NEWLIFE® intensity

Patient Manual

for NewLife 8-Liter and NewLife 10-Liter Oxygen Concentrator

Includes ***Oxygen Monitor, Dual Flow, and Pediatric/Low Flow Options***

AIRSEP®

English: A multilingual version of the manual is available through your equipment provider.
Español: Una versión multilingüe del manual está disponible a través de su proveedor de equipo.
Français: Une version multilingue du manuel est disponible par l'intermédiaire de votre fournisseur de matériel.
Deutsche: Eine mehrsprachige Version des Handbuchs ist in Ihrer Geräte-Anbieter.

TABLE OF CONTENTS

AirSep® NewLife® Intensity
Oxygen Concentrator

AirSep NewLife Intensity Oxygen Concentrator 1

Symbols 1

Why Your Physician Prescribed Oxygen 3

What is an Oxygen Concentrator? 4

Important Safety Rules 5

How to Operate Your Oxygen Concentrator 7

Filters 11

Oxygen Without Humidifier 11

Oxygen With Humidifier 12

Nasal Cannula 13

Proper Setting of Oxygen Flowmeter 14

Cleaning, Care, and Proper Maintenance 15

- Cabinet 15
- Filters 16

Reserve Oxygen Supply 16

TABLE OF CONTENTS

AirSep® NewLife® Intensity Oxygen Concentrator

Troubleshooting 17

Product Specifications 19

Classification 20

Oxygen Monitor Option 21

Function of the Oxygen Monitor 21

Alarm Signal 21

Dual Flow and Pediatric/ Low Flow Options 22

Dual Flow Application 22

Pediatric/Low Flow Application 22

Setting the Pediatric Flowmeter 23

AirSep® NewLife® Intensity Oxygen Concentrator

This Patient Manual will acquaint you with AirSep's NewLife Intensity Oxygen Concentrator (both 8-liter and 10-liter models). Make sure you read and understand all the information contained in this manual before you operate your unit. Should you have any questions, your Equipment Provider will be happy to answer them for you.

Symbols

Symbols are frequently used on equipment and/or the manual in preference to words with the intention of decreasing the possibility of misunderstanding caused by language differences. Symbols can also permit easier comprehension of a concept within a restricted space.

The following table is a list of symbols and definitions that may be used with the NewLife Intensity Oxygen Concentrator.

Symbol	Description	Symbol	Description
WARNING	**Warning – Describes a hazard or unsafe practice that can result in severe bodily injury or death**		**No smoking**
CAUTION	**Caution – Describes a hazard or unsafe practice that can result in minor bodily injury or property damage**	CE 0459	**CE Mark**
NOTE	**Note – Provides information important enough to emphasize or repeat**	ETL CLASSIFIED 3072375	**Safety agency for CAN/CSA C22.2 No. 601.1 M90 for medical electrical equipment. (10-liter only)**
	Refer to Patient Manual Instructions	SA®	**Safety agency for CAN/CSA C22.2 No. 601.1 M90 for medical electrical equipment. (8-liter only)**
	No oil or grease		**Do not disassemble**

Symbol	Description	Symbol	Description
	Proper disposal of waste of electrical and electronic equipment required		Class II
	Type BF Equipment		Keep unit and accessories dry

WARNING

In the event of an alarm, you observe the unit is not working properly, or if you feel discomfort, consult your Equipment Provider and/or your physician immediately.

WARNING

This unit is not to be used for life support. Geriatric, pediatric, or any other patients unable to communicate discomfort while using this machine may require additional monitoring. Patients with hearing and/or sight impairment(s) may need assistance with monitoring alarms.

WARNING

This device supplies high-concentration oxygen that promotes rapid burning. Do not allow smoking or open flames within five feet (1.5 m) of (1) this device, or (2) any oxygen-carrying accessory.

WARNING

Use no oil, grease, or petroleum-based products on or near unit.

WARNING

Disconnect the power cord from the electrical outlet before you clean or service the unit.

Why Your Physician Prescribed Oxygen

Many people suffer from a variety of heart, lung, and other respiratory diseases. A significant number of these patients can benefit from supplemental oxygen therapy at home, in the hospital, or at a medical facility.

Oxygen is a gas that makes up 21% of the room air we breathe. Our bodies depend on a steady supply to function properly. Your physician prescribed a flow or setting to address your particular respiratory condition.

Although Oxygen is a non-additive drug, unauthorized oxygen therapy can be dangerous. You must seek medical advice before you use this oxygen concentrator. The Equipment Provider who supplies your oxygen equipment will demonstrate how to set the prescribed flow rate.

It is very important to select the prescribed level of oxygen flow. Do not increase or decrease the flow until you first consult your physician.

What is an Oxygen Concentrator?

Oxygen concentrators were introduced in the mid-1970's and have become the most convenient, reliable source of supplemental oxygen available today. Oxygen concentrators are the most cost-effective, efficient, and safest alternative to using high-pressure oxygen cylinders or liquid oxygen. An oxygen concentrator provides all the oxygen you need with no cylinder or bottle deliveries required.

The air we breathe contains approximately 21% oxygen, 78% nitrogen, and 1% other gases. In the NewLife Intensity unit, room air passes through a regenerative, adsorbent material called "molecular sieve." This material separates the oxygen from the nitrogen. The result is a flow of high-concentration oxygen delivered to the patient.

NOTE

There is never a danger of depleting the oxygen in a room when you use your NewLife Intensity unit.

Important Safety Rules

Carefully review and familiarize yourself with the following important safety information about the NewLife Intensity Oxygen Concentrator.

WARNING	In the event of an alarm, you observe the NewLife Intensity is not working properly, or if you feel discomfort, consult your Equipment Provider and/or your physician immediately.
WARNING	This unit is not to be used for life support. Geriatric, pediatric, or any other patients unable to communicate discomfort while using this machine may require additional monitoring. Patients with hearing and/or sight impairment(s) may need assistance with monitoring alarms.
WARNING	Do not leave the nasal cannula under bed coverings or chair cushions. If the unit is turned on but not in use, the oxygen will make the material flammable. Set the I/0 power switch to the 0 (off) position when the NewLife Intensity unit is not in use.
WARNING	Electrical shock hazard. Do not remove covers while the unit is plugged in. Only your Equipment Provider should remove the covers.

WARNING

This device manufactures high concentration oxygen, which promotes rapid burning. Do not allow smoking or open flames within 5 feet (1.5 m) of: (1) this device or (2) any oxygen carrying accessory.

WARNING

Do not use extension cords with this unit.

WARNING

AirSep recommends an alternate source of supplemental oxygen in the event of a power outage, alarm condition, or mechanical failure. Consult your physician or Equipment Provider for the type of reserve system required.

CAUTION

Federal (USA) law restricts this device to sale or rental by or on the order of a physician or licensed health care provider.

How to Operate Your Oxygen Concentrator

First, become familiar with the important parts of your NewLife Intensity Oxygen Concentrator (Figures 1a and 1b).

A. On/Off (I/0) Power Switch:
Starts and stops the operation of the unit.

B. Circuit Breaker Reset Button:
Resets the unit after electrical overload shutdown

C. Digital Hour Meter:
Records the unit's total hours of operation.

D. Flowmeter/Adjustment Knob (Primary on Dual Option):
Controls and indicates the oxygen flow rate in liters per minute (lpm). Main flowmeter (left side) on units with dual flow option.

E. Oxygen Outlet (Primary on Dual Option):
Provides connections for a humidifier (if required), nasal cannula, face mask, or catheter . On units with dual flow option, controlled by primary flowmeter.

F. Top and Side Handles:
Enables convenience in carrying the unit.

G. Operating Instructions:
Explains procedures to operate the unit.

H. Secondary Flowmeter (Dual Option):
Flowmeter (right side) on units with dual flow option.

I. Secondary Oxygen Outlet (Dual Option):
Oxygen outlet (right side) on units with dual flow option.
Controlled by secondary flowmeter.

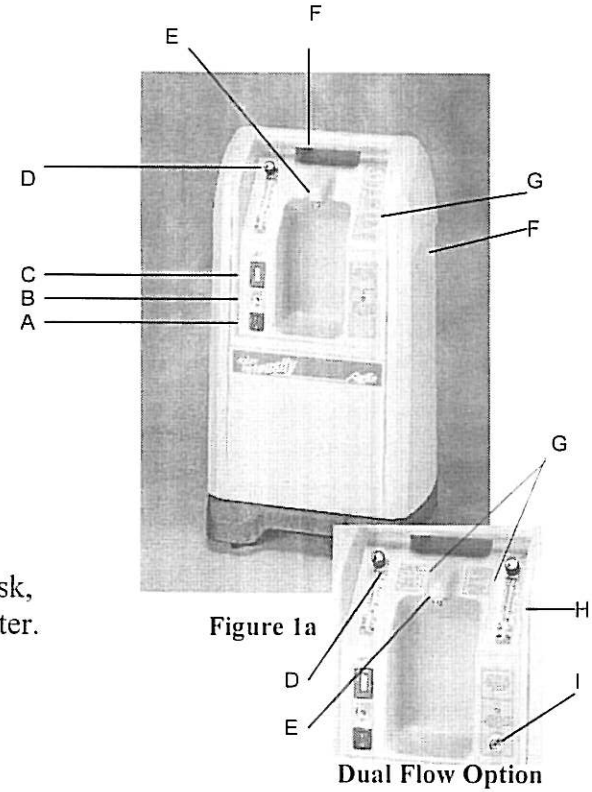

Figure 1a

Dual Flow Option

J. Air Intake Gross Particle Filter:
Prevents dust and other airborne particles from entering the unit.

K. Power Cord:
Allows connection of unit into electrical outlet.

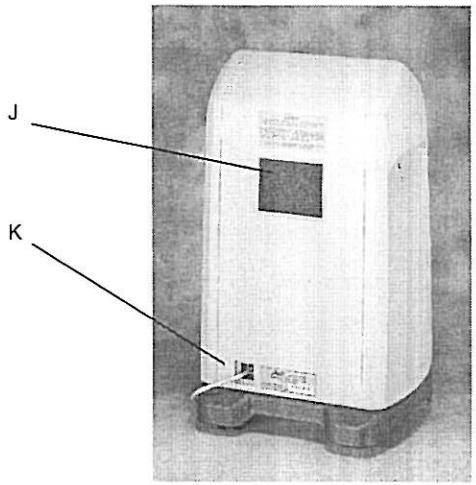

Figure 1b

CAUTION

Do not use extension cords with this unit.

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

2. Position the unit away from curtains or drapes, hot air registers, heaters, and fireplaces. Be certain to place the unit so all sides are at least 12 inches (30.5 cm) away from a wall or other obstruction. Do not place the unit in a confined area.

3. Turn the unit so that the operating controls are within easy reach and the air intake on the back of the unit is not obstructed.

4. Connect oxygen accessories such as a humidifier (if required), nasal cannula, face mask, catheter, and/or extension tubing to the oxygen outlet.

5. Completely unwrap the power cord (Figure 1b).

6. Insert power cord into the electrical outlet.

7. Locate the power switch on the front of the unit, and switch it to the **I** position (on). (Figure 2.)

   A battery-operated audible alarm must sound for a 5-second test to indicate a good battery and alarm.

> **CAUTION** If the alarm is weak or does not sound at all, consult your Equipment Provider immediately.

> **NOTE** The standard NewLife Intensity Oxygen Concentrator accommodates high pressure/high flow prescriptions.

8. *Dual Flow and High Flow Applications:* Set the flowmeter adjustment knob(s) to the prescribed lpm, in any combination of flows up to a total of the maximum capacity of the concentrator (8 lpm for Intensity and 10 lpm for Intensity 10). (Figure 3).

   or

   Pediatric/Low Flow Applications: See page 22 for details.

   The concentrator is now ready for use.

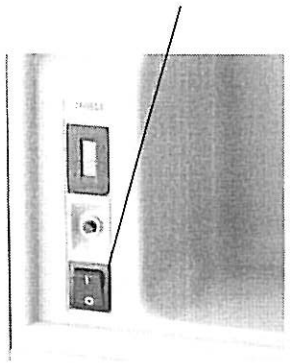

Figure 2

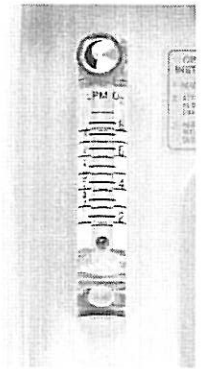

Figure 3

9. To turn the concentrator off, press the I/O switch to the O position.

⚠ **CAUTION**	Always operate the unit in an upright position.

10. If the NewLife Intensity unit fails to operate properly, refer to the Troubleshooting section for a list of probable causes and solutions.

Filters

Air enters the NewLife Intensity unit through an air intake gross particle filter located on the back off the oxygen concentrator. This filter removes dust particles and other large particles from the air. Before you operate the NewLife Intensity unit, make sure this filter is clean and positioned correctly (Figure 4).

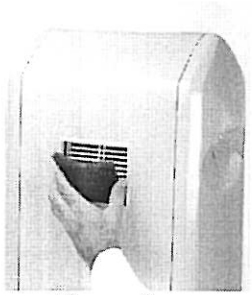

Figure 4

The supplemental oxygen produced by the NewLife Intensity unit receives additional filtration from a product filter located within the oxygen concentrator. Your Equipment Provider performs maintenance on the product filter in addition to other maintenance on the unit.

NOTE	The use of some oxygen administration accessories not specified for use with this oxygen concentrator may impair its performance.

Oxygen Without Humidifier

1. If your physician did not prescribe a humidifier, connect the oxygen tubing directly to the unit's Oxygen outlet. A separate outlet fitting is supplied for this type of connection (Figure 5).

Figure 5

Operating With Humidifier

Following these steps if your physician prescribed an oxygen humidifier as part of your therapy:

1. Remove or unscrew the reservoir bottle from the humidifier (If you have a pre-filled unit, do not perform this step. Proceed directly to step 4.)

2. Fill the reservoir with cool or cold water (distilled water is preferred) to the fill line indicated on the bottle. DO NOT OVERFILL.

3. Screw the reservoir bottle back together.

4. On the top of the humidifier, turn the thread nut counterclockwise while you connect the humidifier to the oxygen outlet, and tighten securely (Figure 6).

5. Connect oxygen tubing from the nasal cannula, face mask, or other accessories to the humidifier outlet fitting (Figure 7).

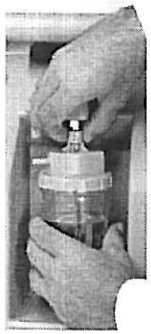

Figure 6

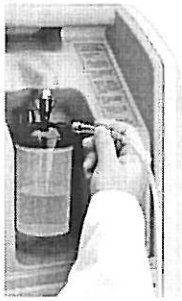

Figure 7

NOTE

The use of certain humidifiers not specified for use with this oxygen concentrator may impair its performance.

NOTE

To Equipment Provider: The following humidifier bottle is recommended for use with the NewLife Intensity Oxygen Concentrator:
AirSep Part No. **HU014-1**

Nasal Cannula

Your physician has prescribed either a nasal cannula, face mask, or other accessories (Figure 8). In most cases the manufacturer has already connected the oxygen supply tubing to the nasal cannula, face mask, or other accessory. If not, follow the manufacturer's instructions for proper connection. Connect the oxygen tubing to the oxygen outlet adapter or humidifier.

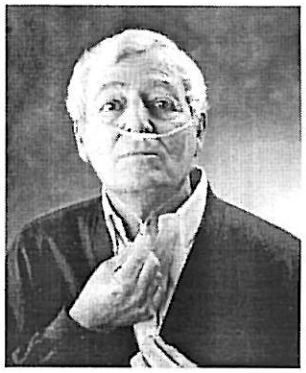

Figure 8

NOTE

To Equipment Provider: The following oxygen administration accessories are recommended for use with the NewLife Intensity Oxygen Concentrator:

- Nasal Cannula with 7 feet (2.1 m) of tubing: AirSep Part No. **CU002-1.**
- Oxygen Outlet Adapter: AirSep Part No. **F0025-1.**
- Face Mask with 7 feet (2.1 m) of tubing: AirSep Part No. **MS013-1**

Proper Setting of Oxygen Flowmeter

To set the proper flow of supplemental oxygen, turn the flowmeter adjustment knob left or right until the ball inside the flowmeter centers on the flow line number prescribed by your physician (Figure 9).

To view the flowmeter at the proper angle, note that the back line and the front numbered line must give the appearance of just one line.

Figure 9

CAUTION

It is very important to follow the prescribed level of oxygen. Do not increase or decrease the flow until you first consult your physician.

CAUTION

Normally, you should not need to adjust the flowmeter on your unit. If you turn the flowmeter adjustment knob clockwise, you will decrease and can shut off the flow of oxygen from your unit. For your convenience, the flowmeter is marked in ½ lpm increments. For units with the pediatric flowmeter option, the flowmeter is marked in 1/8 lpm increments for flow settings up to 2 lpm.

Cleaning, Care, and Proper Maintenance

Cabinet

WARNING

Turn off the NewLife Intensity unit, and disconnect the power cord from unit before you clean the cabinet.

CAUTION

Do not use liquid directly on the NewLife Intensity unit to clean it. A list of **undesirable** chemical agents includes but is not limited to, the following, according to the plastics manufacturer: alcohol and alcohol-based products, concentrated chlorine-based products (ethylene chloride), and oil-based products (Pine-Sol, Lestoil). These are NOT to be used to clean the plastic housing; they can damage the unit's plastic.

CAUTION

Clean the cabinet and power cord only with a mild household cleaner applied with a damp cloth or sponge, and then wipe them dry.

NOTE

To prevent a voided AirSep warranty, follow all manufacturer's instructions.

NOTE

AirSep does not recommend the sterilization of this equipment.

Filters

At least one time each week, wash the air intake gross particle filter, which is located in the back of the unit. Your Equipment Provider may advise you to clean it more often, depending upon your operating conditions. Follow these steps to properly clean the air intake filter:

1. Remove the filter and wash it in a warm solution of soap and water.
2. Rinse the filter thoroughly, and remove excess water with a soft, adsorbent towel. Ensure that the filter is dry before replacing it.
3. Replace the dry filter.

Reserve Oxygen Supply

Your Equipment Provider may recommend another source of supplemental oxygen therapy in case there is a mechanical failure or a power outage.

Troubleshooting

If your NewLife Intensity Oxygen Concentrator fails to operate properly, refer to the chart on the following pages for possible causes and solutions and, if needed, consult your Equipment Provider.

If you cannot get the unit to operate, connect your nasal cannula, face mask, or other accessories to the reserve supplemental oxygen supply (if provided).

NOTE Do not attempt any maintenance other than the possible solutions listed below.

Problem	Probable Cause	Solution
Unit does not operate. Power failure condition causes a continuous alarm to sound.	Power cord not connected into electrical outlet.	Check power cord plug at the electrical outlet for a proper connection.
	No power at electrical outlet.	Check power source, wall switch, fuse, or circuit breaker in-house.
	Oxygen concentrator circuit breaker is activated.	Contact your Equipment Provider for service.
Limited oxygen flow.	Dirty or obstructed humidifier bottle.	Remove the humidifier bottle (if used) from the oxygen outlet. If flow is restored, clean or replace with a new humidifier bottle.
	Defective nasal cannula, face mask, catheter, and/or oxygen delivery tube, or other accessory.	Remove nasal cannula, face mask, or other accessories from oxygen tubing. If proper flow is restored, replace with new nasal cannula, face mask, or other accessories.
		Disconnect delivery tubing at oxygen outlet (front of unit). If proper flow is restored, check oxygen tubing for kinks or obstructions. Replace if needed.
	Other leak or restriction.	Contact your Equipment Provider.

Problem	Probable Cause	Solution
Condensation collects in the oxygen tubing when you use the humidifier bottle.	Unit not properly ventilated. Elevated operating temperature.	Make sure unit is positioned away from curtains or drapes, hot air registers, heaters, and fireplaces. Be certain to place the unit so all sides are at least 12 inches (30.5 cm) away from a wall or other obstruction. Do not place the unit in a confined area. Allow oxygen tubing to dry out, or replace with new tubing. Refill humidifier bottle with COLD water. DO NOT OVERFILL.
Intermittent alarm sounds at one second intervals.	Equipment malfunction.	Set I/0 power switch to 0 position, use your reserve oxygen supply (if provided), and consult your Equipment Provider immediately.
Unit does not alarm, or weak alarm sounds for 5 seconds during start-up.	Weak 9-volt battery	Call your Equipment Provider to replace 9-volt battery.
All other problems.		Set I/0 power switch to the 0 position, use your reserve oxygen supply (if provided), and consult your Equipment Provider immediately.

Product Specifications

	8-Liter Concentrators	10-Liter Concentrators
Oxygen Concentration: *	2-7 lpm: 92% ± 3% 8 lpm: 90% ± 3%	2-9 lpm: 92% ± 3% 10 lpm: 90% ± 3%
Dimensions:	27.5 in. high x 16.5 in. wide x 14.5 in. deep (69.9 cm high x 41.9 cm wide x 36.8 cm deep)	
Weight:	54 lb (24.5 kg)	58 lb (26.4 kg)
Electrical:	120 VAC, 60 Hz, 4.0 amps Two-prong polarized plug Double insulated cabinet *Export Models:* 220-240 VAC, 50 Hz, 2.0 amps 220 VAC, 60 Hz, 2.0 amps Double-insulated cabinet	120 VAC, 60 Hz, 6.0 amps Two-prong polarized plug Double insulated cabinet *Export Models:* 220-240 VAC, 50 Hz, 3.0 amps 220 VAC, 60 Hz, 3.0 amps Double-insulated cabinet
Alarms:	Battery test Power failure High and low pressure Low oxygen concentration (Oxygen monitor)	
Storage Temperature:	-4°F to 140°F (-20°C to 60°C)	

* Based on an atmospheric pressure of 14.7 psi (101 kPa) at 70°F (21°C)
* Operating unit outside of operational temperature range can affect performance.

CE 0459

Classification

Type of protection against electric shock:

Class II Protection from electric shock is achieved by double insulation.
Protective earthing or reliance upon installation conditions are not required.

Degree of protection against electric shock:

Type B Equipment providing a particular degree of protection against electric shock particularly regarding:
1) allowable leakage current;
2) reliability of protective earth connection (if present).
Not intended for direct cardiac application.

Degree of protection against harmful ingress of water:

Drip-proof equipment – IPX1.
Equipment provided with an enclosure preventing of such an amount of falling liquid as might interfere with the satisfactory and safe operation of the equipment.

Method of cleaning and infection control allowed:

Please refer to Maintenance section in the NewLife Intensity Service Manual.

Degree of safety of application in the presence of flammable anesthetic gases:

Equipment not suited for such application.

Mode of operation:

Continuous duty.

Oxygen Monitor Option

The following information will acquaint you with Oxygen Monitor option of the NewLife Intensity Oxygen Concentrator. Make sure you read and understand all the information contained in this manual before you operate your unit. Should you have any questions, your Equipment Provider will be happy to answer them for you.

Function of the Oxygen Monitor

The oxygen monitor is a small electronic device within the NewLife Intensity Oxygen Concentrator that monitors the concentration of oxygen produced by the unit.

Alarm Signal

If oxygen concentration falls below the acceptable therapeutic level, an amber OXYGEN MONITOR light on the Oxygen Concentrator turns on (Figure 10). If the light remains on for more than 15 minutes, an intermittent alarm sounds.

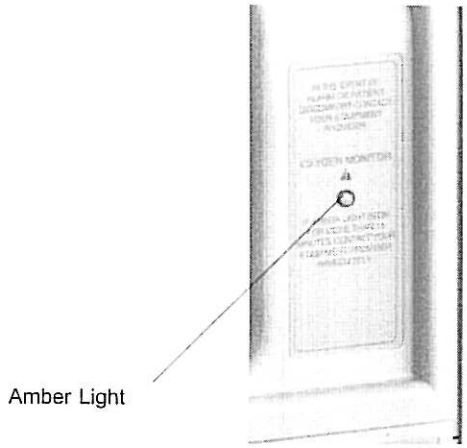

Figure 10

CAUTION Contact your Equipment Provider immediately if the amber OXYGEN MONITOR light remains on for more than 15 minutes.

NOTE When you turn the unit on, it's normal for the amber OXYGEN MONITOR light to turn on and remain on for up to five minutes.

Dual Flow and Pediatric/Low Flow Options

The following information will acquaint you with the dual flow and pediatric/low flow options of the NewLife Intensity Oxygen Concentrator (See Figure 11). Make sure you read and understand all the information contained in this manual before you operate your unit. Should you have any questions, your Equipment Provider will be happy to answer them for you.

Dual Flow Application

The NewLife Intensity unit's dual flow option allows a single concentrator to meet the high flow requirements of one patient (Figure 12) or the needs of two patients, in any combination of flows up to the maximum capacity of the concentrator (Figure 11). Excellent for use in the home, extended care facility, hospital, or physician's waiting room.

Figure 11

Two Patients/
Dual Flow
Applications

Pediatric/Low Flow Application

The pediatric flowmeter (available for use with the dual flow NewLife Intensity unit) meets low flow requirements up to 2 lpm in 1/8 liter (125 ccm) increments (Figure 13).

Figure 12

Setting the Pediatric Flowmeter

When using the pediatric flowmeter, the unit will not reach proper concentration at the pediatric setting (less than 2 lpm) until you bleed off a portion of the oxygen by opening the primary flowmeter (on the left side of the unit). Follow the procedure below when using the pediatric flowmeter.

1. Follow the start-up instructions 1-7 as outlined on page 8 & 9.
2. Set the pediatric flowmeter to the prescribed flow.
3. Set the primary flowmeter to 2 lpm to bleed off excess product, and allow the unit to achieve maximum concentration.

NOTE

The NewLife Intensity Oxygen Concentrator must be operated for at least five minutes at 2 lpm before using the unit.

NOTE

The NewLife Intensity is appropriate for usage by two patients, provided the combined flow is a minimum of 2 lpm and does not exceed the maximum capacity of the concentrator.

Figure 13

For European representative:

Gavin Ayling
9 Bungham Lane
Penkridge Stafford
Staffordshire ST19 5NH England

E-mail: eurorepcontact@airsep.com

For service on your NewLife Intensity Oxygen Concentrator, please contact your local Equipment Provider at:

Manufactured by:
AirSep Corporation
Buffalo, NY 14228-2085 USA
www.airsep.com

MN164-1 Rev –
08/09