



INSTRUCTION MANUAL

Automatic Blood Pressure Monitor with Measure While Inflation Technology

MODEL : BP-03



WQMSBPM002Ver03 (MWI) effective Date 08-05-2022

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INTRODUCTION

Thank you for purchasing the Walnut Medical Automatic Blood Pressure Monitor. Your new digital blood pressure monitor uses the oscillometric method of blood pressure measurement. This means the monitor detects your blood's movement through your brachial artery and converts the movements into a digital reading. An oscillometric monitor does not need a stethoscope so the monitor is simple to use. The BP-03 comes with the following components:

- Monitor
- Standard Adult Arm Cuff
- 4N AA Batteries
- Instruction Manual printed in English

The BP-03 Automatic Inflation Blood Pressure Monitor is intended for home use.

Symbol	Description	Symbol	Description
	Warning – Describes a hazard or unsafe practice that can result in severe bodily injury or death		Stacking limit by number
	Caution – Describes a hazard or unsafe practice that can result in property damage		Applied part BP Cuff category "BF"
	Follow User's Manual		No sitting on product
	CLASS II equipment		Serial number
	Fragile, handle with care		Keep dry
	This way up		Ingress protection against solid objects up to 12mm (2) but there is no protection against liquids (0).
	Temperature range.		Humidity range.

SAFETY INFORMATION

To assure the correct use of the product, basic safety measures should always be followed including the warnings and cautions listed in this instruction manual.

SAFETY SYMBOLS USED IN THIS INSTRUCTION MANUAL

	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided may result in minor or moderate injury to the user or patient or damage to the equipment or other property

OPERATING THE DEVICE

- △ Operator should understand English & symbols used on apparatus & manual.
- △ Contact your physician for specific information about your blood pressure. Self-diagnosis and treatment using measured results may be dangerous. Follow the instructions of your physician or licensed healthcare provider.
- △ The monitor is not intended to be a diagnostic device.
- △ If battery fluid should get in your eyes, immediately rinse with plenty of clean water. Contact a physician immediately.
- △ Read all of the information in the instruction manual and any other literature in the box before operating the unit.
- △ This device is intended for use in measuring blood pressure and pulse rate in the adult population. Do not use this device on infants or persons who cannot express their intentions.
- △ Read the Special Conditions section of the instruction manual if your systolic pressure is known to be more than 220 mmHg. Inflating to a higher pressure than necessary may result in bruising where the cuff is applied.
- △ Operate the device only as intended. Do not use the device for any other purpose.

SAFETY INFORMATION

- △ Intended user can be patient, care giver or Doctor.
- △ Do not use a cellular phone near the device. It may result in an operational failure
- △ Dispose of the device, components and optional accessories according to applicable local regulations. Unlawful disposal may cause environmental pollution.
- △ Use only Walnut Medical authorized parts and accessories. Parts and accessories not approved for use with the device may damage the unit.
- △ Use only 1.5 V "AA" alkaline batteries with this device. Do not use other types of batteries. This may damage the unit.
- △ Use only IEC 60601-1/IEC 60950-1 compliant AC-DC Adaptor of 5v, 1A rating as an external power source.

CARE AND MAINTENANCE

- △ Do not subject the monitor to strong shocks, such as dropping the unit on the floor.
- △ Do not submerge the device or any of the components in water.
- △ Store the device and the components in a clean, safe location.
- △ Changes or modification not approved by the manufacturer will void the user warranty. Do not disassemble or attempt to repair the unit or components.

BEFORE TAKING A MEASUREMENT

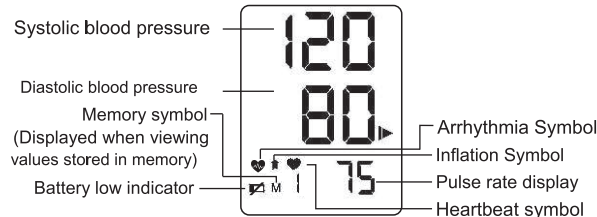
To ensure a reliable reading follow these recommendations:

1. Avoid eating, drinking alcohol, smoking, exercising, and bathing for 30 minutes before taking a measurement. Rest for at least 15 minutes before taking the measurement.
2. Stress raises blood pressure. Avoid taking measurements during stressful times.
3. Measurements should be taken in a quiet place.
4. Remove tight-fitting clothing from your left arm.
5. Sit on a chair with your feet flat on the floor. Rest your left arm on table so that the cuff is at the same level as your heart.
6. Remain still and do not talk during the measurement.
7. Wait 2-3 minutes between measurements. The wait time allows the arteries to return to the condition prior to taking the blood pressure measurement. You may need to increase the wait time depending on your individual physiological characteristics.
8. Keep a record of your blood pressure and pulse readings for your physician. A single measurement does not provide an accurate indication of your true blood pressure. You need to take and record several readings over a period of time. Try to measure your blood pressure at the same time each day for consistency.

WARRANTY CERTIFICATE

Walnut Medical Private Limited hereby guarantee and warranty that “Walnut Medical BP Monitor BP-03” Serial Number purchased vide invoice number..... is free from any manufacturing defect. Further Walnut Medical Private Limited warrants its products and its parts against defects for 1 (one) year from the date of purchase. During this period Walnut Medical will repair or replace defective parts arising during the normal use.

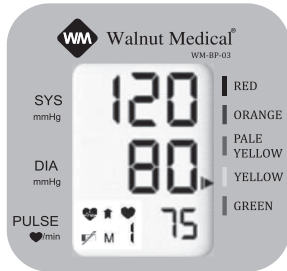
UNIT DISPLAY



ARRHYTHMIA DETECTION

ARRHYTHMIA DETECTION
Arrhythmia detection is activated when apparatus find any arrhythmia condition, and the ♥ arrhythmia symbol and ♥ normal heart symbol will blink alternatively.

DISPLAY SYMBOLS



Blood Pressure Categories

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

There are 5 color code representing systolic and diastolic ranges of hypertension as per WHO and AHA guidelines. Hypertension grading as per WHO guidelines are present as a standard feature.

AHA GUIDELINE

The American Heart Association recommends the following guideline for upper limit of normal for home blood pressure readings:

AHA Home Guideline for Upper Limit of Normal BP	
Systolic Blood Pressure	135 mmHg
Diastolic Blood Pressure	85 mmHg

This is a general guideline because blood pressure depends on age and morbidity. The AHA recommends a lower home blood pressure goal for certain patients, including diabetic patients, pregnant women, and patients with renal failure¹.

WARNING

The monitor is not intended to be a diagnostic device.

WARNING

Contact your physician for specific information about your blood pressure. Self-diagnosis and treatment using measured results may be dangerous. Follow the instructions of your physician or licensed healthcare provider.

¹American Heart Association Scientific Statement 2004

BATTERY INSTALLATION

CAUTION

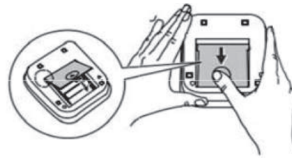
Use only 1.5V “AA” alkaline batteries with this device.

1. Press the ▲ indicator on the battery cover and slide the cover off in the direction of the arrow.



2. Install 4 “AA” size batteries so the + (positive) and - (negative) polarities match the polarities of the battery compartment as indicated.

NOTE: 4 “AA” size batteries are not included in this unit.



3. Replace the battery cover.

BATTERY REPLACEMENT

Low Battery Indicator

When the Low Battery Indicator blinks on the display, turn the monitor off and remove all the batteries. Replace with four new batteries at the same time. Long-life alkaline batteries are recommended.

WARNING

If battery fluid should get in your eyes, immediately rinse with plenty of clean water. Contact a physician immediately.

CAUTION

Dispose of the device, components and optional accessories according to applicable local regulations. Unlawful disposal may cause environmental pollution.

APPLYING THE ARM CUFF

⚠ CAUTION

Read all of the information in the instruction manual and any other literature in the box before operating the unit.

⚠ CAUTION

This device is intended for use in measuring blood pressure and pulse rate in the adult population. Do not use this device on infants or persons who cannot express their intentions.

APPLYING THE CUFF ON THE LEFT ARM

1. Make sure the air plug is securely inserted in the main unit.

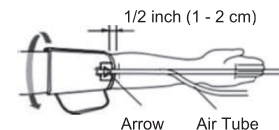


2. Remove tight-fitting clothing from your upper arm.



3. Apply the cuff to your left upper arm so the arrow is centered on the inside of your arm and aligned with your middle finger. The air tube runs down the inside of your arm. The bottom of the cuff should be approximately 1/2" above your elbow.

Left Arm



APPLYING THE ARM CUFF

4. Wrap the cuff firmly in place around your arm using the cloth fastening.

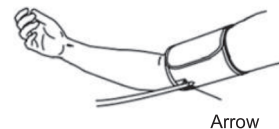


APPLYING THE CUFF ON THE RIGHT ARM

When taking a measurement using the right arm, use this instruction for Step 3.

Apply the cuff to your right upper arm so the arrow and the air tube runs along the inside of your arm. The bottom of the cuff should be approximately 1/2" above your elbow.

Right Arm



NOTE: Be careful not to rest your arm on the air tube. This will restrict the flow of air to the cuff.

TAKING A MEASUREMENT

1. Sit on a chair with your feet flat on the floor. Place your arm on a table so the cuff is level with your heart. Keep still and do not talk during measurement.



MEASUREMENT STEP



2. Press the START/STOP button. All symbols appear on the display. The cuff starts to inflate automatically. As the cuff inflates, the monitor automatically determines your ideal inflation level. (Remain still and do not move your arm until the entire measurement process is completed.)



NOTE: To stop the inflation or measurement, push the START/STOP button. The monitor will stop inflating, and will turn off.

3. During inflation process the cuff is inflated at a rate of 4mm/sec. The B.P. and Pulse rate is detected during the inflation process.



TAKING A MEASUREMENT

4. When the measurement is complete, the arm cuff completely deflates. Your blood pressure and pulse rate are displayed.



5. BP-03 automatically switches off after 15 second on no activity

6. Arrhythmia detection is activated when apparatus find any arrhythmia condition, and the ♥ arrhythmia symbol will be shown.

NOTE: The monitor will automatically turn off after five minutes.



SPECIAL CONDITIONS

⚠ CAUTION

Due to movement or faulty cuff wrapping blood pressure or/and pulse readings may not be properly detected. In these cases blood pressure monitor will display error codes : E8 or E9

When the measurement is complete, the arm cuff completely inflates. Your blood pressure and pulse rate are displayed.

USING THE MEMORY FUNCTION

Every time you complete a measurement the monitor stores the blood pressure and pulse rate in the memory. The monitor automatically stores up to 10 sets of measurement values (systolic pressure, diastolic pressure, and pulse rate). When 10 sets of measurement values are stored, the oldest record is deleted to save the most recent values.

1. Press the Memory (M) button. The most recent set of measurement values appears on the display. The values are displayed from the most recent to the oldest.



NOTE: The number of the reading stored in the memory appears for a second before the pulse rate is displayed. The newest set is numbered "1".

TO DELETE ALL THE VALUES STORED IN MEMORY

All memory will be deleted when battery is removed

CARE AND MAINTENANCE

To keep your digital blood pressure monitor in the best condition and protect the unit from damage, follow the directions listed below:

Do not forcefully bend the arm cuff or air tube. Do not fold tightly.

Clean the monitor with a soft dry cloth.

Do not use any abrasive or volatile cleaners.

Do not attempt to clean the cuff.

⚠ CAUTION

Do not submerge the device or any of the components in water. Do not subject the monitor to extreme hot or cold temperatures, humidity or direct sunlight.

⚠ CAUTION

Store the device and the components in a clean, safe location.

⚠ CAUTION

Do not subject the monitor to strong shocks, such as dropping the unit on the floor.

Remove the batteries if the unit will not be used for three months or longer.

Always replace all the batteries with new ones at the same time.

Use the unit consistent with the instruction provided in this manual.

Use only authorized parts and accessories.

Use the unit in a manner consistent with the instructions provided in this manual.

⚠ CAUTION

Only authorised personnel by manufacturer should carry out any repair, servicing or maintenance.

⚠ CAUTION

Do not attempt to carry out any service or maintenance while unit is being used.

⚠ CAUTION

Use only Walnut Medical authorized parts and accessories. Parts and accessories not approved for use with the device may damage the unit.

⚠ CAUTION

Changes or modification not approved by the manufacturer will void the user warranty. Do not disassemble or attempt to repair the unit or components.

ERROR INDICATOR		
Error Code	Resons for Fault	Troubleshooting Instructions
E2	Low battery	Replace all four batteries with new ones or remove old batteries and use USB power cable to take measurements.
E3	Pressure leak	a. Please check cuff connect or may be loose. b. Wear the cuff properly. c. Check for any cuts or dents on the cuff pipe.
E4 or E5	Pressure leak (High)	a. Please check cuff connect or may be loose. b. Wear the cuff properly. c. Check for any cuts or dents on the cuff pipe. d. The O ring may be faulty.
E7	Cuff too loose	Please wear the cuff properly, not loose nor tight. There must be two fingers gap beneath the cuff.
E8	Movement Error	Please keep the arm still while measurement is on progress.
E9	Readings incorrect	Multiple reasons for faulty reading. Please refer above error codes and take measurement again.

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TROUBLE SHOOTING TIPS	
PROBLEM	CAUSES AND SOLUTIONS
No power. No display appears on the unit.	Replace all four batteries with new ones. Check the battery installation for proper placement of the battery polarities.
Measurement values appear too high or too low.	Blood pressure varies constantly. Many factors including stress, time of day, how you wrap the cuff, may affect your blood pressure. Review the sections "Before Taking a Measurement"

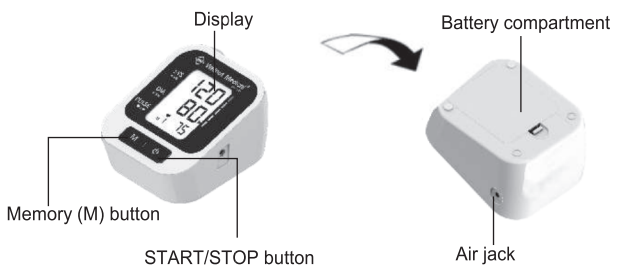
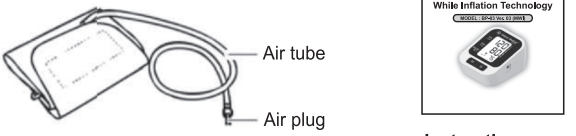
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FCC STATEMENT
Note: POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for U.S.A. only) This product has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the product does cause harmful interference to radio or television reception, which can be determined by turning the product on and off, the user is encouraged to try to correct the interference by one or more of the following measures: • Reorient or relocate the receiving antenna. • Increase the separation between the product and the receiver. • Connect the product into an outlet on a circuit different from that to which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help. POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for Canada only) This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Canadian Department of Communications. Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Clase B prescrites dans la norme sur le materiel brouilleur: "Appareils Numériques", ICES-003 édictée par le ministre des communications. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.


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LIMITED WARRANTIES
Your BP_03 Automatic Blood Pressure Monitor, excluding the arm cuff, is warranted to be free from defects in materials and workmanship appearing within 1 year from the date of purchase, when used in accordance with the instructions provided with the monitor. The arm cuff is warranted to be free from defects in materials and workmanship appearing within one year from the date of purchase when the monitor is used in accordance with the instructions provided with the monitor. The above warranties extend only to the original retail purchaser. We will, at our option, repair or replace without charge any monitor or arm cuff covered by the above warranties. Repair or replacement is our only responsibility and your only remedy under the above warranties. To obtain warranty service contact Customer Service by calling +917719463719 for the address of the repair location and the return shipping and handling fee. Enclose the Proof of Purchase. Include a letter, with your name, address, phone number, and description of the specific problem. Pack the product carefully to prevent damage in transit. Because of possible loss in transit, we recommend insuring the product with return receipt requested. THE FOREGOING IS THE SOLE WARRANTY PROVIDED BY WALNUT MEDICAL IN CONNECTION WITH THIS PRODUCT, AND WALNUT MEDICAL HEREBY DISCLAIMS ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IMPLIED WARRANTIES AND OTHER TERMS THAT MAY BE IMPOSED BY LAW, IF ANY, ARE LIMITED IN DURATION TO THE PERIOD OF THE ABOVE EXPRESS WARRANTY. WALNUT MEDICAL SHALL NOT BE LIABLE FOR LOSS OF USE OR ANY OTHER SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT COSTS, EXPENSES OR DAMAGES. This warranty provides you with specific legal rights, and you may have other rights that vary by jurisdiction. Because of special local requirements, some of the above limitations and exclusions may not apply to you. FOR CUSTOMER SERVICE Visit our web site at: www.walnutmedical.in Call / Message / WhatsApp: +91 77194 63719

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KNOW YOUR UNIT	
Main Unit: 	
Components:  Air tube Air plug Standard Adult Arm Cuff Instruction Manual	

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SPECIFICATIONS	
Model:	BP-03
Display:	LCD Digital Display
Measurement Range:	Pressure: 0 to 299 mmHg, Pulse: 40 to 180/min.
Accuracy/Calibration:	Pressure: ±3mmHg or 2% of reading Pulse: ±5% of reading
Inflation:	Automatic by electric pump
Deflation:	Automatic pressure release valve
Rapid Air Release:	Automatic exhaust valve
Measurement Method:	Oscillometric method
Power Source:	1.5V 4 nos. "AA" batteries /as an external power source IEC60601-1/60950-1compliant 5V, 1A, AC-DC adapter may be used.
Battery Life:	Approx. 450 uses with 4 new alkaline batteries
Operating Temperature / Humidity:	50°F to 104°F (10°C to 40°C) /15 to 90% RH
Storage Temperature / Humidity/Air Pressure:	14°F to 140°F (-10°C to 60°C) /10 to 95% RH 700-1060 hPa
Main Unit Weight:	Approximately 4.5 oz. (415g) not including batteries
Main Unit Dimensions:	Approx L-125mm x W-85 x H-153
Cuff Size:	Approximately 5 3/4"(w) × 17 1/2"(l) (145 mm × 450 mm) Cuff tube 23 5/8" (600 mm)
Cuff Circumference:	Fits arm circumferences 9" to 13" (220 mm to 320 mm)
Memory:	Up to 10 readings
Contents:	Main Unit, Standard Adult Arm Cuff, Instruction Manual, 4N AA Batteries
Optional Accessories:	Large Cuff 13" - 17" (320 mm - 420 mm)
 = Type BF	
NOTE: These specifications are subject to change without notice. Walnut Medical Private Limited 132 : JLPL Industrial Park Sector: 82, Mohali , Punjab India www.walnutmedical.in Copyright © 2021 Walnut Medical Private Limited Made in India	

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