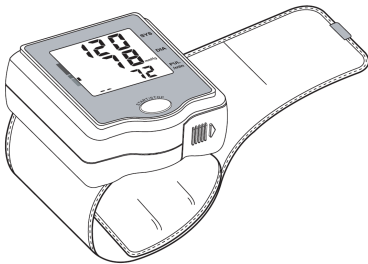




Wireless Wrist Blood Pressure Monitor BPW2.4



Boston Life Labs LLC.

Instructions to User

Dear Users,

Thank you for purchasing our product. Please read the manual carefully before using this device. Failure to follow these instructions may cause measuring abnormality or equipment damage.

The Manual is published in English and Boston Life Labs LLC. has the ultimate right to explain the Manual. No part of this manual may be photocopied, reproduced or translated into another language without the prior written consent. Boston Life Labs LLC. reserves the right to improve and amend it at any time without prior notice.

Version of this manual: Ver 1.0

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Notes:

- The contents contained in this manual are subject to change without notice.
- Information furnished by our company is believed to be accurate and reliable. However, no responsibility is assumed by us for its use, or any infringements of patents or other rights of third parties that may result from its use.

Instructions for Safe Operations

- Read all information in the instruction manual and any other literature included in the box before using the unit.
- Contact your physician for specific information about your blood pressure. Follow the instructions of your healthcare provider.
- Operate the unit only as intended. Don't use for any other purpose.
- The unit is indented to use in measuring the blood pressure and pulse rate for adult only, not recommended for neonatal baby.
- Do not use a cellular near the unit. It may result in operational failure.
- Please avoid using in high radiant area in order to make your measurement data correctly.

- Necessary maintenance must be performed only by qualified service technicians. Users are not permitted to maintain it by themselves.

Cautions

- Explosive hazard—**DO NOT** use the equipment in environment with inflammable gas such as some ignitable anesthetic agents.

Warnings

- The local law must be followed when disposing of the device.

Attentions

- 🔔 Keep the device away from dust, vibration, corrosive substances, explosive materials, high temperature and moisture.
- 🔔 The device should be kept out of the reach of children.
- 🔔 If the equipment gets wet, please stop using it and do not resume operation until it is dry. When it is carried from a cold environment to a warm and humid environment, please do not use it immediately.
- 🔔 **DO NOT** operate the button on the front panel with sharp materials.

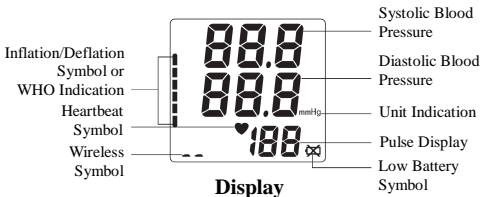
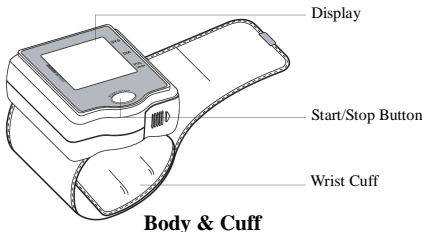
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1 Overview

1.1 Appearance



Power

1.2 Features

The Wireless Wrist Blood Pressure Monitor can be used to measure blood pressure Systolic, Diastolic and pulse rate value. The unit uses the oscillometric method of blood pressure measurement. It means the unit 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 a stethoscope is not needed while using an oscillometric monitor.

- With MWI (measurement while inflating) technology;
- Automatically inflate and deflate;
- Automatic send measurement result wirelessly;

1.3 Name and Model

Name: Wireless Wrist Blood Pressure Monitor

Model: BPW2.4

1.4 Applications and Scope

BPW2.4 Wireless Wrist Blood Pressure Monitor is intended to be used by adults at home or medical center to measure Blood Pressure Systolic, Diastolic and pulse rate.

2 Battery Installation

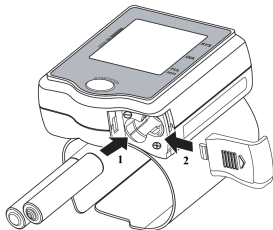


Figure 3 Battery Installation

1. Refer to Figure 3, insert two AAA size batteries into the battery compartment properly in the right direction.
2. Replace the cover.

△ Please take care when you insert the batteries, or the improper insertion may make the device not work.

△ User two identical 1.5V alkaline batteries type AAA LR03.

△ Replace all of the batteries if the symbol of low battery appears on the display.

△ Never leave any low battery in the battery compartment since they may leak and cause damage to the unit.

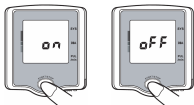
3 Wireless Function

3.1 Enable/Disable Bluetooth

The state of the Bluetooth will appear after longtime pressing the Start/Stop button.

Then press the Start/Stop button to change the state of the Bluetooth to ON or OFF.

Finally, longtime press the Start/Button to exit the menu.



When Bluetooth is ON, the segments are displayed on the bottom left corner of the screen.



3.2 Data Management

When Bluetooth is ON and after a measurement result is made, the Bluetooth part will be powered on and try to connect to the peer device if there is any, otherwise it will enter into discoverable/connectable mode, waiting the SPP connection from any peer device for about 60 seconds. If the device fails to connect the peer device, it will also enter into the discoverable/connectable mode for about 60 seconds.

If the timeout comes, the device will power off the Bluetooth part.

In the discoverable/connectable mode, if the device receives a pairing/connecting request from a peer device, the pin code “6666” should/may be used.

After the Bluetooth SPP is established, the device will send the measurement data to the peer device, then the SPP connection is disconnected and the Bluetooth part is powered off.



Bluetooth is ON



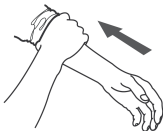
Bluetooth is connecting



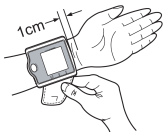
Bluetooth is connected

4 Operation

1. Remove all clothes from your arm allowing the cuff to fit directly on the skin.

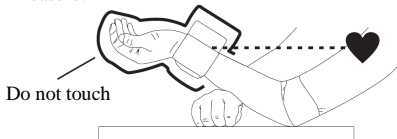


2. Wrap the cuff tightly around your wrist by using the Velcro strip.

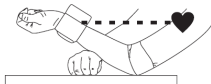


3. Turn your palm upward; stretch your fingers and wrist naturally.
4. Use a soft stuff below the BP monitor to support your arm as the figure shown below.
5. Keep your wrist at the same level of your heart.
6. Sit upright in a chair, and take about 10 deep breaths to relax your entire body, especially between your

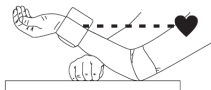
elbow and fingers. Then turn on the unit to start the measure.



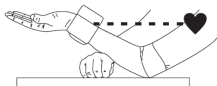
Fingers' pose:



Not good

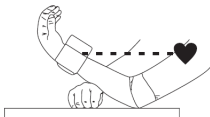


Good

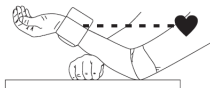


Not good

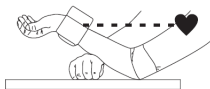
Wrist' pose:



Not good



Good



Not good

5 Make a Measurement

1. Press the Start/Stop button.

All Display symbols appear on the screen. The cuff starts to inflate automatically.



All symbols
display



Deflating
automatically



Start to inflate



2. Measurement starts while inflating.

The heartbeat symbol flashes once a pulse is detected.



3. The blood pressure and pulse rate are displayed when the measurement completed.

The cuff is deflated automatically. If the Bluetooth is enabled, the device automatically tries to send the measurement results.



“mmHg” display

4. Press the Start/Stop button to start a new measurement or longtime press the Start/Stop button to turn off the unit.



The unit will automatically turn off after two minutes if you have forgotten to turn it off.



Please rest for at least 3 minutes before taking the next measurement.

6 Exceptional Situations

Error Indicators: The following symbol will appear on the display when measuring abnormal.

Symbol	Cause	Correction
	The course of inflation appears error.	Wrap the cuff correctly and tightly.
		Inflate over again after ensuring.
	When measurement fails.	Do not Move your arm and body and keep quiet.
		Measure over again according to correct way.
	When the battery power is too low.	Replace all of the worn batteries with two new ones.

Error Indicators:

Problem	Causes and Solutions
No power.	Replace all of the worn batteries with two new ones.
No display appears on the display screen.	Check the battery installation for proper placement of the batteries polarities.
Measurements 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 “Proper Way of Measurement” and “Take a Measurement”.

7 Technical Specifications

A. Display mode : LCD Display

B. Power supply requirement:

1.5V (AAA size) alkaline battery \times 2

Supply voltage: 3VDC

Operating current: \leq 60mA

C. Environment requirement

Operating Temperature: 10°C ~40°C (50~104°F)

Operating Humidity: 15%~90% (Noncondensing)

Atmospheric pressure: 70kPa~106kPa

D. Pressure Parameter Specifications

Measuring range: 0 to 299 mmHg

Accuracy: \pm 3mmHg %

E. Pulse Rate Parameter Specifications

Measuring range: 40bpm~180bpm

Accuracy: \pm 5% of reading

F. Gross Weight

110g (battery not included)

G. Bluetooth

Bluetooth® Class 2 v2.0, ~20m range in open area

8 Repair and Maintenance

8.1 Maintenance

In order to ensure the long service life of the device, please pay attention to the use of maintenance.

- A. Please change the batteries when the low-voltage indicator lightens.
- B. Please clean the surface of the device before using. Wipe the device with alcohol first, and then let it dry in air or wipe it dry.
- C. Please take out the batteries if the device will not be used for 3 months or longer. Always replace all the batteries with new ones at the same time.
- D. Store the device in a clean and dry location. Do not subject the unit to extreme hot or cold temperature, humidity and direct sunlight.
- E. Do not clean the body and cuff with naphtha, thinner or gasoline etc.
- F. Do not wet the cuff or attempt to clean the cuff with water.
- G. The best storage environment of the device is -20°C to 60°C ambient temperature and 10~95% relative humidity.

⚠ High-pressure sterilization cannot be used on the device.

⚠ Do not immerse the device in liquid.

⚠ It is recommended that the device should be kept in a dry environment. Humidity may reduce the life of the device, or even damage it.

8.2 Cleaning and Disinfecting Instruction

- A. Surface-clean sensor with a soft gauze by saturating with a solution such as 75% isopropyl alcohol, if low-level disinfection is required, use a 1:10 bleach solution.
- B. Then surface-clean with clean water and dry with a piece of cloth.

Caution: Do not sterilize by irradiation steam, or ethylene oxide.

Do not use the sensor if it is damaged.

9 Common Knowledge

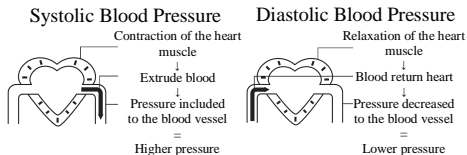
9.1 Blood Circulation

The blood pressure is responsible for supplying the body with oxygen.

Blood pressure is the pressure exerted on the arteries.

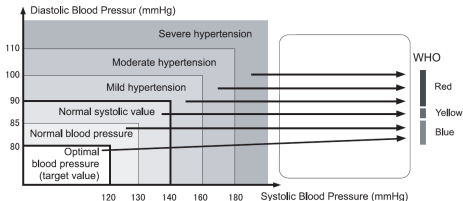
The systolic blood pressure (higher pressure or top value) represents the blood pressure produced by contraction of the heart muscle.

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



9.2 Classification of Blood Pressure





After each measurement is completed, the LCD display will show your position automatically on the six segments of the bar indicator which corresponds to WHO Blood Pressure Indicator.



Note: When a person's systolic and diastolic pressures fall into different categories, the higher category should apply.

Appendix

Key of Symbols

Symbol	Description
	With Type B applied part
	Warning – See User Manual
SYS	Blood Pressure Systolic
DIA	Blood Pressure Diastolic
PUL/min	Pulse rate (beats per minute)
	Low battery voltage
SN	Serial number
	Separate collection for this device.

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FCC ID: YTK-BPW2.4

IMPORTANT REGULATORY INFORMATION

This device complies with Part 15 of the FCC Rules:

Operation is subject to the following two conditions:

1. This device may not cause harmful interference and
2. This device must accept any interference that is received, including any interference that may cause undesired operation.

WARNING:

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipments.