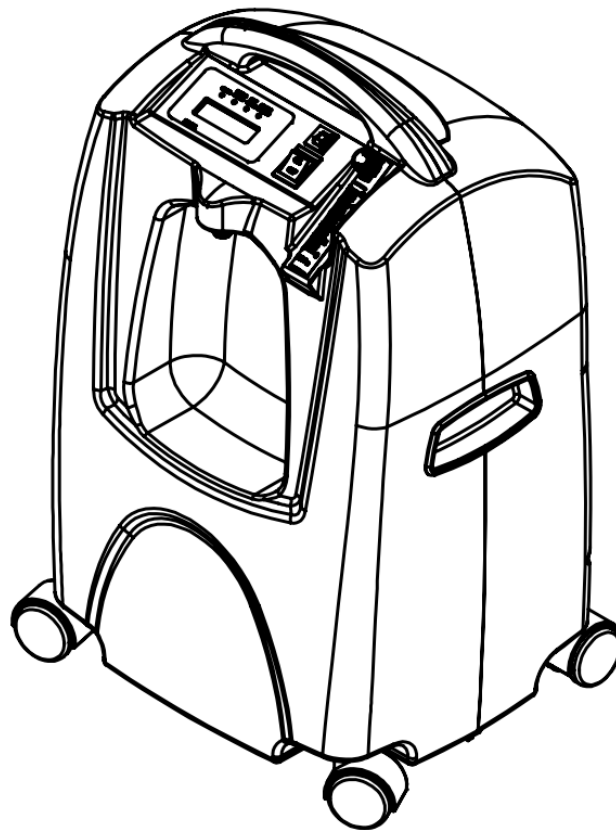




# ZY5AC / ZY5BA

## Oxygen Concentrator



## ZY5AC / ZY5BA Oxygen Concentrator Instruction Guide

WARNING - Read instruction guide before operating this equipment.



**DANGER - NO SMOKING**

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**INDICATIONS FOR USE** — The ZY5AC/ZY5BA Oxygen Concentrator is intended for use as an oxygen concentrator to provide supplemental low flow oxygen therapy in the home, nursing homes , patient care facilities, etc.

 **WARNING**

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

**Physician Information**

Physician Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Address: \_\_\_\_\_

**Prescription Information**

Name: \_\_\_\_\_

Oxygen liters per minute

at rest: \_\_\_\_\_ during activity : \_\_\_\_\_

others: \_\_\_\_\_

**Oxygen use per day**

Hours: \_\_\_\_\_ Minutes: \_\_\_\_\_

Comments: \_\_\_\_\_

**ZY5AA/ZY5BA oxygen Concentrator Serial Number:** \_\_\_\_\_

**(check.....one)**

5-Liter       \_\_\_\_\_

**Medical Provider Information**

Set-Up Person: \_\_\_\_\_

This instruction guide was reviewed with me and I have been instructed on the safe use and care of the **ZY5AC/ZY5BA** Oxygen Concentrator.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## IMPORTANT SAFEGUARDS



Read this entire guide before using your ZY5AC /ZY5BA 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 to which you should pay special attention.

Important safeguards are indicated throughout this guide; pay special attention to all safety Information.



**DANGER-NO SMOKING**

**SAVE THESE INSTRUCTIONS**

### INTRODUCTION

This instruction guide will acquaint you with the ZY5AA/ZY5BA 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 provider if you have any questions.



**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 be benefited 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 YOUR ZY5AC/ZY5BA OXYGEN CONCENTRATOR WORKS

Oxygen concentrators are the most reliable, efficient, and convenient source of supplemental oxygen available today, the oxygen concentrator is electrically operated. 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 ZY5AA/ZY5BA oxygen concentrator before operating.

**Checklist for Unpacking-Before using this product, makes sure you have the following items:**

- . 1 User manual.
- . 1 Oxygen concentrator set.
- . 1 Adapter-for connect Humidifier. (OPTIONAL)
- . 1 Oxygen Outlet Connector. (OPTIONAL)

### Front View (Figure 1)

- 1 Operating instructions
- 2 Green Power light—illuminates when your concentrator is operating
- 3 Power Switch  
I =ON      O=OFF
4. Flow meter knob
5. Flow meter
6. Circuit breaker – (selected units) resets the unit after electrical overload shutdown.
7. Oxygen outlet—oxygen is dispersed through this port.
8. Monitor-indicate the condition of system pressure status; oxygen purity status and indicate electric hour meter
9. Red Service Required light—when illuminated contact your Medical provider.
10. Normal Oxygen (green) light-(the LED display normal oxygen)
11. Low Oxygen (yellow) light-(the LED display low oxygen)

### Back View (Figure 2)

12. Important Safeguards
13. Exhaust
14. Power cord and /or IEC power connector.
15. Air filter—prevents dirt, dust, and lint from entering your unit



Figure 1 Front View



Figure 2 Back View

## 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) away 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) away 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 checks to be sure the air filter (located on the back of your unit) is clean .Proper cleaning of this filter is discussed in the Caring for Your Concentrator section on page 7.

2. Attach the appropriate oxygen accessories to the oxygen outlet.

### **Oxygen Tubing Connection:**

- a. Thread the oxygen outlet connector onto the oxygen outlet.
- b. Attach the oxygen tubing directly to the connector.(Figure 3)



Figure 3

**OXYGEN TUBING CONNECTION WITH HUMIDIFICATION:**

If your physician has prescribed an oxygen humidifier as part of therapy, Follow these steps:

- a. Fill the humidifier bottle with distilled water. Do not overfill.
- b. Thread the wing nut located on the top of the humidifier bottle to the oxygen outlet so that it is suspended(Figure 4).Make sure it is securely tightened.
- c. Attach the oxygen tubing directly to the humidifier bottle outlet fitting.(Figure 5)

Your physician has prescribed either a nasal cannula, catheter, or face mask, in most cases, they are already attached to the oxygen tubing .If not, follow the manufacturer’s instructions for attachment.



Figure 4



Figure 5

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 ZY5AC\ZY5BA CONCENTRATOR



### DANGER

**Oxygen causes rapid burning. Do not smoke while your oxygen concentrator is operating, or when you are near a person utilizing oxygen therapy. Keep the oxygen concentrator at Least 5 feet (1.6 m) away from hot, 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 not page 8 and contact your 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 8, 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 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.

## RESERVE OXYGEN SYSTEM

As a precaution, your Medical provider may supply you with a reserve oxygen system. If your unit loses electrical power or fails to operate correctly, the patient Alarm System will sound and signal to you to switch to your reserve oxygen system (if provided )and contact your Medical provider.

## CLEANING FOR ZY5AC/ZY5BA OXYGEN CONCENTRATOR

Note — Do not Use 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.

### CANNULA, MASK, AND TUBING

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

### Air Filter and Oxygen Outlet Connector

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

1. Remove the air filter, located on the back of the unit .Remove the oxygen outlet connector (if used).
2. Wash in a solution of warm water and dish washing 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 air filter or while the filter is still damp.

## EXTERIOR CABINET



### WARNING

To avoid electric shock, do not remove the concentrator cabinet. The cabinet should only be removed by a qualified 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.

## ACCESSORIES

The accessories below are approved for use with ZY5AA/ZY5BA Oxygen Concentrators:

- Bubble Humidifier(200 ml Capacity)
- Cannula(disposable)
- Cannula w/ 2.1m(7 ft) Oxygen Tubing (disposable)
- Oxygen Outlet Connector
- Oxygen Tubing (disposable)

**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 on page 11 and contact your provider.

The ZY5AC/ZY5BA 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 flash.

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 8 and contact your provider.

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











**MINOR TROUBLESHOOTING**

<b>Symptom</b>	<b>Possible Cause</b>	<b>Remedy</b>
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.	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.
	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.
B. Unit operates; the Power light is on when the Power switch is “On”. Red Service Required light is illuminated. Audible alarm may be sounding.	1. Air filter is blocked.	Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 7.
	2. Exhaust is blocked.	Check the exhaust area; make sure there is nothing restricting the unit exhaust.
	3. Blocked or defective cannula, catheter, face mask or oxygen tubing.	Detach 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 kinks. Replace if necessary.
	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.
C. 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.
D. 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.
F. Red Service Required light is on and an intermittent audible signal is sounding.	1. Flow meter is not properly set.	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 provider.

**SPECIFICATIONS**

No.	Item	Rating
1.	Delivery Rate (Lower delivery rates available for low application) (@ nominal outlet pressures of zero and 7 kPa)	1 to 5 LPM
2.	Outlet Pressure	8.5 ± 0.5 psi ( 58.6 kpa )
3.	Electrical Rating	220V/50 Hz/1.4A or 115V/60Hz/2.6A (Max.) 280W
4.	Oxygen Percentage	1~5 LPM 93%±2%
5.	Operating Environment Range	Temperature 10°C to 40°C, Humidity 30% to 70% Atmospheric pressure 50~106 kpa (7.3~15.4 psi)
6.	Operating Altitude  (tested at 21°C only) 0-2000 M (0-6561 ft)  2000-4000 M (6561-13123 ft)	Across the voltage range: No degradation of performance  Not recommended/Not tested
7.	The visible” low oxygen “indicator will activate at the following level(only available with ZY5AA-O and ZY5BA-O)	82%±2%will activate at the following level(the red “service required” light will activate
8.	Pressure Relief Valve	40 psig±5psig (276 kPa±34.5 kPa)
9.	Weight	33.5 lbs. (15.2 kilograms)
10.	Sound Level ( ISO 8359:1996 from front )	<45dba ( overall average )
11.	Dimensions	23”H x 14 .2”W x 11.4”D (58 x 36 x 29 cm)
12.	Operating System	Time Cycle / Pressure Swing
13.	Storage Conditions	Temperature -40°C to 70°C Humidity 10% t0 100% Atmospheric pressure 50~106 kpa (7.3~15.4 psi)
14.	Equipment Class and Type	The type of protect against electric shock: Class II The degree of protect against electric shock: TYPE B Applied part
15.	Lifetime	2 years

**SYMBOL**

	<p>General warning, caution, risk of danger</p> <p>Please read the instructions carefully before operating the product.</p>
	<p>Type B applied part</p> <p>Note: B = Body</p>
	<p>Class II equipment</p>
	<p>Manufacturer's serial number</p>
	<p>Date of manufacture</p>
	<p>Manufacturer</p>
	<p>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.</p>
	<p>FRAGILE</p> <p>Contents of the transport package are fragile therefore it shall be handled with care.</p>
	<p>THIS WAY UP</p> <p>Indicates correct upright position of the transport package.</p>
	<p>KEEP AWAY FROM RAIN</p> <p>Transport package shall be kept away from rain.</p>

## WARRANTY

KAIYA INTERNATIONAL LIMITED warrants the ZY-5AC/ZY-5BA a period of 18 months from date of invoice, to be free from defects in material and workmanship. If during the specified warranty period you believe the purchased product or any part thereof has such a defect, you must return the product during such period, with proof of purchase to the factory for repair, or replacement of the defective part. If the product or part is found to have been defective in material or workmanship, it will be repaired or replaced, free of charge, and returned to the purchaser.

The warranty shall not apply to any product, which in KAIYA INTERNATIONAL LIMITED's judgment has been subject to misuse, negligence or accident. The disposables are excluded under the terms of this warranty.

THE MANUFACTURER LIMITS THE DURATION OF THE IMPLIED WARRANTY OF MERCHANTABILITY TO THE LIMITED WARRANTY PERIOD SET FORTH ABOVE, AND OTHERWISE DISCLAIMS ALL IMPLIED WARRANTIES WITH RESPECT TO THE PRODUCT AND IT'S PARTS INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

The warranty does not cover damage caused by misuse, negligence, accident, abuse or alteration, modification of the unit by anyone other than KAIYA INTERNATIONAL LIMITED or affixation of any disposable or accessory not manufactured by KAIYA INTERNATIONAL LIMITED

KAIYA INTERNATIONAL LIMITED total liability for any and all claims, damages, losses and injuries arising out of or relating to any breach of warranty shall not exceed the purchase price of the product. IN NO EVENT WHETHER IN CONTRACT, OR TORT, OR OTHERWISE SHALL KAIYA INTERNATIONAL LIMITED BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT, CONSEQUENTIAL, OR INCIDENTAL ARISING OUT OF THE USE, MISUSE, OR INABILITY TO USE THIS PRODUCT.

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