

# MCKESSON

LATEX FREE

## Finger Pulse Oximeter

Blood Oxygen Saturation and Pulse Rate

- Pediatric to adult use
- Multi-angle display mode
- Adjustable brightness
- Automatic power off
- Long battery life

## Instruction Manual 2-Year Limited Warranty



Reorder No. **16-93651**

### READ ALL INSTRUCTIONS BEFORE USE

#### General Description

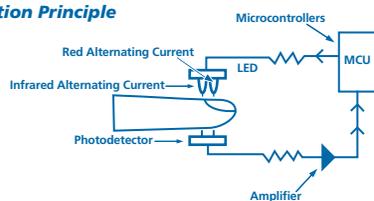
Thank you for purchasing the McKesson Brand Finger Pulse Oximeter. The finger pulse oximeter is a self-contained compact system that incorporates photoelectric sensors and a display screen in one unit. The finger pulse oximeter can be used to measure the oxygen saturation and pulse rate through the finger tip. This unit helps provide exceptional monitoring performance.

Hemoglobin (Hb) saturation is the percentage of Oxyhemoglobin (O<sub>2</sub>Hb), or how much oxygen is bonded to the Hemoglobin (Hb) in the red blood cell and that is available to be carried and released throughout the body. Many respiratory diseases can result in hemoglobin saturation being lowered in human blood. Moreover, the following factors can also lead to problems in oxygen supply, so that human hemoglobin saturation might be reduced: automatic organic regulation malfunction caused by anesthesia, intensive postoperative trauma and some medical examinations. In this situation, symptoms such as lightheadedness, asthenia, and vomiting might occur and even endanger the patient's life. Therefore, it is very important to know hemoglobin saturation of the patient in timely clinical medical aspects so that doctors can diagnose problems in time. Saturation parameters should be provided by a physician.

#### Measurement Principle

Principles of the pulse oximeter are based on the Lambert-Beer Law. This is a combination of two laws describing absorption of monochromatic light by a transparent substance through which it passes. The oxygen saturation is measured by the transmission of light through the pulsatile tissue bed. The pulse oximeter consists of two light sources and a photodetector connected to a signal processing unit. The signal received by the photodetector can be broken down into two signals: an Alternating Current signal from the amount of absorbed infrared light (IR) through the point of measurement, and an Alternating Current signal from the change in absorbed red light due to the pulsation of arteries. The two wavelengths of light are chosen to be 660 nm for infrared light and 940 nm for the red light. This ratio, measured at IR and red wavelengths can be used to calculate the oxygen saturation in the body.

#### Diagram of Operation Principle



#### Precautions for Use

1. Before use, carefully read the instruction manual.
2. Fingernail polish or false fingernails may cause inaccurate SpO<sub>2</sub> readings.
3. Do not use the pulse oximeter in MRI or CT environments.
4. Do not use the pulse oximeter in situations where alarms are required. The device has no alarms.
5. Explosion hazard: Do not use the finger pulse oximeter in the presence of flammable anesthetics, explosive substances or gases.
6. The pulse oximeter is intended only as an adjunct in patient assessment. It must be used in conjunction with other methods of assessing clinical signs and symptoms.
7. Check the pulse oximeter sensor application site *frequently* to determine the positioning of the sensor and circulation and skin sensitivity of the patient.
8. The pulse oximeter has no SpO<sub>2</sub> alarms; it is not for continuous monitoring.
9. The patient's condition may require changing the sensor site periodically based on skin integrity, circulatory status, and correct alignment.
10. Inaccurate measurements may be caused by autoclaving, or ethylene oxide sterilizing. Do not immerse sensors in liquid as this may cause inaccurate readings.
11. Significant levels of dysfunctional hemoglobins (such as carboxy-hemoglobin or methemoglobin) may cause inaccurate readings.
12. Intravascular dyes such as indocyanine green or methylene blue may cause an inaccurate reading.
13. SpO<sub>2</sub> measurements may be adversely affected in bright overhead lights or direct sunlight. Shield the sensor area if necessary.
14. Excessive patient movement may alter reading.
15. Venous pulsations may alter reading.
16. Placement of a sensor on an extremity with a blood pressure cuff, arterial catheter, or intravascular line may alter reading.
17. Hypotension, severe vasoconstriction, severe anemia or hypothermia may alter reading.
18. Do not use if patient is in cardiac arrest or is in shock.

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

#### Product Properties

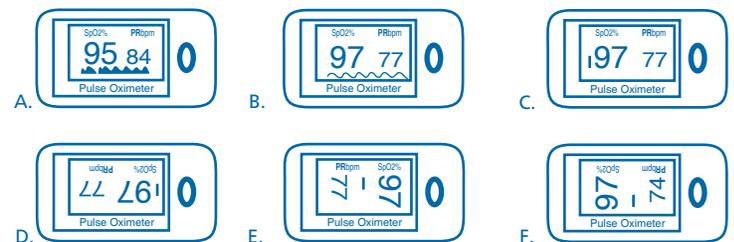
1. Operation of the product is simple and convenient.
2. The product is small in size, light in weight (total weight is about 1.76 oz. (50g) including batteries) and convenient to carry.
3. Power consumption of the product is low and the two originally-equipped AAA batteries can be operated continuously for 30 hours.
4. Low voltage warning will be indicated in visual window when battery voltage is so low that normal operation of the oximeter might be influenced.
5. The product will automatically be powered off when no signal is detected for 8 seconds.

#### Product Operation Scope

The finger pulse oximeter can be used to measure human hemoglobin saturation and heart rate through the finger. The product is suitable for use in home or hospital settings (including clinical use in internist/surgery anesthesia, pediatrics, intensive care, etc.), oxygen clubs, social medical organizations, and physical care in sports. The product is not suitable for long-term continuous patient monitoring.

#### Operation Instructions

1. Install two AAA batteries into battery cassette. (Refer to Battery Installation directions on back.)
2. Place one finger completely in the oximeter with nail surface facing upward before releasing the clamp. Note: fingernail polish or false fingernails may cause inaccurate SpO<sub>2</sub> readings.
3. Press the power button once on front panel.
4. Keep finger and body still while oximeter is working.
5. Read data from display screen.
6. Six display modes (see A-F below). Press power button to change to the different modes.

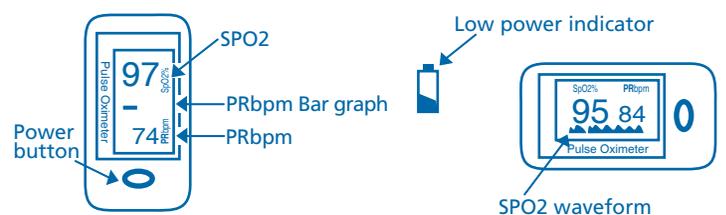


When you press the power button for more than one second, the brightness of the oximeter will be changed by degrees; there are 10 levels of brightness and the default level is level four.

7. Cleaning: Please use Isopropyl alcohol to clean the rubber pad on the inside of the oximeter, and clean the test finger using Isopropyl alcohol before and after each test. (The oximeter contains no toxins, and is not harmful to the skin.)



#### Brief Description of Front Panel



The heart rate bar graph display corresponds with pulse rate (PRbpm).