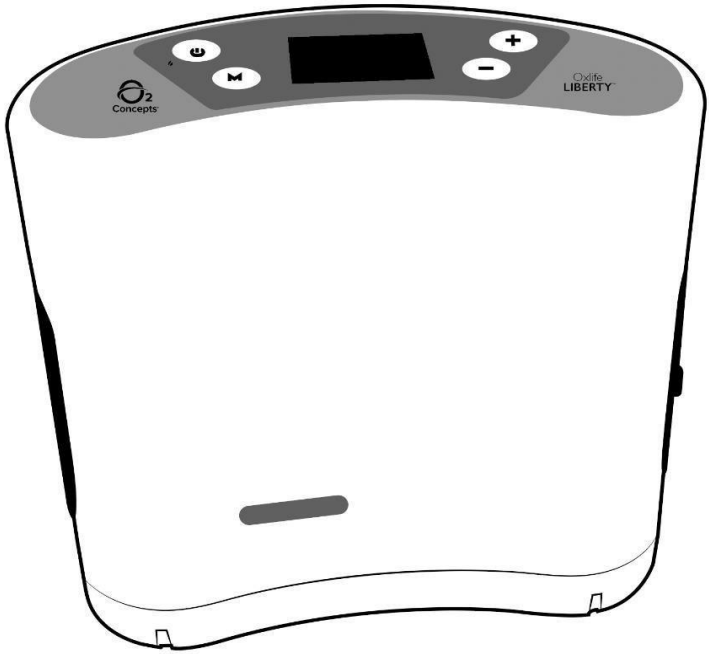
O2 Concepts®

OXLIFE LIBERTY®

OXLIFE LIBERTY2®

User Manual



301-0005V & 301-0005VP PORTABLE OXYGEN CONCENTRATOR
Oxlife Liberty and Oxlife Liberty2

USER: Read this manual before operating the device and save this manual for future reference.

HEALTH-CARE PROVIDER: This manual must be provided to the end user.

DNA® TECHNOLOGY

ENERGY SMART TECHNOLOGY®

PROUDLY DESIGNED, ENGINEERED AND ASSEMBLED IN THE U.S.A.

Table of Contents

Section 1: Introduction

PLEASE READ THIS USER MANUAL CAREFULLY BEFORE USING THE DEVICE. BE AWARE OF ALL WARNINGS AND SAFETY INFORMATION. ONLY USE ACCESSORIES APPROVED BY O_2 CONCEPTS® AND REFERENCED WITHIN THIS MANUAL.

IF YOU DO NOT FULLY UNDERSTAND ALL THE WARNINGS, SAFETY PRECAUTIONS, AND OPERATING INSTRUCTIONS, CONTACT YOUR AUTHORIZED DEALER OR HEALTHCARE PROVIDER FOR TECHNICAL SUPPORT.

Please contact your authorized dealer or healthcare provider if your Oxlife Liberty® requires service.

Please call O_2 Concepts® Technical Support to report any unexpected operation or events associated with the device at 1-877-867-4008 EXT 367.

Information about the Oxlife Liberty® and O_2 Concepts® can also be found on our website at **www.o2-concepts.com.**

CAUTION: U.S. FEDERAL LAW RESTRICTS THESE DEVICES TO SALE BY OR ON THE ORDER OF A PHYSICIAN.

Intended Use

The Oxlife Liberty® is a portable oxygen concentrator used on a prescriptive basis that enables patients requiring supplemental oxygen to be treated in a home, institutional, or vehicle/mobile environment.

The Oxlife Liberty® delivers 87%-95% pure oxygen to a patient through a standard single lumen nasal cannula.

The Oxlife Liberty® is capable of delivering oxygen in both continuous flow and pulse mode. In Pulse Mode the Oxlife Liberty® detects a patient breath and delivers a bolus of oxygen during the inhalation period. In Continuous Mode the device delivers a continuous flow of oxygen.

The Oxlife Liberty® can be set to deliver pulse flow rates in Settings 1 to 9 of 160 – 1500mL/minute of oxygen (at 20 BPM) and can be set to deliver continuous flow rates in Settings 0.5 to 1.5 LPM in .25 LPM increments.

The Oxlife Liberty2® can be set to deliver pulse flow rates in Settings 1 to 10 of 160 – 1600mL/minute of oxygen (at 20 BPM) and can be set to deliver continuous flow rates in Settings 0.5 to 2.0 LPM in .25 LPM increments.

The Oxlife Liberty® has standard power options which include a 100-240V AC power supply, a 10-15V DC power cord and a rechargeable lithium-ion battery.

Certain Oxlife Liberty® models may come equipped with O_2 Concepts® Dynamic Network Analysis® (DNA) Technology to provide equipment performance, usage data and GPS location to O2 Concepts® via cellular connectivity.

User Profile

The Oxlife Liberty® is suitable for patients requiring supplemental oxygen as prescribed by a physician for the treatment of chronic pulmonary and cardiovascular disease.

Symbols Reference/Safety Information

Icon	Meaning	Icon	Meaning
	**Caution** represents the possibility of damage to the equipment		**Warning** represents the possibility of harm to the operator or patient
	No smoking while using or near device		Not suitable for use in the presence of a flammable anesthetic mixture
	No open flames		Do not incinerate battery
	Indoor Use Only*		Use no grease or oils
	Do not disassemble		Do not dispose of in household waste
	Refer to instructions		Keep dry in transport and storage
	Electronic instructions for use available		Class II equipment
	Type BF equipment		Prescription only
	Recycle battery		Manufacturer
IP22	Drip proof equipment		Direct current
	Alternating current		

*Refers to AC power supply and DC power cord, not the Oxlife Liberty® device.

Device Symbols

Icon	Meaning	Icon	Meaning
	Power button		Cell connected
	Menu button		GPS signal
	Increase flow setting		RDM connected (Tech Support Only)
	Decrease flow setting		Provider Information
	Battery charge status		Alarm
	AC/DC battery charging indicator		Breath detection
	Cell signal strength		Device status
	Exit		AC/DC power
	Airplane mode		Contains Dynamic Network Analysis® (DNA) technology
	Device Language		

Specifications

Dimensions	
Device Dimensions	H: 10 in (25.4 cm) W: 9 in (22.9 cm) D: 3.5 in (8.9 cm)
Weights	
Device Weight	6.36 lbs. (2.88 kg)
Battery	1.14 lbs. (0.52 kg)
AC Charger	1.60 lbs. (0.72 kg)
DC Charger	0.39 lbs. (0.17 kg)
Modes of Operation	
Continuous Mode	301-0005V Five Settings, 0.5 to 1.5 in 0.25 LPM increments.
	301-0005VP Seven settings, 0.5 to 2.0 in 0.25 LPM increments.
	Maximum deviation in flow rate is ± 10%. Flow maintained with outlet pressure ranging from 0 to 5.0 psig (0-34kPa)
Pulse Mode	301-0005V Settings 1 to 9 (160ml to 1500mL/minute) Bolus volumes are in 8mL increments, from 8 to 75mL.
	301-0005VP Settings 1 to 10 (160ml to 1600ml/minute) Bolus volumes are in 8mL increments, from 8 to 80mL
	Maximum deviation of volume per breath is ± 15% across all environmental conditions.
Breath Sensitivity	The device will deliver a bolus based on a trigger pressure range of -0.08 to -0.35 cmH2O.
Battery Specification	Rechargeable 14.4V Lithium-Ion Battery
External Power Supply Power Input	AC power: 100 - 240 VAC, 50/60 Hz@ 2.5 amps DC power: 11.5-15 VDC; Recommended: 10A outlet at 12V
Operating Altitude	0-13,123ft or (0-4000m)

Oxygen Purity	91% ± 4% (87 - 95%); Measured purity values are within ± 2% of actual values; There is no variation in purity within the operating altitude. This applies to the full range of environmental operating conditions.
Operating Temperature	50°F (10°C) to 104°F (40°C)
Operating Humidity	10% - 95% @ 82.4°F (28°C)
Operating Atmospheric Pressure	1060hPa to 630hPa
Operating Environment	Free of smoke, pollutants, and fumes.
Transport/ Storage Temperature	-4°F (-20°C) to 140°F (60°C)
Transport/ Storage Humidity	0 -95% non-condensing
Operating Time	24 hours per day when connected to an external AC or DC power source. This is a continuous operation device.
Cannula Specification	DO NOT use cannula tubing longer than 7ft (2.13m) when using Pulse Flow Mode. DO NOT use cannula tubing longer than 50ft (15.25m) when using Continuous Flow Mode.
Sound Level	The volume that the device will reach at maximum settings will be ~ 52.3 dBA. The volume at setting 2 Pulse will be ~ 44.4 dBA.
Alarm Sound Level	All alarms triggered by the device will be 85 dBA or higher at 10cm from the unit.
Maximum Outlet Pressure	Maximum outlet pressure is 7.4 psig (51kPa)
Service Life	Device: 5yrs, Accessories: 1yr

Contraindications

⚠ Under certain circumstances, the use of non-prescribed oxygen therapy can be hazardous. This device should only be used when prescribed by a clinician.

⚠ Not for use in the presence of aerosol sprays or flammable anesthetics.

⚠ Additional monitoring may be required, as appropriate, for use by geriatric, pediatric, or any other patient unable to hear, see or interpret alarms or communicate discomfort.

⚠ The Oxlife Liberty® is not appropriate for any patient who would experience adverse health consequences as a result of a temporary interruption in oxygen therapy.

⚠ The availability of an alternate source of supplemental oxygen is recommended in the case of power interruption or a mechanical failure of the device. Consult your healthcare provider for a recommendation of an alternate source of oxygen.

⚠ It is the patient's responsibility to arrange for an alternate oxygen supply when traveling. O_2 Concepts® assumes no liability for persons choosing not to adhere to manufacture recommendations.

⚠ Use of the device by patients with tracheotomy, under the recommendation of a qualified clinician, will require the use of appropriate clinical apparatus or attachments.

Indications for Use

The O2 Concepts® Oxlife Liberty® is indicated on a prescription basis for the administration of supplemental oxygen. It is not intended for life support.

Dynamic Network Analysis®

This version of the Oxlife Liberty® contains Dynamic Network Analysis® (DNA) technology which is available to allow your health care provider to better serve your needs. This technology is intended to assist your provider in determining that the device is operating properly.

This device is FAA approved for use aboard passenger aircraft (FAA Advisory Circular 91.21-1B), including radio frequency emission limits of (RTCA) Document (DO) 160. section 21. Category M. Device contains FCC Id XPY2AGQN4NNN.

The cellular connection must be deactivated prior to flight on any commercial aircraft.

Instructions for deactivating the cellular connection are included within Section 7: Traveling.

Applied Parts

The applied parts, or components that a patient will come in contact with during normal operation of the device, are listed below:

- Device Enclosure
- Control Panel
- Oxygen Outlet Port
- External Power Input

Section 2: Safety Guidelines

Device Safety Guidelines

- **AVOID EXPOSURE TO OPEN FLAMES OR CREATION OF ANY SPARK NEAR YOUR OXLIFE LIBERTY. THIS INCLUDES SPARKS FROM STATIC ELECTRICITY CREATED BY ANY TYPE OF FRICTION. PROTECT ELECTRICAL POWER CORDS FROM SHARP EDGES TO AVOID ELECTRICAL SHOCK AND SERIOUS PHYSICAL INJURY.**
- Locate the Oxlife Liberty® in a well-ventilated area to allow for adequate air intake. Avoid the intake of airborne pollutants, smoke, or fumes. Wind or strong drafts can adversely affect accurate delivery of oxygen therapy.
- Use only approved accessories as specified in this User Manual. Use of non-approved accessories may cause serious damage to the device and will void the warranty.
- Use only parts recommended by the manufacturer to ensure proper function and to avoid the risk of fire and burns.
- Incompatible parts or accessories can result in degraded performance.
- Locate oxygen tubing and power cords away from hot surfaces and in a manner to prevent tripping hazards.
- **DO NOT** modify the device. Any modifications made to the device may impair performance or damage equipment and will void the warranty.
- **DO NOT** operate the device in an enclosed space, such as a closet, as it will impair device function.
- **DO NOT** cover the device or block the side vents or the exhaust ports located on the bottom of the device as it may impair device function.
- **DO NOT** drop or insert any objects or liquid into any opening.
- **DO NOT** leave your Oxlife Liberty® or batteries in your vehicle or trunk. Extreme heat or cold may damage your device and/or batteries.
- **DO NOT** ship the Oxlife Liberty® with the battery installed. Batteries must be shipped separately and packaged appropriately to avoid damage.
- Keep the device away from potential household pests to avoid infestation that will impair device performance and will void the warranty.

- This device complies with Part 15 of the FCC Rules.
  Operation is subject to the following two conditions:

  (1) This device may not cause harmful interference, and

  (2) This device must accept any interference received,
  including interference that may cause undesired operation.

- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 12 inches (30cm) to any part of the Oxlife Liberty® including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

- Use of accessories, transducers, or cables other than those specified by O_2 Concepts® could result in increased electromagnetic emissions or decreased electromagnetic immunity of the device and result in improper operation.

- Use of the device adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, the device as well as other stacked equipment should be observed to verify that they are operating normally.

- The device is suitable to use in a CISPR 11 Group 1 Class B environment for radiated emissions.

Patient Safety Guidelines

⚠ **DO NOT SMOKE WHILE USING THIS DEVICE. KEEP ALL MATCHES, LIT CIGARETTES, CANDLES, OR OTHER SOURCES OF IGNITION AT LEAST 10 FEET FROM THE DEVICE. THIS DEVICE PRODUCES ENRICHED OXYGEN GAS WHICH ACCELERATES COMBUSTION.**

⚠ **PRESCRIBED MODE AND FLOW SETTINGS SHOULD ONLY BE ADJUSTED UNDER THE ADVICE OF A PHYSICIAN.**

⚠ Outdoor use must be conducted using battery power.

⚠ Monitor children and pets when in proximity to the device.

⚠ Keep cannula tubing away from children and pets to avoid danger of choking or strangulation.

⚠ If you feel discomfort or are experiencing a medical emergency while undergoing oxygen therapy, seek medical assistance immediately to avoid harm.

⚠ **DO NOT** use the device with a damaged power cord or plug to avoid injury.

⚠ **DO NOT** operate the device on wet surfaces or in standing water, and do not submerge or expose to water or precipitation to avoid serious injury or damage to the device. If the Oxlife Liberty® has been dropped, damaged, or exposed to water please contact your authorized dealer or healthcare provider for inspection and possible service of the device.

⚠ **DO NOT** come in contact with the device when wet to avoid serious injury or the chance of shock.

⚠ Use only water-based lotions or salves that are oxygen compatible before and during oxygen therapy. **DO NOT** use oil, grease, or petroleum-based products on or near the device to prevent accidental ignition.

⚠ **DO NOT** lubricate fittings, connections, tubing or other accessories to avoid the risk of fire and burns.

⚠ **DO NOT** use the device with an extension cord.

⚠ Open flames during oxygen therapy are dangerous and are likely to result in fire or death. **DO NOT** allow open flames within ten (10) feet (3m) of the oxygen concentrator or any oxygen carrying accessories.

⚠ Oxygen makes it easier for a fire to start and spread.

⚠ **DO NOT** leave the nasal cannula or mask on bed coverings or chair cushions. If the oxygen concentrator is turned on, but not in use, the oxygen will make the materials flammable. Turn the oxygen concentrator off when not in use to prevent oxygen enrichment.

⚠ **SMOKING DURING OXYGEN THERAPY IS DANGEROUS** and is likely to result in facial burns or death. **DO NOT** allow smoking within the same room where the oxygen concentrator or any oxygen carrying accessories are located. If you intend to smoke, you must always turn the oxygen concentrator off, remove the cannula and leave the room where the oxygen concentrator is located. If you are unable to leave the room, you must turn the oxygen concentrator off and remove the cannula before smoking.

⚠ To ensure you are receiving the therapeutic amount of oxygen according to your medical condition, the Oxlife Liberty® must be used only after one or more settings have been individually determined or prescribed by a physician for you at your specific activity levels. The Oxlife Liberty® must be used with the specific combination of parts and accessories that were used while your settings were determined.

⚠ Replace cannula as recommended by the cannula manufacturer. Cannulas may become contaminated with body fluids or expired gases during use.

⚠ Use of this device outside of the stated altitude, temperature or humidity ranges is expected to adversely affect the flowrate and the percentage of oxygen and, consequently, the quality of oxygen therapy.

Battery and Power Supply Safety Guidelines

- Use of non-approved battery or power supply may cause serious damage to the device and will void the warranty.
- Store the battery in a cool dry place when not in use to enhance battery life.
- Remove the battery from the device if it will not be used for an extended period of time to enhance battery life.
- Locate the external power supply in the open air to prevent overheating when in use.
- U.S. Department of Transportation (DOT) and United Nations (UN) regulations require that the battery be removed from the device when checked as luggage on international flights.
- The battery may explode if exposed to or disposed of in a fire.
- Keep the battery away from children to prevent injury.
- **DO NOT** drive over, drag or place objects on the power cords to avoid damage.
- Use of a frayed or damaged AC or DC power supply cable may compromise basic safety with regard to the electromagnetic disturbances over the expected service life.
- **DO NOT** attempt to disassemble the battery or power supply. Doing so will void the warranty and may cause personal injury.
- **DO NOT** use the battery or power supply for anything other than its intended purpose. Doing so may damage the device or cause personal injury.
- **DO NOT** drop the battery or expose it to mechanical shock. If the battery is damaged, discontinue use and dispose of it properly to avoid personal injury.
- **DO NOT** expose the battery to water or other liquids. If the battery gets wet, discontinue use and dispose of it properly to avoid personal injury.
- **DO NOT** expose the battery to excessive heat or cold outside of specifications as it may affect performance.
- Use caution when handling the DC plug adapter. This plug may get hot with use. Ensure DC plug socket is clean of debris which may cause overheating.

Section 3: Product Description

Device and Accessories

- The use of certain humidifiers and administration accessories not specified for use with this oxygen concentrator may impair performance. Your physician, healthcare provider or authorized dealer will recommend the proper accessories for your use.
- Your physician, healthcare provider or authorized dealer will recommend the proper cannula for your use. Ensure that the selected cannula is compliant to ISO 80601-2-69 Medical Electrical Equipment, Particular requirement for basic safety and essential performance of oxygen concentrator equipment.
- The configuration of the equipment and accessories must be determined for each individual patient.

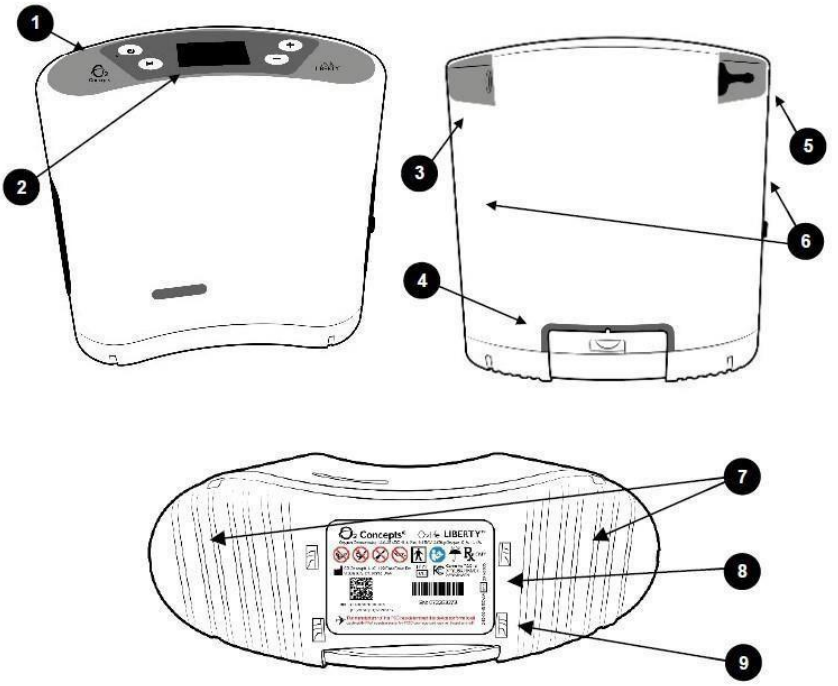
This manual applies to the following accessories:

› Battery
› AC Power Supply
› DC Power Cord
› Accessory Bag
› Carry Bag
› Cannula (not included)

This manual does not apply to the following accessory items sold separately:

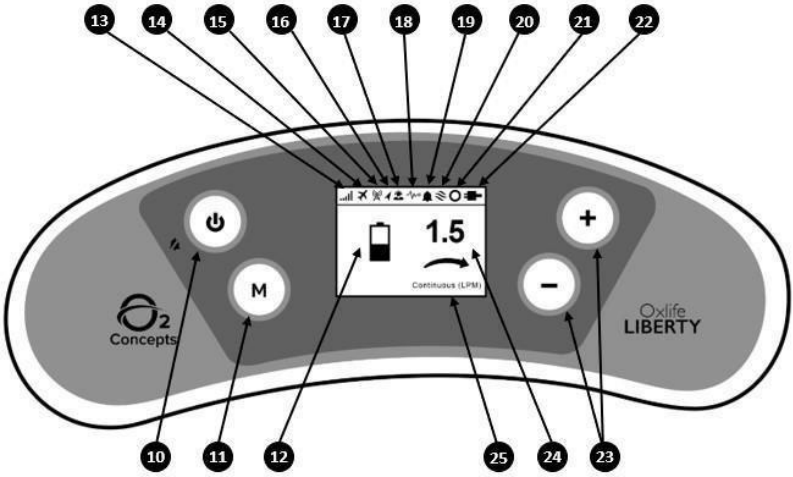
› Desktop Battery Charger

Feature Identification



1. Control Panel
2. LCD Display
3. External Power Input
4. Rechargeable Battery
5. Oxygen Outlet Port
6. Side Vents
7. Exhaust Ports
8. Device Serial Number
9. FAA Approval Statement

Understanding the Control Panel



10. Power Button
11. Mode Button
12. Battery Status/Battery Charging Indicator
13. Cell Signal Strength
14. Airplane Mode
15. Cell Connected
16. GPS Signal
17. RDM Connected (Tech Support Only)
18. RDM Mode (Tech Support Only)
19. Alert/Alarm Indication
20. Breath Detection
21. Green Status Circle – Open circle during warm-up. A Filled circle indicates flow and purity are within specifications.
22. External Power Source
23. Increase/Decrease & Scroll Buttons
24. Device Setting
25. Mode Setting

Section 4: Operating Instructions

Before Operating

Your authorized dealer or healthcare provider has demonstrated the proper operation of your Oxlife Liberty®. This manual provides product information and operating instructions and should be saved for future reference to help you safely operate your device. If you have any further questions, contact your authorized dealer or healthcare provider.

This equipment must be placed into service in accordance with the information provided in the accompanying documents.

DO NOT operate the Oxlife Liberty® without first reading the Safety Guidelines included in **SECTION 2** of this manual.

Please follow all operating instructions.

Before each use, ensure that side vents are clean and in place and that cannula and power cord connections are intact.

If you are relocating your Oxlife Liberty® from an extreme environment, allow the device to return to the specified operating temperature and humidity ranges before use.

Operating your device outside of specified ranges may damage your device, impact device performance and may void your warranty.

See Operating Temperature and Humidity Ranges listed in the Specification Table.

Fully charge battery before first use.

The essential performance of the Oxlife Liberty® is to produce 91% ±4% oxygen at all continuous settings and pulse flow settings.

Locating Your Device

Place the Oxlife Liberty® in a well-ventilated area free of smoke, fumes, pollutants, and away from direct sunlight. Avoid high humidity environments.

Ensure side vents and exhaust ports are not obstructed.

Proper placement and positioning of the device is critical to the effectiveness of the oxygen therapy.

The Oxlife Liberty® **MUST** be located so that alarms can be heard.

Position the oxygen supply tubing and power cords in a manner that prevents kinking, air flow obstructions, and tripping hazards.

DO NOT operate the device in an enclosed space, such as a closet.

DO NOT locate the Oxlife Liberty® near any flammable materials or cleaning product or in the direct path of any heat source such as a stove, heat register or a car heater. Keep the Oxlife Liberty® at least 10 feet (3m) from hot sparking objects or open flame.

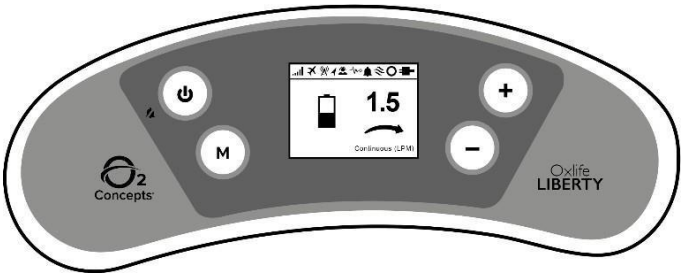
Device Settings

Turn the device on by pressing the Power button. ⏻

Press the Mode button M to select Continuous or Pulse Mode.

Press the Increase + or Decrease − buttons to select the desired flow rate.

Turn the device off by pressing the Power button. ⏻



When the device is powered on it will enter a five (5) minute warm-up period to reach desired performance. The warm-up period is indicated on the display screen by a green ring that becomes a green circle once warm up is complete.

THE PROPER FLOW MODE AND FLOW RATE ARE PRESCRIBED BY YOUR PHYSICIAN. DO NOT CHANGE THESE SETTINGS WITHOUT CONSULTING YOUR PHYSICIAN.

PULSE MODE SHOULD ONLY BE USED UNDER THE DIRECTION OF YOUR PHYSICIAN. APPROPRIATE AND SAFE PULSE MODE SETTINGS MUST ACCOMMODATE THE INDIVIDUAL PATIENT'S LIFESTYLE INCLUDING REST, TRAVEL AND EXERCISE.

DEVICE OXYGEN DELIVERY SETTINGS SHOULD BE PERIODICALLY REASSESSED FOR THE EFFECTIVENESS OF THE OXYGEN THERAPY.

The patient is the intended operator.

Consult your healthcare provider if you are feeling unwell, which may indicate too much or too little oxygen. These side effects are not immediate or life threatening.

Continuous (LPM)

CONTINUOUS MODE
In Continuous Mode the device will deliver a continuous flow of oxygen through the nasal cannula. The oxygen is measured in Liters per Minute or LPM.

Pulse

PULSE MODE
In Pulse Mode the device will detect your breath and deliver a measured pulse of oxygen or bolus through the nasal cannula. The breath detect icon will flash on the control panel with each breath.

Pulse Mode Bolus Volumes (mL)

Breaths per Minute	1	2	3	4	5	6	7	8	9	10*
15	8.0	16.0	24.0	32.0	40.0	48.0	56.0	65.0	75.0	80.0
20	8.0	16.0	24.0	32.0	40.0	48.0	56.0	65.0	75.0	80.0
25	6.4	12.8	19.2	25.6	32.0	38.4	44.8	52.0	60.0	64.0
30	5.3	10.7	16.0	21.3	26.7	32.0	37.3	43.3	50.0	53.3
35	4.6	9.1	13.7	18.3	22.9	27.4	32.0	37.1	42.9	45.7
40	4.0	8.0	12.0	16.0	20.0	24.0	28.0	32.5	37.5	40.0

*Pulse Mode setting 10 available with the Liberty2 device.

Pulse Mode No Breath Detection

When the device has not detected a breath for 45 seconds, the screen will turn amber, sound a 3-beep sequence and the text “No Breath” will flash on the screen. If the device does not detect a breath after an additional 15 seconds, the device will beep once and switch to Continuous Mode.

No Breath Detection Recovery

While in this condition, the breath detection icon on the top of the screen will turn red. The device will check for inspiration for 20 seconds every 15 minutes. If a breath is detected, the device will return to the last Pulse Mode setting. If no breath is detected, the device will stay in Continuous Mode and check for inspiration every 15 minutes.

The device will return to the last Pulse Mode setting at next power up or if the power source is changed.

Installing and Removing the Battery

To install battery, align battery with battery slot in device and slide until battery clicks into place.

To remove battery, depress button and slide battery toward you.

- Turn off the device before removing the battery.
- **DO NOT** use the Oxlife Liberty® without a battery installed.

Typical Battery Operation Times

Continuous Mode Settings	Operating Time/Hours
0.5	3.25
0.75	2.5
1.0	2
1.25	1.75
1.5	1.5
1.75*	1.25
2.0*	1
Pulse Mode Settings	**Operating Time/Hours**
1	4.5
2	4
3	3.5
4	3
5	2.5
6	2
7	1.75
8	1.75
9	1.25
10*	1.25

*Continuous Mode settings 1.75 and 2.0 and Pulse Mode setting 10 are available with the Oxlife Liberty2 device.

Battery operating times are based on a new, fully charged battery and are ± 10%.

Battery operating time will degrade with battery age, number of charge cycles and operating environment.

Battery Time Management

The Oxlife Liberty® is equipped with a rechargeable lithium-ion battery that is not user serviceable.

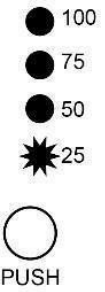
The battery will degrade over time from standard use. The rate of such degradation is dependent upon the frequency of operation of the device under battery power as well as the frequency and length of associated battery charging cycles.

The manufacturer recommends that the user regularly monitor battery performance by viewing the battery charge level indicator on the battery and the device display. Batteries should be replaced at least every two years.

With the combined use of the battery, AC power supply, and DC power cord you may extend your time away from home. Using the AC and DC power cords whenever possible will improve battery life. The battery will charge in the device, when plugged into an external power source.

Battery Charge Status is displayed on the control panel. As the charge level increases on the battery, the battery icon will turn solid in proportionate levels. When the battery is fully charged (over 95%) the battery icon will appear solid.

The Oxlife Liberty® battery includes a battery charge status indicator located on the front of the battery. Simply press the "PUSH" button on the battery to display the remaining battery life in 25% increments.



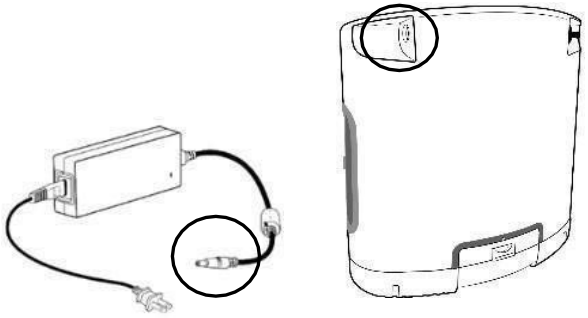
The typical time to recharge a fully discharged battery is under 2.5 hours with the device plugged into the AC power supply and powered off. Battery charge times while the device is running will vary depending on elected setting.

To maximize battery life:

- Store battery in a cool, dry place when not in use. Store battery with at least 50% capacity remaining.
- If using multiple batteries, uniquely label each battery to ensure each battery is rotated equally.
- Charge batteries every three (3) months when not in use.

There is no routine maintenance or service required for the Oxlife Liberty® rechargeable batteries other than the periodic replacement as described above.

AC Power Supply



- Use only the AC power supply (800-1083) provided with this device. Use of power cords not supplied by O_2 Concepts® may cause overheating or damage to the device and will void the warranty.
- The power supply is not water resistant.
- **DO NOT** place anything in the power supply port other than the supplied AC or DC power cords.
- Ensure the power supply is in a well-ventilated area. The power supply may become hot during operation. Allow the power supply to cool before handling.

The AC power supply consists of the following components:

› Power supply with attached power supply cable to connect to the device.
› AC power input cable

When powered on, the green LED on the power supply will be illuminated.

The AC power supply charges the battery using a 100-240V 50/60 Hz outlet (a typical wall outlet in your home). The AC power supply allows use of your Oxlife Liberty® while simultaneously charging the battery.

To use the AC power supply, connect the power cord to the AC power converter (brick). Connect the power supply to a wall outlet and then to the Oxlife Liberty®. The external power icon will be displayed on the control panel.

The AC power supply will charge the battery at all settings.

Recommendation for Use

Do not use electrical outlets controlled by a switch.

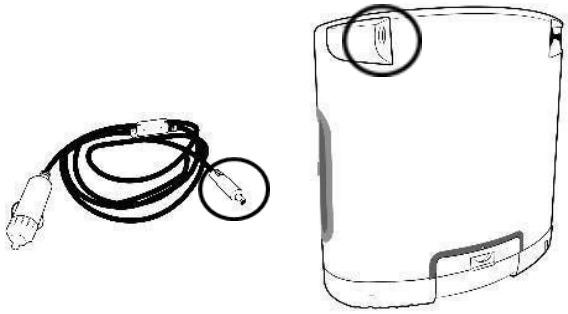
When changing power sources, wait for the control panel to display the new power icon and the unit to beep before removing the original source.

The detachable power supply cord to the power supply is the means of isolating the unit from the power supply main.

If the AC power supply is removed from the device, wait 10 seconds before re- applying power.

When traveling internationally, a standard, applicable, international power plug adapter will be required.

DC Power Cord



The DC power cord allows use of your Oxlife Liberty® device from a vehicle's 12-volt DC outlet in all settings while the vehicle is running. A 12-volt, 15-amp outlet is recommended for use with the device. The external power source icon will be displayed on the control panel. DC power is not sufficient to rapid charge the battery at all settings. Details on battery charging speeds are provided per settings below.

Device Settings	Flow Mode	Battery Charging Speed
0.5 – 1.0	Continuous	Rapid Charge
1 – 4	Pulse	
1.25 – 1.5	Continuous	Trickle Charge
5 – 10	Pulse	
1.75 – 2.0	Continuous	No Charge

Each vehicle's DC power outlet varies in specifications and performance. Moreover, such performance may be adversely impacted by one or more applications simultaneously drawing DC power (e.g., cell phones, media players, other electrical systems in the vehicle). In addition, DC power may fluctuate more significantly in stop and go driving conditions.

If your vehicle's DC voltage output drops below device power requirements, the device will alert. In this condition, the device's performance should be monitored. A flow setting reduction may improve DC performance. If a vehicle's DC voltage output continues to decrease, the device will alarm and then shut down. Switch to battery power to continue using your device.

- Use only the DC power cord (800-1079) provided with this device. Use of power cords not supplied by O2 Concepts may cause overheating or damage to the device and will void the warranty.

Recommendations for Use

When operating the Oxlife Liberty® in your vehicle, ensure that the device is securely stowed and will not get damaged during transport.

Ensure that side vents and exhaust ports are not blocked.

The battery may not charge at any setting if the engine is not running.

Use the DC outlet closest to the car battery.

DO NOT leave the device plugged into the vehicle when the engine is not running.

DO NOT use the Oxlife Liberty® with any power splitting devices.

DC Power Cord User Information Guide

Starting the device on DC power

1. **ALWAYS** have the vehicle's engine running **BEFORE** plugging in your Oxlife Liberty®.

2. Plug DC power cord into the device **BEFORE** plugging into the vehicle's DC outlet.

3. Plug DC power cord into the vehicle's DC outlet.

4. Remove the DC power cord from the vehicle's DC outlet when the engine is not running.

Disconnecting the device from DC power

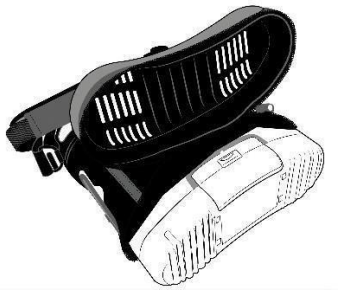
1. When the device is OFF, disconnect the DC power cord from the vehicle's DC outlet.
   The device will beep once and switch to internal battery power.

DC Power Cord Troubleshooting Guide

Event	Solution
Battery Not Charging	• Reduce the device mode to the lowest setting on either Pulse or Continuous mode and wait for charging icon to appear. • Slowly increase settings to determine if charging can be achieved at prescribed setting. Each vehicle's DC power performance varies and may limit achieving the desired flow rate. • Refer to DC Power Cord pg. 31 for further details on how charging occurs at different flow settings.
Depleted Battery Charging	• A fully depleted battery may not begin charging unless the device is powered off. The lightning bolt may not display initially in the battery icon until the battery has charged to a minimum level.
Device Alerting / Beeping Intermittently	• Occurs when the DC voltage supplied by the vehicle drops in and out of the minimal DC input threshold required for device use. • Using a lower flow setting* may improve DC outlet performance.
Low External Power Alarm	• To reduce potential device shut down on DC power, eliminating other sources of power draw can improve performance. Examples of electrical systems that draw power away from the DC outlet include air conditioning. • Using a lower flow setting* may improve DC outlet performance. • Check your vehicle's user manual or consult an auto technician to determine if your vehicle's DC power amperage and wattage are sufficient. The device requires 12 volts (10 amps) to power reliably at all settings.

** Consult your healthcare provider for advice on changing settings.*

Carry Bag



The Oxlife Liberty® carry bag provides protection and allows you to easily take your device with you for your daily activities.

Always use your Oxlife Liberty® in the supplied carry bag.

Check that the adjustable shoulder strap is secure, and the battery access zipper is closed before each use.

The Oxlife Liberty® is inserted into the carry bag from the bottom zippered section of the carry bag.

Ensure that side vents are aligned with the openings in the carry bag and access zipper is closed.

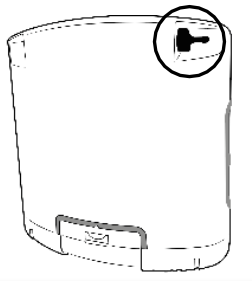
The battery can be accessed via the zipper without removing the device from the carry bag.

The carry bag is designed with an external pocket to carry your Oxlife Liberty® accessories or an additional battery.

Accessory Bag

The Accessory Bag is designed to carry your Oxlife Liberty® accessories including the AC power supply, DC power cord and extra batteries.

Cannula Use



- ⚠ Your physician, healthcare provider or authorized dealer will recommend the proper cannula for your use.
- ⚠ Ensure selected cannula is compliant to *ISO 80601-2-69 Medical Electrical Equipment, particular requirement for basic safety and essential performance of oxygen concentrator equipment.*
- ⚠ Use of a cannula not specified for use with oxygen may impair the performance of your device.
- ⚠ **DO NOT** use cannula tubing longer than 7 feet (2.13m) in Pulse Flow Mode.
- ⚠ **DO NOT** use cannula tubing longer than 50 feet (15.25m) in Continuous Flow Mode.
- ⚠ A single lumen nasal cannula rated at 6 liters per minute is required to ensure proper oxygen delivery.
- ⚠ To ensure proper oxygen flow, confirm that the cannula is not pinched or blocked in any way.
- ⚠ The cannula fitting may be tight.
- ⚠ **DO NOT** use grease or oils to lubricate the oxygen outlet port.

Read and follow the instructions included with the cannula and provided by your authorized dealer.

Regularly clean and replace your cannula as instructed by the manufacturer and authorized dealer or healthcare provider.

O_2 Concepts® recommends the following cannulas by Salter Labs:

For Pulse Mode Use: 7ft (2.13m) cannula: Part #16SOFT-7, or equivalent.

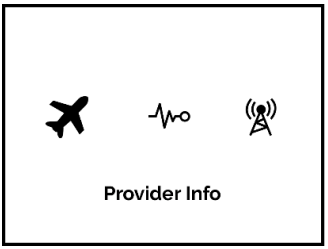
For Continuous Mode Use: 50ft (15.25m) cannula: Part #OTC-203-50, or equivalent.

Accessing the Menu Screen

The provider screen shows information about the device's status and run hours.

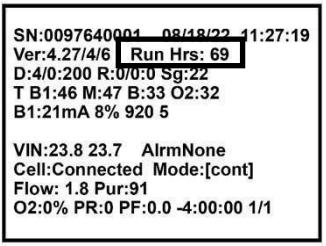
To access the Menu screen:

› Press the Mode (M) and Minus (-) buttons simultaneously.
› Press the Plus (+) button or Minus (-) button to scroll through the screen options.
› To enter and exit a screen, press the Mode (M) button.
› Select the icon to enter the provider screen.



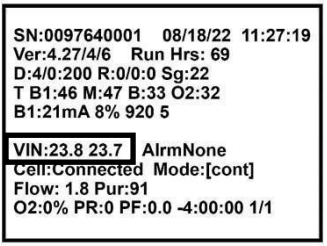
Run Hours:

The run hours are the total life hours the device has run.
(Example: Run Hrs: 69, where the device has been run a total of 69 hours)



Voltage In:

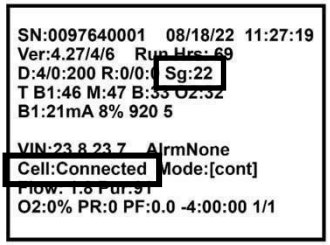
Voltage In is the voltage that the device is receiving from an external power source such as the AC power supply or DC power cord.
(Example: VIN: 23.8 where 23.8 is in volts)



Cell Status and Signal Strength:

The cell status is listed in the eighth row.
(Example: Cell: Connected)

The cell signal strength is listed in the third row on a scale of 0 – 31.
(Example: Sg:22)



Changing Device Language

Device language is available in English, French, German, Italian and Spanish.

To change device language:

› Press the Mode (M) and Minus (-) buttons simultaneously to access the Menu screen.

› Press the Plus (+) button to scroll to the language icon ( ).

› Press the Mode (M) button and the current language will be displayed.

› Press the Plus (+) button to scroll through the language choices.

› Press the Mode (M) button to select language and then the Plus (+) button to confirm.

Section 5: User Alerts and Alarms

The functionality of the alarm system is verified automatically by the unit upon start up by the unit flashing three (3) visual display colors and audible indicators. There will be delays that are greater than ten (10) seconds inherent to specific alarms, and these delays are explained in detail for each alarm in the following tables. To ensure that audible alarm notifications are heard, the maximum distance the user can be from the device is dependent on surrounding noise levels. When two alarm conditions occur at the same time, the higher priority condition will be displayed.

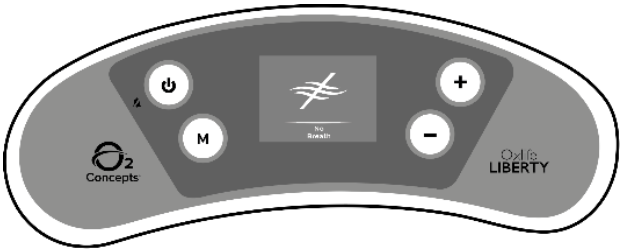
Indefinite Acknowledge (Alarm Mute)

In an alert or alarm condition, pressing the power button momentarily will put the device into an indefinite acknowledge state or alarm mute. In this state, the alarm will be silenced, and the screen will stop flashing. The device will stay in this state until powered off or until a higher-priority alarm is activated.

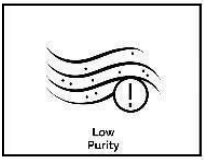
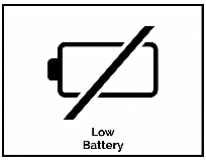
DO NOT IGNORE ALERTS OR ALARMS

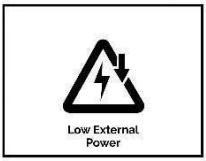
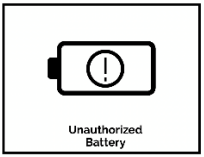
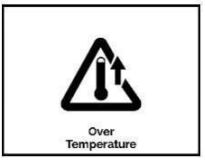
Alarm and Alert Screen Descriptions

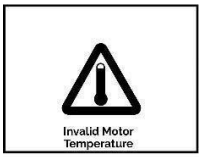
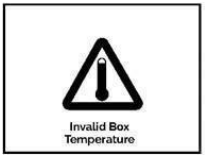
Alarms

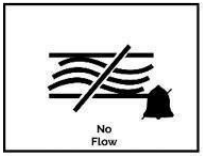


The LCD screen will be RED in Alarm Mode

Low Purity Alarm (technical) (high priority) 	When oxygen levels drop below 72% for 60 seconds, the screen will flash red, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text “Low Purity” will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Clean or replace side vents. Change to another source of oxygen and contact your authorized dealer.
Low Battery Alarm (technical) (high priority) 	When battery power is depleted, the pump shuts off, the screen will flash red at 2Hz, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text “Low Battery” will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Plug into an external power source. Replace depleted battery with a charged battery.

Low External Power Alarm (technical) (high priority)  	When the voltage from an external power source falls below 10 volts (as measured by the device internally), the screen will flash red at 2Hz, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text “Low External Power” will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Ensure all charging connections are intact. Ensure the battery is installed. Refer to the DC user guide section of this manual. Change to another source of power and contact your authorized dealer.
Unauthorized Battery Alarm (technical) (high priority)  	If the device detects that a battery other than an Oxlife Liberty® battery has been installed in the device, the battery icon will show an exclamation point within the battery outline. If no other power source is present, the screen will flash red at 2Hz, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text “Unauthorized Battery” will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Remove unauthorized battery and replace with an authorized Oxlife Liberty® battery.
Over Temperature Alarm (technical) (high priority)  	The maximum operating temperature of the enclosure and pump is 70°C. If either of these component temperatures are reached for 15 seconds, the screen will flash red at 2Hz, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text “Over Temperature” will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Relocate the device to improve airflow or to a cooler environment and allow the device to reach operating temperature. Utilize an alternate source of oxygen if necessary and contact your authorized dealer.

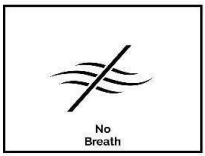
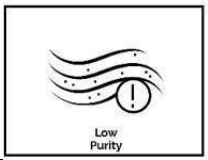
Invalid Motor Temperature Alarm (technical) (high priority) 	When the motor temperature is out of a valid range for 15 seconds, the screen will flash red at 2Hz, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text “Invalid Motor Temperature” will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Relocate the device to improve airflow or to a cooler environment and allow the device to reach operating temperature. Utilize an alternate source of oxygen if necessary and contact your authorized dealer.
Invalid Box Temperature Alarm (technical) (high priority) 	When the internal box temperature is out of a valid range for 15 seconds, the screen will flash red at 2Hz, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text “Invalid Box Temperature” will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Relocate the device to improve airflow or to a cooler environment and allow the device to reach operating temperature. Utilize an alternate source of oxygen if necessary and contact your authorized dealer.
Invalid Flow Alarm (technical) (high priority) 	When the pulse volume is out of a valid range by 15% for 60 seconds the screen will flash red at 2Hz, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text “Invalid Flow” will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Check cannula connection. Repair or replace tubing. Clean or replace side vents. Move device to ensure adequate air flow. Ensure device is oriented for operation, vertically with display visible or horizontally. Change to another source of oxygen and contact your authorized dealer.

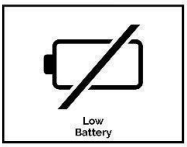
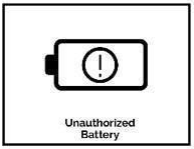
No Flow Alarm (technical) (high priority)  	When the flow of oxygen is stopped for 45 seconds, the screen will flash red at 2Hz, sound a 10-beep sequence repeated after 2.5 seconds of silence and the text "No Flow" will flash on the screen. The alarm will continue to sound until the power button is pressed momentarily to silence the audio; or the power button is held to power off the unit; or 15 seconds has expired at which time the device will power off.
Solutions	Check cannula connection. Repair or replace tubing. Clean or replace side vents. Move device to ensure adequate air flow. Change to another source of oxygen and contact your authorized dealer.

DO NOT IGNORE ALERTS OR ALARMS

Alerts

The LCD screen will be AMBER in Alert Mode

No Breath Alert (technical) (low priority) 	When the device has not detected a breath for 45 seconds, the screen will turn amber, sound a 3-beep sequence and the text “No Breath” will flash on the screen. If the device does not detect a breath after an additional 15 seconds, the device will beep once and switch to Continuous Mode. While in this condition, the breath detection icon on the top of the screen will turn red. The device will check for inspiration for 20 seconds every 15 minutes. If a breath is detected, the device will return to the last Pulse Mode setting. If no breath is detected, the device will stay in Continuous Mode and check for inspiration every 15 minutes. The device will return to the last Pulse Mode setting at next power up or if the power source is changed.
Solutions	Check the cannula for kinks or obstructions. Ensure patient is breathing through their nose.
Low Purity Alert (technical) (low priority) 	When oxygen levels drop below 85% for 60 seconds, the screen will turn amber, sound one beep every 30 seconds and the text “ALERT Low Purity” will flash on the screen. Pushing the Power button once momentarily silences the alert.
Solutions	Clean or replace side vents. Contact your authorized dealer.

Low Battery Alert (technical) (low priority) 	When calculated battery run time reaches 6 minutes remaining, the screen will turn amber, sound one beep every 30 seconds and the text "ALERT Low Battery" will flash on the screen. Pushing the Power button once momentarily silences the alert.
Solutions	Connect to an external power source. Replace depleted battery with a charged battery.
Unauthorized Battery Alert (technical) (medium priority) 	If the device detects that a battery other than an Oxlife Liberty® battery has been installed in the device, the battery icon will show an exclamation point within the battery outline. The device will continue to run if AC or DC power is present. The screen will turn amber, sound a 3-beep sequence repeated after 15 seconds of silence and the text "Unauthorized Battery" will flash on the screen. Pushing the Power button once momentarily silences the alert.
Solutions	Remove unauthorized battery and replace with an authorized Oxlife Liberty® battery.
Low External Power Alert (technical) (medium priority) 	When the voltage from an external power source falls to 10.5 volts or less (as measured by the device internally) for 3 seconds, the screen will turn amber, sound a 3- beep sequence repeated after 15 seconds of silence and the text "ALERT Low Ext Power" will flash on the screen. Pushing the Power button once momentarily silences the alert.
Solutions	Ensure all charging connections are intact. Ensure the battery is installed. Refer to the DC user guide section of this manual. Change to another source of power and contact your authorized dealer.

DO NOT IGNORE ALERTS OR ALARMS

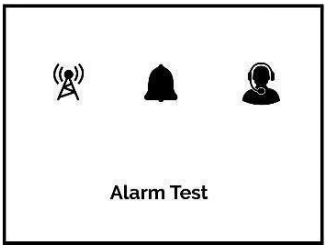
Alarm System Test

Use this test to verify that the alarm system is working properly. This test includes screen color, screen flashing sequence, and audible alarm sequence. Follow the steps in the procedure listed below.

› Simultaneously press the Mode (M) button and Minus (-) button to enter the Menu screen.

› Press the Plus button (+) or Minus button (-) to scroll to the Alarm Test icon.

› Press the Mode button (M) to select Alarm Test.

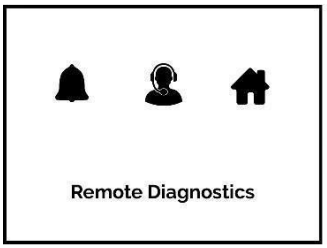


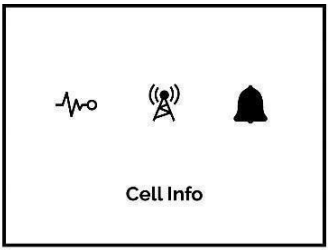
The system will begin by testing the High Priority Alarm. The High Priority Alarm consists of a 10-beep sequence separated by 2.5 seconds of silence and the LCD screen flashes red. The alarm symbol will appear on the screen.

The device will automatically enter the Medium Priority Alarm test once the High Priority Alarm sequence has concluded. Pressing the Mode (M) button while the High Priority Alarm test is in progress will terminate the High Priority Alarm test and start the Medium Priority Alarm. The Medium Priority Alarm consists of a 3-beep sequence separated by 15 seconds of silence and the LCD screen will flash amber. The alarm symbol will appear on the screen.

The device will automatically enter the Low Priority Alarm test once the Medium Priority Alarm sequence has concluded. Pressing the Mode button (M) while the Medium Priority Alarm test is in progress will terminate the Medium Priority Alarm test and start the Low Priority Alarm. The Low Priority Alarm consists of a single, 1-beep and a solid amber LCD screen. The alarm symbol will appear on the screen.

At the conclusion of the test, the menu screen will appear. Use the Plus button (+) or Minus button (-) to toggle to the Home screen. Press the Mode button (M) to return to the home screen.





The Remote Diagnostics and Cell Info screens are for use solely by O_2 Concepts® or your provider's technical support.

Section 6: Maintenance and Cleaning

Maintenance

Routine cleaning of the side vents, and the device care and cleaning, as described below, are the only routine maintenance by the user necessary for the operation of the Oxlife Liberty®.

There is no routine maintenance or service to the Oxlife Liberty® lithium-ion rechargeable batteries other than periodic replacement as described in the section on Battery Time Management, page 28.

All other maintenance or service **MUST** be conducted by a qualified Oxlife Liberty® service technician. **DO NOT** attempt to disassemble or perform any maintenance on your device. Any such attempt will void the warranty.

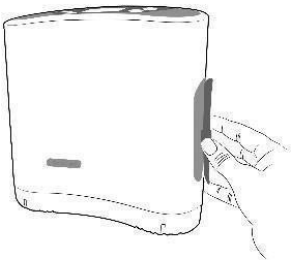
Pre-Use Functional Check

A trained service technician can qualitatively verify that the device is ready for use by performing the following protocols:

- Connect the nasal cannula to the cannula port on the device. Set the device to Continuous Mode. The technician should be able to hear the flow of oxygen by placing the outlet of the nasal cannula near his or her ear (do not direct flow straight at ear to avoid discomfort).
- The technician should be able to feel the flow of oxygen by placing a finger roughly a half inch from the outlet of the nasal cannula.
- Place the end of the nasal cannula in a half-full cup of water. Verify that there are bubbles from the output of the nasal cannula.

Device Care and Cleaning

Side Vent Cleaning



Routine cleaning of the side vents as described below and periodic cleaning of the exterior of the device is the only routine maintenance.

To keep your Oxlife Liberty® working properly, it is recommended you clean the side vents weekly. If the Oxlife Liberty® is used in a dusty environment, more frequent cleaning of the side vents may be required.

Follow these simple directions to clean the side vents:

1. Remove the side vent.
2. Wash the vent by running under warm tap water using a mild detergent.
3. Rinse thoroughly under warm, running water.
4. Tap the side vent on a counter or hard surface several times to remove excess water.
5. It is important to allow the vent to dry completely before reinserting into the device. Moisture from wet or damp side vents may damage your device.

- Never use your Oxlife Liberty® without side vents installed.
- We recommend that you keep extra side vents to use as a replacement while one is drying. Contact your authorized dealer for extra side vents.

Device and Battery Cleaning

⚠ Unplug your Oxlife Liberty® and remove the battery before cleaning.

⚠ Do not submerge your device or any accessories or allow water to enter the device.

Clean the exterior of your device and/or battery using a soft cloth dampened with a mild detergent and water and wipe dry. Clean the outside of the device monthly or more frequently, as needed.

- **DO NOT** spray or soak the case or front panel.
- **DO NOT** spray or soak battery contacts.
- **DO NOT** use alcohol, ethylene chloride, benzalkonium chloride or petroleum-based cleaners.

AC Power Supply and DC Power Cord Cleaning

⚠ Unplug your Oxlife Liberty® and/or power supply before cleaning.

Clean the AC power supply and DC power cord using a soft cloth dampened with a mild detergent and water and wipe dry.

Carry Bag Cleaning

- Remove the device from the carry bag before cleaning.

Follow these simple directions to clean the Carry Bag:

1. The carry bag can be cleaned using a damp cloth or by washing in a washing machine alone, on a gentle cycle, using cold water and a mild detergent.
2. Allow the carry bag to air dry thoroughly.
3. Ensure the carry bag is completely dry before use.

Cannula Cleaning

Clean and replace the cannula as instructed by the manufacturer and your healthcare provider.

Disinfection

Between patients, the exterior of the device, carry bag, and battery should be disinfected.

Clean the item as instructed above.

Per manufacturer's instructions, disinfect device exterior, carry bag and battery using Oxycide (or similar product) with a soft cloth.

- **DO NOT** use alcohol, ethylene chloride, benzalkonium chloride or petroleum-based cleaners.

Device Disposal

This product may contain substances that could be harmful to the environment if inappropriately disposed of in landfills. Follow local governing ordinances and recycling plans regarding disposal of the device.

Battery Disposal

The battery is rechargeable and can be recycled. Always return batteries to your healthcare provider or an authorized dealer for proper disposal. You can also contact your local government offices for proper disposal instructions for a lithium-ion battery.

Section 7: Traveling

Before traveling, be sure to pack the following:

- Accessory Bag
- Carry Bag
- AC Power Supply
- DC Power Cord
- Fully Charged Battery (and extra batteries if required)
- User Manual

Also, bring contact information for your healthcare provider, authorized dealer and/or physician.

When traveling internationally, an applicable standard international power plug adapter is required.

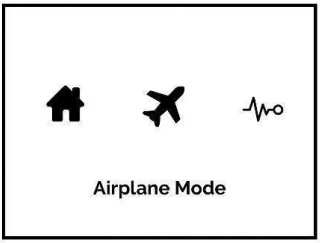
Please note that many air carriers require prior notification (usually at least 48 hours) for passengers traveling with portable oxygen concentrators. In addition, carriers may also require advanced submission of a medical verification statement from your physician. You should confirm any notification and verification requirement with your specific carrier.

Not all air carriers provide an electrical outlet aboard the aircraft, so you should have sufficient batteries (or a confirmed alternative power source) to account for at least 150% of your total travel time, including, but not limited to: (A) commuting time to and from the airport; (B) transition time in and out of airports; (C) the duration of your flight; and (D) any unexpected delays. Please be aware that battery requirements may vary based upon your personal setting.

If traveling by train, bus or boat contact your carrier to inquire about power port/outlet availability.

Entering and Exiting Airplane Mode

The cellular connection must be deactivated prior to flight on any commercial aircraft.



To enter and exit Airplane Mode, follow the steps listed in the procedure below.

1. Simultaneously press the Mode (M) and Minus (-) buttons to enter the Menu screen.
2. Press (+) or (-) buttons to scroll to Airplane Mode icon.
3. Press Mode button (M) to enter Airplane Mode menu.
4. Press Plus button (+) to activate Airplane Mode.
5. Press Mode button (M) to select displayed mode.
6. Press Plus button (+) to confirm or Minus button (-) to cancel.
7. Press Plus button (+) or Minus button (-) to scroll to the Home icon.
8. Press Mode button (M) to return to the Home screen.

The device will exit Airplane Mode after 24 hours or the user manually re-enters Normal Mode.

To manually re-enter Normal Mode, follow instructions above.

Section 8: Standards Compliance

This device is designed to comply with the following standards:

IEC 60601-1 2020 Edition 3.2; Medical Electrical Equipment; Part 1: General Requirements for Basic Safety and Essential Performance

IEC 60601-1-2 Edition 4.1 2020; Medical Electrical Equipment, Part 1-2: General Requirement for Safety – Collateral Standard: Electromagnetic (EMC) Compatibility

IEC 60601-1-6 Edition 3.2 2020 Medical Electrical Equipment – Part 1-6 General Requirements for Basic Safety and Essential Performance – Collateral Standard: Usability

IEC 60601-1-8 Edition 2.2 2020 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 Edition 2.1 2020 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

IEC 62304 Edition1.0 + A1 2015 Medical Device Software – Software Life Cycle Processes

AAMI IEC 62366 Edition 1.0 + A1 2020 Medical Devices – Application of Usability Engineering to Medical Devices (R2013)

ISO 80601-2-67 Edition 2.0 2020 Medical Electrical Equipment – Part 2- 67 Particular Requirements for Basic Safety and Essential Performance of Oxygen Conserving Equipment

ISO 80601-2-69 Edition 2.0 2020 Medical Electrical Equipment – Part 2- 69 Particular Requirements for Basic Safety and Essential Performance of Oxygen Concentrator Equipment

RTCA, DO-160G, Section 21, Category M; Emission of Radio Frequency Energy

ISO 13485:2016 Medical Devices; Quality Management Systems; Requirements for Regulatory Purposes

Classification

The Oxlife Liberty® is classified as:

- IEC Class II Internally Powered Equipment
- Type BF Applied Part
- IP22: Drip Proof Equipment (Protected against solid objects over 12 mm and direct sprays of water up to 15° of vertical per IEC 60529)
- NOT suitable for use in the presence of flammable anesthetic mixture with air or with oxygen or nitrous oxide
- Continuous Operation

Guidance and Manufacturer's Declaration for Electromagnetic Immunity and Recommended Separation Distances between Portable and Mobile RF Communications Equipment and This Device:

The Oxlife Liberty® Portable Oxygen Concentrator is intended for use in an environment where the radiated RF disturbances are controlled. Do not use the device near active HF surgical equipment and the RF shielded room of an ME system for magnetic resonance imaging, where the intensity of EM disturbances is high. Electromagnetic interference can be minimized by maintaining the distances described below based on the output of the equipment below.

If the system is compromised due to excessive RF disturbances, an alert or alarm condition may occur, and the device may power off.

Guidance and manufacturer's declaration – electromagnetic emissions		
The Oxlife Liberty® Portable Oxygen Concentrator is intended for use in the electromagnetic environment specified below. The customer or the user of the Oxlife Liberty® Portable Oxygen Concentrator should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment - Guidance**
RF Emissions CISPR 11	Group 1	The Oxlife Liberty® Portable Oxygen Concentrator 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 Oxlife Liberty® Portable Oxygen Concentrator is suitable for use in all establishments, including domestic, and those directly connected to the public low-voltage power supply network that supplies building used for domestic purposes.
Harmonics IEC 61000-3-2	Class A	
Flicker IEC 61000-3-3	Complies	
RF Emissions CISPR 14-1	Complies	The Oxlife Liberty® Portable Oxygen Concentrator is not suitable for interconnection with other equipment.
RF Emissions CISPR 15	Complies	

Guidance and manufacturer's declaration – electromagnetic immunity			
The Oxlife Liberty® Portable Oxygen Concentrator is intended for use in the electromagnetic environment specified below. The customer or the user of the Oxlife Liberty® Portable Oxygen Concentrator should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - Guidance**
ESD IEC 61000-4-2	±8kV Contact ±15kV Air	±8kV Contact ±15kV Air	Floors should be wood, concrete or ceramic tile. If floors are synthetic, the r/h should be at least 30%.
EFT IEC 61000-4-4	±2kV Mains ±1kV I/Os	±2kV Mains ±1kV I/Os	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1kV Differential ±2kV Common	±1kV Differential ±2kV Common	Mains power quality should be that of a typical commercial or hospital environment.
Voltage Dips/Dropout IEC 61000-4-11	>95% Dip for 0.5 Cycle 60% Dip for 5 Cycles 30% Dip for 25Cycles 0% UT for 1 Cycle >95% Dip for 5 Seconds	>95% Dip for 0.5 Cycle 60% Dip for 5 Cycles 30% Dip for 25Cycles 0% UT for 1 Cycle Note 1	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Oxlife Liberty® Portable Oxygen Concentrator requires continued operation during power mains interruptions, it is recommended that the Oxlife Liberty® Portable Oxygen Concentrator be powered from an uninterruptible power supply or battery.
Power Frequency 50/60 Hz Magnetic Field IEC 61000-4-8	30A/m	30A/m	Power frequency magnetic fields should be that of a typical commercial or hospital environment.

Guidance and manufacturer's declaration – electromagnetic immunity			
The Oxlife Liberty® Portable Oxygen Concentrator is intended for use in the electromagnetic environment specified below. The customer or the user of the Oxlife Liberty® Portable Oxygen Concentrator should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment – Guidance**
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	6 Vrms 150kHz to 80MHz 3 V/m 80 MHz to 2.5 GHz	(V1) = 6Vrms (E1) = 3V/m	Portable and mobile communications equipment should be separated from the Oxlife Liberty® Portable Oxygen Concentrator by no less than the distances calculated/listed below: D=(3.5/V1)(Sqrt P) 150kHz to 80MHz D=(3.5/E1)(Sqrt P) 80 to 800 MHz D=(7/E1)(Sqrt P) 800 MHz to 2.5 GHz Where P is the max power in watts and D is the recommended separation distance in meters. Field strengths from fixed transmitters, as determined by an electromagnetic site survey, should be less than the compliance levels (V1 and E1). Interference may occur in the vicinity of equipment containing a transmitter.
Proximity fields from RF wireless communications equipment IEC 61000-4-3	See table below (Test Specification for Enclosure Port Immunity to RF Wireless Communication Equipment)	See table below (Test Specification for Enclosure Port Immunity to RF Wireless Communication Equipment)	See table below (Test Specification for Enclosure Port Immunity to RF Wireless Communication Equipment)

Max Output Power (Watts)	Separation (m) 150kHz to 80MHz D=(3.5/V1)(Sqrt P)	Separation (m) 80 to 800MHz D=(3.5/E1)(Sqrt P)	Separation (m) 800MHz to 2.5GHz D=(7/E1)(Sqrt P)
0.01	0.11667	0.11667	0.23333
0.1	0.36894	0.36894	0.73785
1	1.1667	1.1667	2.3333
10	3.6894	3.6894	7.3785
100	11.667	11.667	23.333

Test Specification for Enclosure Port Immunity to RF Wireless Communications Equipment

Test frequency (MHz)	Band [a] (MHz)	Service [a]	Modulation [b]	Maximum power (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)
385	380 –390	TETRA 400	Pulse modulation [b] 18 Hz	1,8	0,3	27
450	430 – 470	GMRS 460, FRS 460	FM [c] ± 5 kHz deviation 1 kHz sine	2	0,3	28
710	704 – 787	LTE Band 13, 17	Pulse modulation [b] 217 Hz	0,2	0,3	9
745						
780						
810	800 – 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation [b] 18 Hz	2	0,3	28
870						
930						
1 720	1 700 – 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation [b] 217 Hz	2	0,3	28
1 845						
1 970						
2 450	2 400 – 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation [b] 217 Hz	2	0,3	28
5 240	5 100 – 5 800	WLAN 802.11 a/n	Pulse modulation [b] 217 Hz	0,2	0,3	9
5 500						
5 785						

NOTE If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.

[a] For some services, only the uplink frequencies are included.

[b] The carrier shall be modulated using a 50 % duty cycle square wave signal.

[c] As an alternative to FM modulation, 50 % pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.

If the system is compromised due to excessive RF disturbances, an alert or alarm condition may occur, and the device may power off.

RF cell frequencies used by this equipment include: SARA-R410

Parameter		Min	Max	Unit	Remarks
Frequency range FDD Band 12 (700 MHz)	Uplink	699	716	MHz	Module transmit
	Downlink	729	746	MHz	Module receive
Frequency range FDD Band 17 (700MHz)	Uplink	704	716	MHz	Module transmit
	Downlink	734	746	MHz	Module receive
Frequency range FDD Band 28 (700MHz)	Uplink	703	748	MHz	Module transmit
	Downlink	758	803	MHz	Module receive
Frequency range FDD Band 13 (700MHz)	Uplink	777	787	MHz	Module transmit
	Downlink	746	756	MHz	Module receive
Frequency range FDD Band 20 (800MHz)	Uplink	832	862	MHz	Module transmit
	Downlink	791	821	MHz	Module receive
Frequency range FDD Band 26 (850MHz)	Uplink	814	849	MHz	Module transmit
	Downlink	859	894	MHz	Module receive
Frequency range FDD Band 18 (850MHz)	Uplink	815	830	MHz	Module transmit
	Downlink	860	875	MHz	Module receive
Frequency range FDD Band 5 (850MHz)	Uplink	824	849	MHz	Module transmit
	Downlink	869	894	MHz	Module receive
Frequency range FDD Band 19 (850MHz)	Uplink	830	845	MHz	Module transmit
	Downlink	875	890	MHz	Module receive
Frequency range FDD Band 8 (900MHz)	Uplink	880	915	MHz	Module transmit
	Downlink	925	960	MHz	Module receive
Frequency range FDD Band 4 (1700MHz)	Uplink	1710	1755	MHz	Module transmit
	Downlink	2110	2155	MHz	Module receive
Frequency range FDD Band 3 (1800MHz)	Uplink	1710	1785	MHz	Module transmit
	Downlink	1805	1880	MHz	Module receive
Frequency range FDD Band 2 (1900MHz)	Uplink	1850	1910	MHz	Module transmit
	Downlink	1930	1990	MHz	Module receive
Frequency range FDD Band 25 (1900MHz)	Uplink	1850	1915	MHz	Module transmit
	Downlink	1930	1995	MHz	Module receive
Frequency range FDD Band 39 (1900MHz)	Uplink	1880	1920	MHz	Module transmit
	Downlink	1880	1920	MHz	Module receive
Frequency range FDD Band 1 (2100MHz)	Uplink	1920	1980	MHz	Module transmit
	Downlink	2110	2170	MHz	Module receive

RF GPS frequencies used by this equipment include:
Receiving only:

1575.42 MHz	1598.6 – 1605.9 MHz	1561.098 MHz

The following table lists the sound pressure levels as measured according to IEC 60601-1-8.

Alarm	**Sound Pressure Level**
High Priority	65.5 dB
Medium Priority	63.7 dB
Low Priority	63.2 dB
Device Mode	**Sound Pressure Level**
Continuous Mode	60.7 dB
Pulse Mode	58.7 dB

OXLIFE LIBERTY®
LIMITED WARRANTY STATEMENT

O_2 Concepts®, LLC (the "Company") warrants that each Oxlife Liberty® and the related accessories and replacement parts (each a “Product” and collectively, the “Products”), in each case purchased from the Company or its authorized distributor, shall be free from defects in materials and workmanship under normal use and service and when correctly maintained for the periods shown from the date of shipment ("Original Shipment Date") to the original purchaser ("Purchaser"), except as otherwise set forth herein. Subject to exclusions and terms set forth herein, the applicable warranty coverages are set forth in the table below.

Product	**Warranty Period**
Oxlife Liberty®	Three (3) years from Original Shipment Date
Sieve Tubes	One (1) year from Original Shipment Date
Standard Accessories (battery [(1)], AC power supply, DC power cord, accessory bag)	One (1) year from Original Shipment Date
Optional Accessories (chargers, humidifiers, additional bags, etc.)	Ninety (90) days from Original Shipment Date
Repaired and Replaced Products; Accessories	Later of ninety (90) days from Original Ship Date or remaining warranty period
Disposables (cannulas, filters, tubing)	No warranty
[(1)] Warranty coverage limited to batteries that fall below 80% of associated rated capacity when fully charged.	

The limited warranties granted hereunder apply to Products purchased by the Purchaser and are not transferable. Purchaser's original purchase receipt for the Products are required for the limited warranties hereunder to be effective. For any limited warranty set forth herein to be effective, Purchaser shall inspect each Product within thirty (30) days of delivery and before such Product is placed into use. Purchaser agrees that the warranties provided by the Company with respect to any Product are subject to use of the Product in accordance with the Company's instructions as provided and that failure to do so shall void the warranties. The Company's sole liability and Purchaser's sole and exclusive remedy arising out of or relating to the Products, including for a breach of warranty, is limited to, at the Company's sole option, repair or replacement of the Product or part thereof which is returned to the Company at Purchaser's expense and only to the extent such repair and replacement is provided under this warranty. This warranty shall apply only if Purchaser notifies the Company in writing, including email transmission, of the defective Product promptly after the discovery of the defect and within the applicable warranty period. Products may be returned only by Purchaser and only when accompanied by a Return Material Authorization ("RMA") reference number issued by the Company (see PRODUCT RETURN GUIDELINES at the end of this Statement). The Company will not be responsible for any alleged breach of warranty for which the Company determines to have arisen from a cause not covered by this warranty including, but not limited to, those exceptions listed below. The Company shall make the final determination as to the existence and/or cause of any alleged defect.

For any Product that does not meet the limited warranty herein within the first ninety (90) days of the Original Shipment Date for the Product, Purchaser shall contact the Company to obtain an RMA reference number and Purchaser shall receive a replacement Product (which, solely at the Company's discretion, will be a new Product or a repaired Product built to a new specification) in advance of return of the failed Product. The Company will cover the shipping cost of the failed Product to the Company as well as the shipment of the replacement Product to the Purchaser. Purchaser will not be charged for the replacement Product provided Purchaser returns the failed Product in accordance with the Company's instructions within ten (10) business days of the issuance of an RMA reference number and the Company determines that such Product is covered by the limited warranty hereunder. If any failed Product is not returned in accordance with the Company's instructions within ten (10) business days from issuance of an RMA reference number or if the Company determines that the Product is not covered by the limited warranty hereunder, the Company will invoice Purchaser for the list price of the replacement Product which invoice shall be due and payable by Purchaser upon receipt.

Should a Product not meet the limited warranty herein after the ninetieth (90th) day after the Original Shipment Date but during the applicable warranty period, Purchaser shall contact the Company for an RMA reference number and return the Product within thirty (30) days of the issuance of an RMA reference number and in accordance with the Company's instructions at Purchaser's risk and expense. The Company shall examine the Product and, if the Product is covered by the limited warranty hereunder, the Company shall repair or replace the Product within a reasonable time, returning the Product to the Purchaser at the Company's expense.

If any failed product is not returned in accordance with the Company's instructions within thirty (30) days from the issuance of an RMA reference number or if the Company determines that the Company Product is not covered by the warranty hereunder, in addition to shipping, Company will invoice Purchaser for the list price of the replacement Product or the time and material cost associated with the repairs, which invoice shall be due and payable Purchaser upon receipt.

Defects and/or damage resulting from the following are expressly and specifically excluded from any warranty coverage hereunder.

- Improper operation, improper storage, misuse, accident, alteration, abuse, neglect and/or physical damage, including, but limited to, exposure to smoke (including cigarette, cigar, or e-cigarette smoke).
- Ingress of liquids, sand, dirt, food, insects, animals or other foreign objects into the Product.
- Exposure to unusual electrical stress, heat, humidity, condensation and/or cold.
- Use in a manner that constitutes abnormal usage or conditions.
- Failure to follow recommended preventative maintenance. Unauthorized installation, repair or modification.
- Use of parts, materials and accessories not provided or authorized by the Company.
- Acts of God and/or other acts or conditions not in the control of the Company.

Moreover, warranty coverage shall not be extended to Products for which (i) the serial number label has been removed, altered or destroyed; (ii) tamper evident seals are broken; or (iii) mismatched serial numbers or revised combinations.

THE LIMITED WARRANTY SET FORTH HEREIN IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. NO REPRESENTATION OR STATEMENT OF THE COMPANY MAY CHANGE OR ALTER THIS LIMITED WARRANTY UNLESS AGREED TO AND AUTHORIZED IN WRITING BY THE COMPANY.

The Company shall not be liable for any commercial losses, loss of revenues or profits, loss of goodwill, inconvenience, or exemplary, special, incidental, indirect, consequential or punitive damages whatsoever, or claims of third parties, regardless of the form of any claim, whether in contract or tort, whether from breach of this warranty, or defective equipment, or loss of data or from any other use, even if the Company has been advised or should be aware of the possibility of such damage. The Company's aggregate liability related to a product shall not exceed the purchase price paid by Purchaser for the particular Product giving rise to such liability.

The Company shall not be responsible for delays or failures in its performance resulting from Acts of God, war, riot, fire, explosion, accident, flood, sabotage, inability to obtain fuel, power, raw material or machinery, governmental laws, regulations, or labor disruption, strike, lockout or injunction, acts or omissions beyond the Company's control, including delays of suppliers or technical failure. If any such delay or failure occurs, the Company may allocate Products among the Company's customers at its sole discretion.

The validity, interpretation, and performance of these terms and conditions shall be governed by and construed under the applicable laws of the State of Oklahoma as if performed wholly within the state and without giving effect to any principles of conflict of laws.

Except as provided otherwise herein, all disputes between the parties hereto shall be determined solely and exclusively by arbitration under, and in accordance with the rules then in effect of, the American Arbitration Association or any successors thereto ("AAA") in Oklahoma County, Oklahoma, unless the parties otherwise agree in writing. The parties shall jointly select an arbitrator. In the event the parties fail to agree upon an arbitrator within ten (10) days, then the Company shall select an arbitrator and Purchaser shall select an arbitrator and such arbitrators shall then select a third arbitrator to serve as the sole arbitrator, provided that if either the Company or Purchaser, in such event, fails to select an arbitrator within seven (7) days, such arbitrator shall be selected by the AAA upon application of either the Company or Purchaser. Judgment upon the award of the agreed upon arbitrator or the so chosen third arbitrator, as the case may be, shall be binding and shall be entered into by a court of competent jurisdiction.

Product Return Guidelines

- Purchaser must contact the Company to obtain a Return Material Authorization (RMA) reference number before returning any Product.
- The RMA reference number must be clearly identified on the outer shipping box.
- The Oxlife Liberty® may only be returned in its original shipping box or a similar container with commercially reasonable packing protection.
- Any Product received without an RMA reference number will be refused by the Company.
- All COD shipments will be refused by the Company.
- Any Product received thirty (30) or more days after the date of issuance of an RMA reference number will be refused by the Company.

NOTES

OXLIFE LIBERTY®

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