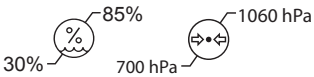
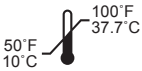


Oxygen Concentrator

User Manual



R_x Only

CAUTION: Federal (USA) law prohibits this device to sale by or on the order of a physician.



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


Product Introduction











This medical Oxygen Concentrator is a device that extracts oxygen from atmospheric air. It is an electrically-powered molecular sieve (artificial zeolite) used to separate ni-

trogen from ambient air. It could be used in a variety of settings. The oxygen concentrator can supply a patient with a steady oxygen flow.

1. Symbols

The following table is a list of symbols and definitions that are used with the Dynarex Oxygen Concentrator.

| Symbol | Title |
|---|---------------------------|
|  | Caution |
|  | "ON" (power) |
|  | "OFF" (power) |
|  | CLASS II equipment |
|  | Type BF applied part |
|  | Manufacturer |
|  | Fragile, handle with care |
|  | Top |
|  | Prescription use only |
|  | Date of manufacture |
|  | Maximum altitude |

| Symbol | Title |
|---|--|
|  | No open flame, no open ignition source, and smoking is prohibited. |
|  | No smoking |
|  | Not made with natural rubber latex |
|  | Keep dry |
|  | Keep away from sunlight |
|  | Temperature limit |
|  | Serial number |
|  | Batch code |
|  | Atmospheric pressure limitation |
|  | Humidity limitation |

2. Warnings

For your safety, the Oxygen Concentrator must be used according to the prescription determined by your physician.

It is very important to follow your oxygen prescription. Do not increase or decrease the flow of oxygen – consult your physician.

Your delivery settings of the Oxygen Concentrator should be periodically reassessed for the effectiveness of therapy.

If a warning light is lit, or the concentrator is not operating properly, or if you feel discomfort or are experiencing a medical emergency while undergoing oxygen therapy, seek medical assistance immediately.

Under certain circumstances, oxygen therapy can be hazardous. Seek medical advice before using an Oxygen Concentrator.

This device manufactures high concentration oxygen, which promotes rapid burning. Keep Oxygen Concentrator far away from open flames. Do not use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.

Smoking during oxygen therapy is dangerous and is likely to result in facial burns or death.

Do not allow smoking within the same room where the Oxygen Concentrator or any oxygen carrying accessories are located. If you intend to smoke, you must always turn the oxygen concentrator off, remove the cannula and leave the room where either the cannula or mask or the Oxygen Concentrator is located. If unable to leave the room, you must wait 10 minutes after you have turned off the Oxygen Concentrator before smoking.

Turn the Oxygen Concentrator off when not in use to prevent oxygen enrichment.

Do not leave the nasal cannula or mask on bed coverings or chair cushions when not in use.

Never use petroleum or oil-based lotions or salves to avoid the risk of fire and burns. Do not lubricate fittings, connections, tubing or other accessories of the Oxygen Concentrator to avoid the risk of fire and burns.

To prevent product damage, do not attempt to operate the unit without the air filter or while the filter is still damp.

Only use service parts recommended by the manufacturer to ensure proper function

Secure oxygen tubing and power supply cords to prevent tripping hazards and reduce the possibility of entanglement or strangulation.

Care should be taken to prevent the unit from getting wet or allowing water to enter the unit.

Do not place the Oxygen Concentrator in surroundings where its airflow is obstructed. Do not place items on top of the concentrator. Keep clearance of at least 32" around unit.

When device is used under extreme operating conditions, the temperature near the exhaust vents on the bottom of the unit may reach 145°F (63°C).

Do not use the unit if the power cord is damaged.

Before attempting any cleaning procedures, turn the unit "OFF".

Do not service or clean this device while in use with a patient.

Electrical shock hazard. Do not remove cover while the unit is plugged in. Only your equipment provider or a qualified

2. Warnings (continued)

service technician should remove the covers or service the unit.

Use of harsh chemicals (including alcohol) is not recommended. If bactericidal cleaning is required, a non-alcohol based product should be used to avoid inadvertent damage.

Use only voltage specified on rating label.

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

NEVER leave the concentrator unattended when plugged in.

Allow unit to run until it reaches the proper purity level.

CAUTION: Radio Frequency Interference.

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

NOTE: When turned off allow at least 5 minutes before restarting concentrator.

3. Operation Conditions and Environment

Ambient temperature: 50°F-100°F

Relative humidity: 30%-85%

Air pressure: 700 hPa-1060 hPa

Altitude: Up to 2286 m without degradation; Consult your equipment provider for further information regarding use at high altitude.

4. Technical Parameters

| | |
|--------------------------|--|
| Model | 5L |
| Rated power (VA) | 350 |
| Operation voltage (V/Hz) | AC230/50 |
| Oxygen flow (L/min) | 0.5-5 |
| Oxygen concentration (%) | 93% ± 3% |
| Outlet pressure (Mpa) | 0.04-0.07 |
| Noise (dB(A)) | ≤ 40 |
| Large LCD display | Total working hours (range: 0-99999 hours) |
| Electrical category | Class II, Type B |
| Net Weight (lb.) | 37 |

5. Structures and Functions

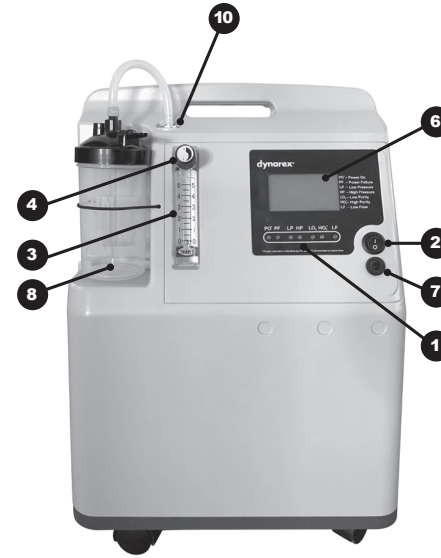


Figure 1



Figure 2

1. **Indicating Lamps** – Total 7 indicating lamps and their indication for each model are as follows:

- a. PO Power On (green lamp)
- b. PF Power Failure (red lamp)
- c. LP Low Pressure (red lamp)
- d. HP High Pressure (red lamp)
- e. HO₂ Oxygen Purity is ≥ 85%, (green lamp) (Accuracy: ±3%)
- f. LO₂ Oxygen Purity is <85%, (red lamp) (Accuracy: ±3%)
- g. LF Low Flow Flowrate (red lamp)

2. **Power Switch**

| – ON

○ – OFF

3. **Oxygen Flow Meter** – The location of float in the oxygen flow meter shows the outlet oxygen flow (L/min.).

4. **Flow Meter Knob** – It adjusts and controls the outlet oxygen flow.

5. **Air Filter** – Prevents dirt, dust and lint from entering your unit.

6. **LCD** – Display total working hours of the oxygen concentrator.

7. **Circuit Breaker** – Resets the unit after electrical overload shutdown.

8. **Humidifier Bottle** – Humidifier which is used for humidifying oxygen.

9. **Rating Label**

10. **Oxygen Outlet** – Oxygen is dispersed through this port.

6. Operation Instructions

1. If used with a humidifier, unscrew the bottle cover from the humidifier in clockwise direction, pour in proper distilled water between the max line and the min line, then re-connect the top cover to the humidifier bottle, as shown in *Figure 3* and *Figure 4*.



Figure 3



Figure 4

2. Connect the nasal oxygen cannula to the humidifier outlet nozzle. Set the nasal oxygen cannula over patient's ears, insert the nasal oxygen cannula into patient's nostrils to absorb oxygen.

3. Set the I/O power switch to the "I" position to turn the unit on, at the same time the PO lamp will light.
4. To set the flow of supplemental oxygen, turn the knob of oxygen flow meter switch left or right until the ball inside the flow meter centers on the flow line number of the prescribed oxygen flow.

Flow value:

Flow value can be set from 0.5~5 L/min on flow meter, as shown in *Figure 5*.



Figure 5

Oxygen Concentration:

at 2 L/min: >90%
at 5 L/min: 93% (±3%)

5. When finished, set the I/O power switch to the "O" position to turn off the unit.

7. Alarms and Safety Devices

1. **Power failure alarm** – In case of a loss of power an audible alarm is activated and a red indicator light will illuminate.
2. **Low & high pressure alarm** – There is a pressure sensor on the main board to check the system pressure, when the pressure is lower than 0.1 Mpa, or higher than 0.23 Mpa, there is an audible alarm and a red indicator light will illuminate.
3. **Low oxygen concentration alarm** – The oxygen concentration will rise to the normal level within five minutes of operation. If oxygen purity falls below 85%, there is an audible alarm and a red indicator light will illuminate.
4. **Low flowrate alarm** – There is a sensor to check the flowrate, if the flowrate falls lower than 0.5 L/min, a red light turns on to indicate low flowrate.

8. Maintenance

1. **Cabinet Filter** – It is critical to inspect the cabinet filter on a routine basis. Remove the cabinet filters, clean with mild soap or detergent, rinse thoroughly and ensure filters are dry before reinstalling, as shown in *Figure 6*.
2. **Change the Air Intake Filter** – Change the air intake filter when it is too dirty or turns black, as shown in *Figure 7*.
3. **Reset Circuit Breaker** – The circuit breaker is an electrical switch designed to protect the electrical circuit from damage caused by excess current. When excess current is present the circuit breaker will trip, blocking the flow of electricity. It must be reset manually by pushing the breaker button in, as shown in *Figure 1*.

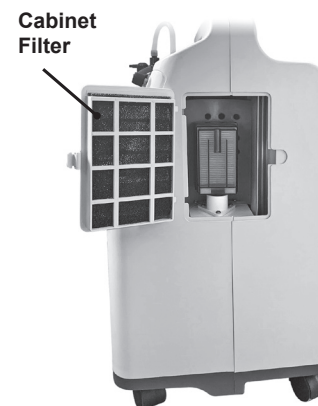
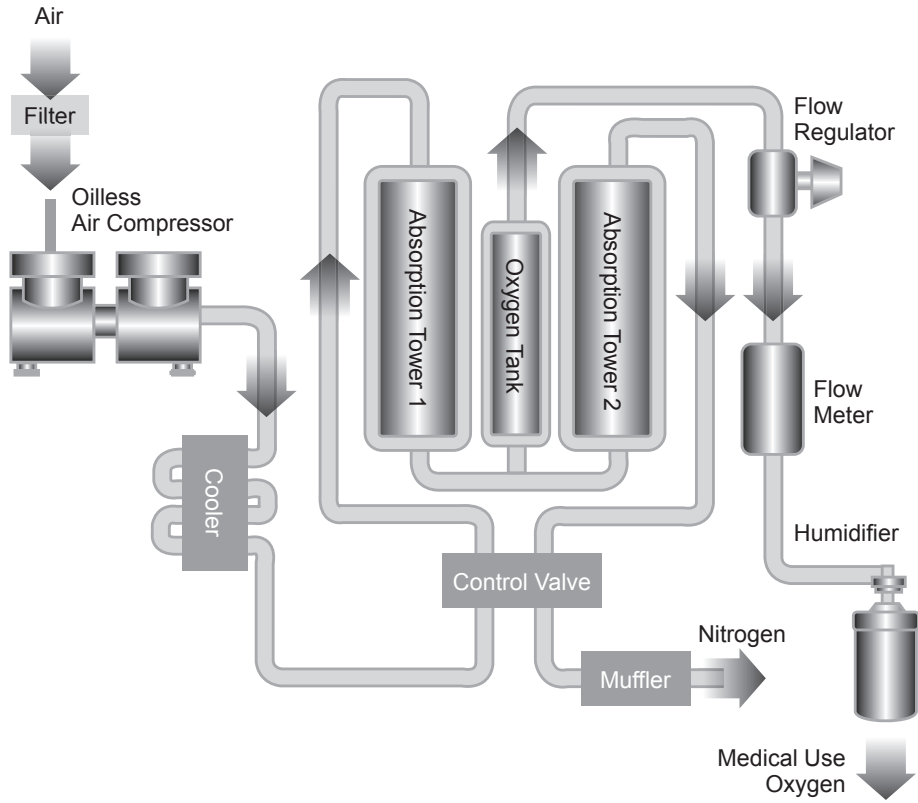


Figure 6



Figure 7

9. Process Diagram



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Made in China



SYMBOL GLOSSARY
For an explanation of symbols
used in Dynarex packaging, visit
dynarex.com/symbols.php