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UPPER ARM AUTOMATIC BLOOD PRESSURE MONITOR

Model: 2006-1



Operation Guide

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INTRODUCTION

Thank you for purchasing the upper arm Automatic Blood Pressure Monitor. This remarkable instrument is ideal for people who frequently monitor their own blood pressure because it's easy to use. Simply push of a button the monitor measures your blood pressure and pulse and displays the reading on a clear digital panel. Perfect for quick, easy readings at home, at work, almost anywhere!

The Monitor uses the oscillometric method of blood pressure measurement. This means the monitor detects your blood's movement through the artery in your arm and converts the movements into a digital reading. An oscillometric monitor does not need a stethoscope so the monitor is simple to use and measurements are easy to obtain.

Clinical research has proven a direct relationship between blood pressure in the wrist and blood pressure in the arm. Changes in wrist blood pressure reflect changes in arm blood pressure because the arteries in the wrist and the arm are connected each other. Frequently measuring the blood pressure will provide you and your doctor with an accurate indication of changes in your actual blood pressure.









The product complies with the electromagnetic compatibility requirement of EN60601-1-2 and safety standards of 60601-1 as specified in MDD directive 93/42/EEC.




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

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  icon indicates prohibitions (what you should not do). Matters involving actual prohibitions are indicated by text or pictures in or near  . The left icon refers to "general prohibition".
	The  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  . The left icon refers to "general compulsion".
	Type BF Applied part
	Attention and read before use

⚠ Caution	
Self-diagnosis of measured results and treatment are dangerous. Please follow the instructions of your doctor. Self-diagnosis may worsen the disease.	
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 blood pressure. May cause accident or trouble.	
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 cuff of the blood pressure monitor. Will cause the unit to function erroneously.	

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 the cuff or the air tube.
When removing the air tube, please pull and hold at plastic plug.
Do not knock or drop the main unit.
Do not inflate the cuff when it is not wrapped on the upper arm.
Always use the specified accessories in the manual, the use of other parts not approved by the manufacturer may cause faults or injuries.
For service information , parts list etc., please contact the dealer.

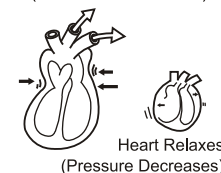
A FEW WORDS ABOUT BLOOD PRESSURE

Blood pressure is the force exerted on the walls of your blood vessels as blood flows through them.



Your heart is like a pump. When it contracts, or beats, it sends a surge of blood through the blood vessels and pressure increases. This is called your systolic pressure.

Heart Contracts
(Pressure Increases)



When your heart relaxes between beats, your blood pressure decreases. This is called your diastolic pressure.

When a doctor takes your blood pressure, he or she measures both your systolic and diastolic pressures and records them as numbers. For example, if your blood pressure reading is 126/76 (126 over 76), your systolic is 126 and your diastolic is 76. The numbers are calculated in millimetres of mercury and recorded as 126/76 mm Hg.

Systolic
(Upper Number)
126
/
76
Diastolic
(Lower Number)

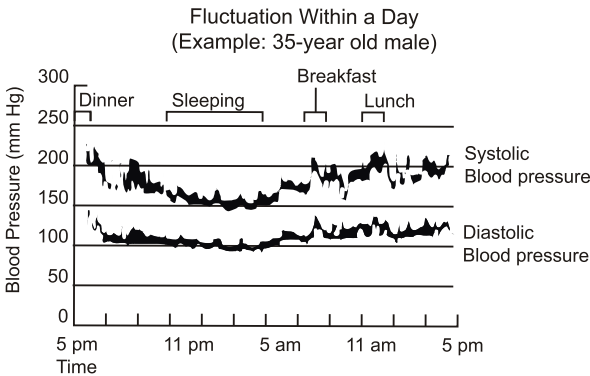
These two numbers provide important information about your health. The more difficult it is for your blood to flow through your blood vessels, the higher both numbers will be. When blood pressure is consistently above normal it is called hypertension (High blood pressure).

Our new Portable Wrist Blood Pressure Monitor automatically measures your systolic and diastolic blood pressure for you, then displays the results on easy-to-read digital panel!

People with a condition that causes circulatory problems (diabetes, kidney disease, arteriosclerosis, or poor peripheral circulation) may get lower readings with wrist type monitor than with a blood pressure monitor that is used on the upper arm.

Please consult your physician to determine if your wrist blood pressure accurately reflects your actual blood pressure.

Your blood pressure changes constantly. Blood pressure fluctuates from day to day and minute to minute according to your body's needs. For example, when you are exercising or angry your blood pressure increases, but when you are relaxing or sleeping your blood pressure decreases. These fluctuations are completely normal. This portable wrist blood pressure monitor is especially helpful when tacking changes in your blood pressure because it travels anywhere and takes just seconds to use.



Lower Arm Blood Pressure Data

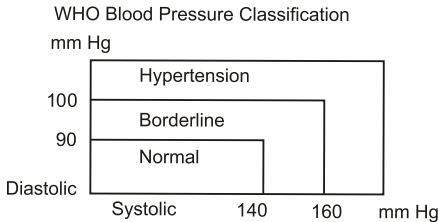
FACTORS THAT MAY CAUSE THE BLOOD PRESSURE TO FLUCTUATE

- * Breathing
- * Exercise
- * Mental stress
- * Worries
- * Environmental and / or temperature change
- * Eating
- * Urination and bowel movement
- * Talking
- * Taking a bath
- * Drinking alcohol
- * Smoking, etc.

Note: One or two readings will not provide a true indication of your normal blood pressure. It is very important to take regular, daily measurements and to keep accurate records. In partnership with your doctor, an accurate record of your blood pressure over a period of time can be a valuable aid in diagnosing and preventing potential health problems.

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.

PRECAUTIONS BEFORE USE

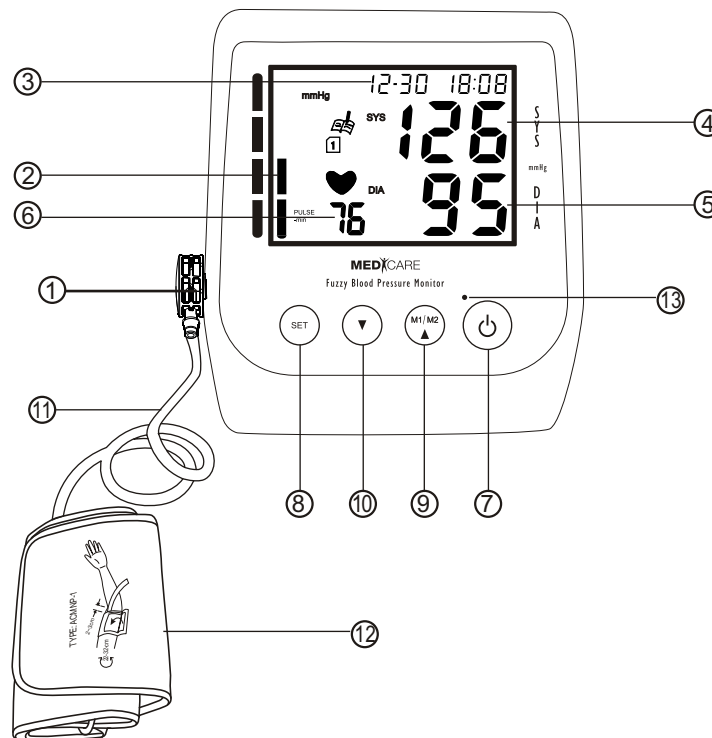
1. Do not confuse self-monitoring with self-diagnoses. Blood pressure measurements should only be interpreted by a health professional who is familiar with your medical history.
2. If you are taking medication, consult with your physician to determine the most appropriate time to measure your blood pressure. NEVER change a prescribed medication without first consulting with your physician.
3. For persons with irregular or unstable peripheral circulation problems due to diabetes, liver disease, hardening of the arteries, etc., there may be fluctuation in blood pressure values measured at the upper arm versus at the wrist.
4. This device is designed for adults to use if use this device on a child patient, old people or toddlers, consult with your physician or measure with relative aid.
5. Measurements may be impaired if this device is use near televisions, microwave ovens, X-ray mobile phone equipment or other devices with strong electrical fields. To prevent such interference, use the meter at a sufficient distance from such devices or turn them off.
6. This device is not suitable for disease diagnoses, urgent treatment, continuous monitoring during medical emergencies or operations.
7. Before using, should wash your hand.
8. If there is overmuch pressure or you feel uncomfortable, please press "POWER" button immediately for quick deflation.

FEATURES OF THE PRODUCT

1. Using the fuzzy-logic measurement.
2. 2-User Memories store up to 100 measurements. (50/person).
3. Measuring of Systolic, Diastolic and Pulse Rate.
4. Large and clear display with Date/Time calendar.
5. Classify Blood Pressure Level Indicator according to WHO.
6. Irregular Heartbeat Detection (IHD).
7. Blood Pressure Data average for last 3 measurements.
8. Automatically power off (within 2.5 minutes) to save power.
9. iTouch key operation with key tone and LED indicator.

MAIN UNIT

1. Air Tube Hole
2. Classify Blood Pressure Level bar
3. Date and Time Display
4. Systolic Value
5. Diastolic Value
6. Pulse/min Value
7. POWER On/Off and Start Button
8. SET Button
9. Button (UP) For memory recall and Date / Time adjust
10. Button (DOWN) For memory and Date / Time adjust
11. Air Tube
12. Upper Arm Cuff
13. LED touch key indicator

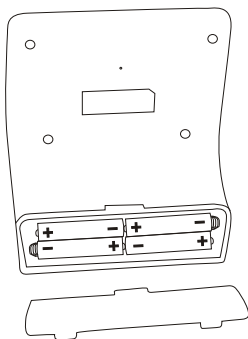


INSTALL OR REPLACE BATTERIES

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

1. Press the snap hook on battery cover to open it.
2. Insert four "AA" batteries in the correct polarity direction.

NOTE: Make sure do not touch to buttons on front panel while intaling battery.



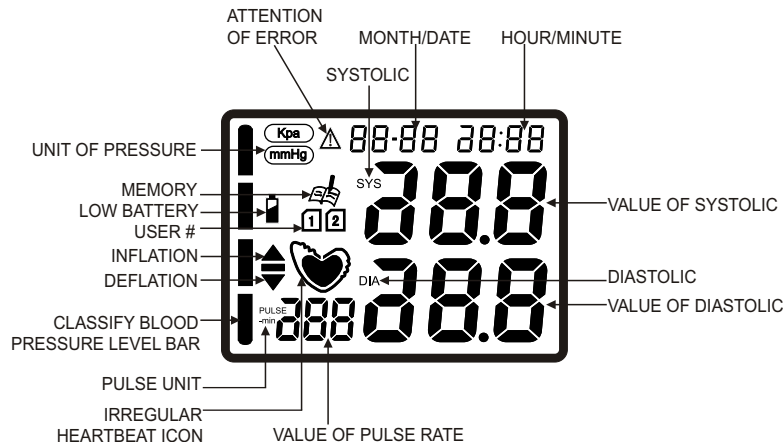
Four "AA" alkaline batteries



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 four alkaline "AA" batteries, you can measure approximately 250 times at room temperature of 22°C and inflating to around 170mmHg 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 four new alkaline "AA" 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



DATE & TIME SETTING AND MEMORY DELETION

1. Touch and hold "SET" button LED light on, until the Year number starting flashes on LCD to release button to enter setting mode.

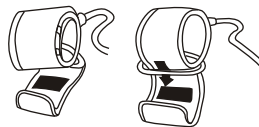


2. Touch "▲" or "▼" button to adjust the year, with correct year on display to touch "SET" button again then Month number is flashing.
3. Touch "▲" or "▼" button to adjust the Month, with correct month on display to touch "SET" button again then Date number is flashing. Following the same steps to adjust Date/Hour/Minute until "mmHg" or "Kpa" is flashing.
4. Touch "▲" or "▼" button to select the "mmHg" as the unit of measurement, touch "SET" button again, then display "CLr All" and "no" is flashing.
5. Touch "M1/M2" button to select "no" (keep the memory) or "yS" (to delete all memory), and touch "SET" button to confirm the selection, then meter turned off for completing all setting.

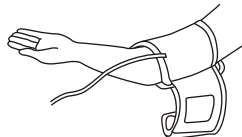
NOTE: a. Select "yS" (yes) will delete all memory in both users, for retain the memory, please select option "no".
b. Please check and re-set Date/Time after replacing of new batteries.

HOW TO USE THE UPPER ARM CUFF

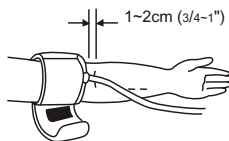
1. Pass the end of the cuff (with sewn-in rubber stopper) through the metal stirrup so that a loop is formed. The Velcro closer must be facing outwards. (Ignore this step if the cuff has already been prepared.)



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

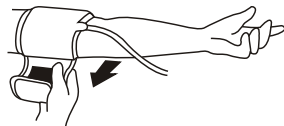


3. Lay the cuff on the arm as illustrated. Make certain that the lower edge of the cuff lies approximately 1 to 2 cm (3/4~1") above the elbow and that the rubber tube leaves the cuff on the inner side of the arm.

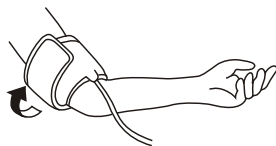


Important! The mark (about 3 cm long bar) must lie exactly over the artery which runs down the inner side of the arm.

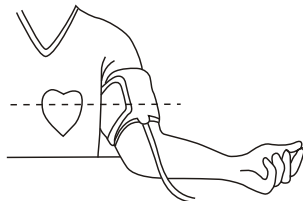
4. Tighten the free end of the cuff and close the cuff with the closer.



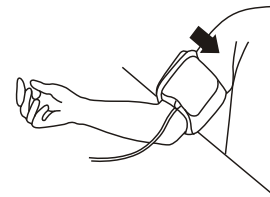
5. There must be no free space between the arm and the cuff as this would influence the result. Clothing must not restrict the arm. Any piece of clothing which does (e.g. a pullover) must be taken off.



6. 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.



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



COMMENT:

If it is not possible to fit the cuff to the left arm, it can also be placed on the right arm. However all measurements should be made using the same arm for better cross reference.

A FEW SUGGESTION BEFORE MEASUREMENT

1. 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.
2. 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.
6. Keep a record of your blood pressure and pulse for your doctor. Remember, a single measurement does not provide an accurate indication of your true blood pressure. You need to take and record several measurements over a period of time. Try to measure your blood pressure at the same time each day for consistency. Blood pressure measurements fluctuate considerably.
7. Wait 5-10 minutes between successive measurements. Waiting allows the engorged blood vessels to return to normal. You may require more rest time depending on your individual physical conditions

HOW TO MEASURE BLOOD PRESSURE

* LED light up at each time touch to buttons to indicate effective touch sensor.

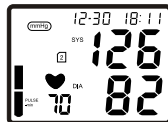
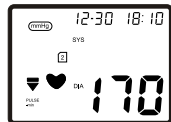
1. Set up the cuff to your upper arm as previous section of "How to use the upper arm cuff".
2. Touch the " " button, LED light up, then all icons appear two seconds on DISPLAY, then flashing of "U1" or "U2".



3. Touch "M1/M2" button to select the user of memory location within 3 seconds while it is flashing.



4. Device will automatic start measurement within a few seconds, the cuff in the arm will automatically inflate. When the value on LCD increases to around 150-200 (mmHg), and start to release the air, and decrease pressure in the cuff automatically when it senses the heart beat, the mark (♥) will flash on LCD.



5. After measurement the screen will display systolic value, diastolic value, pulse rate per minute and pressure classification according to World Health Organization (WHO) reference table, then automatically store the measured records into user's 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 .



6. Touch "⏻" button again to turn off the unit.
* Even if you forget to touch "⏻" button, the unit will turn off automatically in approximately 2.5 minutes.

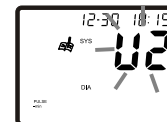
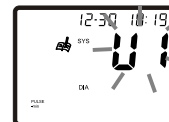
Note:

- * The value measured will be too low if you hold your cuff higher than heart level, or will be too high if you hold your cuff lower than heart level.
- * The unit may store 50 measurements per user, If one user more than 50 records, it will delete the earliest data. (Total 100 memories for 2 users)

- * During measurement do not speak or shake as which may affect the accuracy of the result.
- * If you want to stop the measurement during measurement process, just press the "⏻" button to stop immediately.

RECALLING MEMORY

1. Touch "M1/M2" button, display with "U1" or "U2" flashing, touch "M1/M2" button again while it is flashing to select user U1 or U2 , you are going to review.



2. Device display last 3 measurement data average within few seconds and total number of memory inside that user.

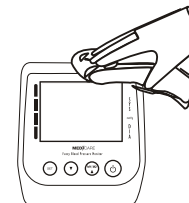


3. Touch "▲" button to review the memory. Repeated touch "▲" button to review memory data in ascending order.
4. Touch "▼" button to review the memory. Repeated touch "▼" button to review memory data in descending order.

Note: To delete all memory in both user's U1 and U2, please refer to the Page 10 point 5 for details.

HOW TO MAINTAIN AND STORE THE UNIT

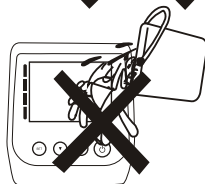
1. Use a dry soft cloth to clean the unit. If necessary, use a cloth lightly dampened with tap water.



- Do not use alcohol, benzene, thinner or other harsh chemicals to clean the device or cuff.



- Before using please wash your hand.
Do not wash or wet the cuff.



- Avoid placing the unit where direct sunlight, high humidity or dust.



Note:

When the unit will not be used for a long period, be sure to remove the batteries. Otherwise, the batteries may leak and damage the unit.

HOW TO PREVENT A MALFUNCTION

- Do not drop the device and avoid sudden jars or shocks.
- Do not inset other objects into any holes.
- Do not attempt to disassemble the unit.
- Do not crush the pressure cuff.
- If the unit has been stored at temperatures below 0°C, leave it in a warm place for 30 minutes before using it, otherwise, may get wrong measurement result.



SPECIFICATIONS

Measuring Method:	Oscillometric System
Indication:	Digital LCD Display
Measuring Range:	Pressure: 30~280 mmHg; Pulse: 40~195 Beat/min.
Accuracy:	Pressure: +/- 3 mmHg; Pulse +/- 5 %
Inflation:	Electric Pump Inflation
Deflation:	Pressure Release Valve
Memory:	100 Memories (50/user)
Power Source:	1.5V "AAA" x 4 Alkaline Battery
Battery Life:	Approx. 250 Times (Once a Day, Room Temperature 22°C)
Working Temp. & Humidity:	41~104°F (5~40°C), 30~85% RH
Storage Temp. & Humidity:	-4~140°F (-20~60°C), 10~95% RH
Outside Dimensions:	125mm(L) x 83mm(W) x 153mm(H)
Weight:	Approx. 521g (Apparatus and Battery)
Accessories:	cuff (fit arm size 22~32cm), Instruction Manual
Operation Voltage:	6V DC
External power:	6V DC, 500mA, \ominus — \bullet — \oplus

* Specifications may be changed without notice in the event of Improvement being made.

TROUBLESHOOTING

If you have trouble while using the unit, please check the following points first.

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		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	
E6: Automatically pressure release too slow	Cuff too loose	Readjust cuff and measure again
"  " Battery icon on	Battery low power	Replace battery, and measure again
The systolic pressure value or diastolic pressure value too high	1. The hand with the cuff was held lower than your heart	Keeping correct position and gesture to measure again
	2. The cuff was not attached properly	
	3. You moved your body or spoke during measurement	
The systolic pressure value or diastolic pressure value too low	1. The hand with the cuff was held higher than your heart	
	2. You moved your body or spoke during measurement.	

Note: Relax for at least 10 minutes and then take another measurement.