

USER MANUAL

Fingertip Pulse Oximeter Item #: POX-ROS

1. General Description

Thank you for purchasing the Roscoe Finger Pulse Oximeter. This oximeter is used to measure your blood oxygen saturation level (in % SpO₂) and your pulse rate. It should be used for spot monitoring only and not for continuous monitoring.

The Fingertip Pulse Oximeter is a non-invasive device intended for spot-check of oxygen saturation of arterial hemoglobin (SpO₂) and pulse rate. This device is NOT intended for continuous monitoring. Solely for use with sporting and aviation activities.

2. Package Contents

- Fingertip Pulse Oximeter
- Lanyard
- User Manual
- 2 AAA Batteries

3. Precautions for Use

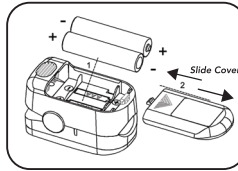
1. Read the manual carefully before use.
2. Pulse oximeters are sensitive to motion. Keep hands still while taking a reading.
3. Pulse oximeters require sufficient blood flow to obtain proper readings. Poor blood circulation can result in inaccurate readings. If your hands are cold or you have poor circulation, warm your hands by rubbing them together or use another method before attempting to obtain a reading. A tourniquet, blood pressure cuff or other blood flow hinderances may also result in inaccurate readings.
4. Fingernail polish or acrylic nails obstruct the light transmission and may also result in inaccurate readings.
5. Your finger must be clean for proper reading.
6. The pulse oximeter must be clean for a proper reading.
7. If a reading is difficult to obtain, switch to another finger or to the other hand.
8. There are a number of other conditions which may lead to an inaccurate reading including but not limited to recent medical tests that included an injection of dyes, use of arterial catheters, a weak pulse, low levels of hemoglobin in the blood, low perfusion (the quality of your pulse), elevated levels of dysfunctional hemoglobin, the strength and type of light that you are in while using the pulse oximeter and the existence of cell phone, radios, and fixed transmitters within certain ranges of the pulse oximeter during use.
9. The pulse oximeter will NOT alert you if your readings are out of normal range.
10. The pulse oximeter has no SpO₂ alarms; It is NOT for continuous monitoring.

In addition to items described in the Precautions for Use section, inaccurate measurements may be caused by **FACTORS INCLUDING BUT NOT LIMITED TO:**

1. Autoclaving, ethylene oxide sterilizing or immersing the sensors in liquid.
2. Significant levels of dysfunctional hemoglobin (such as carboxyhemoglobin or methemoglobin).
3. Intravascular dyes such as indocyanine green or methylene blue.
4. SpO₂ measurements may be adversely affected in the presence of high ambient light such as direct sunlight. In bright light conditions, cover the sensor area if necessary.
5. Excessive user movement.
6. High-frequency electrosurgical interference and defibrillators.
7. Venous pulsations.
8. The user has hypotension, severe vasoconstriction, severe anemia or hypothermia.
9. Fingernail polish or false fingernails may cause inaccurate SpO₂ readings.

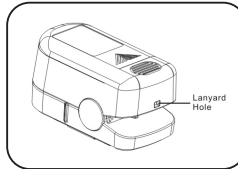
4. Battery Installation

1. Install two AAA batteries into the battery compartment. Match the plus (+) and the minus (-) signs in the compartment. If the polarities are not matched, damage may be caused to the oximeter.
2. Slide the battery door cover horizontally along the arrow as shown in the picture.
NOTE: Install the batteries in the right polarity. Incorrect placement may cause damage to the bracket.
NOTE: Remove the batteries if the pulse oximeter will not be used for long periods of time.
3. The battery indicator symbol on the front panel display will light when the battery voltage is too low for normal operation. Replace the batteries when the indicator symbol lights up.



5. Lanyard Installation

1. Thread the thinner end of the lanyard through the hole in the rear of the pulse oximeter.
2. Thread the thicker end of the lanyard through the thinner end before pulling it tightly.

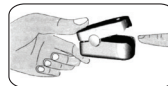


⚠ WARNING

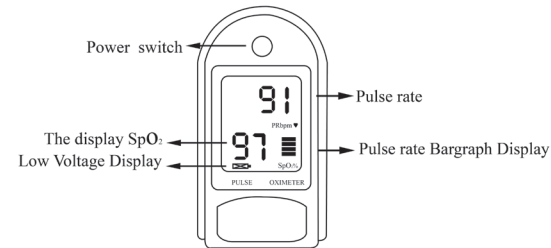
- ⚠ Keep the oximeter away from young children. Small items such as the battery door, batteries, and lanyard are choking hazards.
- ⚠ Explosion hazard: **DO NOT** use the pulse oximeter in an explosive atmosphere.

6. Using the Oximeter

1. Open the clamp as shown in the picture.
2. Place one of your fingers into the rubber opening of the pulse oximeter (your finger should touch the bottom portion) before releasing the clamp.
3. Press the button one time on the front panel to turn the pulse oximeter on.
4. Keep your hands still for the reading. Do not shake your finger during the test. It is recommended that you do not move your body while taking a reading.
5. Read the data from the display screen.



7. Brief Description of Front Panel



The pulse bar graph display corresponds with the user's pulse beat. The height of the bar graph shows the user's pulse strength.

8. Maintenance and Storage

The pulse oximeter requires no routine calibration or maintenance other than replacement of the batteries.

Clean the pulse oximeter and sensor with a soft cloth dampened with isopropyl alcohol. **DO NOT** pour or spray any liquids onto the pulse oximeter. **DO NOT** allow any liquid to enter any openings in the device. Allow the pulse oximeter to dry thoroughly before reusing.

1. Replace the batteries in a timely manner when battery indicator symbol lights up.
2. Clean surface of the fingertip oximeter before each use.
3. Remove the batteries if the oximeter is not operated for over 30 days.
4. It is best to store the product in -4°F ~ +131°F (-20°C ~ +55°C) and ≤93% humidity.
5. Keep in a dry place. Extreme moisture may affect oximeter lifetime and may cause damage.
6. Dispose of batteries properly; follow any applicable local battery disposal laws.

The expected life of the device is three years. The device should be kept in a dry environment. Humidity may reduce the expected life of the device or even damage it.

Stop using the oximeter if one of the following cases occurs:

- An error is displayed on screen. Refer to Section 10 for Possible Problems and Resolutions.
- The oximeter cannot be powered on in any case and even after the batteries have been replaced.
- There is a crack on the oximeter or damage on the display resulting in readings that cannot be identified; the spring is damaged; or the button is unresponsive or unavailable.

9. Technical Specifications

1. **Display Type:**
LED Display
2. **SpO₂:**
Display Range: 0-99%
Measurement range: 0-100%
Accuracy: 70%-100%: ±3%; 0%~69% no definition
Resolution: ±2% for SpO₂

3. Pulse Rate:

Measure range: 30-250 BPM
Accuracy: 30~99 BPM, ±2 BPM for Pulse Rate
Resolution: ±1 BPM for Pulse Rate

4. Probe LED Specifications:

	Wavelength	Radiant Power
RED	660nm	6.65mW
IR	880nm	6.75mW

5. Power Requirements:

Two 1.5 V AAA alkaline batteries, adaptable range: 2.6V-3.6V
Power consumption: Less than 25 mA

Low power indication:

Battery Life: Two AAA 1.5V, 600 mAh alkaline batteries could be continuously operated as long as 24 hours. It is equipped with a function switch, through which the oximeter powers off if finger is out of the oximeter longer than 5 seconds.

6. Outline Dimension:

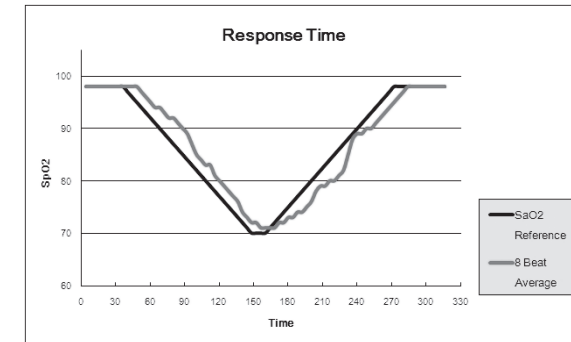
Length: 2.25"
Width: 1.25"
Height: 1.5"
Weight: 1.6 oz (including two AAA batteries)

7. Environment Requirements:

Operation Temperature: 41~105°F (5~40°C)
Storage Temperature: -4~131°F (-20~+55°C)
Ambient Humidity: 15%~80% in operation; ≤93% in storage

8. Equipment Response Time:

As shown in the following figure.
Response time of slower average is 12.4s.



9. Classification:

According to the type of protection against electric shock: INTERNALLY POWERED EQUIPMENT; According to the degree of protection against electric shock: TYPE BF APPLIED PART; According to the method(s) of sterilization or disinfection recommended by the manufacturer: Equipment with method(s) of sterilization or disinfection recommended by the manufacturer; According to the degree of safety of application in the presence of a FLAMMABLE ANAESTHETIC MIXTURE WITH AIR or WITH OXYGEN OR NITROUS OXIDE: EQUIPMENT not suitable for use in the presence of a FLAMMABLE ANAESTHETIC MIXTURE. According to the degree of protection against ingress of water: IPX1 According to the mode of operation: CONTINUOUS OPERATION.

10. Declaration:

EMC of this product complies with IEC60601-1-2 standard. The materials which users can come into contact with are non-toxic and comply with ISO10993-1, ISO10993-5 and ISO10993-10.

Compass Health Brands offers a limited one (1) year warranty on the pulse oximeter. We warrant that the oximeter will be free from defects in workmanship and materials for a period of one (1) year from the date of original purchase. This warranty does not extend to failures resulting from accident, misuse, abuse, alteration, use of unauthorized service, parts or cleaning solutions, or failure to comply with the User's Manual.










Fingertip Pulse Oximeter



10. Possible Problems and Resolutions

Problem	Possible Reason	Solution
SpO ₂ or PR is not shown normally.	1. Finger is not inserted correctly. 2. User's oxyhemoglobin value is too low to be measured.	1. Retry inserting the finger. 2. Possible pulse oximeter failure.
SpO ₂ or PR is shown unstable.	1. Finger may not be inserted deep enough. 2. Finger is trembling or user's body is in movement status.	1. Retry inserting the finger. 2. Try not to move.
The oximeter cannot be powered on.	1. Power of batteries might be inadequate or missing. 2. Batteries might be installed incorrectly. 3. The oximeter might be damaged.	1. Replace batteries. 2. Try reinstalling the batteries. 3. Contact Compass Health.
Indication lamps are suddenly off.	1. The oximeter automatically powers off when no signal is detected longer than 5 seconds. 2. Power level of the batteries is beginning to become weak.	1. Normal. Press power button to power back on. 2. Replace the batteries.
"Error3" or "Error4" is displayed on the screen.	1. Lower power. 2. Product is damaged.	1. Replace the batteries. 2. Contact Compass Health.
"Error6" is displayed on screen.	1. Product is damaged.	1. Contact Compass Health.
"Error7" is displayed on screen.	1. Lower power. 2. Product is damaged.	1. Replace the batteries. 2. Contact Compass Health.

11. Symbol Definitions

Symbol	Definition
	Type BF applied part
	Refer to instruction manual/booklet
IP22	Ingress of liquids rank
SpO₂%	Oxygen Saturation
BPM	Pulse Rate / beats per minute
	Lower Power Indication
	Storage temperature and relative humidity
SN	Serial number
	Manufacturer
	This side UP
	Fragile, handle with care
	Keep dry
	Read all warnings and instructions before use

Guidance and manufacturer's declaration - electromagnetic emissions - for all EQUIPMENT and SYSTEMS		
Guidance and manufacturer's declaration - electromagnetic emission		
The pulse oximeter is intended for use in the electromagnetic environment specified below. The customer or the user of the pulse oximeter should assure that it is used in such an environment.		
Emission test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The pulse oximeter 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 emission CISPR 11	Class B	The pulse oximeter is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.

NOTE: The illustrations used in this manual may differ slightly from the appearance of the actual product.

12. Common Questions and Answers

What is a Pulse Oximeter?
A pulse oximeter is a non-invasive device that indirectly monitors blood oxygen saturation (SpO₂) and pulse rate (heart rate). It displays both blood oxygen saturation (SpO₂) and pulse rate (heart rate). Pulse oximeters provide an easy way of assessing your blood oxygen level and pulse rate.

What is SpO₂?
SpO₂ is also known as oxygen saturation. Oxygen saturation is a measure of how much oxygen the blood is carrying as a percentage of the maximum it could carry.

What is the normal range of SpO₂?
The normal range for SpO₂ is typically considered to be from 95% - 99%. The SpO₂ measurement may be lower for people who live in high altitudes. Ask your health care professional this question as it pertains to you.

What is the normal range for pulse rate?
The normal resting range for pulse rate is typically considered from 60~100 beats per minute (bpm). Ask your health professional this question as it pertains to you.

What kind of conditions may cause an inaccurate reading?
Cold hands, poor circulation, very weak pulse, movement, fingernail polish and acrylic nails (fake nails) may cause inaccurate readings and results. See additional conditions listed in Section 3 of this manual.

The SpO₂ is not changing - it's stuck:
SpO₂ levels do not change like a pulse rate. It is slow to change.

I do not see the battery indicator symbol on the display:
The battery indicator symbol only appears when the batteries are weak or low.

13. Limited Warranty

Compass Health Brands offers a limited one (1) year warranty on the pulse oximeter. We warrant that the oximeter will be free from defects in workmanship and materials for a period of one (1) year from the date of original purchase. This warranty does not extend to failures resulting from accident, misuse, abuse, alteration, use of unauthorized service, parts or cleaning solutions, or failure to comply with the User's Manual.

If the warranted equipment should fail during the warranty period, Compass Health Brands, at our option, will repair or replace parts at issue, provided the claim is bona fide. It shall be the responsibility of the purchaser to pack and return the equipment in a manner to avoid shipping damage. The shipment must be prepaid to us. This warranty covers the cost of labor incurred in the removal or replacement of the warranted component parts only.