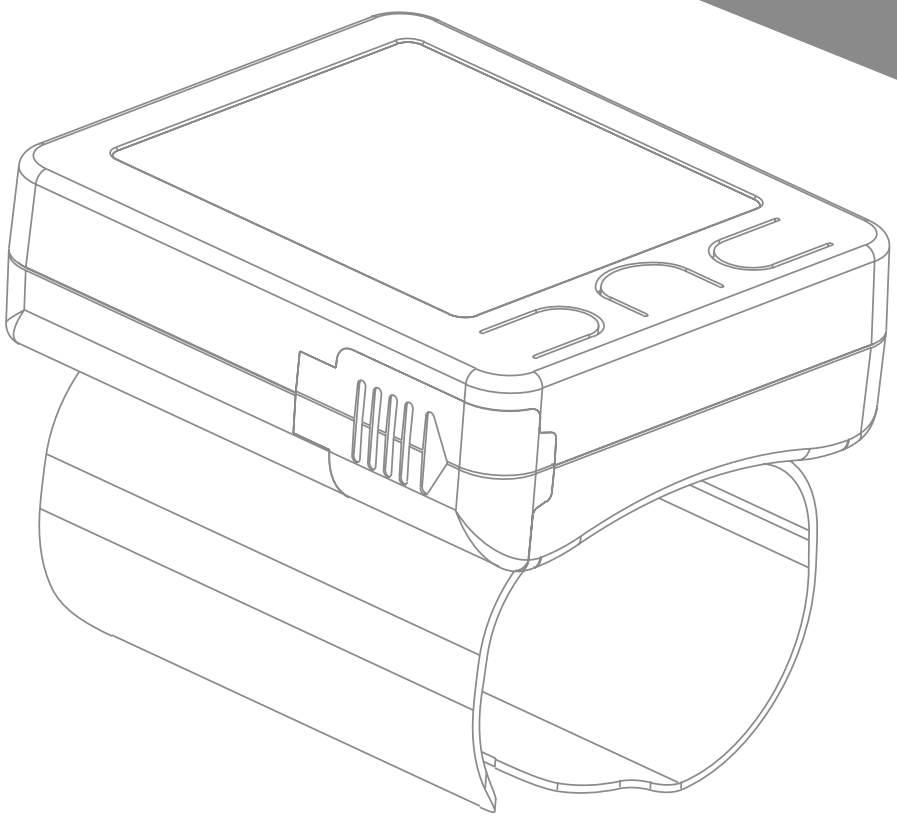
eHealthyNet

Wrist Blood Pressure Monitor

MBP-022-B

User Manual



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INTRODUCTION

Thank you for purchasing the eHealthyNet Wrist Blood Pressure Monitor. The eHealthyNet Wrist Blood Pressure Monitor is compact and easy to use that uses the oscillometric principle to measure your blood pressure data. The monitor works with your mobile device to track your blood pressure data and share it with your family via eHealthyNet App.

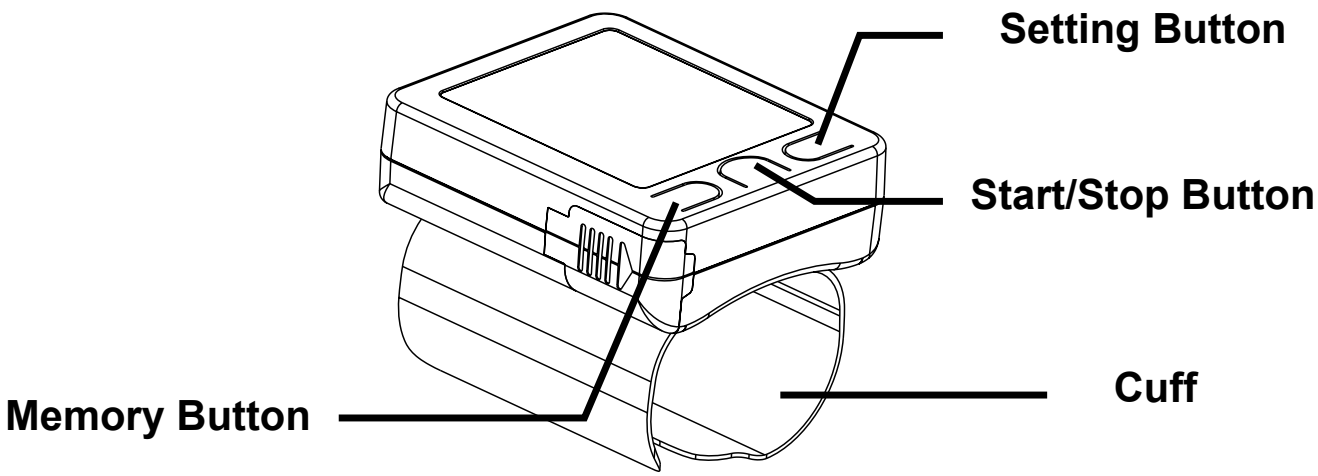
PACKAGE CONTENT

- 1 eHealthyNet Wrist Blood Pressure Monitor
- 1 Storage Box
- 1 User Manual
- 2 AA Batteries

INTENDED USE

The eHealthyNet Wrist Blood Pressure Monitor is intended for use at home or medical center. It is a non-invasive blood pressure monitoring system designed to measure the systolic and diastolic blood pressures and pulse rate of an adult individual with an inflatable cuff wrapped around the Wrist. Please follow the instruction of this user manual in order to use the monitor safely and properly. The measurement range of the cuff circumference is 22cm to 32cm.

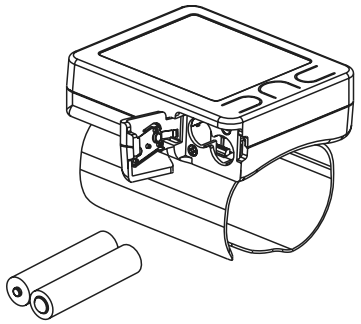
PARTS



HARDWARE SET UP

Batteries

Remove the battery cover. Insert 2 AAA batteries into the compartment.



eHealthyNet APP

Download eHealthyNet App

The App is available in both Google Play and Apple App Store. Before the first use of the monitor, download the “eHealthyNet” App from Google Play and Apple Store.

Account Setting

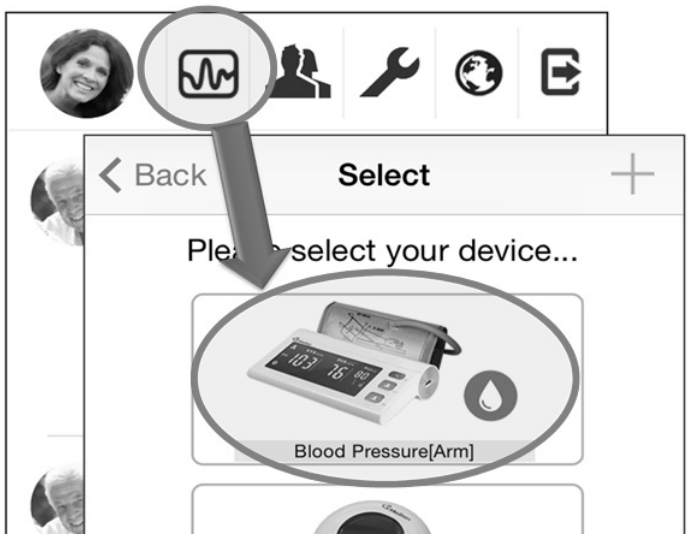
Follow the on-screen instruction to register and set up your personal account.

Connect the monitor with mobile devices

1. Switch “bluetooth” on under the “Settings” menu on IOS or Andriod devices.
2. Select the “Measure” button in the main screen and then “+” button in the upper right corner.

3. Press and hold the Start/Stop Button on the monitor until you see a bluetooth sign appears on screen. Wait the monitor pairs with your mobile device, it may last for 30 seconds.

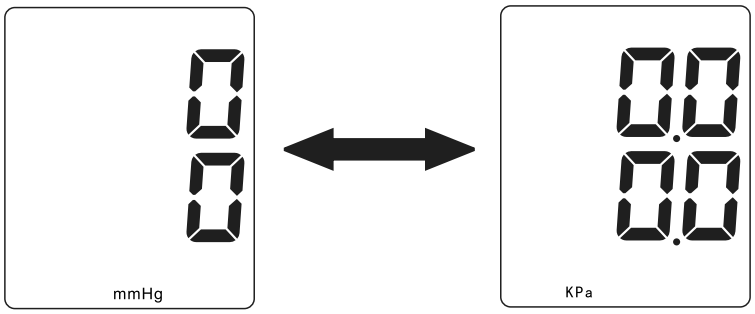
4. After successful pairing, select the paired device under “Measure” Button of the App. And Press Start/Stop Button on the monitor to start measurement.



MODE SETTING

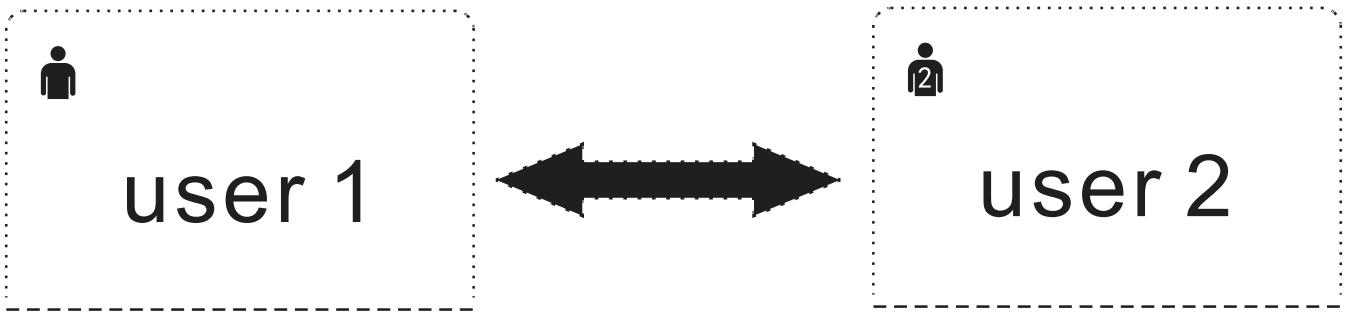
Measurement Unit

Press Setting (SET) Button when power is off, the screen displays as the picture below, press Memory (MEM) Button to switch between mmHg (Default) and KPa units.



User

Press SET Button when it is in Measurement Unit Setting Mode, the screen displays as the picture below, press MEM Button to switch between User1 and User2.

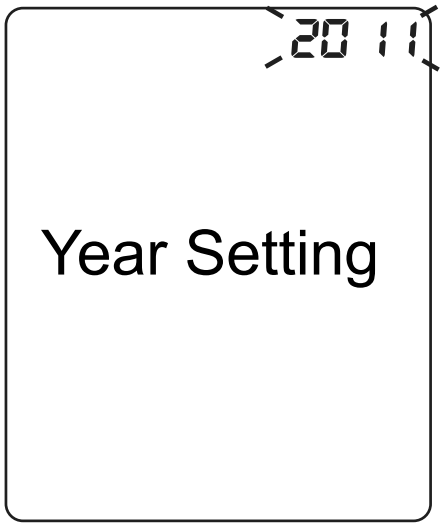


Date

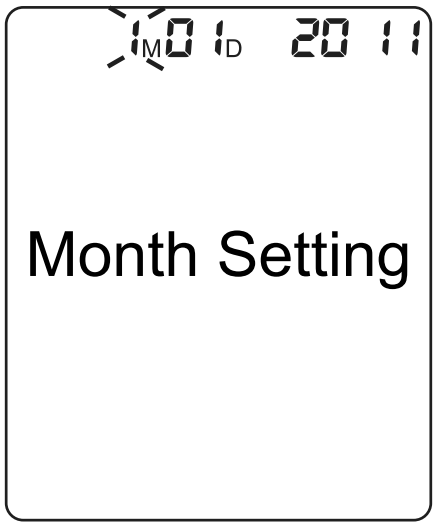
Press SET Button when it is in User Setting Mode, press it 3 times to enter Date Setting Mode in a sequence:

Year ➡ Month ➡ Day

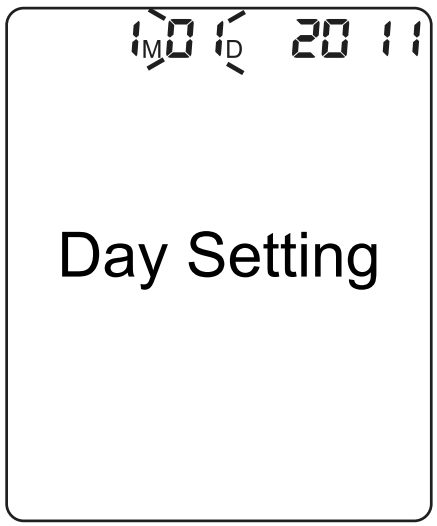
In each time pressing SET Button, the screen displays as the pictures from left to right in the next page, press MEM Button to increase the value by 1.



Year Setting



Month Setting



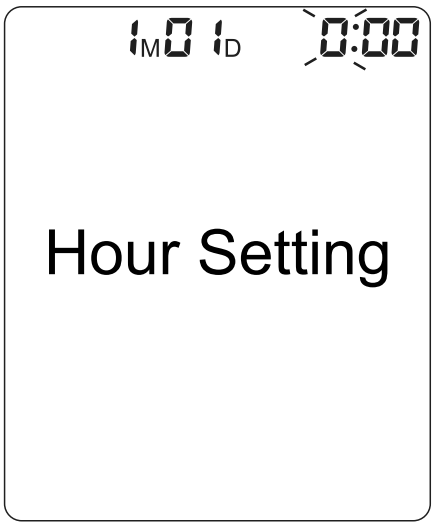
Day Setting

Time

Press SET Button when it is in Day Setting Mode, press it 2 times to enter Time Setting Mode in a sequence:

Hour ➡ Minute

In each time pressing SET Button, the screen displays as the pictures from left to right in the next page, press MEM Button to increase the value by 1.



Hour Setting

Minute Setting

MEASUREMENT

Pre-measurement

Keep calm for 5 - 10 minutes before measurements, avoid eating, drinking, smoking, exercising and having bath. Any of these activities may influence the blood pressure.

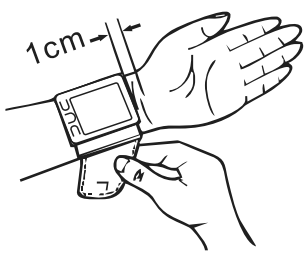
Body Posture

1. Be seated with your feet flat on the floor without crosing your legs.
2. Place your hand palm-side up in front of you on a flat surface like a table.

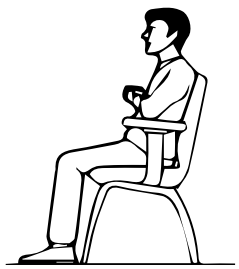
3. The Middle of the cuff should be in the same level of the right atrium of your heart.

Apply The Cuff

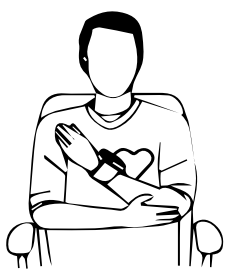
1. Wrap a bare wrist with the cuff, adjust its position 1 cm above the hand and make sure the monitor facing up with your palm-side up.



2. Secure the cuff closed with the Velcro fastener.



3. Be seated, place you hand on a flat surface (e.g. a table) with the palm-side up. Make sure the cuff is in the same level of the right atrium of your heart.



Take Measurements with Mobile Devices

1. Switch on bluetooth, launch the “eHealthyNet” App in your mobile device.
2. Select the paired monitor under “Measure” Button of the App. And Press Start/Stop Button on the monitor to start measurement.

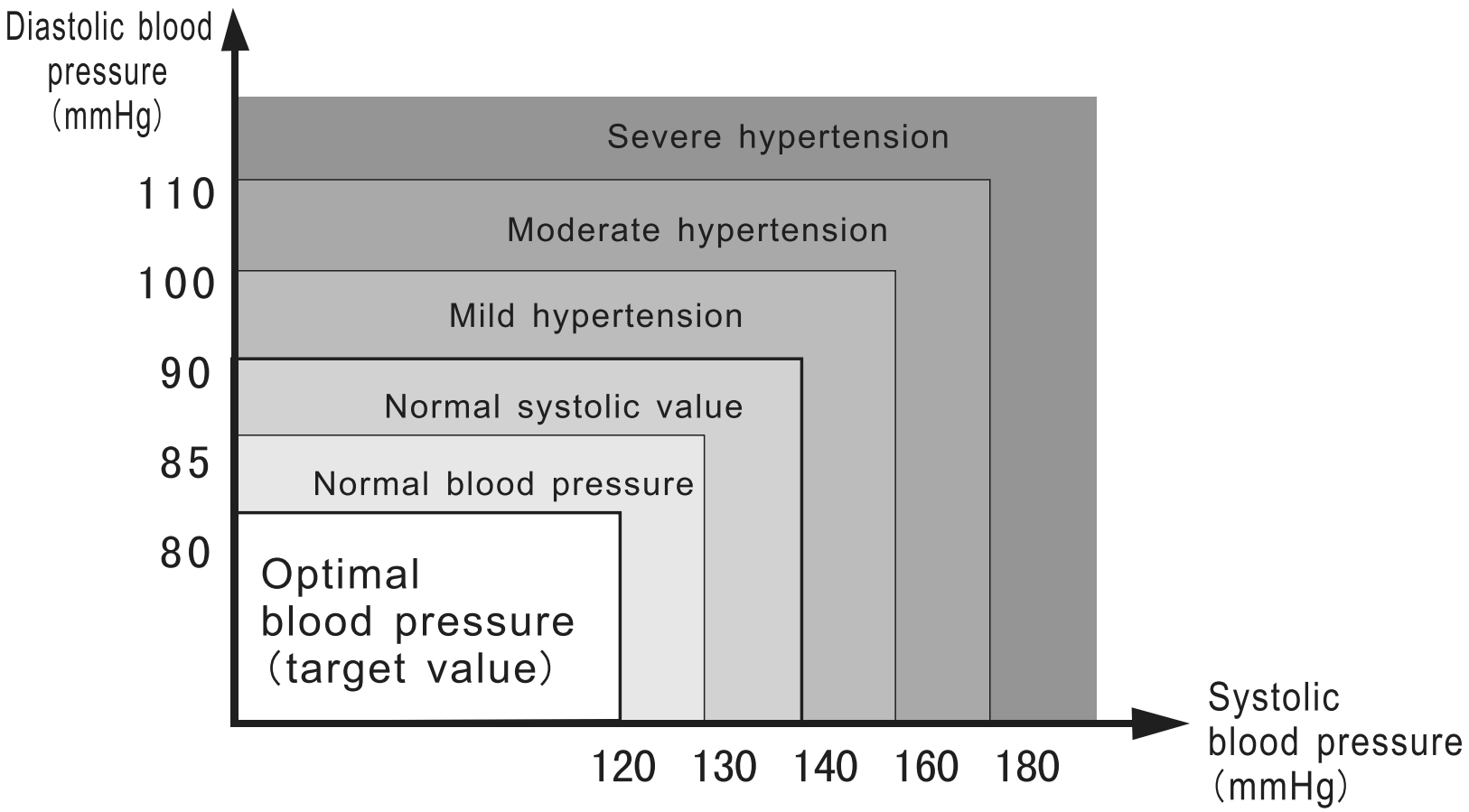
Take Measurements without Mobile Devices

The monitor can work without pairing with a mobile device. Press Start/Stop Button twice to skip switching on the bluetooth and start measurements.

Note: Stop the measurement process at any time by pressing the Start/Stop Buttion.

ABOUT BLOOD PRESSURE

The World Health Organization (WHO) and International Society of Hypertension (ISH) have created the following guide to classify and assessing high blood pressure. Please note that other factors such as Diabetes, obesity, smoking and drinking alcohol may influence the blood pressure.



Blood Pressure Classification	SYS BP mmHg	DIA BP mmHg	Color indicator
Optimal	<120	<80	Green
Normal	120-129	80-84	Green
High-Normal	130-139	85-89	Yellow
Mild Hypertension	140-159	90-99	Orange
Moderate Hypertension	160-179	100-109	Orange
Severe Hypertension	≥180	≥110	RED

Note: This chart is not intended to provide a basis for any type of emergency condition or diagnosis based on the color indicator; this chart only depicts different classification of blood pressure. Consult your physician to interpret the blood pressure results properly.

SPECIFICATION

Product Name		Wrist Blood Pressure Monitor
Model		MBP-022-B
Measurment Mechanism		Oscillometric Method, automatic inflation and measurement.
Size		L73mm x W65mm x H65mm
Weight		Approximate 122g
Display		LCD Digital Display
Power Source		2 AA Batteries
Measurement Range	**Pressure**	0-299 mmHg
	Pulse	40-199 pulse/min
Accuracy	**Pressure**	±3 mmHg
	Pulse	±5% of reading
Operating environment	**Temperature**	5-40 °C
	Humidity	15-85% RH
	Air Pressure	86-106 kPa
Storage environment	**Temperature**	-20-55 °C
	Humidity	10-85% RH
	Air Pressure	86-106 kPa

SAFETY PRECAUTIONS

1. Read all of the information in the User Manual and other provided instructions before operating the monitor.
2. Consult your physician if there is any concern about using the monitor.
3. Do not use the monitor in a moving vehicle as it may lead to inaccurate result.
4. Do not use the cuff on your neck as it may lead to suffocation.
5. Use ONLY the cuff provided in this package.
6. Do not drop the monitor or subject it to strong impact.
7. Replace all the batteries at once.
8. Take out the batteries if the monitor will not be used in 3 months.

⚠ The monitor is designed for adults and should not be used on infants, youning children, pregnant or pre-eclamptic patients. Consult your physician before use on children.

⚠ The product might not meet its performace specifications if not stored or used within the specified range of temperature, relative humidity and air pressure in the section “SPECIFICATION”.

⚠ Please do not share your cuff with other person to avoid any cross-infection.

CARE & MAINTENANCE

Cleaning the Monitor

Clean the monitor with soft dry cloth. Do not use any abrasive and volatile cleaning agent.

Cleaning the Cuff

Use a piece of cloth soaked with 1:99 Bleach solution to clean the cuff. Air dry it after cleaning.

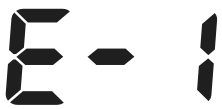
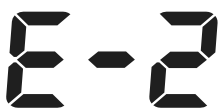
Storage

1. Store the monitor in a dry and clean environment, avoid direct sunlight (see the storing environmental condition in the section “SPECIFICATION”).
2. Remove the batteries if the monitor will not be used in 3 months.

TROUBLESHOOTING

Error Sign

Error signs are displayed on the monitor’s screen if there are abnormalities during measurement.

Sign	Cause	Correction
	Weak Signal or drastic change in blood pressure	Wrap the cuff properly. Check if the connector of the cuff’s air tube is detached.
	External disturbance	Avoid use the monitor near a cell phone or any high radiation device. Keep calm during measurement.

Sign	Cause	Correction
E-3	Error during inflation	Wrap the cuff properly. Check if the connector of the cuff's air tube is detached.
E-5	Abnormal Blood Pressure	Keep calm for 5 - 10 mins before measurement. Repeat a measurement after 30 minutes of rest, if the abnormalty persist for 3 times of measurements, contact your physician.
	Low Battery	Replace all the batteries at once

WARRANTY

The eHealthyNet Wrist Blood Pressure Monitor is warranted to be free from defects in materials and workmanship within two year from the date of purchase when used in accordance with the provided instructions. The Warranty extends only to the end user. We will, at our option, repair or replace without charge the eHealthyNet Wrist Blood Pressure Monitor covered by the warranty. Repair or replacement is our only responsiblity

and your only remedy under the warranty.

EXPLANATION OF SYMBOL

 Symbol for “WARNING”

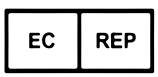
 Symbol for “TYPE B APPLIED PART”

 Symbol for “ENVIRONMENTAL PROTECTION” Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

 Symbol for “THE OPERATION GUIDE MUST BE READ”

 Symbol for “MANUFACTURER”

SN Symbol for “SERIAL NUMBER”



Symbol for “EUROPEAN REPRESENTATIVE”

CE 0123 Symbol for “CE MARK” - Conforms to essential requirements of the Medical Device Directive 93/42/EEC.

ELECTROMAGNETIC COMPATIBILITY INFORMATION

Guidance and manufacturer’s declaraiton - electromagnetic immunity

The Wrist blood pressure monitor is inteded for use in the electromagnetic environment specified below. The customer of the user of the Wrist blood pressure monitor should assure that it is used in such an environment

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the elative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 sec	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the "blood pressure monitor" requires continued operation during power mains interruptions, it is recommended that the "blood pressure monitor" be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE UT is the a.c. mains voltage prior to application of the test level.			

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHZ 3 V/m 80 MHz to 2,5 Ghz	3 V 3 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the "blood pressure monitor", including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d=1.2\sqrt{P}$ $d=1.2\sqrt{P}$ 80MHz to 800MHz $d=2.3\sqrt{P}$ 800MHz to 2.5 Ghz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the "blood pressure monitor" is used exceeds the applicable RF compliance level above, the blood pressure monitor should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the "blood pressure monitor".

b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than [V1] V/m.

Guidance and manufacturer's declaraiton - electromagnetic emissions

The Wrist blood pressure monitor is inteded for use in the electromagnetic environment specified below. The customer of the user of the Wrist blood pressure monitor should assure that it is used in such an environment

Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The "blood pressure monitor" uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The "blood pressure monitor" is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Recommended separation distances between portable and mobile RF communications equipment and the blood pressure monitor

The Wrist blood pressure monitor is inteded for use in an electromagnetic environment in which raidted RF disturbances are controlled. The customer or the user of the blood pressure monitor can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Wrist blood pressure monitor as recommended below, according to the masimum output power of the communication equipment.

Rated maximum output power of transmitter W	eparation distance according to frequency of transmitter m		
	150 kHz to 80 MHZ $d = \left[\frac{3,5}{V_1}\right]\sqrt{P}$	80 MHz to 800 MHZ $d = \left[\frac{3,5}{E_1}\right]\sqrt{P}$	800 MHz to 2,5 Ghz $d = \left[\frac{7}{E_1}\right]\sqrt{P}$
0,01	0.12	0.12	0.23
0,1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maxlmum output power not listed above, the recommended separation distanced in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter In watts (W) according to the transmitter manufacturer.

NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies**.**

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation Is affected by absorption and reflection from structures, objects and people.

CE 0123