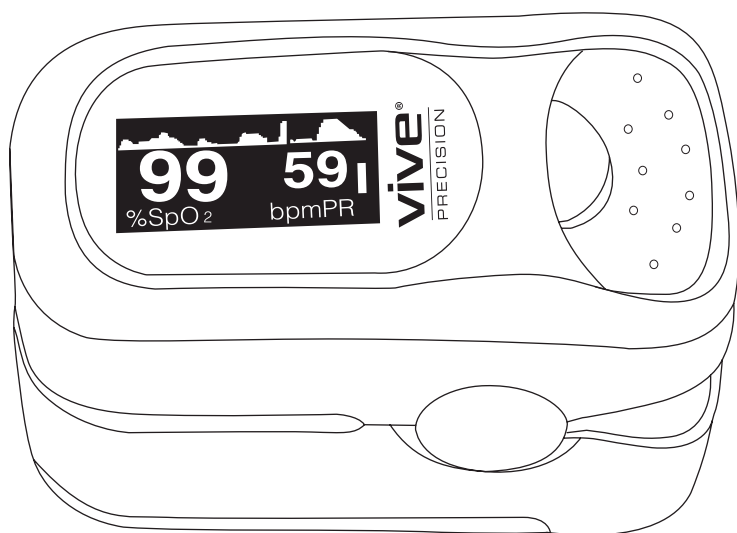


vive®

PULSE OXIMETER

User Manual

DMD1003



vivehealth.com

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PRODUCT DESCRIPTION

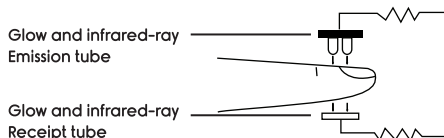
The Vive Precision pulse oximeter is a lightweight, portable device used for measuring both pulse rate and SpO2 level. Simply place your finger inside the antimicrobial vinyl sensor and have these vital measurements instantly displayed on a vibrant LCD screen. Features a battery-saving automatic power off function and an irregular heartbeat alarm notification. Protected by a two-year warranty.

MEASUREMENT PRINCIPLE

Principle of the pulse oximeter is as follows: A mathematical formula is established making use of Lambert Beer Law according to Spectrum bsorption Characteristics of Reductive hemoglobin (RHb) and Oxyhemoglobin (HbO₂) in glow and near-infrared zones. Operation principle of the instrument: Photoelectric Oxyhemoglobin Inspection Technology is adopted in accordance with Capacity Pulse Scanning and Recording Technology, so that two beams of different wavelength of lights (660nm glow and 940nm near infrared light) can be focused onto a human nail tip through a clamping finger-type sensor. A measured signal obtained by a photosensitive element, will be shown on the oximeter's display through process in electronic circuits and microprocessor shown on the oximeter's display through electronic circuits and a microprocessor.

Operation Principle

1. Red and Infrared-ray Emission Tube
2. Red and Infrared-ray Receipt Tube



WHAT'S INCLUDED

- 1x Pulse Oximeter
- 1x Carrying Case
- 1x Lanyard
- 2x AAA Batteries
- 2-Year Warranty

WARNING

- Do not use the pulse oximeter in an MRI or CT environment.
- The pulse oximeter is intended for sports and/or aviation use only.
- Check the pulse oximeter sensor application site frequently to determine the positioning of the sensor and circulation and skin sensitivity of the user.
- Do not stretch the adhesive tape while applying the pulse oximeter sensor. This may cause inaccurate readings or skin blisters.

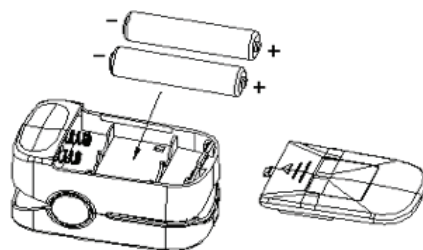
- The pulse oximeter has no SPO2 alarms; it is not for continuous monitoring.
- Prolonged use or the user's condition may require changing the sensor site periodically. Change sensor site and check skin integrity, circulatory status, and correct alignment at least every 4 hours.
- Inaccurate measurements may be caused by autoclaving, ethylene oxide sterilizing, or immersing the sensors in liquid.
- Significant levels of dysfunctional hemoglobins (such as carboxyhemoglobin or methemoglobin) may cause inaccurate readings.
- Intravascular dyes such as indocyanine green or methylene blue.
- SPO2 measurements may be adversely affected in the presence of high ambient light. Shield the sensor area (with a surgical towel, or direct sunlight, for example) if necessary.
- Excessive user movement may cause inaccurate readings.
- Venous pulsations may cause inaccurate readings.
- High-frequency electrosurgical interference may cause inaccurate readings.
- Placement of a sensor on an extremity with a blood pressure cuff, arterial catheter, or intravascular line.
- The user has hypotension, severe vasoconstriction, severe anemia, or hypothermia.
- The user is in cardiac arrest or is in shock.
- Fingernail polish or false fingernails may cause inaccurate SPO2 readings.

Note: Follow local ordinances and recycling instructions regarding disposal or recycling of the device and device components, including batteries.

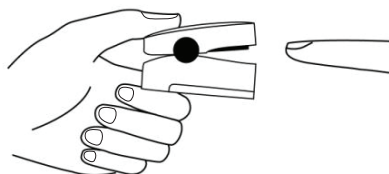
OPERATING INSTRUCTIONS

1. Install two AAA batteries into battery compartment according to diagram.

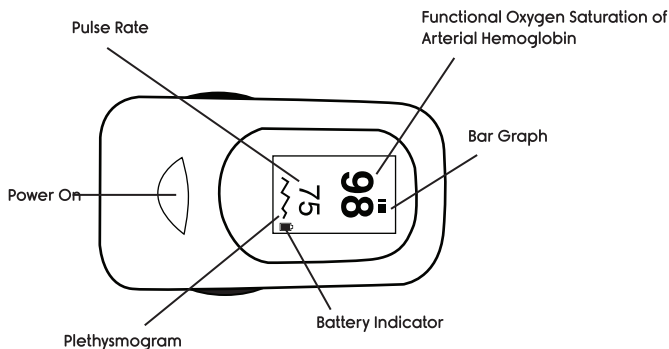
Notes: Battery polarities should be correctly installed. Incorrect placement may cause damage to the device.



2. Open the clamp as illustrated.



3. Fully insert one fingertip into the silicone hole of the oximeter before releasing the clamp.
4. Press the power on button once on front panel. See diagram.



5. Finger and body should remain still during measurement.
6. Read correct data from display screen. When unit is powered on (each time you press the power button, the oximeter will switch to another display mode). There are a total of 4 display modes. Press and hold the power button and you will enter the settings screen. Press once quickly to switch among the settings, longer press to change the current settings to sounds and alarm limits.

Settings	
Alm Setup	
Alm	* off
Beep	off
Demo	off
Restore	OK
Exit	

Settings	
Sounds Setup *	
SpO2 Alm Hi	100
SpO2 Alm Lo	90
PR Alm Hi	130
PR Alm Lo	50
Exit	

7. The product will automatically power off when there is no signal for longer than 8 seconds.

Notes:

- Fingernail surface must be facing upward when finger is inserted into the pulse oximeter.
- An inaccurate reading or error message may occur if finger was not placed correctly into the pulse oximeter.
- Use rubbing alcohol to clean the rubber padding inside of the oximeter. Clean the test finger using rubbing alcohol before and after each test. (The medical grade silicone inside of oximeter has zero toxins and is not harmful to skin).

STRAP INSTALLATION

1. Thread thinner end of the strap through the loop.
2. Thread thicker end of the strap through the threaded end before pulling it tightly.

MAINTENANCE AND STORAGE

1. Replace the batteries in time when low voltage lamp is lighted.
2. Clean surface of the fingertip oximeter before it is used in diagnosis for users.
3. Remove the batteries inside the battery cassette if the oximeter will not be operated for a long time.
4. It is best to preserve the product in a place where ambient temperatures is -10°C - 50°C and relative humidity is 10%-95%.
5. It is recommended that the product should be kept in a dry environment anytime. A wet ambient might affect its lifetime and even might damage the product.
6. Avoid exposure or direct sunlight.
7. Avoid excessive radioactive infrared rays or ultraviolet rays.
8. Please follow the law of the local government to deal with used battery.

SPECIFICATIONS

Display Type:

- Color OLED display
- 4 display directions

SPO2:

- Measurement range: 35%-100%
- Resolution: 1%
- Accuracy: 70%-100%, $\pm 2\%$; 0%-69% no definition.

Pulse Rate:

- Measure range: 25 BPM -250 BPM
- Resolution: 1bpm,
- Accuracy: 2bpm
- Pulse Intensity: Bar Graph Indicator

Power Requirements:

- Two AAA alkaline Batteries
- Power consumption: 30mA (Normal)
- Low power indication:
- Battery Life: Two AAA 1.5V, 600mAh alkaline batteries could be continuously operated as long as 30 hours.

Dimension:

- Length: 64mm
- Width: 35mm
- Height: 34mm
- Weight: 57g (including two AAA batteries)

Environment Requirements:

- Operation Temperature: 5°C - 40°C
- Storage Temperature: -10°C - 50° C
- Ambient Humidity: 15%-80%, no condensation in operation.
- 10%-93%, no condensation in storage

Measurement Performance in Low Perfusion Condition: 0.3%.

DECLARATION

EMC of this product complies with IEC60601-1-2 standard.
The materials which the user can come into contact have no toxicity and no action on tissues comply with ISO10993-1, ISO10993-5 and ISO10993-10.


Guidance and Manufacturer’s declaration – electromagnetic immunity. For all EQUIPMENT and SYSTEMS that are not LIFE SUPPORTING

Guidance and Manufacturer’s declaration – electromagnetic immunity

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.





TROUBLESHOOTING

Problems	Possible reason	Solution
SPO2 or PR cannot be shown normally	<ol style="list-style-type: none"> 1. Finger is not inserted correctly 2. User's Oxyhemoglobin value is too low to be measured 	<ol style="list-style-type: none"> 1. Retry by inserting the finger 2. Try some more times. If you can make sure no problem is existing in the product. Please go to a hospital timely for exact diagnosis.
SPO2 or PR is shown unstably	<ol style="list-style-type: none"> 1. Finger might not be inserted deep enough. 2. Finger is trembling or user's body is in movement status. 	<ol style="list-style-type: none"> 1. Retry by inserting the finger 2. Try not to move
The Oximeter cannot be powered on	<ol style="list-style-type: none"> 1. Power of batteries might be inadequate or not be there at all 2. Batteries might be installed incorrectly 3. The Oximeter might be damaged 	<ol style="list-style-type: none"> 1. Please replace batteries 2. Please reinstall the batteries 3. Please contact with local customer service center
The screen suddenly turns off.	<ol style="list-style-type: none"> 1. The product is automatically powered off when no signal is detected longer than 8 seconds 2. Power cells of the batteries have been depleted or are inadequate 	<ol style="list-style-type: none"> 1. Normal 2. Replace the batteries

 There are no user-serviceable parts inside the oximeter. The cover should only be removed by qualified service personnel. If you are uncertain about the accuracy of any measurement, check the user's vital signs by alternate means; then make sure the oximeter is functioning correctly.

Do not spray, pour, or spill any liquid on the oximeter, its accessories, connectors, switches, or openings in the enclosure as this may damage the oximeter.

SYMBOL DEFINITIONS

Symbol	Definition
	Type BF equipment (Refer to IEC 60601-1:1995)
	Attention, consult accompanying documents
% SPO₂	Oxygen saturation
	Pulse rate (BPM)
	Symbol for the marking of electrical and electronic devices according to Directive 200296/EC. The device, accessories, and the packaging have to be disposed of waste correctly at the end of the usage. Please follow Local Ordinances or Regulations for disposal. Note: The Oximeter is applied to this regulation.

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

WARRANTY REGISTRATION

This product is guaranteed to be free from manufacturing defects. We will replace or exchange any product that is defective to your complete satisfaction. This warranty extends two years from the purchase date, as long as the product has not been misused or abused.

**To ensure your warranty,
please register your product at
www.vivehealth.com/register.**

Product Code: DMD1003



We sincerely appreciate your business.
We strive to provide you with the best
quality products at great value.

If you have any questions please contact us.



service@vivehealth.com



1-800-487-3808

Monday - Friday 9am - 5pm EST