## **DigiFLO**

# HH - DigiFLO Concentration Analyzer



## **BEFORE USING THUS PRODUCT PLEASE READ THIS MANUAL AND SAVE FOR FUTURE REFERENCE**

## WARRANTY

PLEASE NOTE: THE WARRANTY BELOW WAS DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED DRAFTED AFTER JULY 4, 1975.

The warranty is extended only to original purchaser/user of our product.

This warranty gives you specific legal rights and you may also have other legal rights, which wary from state to state.

DigiFLO warrants its parts to be free of defects in material and workmanship for a period of Five (5) years from date of purchase. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced at DigiFLO option. This warranty does not include any labor for shipping charges incurred in replacement part installation or repair of any such product. DigiFLO's sole obligation and your exclusive remedy under this warranty shall be limited to repair and / or replacement. For warranty service please contact your supplier or dealer.

DO NOT return products or parts directly to our factory without prior written consent. Any such shipments will be refused.

LIMITATIONS AND EXCLUSIONS: THE FORGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, PRODUCTS SUBJECT TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, COMMERCIAL OR INSTITUTIONAL USE, PRODUCTS MODIFIED WITHOUT DIGIFLO EXPRESS WRITTEN CONSENT (INCLUDING BUT NOT LIMITED TO MODIFICATIONS THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS) OR TO PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT DIGIFLO SPECIFIC WRITTEN CONSENT OR TO PRODUCTS DAMAGED BY CIRCUMSTANCES BEYOND DIGIFLO CONTROL. SUCH EVALUATION SHALL BE SOLELY DETERMINED BY DIGIFLO. WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE FOLLOWING INSTRUCTIONS.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. DIGIFLO SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL DAMAGES WHATSOEVER.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.

#### **Pressure Unit Conversions**

KPA $\rightarrow$  PSI1 PSI = 6.9 KPAKPA $\rightarrow$  MMHg7.5 MMHg = 1 KPAKPA $\rightarrow$  CMH<sub>2</sub>O10.2 CMH<sub>2</sub>O = 1 KPA

### **Caution**

"Caution: Do not expose this product to pressures greater than 40 PSI, or damage may result to internal components. Do not use this product on pure oxygen from high pressure gas tanks or liquid systems. Use the DigiFLO Concentrator Analyzer with unhumidified gas only. Use of this product with water vapors can cause erroneous readings and internal damage.

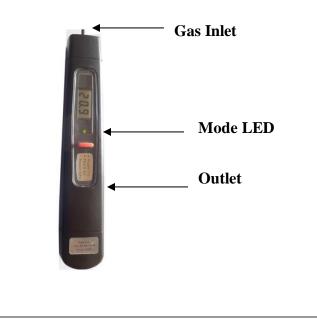
### **Instructions for use**

- Press and release the front button. Display will come on in
   O2 Mode.
- 2. To reach one of the following modes, press and release the button until LCD displays one of the following:

Mode	<u>Units</u>	Parameter
•O2	%	Oxygen Concentrator Concentration
•o2	%	100% O <sub>2</sub> /Air mixer Concentration
•FLO	LPM	Flow Rate
	21111	
•KPA	KPA	Pressure

3. Connect 1/8"ID x 1/4"OD silicone tubing to ANALYZER barbed inlet.

In order to measure pressure, plug the outlet port with your thumb.



#### **Indication For Use:**

The DigiFLO Concentrator ANALYZER is a tool used by service personnel to measure Oxygen purity and Flow Rate produced by an oxygen concentrator. Also, it measures gas pressure. Unless a patient is specifically trained, it is not intended to be used by patients who are prescribed oxygen. The DigiFLO Concentrator ANALYZER is intended to be used in an environment where oxygen concentrators are being serviced or repaired. This includes Hospitals, Nursing Homes, Extended Care Facilities, Patient Homes, and Respiratory Device Service and Repair Centers.

Specification:	
Size	9" x 1.5" x 1"
Weight with battery	164g
Response Time	0.1 Second
Power On Duration	2 minutes
Accuracy	Concentration: ±1.5% Flow Rate: ±0.1 LPM Pressure ±0.5%
Range	<ul> <li>Concentration: 21% - 95.7% (Oxygen Concentrator range)</li> <li>Concentration: 21% - 100% (100%O<sub>2</sub>/Air mixer range)</li> <li>Flow Rate: 0 to 20 LPM</li> <li>Pressure: vacuum to 350 KPA</li> </ul>
Max pressure	350 KPA
Temperature range	-45 to +70°C
Power consumption	10ma
Battery	Single Alkaline 9V battery
Battery life	1000+ read cycles
Limited Warranty	5 years
Blinking Alarms	OFF – Unit operational time of 2 minutes has expired BAt – Low battery indicator

#### **BATTERY**

Reasons to replace the battery:

- **BAt** is seen blinking on the display.
- DigiFLO Concentrator Analyzer does not respond to a Power On.
- CHANGING THE BATTERY
  - 1. Open the rear battery compartment.

Caution: Observe proper battery installation.

- 2. Carefully lift the battery from its location.
- 3. Remove the clips from the battery.
- 4. Apply the clips to a new battery.
- 5. Position the new battery within its groove, with the clips facing the Inlet.
- 6. Turn ON the unit. The display should turn ON. If it does, close the battery compartment. If it does not, replace the battery with another.

#### TROUBLESHOOTING

There are no user serviceable parts within the DigiFLO Concentrator ANALYZER.

If the unit fails to come ON, replace the battery with a known good battery.

If the unit fails to come on with known good battery, contact DigiFLO Technical Service for repair.

If the unit comes on and the reading are erratic or frozen, contact DigiFLO Technical Service for repair.

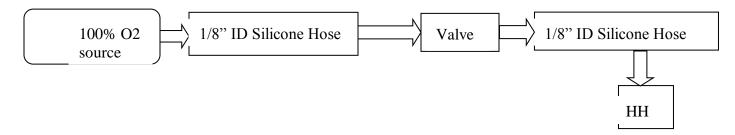
If the front button does not respond, contact DigiFLO Technical Service for repair.

If a segment within the display is missing or is displayed intermittently, contact DigiFLO Technical Service for repair.



## **Field Calibration**

- 1. Flush HH with Air.
- 2. Prepare a On / Off switchable 4.0 LPM, 41 KPA, 100% O2 flow source and Connect to HH as follows:



- 3. Power HH On and continue holding the button until HH displays CAL and then CAL is replaced with O2 reading. Release the button.
- 4. Turn O2 Flow on.
- 5. Press the front button. Display will show FLO. Continue holding down the button until HH displays CAL and then CAL is replaced with Flow Rate reading. Release the button.
- 6. Turn O2 Flow off.
- 7. Plug HH outlet and Turn Flow On. Thus 41 KPA pressure will apply to HH.
- 8. Press the front button. Display will show KPA. Continue holding down the button until HH displays CAL and then CAL is replaced with Pressure reading. Release the button.
- 9. Unplug HH outlet.
- 10. Wait for 1/2 second.
- 11. Turn O2 Flow off.
- 12. Wait for  $\frac{1}{2}$  second.
- 13. Press the front button. Display will show O2. Continue holding down the button until HH displays CAL and then CAL is replaced with O2 reading.

#### Warning

User should be cautious such that this product, does not perform inadvertent Field calibrations.

#### Cleaning

This product should be cleaned by applying a damp cloth or sponge to the outside case, such that the display window is clean and transparent. Do not immerse the analyzer in any water solution or any other cleaning/disinfecting agent.

Never clean the meter with organic solvents such as alcohol or acetone.