

BIOS Diagnostics BD412

BIOS Diagnostics Premium Blood Pressure Monitor User Manual

Model: BD412

1. INTRODUCTION

Thank you for choosing the BIOS Diagnostics Premium Blood Pressure Monitor, Model BD412. This device is designed for accurate and reliable measurement of systolic and diastolic blood pressure, as well as pulse rate, for up to four users. It features advanced assessment indicators for blood pressure and irregular heartbeats, along with multiple averaging modes. Please read this manual thoroughly before use to ensure proper operation and to understand all safety precautions.

2. IMPORTANT SAFETY INFORMATION

- Consult your physician before using this device if you have any medical conditions or are taking medications.
- Do not self-diagnose or self-treat based on measurements from this device. Always consult a healthcare professional for interpretation of results.
- This device is intended for adult use only. Keep out of reach of children.
- Do not use this device on an injured arm or an arm undergoing medical treatment.
- Avoid taking measurements in a moving vehicle or during strenuous activity.
- Use only the cuff provided with this monitor. Using other cuffs may lead to inaccurate results.
- If you experience discomfort during inflation, press the START/STOP button to immediately deflate the cuff.

3. PRODUCT OVERVIEW

3.1 Included Components

The BIOS Diagnostics Premium Blood Pressure Monitor package includes the following items:

- BIOS Diagnostics Blood Pressure Monitor (Model BD412)
- Wide Range Cuff (22 - 44 cm / 9" - 17") with built-in storage

- Storage Bag
- Instruction Manual (this document)
- 4 x AA Batteries

What's Included?

- ♥ Blood Pressure Monitor
- ♥ Wide Range Cuff: (22-42cm/8.7"-16.5")
- ♥ x4 AA Batteries
- ♥ Instruction Manual
- ♥ Storage Bag



Figure 3.1: Included components of the BIOS Diagnostics Premium Blood Pressure Monitor.

3.2 Monitor Display and Buttons

Familiarize yourself with the monitor's display and control buttons:

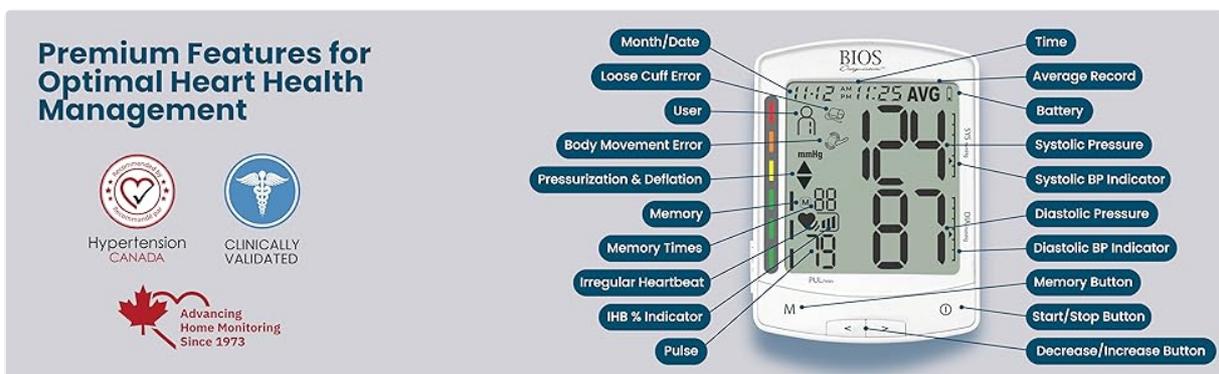


Figure 3.2: Overview of the monitor display and button functions.

- **User Indicator:** Shows which of the 4 users is currently selected.

- **Average Read Icon (AVG):** Indicates when an average reading is displayed.
- **Systolic Blood Pressure (SYS mmHg):** Top number, indicates pressure when heart beats.
- **Diastolic Blood Pressure (DIA mmHg):** Bottom number, indicates pressure when heart rests between beats.
- **Pulse (PUL/min):** Heart rate per minute.
- **Blood Pressure Classification Indicator:** Color-coded bar on the left side, indicating BP level according to WHO guidelines.
- **Irregular Heartbeat (IHB) Indicator:** Symbol appears if an irregular heartbeat is detected.
- **Memory Recall & Advance Button (M):** Press to view stored readings or navigate memory.
- **Start/Stop Button ():** Powers the unit on/off and starts/stops a measurement.
- **Decrease/Increase Buttons (< >):** Used for user selection and navigating memory.

4. SETUP

4.1 Installing Batteries

1. Open the battery compartment cover on the back of the monitor.
2. Insert the 4 AA batteries, ensuring the correct polarity (+/-) as indicated inside the compartment.
3. Close the battery compartment cover securely.

4.2 Attaching the Arm Cuff

1. Insert the air plug of the arm cuff firmly into the air jack on the side of the monitor.
2. Ensure the connection is secure to prevent air leakage during measurement.

4.3 Setting Date, Time, and User

Upon first use or after battery replacement, you may need to set the date and time. Refer to the full instruction manual for detailed steps on setting these parameters and selecting a user profile (1-4).

5. OPERATING INSTRUCTIONS

5.1 Preparation for Measurement

For accurate readings, follow these guidelines before and during measurement:

- Rest for at least 5 minutes before taking a measurement.
- Avoid eating, drinking caffeine or alcohol, smoking, and exercising for 30 minutes prior.
- Sit comfortably with your back supported by a chair.
- Place your feet flat on the floor and do not cross your legs.
- Place the cuff on your non-dominant arm (or as advised by a healthcare professional) on bare skin.
- Ensure the cuff is positioned at heart level.
- Support your arm on a table or other hard surface.
- Remain still and silent during the measurement.

Measuring Your Blood Pressure

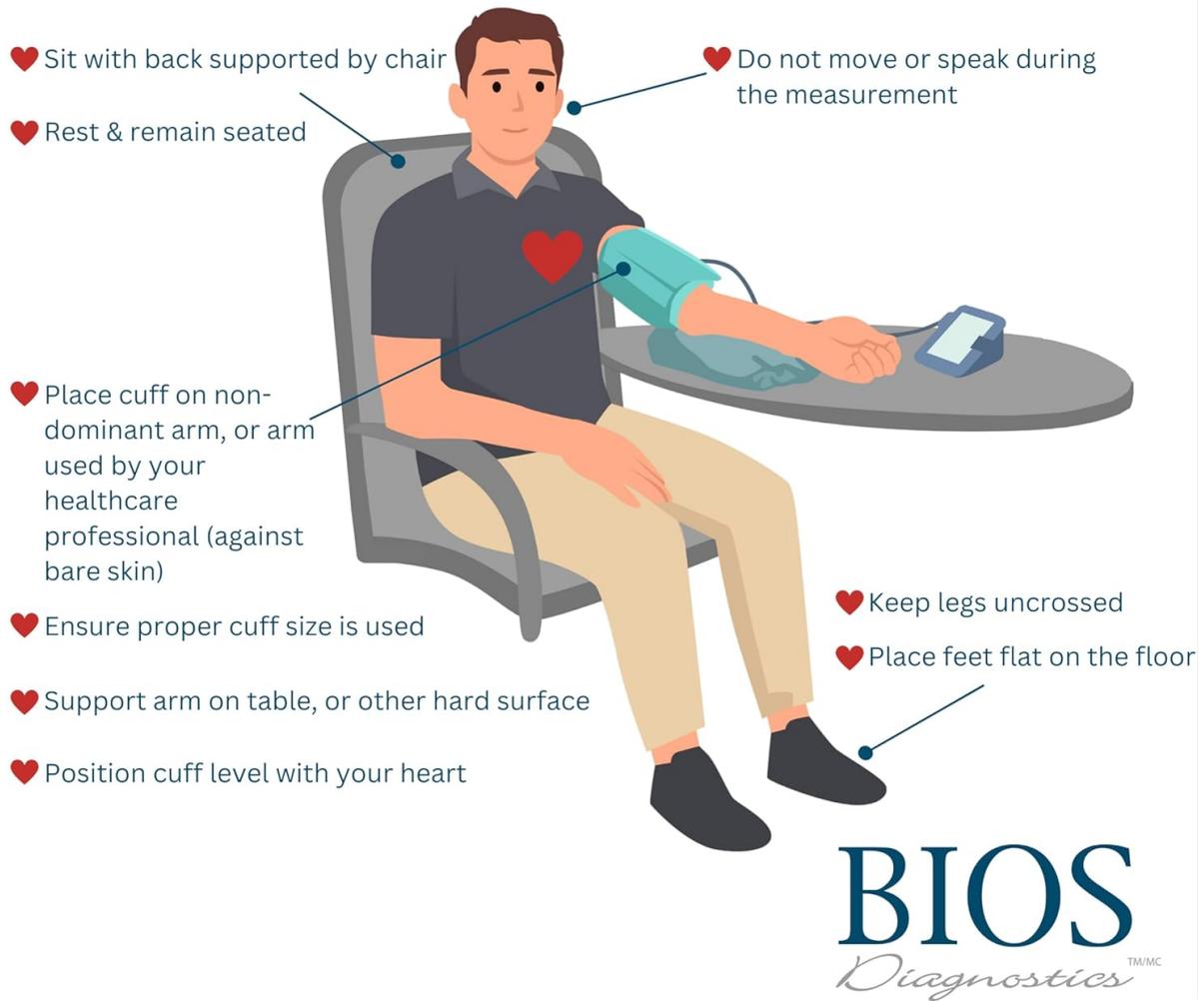


Figure 5.1: Correct posture for blood pressure measurement.

5.2 Taking a Measurement

1. Ensure the correct user profile is selected using the < or > buttons.
2. Press the START/STOP () button. The cuff will begin to inflate automatically.
3. Remain still and quiet. The monitor will deflate the cuff and display your systolic pressure, diastolic pressure, and pulse rate.
4. The reading will automatically be stored under the selected user profile.
5. Press the START/STOP () button again to turn off the monitor, or it will automatically shut off after 1 minute of inactivity.



Figure 5.2: User taking a blood pressure measurement.

5.3 Memory Functions

The monitor stores 240 measurements for each of the 4 users, totaling 960 measurements.

- **Viewing Memory:** With the monitor off, press the 'M' button to enter memory mode. Use the < or > buttons to scroll through individual readings.
- **Averaging Modes:** The device offers advanced averaging modes, including:
 - Average of all readings.
 - Average of AM readings.
 - Average of PM readings.

Refer to the full manual for instructions on how to access and utilize these averaging functions.

- **Clearing Memory:** Consult the full instruction manual for steps on how to clear stored memory for a specific user.

6. ADVANCED FEATURES

6.1 Advanced BP Assessment Indicator

Each reading is assessed against the World Health Organization (WHO) classification for blood pressure. The monitor provides an overall assessment, as well as individual systolic and diastolic assessments. This indicator helps identify potential risks and provides data that should be discussed with your doctor.

6.2 Advanced Irregular Heartbeat Detection

This device not only indicates if an irregular heartbeat (arrhythmia) was present during a reading but also provides insight into the frequency of irregular heartbeats across multiple readings over time. An irregular heartbeat symbol will appear on the display if detected. If this symbol appears frequently, consult your physician.

7. MAINTENANCE AND STORAGE

7.1 Cleaning the Monitor and Cuff

- Wipe the monitor and cuff gently with a soft, dry cloth.
- If necessary, use a cloth lightly dampened with water or a mild detergent, then wipe dry.
- Do not use abrasive cleaners, alcohol, or organic solvents.
- Do not immerse the monitor or cuff in water.

7.2 Storage

- Store the monitor and cuff in the provided storage bag.
- Keep the device in a cool, dry place, away from direct sunlight, extreme temperatures, and humidity.
- Remove batteries if the unit will not be used for an extended period to prevent leakage.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Monitor does not power on	Dead or incorrectly installed batteries	Replace batteries with new AA batteries, ensuring correct polarity.
Error message (e.g., "E1", "E2")	Cuff not properly applied, movement during measurement, or air leakage.	Reapply cuff correctly, remain still and silent, check cuff connection to monitor. Wait a few minutes and try again.
Inconsistent readings	Improper measurement posture, talking during measurement, or recent activity.	Ensure proper preparation and posture (refer to Section 5.1). Take multiple readings over time and consult your doctor.
Cuff does not inflate or deflates too quickly	Loose cuff connection or cuff damage.	Check that the air plug is securely inserted. Inspect the cuff for any damage or leaks.

9. SPECIFICATIONS

Feature	Detail
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Feature	Detail
Model Number	BD412
Measurement Method	Oscillometric
Display Type	LCD
Number of Users	4
Memory Capacity	240 measurements per user (total 960)
Cuff Size	Wide range cuff: 22 - 44 cm (9" - 17")
Power Source	4 x AA batteries (included)
Product Dimensions	14L x 11.8W x 8.8Th Centimetres
Item Weight	1.03 Pounds (approx. 467.2 g)
Manufacturer	Thermor Ltd.
Country of Origin	China

10. WARRANTY AND SUPPORT

10.1 Warranty Information

For detailed warranty information, please refer to the warranty card included in your product packaging or visit the official BIOS Diagnostics website. Keep your purchase receipt as proof of purchase for warranty claims.

10.2 Customer Support

If you have any questions, require assistance, or need to report an issue with your BIOS Diagnostics Premium Blood Pressure Monitor, please contact customer support:

- **Website:** www.biosmedical.com
- **Phone:** Refer to the contact information provided in your product packaging or on the official website for your region.