Blood Pressure Sensor Troubleshooting and FAQs

About this FAQ
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- Article #1426

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Product Support FAQs
Blood Pressure Sensor, order code BPS-BTA, $109
Specifications and User Guide

Please note that the Blood Pressure Sensor will not report Blood Pressure Parameters unless data collection has begun.

Please also note that you need to let the Data Collection software finish collecting data to get accurate blood pressure readings. Do not stop data collection prematurely, allow the software to complete data collection.

TROUBLESHOOTING
- Primary Test: Confirm that the version of Logger Pro is 3.4 or newer. Confirm that the sensor is set up correctly. The cuff should be positioned over the upper arm just above the elbow. The two rubber hoses from the cuff should be positioned over the bicep muscle (brachial artery) and not under the arm. Tighten the cuff on the arm using the attached hook-and-pile strip. You want the cuff to fit snug when no air is in it.
  1. The readings displayed on the computer screen should be between 0 and 5 mm Hg before any air is pumped into the cuff.
  2. Squeezing the rubber bulb repeatedly, inflate the cuff to a pressure between 150 and 170 mm Hg. When this maximum pressure has been achieved, place the rubber bulb on the desk. The built-in release valve will automatically deflate the cuff at a constant rate.
  3. The exhaust rate should be between 2.0 and 4.0 mm Hg/s. If the cuff is not releasing the air or not releasing the air fast or slow enough, refer to the Specifications and User Guide for instructions on “Adjusting the Pressure Release Valve”.
  4. If the cuff will not deflate, check to see that the Pressure Release Valve is not completely closed. It should be opened about 4 turns from the closed position.
  5. An appropriate sized cuff is required for the subject to obtain accurate results. The small cuff fits subjects with
upper arm circumferences between 18.4 and 26.7 cm (CUFF-SM). The standard adult cuff accommodates upper arms between 27.9 and 41.7 cm. For large upper arms with circumferences between 33 and 50.8 cm, the large cuff should be used (CUFF-LG).

Is it a problem if the readings are not consistent? Blood pressure readings will differ from person to person and even between measurements on the same individual. Do not expect to receive the same measurements each trial since there are many factors that cause a person's blood pressure to increase or decrease.

**TECH TIPS**

**RELATED TIL ENTRIES**
- TIL 2025: I see the cuff pressure, but LabQuest does not report systolic and diastolic values.
- TIL 4162: My blood pressure readings do not update after the first run when using LabQuest 2, even though the new graph appears on the screen.

**SPECIFICATIONS**

Calibration
- slope: 64.64 (mm Hg/V)
- intercept: –32.32 (mm Hg)
- Pressure range: 0 mm Hg to 258 mm Hg
- Maximum pressure without permanent damage: 1550 mm Hg
- Typical accuracy: ± 1 mm Hg
- Temperature compensated: –20°C to 85°C
- Combined linearity and hysteresis: typical ±0.25% full scale range
- Response time: 1 millisecond

**CALIBRATION**

This sensor cannot be calibrated.
RELATED VERNIER PRODUCTS

- Smaller cuff, Blood Pressure Cuff (Small), order code CUFF-SM, $32
- Larger cuff, Blood Pressure Cuff (Large), order code CUFF-LG, $35

Need more assistance?
Fill out our online support form or call us toll-free at 1-888-837-6437.