
USER GUIDE

HEALTHMATE PRO BPM-500

Digital Blood Pressure Monitor

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TABLE OF CONTENTS

1. Safety Information	6
2. Introduction	7
2.1 Product Overview	
2.2 Key Features	
2.3 Intended Use	
2.4 Device Overview	
2.5 Proper Cuff Position	
3. Package Contents	9
4. Symbols and Markings	10
5. Operating Instructions	11
5.1 Preparing the Device	
5.2 Applying the Arm Cuff	
5.3 Taking a Measurement	
5.4 Reading and Interpreting Results	
5.5 Storing and Reviewing Readings	
5.6 Power Off and Storage	
6. Troubleshooting	14
7. Maintenance and Care	15
7.1 Cleaning the Device	
7.2 Storing the Device	
7.3 Periodic Checks	
7.4 Disposal Instructions	
8. Specifications	17
9. Warranty and Support	18
9.1 Warranty Coverage	
9.2 Customer Support	
10. Regulatory and Compliance Information	19
10.1 Regulatory Statements	

10.2 Medical Device Classification	
10.3 Manufacturer's Declaration	
Appendix A. Glossary of Terms	20

1. Safety Information

Read Before Use. This guide provides critical instructions to ensure safe operation of your HealthMate Pro BPM-500. Please read carefully and retain for future reference.

WARNINGS

These warnings identify serious risks that could lead to injury or malfunction.



Do not use
with implanted
devices



Consult doctor
before use



Do not tamper



Keep out of
reach of children



Avoid extreme
conditions



Avoid use
on injured limb

CAUTIONS

These cautions help prevent damage and ensure reading accuracy:



Clean care



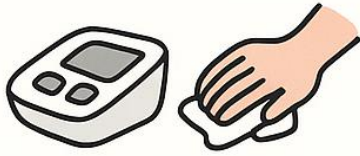
Store in
a dry location



Store in a
dry location

NOTES

These recommendations support optimal performance:



Regular cleaning and correct cuff placement help ensure consistent results.

2. Introduction

This provides a detailed overview of the HealthMate Pro BPM-500 blood pressure monitor, including its core design, features, usage guidelines, and physical layout.

2.1 Product Overview

The HealthMate Pro BPM-500 is a compact digital blood pressure monitor engineered for user-friendly, clinically accurate readings. Suitable for both home and professional settings, it utilizes oscillometric technology to measure systolic pressure, diastolic pressure, and heart rate.

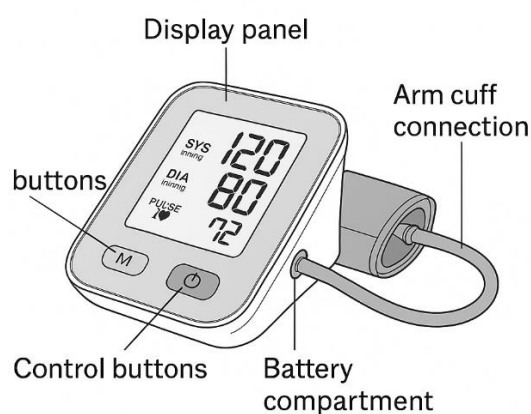


Figure 1. Product Overview

2.2 Key Features

The following list highlights the primary functions and enhancements integrated into the BPM-500.

- One-button operation with automatic cuff inflation and deflation
- Large backlit LCD display for improved visibility
- Memory storage for up to 90 readings with date and time stamps
- WHO blood pressure classification indicator bar
- Dual power options. 4 AA batteries or AC adapter
- Irregular heartbeat detection
- Built-in motion sensor to prevent measurement errors

2.3 Intended Use

This device is designed for adults who are in a seated, relaxed posture during use. It is not intended for infants or users unable to remain still. Measurements are meant to assist clinical evaluation, not replace it.

2.4 Device Overview

This list describes each physical component that makes up the monitor and its operating interface. Refer to Figure 2.

- Display panel for reading results and prompts
- Control buttons for power and memory access
- Arm cuff connection port
- Battery compartment located at the rear of the device.



Figure 2. Device Overview

2.5 Proper Cuff Positioning

Follow these cuff placement guidelines to ensure accurate readings during blood pressure measurement. Refer to Figure 3.

1. Wrap the cuff 2–3 cm above the inner elbow crease.
2. Align the air tube along the brachial artery on the inside of the arm.
3. Ensure the arm is supported at heart level on a flat surface.
4. Wrap the cuff securely—two fingers should fit comfortably underneath.



Figure 2. Proper Cuff Position

3. Package Contents

This lists all items included with your HealthMate Pro BPM-500 device. Ensure each component is present and undamaged before use. If anything is missing, contact customer support for assistance. Refer to Figure 4.

3.1 Included Items

Item No.	Component	Description	Specifications
1	Blood Pressure Monitor	Main unit with digital interface	Model BPM-500
2	Standard Arm Cuff	Reusable cuff for upper arm measurements	Fits 22–32 cm arm circumference

3	AA Batteries ×4	Power source for portable use	1.5 V each
4	Storage Case	Protective case for device and accessories	—
5	Quick Start Guide	Introductory instructions for setup	—
6	Full User Guide	Comprehensive operating manual	This document

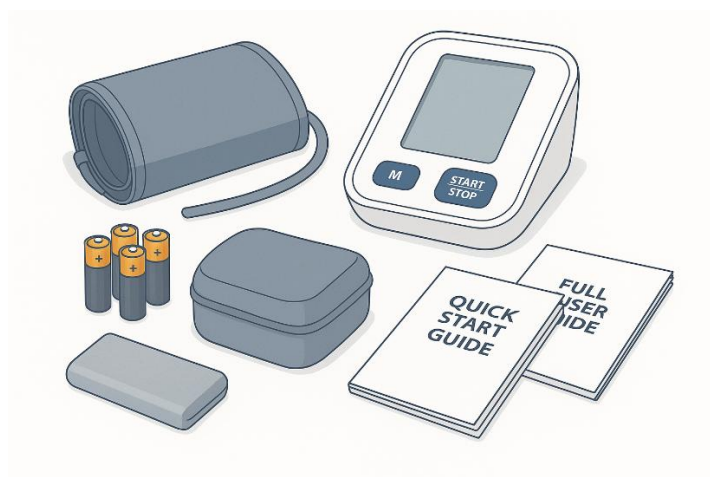


Figure 4. Package Contents

3.2 Packaging Verification Checklist

Use the checklist below to confirm package completeness:

- ☐ Blood Pressure Monitor
- ☐ Standard Arm Cuff
- ☐ AA Batteries (×4)
- ☐ Storage Case
- ☐ Quick Start Guide
- ☐ Full User Guide

If any item is missing or appears damaged, contact HealthMate Customer Support promptly.

3.3 Replacement and Support Note

Replacement accessories (e.g., cuffs or adapters) should be ordered directly through the HealthMate Support Portal. Ensure you reference **Model BPM-500** to maintain compatibility.

3.4 Shipping Notice

If the external packaging appears damaged at delivery, inspect contents immediately and report issues within **7 days** for eligibility under warranty conditions.

4. Symbols and Markings

This provides definitions for the standard symbols and compliance markings found on the HealthMate Pro BPM-500 device, packaging, and product documentation. Understanding these icons ensures proper handling and safe use across different regions and medical environments.

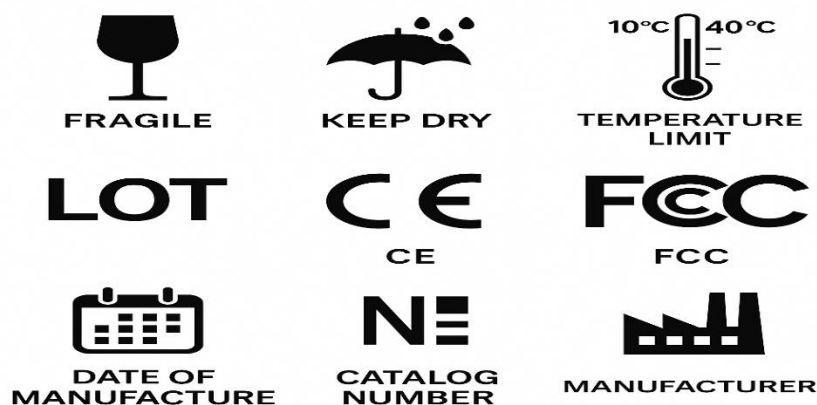


Figure 5. Symbols and Markings Chart

4.1 Explanation of Symbols

Symbol	Description	Meaning / Purpose
 Fragile - Handle with Care	Indicates contents must be treated delicately	Do not drop or apply pressure
 Keep Dry	Protect device and packaging from moisture	Store in a dry area

 Temperature Limit	Indicates safe operating or storage temperature	Example. 10°C – 40°C
 Serial Number	Unique device identifier for inventory and support	Used for warranty and tracking
 Lot Number	Identifies production batch	Important for recalls or production review
 Date of Manufacture	Indicates when device was produced	Important for shelf-life and traceability
 Recyclable Materials	Packaging can be recycled	Dispose in accordance with local regulations
 Consult Instructions	Advises users to read instructions before use	Refer to Quick Guide or User Manual
 Medical Device	Classifies product as regulated medical device	Subject to regional compliance standards
CE Mark	Conformité Européenne	Complies with EU safety regulations
FCC Mark	U.S. Federal Communications Certification	Approved for use under FCC standards

5. Operating Instructions

This details how to properly set up and use the HealthMate Pro BPM-500 to ensure accurate blood pressure readings. Follow each step carefully and consult the illustrations where referenced.

5.1 Preparing the Device

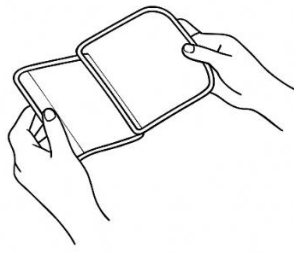
Insert the included AA batteries into the battery compartment on the back of the monitor. Ensure correct polarity alignment. Alternatively, connect the AC adapter to the power port.

Place the device on a stable surface near the user. Connect the arm cuff securely to the monitor's cuff port.

5.2 Applying the Arm Cuff

Proper cuff placement is critical for accurate measurements. Follow these guidelines to position the cuff correctly before use. Refer to Figure 5. Proper Cuff Application for visual placement.

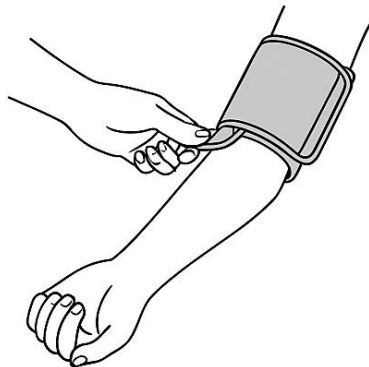
1. Ensure the cuff is fully deflated.



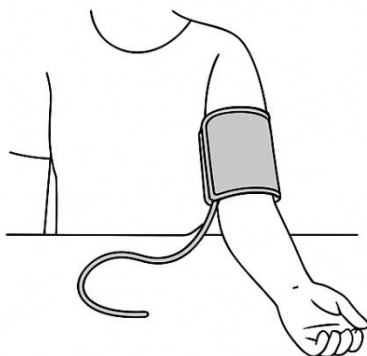
2. Slide the cuff onto the upper right arm, 2–3 cm above the elbow crease.



3. Align the air tube with the inner arm along the brachial artery.



4. The cuff should wrap snugly—two fingers should slide underneath easily.



5. Sit upright with legs uncrossed and back supported.

5.3 Taking a Measurement

Follow these instructions to initiate and complete a blood pressure reading.

1. Press the **START** button once.
2. Remain still and quiet during inflation and measurement.
3. The monitor will inflate the cuff automatically, measure, then deflate.
4. Results for systolic, diastolic, and pulse rate will display on screen.
5. Wait for confirmation beep before removing the cuff.

Note. If movement or error is detected, the monitor may cancel the reading and prompt a retry.

5.4 Reading and Interpreting Results

Displayed values include the below:

- **SYS** – Systolic pressure (upper number)
- **DIA** – Diastolic pressure (lower number)
- **PUL** – Pulse rate (beats per minute)
- **WHO Bar** – Indicates blood pressure category based on WHO standards.

5.5 Storing and Reviewing Readings

The BPM-500 allows for simple recall of prior measurements using the memory function.

1. Press the **MEM** button to cycle through stored readings.
2. The screen shows reading number, timestamp, and all measured values.
3. Up to 90 records are stored in non-volatile memory.
4. To erase all records, press and hold the MEM button for 3 seconds.

5.6 Power Off and Storage

Follow these recommendations to safely power down and store the device after use.

- The device powers off automatically after inactivity (~1 minute)
- You may also press the **START** button to turn off manually.
- Store the monitor in its protective case in a dry, cool location.
- Remove batteries if storing for long periods to prevent leakage.

6. Troubleshooting

This outlines common issues that may occur during device operation and offers straightforward solutions. If problems persist after following these steps, contact HealthMate Support.

6.1 Troubleshooting Guide

The table below identifies frequent device issues, their possible causes, and practical solutions for resolving them.

Issue	Possible Cause	Suggested Solution
Device does not power on	Batteries depleted or incorrectly installed	Check battery orientation or replace batteries
Measurement canceled automatically	Arm moved during measurement	Remain still; restart process
Irregular readings / fluctuation	Improper cuff placement	Reapply cuff as instructed in 2.5
Display screen is dim or unreadable	Low battery or ambient lighting	Replace batteries or use in well-lit location
WHO bar not visible on screen	Measurement incomplete	Retry with proper posture and positioning
Device beeps repeatedly before start	Loose cuff or connector issue	Secure cuff and confirm connector is attached
Memory not saving new readings	Storage is full	Clear stored records per 5.5
Device won't shut off manually	Button not held long enough	Press and hold START until screen turns off

6.2 Error Code Reference

The table below provides interpretation and resolution for any error codes that may appear during operation.

Error Code	Meaning	Action
E1	Cuff not applied correctly	Reposition cuff and restart measurement
E2	Excessive movement detected	Remain still and retry
E3	Air pressure fault	Check cuff tubing; power cycle the device
E4	Measurement failed	Restart and ensure correct posture and cuff fit

If these solutions do not resolve the issue, discontinue use and contact **HealthMate Support** via the details listed in 9.2.

7. Maintenance and Care

Routine maintenance ensures long-term performance and reliability of the HealthMate Pro BPM-500. This describes best practices for cleaning, storing, inspecting, and disposing of the device and its accessories.

7.1 Cleaning the Device

Follow these cleaning steps to preserve the device's functionality and hygiene.

1. Power off the monitor and disconnect the cuff.
2. Use a soft, dry cloth to wipe the exterior surfaces.
3. For stubborn dirt, lightly dampen the cloth with water—do not use alcohol or solvents.
4. Do not submerge the device or cuff in liquid.
5. Allow the cuff to air dry completely before next use.

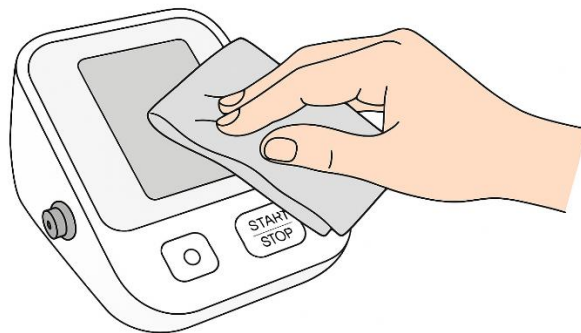


Figure 6. Cleaning the Monitor Safely

7.2 Storing the Device

Use these guidelines to protect the device when not in use.

- Store the device and accessories in the provided case.
- Keep in a cool, dry location away from direct sunlight, moisture, and dust.
- Avoid environments with temperature extremes or high humidity.
- Remove the batteries if the device will not be used for more than one month.

7.3 Periodic Checks

These checks help ensure continued device accuracy and safety.

- Inspect the cuff for signs of wear, cracking, or leakage.
- Confirm that the air tube and connector are secure and unobstructed.
- Verify battery contacts are clean and corrosion-free.
- Test the monitor monthly using a known reading to validate performance.

7.4 Disposal Instructions

Dispose of device components responsibly in accordance with local regulations.

- Do not dispose of electronic devices in household trash.
- Remove batteries before disposal and recycle separately.
- Follow regional electronic waste (e-waste) procedures for medical devices.
- If needed, contact HealthMate Support for disposal guidance or return programs.

8. Specifications

This outlines the technical and compliance attributes of the HealthMate Pro BPM-500. The details help users, healthcare professionals, and support teams verify device compatibility, accuracy, and standards.

8.1 Technical Specifications

The table below provides a detailed breakdown of the device's measurement capabilities, physical attributes, and operating parameters.

Specification	Details
Model Number	BPM-500
Measurement Method	Oscillometric
Display	Backlit LCD screen
Measuring Range	Pressure. 0–280 mmHg Pulse. 40–180 bpm
Measurement Accuracy	Pressure. ± 3 mmHg Pulse. $\pm 5\%$
Arm Cuff Size	Fits 22–32 cm circumference
Memory Capacity	90 readings (with date and time)
Power Source	4 $\times$ AA batteries or AC adapter (6 V DC)
Auto Power-Off	Approx. 1 minute after last activity
Operating Temperature Range	+10°C to +40°C
Storage Temperature Range	–20°C to +55°C
Operating Humidity	15% to 85% RH (non-condensing)
Device Dimensions	Approx. 120 mm $\times$ 95 mm $\times$ 50 mm

Device Weight	Approx. 280 g (excluding batteries)
Battery Life	Approx. 250 measurements with alkaline batteries

8.2 Compliance and Classification

This table summarizes the device's regulatory status, safety ratings, and international certification data.

Parameter	Details
Medical Device Class	Class II (FDA); Class IIa (EU MDR)
Standards Compliance	IEC 60601-1, ISO 81060-2, RoHS
CE Certification	Yes
FCC Compliance	Yes
IP Rating	IP22 – Protected against fingers and water drops
EMC Rating	Complies with IEC 60601-1-2 (Electromagnetic compatibility)
Country of Origin	United States

9. Warranty and Support

This outlines the warranty coverage provided with the HealthMate Pro BPM-500 and offers contact details for accessing technical support, service inquiries, and product registration.

9.1 Warranty Coverage

HealthMate Medical Devices, Inc. warrants the BPM-500 blood pressure monitor against defects in materials and workmanship under normal use for a period of **24 months** from the date of original retail purchase.

Coverage includes:

- Device malfunction due to manufacturing fault.
- Damage not caused by misuse, modification, or accident.
- Replacement or repair at HealthMate's discretion.

Exclusions:

- Damage due to improper use, unauthorized servicing, or environmental conditions.
- Consumable parts such as batteries and cuffs beyond their expected wear.
- Warranty claims without valid proof of purchase.

To initiate a warranty claim, retain your purchase receipt and contact HealthMate Support (see 9.2). All returned units must include original packaging and documentation where possible.

9.2 Customer Support

For technical assistance, product registration, warranty claims, or accessory replacements, reach out to HealthMate via the following methods:

Support Channel	Details
Phone Support	+1-800-555-0189 (Mon–Fri, 8 AM–6 PM EST)
Email Assistance	support@healthmate-med.com
Online Help Center	www.healthmate-med.com/support
Product Registration Portal	www.healthmate-med.com/register
Mailing Address	HealthMate Medical Devices, Inc.

200 Westbridge Drive Kent, OH 44240, USA |

NOTE. Before contacting support, have your **device serial number**, **model ID**, and **purchase receipt** available. These details help expedite service and ensure warranty validation.

10. Regulatory and Compliance Information

This outlines the legal and regulatory declarations related to the HealthMate Pro BPM-500. It covers global compliance certifications, device classifications, and manufacturer responsibilities under applicable laws and standards.

10.1 Regulatory Statements

The BPM-500 is manufactured and distributed in accordance with internationally recognized medical safety and performance standards.

- Complies with the **European Union Medical Device Regulation (EU MDR 2017/745)**
- Certified under **U.S. Food and Drug Administration (FDA) Class II** classification.
- Meets **CE marking requirements** for electrical safety and electromagnetic compatibility.
- Registered under **ISO 13485** quality management system for medical devices.
- Adheres to **RoHS (Restriction of Hazardous Substances)** directive for material safety.

10.2 Medical Device Classification

The HealthMate Pro BPM-500 is classified as a regulated diagnostic tool used for physiological measurement.

Region	Classification	Oversight Agency
United States	Class II	U.S. FDA
European Union	Class IIa	EU MDR
Canada	Class II (Active Device)	Health Canada
Australia	Class IIa	Therapeutic Goods Administration (TGA)

This classification indicates the device poses moderate risk and requires regulatory approval for sale and use within each respective region.

10.3 Manufacturer's Declaration

HealthMate Medical Devices, Inc. hereby declares that the BPM-500 complies with applicable safety, performance, and quality standards required by all markets in which it is sold. All technical documentation and certification records are maintained and made available upon request to relevant authorities.

For details on certifications, audits, or declarations of conformity, please contact HealthMate Support (see 9.2).

Appendix A. Glossary of Terms

This glossary defines key terms used throughout the HealthMate Pro BPM-500 user guide. It is intended to help users understand medical concepts, device functions, and regulatory terminology.

Term	Definition
Systolic Pressure	The highest pressure in the arteries when the heart contracts. It's the top number in a blood pressure reading.
Diastolic Pressure	The lowest pressure in the arteries when the heart rests between beats. It's the bottom number in a blood pressure reading.
Pulse Rate	The number of heartbeats per minute. Also referred to as heart rate.
Oscillometric Method	A non-invasive technique used to measure blood pressure via cuff pressure changes.
Brachial Artery	Major blood vessel of the upper arm, typically used for blood pressure measurement.
Arrhythmia	Irregular heartbeat or rhythm, which may affect blood pressure readings.
WHO Classification	Blood pressure categories defined by the World Health Organization, ranging from normal to hypertensive.
Memory Recall	Function allowing access to previous measurements stored on the device.
Irregular Heartbeat Indicator	Feature that alerts the user to abnormal pulse patterns detected during measurement.
EMC (Electromagnetic Compatibility)	Design standard ensuring that the device doesn't interfere with, or be affected by, other electronic equipment.
RoHS	Directive restricting the use of hazardous materials in manufacturing of electronic equipment.
CE Mark	Certification symbol indicating compliance with European safety and health regulations.