Oxy-med®

User Manual

PORTABLE OXYGEN CONCENTRATOR
P2

MKPOC01

※READ THIS INSTRUCTION MANUAL CAREFULLY BEFORE USE

FAA Approval Letter

Letter of Authorization for
Manufacture's FAA

Distributor: Medequip Healthcare Solutions LLP

Brand: **Oxy-med**

Address: Plot No. A-12, A-13, Apparel Pakr, Phase 1, Doddaballapur Industrial Area, Doddaballapur, Bengaluru Rural District-561203, Karnataka, India

Phone: +91 (0) 80 2836 2444

is our authorized dealer for the territory of India, has determined the following POC devices conform to all applicable FAA acceptance criteria for POC carriage and use on board aircraft.

Device: **Portable Oxygen Concentrator**

Model No.: P2

Brand: Oxymed

The above device has tested and passed the requirements of;

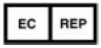
RTCA/DO-160G, Environmental Conditions and Test Procedures for Airborne Equipment.

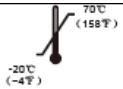
Section 21, Radiated RF Emissions, Category M

Test reports are available upon request

CONTENTS

1. USE INTENTION ,CONTRAINDICATIONS AND GENERAL PRECAUTION. 3
   Use Intention 3
   Contraindications 4
   General Precaution 4
   General Precaution---Continue 5
   General Precaution---Continued 6
   General Precaution---Continued 7
2. DESCRIPTION OF THE OXYMED P2 OXYGEN CONCENTRATOR 8
   Important Parts of the OXYMED P2 8
   User Interface Instruction and Symbols used on OXYMED P2 9
   Alerts 13
   Alerts 14
   Alerts -- Continued. 15
   Power Supply 16
   Accessories 17
   Accessories Lis 18
3. OPERATING INSTRUCTIONS 19
   General Operation 19
4. TROUBLESHOOTING. 24
5. MAINTENANCE AND CLEANING OF OXYGEN P2 25
   Cleaning the Case 25
   Cannula Replacement. 25
   Filter Cleaning and Replacement 25
   Battery Care and Maintenance 26
   Disposal of Equipment and Accessories 28
   Maintenance Items Lists. 28
6. SYSTEM SPECIFICATIONS 29
   Concentrator Specification 29
   Concentrator Specification--Continued 30
   Classifications 30
   Standards Complianc 31
   EMC Information. 32
   EMC Information-Continued 33
7. WARRANTY .....34.

Symbol	Meaning
WARNING	A warning indicates that the personal safety of the patient may be involved. Disregarding a warning could result in significant injury.
CAUTION	A caution indicates that a precaution or service procedure must be followed. Disregarding a caution could lead to a minor injury or damage to equipment.
	See User Manual for Instructions.
	AC Power
	DC Power
	U.S. Federal Regulation Restricts this Device to Sale by Order of Physician. May also be applicable in other Countries
	No Smoking
	Keep away from open flames
	Keep Dry
	Use No Oil or Grease
	Do Not Disassemble (contact your equipment provider for servicing by authorized personnel)
	Do Not Dispose of In Unsorted Municipal Waste
	Type BF Applied Part
	Complies With Applicable EU Directives ; Including Medical Device Directive
	Class II (Double Insulated)
	See Instructions for Use
	Manufacturer
	Authorised representative in the European Community
IP22	Protection against vertically falling water drops
	Date of manufacture
	Serial Number

Symbol	Meaning
	This side up
	Fragile
	Storage Humidity (Non-condensing)
	Storage Temperature
	MR unsafe
	The manufacturer of this POC has determined this device conforms to all applicable FAA requirements for POC carriage and use on board aircraft.

Ⅰ.USE INTENTION ,CONTRAINDICATIONS AND GENERAL PRECAUTION

Use Intention

Intended use:The Oxymed P2 Oxygen Concentrator is used on a prescriptive basis by patients requiring supplemental oxygen .It supplies a high concentration of oxygen to the patients .
It supplies a high concentration of oxygen and is used with a nasal cannula to channel oxygen from the concentrator to the patient. The Oxymed P2 is small, portable and may be used in home, institution and various mobile environments.

WARNING	This device is not intended to be life-sustaining or life-supporting. This device is not intended for newborn and infant use.

WARNING	A backup oxygen source is recommended for power outages or mechanical problems. Please provide your device with a backup system type recommended by the business consultant.

CAUTION	This device restricted to sale by or on the order of a physician in many countries. May also be applicable in your country.

CAUTION	It is the responsibility of the patient to make back-up arrangements for alternative oxygen supply when traveling; assumes no liability for persons not to adhere to manufacturer recommendations.

Service Item	**Expected Life**
OxymedP2 Oxygen System	5 Years
Molecular Sieve Beds	1 Years
Batteries	500 full charge/discharge cycles

CAUTION	The expected life is depending on the environment of usage and the maintenance. The bad condition will short the life time of the concentrator.

WARNING	The operator should read and understand this entire manual before using the device.

Contraindications

CAUTION	This device is not intended to be life sustaining or life supporting.
CAUTION	Patients who use this device may require additional monitoring or attention, and these patients cannot hear or see an alert or communicate discomfort. If the patient has any symptoms, consult a physician immediately.
CAUTION	In certain circumstances, oxygen therapy can be hazardous. Please seek medical advice before using this device.
CAUTION	The Oxymed P2 is not designed or specified to be used in conjunction with a humidifier, nebulizer or connected with any other equipment. Do not modify the Oxymed P2 Concentrator. Any modifications performed on the equipment may impair performance or damage equipment and will void your warranty.

General Precaution

WARNING	Oxygen supports combustion. Oxygen should not be used while smoking or smoking in the same room ,or in the presence of an open flame.
WARNING	Do not submerse the Oxymed P2 or any of the accessories in liquid. Do not expose to water or precipitation. Do not operate in exposed rain. This could lead to electrical shock and/or damage.
CAUTION	Do not use oil or grease on the concentrator or its components as these substances, when combined with oxygen, can greatly increase the potential for a fire hazard and personal injury.
CAUTION	Never leave the Oxymed P2 in an environment which can reach high temperatures or high humidity, such as an unoccupied car in high temperature environments or bathroom with high humidity. This could damage the device.
WARNING	Geriatric or any other patient unable to communicate discomfort, or hear or see the alarms while using this device, may require additional monitoring.

General Precaution---Continued

WARNING	If you feel discomfort or are experiencing a medical emergency while undergoing oxygen therapy, seek medical assistance immediately to avoid harm.
WARNING	The oxygen delivery settings of the oxygen concentrator should be periodically reassessed for the effectiveness of the therapy .
WARNING	Set the device at the prescribed level and do not increase or decrease your flow rate from the prescribed level until you first consult with your physician or healthcare professional.
WARNING	Only use this device as prescribed. The use of oxygen therapy can be hazardous in some circumstances, so consult your health care practitioner before using Oxymed P2
WARNING	To ensure that you receive the correct therapeutic amount of oxygen delivery according to your medical condition, the Oxymed P2 must be used: ● Only after one or more settings have been individually determined or prescribed for you at your specific activity levels. ● only use the parts and accessories that are provided by oxygen concentrator manufacturer .
WARNING	The settings of the Oxymed P2 might not correspond with continuous flow oxygen .
WARNING	The settings of other models or brands of oxygen therapy equipment do not correspond with the settings of the Oxymed P2
WARNING	There is a risk of fire associated with oxygen equipment and therapy. Do not use near sparks or open flames

General Precaution---Continued

WARNING	Use only water-based lotions or salves that are oxygen compatible during setup or use during oxygen therapy To avoid the risk of fire and burns, never use petroleum or oil-based lotions or salves.
WARNING	Smoking during oxygen therapy is dangerous and is likely to result in serious injury or death of the patient and others from fire.
WARNING	To ensure receiving the therapeutic amount of oxygen delivery according to your medical condition OxymedP2 must — be used only after one or more settings have been individually determined or prescribed for you at your specific activity levels. — be used with the specific combination of parts and accessories that are in line with the specification of the oxygen conserver manufacturer and that were used while your settings were determined.
WARNING	Do not lubricate replaceable fittings,connections, tubing, or other accessories of the oxygen conserver to avoid the risk of fire and burns
WARNING	Use only spare parts recommended by the manufacturer to ensure proper function and to avoid the risk of fire and burns
WARNING	Wind or strong draughts can adversely affect accurate delivery of oxygen therapy. EXAMPLE 1 Using this equipment beside an open window or in front of a fan can affect the accuracy of delivery of oxygen. EXAMPLE 2 Using this equipment in the back seat of an open convertible car can affect the accuracy of delivery of oxygen.

General Precaution---Continued

WARNING	If you notice any of the following, STOP use immediately and contact your equipment provider : ● unexplained changes in the performance of this device ● unusual or harsh sounds ● dropped or mishandled device or the power supply ● water spilled into the enclosure ● broken enclosure

WARNING	Oxygen is a combustion-supporting gas, a fire will start easier and spread quickly. Do not leave the nasal cannula on bed coverings or chair cushions if the oxygen concentrator is turned on, but not in use; Turn the oxygen concentrator off when not in use.

WARNING	To ensure proper function and to avoid the risk of fire and burns: ● Use only with Oxymed P2 AC power supply ● Use only with Oxymed P2 batteries ● Use only approved Oxymed P2 accessories

WARNING	Device operation exceed the voltage, breath rate, temperature, humidity and/or altitude values specified may decrease oxygen concentration levels

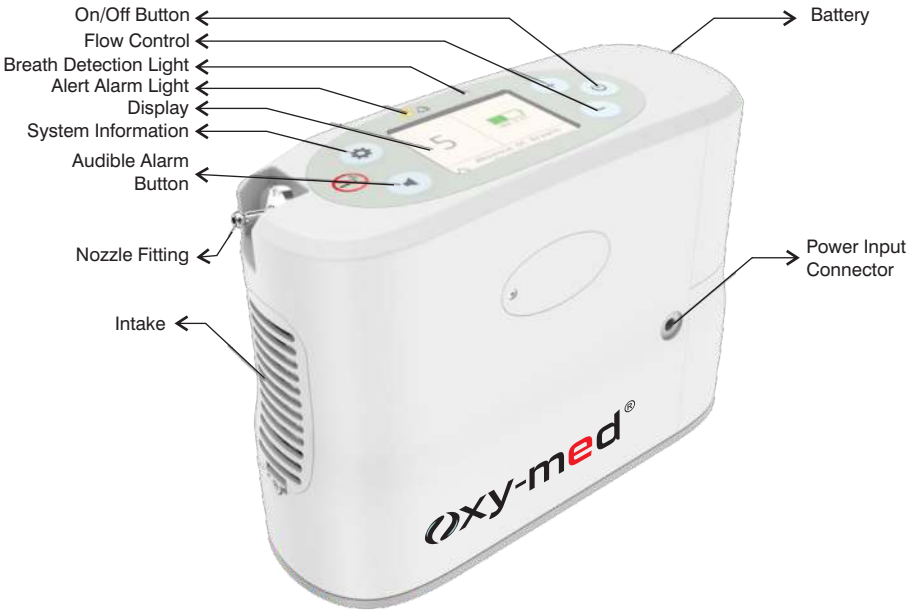
WARNING	Do not modify this system or equipment in any way . Modifications could result in hazards to the user.

WARNING	Change in altitude may affect to actual oxygen supplied to you .Do consult your physician before travelling to a place with altitude changes.

Note: Additional warnings, cautions, and notes are located throughout the manual.

Ⅱ.DESCRIPTION OF THE Oxymed P2 OXYGEN CONCENTRATOR

Important Parts of the Oxymed P2



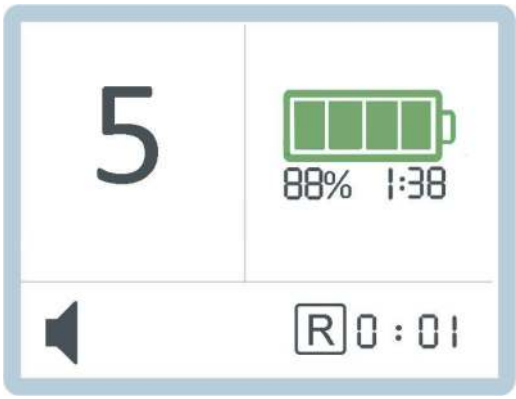
User Interface Instruction and Symbols used on Oxymed P2

User control:

Symbol	Item	Description
	ON / OFF Button	Press once to turn “ON”; Press and hold for one second to turn “OFF”
	Audio Alarm Button	Pressing the button will toggle the Oxymed P2’s audible alert on and off. The display’s mode indication area will show 2 different icons on mute & audible mode: on audible mode-----  On mute mode-------  and turn on yellow light, and display message when the alert is enable. Press this button to mute or unmute alarms .
+ —	**Flow Setting Control Buttons**	Select the setting by pressing the – or + buttons ,swift from 1 to 5 different flow setting
	Device Information	Press this button to display the information of device. The information includes battery temperature,battery status,molecular temperature,molecular runtime, device model,device temperature,device runtime , firmware version, hardware version.

Home Screen

Home screen will show the icon as:



The icons mean:

Icon	Description
5	Flow Setting(from 1 to 5)
	Battery charge level: ●Battery percentage ●Battery remaining time to use
	Device runtime (H:Min) (single time)
	Alert mute
	Alert audible

Additionally, screen will also display the following icons:

Description of the Oxymed P2 Oxygen Concentrator

ICON	DESCRIPTION
	Powered by AC only
	1. Powered by battery only ,without AC charge 2. Battery level and remaining time to use 3. Device ON
	1. battery installed and with AC charge 2. Battery level percentage and estimated time to fully charge the battery 3. Device ON
	1. battery installed and with AC charge 2. Battery level percentage and estimated time to fully charge the battery 3. Device OFF
	Alarm Silence the device has detected an active alarm under mute mode
	the device has detected an active alarm under unmute mode
	Runtime of concentrator since started for single time (2H 35minutes)
	More than one alert are rolling and will display.

Description of the Oxymed P2 Oxygen Concentrator

Audible Mode:
the device has detected an active alarm under unmute mode

Mute Mode:

Alarm Silence
the device has detected an active alarm under mute mode

Alerts

Adapter plug / unplug:
System automatic switch power supply and adapter icon appears/disappears with audio.

Battery plug / unplug
System automatic switch power supply and battery icon appears/disappears with audio.

Alarm audio selection:
Global off/on (Audio Alarm Button)

Alarm audio pulse duration:
150ms On, 150ms Off，Repeat 2 times

Alarm audio pulse group interval:
14.7s (until Alarm returns to normal)

Alarm details
Reference the table below

Description of the Oxymed P2 Oxygen Concentrator

Alerts

Alarm item	Alarm condition	System process	Display of screen
Battery Exhausted	Battery cycle > 500 Or health < 50%	Alarm only	Battery Exhausted
Replace SieveBed	SieveBed expired Or SieveBed chip error	Alarm only	Replace SieveBed Pls contact provider
Low Input Voltage	Adapter input < 17.0v	Switch battery supply until adapter input >18	LowInput Voltage Pls Check Adapter
Absence Of Breath	No breath detected continuously > 15S	Alarm only	Absence of Breath Pls Check cannula
Oxygen concentration<87	Concentration < 87% continuously > 300S	Alarm only	Low O2:< 87% Pls contact provider
Low Battery	5%≦RSOC≦ 20% Without adapter	Alarm only	Low Battery Pls charge now
Oxygen concentration <50	Concentration < 50% continuously > 300S	shut down after 30s	Low O2:< 50% Pls contact provider
Breath Sensor Fail	Breath Sensor failed	shut down after 30s	Breath Sensor Fail Pls contact provider
Oxygen Sensor Fail	Oxygen Sensor failed	shut down after 30s	Oxygen Sensor Fail Pls contact provider
Gas Delivery Fail	No delivery detected After injection	shut down after 30s	Gas Delivery Fail Pls contact provider
Gas Obstruction	Pipe Or nasal blocked	shut down after 30s	Gas Obstruction Pls contact provider
Tank Pressure Fail	Tank pressure failed	shut down after 30s	Tank Pressure Fail Pls Check cannula
SieveBed Fail	SieveBed failure or invalid	shut down after 10s	SieveBed Fail Pls contact provider
Compressor Fail	Compressor failed	shut down after 10s	Compressor Fail Pls Contact Provider

Alerts -- Continued

Alarmitem	Alarmcondition	Systemprocess	Display of screen
ValveCheckFail	Valveswitchfailed	shut down after 10s	Valve Check Fail PlsContactProvider
CoolingFanFail	Coolingfanfailed	shut down after 10s	Cooling Fan Fail Pls Contact Provider
Battery Depleted	RSOC ≦ 5% Withoutadapter	shut down after 10s	BatteryDepleted Replace battery or connect to adapter
System Cold	System temperature < 0℃	shut down after 10s	System Cold Pls Shut down,Move towarmerplace
Battery Cold	Battery temperature < 0℃	shut down after 10s	Battery Cold Pls Shut down,Move to warmer place
System Hot	System temperature > 60℃	shut down after 10s	System Hot ; PlsShutdown,Move to cooler place
BatteryHot	Battery temperature > 65℃	shutdownafter 10s	Battery Hot; PlsShutdown, Only Use adapter
Gas Supply Fail	Flow or concentration below normal after injection	shutdownafter 10s	GasSupplyFail Pls Contact Provider
Sys Startup Fail	Concentration < 87% continuously > 15S after system startup	shut down after 10s	Sys Startup Fail Pls Contact Provider
Power Supply Fail	System voltage < 10.5v	shut down after 10s	Power Supply Fail Pls Contact Provider

Power Supply

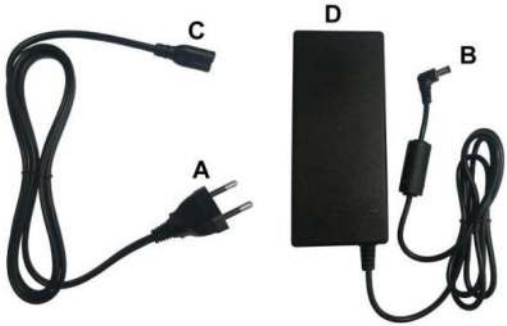
Standard Lithium Ion Battery # BA-P200

The OxymedP2 will be powered by standard lithium ion battery. When full charged, the battery can serve for up to 4 hours of operation. Recharge the battery by AC power when installed in the P2. Recharging time is not more than 4 hours.

AC Power Supply # EM11012E

The concentrator AC supply (EM11012E) is used to power the Oxymed P2 Oxygen Concentrator from an AC power source. when used with AC power sources, the power supply automatically adapts to input voltages from 100V to 240V(50-60HZ) permitting use with most power sources throughout the world.

Connect A plug to nearest AC power outlet→connect C plug to D port →connect B plug to Oxymed P2



WARNING	Do not use power supplies or power cable other than the specified above. Do not use power supplies /adapters or accessories other than those specified above. The use of non-specified accessories may create a safety hazard and/or impair equipment performance.

Accessories

Nasal Cannula

The Oxymed P2 Oxygen Concentrator must use a single lumen nasal cannula to provide oxygen to the patient.

WARNING	One single lumen nasal cannula should not be used by two or more persons. DO NOT use cannula length exceeding 25ft (7,6m)
CAUTION	When using a long cannula, the flow setting may be increased.
CAUTION	Increasing the cannula length may reduce the perceived noise during oxygen bolus delivery.
CAUTION	When using a long cannula, the flow setting may be increased.
CAUTION	Disposable usage for the cannula.
CAUTION	Choose the CE marked nasal cannula (e.g. Runmai NOC-DAW0721)

Carry bag # CB-P200

Oxymed P2 carry bag allows you to go out for daily activities with the Oxymed P2 concentrator. The bag is convenient to the patient.

Accessories List

Item	Qty
Nasal Cannula	1 pc
Carry Bag	1 pc
AC power supply	1 pc
Intake Filter	5 pc
Battery	1 pc

Battery Duration

Flow Settings	Battery Duration
1	5h 00min
2	3h 50min
3	3h 00min
4	2h 00min
5	1h 40min

- 10 hours* with additional battery
- Battery duration subject to factory test conditions only
- Backup may vary depends on practical usage

Ⅲ.OPERATING INSTRUCTIONS

General Operation

1. Find a well ventilated location to place the Oxymed P2, make sure it's turned off.

Be Sure to keep the Intake and exhaust with clear access. Try to locate the Kingon P2 in a suitable place where any auditory alarms may be heard.

WARNING	Do not use Oxymed P2 in the presence of flammable anesthetics, detergents or other chemical vapors.

CAUTION	Do not block the air intake or air exhaust when operating the equipment. Blocked air circulation or proximity to the heat source can cause internal heat build-up, shut down, or damage to the concentrator.

CAUTION	The Oxymed P2 Concentrator is designed for continuous use. It is useful to operate the product frequently for optimal sieve bed life.

CAUTION	Oxymed P2 is shipped from factory with battery removed.

2. Ensure the particle filter is in place.

CAUTION	Do not operate the Oxymed P2 without intake filter. Inhalation of system particles can damage the device.

3. Install the battery.

Flat slide the battery into place until the latch returns to the upper position along with audible sound .

4. Connect the AC power to Oxymed P2 .

The green LED on the power adapter will be on and the concentrator will generate a sound of beep.

CAUTION	Do not place anything in the power supply port other than the supplied wall cord. Avoid the use of electrical extension cords with the Oxymed P2.

CAUTION	Power supply is not waterproof. Do not disassemble the power supply.

CAUTION	When the power is disconnected from the AC outlet, disconnect it from the concentrator to avoid unnecessary battery discharge.

5. Join the nasal cannula to the nozzle fitting by end connector

Nozzle fitting is located on the top side of the Oxymed P2 near the pre-filter.
Connect a nasal cannula to the nozzle fitting.

CAUTION	Ensure that the cannula is routed to prevent it from being pinched or kinked to avoid a disruption of oxygen flow.

CAUTION	Disposable usage for the cannula.

6. Switch on Oxymed P2 by short pressing the ON/OFF Button.

Pressing the ON/OFF button for one second,a sound of beep and the indicator light's flashing will turn on.
" Welcome" will appear on the display while the concentrator starts up. The display will indicate the selected flow setting and power condition. A two-minute warm up time will initiate . During this period the oxygen concentration is building to but may not have reached specification. Under special conditions ,longer warm up time may be necessary ,such as a extremely cold temperature of storage or operation of Oxymed P2.

CAUTION	Oxygen concentration may not reach specification during the one-minute warm up time.

CAUTION	Oxymed P2 will enter mandatory Auto pulse mode after 30 seconds of starting up and lasts for 30 seconds .No inhalation will work during the 30 seconds .

7. Change the Oxymed P2 Concentrator setting to the flow rate prescribed by your physician or clinician.

Press the + or – setting buttons to adjust the Oxymed P2 to the desired setting. The current setting can be viewed on the display from 1 to 5.

CAUTION	Make sure the power is in a well-ventilated place. During operation, the power supply may get hot. Make sure the power supply is cool before handling.

8. Wear the nasal cannula on your face and breathe through your nose.

The Oxymed P2 will sense if you are breathing from it. If you are not yet breathing through the cannula, the Oxymed P2 will begin to pulse automatically about once every 3 seconds. As soon as you begin breathing through the cannula, the device will begin delivering pulses based on your breathing. As your breathing rate changes, the Oxymed P2 will sense these changes and adjust the amount of oxygen at next inhale.

WARNING	If you feel uncomfortable or uncomfortable using the device, consult your doctor right now.

CAUTION	A Low O2 ：< 87% alert will notify you if the oxygen level drops. If the alarm persists, contact your device provider.

CAUTION	The display could become darker if there is no operation of the device after 30 seconds. You can press any button to light up the display.

CAUTION	The Oxymed P2 will alert with audible and visual signals (such as “Absence Of Breath ”) when this mode is enabled and no breath has been detected for 15 seconds. At 15 seconds, the device will enter into auto pulse mode and once another breath is detected, the device will exit auto pulse mode and deliver normally on inspiration.

General
To remove power, disconnect the input cord from AC power source (like AC wall outlet) and disconnect it from the Oxymed P.2

DO's

- DO properly store your concentrator to avoid injuries and prevent damage.
- DO keep your device away from bodies of water and be aware of the weather. Don't allow your oxygen concentrator to get wet.
- DO keep your portable oxygen concentrator in a well-ventilated area.
- DO store your concentrator away from heat sources (e.g. space heaters, fireplaces, vents, electric blankets, etc.).
- DO charge the battery fully once in 2 months.
- DO use proper tubing and check it regularly for signs of wear and tear.
- DO clean your tubing regularly and replace it as needed.

Don'ts

- DO NOT smoke or allow others around you to smoke during oxygen therapy. Smoking with an oxygen concentrator is one of the most dangerous things you can do and will likely result in serious injury.
- DO NOT plug your concentrator into a power strip. Your concentrator should have its own outlet.
- DO NOT obstruct the vents on your concentrator or store the concentrator in an area with limited ventilation while it is being used.
- DO NOT cover your concentrator with blankets, clothing, draperies, etc
- DO NOT leave your oxygen equipment in a vehicle when not in use.
- DO NOT use your POC has main Oxygen source(Not recommended for 24/7)

Ⅳ.TROUBLESHOOTING

The table below lists some common problems and actions you can take. If you can't resolve a problem, please contact your equipment provider.

Problem	Possible Cause	Recommended Solution
Device Won't Turn On	Battery is not installed correctly	Remove the battery and re-install it correctly.
	Battery is depleted.	Use the AC power adapter to operate the device (with the battery inserted) to recharge the battery. If this does not resolve the problem, contact your equipment provider.
	the AC supply is poor contact.	Check power supply connection and verify green light on adapter is solid.
No Oxygen	The device is not turned on.	Turn on the concentrator.
	Cannula is kinked or obstructed.	Check cannula and its connection to the oxygen outlet port.
	Equipment failure.	Contact your equipment provider.
Oxygen Not At Full Concentration	The device is warming-up.	Wait 2 minutes for the device. If the problem is not solved, please contact your equipment provider.
	The sieve beds may require servicing.	Contact your equipment provider to change the sieve beds.
Alarm Occurs	Refer to Previous section-Alerts.	Refer to Previous section -Alerts.

Ⅴ.MAINTENANCE AND CLEANING OF Oxymed P2

Cleaning the Case

The outside case should be cleaned using a cloth dampened with a solution of mild detergent and water.

CAUTION	Do not allow liquids into any of the controls, the interior of the case, or the oxygen tubing connector. If this occurs, contact your equipment provider for assistance.

WARNING	Do not use alcohol, isopropyl alcohol, ethylene chloride or petroleum based cleaners on the cases or on the particle filters.

Cannula Replacement

The nasal cannula is designed for disposable usage. You can buy it from physician and/or equipment provider and/or cannula manufacturer's instructions.

Filter Cleaning and Replacement

Filters are designed to adequate air flow through the device at the front of the Oxymed P2.

Pre Filter # FI-P200

This particle screen must be cleaned on a weekly basis to ensure adequate air flow through the device. Clean the pre filters with a mild liquid detergent and water; be sure that the filter is dried without water before reuse.

CAUTION	It may be necessary to clean the particle filters more often in dusty or bad environments/conditions.

Intake Filter # FI-P201

The intake filter is designed to ensure the clean air into the compressor.

1. screw off the screw on the bottom of pre-filter by a Philips screwdriver.
2. Lift the particle screen up by the bottom end then remove it.
3. take out of the intake filter from the intake chamber;
4. put a new intake filter into the chamber;
5. Install pre filters.

Pre and intake filters can be purchased from your equipment provider.

Battery Care and Maintenance

The Oxymed P2 Lithium Ion Battery requires special care to ensure proper performance and long life. Use only Oxymed P2 batteries # BA-P200 with your concentrator.

CAUTION	Keep liquids away from batteries. If batteries become wet, stop use immediately and dispose of battery properly.

Battery Replacement

1.Press down the latch ,and flat slide the battery off

2.Insert the Oxymed P2 battery by sliding battery into place until the latch returns to the upper position.

Effect of Temperature on Battery Performance
To extend the run-time of your battery, the device should be used in temperatures between 41˚ F(5°C) and 95˚ F(35°C) for extended periods of time. The number of cycles that the battery will last is highly dependent upon the temperature at which the battery is charged.

CAUTION	Oxymed suggests that the room temperature should not be exceeding 75°F (24°C) when batteries are charged.

Battery Time Remaining Clock
The Oxymed P2 continuously displays battery time remaining. This displayed time is only an estimate and the actual time remaining may vary from this value.

CAUTION	Store battery in a cool, dry place. Store with a charge of 40-50%. Batteries should not be left dormant for more than 90 days at a time.

CAUTION	Battery should be removed from the device, when device not in used for 30 days.

Disposal of Equipment and Accessories

Follow your local governing ordinances for disposal and recycling of the Oxymed P2 accessories. The battery contains lithium ion cells and should be recycled and must not be incinerated.

Maintenance Items Lists

Item	Model No.
Oxymed P2 standard battery	BA-P200
Pre Filter	FI-P200
Intake Filter	FI-P201

For assistance, if there are some problems, contact your equipment provider, or manufacturer.

VI.SYSTEM SPECIFICATIONS

Concentrator Specification

Dimensions	L/W/H:8.70in.(22.1cm.)/3.35in.(8.5cm.)/6.30in.(16.0cm.)					
Weight	4.37 pounds 1.98Kg (with battery.)					
User Interface	2.8 inch large LCD color display screen					
Sound Level	49 dB (A) (on setting 2)					
Warm-Up time	2 minutes					
Oxygen Concentration	90% - 3% /+ 6% at all settings					
Flow Control Settings and Pulse Volumes	Settings					
		1	2	3	4	5
	Breath Rate	Pulse Volumes(ml)				
	10	21	42	63	84	100
	15	14	28	42	56	66.7
	20	10.5	21	31.5	42	50
	25	8.4	16.8	25.2	33.6	40
	30	7	14	21	28	33.3
	35	6	12	18	24	28.6
	40	5.3	10.5	15.8	21	25
	±15% at STPD* +/-25% over the rated environmental range *STPD is 101.3 kPa at an operating temperature of 20 °C, dry					
Breathing Frequency	10 to 40 BPM					
Inspiratory Trigger Sensitivity	≤ 0.12 cm H2O					
Maximum Outlet Pressure	25 PSI					
Use Mode	Continuous Use					

Concentrator Specification--Continued

Power: AC Power supply Rechargeable Battery	 AC Input: 100 to 240VAC 50 to 60 Hz Voltage: 14.4VDC Rated capacity:6.8Ah
Battery Duration	Up to 4 hours
Battery Charging Time	Not more than 4 hours
Environmental Ranges Intended for Operation	Temperature: 41 to 104˚F (5 to 40˚C) Humidity: 10% to 90%, non-condensing Altitude: 0 to 10,000 ft. (0 to 3048 meters,70kPa to 106 kPa)
Environmental Ranges Intended for Shipping and Storage	Temperature: -4 to 158˚F (-20 to 70˚C) Humidity: 5% to 90%, non-condensing Store in a dry environment Altitude: 0 to 10,000 ft (0 to 3048 meters,70kPa to 106 kPa)
Transportation	Keep Dry, Handle With Care

Classifications

Mode of Operation:	**Continuous Duty**
Type of Protection Against Electrical Shock:	Class II
Degree of Protection to Concentrator Components Against Electrical Shock:	Type BF Not intended for cardiac application
Degree of Protection to Concentrator Components Against Ingress of Water	IP22 - Not protected from dripping water. Protected against ingress of solid objects > 12.5 mm.

Standards Compliance

The device is designed to conform to the following standards:
- IEC 60601-1-2, 2014, Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests
- IEC 60601 - 1: Medical Electrical Equipment - part 1: General Requirements for Basic safety & Essential Performance
- AAMI ES60601-1: Medical Electrical Equipment - Part 1: General Requirements for Basic safety and Essential Performance
- IEC 60601-1-8 Medical electrical equipment – Part 1-8: General Requirements for Basic Safety and Essential Performance – Collateral Standard: General requirements, tests, and guidance for alarm systems in medical electrical equipment and medical electrical systems
- IEC 60601-1-11 Medical electrical equipment – Part 1-11: General Requirements for Basic Safety and Essential Performance – Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
- ISO 80601-2-67, Medical electrical equipment, Part 2-67: Particular requirements for basic safety and essential performance of oxygen conserving equipment
- ISO 80601-2-69, Medical electrical equipment, Part 2-69: Particular requirements for basic safety and essential performance of oxygen concentrator equipment
- ISO18562-1 2017 Biocompatibility evaluation of breathing gas pathways in healthcare applications -- Part 1: Evaluation and testing within a risk management process
- ISO18562-2 2017 Biocompatibility evaluation of breathing gas pathways in healthcare applications -- Part 2: Tests for emissions of particulate matter
- ISO18562-3 2017 Biocompatibility evaluation of breathing gas pathways in healthcare applications -- Part 3: Tests for emissions of volatile organic compounds (VOCs)
- ISO 10993-1 Biological evaluation of medical devices -- Part 1: Evaluation and testing within a risk management process
- AAMI/ANSI/ISO 10993-10:2010, Biological Evaluation of Medical Devices - Part 10: Tests for Skin Irritation
- AAMI/ANSI/ISO 10993-5:2009, biological Evaluation of Medical Devices - Part 5: Tests for in vitro Cytotoxicity

EMC Information

The device has been designed to meet EMC standards throughout its Service Life.
Guidance and Manufacturer's Declaration –Electromagnetic Immunity:
The Concentrator is intended for use in the electromagnetic environment specified below. The user of the Concentrator should make sure it is used in such an environment.

Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - Guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	±8 kV Contact ±15 kV Air	±8 kV Contact ±15 kV Air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical Fast Transient/Burst IEC 61000-4-4	±2 kV for Power Supply Lines±1 kV for Input/output Lines	±2 kV for Power Supply Lines ±1 kV for Input/output Lines	Mains power quality should be that of a typical home or hospital environment.
Surge IEC 61000-4-5	±1 kV Line to Line ±2 kV Line to Ground	±1 kV Line to Line ±2 kV Line to Ground	Mains power quality should be that of a typical home or hospital environment.
Voltage Dips, Short Interruptions and Voltage Variations on Power Supply Input Lines IEC 61000-4-11	<5% U_T (>95% Dip in U_T) for 0.5 Cycle at 45 degree increments 70% U_T (30% Dip in U_T) for 0.5 seconds <5% U_T (>95% Dip in U_T) for 5 Seconds	<5% U_T (>95% Dip in U_T) for 0.5 Cycle at 45 degree increments 70% U_T (30% Dip in U_T) for 0.5 seconds <5% U_T (>95% Dip in U_T) for 5 Seconds	Mains power quality should be that of a typical home or hospital environment. If the user of the Device required continued operation during power mains interruptions, it is recommended that the Device be powered from an uninterruptible power supply or battery.
Power Frequency (50/60Hz) Magnetic Field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical home or hospital environment.
Note: U_T is the A.C. mains voltage prior to application of the test level			

EMC Information-Continued

Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 6 Vrms Amateur Radio & ISM Bands between 150 kHz and 80 MHz 10 V/m 80 MHz to 2.7 GHz	3 Vrms 150 kHz to 80 MHz 6 Vrms Amateur Radio & ISM Bands between 150 kHz and 80 MHz 10 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the Device, including cables, than the recommended 30 cm separation distance. Interference may occur in the vicinity of equipment marked with the following symbol:

Guidance and Manufacturer's Declaration –Electromagnetic Emissions:

The Concentrator is intended for use in the electromagnetic environment specified below. The user of the Concentrator should make sure it is used in such an environment.

Emissions Test	**Compliance**	**Electromagnetic Environment - Guidance**
RF Emissions CISPR 11	Group 1	The Device uses RF energy only 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 Device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations/Flicker Emissions IEC 61000-3-3	Complies	

medequip®
Healthcare Solutions LLP
Making You Independent

Customer Copy

Oxy-med®

WARRANTY CARD

Product Code :

Serial Number :

Bill Number :

Date of Purchase :

Dealer Stamp :

Manufactured & Marketed by
Medequip Healthcare Solutions LLP
Plot No. A-12, A-13, Apparel Park, Phase 1,
Doddaballapur Industrial Area, Doddaballapur,
Bengaluru Rural District - 561203, Karnataka, India
Ph : +91 80 2836 2444 / 2836 2555
Email : customersupport@medequip.co.in
www.medequip.co.in

medequip®
Healthcare Solutions LLP
Making You Independent

Company Copy

Oxy-med®

WARRANTY CARD

Customer Name :

Product Code :

Serial Number :

Bill Number :

Date of Purchase :

Dealer Stamp :

Telephone :

E-mail :

Please Mail / Hand-over this warranty card within 15 days of purchase for warranty to be valid.
Please ensure Dealer stamp & date of purchase is filled for the warranty card to be valid.

TERMS AND CONDITIONS

- Warranty is valid only for 3 year for main unit, 1 year for Sieve Bed and Battery from the date of purchase shown on the Card.
- Warranty is only valid for the manufacturing defects, and does not hold good:
  - On damages caused due to wrong use of the product or due to not.

    Following the correct operating instructions, or in case repairs / modifications done by any third party.
  - In case the serial number on the product is altered/tampered or removed.
  - On General Wear and Tear of the parts due to prolonged usage.
- In the event of a complaint, the customer need to send / bring the product back to the authorized dealer from whom the product was purchase or to the company , at his own cost.

  As per Medical rules Cbed and battery as to be replaced to get the better result of the device. On failed conditions of non replacing of Cbed and battery resulting in a performance issue of machine. (eg : Battery backup maybe lessor or oxygen purity issues)
- All disputes are subject to Bangalore jurisdiction.

medequip®
Healthcare Solutions LLP
Making You Independent

Post Stamp

Medequip Healthcare Solutions LLP
Plot No. A-12, A-13, Apparel Park, Phase 1,
Doddaballapur Industrial Area, Doddaballapur,
Bengaluru Rural District - 561203,
Karnataka, India

www.medequip.co.in
customersupport@medequip.co.in
Ph : 080 28362444 / 080 28362555

SERVICE NETWORK PAN INDIA

Branch Office Address :

Delhi :
#W-37, Okhla Industrial Area,
Phase –2, New Delhi-110020

Hyderabad :
H No. 2-3-18/22, Tulasinagar, Golnaka,
Amberpet,Hyderabad, Telangana-500013

Bhubaneshwar :
Ground Floor, Sub Plot No.1, Plot No.112,
Lingipur, Lingipur, Bhubaneswar, Khordha, Odisha-751002

Pune :
No.2139,G-No. 1257, Area 00H, 05R,
Situated at Village Wadki,
Taluka Haveli, Pune, Maharashtra-412308

Surat :
Plot No.6, Krishna Park Industries,
Sania Hemad, Surat - 395 006. (Gujarat).

Lucknow :
Plot No. E-31, Phase II, Kanpur Road,
Transport Nagar, Lucknow, Uttar Pradesh-226012

Jaipur :
Plot No.818 II(2), Road No.14, Vishwakarma Industrial Area(VKIA),
Jaipur - 302013 (Rajasthan)

Kerala :
Mahe Railway Station Road, R S No. 831 A, Mahe Dist -673310
(Puducherry State)

Bhopal :
No 123-124, Ground Floor, Neha Greens, 1800 Sq ft,
Near DPS School, Neelbad, Bhopal - 462044 (Madhya Pradesh)

Chennai :
No. 5, Boombugar Nagar, Sothupakkam, Redhills,
Thiruvallur, Chennai - 600051 (Tamil Nadu)

Punjab :
No.144/147, Khasra No.18/12,7-12,13/1,4-0, Khewat
KhatoniBhabat Village, Zirakpur, SAS Nagar, Punjab - 140603

Indore :
83, Navlakha, Teen Ekka Compound, Indore - 452001 (Madhya Pradesh)

Kolkata :
No. Block CP-7/3, Salt Lake, Sector-V, Kolkata - 700091 (West Bengal)

Service network PAN India

- Karnataka, Tamil Nadu, Goa, Telangana, Andhra Pradesh
  Sales and Service: 08028362444/28362555, 7349466271, 9606091690,
  7624999529 (WhatsApp) Email : service@medequip.co.in, support@medequip.co.in
- J&K, Himachal, Delhi & NCR, Uttarakhand, Haryana, Punjab
  Sales and Service : 09902931222 Email : service.north@medequip.co.in
- Andhra Pradesh & Telangana-Service : 7337837736
  Email: service.hyderabad@medequip.co.in
- Uttar Pradesh - Service:7991898904, Email-service.up@medequip.co.in
- Odisha – Service – 9937457479, 7991898907, Email – service.odisha@medequip.co.in
- West India (Gujarat, MP, Rajasthan) – Service : 7227090909,
  Email: service.west@medequip.co.in
- Patna - Service : 9606056569, Email : service.bihar@medequip.co.in
- Kerala - Service : 7337837738, Email : service.kerala@medequip.co.in
- West Bengal - Service : 7600123000, Email : service.westbengal@medequip.co.in
- Nepal - Service : +977 9843345555,
  Email : service.nepal@medequip.co.in

- Maharashtra - Mumbai, Sales and Service: 9833610631, 9136293475
- Maharashtra - Mumbai, Sales and Service: 9820476886
- Maharashtra - Pune, Sales and Service: 8792510061
- Maharashtra - Nagpur, Sales and Service: 9422101036
- Maharashtra - Amravati, Sales and Service: 8087261931, 7775978154
- Maharashtra - Nashik, Sales and Service: 9881768758
- Gujarat - Ahmedabad, Sales and Service: 8792510062
- Gujarat - Vadodara, Sales and Service: 9913397233
- Gujarat - Rajkot, Sales and Service: 7573930303
- Madhya Pradesh - Bhopal, Sales and Service: 9981845233
- Madhya Pradesh - Indore, Sales and Service: 8792510063
- Rajasthan - Jaipur, Sales and Service: 9983669062, 8951790067
- Rajasthan - Jodhpur, Sales and Service: 9166654999
- Rajasthan - Udaipur, Sales and Service : 97728 87373

- customersupport@medequip.co.in

Plot No. A-12, A-13, Apparel Park, Phase 1,
Doddaballapur Industrial Area, Doddaballapur,
Bengaluru Rural District - 561203, Karnataka, India
www.medequip.co.in
Customer support information:
customersupport@medequip.co.in
+91 (0) 80 2836 2444 / 2555