



# Attendant® Fingertip Pulse Oximeter

## Owner's Manual

Model EFP1

Thank you for purchasing an Attendant® Fingertip Pulse Oximeter from Direct Supply Equipment & Furnishings®. Please read this entire guide carefully and keep it for future reference. This guide will provide you with instructions, warnings, warranty information and other important information about your Attendant Pulse Oximeter. Share this information with your nursing, housekeeping and maintenance staff to help ensure the Pulse Oximeter is cared for properly. Please keep and refer to this owner's manual.

### Introduction

Attendant Fingertip Pulse Oximeters are easy to use and simple to understand. The one-button keypad provides the functionality to quickly check blood-oxygen concentration levels and pulse rate. The color display allows caregivers to quickly assess resident needs and provide care without being intrusive into the daily lives of their residents.

### Definitions & Symbols

**⚠ CAUTION:** Indicates correct operating or maintenance procedures in order to prevent damage to or destruction of the equipment or other property.

**⚠ WARNING:** Calls attention to a potential danger that requires correct procedures or practices in order to prevent personal injury.

**DEVICE:** Your Attendant Fingertip Pulse Oximeter.

**YOU and YOUR:** The facility, community or other entity that has purchased the device.

**WE, US, and OUR:** Direct Supply® Manufacturing™, Inc

**⚠ Attention.** Read the instructions.

: Type BF applied part

**IPX1:** Protected against dripping water

**%SpO<sub>2</sub>:** Oxygen saturation

**BPM:** Pulse rate (BPM)

: Low-power indication

: No SpO<sub>2</sub> Alarm

: Waste electrical and electronic equipment

: Storage temperature and relative humidity

: Follow instruction for use

: Date of manufacture

**SN:** Serial number

: Manufacturer's information

### Specifications

Measures 2¼" x 1¼" x 1½"

Weighs 1.75 oz. with batteries

SpO<sub>2</sub> accuracy: +/2% at 80% to 99%; +/3% at 70% to 80%; undefined at less than 70%

Pulse rate accuracy: +/2% or 2 bpm from 30 to 235 bpm

Pulse rate range: 30 to 235; SpO<sub>2</sub> range: 0% to 100%

Automatically shuts off after 8 seconds

Includes protective rubber boot

### Product Description

The Attendant Fingertip Pulse Oximeter is a portable noninvasive way to spot-check the oxygen saturation of arterial hemoglobin (SpO<sub>2</sub>) and pulse rate of adults in nursing homes, hospitals and Long Term Care communities. The device is suitable for home use only when prescribed by a licensed healthcare professional. NOT FOR CONTINUOUS MONITORING. The Oximeter requires no routine calibration or maintenance other than the replacement of batteries.

### Product Properties

Operation of the Oximeter is simple and convenient. The device is small and light, weighing about 1.75 oz. (50 g) including batteries. Power consumption is low and the two originally equipped AAA batteries can be operated continuously for up to 30 hours. The low-battery indicator will light on the display screen when the batteries need to be replaced. To conserve battery life, the device automatically powers off after 8 seconds if no finger is present in the device.

### Warnings

**BEFORE USE, CAREFULLY READ THIS ENTIRE MANUAL.**

**⚠ WARNING – EXPLOSION HAZARD:** DO NOT USE THE DEVICE IN AN EXPLOSIVE ATMOSPHERE. Operation of device may be affected by the use of an electrosurgical unit (ESU). Do not use the device in an MRI or CT environment.

**⚠ WARNING –** Do not use where SpO<sub>2</sub> or other alarms are required. THE DEVICE HAS NO ALARMS.

**⚠ WARNING –** Do not use if resident has hypotension, severe vasoconstriction, severe anemia or hypothermia. Do not use if the resident is in cardiac arrest or is in shock.

**⚠ WARNING –** Verify nothing is hindering the pulse measurement before relying on the SpO<sub>2</sub> measurement. The device must be able to measure the pulse properly to obtain an accurate SpO<sub>2</sub> measurement. Any of the following, or a combination of the following, may cause inaccurate test results:

- Significant levels of dysfunctional hemoglobins (such as carboxyhemoglobin or methemoglobin)
- Intravascular dyes, such as indocyanine green or methylene blue
- Excessive resident movement
- High-frequency electrosurgical interference and defibrillators

## Warnings (cont.)

- Venous pulsations
- Fingernail polish or false fingernails
- Placement of a sensor on an extremity with a blood pressure cuff, arterial catheter or intravascular line
- High ambient light levels

**⚠ WARNING** – The device is intended only as an adjunct in resident assessment. It must be used in conjunction with other methods of assessing clinical signs and symptoms. The device is not intended for continuous monitoring.

**⚠ WARNING** – Check skin integrity, circulatory status and correct alignment of finger prior to use. Check the device sensor application site frequently to determine the positioning of the sensor, circulation and skin sensitivity of the resident. Do not stretch the rubber lining in the opening of the device when inserting finger. This may cause inaccurate readings or skin blisters. Prolonged use or resident's condition may require changing sensor site periodically.

**⚠ CAUTION** – Do not sterilize the device using autoclaving or ethylene oxide sterilizing, or immerse the device in liquid, which may cause inaccurate readings. The device is not intended for sterilization.

## Product Accessories

- One lanyard
- Two AAA batteries
- One instruction manual and guide

## Directions for Use

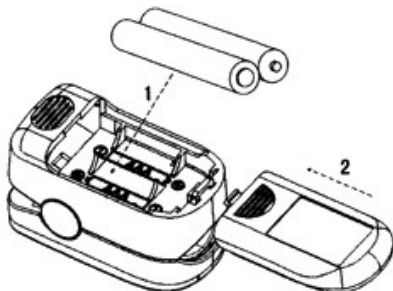
### Lanyard Installation

- Thread thinner end of the lanyard through the hanging hole in the Oximeter.
- Thread thicker end of the lanyard through the threaded thinner end before pulling it tight.

### Battery Installation

Install two AAA batteries into battery case, following the polarity as shown.

Close the battery cover by pushing horizontally along the arrow as shown.

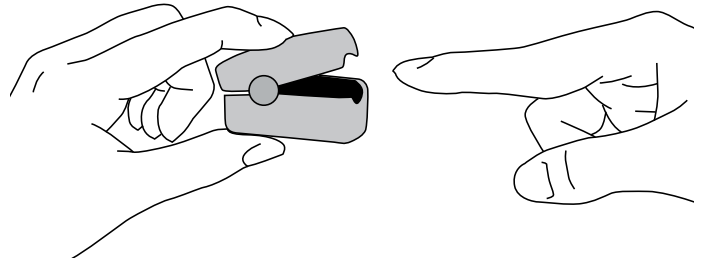


**⚠ WARNING** – Batteries must be installed with the correct polarity. Otherwise, DEVICE MAY NOT WORK and damage might be caused to device. Remove the batteries if the device will not be used for an extended period of time.

## Operation Instructions

- Open the Oximeter clamp as illustrated in the picture below.
- Insert one finger into the opening of the device. Make sure finger is secured in the device before releasing the clamp.

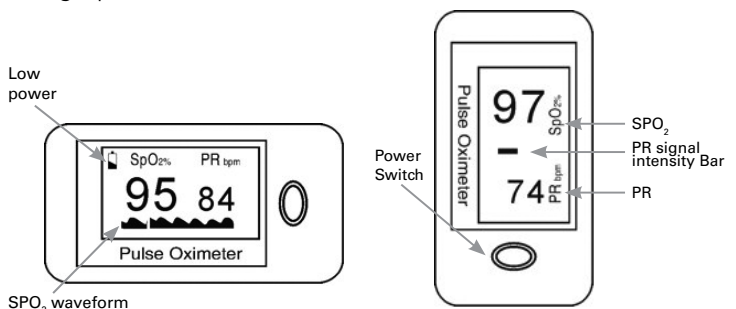
*When finger is inserted into the device, the fingernail surface must be facing upward.*



- Press and release the power switch on the front panel (If the power switch is pressed and held for more than 1 second, the brightness of the device will be adjusted. There are 10 levels on brightness; the default level is 4.)
- Do not move body or finger while the device is operating.
- Read correspondent data from display screen.

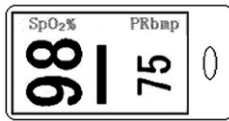
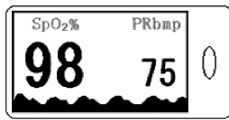
## Brief Description of Display

Resident pulse rhythm is indicated by the signal intensity bar graph.



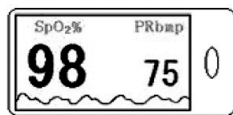
## Six Display Modes

After turning on the device, each time you press and release the power switch (for less than 1 second), the device will switch to another display mode. There are six display modes:

Display Mode	Description
	Display mode when turning on the device, the display is horizontal and upright, displaying a solid waveform
	After pressing the power switch a second time, the display is horizontal and upright, displaying a line waveform



After pressing the power switch a third time, the display is horizontal and upright



After pressing the power switch a fourth time, the display is horizontal and inverted



After pressing the power switch a fifth time, the display is vertical and facing away from the resident



After pressing the power switch a sixth time, the display is vertical and facing toward the resident

### Calibration & Accuracy Verification

- The device cannot be calibrated in the field by the end user.
- If you suspect the device is providing inaccurate results, use a second device to verify accuracy. Do not rely on results you suspect to be inaccurate.
- Immediately discontinue use of the device if it provides inaccurate readings.

### Maintenance, Storage & Disposal

- Replace the batteries as soon as the low-battery indicator on the display screen is lit.
- Clean the surface of the device before it is used in diagnosis of residents.
- Remove the batteries if the device will not be used for an extended period of time.

### Limited Warranty

We offer to you, as the original purchaser, a warranty for the Attendant Fingertip Pulse Oximeter. Our warranty applies for the limited warranty period stated below. If any device or device part listed below is defective in material or workmanship during the applicable limited warranty period, we will repair or replace it at our cost. Please note that the decision to repair or replace a device or device part will be at our discretion. Our warranty applies only if the device is properly maintained by the original purchaser for normal, indoor use and does not cover normal wear and tear, modification of the device, or damage caused by abuse, improper use, failure to maintain, use which exceeds the published device limitations, or the combination of any device with another product. In addition, our warranty does not cover fading, colorfastness, stains, spills or exposure to chemicals, odors, heat or light. In certain cases, we may provide you repair or adjustment instructions and/or replacement parts and ask you to perform a repair or adjustment or replace a defective part.

Our warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Please note that our limited warranty period begins when we ship the device to you. The limited warranty period and our obligations under the warranty end once you transfer the device to someone else or at the end of the applicable limited warranty period identified below, whichever is earlier.

- Store the device in a place where ambient temperatures range from 14° to 104°F (-10° to 40°C). A low-humidity environment is recommended.

### Cleaning

- Use a soft cloth dampened with 70% isopropyl alcohol to clean the rubber that comes into contact with a finger during testing. Also clean the test finger using alcohol before and after each test.

**⚠ CAUTION** – Do not pour or spray any liquids onto the device, and do not allow any liquid to enter any openings in the device. Allow the device to dry thoroughly before reusing.

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

### Measurement Principle

The Oximeter is calibrated to display functional oxygen saturation using the principles of the Lambert Beer Law, according to Spectrum Absorption Characteristics of Reductive Hemoglobin (R Hb) and Oxyhemoglobin (O<sub>2</sub> Hb) in red and near-infrared zones. Using Photoelectric Oxyhemoglobin Inspection Technology and Capacity Pulse Scanning and Recording Technology, the Oximeter measures SpO<sub>2</sub> and pulse rate by shining two beams of differing wavelengths of light (660nm red and 940nm near infrared) through the tip of the fingernail. The Oximeter measures the amount of each wavelength of light that passes through the fingernail using a photosensitive element. The microprocessor analyzes these measurements, determines the SpO<sub>2</sub> level and pulse rate of the resident, and displays this information on the LCD display.

	Warranty Period (Parts)	Anticipated Usable Device Life
Attendant Fingertip Pulse Oximeter (excluding batteries and accessories)	2 years	2 years



### **Limited Warranty** *(cont.)*

Anticipated Usable Device Life is based on normal use with proper maintenance, cleaning and storage. You should still inspect, monitor and care for the device as described in this guide, as the device may need to be replaced sooner than anticipated in particular situations.

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### **Customer Service**

Our promise to you is that you will have a convenient and easy ordering experience, receive a quality Attendant Fingertip Pulse Oximeter and enjoy outrageous customer service. If you have any questions about the Pulse Oximeter you have purchased or would like to request warranty service, please contact:

**Direct Supply Equipment & Furnishings®**, 1-800-634-7328, 6767 N. Industrial Road, Milwaukee, WI 53223, SalesSupport@DirectSupply.com



*DirectSupply.com*

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