

1. General Information

The Stress & Recovery Analyzer (SRA) Pulse Oximeter is a wireless device that allows you to record pulse wave data while not being connected to your computer.

The following requirements are applied for the proper functioning of Dr. Berg Nutritionals products equipped with an SRA Pulse Oximeter:



1. Your computer operates under Microsoft Windows 10 or 11 operating system.
2. Your computer has an integrated Bluetooth 4.0 (Bluetooth LE, or BLE) module (most modern laptops and tablets have it). If your computer does not have an integrated BLE module, the following additional requirements are applied:
 - a) Your computer has at least one USB 2.0 (or higher) port available.
 - b) You will use a Bluetooth LE USB adapter available from a local or online computer store.
3. You will be using an SRA Pulse Oximeter within a 10-meter (33-foot) range from the location of your computer.

2. Set up a Bluetooth LE USB Adapter (Optional)

If your computer is not equipped with an integrated Bluetooth LE module (most modern laptops and tablets have it), you will have to obtain an off-the-shelf Bluetooth LE USB adapter (dongle). They are widely available online and at local computer stores. Any such adapter should work with the SRA Pulse Oximeter.

You simply plug it into any available USB port on your computer. The operating system will automatically set it up for operation.

To check if your computer is ready to connect to Bluetooth LE devices like the SRA Pulse Oximeter, do the following steps:

1. Check if the Bluetooth icon  is shown in the bottom right corner of the Windows desktop screen (notification area). If it is there, your PC is ready to connect to the SRA Pulse Oximeter.
2. If the icon is not shown there, it could be hidden. Click on the up-arrow icon  in the bottom right corner of the Windows desktop screen. It will bring up a list of hidden icons. Check if the Bluetooth icon is there.

3. Using SRA Pulse Oximeter

3.1. General Description

The SRA Pulse Oximeter has features that make it exceptional as a portable pulse wave recording device. The unit is designed for quick checkups and long-term pulse wave signal recordings. No latex is used anywhere within the device to help avoid any allergic reactions.



The device has an **ON** button. After putting the clip on a finger, press this button to turn the device on. No need to turn the device off. When it is removed from the finger, it will automatically turn off within 15 seconds.

Make sure you turn the device on before starting a new test or training session in the software. Otherwise, the software may not properly detect the device.

3.2. Device Specification

SRA Pulse Oximeter has the following hardware specifications:

Weight (with 2 AAA batteries)	About 50 g
Dimensions	60 x 37 x 30 mm (
Battery	2 x AAA alkaline
Battery operation time	30 h
Signal Bandwidth	0.5 - 30 Hz
A/D conversion	32 bit
Sampling rate	200 Hz
Housing	Stable easily cleanable ABS plastic
Operating temperature	+10 ~ +40 C
Data interface	Bluetooth LE
Operating range	10 meters

3.3. Device Inspection

The SRA Pulse Oximeter's components should be inspected regularly and prior to each use. These inspections are important in order to guarantee the proper working condition of your system.

Perform the following steps to inspect the SRA Pulse Oximeter:

1. Inspect the physical condition. Check to ensure that the case and controls are clean and in good condition.
2. Make sure that the device batteries have a good charge. It is a good practice to keep a pair of fresh AAA batteries on hand for replacement.

3.4. Connecting Device to a User

Prepare the user's index or middle finger skin surface for effective signal acquisition. Clean the skin using a soft tissue to remove oils, dirt, etc. Note that for proper oximeter placement never use an alcohol tincture of benzoin or antiperspirant to prepare the skin. Slightly massage the finger to increase blood flow in it. This will ensure a strong pulse wave signal. Clip the device to the finger to make sure that it suitably fits the finger.

3.5. After Each Use

1. Clean the device.
2. Check if spare batteries are available for the next use.
3. Put the device in a safe place.

4. Troubleshooting

Since Bluetooth communication is wireless it may be affected by various sources of electromagnetic interference like EMR or X-ray equipment, the presence of other wireless devices, etc.

If your system functioned well before and suddenly stopped working, this may occur due to such interference. To restore its function, check for possible sources of interference and turn them off if possible.



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Stress & Recovery Analyzer

Pulse Oximeter

Wave Sensor

Setup and Operation Guide

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