



PRODUCT USER MANUAL

HEMOCARE OXYGEN CONCENTRATOR

MODEL NO:DE-1A

# BRANDINTRODUCTION

DE-1A Oxygen Concentrator is designed by Shenzhen Deda Health Co., Ltd. and produced by Shenzhen Deda Medical Instrument Co., Ltd. Deda Health company is a long-standing professional manufacturer that is engaged in health care products design and manufacturing establishment, the company holds the operation concepts of being trustworthy and honesty-based, devoted to the research and development, manufacturer, marketing and service of health care products. Based on customer's demands, we have launched medical oxygen generators and oxygen preparation equipment with multiple functions. The company continuously integrates the resources about the key component of oxygen generating, and actively explores the business strategy on technological innovation and brand marketing, so as to develop into the leading professional oxygen generating enterprise, providing qualified and cost effective oxygen concentrator for existing and new customers. Deda Health company has highly experienced technical personnel, with high-quality team that can provide integrated and timely service to customers. "Professional qualifications, brand creation" is the business objective. "Excellent quality, reliable service" is the operating principle. With huge advantages of talented personnel, resources, network, enterprise, scale and experience, the company has become a new brand enterprise which has highly competitive and leading edge advantages. Deda Health company prides itself on quality, develops with good service, to produce high quality and affordable price oxygen generating products.

----DADEKJ,casting classic quality, leading the oxygen industry.

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**Safety precautions**

In case of power outage and malfunction of the oxygen concentrator, an alternate source of supplemental oxygen (such as oxygen cylinder or oxygen bag) should be prepared for the user in urgent need of oxygen. The machine is not intended as medical device and is not to be used for life support or life extension.

**Pre-installation**

Upside down operation is prohibited.  
If the power supply has unstable voltage, or is beyond AC220±22(110±10)volt, please connect the voltage regulator before using the machine.  
Please use standard socket with safety qualification and terminal board with electrical safety certification.

**Laying Place**

The machine should be located in a well-ventilated space and avoid direct sunlight. The distance between the machine and the wall or other objects should be no less than 10cm.  
Do not put other things or liquid vessel on the machine.  
There should not be any obstruction around the air outlet on the back and bottom of the machine, in case of air inlet and air outlet blocked, which could lead to high temperature that will result in machine stoppage and decreasing of oxygen concentration.

**Using**

Oxygen is a combustion-supporting gas, so do not smoke and keep away from combustion source while using the machine for fear of fire accident. Do not switch on & off frequently. You can restart it after you have switched it off for 3—5 minutes, considering its service life.  
Avoid oil or grease-like material for any part of the machine. So as not to pollute the oxygen machine and cause fire.

**Product feature**

The scope of product application: The product is designed in accordance with standard of Home personal usage appliance,  
Health function: improved oxygen absorption can improve the condition of the body to achieve the purpose of oxygen health care. Applicable to the elders, poor physique, pregnant women, students, and athletes restore physical function

**Function Feature**

Intelligent control: LED display screen, easy use and operations operate for timing function.  
Overheat protection: the pure oil-free air compressor with overheat protector, will stop working automatically when the compressor's working temperature is too high to protect the compressor and the whole part of the product.

**Operating principle**

This product uses AC220V/110V as power source, air as raw material and adopts the pure oil-free air compressor and qualified molecular sieve imported with original packaging, so as to generate high purity oxygen by PSAat normal temperate and supply oxygen.

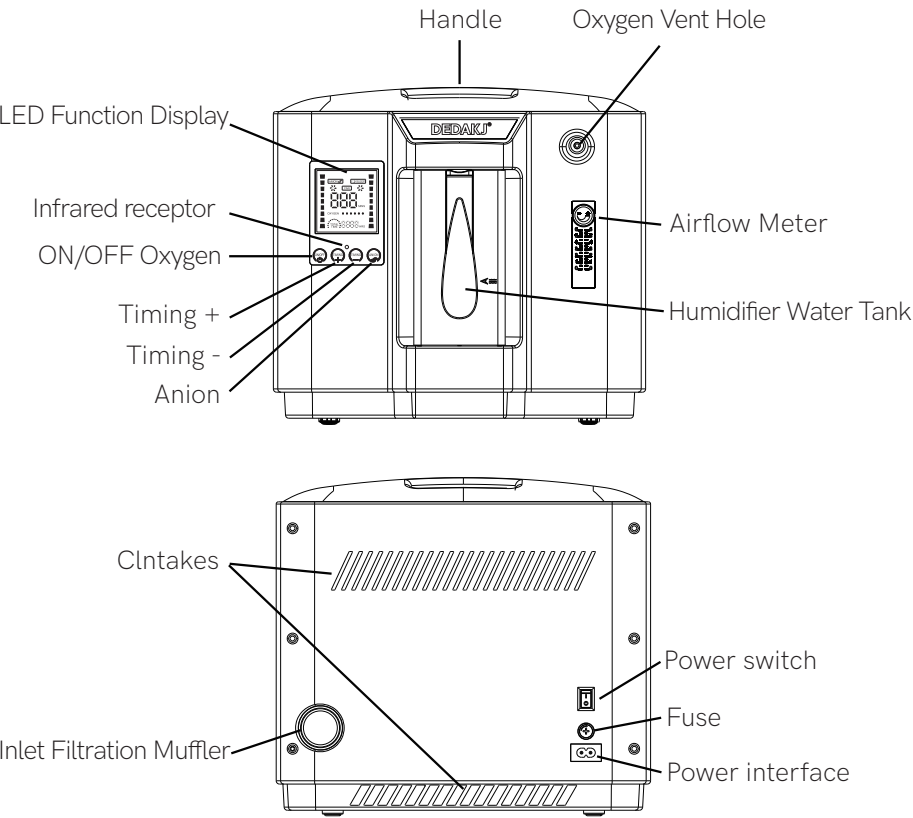
**Key Technical Indexes**

Product name: Oxygen concentrator  
Model: DE-1A  
Oxygen generation method: Pressure Swing Adsorption(PSA)  
Rated voltage: AC220±22V50±1Hz/AC110±10V 60Hz  
Rated power: 120VA  
Oxygen flow rate: 0-6L/min adjustable  
Oxygen concentration: 30%-90%(±3%) adjustable  
Oxygen pressure: 0.02—0.05MPa  
Carbon dioxide: qualified according to the specified method  
pH value: qualified according to the method  
Morphological identification: odorless, specified colorless gas, combustion-support  
Operating noise: s45dB(A)  
Classification: class II  
Size: 340mmx 180mm x 310mm  
Net weight: 6.0kg  
Display control: LED light display, Intelligent chip control, infrared remote control

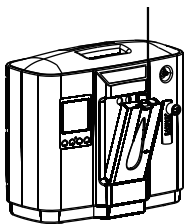
# Installation and Usage

Open - package inspection  
After opening the package, please check whether the machine is in good condition, and refer to the accessory list to ensure that it has included all of the items. If there is any missing item, please contact your supplier or manufacturer in time for replacement.

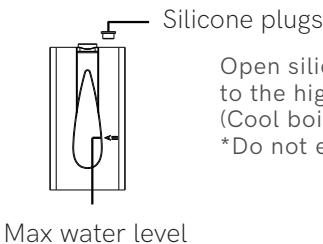
## Sketch Map



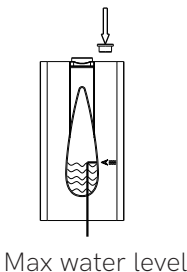
## Preparation Work



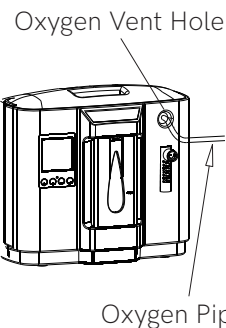
Filling water in humidification water tank:  
Grip the top handle of the humidification water tank by hand, pull out the water tank after pressing.



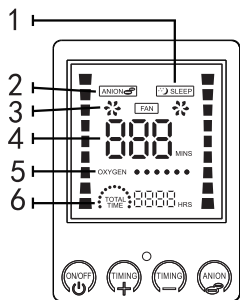
Open silica gel plug at top and fill pure water to the highest water level line.  
(Cool boiled water, distilled water and so on)  
\*Do not exceed water level line



Make sure to cover the rubber plug before using, align the positioning groove at the bottom of water tank and then the outlet, put the humidification water tank back to the main body.



Connect oxygen tube:  
Connect one end of "Oxygen tube" with "oxygen outlet mouth", and connect the other end with oxygen inhaler.



## Inhale Oxygen Operation

LED screen display instruction

1. Sleep function: The machine engage in sleep mode automatically after running for 3 minutes, the screen lights dimmed to power saving.
2. Anion indicator
3. Cooling fan indicator
4. Timing setting indicator
5. Generating oxygen indicator
6. Cumulative time indicator

### 1. Electricity

When the oxygen machine is power on, open the power switch on the shell, the buzzer sounds for a long time, then LED screen light.

### 2. Power on

Press the key " generate oxygen", the machine will start, open the cooling fan, timing setting function, generate oxygen function, Cumulative time function and brand logo light synchronously, there is LED display light and blue light in water tank.

### 3. Timing +

Lightly touch the "Timing+" key, the timing is set to be 15 minutes. The timing setting is one-way circulation setting. The highest value is 180 minutes; 3 seconds after you have done the timing operation, the timer will start into a countdown process. The operation of the "Timing —" key is the same with the "Timing +" key.

### 4. Negative ion key

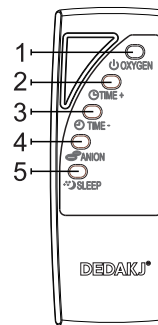
The function of negative ion is synchronized with the system, and can work independently. In working condition or standby state, touch the "negative ion" key to close its function; and touch the key again to start the function.

### 5. Flow rate setting key

Through regulating valve knob to control the oxygen flow and concentration, the greater the flow, the smaller the oxygen concentration.

### 6. Infrared remote control

The remote control key function is the same with control panel key function.



## Remote Control Instructions

- (1 ) On/Off key
- (2) Timing + key
- (3) Timing — key
- (4) Negative ion key
- (5) Sleep mode key

In working state, press "Sleep" mode key, the "Sleep" icon on the display screen will flash three times, then the screen will turn into sleep mode. Press any key on the remote control or touch any key on the machine panel to active the screen highlight.

## Normal Operating Conditions

Operational temperature: 5°C-40°C

Relative humidity range: ≤80%RH

Atmospheric pressure range: 86kPa-106kPa

When the temperature is below 5°C,the machine should be put in normal operating condition for at least 4 hours before getting started.

Transport or storage conditions

Storage temperature: -20°C-60°C

Relative humidity range: ≤93%RH

To avoid strong electromagnetic interference environment or interfering other domestic appliances, please keep the machine at least 3m away from other domestic appliances.

Symbols for safety requirement and meaning on the machine



Class II equipment

## Care and Maintenance

### 1. Cleaning housing unit

The surface of the housing should be cleaned at least once every month. Disconnect the power cord before you clean it. Wipe it with a clean, mild, damp cloth soaked with disinfectant. Do not let the liquid penetrate into the machine.

### 2. Cleaning water tank

To keep the water tank clean, the water used should be purified water, distilled water or cold boiled water. We suggest to change water every day.

The water tank should be cleaned every week. First use mild detergent and shake the tank to wash. Then use clean water to rinse it,

After cleaning the water tank, please remember to put the water tank plastic plug back to avoid leakage of oxygen from the water inlet, caused no oxygen output from oxygen outlet mouth when the machine is in normal working.

### 3. Air filter cleaning

The white air filter at the back of the machine can reduce noise, isolate dust and purify the air. It should be clean. It should be cleaned around every ten days. First use mild detergent to wash, and then rinse it with clean water. Pay special attention that it must be dry to be positioned back, or the function of the molecular sieve could be damaged, which will lead to decreased oxygen concentration.

### 4. Oxygen tube and oxygen inhaler cleaning

In general condition, it should be cleaned every three days. The snorting part of nasal cannula should be cleaned after each use. You can soak it with 5% potassium permanganate solution for 5 minutes, then rinse with clean water, or wipe it with alcohol. Change a new oxygen tube every year.

### 5. Long-term storage operations

Before you long-term storage the oxygen concentrator, please do as follows:

1. Bring down the humidifier water tank, pull out the water, dry it and position it back.
2. Disconnect the power cord and put away the power cord.
3. Do not place the machine in damp, dusty environment.

Avoid direct sunlight and pollution. Preserve the oxygen tube and oxygen inhaler at room temperature. Do not twist the airway tube. Keep out of the reach of the children.

Do as follows before restart the machine after long-term storage period:

1. Make sure the power cord is undamaged.
2. Clean the oxygen tube and oxygen inhaler. Check whether the tube is blocked or twisted. Please straighten out.
3. Clean the humidifier water tank.

Common Fault and Trouble-shooting

NO.	Phenomenon	Cause analysis	Solution
1	Odor in air.	In the initial stage of using, there is smell for the connection tube and other plastic parts. It is normal.	The odor that comes from silicone tube and ABS rubber parts is normal and non-toxic by inspection. The odor will disappear as time goes by.
		The humidifier water tank hasn't been cleaned for a long time or the water hasn't been changed.	Clean the oxygen tube and humidifier water tank.
2	Water flows from the oxygen outlet.	The water level of the humidifier water tank is beyond the highest water level, so the airflow pressed the bubble into the oxygen tube.	Keep the water lower than the highest water level.
		The machine has been used for a long time, so that the steam in the airflow gathers on the tube wall.	pour the water in water tank. And add water into the water tank when there is no water coming out from oxyhen outlet.
3	The machine lelse "puff" sound every several ssceondss	It is the sound of nitrogen discharging which is normal and is asign of fine working.	
4	After startup, the machine operates well, the flowmeter displays "O" or is too small	The flowmeter is off or the value istoo small	Turn up the oxygen flow.
		The oxygen tube is twisted or blocked.	Straighten the oxygen tube.
		The inner connection tube of the machine is disconnected or broken.	Disconnect the powercord and contact professionals to repair it.

5	After startup, there is bubble in the water tank, butthere is no oxygen getting out from the oxygen outlet.	The silica gel stopper of the humidifying water tank is not properly positioned.	Remove the humidifying water tank to plug the silica gel stopper.
6	After startup, the in dicator light works, but the machine does not(the sound is irregu lar).	Compressor malfunction.	Disconnect the power cord and contact professionals to repair it.
		The temperature is so high that the self-porote ction mode of the oilfree compressor is activated.	It is a normal case.When the temperature lowers down, the machine will restart automatically.
7		Separation valve malfuncyion	Disconnect the power cord and contact professionals to repair it.
		The inner conection tube of the machine is disconnected or broken.	Disconnect the power cord and contact professionals to repair it.

If it still does not work as you have followed the solutions listed above, do not disassemble the machine. Please consult the manufacturer for assistance.

# Operating Principle

The air comes into the compressor after compressed by air inlet filter unit, and then it enters into molecular sieve tower to separate the oxygen and nitrogen. The oxygen successfully goes through the molecular sieve tower into the fine sieve tower. In contrast, the nitrogen is absorbed by the molecular, then to be discharged into the atmosphere through the separating valve. The oxygen concentration is enhanced in the fine sieve tower and controlled flow size by flowmeter. Then the oxygen is humidified by the humidifying water tank when it comes to it. Finally, the oxygen reached the user through oxygen supply tube.

