# CardioTech

## Premium Series

DIGITAL BLOOD PRESSURE MONITOR



**Model BP2M** 

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#### Introduction

Thank you for purchasing an Ozeri Fully Automatic Wrist Blood Pressure Monitor. The device uses the oscillometric method of blood pressure measurement. This method detects the movement of your blood through your brachial artery, and converts your blood pressure into a digital reading. The unit is simple to use because no stethoscope is needed while using an oscillometric monitor. This device automatically stores 1197 sets of measurement values with date and time data for 3 users (1197 measurements total). You can access the stored data simply by pressing the MEMO button.

## **Important Safety Information**

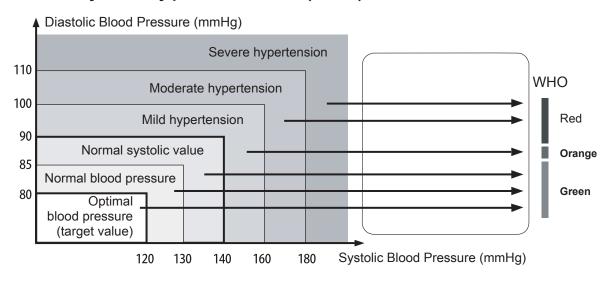
To assure the correct use of this product, basic safety measures should always be followed, including the precautions listed below:

- Read all information in the instruction manual and any other literature included in the box before using this device.
- Consult your physician before measuring blood pressure, especially if you have any of the following conditions: hypertension, diabetes, arteriosclerosis, kidney or vascular disease, or any conditions affecting circulation.

- Operate this device only as it is intended. Do not use this device for any other purpose.
- This device is intended for use in measuring blood pressure and heart rates for adults only.
   Do not use on infants or persons who cannot express their intentions.
- Do not use a cellular phone near this device.
   Cell phones may inhibit the accuracy of this device.
- Do not disassemble or attempt to repair this device or any of its components. Doing so will void the warranty.
- Do not use this device where flammable gases (such as anesthetic gas, oxygen or hydrogen) or flammable liquids (such as alcohol) are present.

## **Understanding Blood Pressure Values**

This device refers to a blood pressure classification developed by The World Health Organization (WHO) and the International Society of Hypertension (ISH).

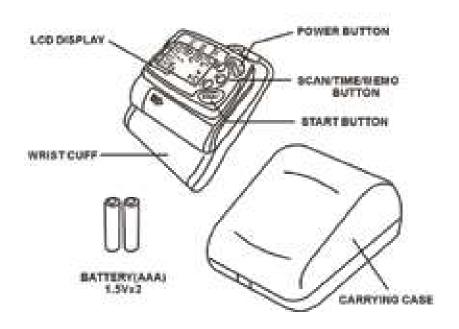


## Suggestions before Measuring Blood Pressure

- 1. Rest for at least 5-10 minutes before taking your blood pressure.
- 2. Avoid eating, smoking, exercising, bathing and drinking (especially alcohol, caffeine or tea) for at least 20-30 minutes before taking a measurement, and avoid talking while measuring your blood pressure.
- 3. Make sure the wrist cuff is at heart level.
- 4. Stress raises blood pressure. Try to keep calm before and during the measurement process.
- 5. Wait 2-3 minutes before retaking your blood pressure measurement.
- 6. Keep the records for your physician and refer to your physician for guidance.

Remember that one reading does not provide a true blood pressure value; only long-term records will reveal a more accurate picture of your blood pressure. Try to take your measurement at the same time each day to stay consistent.

## **Device Descriptions**



## **Description of Control Buttons**

**POWER:** Turns the unit on or off.

START: Inflates the cuff to begin a blood

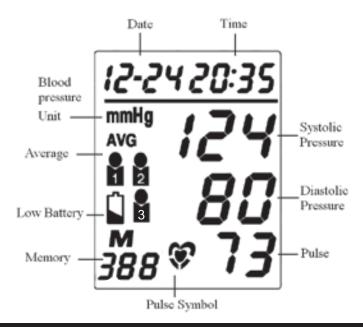
pressure and pulse measurement.

**TIME:** Programs and confirms the Date &Time.

**MEMO**/▲: Displays the previously recorded blood pressure reading. This button is also used to change the Date & Time during programming.

SCAN/▼: Displays all previously measured record(s) in 10 measurement increments from the device's memory. This button is also used to change the Date & Time during programming.

## **Description of LCD Display Symbols**



#### **Installing/Replacing Batteries**

To prevent the accidental deletion of the blood pressure readings stored in Memory, make sure the device is turned off before installing / replacing the batteries.

- 1. Remove the battery cover by sliding it in the direction indicated by the arrow.
- 2. Install 2 new AAA alkaline batteries, following the +/- polarity indicators marked inside.
- 3. Replace the battery cover.



#### Note:

- a. When (Low Battery Indicator) appears on the display, the batteries are low in charge.
   Change the batteries as soon as possible.
   A low battery charge can affect the ability of this device to take correct measurements.
- b. Replace old batteries with new ones immediately.
- c. Replace with new **ALKALINE batteries** for best performance and longevity.
- d. Remove and store the batteries if this device will not be used for an extended period of time (i.e., 3 months). The batteries can leak chemicals which can destroy electronic components in this device.

## **Programming Date and Time**

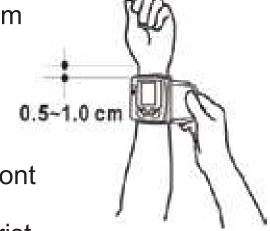
- 1. Press and hold TIME button for 2 seconds until the display shows 2012 and starts to flash.
- 2. Press MEMO/ ▲ button or SCAN/ ▼ button until the number representing the current Year appears on the screen. Note: pressing and holding the MEMO/ ▲ or SCAN/ ▼ button for about 2 seconds will cause Year to increase or decrease at a faster speed.

- 3. Press the TIME button to confirm the Year setting. The number representing the Month will then flash on the screen.
- 4. Follow the same instructions as above to set the Month, Date, Hour and Minute settings.

Note: After replacing batteries, always confirm the Date/Time first and then proceed to use the blood pressure monitor.

### **Using the Wrist Cuff**

1. Remove all clothes from your arm allowing the cuff to make direct contact on your skin.



- 2. Hold your left arm in front of you with your palm facing up. Apply the wrist cuff so that the monitor is on the inside wrist facing upwards towards you so that the screen is in clear view.
- 3. As shown in the image below, enclose the wrist cuff leaving 1/4"~1/2" (0.6 cm 1.3 cm) between the edge of the cuff and the palm of your hand.

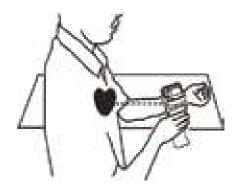
4. Hold the bottom part of the cuff and wrap it comfortably around your wrist. The top and bottom edges of the cuff should be tightened evenly around your wrist. (Do not pull strongly on the cuff. Do not apply the wrist cuff too tightly.)

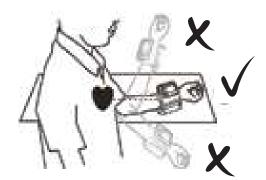


5. When the cuff is positioned correctly, secure it in place by pressing the two sides of the Velcro material together firmly.

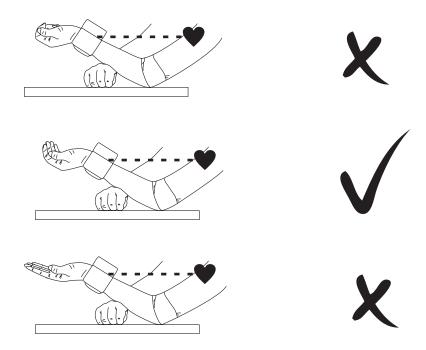
#### **Correct Measurement Position**

In order to get an accurate reading, sit upright in a chair and rest your left elbow on the table. If needed use a cushion, pillow or your other wrist for support. Keep your palm facing up and make sure the monitor is at heart level. Take a few deep breaths and relax your body, especially between your elbow and fingers.

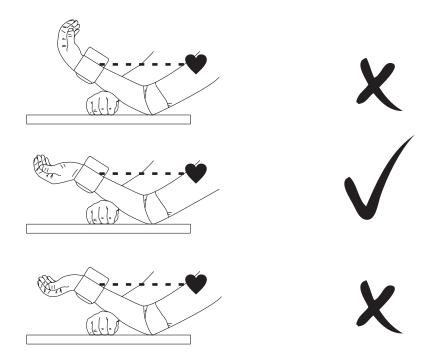




Your fingers should be relaxed and in a natural resting position:



Wrist should also be relaxed and in a natural resting position:



## **Measuring Your Blood Pressure**

- 1. Press the POWER button to turn on the device.
  - All symbols will flash on the screen for a few seconds during boot up. The screen will then flash a User icon and 0 at the same time. Press UP or DOWN to choose user 1, 2 or 3. If no specific user is chosen, the default user is always "1". Note, a user can only be selected while the User icon and 0 are flashing during boot up. Once the 0 stops flashing, you will hear a confirmation beep that the device is ready to be used.
- 2. Then press the START button to take a measurement. The cuff will automatically inflate to approximately 170mmHg.
- 3. Upon completion, the systolic pressure, diastolic pressure and pulse rate will be shown simultaneously on the screen. The values are automatically stored in memory. The screen uses a 3-color light system to indicate systolic and diastolic blood pressure health according to the World Health classification. The colors displays on the screen are green, orange and red.

- a. Green indicates a normal blood pressure level
- b. Orange indicates prehypertension.
- c. Red indicates hypertension.
- 4. The blood pressure and pulse reading will remain on the screen for 1 minute before the device automatically powers off.

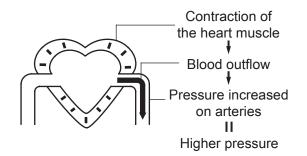
#### **About Blood Circulation**

The blood circulation is responsible for supplying the body with oxygen. Blood pressure is the pressure exerted on the arteries.

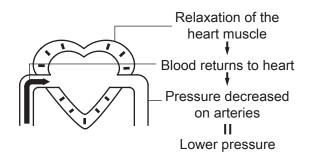
The systolic blood pressure value (higher pressure or top value) represents the blood pressure produced by contraction of the heart muscle.

The diastolic blood pressure value (lower pressure or lower value) represents the blood pressure produced by relaxation of the heart muscle.

Systolic Blood Pressure

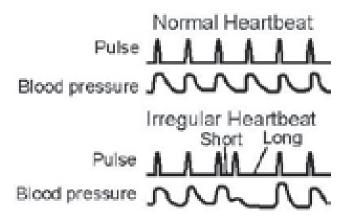


Diastolic Blood Pressure



#### Irregular Heartbeat?

An irregular heartbeat is defined as a heartbeat that varies by 25% from the average of all heartbeat intervals while the unit is measuring the systolic and diastolic blood pressure.



If an irregular rhythm is detected more than twice during measurement, the irregular heartbeat symbol with a filled in heart will appear on the display along with the measurement results.



Note: If the irregular heartbeat symbol appears on the screen, it is recommended you consult your physician for further testing. Do not use this device as a substitute for proper medical diagnosis and check-ups by your physician.

#### What is Arrhythmia?

A heartbeat is stimulated by electrical signals that cause the heart to contract. Arrhythmia is a condition where the heartbeat rhythm is abnormal due to flaws in the bio-electrical system that drives the heartbeat. Typical symptoms are skipped heartbeats, premature contraction, an abnormally rapid (tachycardia) or slow (bradycardia) pulse. This can be caused by heart disease, aging, physical predisposition, stress, lack of sleep, fatigue etc.

The appearance of an irregular heartbeat symbol does indicate arrhythmia. Arrhythmia and other heart conditions can only be properly diagnosed by a doctor through a medical examination.

## **Using the Memory Feature**

The measured blood pressure and pulse readings are automatically stored in the memory. This blood pressure monitor will save the most recent 1197 measurements in memory (399 measurements for 3 users). If more than 399 measurements per user are taken, the earliest measurement is erased and replaced by the most recent measurement.

#### Recall/Review previous measurements

Note: The memory feature does not require that the device first be turned on. The following instructions apply whether the device is on or off.

Press the **MEMO**/ ▲ button to recall/review the most recent measurement.

Continue to press the **MEMO**/ ▲ button to review each previous measurement. If there are any measurements stored in the memory, the latest measurement (M 01) will appear when you press the **MEMO**/ ▲ button.

The Systolic blood pressure, Diastolic blood pressures, pulse, and Date/Time of measurement will display for each measurement.

Press the **MEMO**/▲ button repeatedly to cycle through previous measurements. The measurement number will be displayed as M 01, M 02, M 03, M 04, ... etc. The screen will also illuminate according to the device's 3-color light system to indicate systolic and diastolic blood pressure health.

Scanning previous measurements in 10 measurement increments: press SCAN/down to recall/review the measurements in 10 measurement increments: from M10, M20, M30, ... etc.

### **Using the Average Feature**

The blood pressure monitor provides an average blood pressure reading calculated based on the total measurements stored in memory. To activate the average feature, press the **MEMO**/ ▲ button. The symbol AVG will appear on the screen along with your average systolic, diastolic and pulse readings.

#### **Deleting Individual Measurements**

You can delete an individual blood pressure reading immediately after completing a measurement. Simply press the SCAN/▼ as soon as the results of a measurement are displayed on the screen. Press SCAN/▼ button again to confirm the deletion of the displayed blood pressure reading.

Note: This feature only works immediately after completing a measurement.

## **Deleting All Measurements**

To delete all measurements for a user, first turn on the device and press the MEMO/UP button to select user 1, 2 or 3. Then turn off the device. Once off, press and hold the SCAN/▼ button until the symbol "dEL ALL" appears and flashes on the screen. Press SCAN/▼ button again to confirm the deletion of all measurements stored in memory. The screen will then display "00 ALL" confirming that measurements have been deleted.





TROUBLESHOOTING		
Condition	Cause	Solution
With batteries	• Batteries	Ensure batteries
installed,	are not	were installed
the device	installed	with correct +/-
is turned on	properly.	polarity.
and nothing	<ul> <li>Batteries</li> </ul>	<ul> <li>Replace with</li> </ul>
appears on	are	new batteries.
the screen.	dead.	

Condition	Cause	Solution
Cuff inflation fails or does not inflate properly.	Cuff is not properly attached to the wrist	Ensure proper wrist position and that the cuff is firmly applied to wrist leaving 1/4"~1/2" (0.6 cm - 1.3 cm) between the edge of the cuff and the palm of hand.
	The Low Battery Indicator displays when the batteries are weak and require changing	Replace batteries taking care to ensure device is turned off first and batteries are replaced within 30 seconds so as not to erase memory. Replace with new "AAA" Alkaline batteries.

When attempted to measure blood pressure, the LCD screen displays an error message and fails to complete measurement.

- Ensure proper wrist position and that the cuff is firmly applied to left wrist leaving 1/4"~1/2"
  (0.6 cm 1.3 cm) between the edge of the cuff and the palm of hand. Sit down and rest elbow on flat surface.
- Keep your wrist at heart level during the measurement process.
- Keep silent
   and still during
   measurement.
   Note: some heart
   irregularities may
   cause this device
   to fail during
   measurement
   process or
   display inaccurate
   results

The blood pressure monitor displays different results that vary too much.

**Blood pressure** can vary based on stress, time of day, exercise, consumption of alcohol, smoking, tightness of cuff, and other variables. A single measurement does not provide an accurate indication of blood pressure. Several readings are recommended. Always wait 3 or more minutes between measurements.

	ERROR MESS	AGES
Error Indicators	Cause	Solution
10-1112:00   E	Incorrect posture during measurement. Can also be caused by talking or other small exertions during measurement	<ul> <li>Cuff is not fastened well.</li> <li>Wait at least 3 minutes before taking another measurement</li> <li>Keep your wrist at heart level during the measurement.</li> <li>Keep silent and still during measurement</li> </ul>
10-11 12:00 E	No pulse or blood pressure detected.	Cuff is not fastened correctly or not tight enough. Ensure proper wrist position and posture, and that the cuff is firmly applied to wrist leaving 1/4"~1/2" (0.6 cm - 1.3 cm)

		between the edge of the cuff and the palm of hand
3 Err	Insufficient cuff inflation or failure to inflate.	<ul> <li>Cuff is not fastened well.</li> <li>See above instructions.</li> <li>Pump, venting valve or deflation valve failure. Please contact your distributor for warranty service.</li> </ul>

## **SPECIFICATIONS**

Model No.	BP2M
Display	LCD Digital Display
Measurement Method	Oscillometric method
Measurement Range	Pressure: 20~280mmHg Pulse: 40~190 / minute

Accuracy /	Pressure: ± 3mmHg or 2%
Calibration	of reading
	Pulse: ± 5% of reading
Memory	399 measurements per
capacity	user (total 3 users)
Inflation	Automatic inflation by air
	pump
Deflation	Automatic liner pressure
	deflation valve
Pressure	Automatic exhaust valve
Release	
Sensor	Semiconductor pressure
	sensor
Power Supply	3V DC (2 "AAA" alkaline
	batteries)
Measuring	1 mmHg
Interval	
Operating	+10°C~+40°C (50 0F~104
Temperature/	OF)
Humidity	40%~85% R.H. maximum
Storage	-20°C~+50°C (-4 0F~122
Temperature /	OF)
Humidity	15%~85% R.H. maximum
Battery Life	Approx. 250 uses (alkaline
	batteries)

Unit Weight	Approx. 105 grams (not
	including batteries)
Cuff Size	Wrist Circumference
	approx. 135~195mm (5
	1/4~ 7 3/4 inch)
Unit dimensions	Approx. 74 (I) x 72 (w) x
	25 (h) mm
Accessories	Storage Case, Instruction
	Manual

#### **Care and Maintenance**

#### Care

- 1. Keep the unit in the storage case when not in use.
- 2. Clean the unit with a soft dry cloth. Do not use any abrasive or volatile cleaners.

#### **Maintenance**

- Keep the unit in the storage case when not in use.
- Clean the unit with a soft dry cloth. Do not use any abrasive or volatile cleaners.
- Do not wet the cuff or attempt to clean the cuff with water.
- Store the unit in a clean and dry indoor location. Do not subject the unit to extreme hot or cold temperatures, humidity and direct sunlight.
- Remove the batteries if the unit will not be used for 3 months or longer.
- Always replace all of the batteries with new ones at the same time.

#### **WARRANTY INFORMATION**

Your Ozeri Blood Pressure Monitor, excluding the wrist cuff, is warranted to the original owner for 5 years from the date of purchase against defects in material and workmanship under normal use. The wrist cuff is warranted to the original owner for 1 year to be free from defects in material and workmanship under normal use. Should your blood pressure monitor and/or wrist cuff appear defective within the applicable period from the date of purchase, return the defective unit, freight prepaid along with an explanation of the claim to Ozeri. Please pack carefully to avoid damages in transit. Under this warranty, Ozeri will repair or replace any parts found to be defective due to a manufacturer's defect. This warranty extends only to personal use and does not extend to any product that has been used for commercial use, or use which is not intended. There are no warranties other than that expressly set forth herein. This warranty is not transferable. Ozeri is not responsible in any way for damages, losses or inconveniences caused by equipment failure caused by user negligence, abuse, or use not in accordance with the "User Guide" or any additional safety, use, or warnings included in the product materials. Further, Ozeri is not liable for incidental or consequential damages

of any nature resulting from the use of this product and any liability shall not exceed the purchase price of the product.

This Warranty gives you specific legal rights. You may also have other rights which vary from state to state.

## THIS WARRANTY DOES NOT APPLY TO THE FOLLOWING

- Damage due to accident, misuse, abuse, alterations or vandalism.
- Improper or inadequate maintenance.
- Unauthorized modification or commercial use.
- Damage in return transit.
- Unsupervised use by children under 18 years of age

#### **Ozeri Customer Service**

**Customer service: 1-877-299-1296 (USA)** 

Email: support@ozeri.com

(Ozeri<sup>™</sup> and its subsidiaries assume no liability for damage caused by the use of the Ozeri Blood Pressure Monitor other than for its intended use or as instructed above and in the User Manual.)





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