Attendant®

5-LITER OXYGEN CONCENTRATOR

A5LC-1

Owner's Manual

Please keep and refer to this Owner's Manual.

Thank you for purchasing an Attendant® Oxygen Concentrator from Direct Supply Equipment & Furnishings®. Please read this entire guide carefully and keep it for future reference. This guide will provide you with instructions, warnings, warranty information and other important information about your oxygen concentrator. Share this information with your housekeeping, nursing and maintenance staff to help ensure the oxygen concentrator is cared for properly.

Introduction

Table of Contents

Definitions & Symbols

NOTE: Indicates a helpful tip.
CAUTION: Indicates correct operating or maintenance procedures in order to prevent damage to or destruction of the equipment or other property
WARNING: Calls attention to a potential danger that requires correct procedures or practices in order to prevent personal injury.
⚠**:** Attention! Read the instructions.
CONCENTRATOR or DEVICE: Your Attendant® 5 Liter Oxygen Concentrator.
YOU and YOUR: The facility, community or other entity that has purchased the product.
WE, US, and OUR: Direct Supply Manufacturing, Inc.

Intended Use for the A5LC-1

The A5LC-1 oxygen concentrator is intended for use by a resident in the home, hospital, or hospital-like facility as an oxygen supplement device. The concentrator is an electronically operated device that separates oxygen from ambient air, providing high concentration of oxygen directly to the resident through a nasal cannula or other method. Clinical studies have documented that oxygen concentrators are therapeutically equivalent to other types of oxygen delivery systems.

NOTE: Hospital use typically includes areas such as general care floors, operating rooms, special procedure areas, and intensive and critical care areas within the hospital. Hospital-type facilities include physician office-based facilities, sleep labs, Skilled Nursing facilities, surgical centers and subacute care centers.

Contraindications

No known contraindications.

Features of the A5LC-1

Physical The concentrator is lightweight and compact, measuring 13"W x 10¼"H x 21¼"D (33 cm x 26 cm x 54 cm) and weighing 33 lbs. (15 kg). The concentrator has a flowrate knob that allows the resident to adjust the oxygen flow from 0.5 to 5 liters per minute, and a digital counter that tracks the total hours of use. The concentrator also has an intake filter and a cabinet filter to prevent dust and particulate from entering the concentrator.

Electrical The concentrator is powered from a 120V AC 60Hz source, and has audible/visual alarms whenever power is lost, outlet air pressure is below 0.5L/min., or oxygen purity is low.

General Safety Information

This section contains important safety information related to general use of the A5LC-1. Other important safety information appears throughout the manual.

Important! Carefully read this manual and all accessory manuals, as well as all precautionary information and specifications, before using the concentrator.

Important! The concentrator should always be kept in an upright position to prevent damage during transport.

Warnings & Cautions

Warnings

⚠ **WARNING:** Read and follow all directions and warnings before use or assembly. Do not use or assemble if you do not understand the contents of this manual – contact Direct Supply supply for assistance. Damage, injury or even death may result from improper use of this product or not following the directions and warnings. This product is intended for use in normal, indoor conditions. This product may not be appropriate for all individuals.

⚠ **WARNING:** Prior to use of this product, the user's medical professional should be consulted to ensure that this product is appropriate for the user's specific needs based upon his or her overall medical condition and limitations.

⚠ **WARNING:** This product is not intended to sustain or support life.

⚠ **WARNING:** Do not use any unauthorized accessories or options with this concentrator.

⚠ **WARNING:** Thoroughly read the instruction manuals supplied with accessories and options to ensure correct use. This instruction manual does not carry the caution selections for such equipment.

⚠ **WARNING:** Do not open cover or disassemble this concentrator. Doing so could cause electric shock or fire. It is prohibited by law to modify the concentrator without authorization.

⚠ **WARNING:** Do not use power source other than the specified voltage – 120V, 60Hz – as this may cause fire or electric shock. If the power source becomes unstable, discontinue use until an alternate power source is found.

⚠ **WARNING:** Pre-use inspection and preventive maintenance must be performed. Do not perform inspections or preventative maintenance when the concentrator is in use.

⚠ **WARNING:** Do not run the concentrator for less than 30-minute periods, as this may reduce the service life of the concentrator.

⚠ **WARNING:** Do not place anything on top of this concentrator.

⚠ **WARNING:** Do not block the air openings on the concentrator or place it on a soft surface like a bed or couch. The concentrator may tip or fall. Keep the air openings free of lint, hair and similar objects.

⚠ **WARNING:** Do not use the concentrator in confined areas. Place the concentrator such that all sides are at least 4" away from walls, draperies, furniture or similar objects.

⚠ **WARNING:** Do not use the concentrator on deep pile carpets.

⚠ **WARNING:** Do not use the concentrator near heaters, radiators or hot air registers.

⚠ **WARNING:** Do not use the concentrator near heat, fire or water sources.

⚠ **WARNING:** Do not use the concentrator near pollutants or fumes.

⚠ **WARNING:** Any materials that will burn in air, and some that will not, are easily ignited and burn rapidly in high concentrations of oxygen. All sources of ignition must be kept away from the concentrator and preferably outside of the room where the concentrator is being used. Failure to observe this warning can result in severe fire, property damage, physical injury or death.

⚠ **WARNING:** Do not smoke while using the concentrator or in close proximity to the concentrator. "No Smoking" signs should be prominently displayed in rooms where the concentrator is used.

⚠ **WARNING:** Spontaneous and violent ignition may occur if oil, grease or greasy substances come in contact with oxygen under pressure. Such substances must be kept away from the concentrator, tubing, connections and all other oxygen equipment.

⚠ **WARNING:** Do not use any lubricants on the concentrator.

⚠ **WARNING:** If the following occur, turn the power OFF immediately and unplug the power cord from the wall socket. Continued use in such situations may cause fire or electric shock.

- There is smoke or a strange odor leaking out of the concentrator.
- The concentrator has been dropped or impacted by an object.
- Liquid or foreign matter has entered the concentrator.
- Concentrator failure has occurred.

Also, if any of the above occurs, promptly do the following:

1. Verify that the power cord has been unplugged from the wall socket.
2. Place an "Out of Order" sign on the concentrator and do not use it.

⚠ **WARNING:** Do not use the concentrator with multiple residents simultaneously.

⚠ **WARNING:** Do not connect the concentrator in series or parallel with other concentrators or oxygen therapy devices.

⚠ **WARNING:** Avoid using the concentrator while bathing. If continuous usage is required by a physician's prescription, the concentrator must be located in another room at least 9 feet from the bath.

⚠ **WARNING:** Do not come in contact with the concentrator while wet.

⚠ **WARNING:** Do not place or store the concentrator where it can drop into water or another liquid.

⚠ **WARNING:** Do not reach for the concentrator if it has fallen into water. Unplug immediately

⚠ **WARNING:** Close supervision is required if the concentrator is used near children or impaired people

⚠ **WARNING:** Do not use the concentrator if the power cord or plug is damaged.

⚠ **WARNING:** Do not drop or insert any objects into any of the openings on the concentrator.

Cautions

Caution statements identify conditions or practices that could result in damage to the equipment or other property.

⚠ **CAUTION:** Federal law restricts this device to sale by or on the order of a physician.

⚠ **CAUTION:** The monitor may not operate properly if it is operated or stored at conditions outside of the ranges stated in this manual, or subjected to excessive shock or drops.

⚠ **CAUTION:** Both the monitor and the instrument connected to it must be connected to a grounded outlet.

⚠ **CAUTION:** Do not move or relocate the concentrator by pulling on the power cord.

Description of the Concentrator

Oxygen Concentrator Components

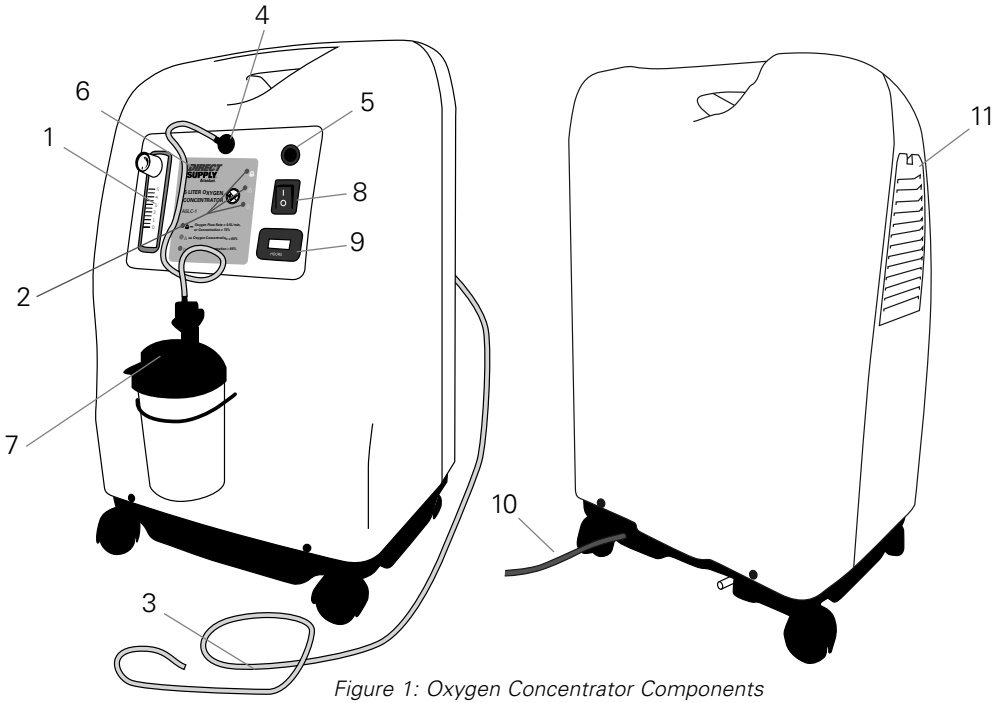


Figure 1: Oxygen Concentrator Components

1 – **Flow Meter**
Set the flow rate of oxygen by adjusting the knob.

2 – **Status Indicator Light** (Alarm/Normal /Low)

3 – **Oxygen Tube**

4 – **Oxygen Outlet**

5 – **Circuit Breaker**
Breaker will cut off power automatically when current ≥ 5A. After cooling, machine can be turned back on by pressing the breaker.

6 – **Humidifier Bottle Hose**

7 – **Humidifier Bottle**
To minimize respiratory discomfort, use the humidifier bottle to humidify oxygen.

8 – **Power Switch**

9 – **Elapsed Time Meter**
Records the total operation time.

10 – **Power Cord**

11 – **Cabinet Filter**

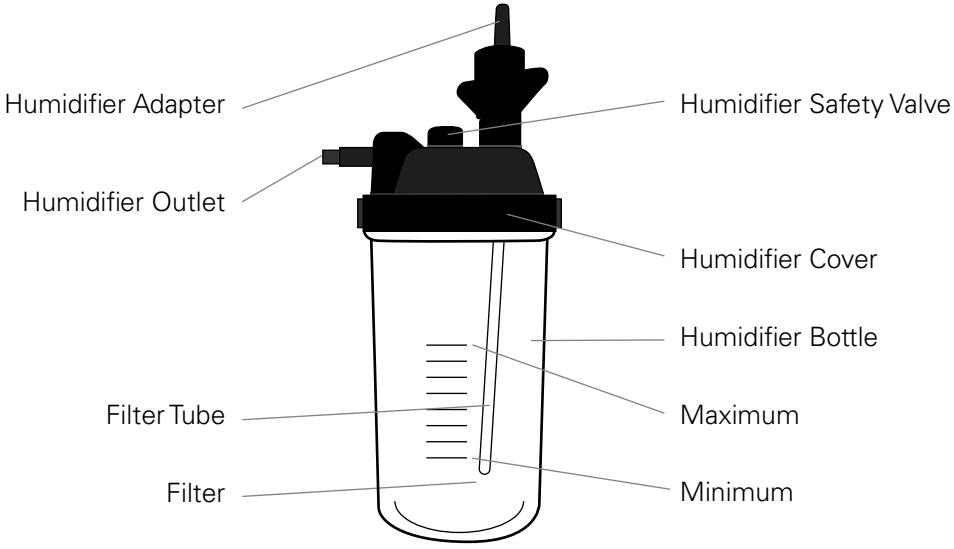


Figure 2: Humidifier Bottle Components

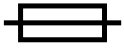
⚠ **WARNING:** DO NOT add water over the maximum water level. Pure water shall be added in humidifier to between maximum and minimum water level in use.

Standard Accessories

Humidifier Bottle	Qty. 1
Humidifier Bottle Adapter Assembly	Qty. 1
Cannula	Qty. 1

If replacement accessories are needed, please contact Direct Supply for a list of accessories compatible with this concentrator.

Symbols and Descriptions

Symbol	Meaning	Symbol	Meaning
	Alternating current		Refer to instruction manual
	Class II Equipment		Type BF applied part
	OFF (power)		ON (power)
	Circuit Breaker		No open flame; Fire, open ignition source and smoking prohibited
	Height		Do not expose to direct sunlight
	Serial number		Date of manufacture
	Up		Manufacturer
	Keep dry		Temperature limitation
	Fragile, handle with care		Atmospheric pressure limitation
	Humidity limitation	LOT	Lot number

Unpacking the Concentrator

NOTE: Store concentrator in its packaging until you are ready to use the concentrator.

Unpacking

When unpacking concentrator, check for any obvious damage to the carton or its contents. If damage to the concentrator is evident, notify Direct Supply.

Remove all loose packing from the carton.

Carefully remove all the components from the carton.

Inspection

Examine exterior of the oxygen concentrator for nicks, dents, scratches or other damages.

Inspect all accessories for damage.

Storage

Store the concentrator in a dry area.

⚠ **CAUTION:** Do not place anything on top of the concentrator.

Initial Setup of the Concentrator

Initial setup without humidifier bottle:

1. Remove the cannula from the plastic packaging
2. Connect the cannula to the oxygen outlet on the concentrator
3. Plug the concentrator into a 120V AC power source
4. Turn the concentrator on by pressing the power switch ("I" indicates the power is on, "O" indicates the power is off).

Optional initial setup with humidifier bottle:

1. Remove humidifier bottle from plastic packaging
2. Unscrew the cover of the humidifier bottle
3. Add purified or distilled water to the bottle. Ensure that the water levels fall between the MINIMUM and MAXIMUM indicators on the side of the bottle
4. Screw the cover onto the humidifier bottle
5. Insert the humidifier bottle into the elastic strap on the front of the concentrator
6. Remove the cannula from the plastic packaging
7. Connect the cannula to the humidifier bottle outlet
8. Connect the oxygen hose between the oxygen outlet on the concentrator and the humidifier adapter on the humidifier bottle
9. Plug the concentrator into a 120V AC power source
10. Turn the concentrator on by pressing the power switch (I indicates the power is on, O indicates the power is off).

Using the Concentrator

Inspect the concentrator for damage prior to each use. If damage is observed or functionality is in question, DO NOT use and contact Direct Supply for assistance.

Turn the concentrator on by pressing the power switch so the "I" symbol is pressed in. The compressor will start, and the green, yellow, and red LEDs on the front of the concentrator will first turn on in sequence, then turn off. This sequence will repeat for approximately 40 seconds, or until the oxygen purity reaches 85%. When this occurs, the green LED will stay lit. It may take up to 30 minutes for the oxygen purity to reach its maximum level, but once the green LED stays on, the concentrator is ready to use.

To set the flow rate to the prescribed oxygen level, adjust the flow meter knob until the ball floats at the appropriate flow line on the flow meter. Turning the flow meter knob clockwise reduces the flow, and counter-clockwise increases the flow.

When you are done using the concentrator, turn it off by pressing the power switch so the "O" symbol is pressed in.

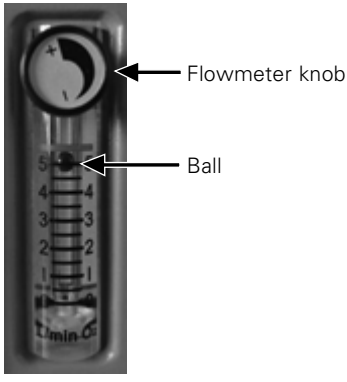


Figure 3

⚠ **CAUTION:** If the oxygen flow ever falls below 0.5 liters/minute, check the tubing for kinks or blockage, and verify that there is no damage to the humidifier bottle.

Alarm LEDs

Green LED: O_2 concentration is greater than 85%±2%
Yellow LED: O_2 concentration is between 73% and 85% ±2%
Red LED: O_2 concentration is less than 73%±2%, or oxygen flow rate is less than 0.5 liters/minute

Testing the Safety Features of the Concentrator:

Pressure Safety Valve Testing

With the concentrator running, plug the oxygen outlet with your finger and verify that the pressure safety valve opens after 5 seconds, gas is released, and the pressure valve closes.

Loss of Power Alarm Testing

With the concentrator running, unplug the power cord from the 120V AC power source. Verify that the Loss of Power Alarm chirps once every 6 seconds.

Low Oxygen Flow Alarm Testing

With the concentrator running, adjust the flow meter all the way down. Verify that the Low Oxygen Flow Alarm sounds continuously and the red LED on the concentrator illuminates until the flow is adjusted back over 0.5 liters/minute.

Maintenance

⚠ **WARNING:** Power off and unplug the concentrator prior to performing preventive maintenance.
⚠ **WARNING:** Do not perform preventive maintenance while the resident is using the concentrator.

If used in a clean environment, the concentrator typically requires no filter cleaning or changes for one year. More frequent cleaning and filter changes may be required if:
- You are operating the concentrator in a dusty environment
- You are operating the concentrator continuously
- Your facility policy requires more frequent maintenance

Cleaning the Cabinet

Turn off the power switch and unplug the concentrator from the 120V AC power source Using a soft dry cloth, a damp sponge or alcohol-based wipes, clean only the outside of the concentrator. Do not use acetone, solvents or any other inflammable products. Do not allow any liquids to enter the cabinet.

Cleaning the Cabinet Filter

- Remove the locking screw and the access door on the left side of the concentrator
- Remove the cabinet filter from the access door
- Wash the cabinet filter with water, and allow to completely dry
- Replace the cabinet filter in the access door
- Reattach the access door
- Replace the access door screw

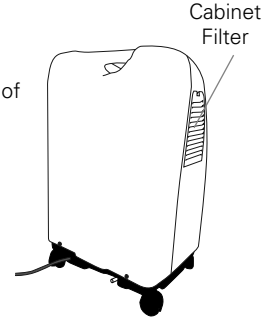


Figure 4

Replacing the Intake Filter

- Remove the access door on the left side of the concentrator
- Remove the intake filter by sliding two fingers under the filter and lifting while twisting the filter back and forth
- Install a new filter by inserting the plastic tube on the filter into the rubber fitting. Press down and twist the filter back and forth until the filter is fully seated.
- Replace the access door

⚠ **WARNING:** DO NOT operate the concentrator without the filters installed, or if the filters are wet. Doing so could permanently damage the concentrator.

Cleaning the Optional Humidifier Bottle

Replace the water in the humidifier bottle every day.
Clean the humidifier bottle weekly.

- Wash with a mild detergent
- Rinse with water
- Completely dry before returning to service

Disinfecting the Optional Humidifier Bottle

- Unscrew the top of the humidifier bottle
- Remove the tube and filter
- Immerse the bottle and tube in a disinfecting solution
- Rinse the bottle and tube completely with water
- Allow bottle and tube to completely dry before reassembling and returning to service

It is recommended to replace the humidifier bottle tube once a year.

Oxygen Nasal Cannula

- Follow the nasal cannula manufacturer's instructions.

Troubleshooting

Symptom	Probable cause	Solution
Green and yellow status lights are lit, oxygen concentrator stops running, continuous buzzer sounding.	1. Valve plug is not properly connected	Stop using the concentrator immediately and contact Direct Supply for repairs.
	2. Exhaust sound buffer box jammed.	
	3. Can't open the valve.	
	4. Failure of the main electronic control circuit board.	
The nasal cannula has condensation or water droplets in it.	1. Concentrator is overheating due to placement in the room.	1. Make sure the machine is at least 4" (10 cm) away from the walls, draperies, furniture or similar objects
	2. Fan inside the concentrator is not running or running too slow	2a. Contact Direct Supply for service
		2b. Replace it.
	3. Humidifier bottle water is too warm.	3. Add cold water to the humidifier bottle.
	4. Too much water in the humidifier bottle.	4. Remove water from the humidifier bottle until the level is between the maximum and minimum indicators.
Concentrator works, but yellow light illuminates.	1. Concentrator oxygen purity between 75% and 85%	1. Clean or replace filters.
	2. Unit overheating due to blocked air intake.	2. Move concentrator at least 4" (10 cm) away from walls, draperies, furniture or similar objects.
	3. If condition persists, contact Direct Supply for service.	
Concentrator stops working, red status light illuminates, audible alarm sounds continuously.	1. Low pressure alarm.	1. Clean or replace filters.
	2. If condition persists, stop using the concentrator immediately and contact Direct Supply for service.	
Concentrator stops working, red status light illuminates, audible alarm sounds.	High pressure alarm.	Stop using the concentrator immediately and contact Direct Supply for service.
Concentrator stops working, audible alarm sounds continuously.	Compressor open circuit alarm.	Stop using the concentrator immediately and contact Direct Supply for service.
Concentrator stops working, continuous audible alarm sounds.	Compressor short circuit alarm.	Stop using the concentrator immediately and contact Direct Supply for service.

Specifications

1 **Power supply:** AC120V, 60Hz; Current: 3.5A; Power: 390VA

2 **Sound level:** ≤ 50dB (A)

3 **Maximum recommended flow:** 5L/min

4 **Flow Range at Outlet Pressure of zero:** 0.5 - 5L/min
Flow Range at Outlet Pressure of 7 kPa: 0.5 - 5L/min
Change in maximum recommended flow when back pressure of 7 kPa is applied: < 0.5 L/min

5 **Oxygen Concentration:** When 0.5 - 5L/min ,93% ± 3% (after running for 30 minutes)

6 **Output Pressure:** 38kPa ± 5kPa ;

7 **Release Pressure by machine operation:** 250kPa ± 50kPa;

8 **Weight:** 33 lbs. (15kg)

9 **Dimensions:** 13" x 10¼" x 21¼" (33 cm x 26 cm x 54 cm)

10 **Altitude:** The oxygen concentration will operate at altitudes of up to 6000' (1828 m) with no degradation in purity. Between altitudes of 6000 - 13,100' (1828 - 4000 m); the oxygen purity will decrease to less than 90%.

11 **Safety Systems:**
- Current overload or line surge shutdown.
- High temperature compressor shutdown.
- High pressure alarm shutdown.
- Low pressure alarm shutdown.
- Low Oxygen Concentration alarm.

12 **Minimum Recommended Operating Time:** 30 minutes

13 **Electric Classification:**
Class II equipment, Type BF applied part (Nasal oxygen cannula);

14 **Mode of operation:** Continuous duty

15 **Operating Conditions:**
Overvoltage category: II Pollution degree: 2, Altitude: ≤2000
- Temperature range: 41°F - 104°F (5°C - 40°C)
- Relative humidity: ≤80%
- Atmospheric pressure: 12.47psi - 15.37psi (86kPa - 106kPa)

NOTE: When the storage temperature is lower than 41°F, the equipment must be returned to an environment where the temperature is above 41°F for a minimum of 4 hours before operating.

NOTE: The life of the concentrator will be affected and the efficiency lowered if operated outside of these limits.

16 **Oxygen Output Temperature:** Less than ambient temperature +11°F (6°C)

17 **Cannula/Oxygen Tubing:** To prevent folding or kinking of oxygen hose, do not use cannula longer than 6' (2m) or oxygen hose longer than 50' (15.2m) (non-flattening).

18 **Storage and Transport Conditions:**

- Temperature Range: 32°F - 131°F (0°C - 55°C)
- Relative Humidity Range: 10% - 90%
- Atmospheric pressure: 10.2psi - 15.37psi (70kPa - 106kPa)

NOTE: The oxygen concentrator should be stored in area without corrosive gas;

NOTE: Do not shake the concentrator during transportation.

NOTE: Only transport the concentrator in an upright position.

Guidance and declaration of manufacturer - Electromagnetic Emission		
The A5LC-1 Oxygen Concentrator is intended for use in the environment specified below. The purchaser of the A5LC-1 Oxygen Concentrator should ensure that the unit is used in such an environment.		
Emission test	**Compliance**	**Electromagnetic Environment Regulations**
RF emissions CISPR 11	Group 1	The A5LC-1 Oxygen Concentrator uses RF energy solely for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The A5LC-1 Oxygen Concentrator is suitable for use in all establishments, including domestic and those directly connected to the public low-voltage power supply networks that supply buildings used for domestic purposes.
Emission of harmonics IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

Guidance and declaration of manufacturer - Electromagnetic Immunity

The A5LC-1Oxygen Concentrator is intended for use in the electromagnetic environment specified below. The purchaser of the A5LC-1Oxygen Concentrator should ensure that the unit is used in such an environment.

Immunity	IEC 61000-4-2 Test Level	Compliance Level	Electromagnetic Environment Guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact discharge ±8 kV Air discharge	±6 kV contact discharge ±8 kV Air discharge	Floors should be wood or concrete or ceramic tile. If floors are covered with synthetic materials, the relative humidity must be at least 30%.
Electrical fast transient/bursts IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output leads	±2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode ll	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and Voltage variations on power supply input lines IEC 61000-4-11	< 5% UT (>95% dip in UT) for 0.5 cycle	< 5% UT (>95% dip in UT) for 0.5 cycle	Mains power quality should be that of a typical commercial or hospital environment. If the user of the A5LC-1Oxygen Concentrator requires continued operation during power mains interruptions, it is recommended that the A5LC-1Oxygen Concentrator be powered from an interruptible power supply or a battery
	40% UT (60% dip in UT) for 5 cycle	40% UT (60% dip in UT) for 5 cycle	
	70% UT (30% dip in UT) for 25 cycle	70% UT (30% dip in UT) for 25 cycle	
	<5% UT (95% dip in UT) for 5 sec	<5% UT (95% dip in UT) for 5 sec	
Power frequency (50 Hz) magnetic IEC 61000-4-8	3 A/m	Due to the EUT contains no components susceptible to magnetic field, it is deemed to fulfill the relevant immunity requirement without testing.	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE: UT is the a.c. mains voltage prior to application of the test level.

Guidance and declaration of manufacturer - Electromagnetic Immunity

The A5LC-1 Oxygen Concentrator is intended for use in the electromagnetic environment specified below. The purchaser of the A5LC-1 Oxygen Concentrator should ensure that the unit is used in such an environment.

Immunity	EC61000-4-2 Test Level	Compliance Level	Electromagnetic Environment Guidance
Directed HF interference acc. to IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 V	Portable and mobile RF communications equipment should be used no closer to any part of the JMC5A Ni Oxygen Concentrator, including cables than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: d= 1.2 √P d= 1.2 √P 80 MHz to 800 MHz d= 2.3 √P 800 MHz to 2.5GHz Where P is the maximum output power rating of the transmitter in Watt (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters as determined by an electromagnetic site survey[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated RF IEC 61000-4-6	3 V/m 80 kHz to 2.5 GHz	3 V/m	

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

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

a Field strengths from fixed transmitters, such as base stations of radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and television 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 A5LC-1 Oxygen Concentrator is used exceeds the applicable RF compliance level above, the A5LC-1 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 A5LC-1 Oxygen Concentrator.

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

Recommended separation distances between portable and mobile RF communication equipment and the A5LC-1 Oxygen Concentrator.

The A5LC-1 Oxygen Concentrator is intended for use in an electromagnetic environment in a controlled RF environment . The purchaser of the A5LC-1 Oxygen Concentrator can help to prevent electromagnetic interferences by maintaining minimum distances between the portable and mobile RF communication equipment (transmitters) and the A5LC-1 Oxygen Concentrator as recommended below, according to the maximum output power of the communication equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter		
	150 kHz to 80 MHz $d=1.2\sqrt{P}$	80 MHz to 800 MHz $d=1.2\sqrt{P}$	800 MHz to 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 is not listed above, the recommended separation distance in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. Specified by the transmitter manufacturer.

NOTE 1 At 80MHz and 800MHz, the separation distance for the higher frequency range applies.

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

Limited Warranty

We offer to you, as the original purchaser, a warranty for the Direct Supply Attendant® Oxygen Concentrator. Our warranty applies for the limited warranty period stated below. If any device or device part listed below is defective in material or workmanship during the applicable limited warranty period, we will repair or replace it at our cost. Please note that the decision to repair or replace a device or device part will be at our discretion. Our warranty applies only if the device is properly maintained by the original purchaser for normal, indoor use and does not cover normal wear and tear, modification of the device, or damage caused by abuse, improper use, failure to maintain, use which exceeds the published device limitations or the combination of any device with another product. In addition, our warranty does not cover fading, colorfastness, stains, spills or exposure to chemicals, odors, heat or light. In certain cases, we may provide you repair or adjustment instructions and/or replacement parts, and ask you to perform a repair or adjustment or replace a defective part.

Our warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Please note that our limited warranty period begins when we ship the device to you. The limited warranty period and our obligations under the warranty end once you transfer the device to someone else or at the end of the applicable limited warranty period identified below, whichever is earlier.

	Warranty Period	**Anticipated Usable Device Life**
Attendant® Oxygen Concentrator Device	3 years or 12000 hours, whichever comes first	3 years or 12000 hours, whichever comes first

Anticipated Usable Device Life is based on normal use with proper maintenance, cleaning and storage. You should still inspect, monitor and care for the device as described in this guide, as the device may need to be replaced sooner than anticipated in particular situations.

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Customer Service

Our promise to you is that you will have a convenient and easy ordering experience, receive a quality Oxygen Concentrator and enjoy outrageous customer service. If you have any questions about the oxygen concentrator you have purchased or would like to request warranty service, please contact: **Direct Supply Equipment & Furnishings** at 1-800-634-7328, 6767 N. Industrial Road, Milwaukee, WI 53223, SalesSupport@DirectSupply.com.

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