

**drive**

**DeVilbiss**  
HEALTHCARE

# Oxygen User Guide





## The Drive DeVilbiss Story

Dr. Allen DeVilbiss invented the first atomizer in the late 1880's. In order to help his patients breathe more freely, Dr. DeVilbiss became an innovator, dedicated to the quality of product design and most importantly, its impact on an person's quality of life. He invested countless hours reviewing and reengineering the product, initially in his backyard woodshed, until he perfected the right device.

To manufacture the device, Dr. DeVilbiss formed an individual proprietorship known as 'The DeVilbiss Manufacturing Company' in Toledo, OH (USA). A century later the company, then known as DeVilbiss Health Care, was acquired by Eagle Industries. In 1993, DeVilbiss was one of five market-leading brands, in 2010, DeVilbiss Healthcare was a stand alone entity, and in 2015, it was acquired by Drive Medical, forming Drive DeVilbiss Healthcare.

**Drive DeVilbiss Healthcare** is now recognised as one of the world's leading manufacturers and distributors of not only durable but also high quality medical products. Currently the Company has Corporate offices, manufacturing facilities and distribution centres located in the United States, Canada, United Kingdom, Ireland, Germany, Spain, France, Romania, Australia, Taiwan and China.

## Drive DeVilbiss Healthcare Product Suite

In Australia, we are more than simply an Oxygen supplier. We also offer an extensive and diverse suite of medical products to service, as well as support, a broad range of patient needs which include;

- Wheelchairs & Accessories
- Walking Aids & Accessories
- Bathing & Toilet Aids
- Respiratory Devices
- Powerchairs & Accessories
- Electric Lift Chairs
- Moving & Handling Equipment
- Mobility Scooters & Accessories

### Drive DeVilbiss Healthcare

Building F, 2 Hudson Ave  
Castle Hill NSW 2154

For all enquiries **during** operating hours:

(02) 9899 3144

For urgent issues with equipment **outside** of operating hours:

(02) 9962 6001

### Operating Hours

Monday—Friday

9am—5pm

**In case of an emergency please call 000**

# Introduction

## **PLEASE READ ALL INSTRUCTIONS BEFORE USING**

### **WARNING**

For your safety, the oxygen concentrator must be used according to the prescription determined by your physician.

### **DANGER**

Oxygen causes rapid burning. **Do not smoke while your oxygen concentrator is operating**, or when you are near a person utilising oxygen therapy. Do not use within 2m of hot, sparking objects, or naked sources of flame.

### **Why Your Physician Prescribed Supplemental Oxygen**

Today, many people suffer from heart, lung, and other respiratory diseases. Many of these people can benefit from supplemental oxygen therapy. Your body requires a steady supply of oxygen to function properly. Your physician prescribed supplemental oxygen for you because you are not getting enough oxygen from room air alone. Supplemental oxygen will increase the amount of oxygen that your body receives.

Supplemental oxygen is not addictive. Your physician prescribed a specific oxygen flow to improve symptoms such as headaches, drowsiness, confusion, fatigue, or increased irritability. If these symptoms persist after you begin your supplemental oxygen program, consult your physician.

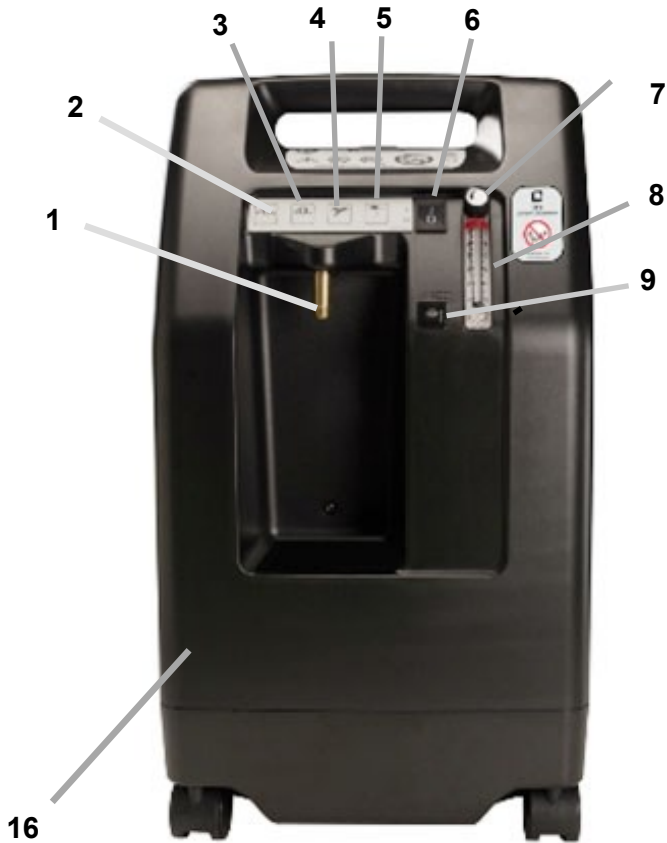
### **How Your Drive DeVilbiss Healthcare Oxygen Concentrator Works**

Oxygen concentrators are the most reliable, efficient, and convenient source of supplemental oxygen available today. The oxygen concentrator is electrically operated. The unit separates oxygen from room air, which allows high-purity supplemental oxygen to be delivered to you through the oxygen outlet. Although the concentrator filters the oxygen in the room, it will not affect the normal amount of oxygen in your room.

**ONLY STOP TAKING OXYGEN OR CHANGE THE FLOW RATE WITH PERMISSION FROM YOUR DOCTOR**

# Oxygen Concentrator

FRONT VIEW (Figure 1.)



BACK VIEW (Figure 2.)



- |                           |                 |
|---------------------------|-----------------|
| ① Oxygen Outlet           | ⑨ Reset Button  |
| ② Green Oxygen Light      | ⑩ Handle        |
| ③ Yellow Low Oxygen Light | ⑪ Air Filter    |
| ④ Red Service Light       | ⑫ Hand Grip     |
| ⑤ Green Power Light       | ⑬ Cord Strap    |
| ⑥ Power Switch            | ⑭ Exhaust       |
| ⑦ Flow Meter Dial         | ⑮ Power Cord    |
| ⑧ Flow Meter              | ⑯ Outer Cabinet |

# Operating Instructions



- 1 **ON** - Press switch towards **I** to turn on  
**OFF** - Press switch towards **O** to turn off
- 2 **LIGHT PANEL & ALARM** - The light panel will illuminate together with an audible alarm that sounds for a short period of time when starting the machine
- 3 **FLOW METER** - Adjust the flow rate using the flow meter dial. Turn anti-clockwise to increase and clockwise to decrease the flow rate
- 4 **OXYGEN OUTLET** - Connect tubing to oxygen outlet



## WARNING

Oxygen promotes rapid burning. To avoid possible personal injury do not smoke when using the concentrator or when you are near a person receiving oxygen therapy. Do not use near hot, sparking, burning objects or near naked flames

# Troubleshooting



## RED SERVICE LIGHT ON AND FAST SOUNDING ALARM

<b>Check Flow Rate on the Flow Meter</b>	<ol style="list-style-type: none"> <li>1. Make sure the Flow Meter is set at the prescribed flow rate (Pg 4, Fig 1, #8).</li> <li>2. If the ball has dropped below 0 or risen above 5, the machine will alarm and the red service light (Pg 4, Fig 1, #4) will appear.</li> <li>3. Turn the flow meter dial (Pg 4, Fig 1, #7) anti-clockwise to increase or clockwise to decrease the flow rate to the correct prescribed rate.</li> <li>4. If the ball does not move, try removing the tubing from the oxygen outlet (Pg 4, Fig 1, #1) to let any residual pressure escape and try adjusting flow meter again. Place new tubing and nasal prongs on the oxygen outlet.</li> </ol>
<b>Clean air filter</b>	<ol style="list-style-type: none"> <li>1. Inspect the air filter (Pg 4, Fig 2, #11) at the back of the machine .</li> <li>2. If the filter is dirty wash with warm soapy water, rinse, pat dry with a towel and put back into the machine.</li> </ol>
<b>Check ventilation</b>	<ol style="list-style-type: none"> <li>1. Ensure the machine is well ventilated with nothing covering or obstructing the machine.</li> <li>2. If the machine is warm to touch, turn off for 20 minutes and allow it to cool down.</li> </ol>
<b>Check tubing and nasal prongs</b>	<ol style="list-style-type: none"> <li>1. Remove tubing from the oxygen outlet (Pg 4, Fig 1, #1) and let the machine run for 5-10 minutes.</li> <li>2. If the alarm sound stops, replace tubing and nasal prongs. Dispose of the old consumables (tubing and/or nasal prongs).</li> </ol>



## RED SERVICE LIGHT ON AND SLOW SOUNDING ALARM

<b>No power</b>	<ol style="list-style-type: none"> <li>1. Turn off at the power point.</li> <li>2. Unplug the orange power cord from the back of the machine (Pg 4, Fig 2, #15) then re-plug the power cord by pushing firmly back into the machine.</li> </ol> <p><b>NOTE: Machine should be plugged directly into the wall socket, NOT a power board!</b></p>
<b>No power in socket</b>	<ol style="list-style-type: none"> <li>1. Check to see that there is power coming from the socket by plugging something else into the socket and testing it.</li> <li>2. If there is no power in that socket, plug machine into a different socket.</li> </ol>
<b>Blackout/Power Surge</b>	<ol style="list-style-type: none"> <li>1. Check to see if there is a black out—machine will not run without power.</li> <li>2. If there has been a black out, check to see if the reset button (Pg 4, Fig 1, #9) has popped out.</li> </ol>

# Troubleshooting



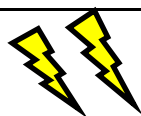
## NO OXYGEN COMING OUT

<b>Check Flow Rate on the Flow Meter</b>	<ol style="list-style-type: none"> <li>1. Make sure the Flow Meter (Pg 4, Fig 1, #8) is set at the prescribed flow rate.</li> <li>2. Turn the flow meter dial (Pg 4, Fig 1, #7) anti-clockwise to increase or clockwise to decrease the flow rate to the correct prescribed rate.</li> </ol>
<b>Test oxygen flow</b>	<ol style="list-style-type: none"> <li>1. Place nasal prongs or tubing into a glass or water. If bubbles appear, the machine is producing oxygen.</li> <li>2. If no bubbles appear, change tubing and nasal prongs, then retest.</li> <li>3. If bubbles appear, but patient can still not feel oxygen coming through nasal prongs, they should consult their physician immediately.</li> </ol> <p><b>NOTE: If patient has recently had the flu, this may affect their ability to feel oxygen coming through nasal prongs.</b></p>



## ORANGE LOW OXYGEN LIGHT ON WITH OR WITHOUT FAST SOUNDING ALARM

<b>Not enough power</b>	1. Check that the machine is plugged directly into the wall socket and not a power board. A power board may affect the amount of power going to the machine.
<b>Restart machine</b>	<ol style="list-style-type: none"> <li>1. Turn machine off for 5-10 minutes then turn back on. Machine should run for another 45 minutes to 1 hour before orange low oxygen light and alarm activates.</li> <li>2. Contact Drive DeVilbiss Healthcare on (02) 9899 3144 for further instructions.</li> </ol>



## NOISY MACHINE

<b>Describe the noise</b>	<ol style="list-style-type: none"> <li>1. Is it a vibrating noise? Check if the machine is on floor boards or tiles, if it is, try placing on carpet or a rug.</li> <li>2. Is it a compressor/motor noise, or a whistling noise? Please contact Drive DeVilbiss Healthcare on (02) 9899 3144.</li> <li>3. If the noise is a general hum or a puff sound, this is completely normal.</li> </ol>
<b>How long has the noise been there?</b>	<ol style="list-style-type: none"> <li>1. If the machine has always produced this noise, it's likely to be the normal sound of the internal mechanics of the machine.</li> <li>2. If it is a new noise, contact Drive DeVilbiss Healthcare to help assess the noise.</li> <li>3. If you have difficulty with the normal noise of the machine, you can place it in a different room of the house.</li> </ol>

**PLEASE BE AWARE THAT FEES WILL APPLY FOR SAME DAY OR AFTER HOURS CALL OUT REQUESTS WHERE NO FAULT IS FOUND**

# Cleaning and Maintenance



## 1. AIR FILTER (Page 4, Figure 2, #11)

Each **WEEK** wash filter with warm soapy water, rinse with warm water, pat dry with a towel and place back into the machine.



## 2. OUTER CABINET (Page 4, Figures 1 & 2, #16)

Each **WEEK** wipe down outer cabinet with a damp cloth or sponge to remove any dust or dirt.



## 3. NASAL PRONGS (CANNULAS)

Each **MONTH** replace nasal prongs and discard the used item. If you have had a cold or flu, change once symptoms have subsided.



## 4. GREEN OXYGEN TUBING

Every **THREE MONTHS** or **AS NECESSARY**, replace green oxygen tubing and discard the used item.

**NOTE: Additional tubing, nasal prongs and accessories can be purchased direct from Drive DeVilbiss Healthcare on (02) 9899 3144.**



### WARNING

To avoid electrical shock hazard, do not remove cabinet. The cabinet may only be removed by Drive DeVilbiss Healthcare or their authorised agents.

- Keep well ventilated away from fumes
- Do not use in rooms heated by paraffin or portable gas heaters
- Do not use lubricants
- Do not cover or obstruct the machine
- No smoking or naked flames
- Outer cabinet should not be removed by unauthorised personnel
- Switch off when not in use
- Ensure only one outlet is used at anytime



# Safe Handling of Oxygen Cylinders

The portable oxygen cylinders should be stored in a well ventilated area free from any open flames or gas appliances. It is recommended that the cylinder be kept in a cool, dry environment. Do not replace or use the cylinder near hot, sparking, burning objects or near naked flames.

Cylinders should be handled with care, never knocked violently or allowed to fall over.

When using the cylinder, it is recommended that it be kept in an upright position and fastened to a trolley or inside a carry bag.

The large oxygen cylinders, including D and E size cylinders, should be fitted to a trolley at all times. These must be stored in a well ventilated area. These are not portable cylinders and are not to be transported in a motor vehicle.

**NOTE: The portable oxygen (C size) cylinders may be used while laying flat on its side, however it is not recommended.**

Oxygen promotes rapid burning. To avoid possible personal injuries do not smoke when operating the oxygen cylinder.

## Transit Tips:

- Do not touch unit while driving;
- Switch off when refuelling; and
- Secure cylinder safely in rear footwell.

# PulseDose Conserver

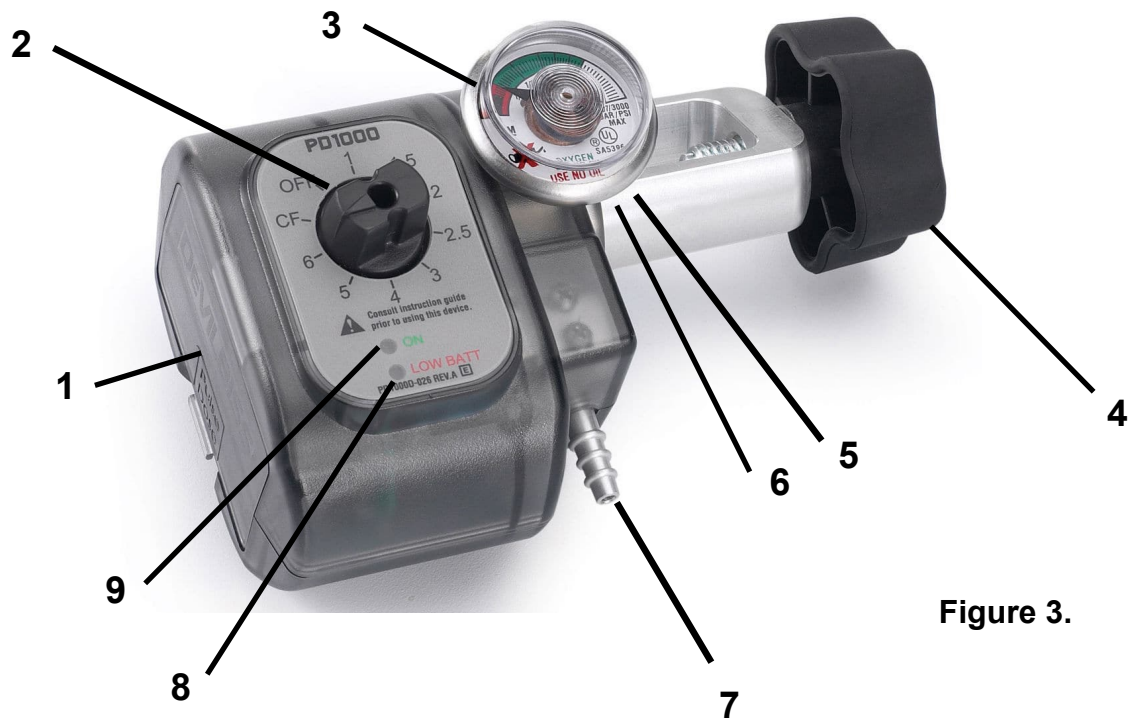


Figure 3.

- |                        |                      |
|------------------------|----------------------|
| 1. Battery Compartment | 6. Attachment Pins   |
| 2. Flow Rate Dial      | 7. Oxygen Outlet     |
| 3. Contents Gauge      | 8. Low Battery Light |
| 4. Tightening Handle   | 9. Green ON Light    |
| 5. Washer              |                      |

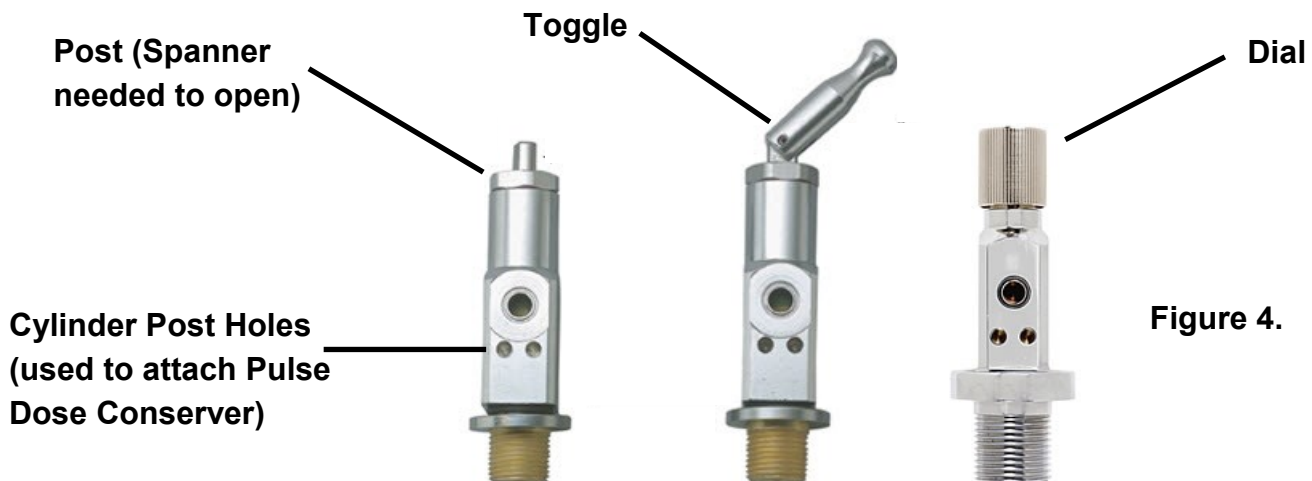


Figure 4.

## Different Oxygen Cylinder Opening Valves

# Operating Instructions

1. Attach the PulseDose Conserver to the oxygen cylinder by matching the two pins (Pg 10, Fig 3, #6) on the PulseDose to the two holes on the cylinder post (Pg 10, Fig 4) and tighten using the black tightening handle (Pg 10, Fig 3, #4).
2. Open the cylinder valve by turning the post, toggle or dial (Pg 10, Fig 4) at the top of the cylinder 1/2 a turn anti-clockwise.

**NOTE:** At each cylinder change, locate the **WASHER** (Pg 10, Fig 3, #5), where the PulseDose attaches to the cylinder, and turn the washer over. This will promote even wear of the washer, and prevent it bending or cracking.



3. Set the PulseDose to the prescribed flow rate (e.g. 2 LPM) using the flow rate dial (Pg 10, Fig 3, #2).

**NOTE:** The PulseDose is only to be used by patients breathing at a rate of more than 12 bpm and less than 40 bpm. It will not work if you breathe through your mouth. **The PulseDose Device does not work until you breathe through the nasal prongs.**

4. Attach the nasal prongs to the PulseDose oxygen outlet (Pg 10, Fig 3, #7) and insert the nasal prongs into the nose. Breathe normally through the nose, the PulseDose will deliver a spurt of oxygen at the beginning of the intake breath. The **Green ON indicator** (Pg 10, Fig 3, #9) will flash at each breath only.
5. When you are finished using the portable oxygen, please ensure you **CLOSE THE CYLINDER** by turning the post, toggle or dial (Pg 10, Fig 4) at the top of the cylinder in a clockwise direction, and returning the PulseDose Conserver flow rate dial (Pg 10, Fig 3, #2) to the 'OFF' position.

**ATTENTION:** Should the low battery light (Pg 10, Fig 3, #8) continuously flash **red** you have 4-8 hours to change the batteries.

**We recommend only using high strength, good quality alkaline batteries.**

# Troubleshooting

<b>NO OXYGEN COMING OUT</b>	
<b>Is the cylinder open?</b>	1. Make sure to open the cylinder before use by turning the post, toggle or dial (Pg 10, Fig 4) at the top of the cylinder anti-clockwise 1/2 a turn.
<b>Breathe through the Nasal Prongs</b>	1. Oxygen will not be released until you breathe through the nasal prongs. 2. If there is still no oxygen being released, have a family member or friend breathe through the nasal prongs as your breath may not be strong enough. 3. The flow rate dial (Pg 10, Fig 3, #2) can also be turned to 'CF' (continuous flow) to test if oxygen is being released.
<b>Replace batteries</b>	1. Try to replace the batteries in the PulseDose Conserver (see Pg 10, Fig 3, #1 for battery compartment location). 2. Make sure to use high strength, good quality alkaline batteries.
<b>Is there oxygen in this cylinder?</b>	1. Open the cylinder (with PulseDose Conserver attached) by turning the post, toggle or dial at the top of the cylinder anti-clockwise 1/2 a turn. 2. Once the cylinder is open, check the contents gauge (Pg 10, Fig 3, #3) to see how much oxygen remains in the cylinder. If the needle is in the green area there is oxygen in the cylinder. If the needle is in the red area, there is little or no oxygen in the cylinder. 3. Head to your nearest Drive DeVilbiss Healthcare Accredited Cylinder Depot to exchange the cylinder for a full one.
<b>OXYGEN LEAKING</b>	
<b>Ensure the device is properly attached</b>	1. To check this, make sure the cylinder is closed (turn the post, toggle or dial at the top of the cylinder clockwise until closed) unscrew the conserver from the bottle using the black tightening handle (Pg 10, Fig 3, #4) . 2. Reattach the PulseDose Conserver to the cylinder and try to operate again (see page 11 for operating instructions).
<b>Check Washer</b>	1. Close the cylinder by turning the post, toggle or dial at the top of the cylinder clockwise. 2. Remove the PulseDose Conserver from the cylinder by unscrewing the tightening handle (Pg 10, Fig 3, #4). 3. Inspect the washer (Pg 10, Fig 3, #5), if it is cracked or bent then replace the washer.
<b>PLEASE BE AWARE THAT FEES WILL APPLY FOR <u>ALL</u> SAME DAY OR AFTER HOURS CALL OUT REQUESTS FOR CYLINDER RELATED ISSUES</b>	