

# Upper Arm Semi-Automatic Blood Pressure Monitor



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USER'S MANUAL

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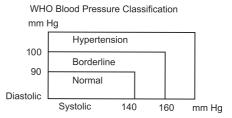
#### INTRODUCTION

Thank you for purchasing the upper arm Semi-Automatic Blood Pressure Monitor. This remarkable instrument is ideal for people who frequently monitor their own blood pressure because it's easy to use.

Please read this instruction manual thoroughly before using the Monitor. For specific information on your own blood pressure, CONTACT YOUR PHYSICIAN.

The World Health Organization (WHO) developed the following Blood Pressure Classification. This classification, however, is only a general guideline because blood pressure varies from person to person according to age, weight, and health status.

CONSULT YOUR PHYSICIAN TO DETERMINE YOUR NORMAL BLOOD PRESSURE.



	Systolic (mmHg)	Diastolic (mmHg)	
Normal	less than 139	less than 89	
Borderline	140 to 159	90 to 99	
Hypertension	more than 160	more than 100	

**Note**: There is not an universally accepted definition of hypotension (low blood pressure), but a systolic pressure below 99 mmHg is usually regarded as hypotension.

#### **NOTES ON SAFETY**

- \* The warning signs and sample icons shown here are listed for your safe and correct use of the unit, so as to prevent injuries or damages to properties.
- \* The icons and meanings are as follow.

#### **Examples of signs**



The  $\odot$  icon indicates prohibitions (what you should not do). Matters involving actual prohibitions are indicated by text or pictures in or near  $\odot$ . The left icon refers to "general prohibition".



The ① icon indicates something that is compulsory (What must always be observed). Matters involving actual compulsory actions are indicated by text or pictures in or near ① . The left icon refers to "general compulsion".



Type BF Applied part



Attention and read before use

<b>⚠ Caution</b>	
Self-diagnosis of measured results and treatment are dangerous. Please follow the instructions of your doctor. Self-diagnosis may worsen the disease.	0
Do not use the unit for infants or person who cannot express one's intention. May cause accident or trouble.	
Do not use the unit for purpose other than measuring bolld pressure. May cause accident or trouble.	0
Do not use cellular phone near the unit. The main unit may operate erroneously.	
Do not disassemble, repair, or remodel the main unit or the blood pressure monitor. Will cause the unit to function erroneously.	3

#### **Requests from Manufacturer**

Used batteries may leak and damage the main unit. Please observe the following points.

- \* If you are not going to use the unit for a long period of time (approximately three months or more), remove the batteries.
- \* Replace worn batteries with their polarities in the correct direction.
- \* Do not insert the batteries with their polarities in the wrong direction

Do not use force to bend or pull the cuff.

Do not knock or drop the main unit.

Do not inflate the cuff when it is not wrapped on the wrist.

Always use the specified accessories in the manual, the use of other parts not approved by the manuafacturer may cause faults or injuries.

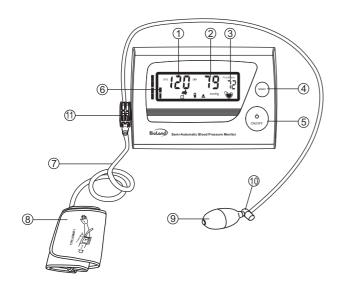
For service information, parts list etc., please contact the dealer.

#### **FEATURES OF THE PRODUCT**

- 1. Using the fuzzy-logic measurement.
- 2. Memory can store 100 measurements.
- 3. Easy to use buttons.
- 4. Large and clear display.
- 5. Upper arm cuff is easy to wrap correctly.
- 6. Desktop style for easy measurement.
- 7. Automatically power off (within 2.5 minutes) to save power.

#### **MAIN UNIT**

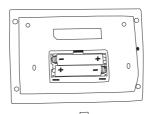
- 1. Systolic Value
- 2. Diastolic Value
- 3. Pulse/min Value
- 4. MEMORY Button
- 5. POWER and ON/OFF Button
- 7. Air Tube
- 8. Upper Arm Cuff
- 9. Inflation Bulb
- 10. Exhaust Valve
- 11. Air Tube Hole
- 6. Classify Blood Pressure Level Bar



#### **INSTALL OR REPLACE BATTERIES**

When the battery symbol appears on the display or nothing is display while inflation during measurement, you should replace with new batteries.

- 1. Slide the battery cover to open.
- 2. Insert two "AAA" batteries in the correct polarity direction.





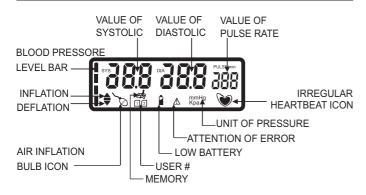
Two "AAA" batteries



Disposal of used battery to the authorized Collecting party subject to the regulation of Each individual territory.

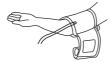
- 3. Replace the battery cover.
- 4. With the use of two "AAA" batteries, you can measure approximately 250 times at room temperature of 22°C and inflating to around 150~200mmHg once a day. But the included batteries only for test purpose may not last as specified long period.
- 5. When the battery icon displays on the LCD, please replace two new "AAA" batteries, please do not mix the new and old battery together.
- 6. If the unit will not be used for a long period, please take out all batteries to avoid liquid leakage damaging the unit.

#### SYMBOLS ON DISPLAY

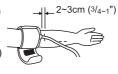


#### **HOW TO USE THE UPPER ARM CUFF**

 Push the cuff over the left upper arm so that the tube points in the direction of the lower arm.

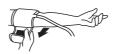


2. Lay the cuff on the arm as illustrated. Make certain that the lower edge of the cuff lies approximately 2 to 3 cm (3/4~1") above the elbow and that the rubber tube leaves the cuff on the inner side of the arm.



**Important!** The mark (about 3 cm long bar) must lie exactly over the artery which runs down the inner side of the arm.

3. Tighten the free end of the cuff and close the cuff with the closer.



4. There must be no free space between the arm and the cuff as this would influence the result. Clothing must not restrict the arm. Any piece of clothing which does (e.g. a pullover) must be taken off.



5. Secure the cuff with the Velcro closer in such a way that it lies comfortably and is not too tight. Lay the arm on the table (palm upwards) so that the cuff is at the same height as the heart. Make sure that the tube is not kinked.



6. Remain seated quietly for two minutes before you begin the measurement.



### A FEW SUGGESTION BEFORE MEASUREMENT

- Avoid eating, smoking, and exercising for at least 30 minutes before taking a measurement. Also rest for at least 15 minutes before taking a reading.
- Stress raises blood pressure. Avoid taking measurements during stressful times.
- 3. You would better apply the cuff on your left upper arm.
- 4. Measurement should be taken in a quiet place and you should be relaxed, seated position. Rest your left arm on a table.
- 5. Remain still and do not talk during the measurement.

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#### **HOW TO MEASURE BLOOD PRESSURE**

- Set up the cuff to your upper arm as previous section of "How to use the upper arm cuff".
- 2. Press the "ON/OFF" button, all icons appear two seconds on LCD, and display "0" and the "≜" " → "symbols.







- 3. Squeeze the inflation bulb repeatedly to inflate the pressure to the cuff up to around 150~200 mmHg (you will see the arrow symbol change from " ≜ " to " ▼ "). stop pumping the air immediately. (Note: If not inflate the pressure within 30 seconds, device will display "E01" error and then turned off)
- 4. To wait the cuff decreasing pressure automatically, when it senses the heart beat, the ( ) icon will flash on LCD.





After complete measurement the screen will display systolic, diastolic value, and pulse/min value, meanwhile will automatically store the data in memory.

#### Level indicator-

One bar for Systolic below 99 mmHg
Two bars for Systolic between 100 ~ 139 mmHg
Three Bars for Systolic between 140 ~ 159 mmHg
Four bars for Systolic above 160 mmHg

#### Irregular Heartbeat Detection(IHD)

During measurement, if the sensor detects more than twice of Heartbeat out of 25% tolerance to your average Heart rate, the display will turn on Irregular Heartbeat icon.



Press down the Exhaust Valve on the top of bulb to completely deflate the remaining air pressure in the cuff.

Note: In some cases, if the result of measurement display with Error message, please make sure release the cuff pressure completely, then turn power off and on again, and repeat from the step 3 to make a new measurement.

 Press " ON/OFF" button to turn off the unit. (Even if you forgot to turn off, the unit will turn off automatically in approximately 2.5 minutes)

#### Note:

- \* You should inflate the pressure up to about 30 mmHg above your regular systolic pressure value, so as to get a correct measurement result.
- \* The unit may store 100 measurement values, if more than 100 records, it will delete the earliest data.
- \* During measurement do not speak or shake as which may affect the accuracy of the result.

### **RECALLING MEMORY**

1. Press " MEMO" button to review the previous memory data. The first display with the last 3 measurements data average.





- Repeated press "MEMO" button to continue review the memory data in ascending order.
- Press "ON/OFF" button to turn off device after completing data review.

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## **SPECIFICATIONS**

Operation Voltage	3V DC
Standby Current	20~50 uA
Operation Current	ON: <10 mA

<sup>\*</sup> Specifications may be changed without notice in the event of Improvement being made.

## TROUBLESHOOTING

ERROR DISPLAY	POSSIBLE CAUSE	HOW TO CORRECT	
Nothing is displayed when you push the POWER button or battery icon flash	No battery installation	Insert batteries	
	Battery worn out	Replace new batteries	
	The polarities of batteries placed wrongly	Insert battery in the correct polarities	
E1: Can't normally increase pressure	Check your cuff if any air leakage	Replace wrist cuff with new one	
E0, E2, E7, E8, E9 Measurement failure	Cuff not properly adjust or placement, hand or body shaking.	Renew adjust cuff position and tightness, and keep hand still	
E3. Inflate pressure too high	Hand or body shaking while measurement	Re-measurement or send back dealer for re-calibrate pressure	
E4: Have shaking while measurement	Hand or body shaking while measurement	Keeping static and correct gesture to measure again	
E5: Automatically pressure release too fast	Cuff too tight	Readjust cuff and measure again	
E6: Automatically pressure release too slow	Cuff too loose		