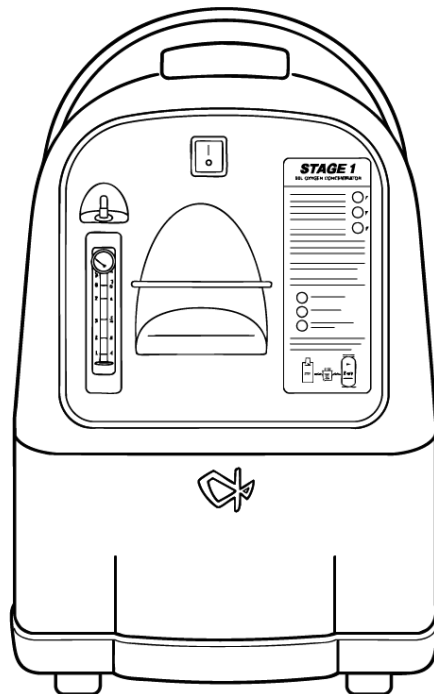




STAGE 1

10 LPM OXYGEN CONCENTRATOR

Digital Properties Group Inc
dpgsupply.com



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CAUTION!

Before operation of this device read this manual and follow all Safety Rules and Operation Instructions. Retain this manual for Future Reference.

TECHNICAL SPECIFICATIONS

Compressor	Oil-Free
Average Power Consumption	580 Watts
Input Voltage/Frequency	AC 110V± 10%, 60Hz
Ac Power Cord Length (Approx)	8 Feet (2.5m)
Sound level	≤52 dB(A) Typical
Outlet Pressure	8 PSI (~58 kPa)
Flow Rate	0.5 To 10 Liters Per Minute
Oxygen Concentration (at 10 LPM)	≥90% At 10L/Min.
OPI (Oxygen Percentage indicator) light	Low Oxygen 82% (Yellow) Very Low Oxygen 73% (Red)
Operating Altitude /Humidity	0 To 6,000 ft (0 To 1,828 m), Up To 95% Relative Humidity
Operating Temperature	41 Degree Fahrenheit To 104 Degree Fahrenheit (5 Degree Celsius To 40 Degree Celsius)
Required Maintenance	Machine Inlet Window Filter Clean Every 2 Weeks Compressor Intake Filter Change Every 6 Months
Dimensions (Machine)	17*15*28.3 Inch (43*38*72cm)
Dimensions (Carton)	19.6*17.7*30.3 Inch (50*45*77cm)
Weight (Approx)	W: 50lbs (23kg) G.W: 59lbs (26.8kg)

FEATURE VIEW

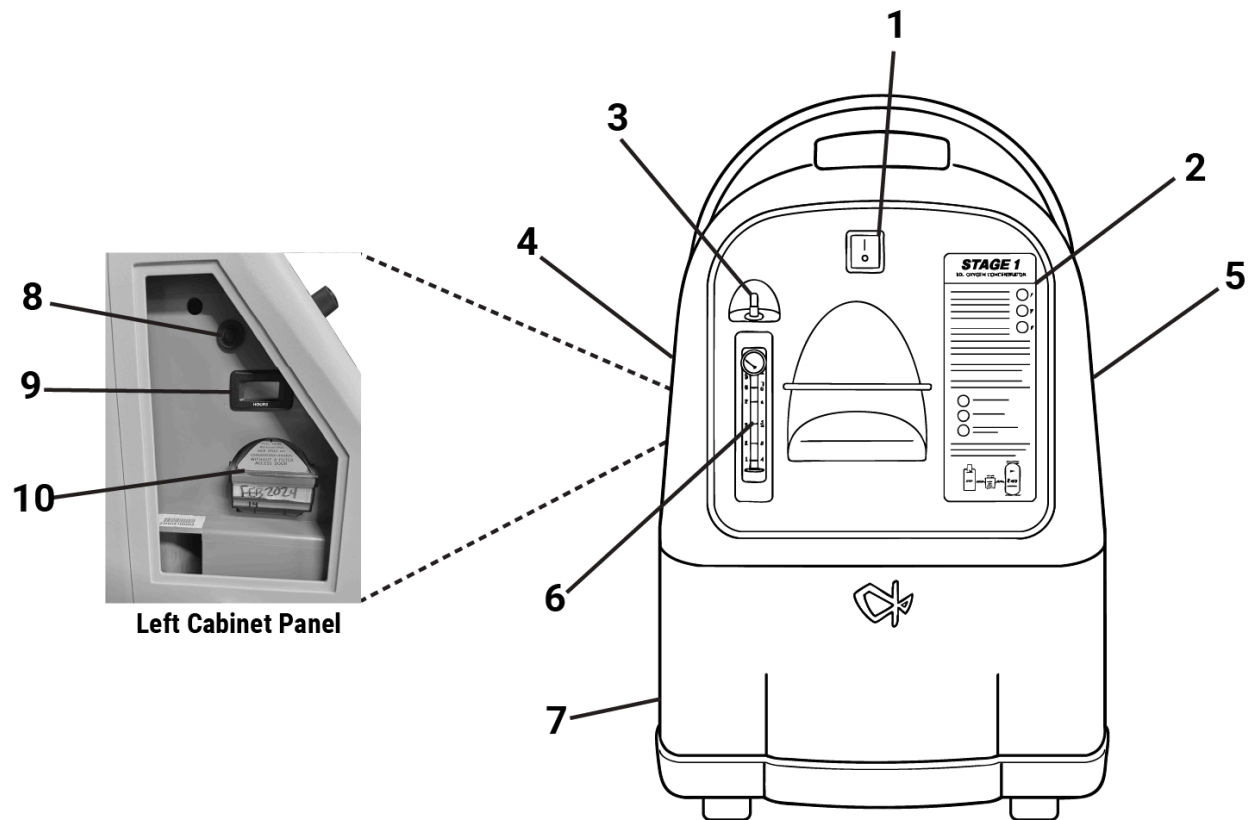


Figure 1.

- | | |
|---|------------------------------------|
| 1. Power Switch | 6. Flow Meter with Adjustment Dial |
| 2. Warning Indicators and Label | 7. Power Cord (110V AC) |
| 3. Oxygen Output - Dual 3/16 - 1/4 in. Barb | 8. Circuit Breaker |
| 4. Left Cabinet Filter and Door | 9. Hours Meter |
| 5. Right Cabinet Filter | 10. Intake Air Filter |

INTENDED USE

The Stage 1 10 LPM Oxygen Concentrator is designed for **industrial oxygen generation** through the pressure swing adsorption (PSA) process. It separates oxygen from ambient air to produce a concentrated oxygen stream for industrial applications. This device is **not a medical device** and is **not intended or certified for any medical or therapeutic use**.

⚠ WARNING: Risk of Injury or Equipment Damage. Operating this product outside its specified purpose or parameters has not been evaluated and may result in equipment damage, loss of function, or personal injury.

DO NOT operate this product in any manner other than as described in the Specifications and Intended Use sections of this manual.

INSTALLATION GUIDE

⚠ **WARNING:** Read this guide carefully before installing and operating the Stage 1 Oxygen Concentrator. Failure to follow these instructions may result in serious injury, fire, equipment damage, or voiding of the warranty.

1. Installation Location Requirements

To ensure safe operation and optimal performance, install the device in a suitable environment:

- ☒ **Cool, Dry Space** – Install in an area free from excessive humidity, moisture, or water exposure. Exposure to high humidity or water may void the warranty.
 - ☒ **Well-Ventilated Area** – Ensure proper airflow around the unit to prevent overheating and allow safe oxygen dispersion.
 - ☒ **Away from Ignition Sources** – Keep at least 10 feet (3 meters) away from open flames, sparks, or heat sources such as:
 - Gas-powered appliances
 - Open flames (candles, stoves, lighters)
 - Electrical panels or high-heat equipment
 - ☒ **Stable, Level Surface** – Place the unit on a sturdy, level surface to prevent vibration, movement, or tipping.
-

2. Electrical Connection

⚠ WARNING: This device operates on 120V AC power. Improper connection may cause electrical shock, fire, or damage to the unit.

- Ensure the power cords are free from damage and kept away from heat, sharp objects, and moving parts.
 - If the power cords become damaged, disconnect power immediately and replace before use.
 - If using the Stage 1 independently;
 - Do not use extension cords, power strips, or adapters—plug the unit directly into properly grounded outlets. **See Independent Device Setup.**
 - If using in conjunction with a Stage 2 Compression System;
 - Install the Stage 1 Power Cord into one of the outlets on the rear of the Stage 2. **See System Setup & Connection.**
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3. Independent Device Setup

1. Position the Concentrator – Place the device in your chosen clean and dry location, ensuring proper clearance on all sides for airflow and maintenance.
2. Plug in the unit - securely plug the power cord into a 120V grounded outlet.
3. Plumb the Oxygen Output to the Oxygen Input of your torch or desired device. (Figure 2.)
 - a. Note the oxygen output is a dual 3/16 to 1/4 in. barb. Make sure to select tubing with an I.D. of either 3/16 or 1/4 inch and press the tubing beyond the respective barb.
4. Power On & Test – Flip the power switch to the ON position (I). The Stage 1 should immediately power on and begin concentrating oxygen.
 - a. The Green Indicator light will be on to start. After a few seconds the Yellow Indicator light may turn on to indicate startup impurities. The device may produce this lower purity oxygen for a few minutes. This is the normal function of oxygen concentrators.
 - b. Wait 3-5 minutes for the Green indicator light to turn on. Indicating adequate oxygen purity.

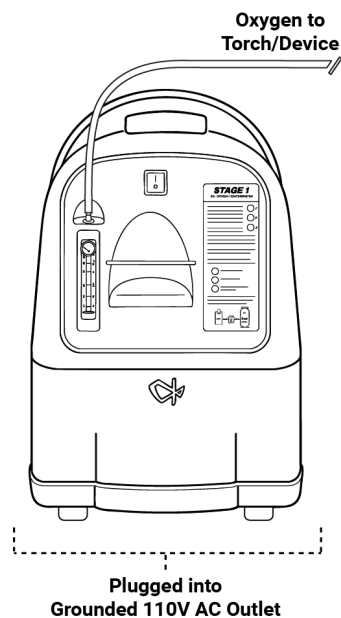


Figure 2.

5. Check for Leaks – Apply an oxygen-compatible leak detection solution to all fittings. Do not use an open flame to check for leaks.
6. Monitor for normal operation – Ensure pressure levels are within safe operating limits.

Important Note: When using a Stage 1 Concentrator without a Stage 2 System, the user must make sure to leave torch oxygen valves cracked open slightly at all times enabling continuous oxygen flow from the concentrator. This will maintain high oxygen purity levels and minimize wear on the concentrator.

4. Stage 2 System Setup & Connection

1. Position the Concentrator(s) – Place the system in the designated location, ensuring proper clearance on all sides for airflow and maintenance.
2. Group and install Oxygen Concentrators – Separate Bank A concentrators and Bank B concentrators. (Figure 3)
 - a. Plumb the outputs of Bank A together and into Input A. Plug these concentrators into any of the Bank A power outlets on the rear panel.
 - b. Plumb the outputs of Bank B together and into Input B. Plug these concentrators into any of the Bank B power outlets on the rear panel.

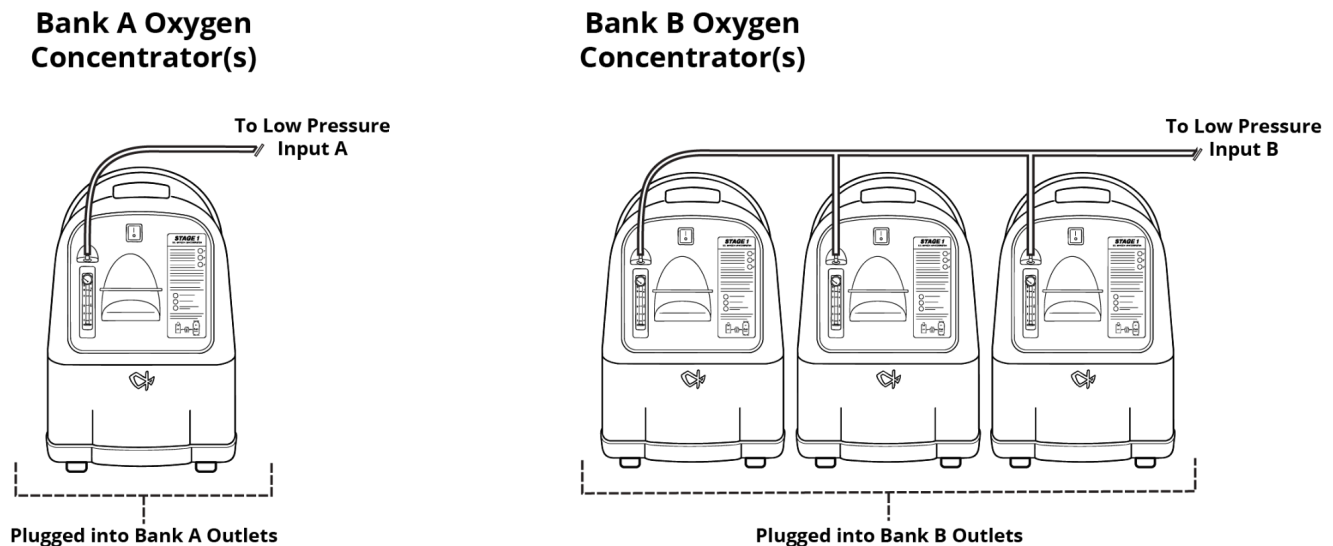


Figure 3.

- i. Note the oxygen output of the Stage 1 concentrators is a dual 3/16 to 1/4 in. barb. Make sure to select tubing with an I.D. of either 3/16 or 1/4 inch and press the tubing beyond the respective barb.
 - ii. Use only approved high-pressure oxygen-rated hoses and fittings. Ensure all connections are secure and free of leaks.
3. Turn all Concentrators Manual Power switches to the ON position.

4. Check that all Oxygen Concentrators are connected to the correct inputs and power sources. Warning: Failure to do so may result in damage to the Oxygen Concentrator(s).
 - a. Oxygen Concentrators powered by Bank A feed oxygen supply to Input A. Confirm with Figure 3.
 - b. Oxygen Concentrators powered by Bank B feed oxygen supply to Input B. Confirm with Figure 3.
5. Connect a High Pressure Storage tank rated above 150 psi to the High Pressure Outlet.
6. Verify Power Supply – Confirm that the electrical outlet is properly grounded and meets the 120V AC power requirement.
7. Plug in the Unit – Insert the 3 power plugs securely into grounded outlets.
 - a. Controller - Supplies power to the compressor and controllers.
 - b. A - Supplies power to Bank A outlets.
 - c. B - Supplies power to Bank B outlets.
8. Power On & Test – Power on the Bank A and Bank B power switches on the rear panel followed by the Controller power switch on the front panel.
 - a. The Stage 2 Compression system should immediately power on concentrators and begin venting impure oxygen by default.
 - b. Wait 3 minutes for Pre-Venting to complete and the system to begin compressing (or activate the Pre-Vent Bypass Switch).
 - i. During this time the concentrators indicator lights may be yellow, signalling lower purity oxygen. This is normal operation and this impure oxygen is vented off by the Pre-Vent System.
 - ii. If all concentrators are indicating Green lights you can use the Pre-Vent Bypass Switch (Stage 2 Pro ONLY) to stop venting and immediately start compressing oxygen.

9. Check for Leaks – Apply an oxygen-compatible leak detection solution to all fittings. Do not use an open flame to check for leaks.
10. Monitor for normal operation – Ensure pressure levels are within safe operating limits.

Note: The first fill can trap air impurities. To remove them, vent the High Pressure Tank at its bottom before repressurizing.

5. Flow Adjustment

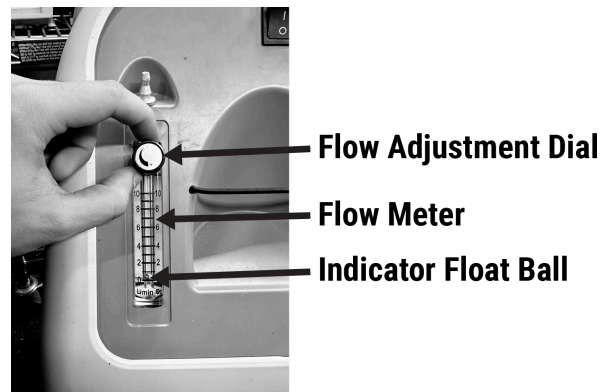


Figure 4.

- With the concentrator powered on, the user can adjust the oxygen flow rate by twisting the Flow Adjustment Dial. (Figure 4)
 - Counter-Clockwise to increase flow.
 - Clockwise to decrease flow.
 - The current flow rate can be read by referencing the Indicator Float Ball and its height in the Flow Meter. These flow rates are in litres per minute (LPM).
-

6. Important Safety Warnings and Final Checklist

- ✗ DO NOT install in an enclosed or unventilated space—oxygen buildup or deprivation can create a hazard.
 - ✗ DO NOT expose to water, rain, or high humidity—this could void the concentrator warranty.
 - ✗ DO NOT modify or tamper with electrical components—doing so may result in shock or fire.
 - ✗ DO NOT exceed the device's rated pressure limits—over-pressurization may cause failure.
 - ✗ DO NOT use oil, grease, or petroleum-based lubricants on oxygen fittings—these can ignite explosively.
 - ✓ Always use manufacturer-approved components and accessories.
 - ✓ Regularly inspect hoses, fittings, and power connections for signs of wear or damage.
 - ✓ If a leak, electrical issue, or unusual noise occurs, shut down the system immediately and inspect before further use.
-

Final Checklist Before Operation

- ✓ Concentrator is installed in a cool, dry, and ventilated area
 - ✓ Unit is at least 10 feet away from ignition sources
 - ✓ Power is plugged into a 120V AC grounded outlet
 - ✓ Oxygen hoses and fittings are properly connected and leak-tested
 - ✓ Device operates normally without unusual noise or pressure fluctuations
-

Following these installation guidelines will help ensure safe operation, longevity of the concentrator, and compliance with warranty requirements. If you have any questions or need assistance, contact the manufacturer's support team before proceeding.

O2 STATUS & ALARM SIGNALS

Case #	LED Colour	Alarm	O ₂ Purity or Flow	Status
1	Green - O ₂	-	>82% ± 2%	Normal Operation
2	Yellow - ⚠	-	>73% ± 2% and <82% ± 2%	Low Purity
3	Red -	Intermittent	<73% ± 2%	Low Purity Alarm
4	Red -	Intermittent	<0.5 LPM O ₂	Low Flow Alarm
5	Red -	Intermittent	-	Compressor Failure Alarm
6	Red -	Intermittent	-	Low/High Pressure, Cycle Failure Alarm

MAINTENANCE PROCEDURES

Case Cleaning

- Turn off the power switch and unplug the concentrator's AC connector from the power outlet.
- Only the exterior surface of the concentrator should be cleaned. Use a soft, dry cloth, a damp sponge, or wipes with an alcohol-based solution. Do not use acetone, solvents, or any other flammable products. Avoid spilling any liquid inside the cabinet.

Cabinet Air Filter

- The cabinet air filters located on both sides of the cabinet should be cleaned at least every 14 days to keep the concentrator running properly. Cleaning frequency may vary depending on environmental conditions and install location.



Figure 5.

- The cabinet filters can easily be pulled out for cleaning (Figure 5). Wash gently with warm water and soap. Ensure the filters are fully dry before re-installing.
- To re-install the cabinet filters simply push into place and tuck in the edges.

Intake Air Filter

- The intake air filter should be inspected every 30 days and replaced every 6-12 months. Replacement frequency may vary depending on environmental conditions and install location.
- If the filtration core becomes black, replace the filter. No matter how long since the last filter replacement.

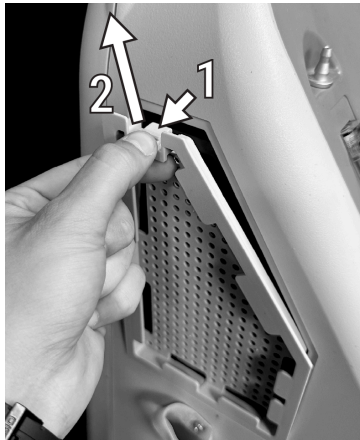


Figure 6.



Figure 7.

- To inspect the intake filter, remove the Left Cabinet Panel Door. Pinch the clip at the top before pulling out and then up. (Figure 6)
 - Then remove the Intake Filter by pulling out towards the user. (Figure 7)
 - After Inspection or Replacement follow the steps in reverse to re-install Intake Filter and Left Cabinet Panel Door. If the Left Cabinet Filter was removed be sure to reinstall it in position before operating the device.
-

SAFETY PRECAUTIONS

Compressed Oxygen Safety

- Oxygen supports combustion. Keep away from flames, sparks, smoking materials, and flammable substances.
 - Never use oil, grease, or other petroleum-based substances near oxygen connections—these can ignite explosively.
 - Always use approved, pressure-rated hoses and fittings designed for oxygen service.
 - Regularly inspect for leaks using an oxygen-compatible leak detection solution—never use a flame to check for leaks.
 - Do not exceed the maximum rated pressure of the system.
-

Electrical Safety

- Ensure the machine is properly grounded before use.
 - Only connect the unit to a power source that matches the voltage and frequency specified in the manual.
 - Do not use extension cords or power strips—plug the unit directly into a properly rated outlet.
 - Keep power cords away from heat, sharp objects, and moving parts.
 - Unplug the unit before performing maintenance or repairs.
 - If the unit or power cord becomes damaged, discontinue use immediately and contact a qualified technician.
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Operational Safety

- Never operate the machine in an enclosed or poorly ventilated space, as oxygen buildup can pose a fire hazard. Additionally, ensure sufficient airflow to prevent the risk of an oxygen-depleted environment.

- Always ensure the attached vessel is rated for operating at above the set outlet pressure of the Stage 2 controller to prevent bursting. Verify safety blow off valves are adjusted according to your process requirements
 - Do not cover or obstruct ventilation openings.
 - Avoid overfilling oxygen storage tanks or exceeding pressure limits.
 - Regularly check and replace filters, hoses, and seals as recommended by the manufacturer.
 - If a leak, electrical issue, or unusual noise occurs, shut down the machine immediately and inspect before further use.
 - INSPECT SYSTEM REGULARLY. Rusted or otherwise damaged tank can cause explosion and severe or fatal injury. Utilize tank drain before long term storage.
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Emergency Procedures

- In case of fire, shut off the oxygen supply only if safe to do so, and use a Class D fire extinguisher for metal fires or a Class B/C extinguisher for electrical fires.
 - If an oxygen leak is detected, shut down the machine and ventilate the area immediately.
 - In the event of an electrical shock, disconnect power at the breaker before assisting the affected person.
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WARRANTY

The Stage 1 Oxygen Concentrator is backed by a limited warranty, which includes the following coverage:

- 100% coverage for 300 hours of runtime (that's >25 Full K Tanks worth of Oxygen production) or 90 days from the date of purchase, whichever occurs first.
 - After this period, coverage continues on a prorated basis. This is included under our Premium Protection Plan. Please contact us or see our website dpgsupply.com for details.

For full warranty terms, conditions, and claim procedures, please refer to the warranty section of our website or contact our support team.
