# **Oxygen Concentrator**



# CP501T Oxygen Concentrator Instruction Guide

WARNING-Read instruction guide before operating this equipment.



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**INDICATIONS FOR USE** — The CP501T Oxygen Concentrator is intended for use as an oxygen concentrator to provide supplemental oxygen therapy in the home, nursing homes, patient care facilities, etc.



Under certain circumstances, oxygen therapy can be hazardous. Seeking medical advice before using an oxygen concentrator is advisable.

#### **Physician Information**

Physician Name:				
Prescription Inform				
Name:				
Oxygen liters per min	nute			
at rest:		during activity:		
other:				
Oxygen use per day				
Hours:		Minutes:		
Comments:				
Oxygen Concentrate	or Serial Number:	CP501T		
(check one)				
□ 3-Liter	□ 5-Liter	□ 8-Liter	□ 10-Liter	
<b>Provider Informatio</b>	n			
Service Person:				
This instruction guid	e was reviewed wi	ith me and I have bee	n instructed on the saf	e use and care of the CP501T
Oxygen Concentrator				
Signature:			Date:	

# **IMPORTANT SAFEGUARDS**

**A** Read this entire guide before using your CP501T oxygen concentrator. Important information is highlighted by these terms throughout this guide:

DANGER	Urgent safety information for hazards that will cause serious injury or death.
WARNING	Important safety information for hazards that might cause serious injury.
CAUTION	Information for preventing damage to the product.
NOTE	Information which you should pay special attention.

## **INTRODUCTION**

This instruction guide will acquaint you with the CP501T oxygen concentrator. Make sure that you read and understand this guide before operating your unit. Important safeguards are indicated throughout this guide; pay special attention to all safety information. Contact your Medical equipment provider if you have any questions.

## A WARNING

For your safety, the oxygen concentrator must be used according to the prescription determined by your physician.

## **DANGER**

Oxygen causes rapid burning. Do not smoke while your oxygen concentrator is operating, or when you are near a person utilizing oxygen therapy. Do not use within 5 feet (1.6m) of hot, sparking objects or naked sources of flame.

# WHY YOUR PHYSICIAN PRESCRIBED SUPPLEMENTAL OXYGEN

Today, many people suffer from heart, Lung, and other respiratory diseases. Many of these people can benefit from supplemental oxygen therapy. Your body requires a steady supply of oxygen to function properly. Your physician prescribed supplemental oxygen for you because you are not getting enough oxygen from room air alone. Supplemental oxygen will increase the amount of oxygen that your body receives.

Supplemental oxygen is not addictive. Your physician prescribed a specific oxygen flow to improve symptoms such as headaches, drowsiness, confusion, fatigue, or increased irritability. If these symptoms persist after you begin your supplemental oxygen program, consult your physician.

# HOW DO YOUR CP501T OXYGEN CONCENTRATOR WORKS

Oxygen concentrators are the most reliable, efficient, and convenient source of supplemental oxygen available today. The unit separates oxygen from room air which allows high-purity supplemental oxygen to be delivered to you through the oxygen outlet, although the concentrator filters the oxygen in a room, it will not affect the normal amount of oxygen in your room.

# **IMPORTANT PARTS OF YOUR CONCENTRATOR**

Please take time to familiarize yourself with your CP501T oxygen concentrator before operating.

#### Before using this product, make sure you have the following items:

- 1 User manual.
- 1 Oxygen concentrator set.
- 1 Adapter for connecting humidification bottle

- 1 humidification bottle.
- 1 Oxygen Outlet Connector

#### Front View (Figure 1)

- 1. Display Panel
- 2. Intake Filter
- 3. Accessories container
- 4. Circuit breaker (selected units) resets the unit after electrical overload shutdown.
- 5. Flow meter knob
- 6. Flow meter
- 7. Power Switch

I =ON O=OFF

- 8. Oxygen outlet-oxygen is dispersed through this port
- 9. Nebulization function (optional)
- 10. Wheels

#### Back View (Figure 2)

- 11. Filter sponge prevents dirt, dust, and lint from entering your unit
- 12. Product specification label
- 13. Exhaust (under unit)
- 14. Power cord and /or IEC power connector







#### **DISPLAY View** (Figure 3)

15. Display panel	Indicate the lo-p/hi-p: lo-o2: lo-po2/hi-po2	condition of system pressure (lo-p/hi-p) condition of oxygen purity (lo-o2) condition of circulation and pressure(lo-po2/hi-po2) accumulative operated time low pressure / high pressure low oxygen purity cycling fault and low pressure/high pressure
16. Power indicator (green light)	Device is opera	ating
17. Normal oxygen (green light)	Oxygen purity is under normal condition	
18. Low oxygen (yellow light)	Oxygen purity is below 82%, ASK FOR SERVICE	
19. Alarm (red light)	TURN this dev immediately.	vice OFF and contract your device supplier for service



**DISPLAY View** (Figure 3)

# SETTING UP YOUR OXYGEN CONCENTRATOR

1. Position your unit near an electrical outlet in the room where you spend most of your time.

#### **DANGER**

# Keep the oxygen concentrator at least 5 feet (1.6 m) from hot, sparking objects or naked sources of flame.

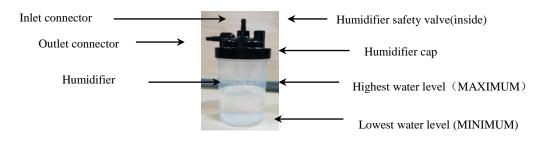
- **NOTE** Do not connect to an electrical outlet controlled by a wall switch. No other appliances should be plugged into the wall outlet.
- 2. Position your unit at least 6 inches (16 cm) from walls, draperies, or any other objects that might prevent the proper flow of air in and out of your oxygen concentrator. The Oxygen concentrator should be located so as to avoid pollutants or fumes.

# **BEFORE OPERATING YOUR OXYGEN CONCENTRATOR**

- 1. Before operating your unit always check to make sure the filter sponge (located on the back of your unit) is clean. Proper cleaning of this sponge if necessary.
- 2. Attach the appropriate oxygen accessories to the oxygen outlet.

#### **Oxygen Tubing Connection:**

1. Connected humidifier: selected with humidifier, follow the below instructions steps:



 a. . Fill with cold water or distilled water, the water level must be instructed not more o r less than high / low indicator line of the bottle, bottle cap should be tightening (se e Figure I);



b. Fix humidifier to machine with a rubber band, connected humidifier to intake port in one side, and connected humidifier to machine oxygen outlet in other side (See Figure 2).

Figure 5

Figure 6

3. Remove the power cord completely from the line cord strap, Make sure the power switch is in the "off" position, and insert the plug into the wall outlet; the unit is double insulated to guard against electric shock.

## **WARNING**

Improper use of the power cord and plugs can cause a burn, fire or other electric shock hazards. Do not use the unit if the power cord is damaged.

# **OPERATING YOUR CP501T CONCENTRATOR**

# **DANGER**

Oxygen causes rapid burning. Do not smoke when you are operating oxygen concentrator. Smoking or naked fire are forbids to near around while somebody who is utilizing oxygen therapy. Keep the oxygen concentrator at Least 5 feet (1.6 m) from hot or sparking objects or naked sources of flame.

- 1. Press the power switch to the "On" position, when the unit is turned on, the Power light will illuminate, and the patient alert system Service required light and audible signal will briefly alarm.
- **NOTE** If the Service Required light illuminates and the audible signal alarms but the unit is not operating, there is no power to the unit, Refer to the Minor Troubleshooting chart on page 8 and contact your Medical provider if necessary.
- **NOTE** If an audible low-frequency vibration sound is detected, the unit is not operating properly. Refer to the Minor Troubleshooting chart on page 12, and contact your provider if necessary.
- 2. Check the flow meter to make sure that the flow meter ball is centered on the line next to the prescribed number of your flow rate.
- **CAUTION** It is very important to follow your oxygen prescription. Do not increase or decrease the flow of oxygen-consult your physician.
- NOTE Your Medical provider may have preset the flow meter so that it can not be adjusted.
- **NOTE** If the flow meter knob is turned clockwise, the flow decreases (and eventually will shut off the oxygen flow). If the knob is turned counterclockwise, the flow increases.

# **CARING AND PERIODIC MAINTENANCE FOR YOUR UNIT**

Not — Use no lubricants, oils or grease.

#### **WARNING**

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

#### Oxygen Humidifier (reusable bottles)

If your physician has prescribed humidification, clean your humidifier bottle daily. Follow the instructions Supplied by the manufacturer, if no cleaning instructions were supplied, follow these steps:

- 1. Wash the humidifier in a solution of hot water and dishwashing detergent.
- 2. Soak the humidifier in a solution of one part white vinegar to three parts hot water for 30 minutes. This solution acts as a germicidal agent.
- 3. Rinse thoroughly with warm tap water and refill with distilled water for use. Do not overfill.

#### Nasal Cannula, Mask, and Tubing

Clean and replace the Nasal cannula, mask, and tubing as instructed by your Medical provider.

#### Filter Sponge and Oxygen Outlet Connector

The air filter sponge and connector should be clean once a week. To clean, follow these steps:

- 1. Remove the filter sponge, located on the back of the unit. Remove the oxygen outlet connector (if used).
- 2. Wash in a solution of warm water and dishwashing detergent.
- 3. Rinse thoroughly with warm tap water and towel dry. The filter should be completely dry before reinstalling.

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

#### **Exterior Cabinet**

# A WARNING

To avoid electric shock, do not remove the concentrator cabinet. The cabinet should only be removed by a qualifier Medical technician. Do not apply liquid directly to the cabinet or utilize any petroleum-based solvents or cleaning agents.

Clean the concentrator exterior cabinet by using a damp cloth or sponge with a mild house-hold cleaner and wipe it dry.

#### **Periodic Maintenance for Your Unit**

- 1. Clean the Air Filter Sponge at least once a week. The steps of cleaning see the Air Filter Sponge and Oxygen Outlet connector.
- 2. Change Felt of the Inlet Pre-Filter at least once half a year. Follow those steps:

Open the cabinet and pull out the Inlet Pre-Filter. Pull out the old felts from the Inlet Pre-Filter (two sides). Then insert the new felts to the Inlet Pre-Filter each side, insert the Inlet Pre-Filter to the cabinet and close cabinet.

 Change the Bacterial Filter at least once a year. You can not change this by yourself and must contact your Medical provider to change this for you.

#### Accessories

object/part No.	manufacturer / trademark	type/model	technical data	mark (s) of conformity <sup>1</sup> )
Bubble Humidifier ( 200 ml Capacity )	SALTER LABS	REF7100	ABS, PP	CE 0482
Nasal Cannula (disposable)	Hsiner Co,.Ltd	3583	PVC	CE 0434
Nasal Cannula w/ 2.1m (7 ft) Oxygen Tubing (disposable)	Hsiner Co,.Ltd	3031	PVC	CE 0434
Oxygen Outlet Connector	KEY-HUB	OP01A609A	ABS	
Oxygen Tubing (disposable)	Hsiner Co,.Ltd	30302	PVC	CE 0434

The accessories below are approved for use with CP501T Oxygen Concentrators:

- **NOTE** The use of certain humidifiers and accessories not specified above may impair the oxygen concentrator's performance.
- **NOTE** If the Service Required light illuminates and the audible signal alarms but the unit is not operating, there is no power to the unit. Refer to the Minor Troubleshooting chart and contact your Medical provider.

The OCI Device is a device within your concentrator that monitors the oxygen produced by your unit. When the units is turned "ON," all four light (Power, Low Oxygen, Normal Oxygen, and Service Required) on the front panel will illuminate briefly. After a few seconds, only the Power and Normal Oxygen lights will remain lit.

The lights on the front panel are defined as follows:

- Green Normal Oxygen light-acceptable oxygen level. (The LED will display "Normal Oxygen")
- Yellow Low Oxygen light-below an acceptable oxygen level. (The LED will display "Low Oxygen")

If the oxygen purity falls below the acceptable level, the green Normal Oxygen light will shut off and the yellow Low Oxygen light will illuminate. Switch to your reserve oxygen system. Refer to the Troubleshooting section in this guide on page 12 and contact your Medical provider.

As an added safety feature should the oxygen purity continue to drop, an intermittent audible signal will sound. Contact your Medical provider immediately. Do not attempt any other maintenance.

# MINOR TROUBLESHOOTING

Symptom	Possible Cause	Remedy
	1. Power cord not properly inserted into wall outlet.	Check power connection at the wall outlet. On 115 volt units, check the back of the unit.
A. Unit does not operate. Power light is off when the power switch is "on". Audible alarm is pulsing and Service Required light is flashing.	2. No power at wall outlet.	Check your home circuit breaker and reset if necessary. Use a different wall outlet if the situation occurs again.
	3. Oxygen concentrator circuit breaker activated (selected units).	Press the concentrator circuit breaker button (if equipped) located below the power switch. Use a different wall outlet if the situation occurs again.
	1. Air filter is blocked.	Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 7.
<b>D</b> Unit exercises the Devier	2. Exhaust is blocked.	Check the exhaust area; make sure there is nothing restricting the unit exhaust.
<b>B.</b> Unit operates; the Power light is on when the Power switch is "On". Red Service Required light is illuminated. Audible alarm may be	3. Blocked or defective nasal cannula, catheter, face mask or oxygen tubing.	Detach nasal cannula, catheter, or face mask. If proper flow is restored, clean or replace if necessary. Disconnect the oxygen tubing at the oxygen outlet. If proper flow is restored, check oxygen tubing for obstructions or kinked. Replace if necessary.
sounding.	4. Blocked or defective humidifier bottle.	Detach the humidifier from the oxygen outlet. If proper flow is obtained, clean or replace humidifier.
	5. Flow meter set too low.	Set flow meter to prescribed flow rate. If the above remedies do not work, contact your Medical provider
<b>C.</b> Unit operates the power light is on when power switch is "on ", audible low-frequency vibration sound is detected.		Turn your unit "off", Switch to your reserve oxygen system, and contact your Medical provider immediately.
<b>D.</b> If any other problems occur with your oxygen concentrator.		Turn your unit "Off". Switch to your reserve oxygen system, and contact your Medical provider immediately.
<b>E.</b> Both the green Normal Oxygen and the yellow Low Oxygen lights are either on or off.	O.C.I malfunction	Contact your Medical provider.
<b>F.</b> Yellow Low Oxygen light	1. Flow meter is not properly yet.	Ensure the flow meter is properly set to the prescribed.
is on or the yellow low Oxygen light is on and the intermittent audible Signal is sounding.	2. Air filter is blocked.	Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 7.
	3. Exhaust is blocked.	Check the exhaust area: make sure there is nothing restricting the unit exhaust.
<b>G.</b> Red Service Required light is on and an intermittent audible signal is sounding.	1. Flow meter is not properly yet.	Ensure the flow meter is properly set to the prescribed.
	2. Air filter is blocked.	Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 7.
	3. Exhaust is blocked.	Check the exhaust area: make sure there is nothing restricting the unit exhaust. If the above remedies do not work, contact your Medical provider.

# **SPECIFICATIONS**

	CP501T
Model	5L
Oxygen Flow (Liter Per Minute)	Up to 5 LPM
Oxygen Purity	93% ±3%
Sound Level	$\leq$ 45 dB(A)
Power Consumption (Average)	280W
Outlet Pressure	8.5 psi ( 58.6 kpa )
Weight	15.8kg / 34.8lb
Dimensions	H: 51cm / 20 in; W: 30cm / 12 in; D: 40cm / 16 in
AC Power	220Vac 50Hz; 115Vac 60Hz
Class & Dating	Medical Device Category: Class II
Class & Rating	Insulation Rating: B
In Compliance With	EU Medical Device Directive 93/42/EEC
Approvals, Certifications	CE (No: 0434); RoHS; SFAD
Operating Environment	Temperature: 10 ℃ ~ 40 ℃ Humidity: 30% to 75% Atmospheric Pressure: 86 kPa ~ 106 kPa
Storage & Transportation	Temperature: -20 ℃ ~ 55 ℃ Humidity: up to 93% non-condensing Atmospheric Pressure: 86 kPa ~ 106 kPa
Oxygen Concentration Indicator (Optional)	Yellow below 82% Red below 72%
Filters	3 Levels Filtration System
Lifetime	5 Years
Warranty Period limit	1 Year
<u>I</u>	

# SYMBOL

	General warning, caution, risk of danger Please read the instructions carefully before operating the product.
Ŕ	Type B applied part
	Class II equipment
SN	Manufacture's serial number
EC REP	Authorized representative in the European community
М	Date of manufacture
	Manufacture
X	Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE Directive) after over the valid term within 3 years, the machine should be treated on local law or regulation requirement. To avoid hurt users and pollute environment.
<b>CE</b> <sub>0434</sub>	The equipment bears CE mark CE0434 indicating its conformity with the provision of Council Directive 93/42/EEC concerning medical devices, and fulfills the essential requirement of Annex I of this directive.
	FRAGILE Contents of the transport package are fragile therefore it shall be handled with care.
<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	THIS WAY UP Indicates correct upright position of the transport package.
Ť	KEEP AWAY FROM RAIN Transport package shall be kept away from rain.
(((•)))	Non-ionizing electromagnetic radiation

# ELECTROMAGNETIC IMMUNITY

an environment.		T	ONCENTRATOR should assure that it is used in such
Immunity test	IEC 60601 test level	Compliance	Electromagnetic environment-guidance
		level	Portable and mobile RF communications equipmer should be use no closer to any part of the CP501T OXYGEN CONCENTRATOR including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. <b>Recommend ed separation distance</b>
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 V	$d = \left[\frac{3.5}{V_1}\right]\sqrt{P}$ $d = \left[\frac{3.5}{E_1}\right]\sqrt{P}  80 \text{ MHz to } 800 \text{ MHz}$
Conducted RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	$d = [\frac{7}{E_1}]\sqrt{P}  800 \text{ MHz to } 2.5 \text{ GHz}$ Where <i>p</i> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <i>d</i> is the recommended separation distance in metres (m). <sup>b</sup>
			Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, <sup>a</sup> should be less than the compliance level in each frequency range. <sup>b</sup>
			Interference may occur in the vicinity of equipmen marked with the following symbol:

NOTE-1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE-2 These guidelines may not apply in all situations. Electromagnetic is affected by absorption and reflection from structures, objects and people.

<sup>a</sup> Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the CP501T OXYGEN CONCENTRATOR is used exceeds the applicable RF compliance level above, the CP501T OXYGEN CONCENTRATOR should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the CP501T OXYGEN CONCENTRATOR.

 $^{b}$  Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

# **DECLARATION OF CONFORMITY**

Manufactured: Bio - Medical Instruments&SystemsProduct Designation:Oxygen ConcentratorModel Number:CP501T

# EC authorized representation



CGI Business Trading

Inh. Herr Leizhang, Huegel Str. 73, 60433 Frankfurt am Main, Germany