

# PulseOx 6000™ - Finger Unit User Guide

## Blood Oxygen Saturation & Heart Rate Spot-Monitor

Dear User,

Thank you for purchasing the SPO Medical PulseOx 6000™ finger unit ("PulseOx"). By purchasing this pulse oximeter, you have chosen a high quality device. SPO is convinced that you will be fully satisfied with your new pulse oximeter. Please take a few moments to review the following instructions before using the PulseOx for the first time. If you still have questions, please contact your local dealer for assistance or SPO Medical at [support@spomedical.com](mailto:support@spomedical.com)

⚠ Attention: See Instructions for Use

**Statement of Use:** Spot-check pulse oximetry

### Safety:

- ❑ If being used by an end-user, please follow your physician's instructions. Self-diagnosis of measured results and self-treatment are dangerous.
- ❑ Diseases that cause peripheral circulatory disturbance may cause incorrect readings (including, but not limited to, diabetes, hyperlipidemia, hypertension and arterial sclerosis). Carboxyhemoglobin and/or dyes may also cause erroneous readings.
- ❑ The PulseOx is not intended for use as an apnea monitor.
- ❑ Do not use cellular phones near the PulseOx as it may cause interference.
- ❑ The PulseOx is a precision electro-optical device that, with the exception of replacing the battery, has no user serviceable or adjustable components inside.
- ❑ The PulseOx must be serviced by trained SPO Medical personnel only.
- ❑ If the PulseOx is mechanically damaged or the LCD presentation is blurred, the device must not be used.
- ❑ If the elastic thimble changes color (gray or white) or loses elasticity (enough to fall off the finger) we recommend that you stop using the unit.
- ❑ The PulseOx is **not** water-proof. Water penetration invalidates the warranty.
- ❑ Please note that the PulseOx includes a battery that should be disposed of in accordance with local environmental regulations.
- ❑ The pulse rate indicator is not suitable for monitoring cardiac pacemaker frequency.
- ❑ The PulseOx should only be used on intact skin.
- ❑ The use of the PulseOx by special need patients should be supervised by his/her caregiver.

### System Parts:

- ❑ PulseOx 6000™ Finger unit
- ❑ 3.6 V ½ AA Lithium battery
- ❑ Carrying strap
- ❑ Storage pouch
- ❑ User instructions
- ❑ Manufacturer's warranty

### Device Components:

- A. Silicone Elastic Thimble
- B. Illumination and Multi-Directional Display Button
- C. Liquid Crystal Display (LCD)
- D. Plastic Casing
- E. Battery Cover
- F. Carrying Strap Anchor

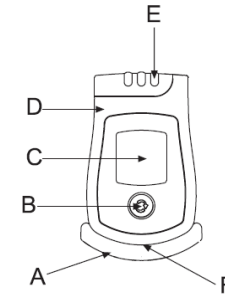


Figure 1

### Liquid Crystal Display (LCD) Indicators and symbols (Figure 2):

1. Pulsing Heart Indicator
2. SpO<sub>2</sub> Legend
3. Sensor "OFF" Indicator
4. "Weak Signal" Indicator
5. "Battery Status" Indicator
6. Saturation Rate (%)
7. Heart Rate (bpm)

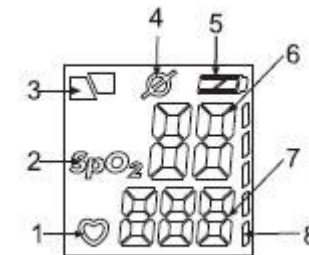


Figure 2

### Please Note Before Use:

- ❑ All activity should cease prior to initiating measurements (e.g. eating, drinking, smoking, or exercising) since these, among other activities, may affect the readings.
- ❑ The hand should be relaxed (e.g. lying on a flat surface) and still during the measurement process.

- ❑ Inserting a finger into the elastic thimble should be easy and comfortable, IF INSERTION IS TOO TIGHT OR DIFFICULT, USE A SMALLER FINGER. **Damage caused by force will void the warranty.**

#### Using the PulseOx:

- ❑ Hold the PulseOx so that the diagram of the nailbed is facing up.
- ❑ Gently place a finger into the elastic thimble as shown in the diagram (see Figure A). Slightly press on the sides of the thimble to ease the finger inside



**Figure A**

- ❑ Gently turn the hand over so that the LCD screen is now facing up. Make sure that the finger feels comfortable. **Do not use force.**
- ❑ Hold the hand relaxed and still. The SPO legend will appear, followed by a series of flashing dashes.
- ❑ The PulseOx will initiate readings within the first twenty (20) seconds.
- ❑ To illuminate the LCD screen, press the Illumination and Bi-directional Display Button for one second. The screen will be illuminated for 40 seconds.
- ❑ To change the direction of the LCD screen display 180°, press the Illumination and Bi-directional display button (Figure 1 - B) for two (2) seconds.

#### Turning Off the PulseOx:

- ❑ To turn off the PulseOx, remove the finger from the elastic thimble. The LCD display will show "OFF" and automatically turn off.

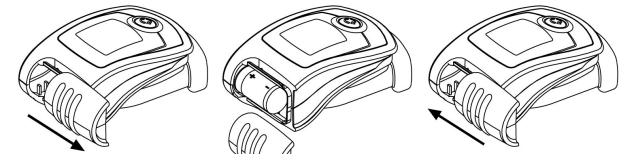
#### Battery status:

- ❑ The battery indicator displays the approximate power remaining in the battery.
- ❑ The display of a single battery bar indicates that the battery will soon need replacement.
- ❑ Battery requirements: 3.6V ½ AA Lithium

#### Battery replacement method:

- ❑ Batteries are to be changed by a trained service technician.
- ❑ Open the battery compartment by sliding the battery cover (see figure B).
- ❑ Carefully remove the old battery and discard according to local environmental regulations.
- ❑ Insert a new 3.6V ½ AA Lithium battery (see figure C). Ensure that the battery polarization (+/-) is in per the symbols inside the battery compartment.
- ❑ Replace the battery cover (see figure D).

- ❑ The PulseOx will automatically "power on" when the battery is placed correctly.



**Figure B**

**Figure C**

**Figure D**

#### PulseOx Cleaning Instructions:

- ❑ Wipe the exposed surfaces with a soft cloth or a moistened pad with a mild detergent solution or an isopropyl alcohol solution (70%).
- ❑ Clean the inside of the elastic thimble and the optical elements with a cotton swab moistened with a mild detergent solution or an isopropyl alcohol solution (70%).
- ❑ Clean your PulseOx whenever you see any kind of soil, dirt or obstruction in the unit.
- ❑ Ensure that no dirt or blood is on the optical components inside the elastic thimble.
- ❑ A transparent protective plastic sleeve, supplied by SPO, can be placed on the finger if the user sees fit.

#### Product Specifications:

##### Effective Measuring Range

Saturation	40 to 99%
Heart Rate	40 to 250 bpm
Resolution	1 digit

##### Accuracy (incl. minor motion and low perfusion)

Saturation (70%-99%)	±2% or ±2 digits
Heart Rate	±3% or ±3 digits

##### Display

Saturation	2 characters
Heart Rate	3 characters
Signal Indications:	Sensor 'OFF' and 'Weak Signal'

Battery Indication	Flashing Heart Icon Full power, 1/3 and near empty
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Power Requirements	3.6V Lithium battery, ½ AA size
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Battery life	500 Hours
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##### Mechanical

Overall Dimensions	2.91" x 1.61" x 1.18" (74 x 41 x 30 mm)
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Weight	1.76 oz (50 g) incl. battery
Storage Temperature	-4° to 158F° (-20°C to 70°C)
Operating Temperature	39° to 107F° (4°C to 42°C)
Humidity	Up to 95% non-condensing

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Spot measurements  
No alarms

Rx  
only



Device Catalog Number: 90310000  
Design and specifications are subject to change without notice.  
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### Manufacturer's End User Product Warranty - PulseOx 6000™

SPO Medical Equipment Ltd. (the "Company") warrants (except as otherwise noted below) that its products (the "Product") are free from defects in materials and workmanship for a period of two (2) years from the date of purchase by the end user. In the event that the Product qualifies for coverage under this warranty, the Company, at its option and at no charge, may either repair or replace the Product (not including, shipping, handling, delivery or installation) with an identical product or product having similar features and functionality, as determined by the Company. The warranty period for any repaired or replaced Product shall be the remainder of the original warranty term for the original product.

The Company does not warranty the installation, maintenance, or service of its Product. The Company is not responsible for ancillary equipment not supplied by the Company, which is attached to or used in connection with the Company's Product, or for the operation of the Product with any ancillary equipment, and all such equipment and operation of such equipment with the Product, is expressly excluded from this limited warranty. Furthermore, the Company shall not be responsible for any damage to the Product resulting from the use or operation of the ancillary equipment not furnished by the Company for use with the Product.

The Company extends this limited warranty only to the original end-user. This limited warranty and the remedies hereunder are limited to Products properly used, maintained, stored, installed and used for their intended purpose and use only, in accordance with the Company instructions. This warranty shall not apply to Product installed, operated or maintained in or under abnormal

conditions. This warranty is not applicable to any Product which is not operated and/or installed in accordance with the Company's specifications and or industry practices and standards. This warranty does not extend to any battery power supply included in / with the Product.

This warranty sets forth all of the Company's responsibilities for the Product.

THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT, INCLUDING WITHOUT LIMITATION, IN CONTRACT, TORT, STRICT LIABILITY OR WARRANTY, SHALL THE COMPANY BE LIABLE TO THE PURCHASER OR TO ANY THIRD PARTY, FOR ANY DAMAGES OR FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT. TO THE FULL EXTENT THAT SUCH MAY BE DISCLAIMED BY LAW, COMPANY'S SOLE LIABILITY SHALL BE TO REPLACE OR REPAIR THE PRODUCT.

Some states within the United States do not allow the exclusion or limitation of consequential or incidental damages, or limitations on the duration of an implied warranty. Therefore, the limitations or exclusions of consequential or incidental damages and implied warranties set forth herein may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

If it appears that the Product does not meet the terms of the limited warranty set forth above, within the Warranty Period, the purchaser must notify the Company in writing of the warranty claim and after receiving proper authorization, return the Product to the nearest Company certified distributor for exchange or repair of Product.

### FAQ's (Frequently Asked Questions) on the PulseOx 6000™ Pulse "oximeter"

- Q:** Which finger should be used to obtain best results?  
**A:** Use any finger that easily fits into the thimble; do not force the finger into the thimble.
- Q:** After I start the Oximeter, only dashes appear.  
**A:** This is normal for the first ten (10) seconds. If the reading takes longer than 20 seconds to appear, it may be indicating that the Oximeter is too tight on the finger, causing impairment or restriction of the circulation. Ensure that the finger is properly placed inside the elastic thimble as indicated in the user instructions. Pull the finger out a little and the Oximeter will restart. If the second try is unsuccessful, repeat the insert/start process on a smaller finger. If the user has very small fingers (e.g. children), try using the thumb.

3. **Q:** I get a "weak signal" icon, what does this mean?  
**A:** Once the Oximeter is operational and getting a reading and the sensor does not receive a signal for more than approximately 5 seconds this icon will appear, even though the LCD continues to show the last update. The "weak signal" reading may indicate that the unit is too tight and the finger and is restricting or stopping circulation. Please refer to FAQ # 2.
4. **Q:** The Sensor "OFF" icon is lit, what does this mean?  
**A:** This means that the sensor is having a problem reading the signal from the finger. Please ensure that the finger is properly places inside the elastic thimble as indicated in the user instructions. The sensor will shut down if no signal is detected over a 60 second period. It may also indicate that the unit is placed too tightly on the finger and is restricting or stopping circulation. Please refer to FAQ #2.
5. **Q:** The illuminating backlight turns off.  
**A:** The light is designed to operate at 10 seconds intervals to conserve on battery life. Press the button for one second and the light should turn on for another ten seconds.
6. **Q:** How do I change the direction of the screen?  
**A:** Press the Illumination and Bi-directional Screen Selector Button for two seconds and the LCD reading will switch 180°.
7. **Q:** How is the battery changed?  
**A:** A trained service technician should open the battery compartment by sliding the battery cover off. Carefully remove the old battery and discard according to local environmental regulations. Insert a new 3.6V ½ AA Lithium battery. Verify that the battery polarization (+/-) is per the symbols inside the battery cover. The Oximeter will automatically "power on" when the battery is placed correctly.
8. **Q:** Where can I purchase a new battery?  
**A:** 3.6V ½ AA batteries are available in many electronics stores, e.g. Radio Shack / USA. Replacement batteries can be purchased from Customer Service 1-800-548-6705 or (for calls from out of the USA dial +1-805-823-8460) or via email [support@spomedical.com](mailto:support@spomedical.com).
9. **Q:** What is the normal range for each display (SpO<sub>2</sub> and pulse)?  
**A:** Individual normal ranges should be defined by the patient's physician.
10. **Q:** Can I put it on a wet (or bloody) finger?  
**A:** No. This model is not water resistant and, therefore, exposure to excessive moisture will damage the Oximeter and void the warranty. Wipe all moisture from the finger before inserting into the flexible thimble. If finger is injured or bleeding, use a different finger.

11. **Q:** The Oximeter dropped into the water.  
**A:** Turn the Unit off immediately and remove the battery. Discard the Oximeter at your local electronics recycling center.