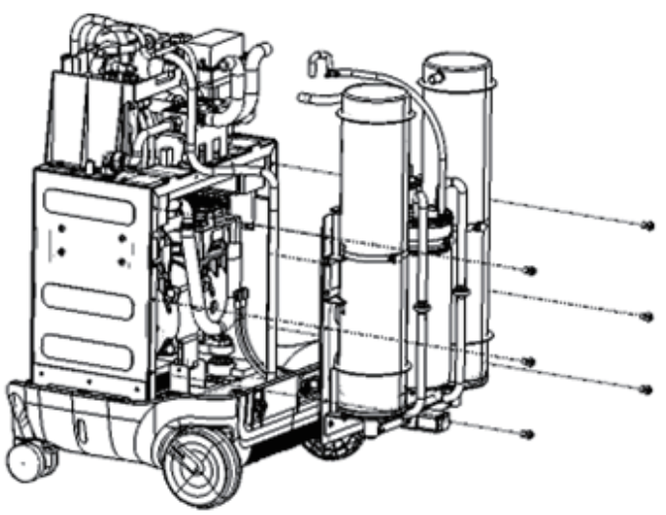


- Disconnect the corresponding tube connected to the rear shell, and remove the rear shell assembly.



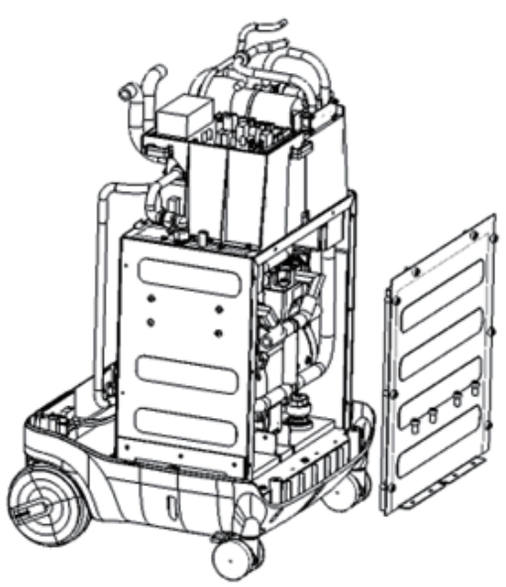
18.4.7 Remove Molecular Sieve Bed Assembly

- Disconnect all tubes connected to the molecular sieve bed, remove the screws securing the molecular sieve bed, and remove the molecular sieve bed assembly, as shown in the figure below.

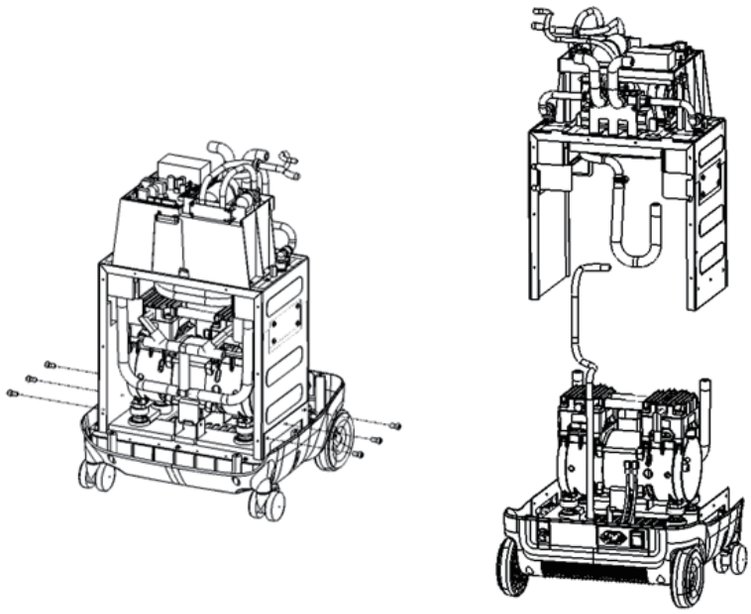


18.4.8 Remove Inner Chassis

- Disconnect all wire harnesses and pressure transfer tubes from the control board, as shown in the figure below.



- Disconnect the air hose connected to the compressor, then unscrew the screws securing the inner chassis assembly. Lift the inner chassis upward, as shown in the figure below.



19. Quality Assurance

WEIGAO Health promises that any consumer who uses our products and encounters any product quality issues during use can call WEIGAO Health or visit its website. Our after-sales service personnel will answer your questions and provide after-sales service for you from 9:00 am to 5:00 pm on weekdays.

19.1 Scope of Service

19.1.1 Scope of Free Service

Devices within the scope of WEIGAO Health's warranty service can enjoy free services.

19.1.2 Scope of Paid Service

- WEIGAO Health will provide paid services for devices not falling within the scope of WEIGAO Health's warranty service.
- Even within the warranty period, if the product needs to be maintained due to the following reasons:
  - damages due to human or force majeure.
- WEIGAO Health is not responsible for any direct, indirect, or ultimate damages and delays due to the following reasons (including but not limited to):
  - The components are disassembled, stretched, and re-commissioned.
  - The parts are replaced without WEIGAO Health's permission, or disassembled or maintained by unauthorized maintenance personnel.

19.1.3 Return

If you need to return the product to WEIGAO Health, please follow the following steps:
In principle, the product sold by WEIGAO Health will not be returned except for product quality issues. If normal returns are required, the right to return must be obtained first.

- It is necessary to contact WEIGAO Health's Customer Service Department and inform it of the reason for the return, the return quantity, and the product serial number. If the serial number is not clear and identifiable, the return will not be accepted.
- Please indicate the product model, product serial number, and return quantity in a written return note, briefly describe the reason for the return, and sign and stamp with WEIGAO Health's seal to enter the return process via email or fax.

19.1.4 Costs Incurred from Returns

Products that are recognized and approved for return by WEIGAO Health can be sent to WEIGAO Health by mail, express delivery, or consignment for shipment, and the costs incurred should be borne by the returning party in principle.

19.2 Warranty

- The oxygen concentrator comes with a one-year warranty for the entire machine and a three-year warranty for the compressor, starting from the date of sale, under normal use and storage conditions. If a quality issue arises due to non-human factors within the warranty period, the entire machine or the compressor will be covered by warranty service (excluding consumables and easily worn parts). For product faults occurring after one year, up until the end of the product's service life, the company provides spare parts for repair, with reasonable charges.

⚠ Warning: WEIGAO Health does not provide a free warranty for device damage caused by improper personal use, human damage, accidental damage (such as falling, disassembly), unreasonable maintenance, or improper repairs by non-WEIGAO Health authorized service points.

- Pulse oximeter warranty declaration

1. Only products purchased from the company or authorized distributors are eligible for warranty service.
2. If the product malfunctions under normal use due to quality issues, WEIGAO will contact the supplier for free repair service within the warranty period.
3. For product malfunctions, please contact WEIGAO directly. WEIGAO will contact the supplier to provide technical support.
4. If you require services beyond the standard warranty, please contact pre-sales consultation.
5. The product comes with a one-year warranty for the entire machine and a six-month warranty for accessories from the date of purchase. If there are specific contractual agreements, the warranty period will follow the contract terms.
6. Users should keep the warranty card and valid invoice as warranty proof.
7. The warranty start date is the date of purchase on the invoice, unless there is a separate written agreement with WEIGAO.
8. On-site service may not be available in some regions. Areas with geographic barriers, undeveloped roads, or unsuitable public transportation for regular travel require coordination and additional charges for repair services.
9. Repaired equipment continues to enjoy warranty service during the warranty period.
10. Replaced parts during repairs are the property of WEIGAO.
11. Users are responsible for the security of their data. Before repair, users should back up their data and programs. WEIGAO is not responsible for any consequences arising from data or program loss or damage.
12. The warranty policy for accessories of WEIGAO pulse oximeters may vary depending on the purchase method. Standard accessories are covered by the main unit's warranty; and accessories separately purchased are covered by their own warranty.
13. The following cases are not covered under warranty but may be eligible for paid repair service:

- Products exceeding the warranty period;
- Damage caused by improper use, maintenance, or storage not following the manual or instructions;
- Damage caused by unauthorized repairs or disassembly;
- No warranty card or valid invoice (except when the product is within the warranty period and proof can be provided).
- Products without the WEIGAO product label, or where the warranty card's product model, serial number/UDI does not match or has been altered;
- Incorrect product serial number/UDI provided, which cannot confirm the product as one of our company's products;
- Damage caused by force majeure;
- Damage caused by other equipment;
- Situations where warranty is not provided as specified by laws and regulations;

14. This warranty specifies WEIGAO's responsibility for product repairs or replacements, and there are

no other guarantees. If otherwise clearly stipulated by applicable national laws and regulations, WEIGAO will comply with them.

15. This warranty service applies within China.

*The final interpretation and modification rights of these provisions belong to Weihai WEIGAO Health Technology Co., Ltd.

20. Manufacturer Information

Weihai WEIGAO Health Technology Co., Ltd.

Domicile/manufacturer address: Plot 3, Jinnuo Road East and Binhai Avenue North, Gushan Town, Weihai Economic and Technological Development Zone, Shandong Province (within the campus of Shandong WEIGAO Hongrui Medical Technology Co., Ltd.)

Tel: 4000616988 Postal code: 264499

National after-sales hotline: 400-0616-988

Manufacturing license No.: LYJXSCX No. 20240028

Product technical requirements/registration certificate No.: LXZZ 20242081112

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21. Warranty Terms

21.1 Warranty Card

The warranty for WEIGAO products within the warranty period (free repair) starts from the date of purchase.

1. **Products within the warranty period can only be repaired at WEIGAO-approved service stores. Please present the warranty card and the purchase invoice when seeking repairs.**

The following two points should be noted:

① The warranty card will not be reissued if lost, so please properly keep it;

② This warranty card is only valid within the People's Republic of China (currently not available for use in Hong Kong, Macau, and Taiwan).

2. **Warranty will be provided if a fault occurs under normal usage within the following periods from the date of purchase:**

① Complete unit [1 year] free of charge;

② Main components: Compressor [3 years] free of charge;

③ Accessories [filter felts, filter screens, disposable nasal cannula, disposable nebulizers] available for a fee.

3. **In the following situations, even within the warranty period, repairs will not be covered under warranty, but paid repair services may be provided:**

① Damage caused by improper usage, maintenance, or storage not following the product manual instructions;

② Damage caused by improper operation, abnormal power supply, or breakage (e.g., dropping);

③ Damage caused by disassembly by non-WEIGAO authorized service personnel;

④ No warranty card or valid purchase invoice presented;

⑤ The information recorded on the warranty card does not match the physical product or has been altered;

⑥ Damage caused by force majeure factors (e.g., lightning, earthquake, fire, flooding, etc.).

21.2 Product Information

Product name:	Medical molecular sieve oxygen concentrator	Place of manufacture:	Weihai
Product model:	See label	Serial number:	See label

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【**Sales records**】The information contained herein is for verification purposes only in the event of a product warranty, and we do not collect or record such information.

Sales date: ..... Invoice No.: .....

Customer name: ..... Contact number: .....

Customer address: ..... Postal code: .....

Sales store name: ..... Sales store phone number: .....

Sales store address: .....

【Maintenance records】

Sales date: ..... Contact number: ..... Repair date: .....

Customer name: .....

Customer address: ..... Cause: .....

Sales store name: .....

Sales store address: ..... Submission date: .....

【Maintenance records】

Sales date: ..... Contact number: ..... Repair date: .....

Customer name: .....

Customer address: ..... Cause: .....

Sales store name: .....

Sales store address: ..... Submission date: .....

【Maintenance records】

Sales date: ..... Contact number: ..... Repair date: .....

Customer name: .....

Customer address: ..... Cause: .....

Sales store name: .....

Sales store address: ..... Submission date: .....

This warranty contains personal information of consumers, please keep it properly.

WEIGAO Health customer consultation service center: 4000616988

Website: www.wegohealth.com.cn

Preparation/revision date: October 24, 2024