

Digital Wrist Blood Pressure Monitor

Advanced Wrist Monitor



6016

Instruction Manual



PLEASE NOTE:
THIS MEDICAL INSTRUMENT MUST BE
USED ACCORDING TO INSTRUCTIONS
TO ENSURE ACCURATE READINGS.

Questions?
Call ADC toll free at 1-800-232-2670



American Diagnostic Corporation
55 Commerce Drive, Hauppauge, New York 11788
1-800-232-2670
www.adctoday.com

Part #93-6016-00



6016 Advanced Wrist Blood Pressure Monitor
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1. INTRODUCTION

1. Introduction

Congratulations on your purchase of the ADC® ADvantage™ Advanced Wrist Blood Pressure Monitor.

In hospitals and physician's offices throughout the world, where accuracy and dependability are critical, ADC® professional diagnostic products are the instruments of choice.

Now you, too, can enjoy the benefits of ADC® engineering and quality in the home. This feature rich instrument was designed to simplify the measurement of blood pressure and pulse rate at home and deliver consistent, dependable results.

Your ADC® ADvantage™ blood pressure monitor is a fully automatic digital blood pressure measuring device for use on the wrist. It enables very fast and reliable measurement of the systolic and diastolic blood pressure as well as the pulse by way of the oscillometric method. This device offers clinically proven accuracy and has been designed to be user friendly.

Read this booklet thoroughly before attempting to use your new ADC® ADvantage™ Digital Blood Pressure Monitor.

Remember...

- Only a health care professional is qualified to interpret blood pressure measurements. This device is NOT intended to replace regular medical checkups.
- It is recommended that your physician review your procedure for using this device.
- Blood pressure readings obtained by this device should be verified before prescribing or making adjustments to any medications used to control hypertension. Under no circumstances should YOU alter the dosages of any drugs prescribed by your doctor.

12. ACCESSORIES

Optional Accessories:

AC Adapter:	6013ZAC
Paper Rolls:	PAPER (5/pkg)
Digital Printer:	6014P

13. HOW TO CONTACT US

To register your product and obtain further detailed user information about our products and services visit us at:

www.adctoday.com
and follow the links.

For questions, comments, or suggestions call us toll free at:

1-800-232-2670



55 Commerce Drive, Hauppauge, New York 11788
Telephone: 631-273-9600 • Fax: 631-273-9659
Email: service@adctoday.com

11. TECHNICAL SPECIFICATIONS

Weight:	7 lbs. / 148g (with batteries + cuff)
Size:	3.75" x 4.25" x 4.25" 85mm x 77mm x 75mm (including cuff)
Storage temperature:	-5°C to +50°C (23°F - 122°F)
Humidity:	15% to 85% relative humidity maximum
Operation temperature:	10°C to 40°C (50°F - 104°F)
Display:	LCD (Liquid Crystal Display)
Measuring method:	Oscillometric
Pressure sensor:	Capacitive
Measuring range:	SYS/DIA: 30 to 280 mmHg
Pulse:	40 to 200 per minute
Cuff pressure display range:	0-299 mmHg
Memory:	Stores the last 90 measurements automatically for 2 Users
Measuring resolution:	1 mmHg
Accuracy:	Pressure within ± 3 mmHg Pulse ± 5 % of the reading
Power source:	2 dry cells (Batteries) UM-4, size AAA, 1.5V
Accessories:	storage case

- This monitor is intended for use by adults only. Consult with a physician before using this instrument on a child.
- In cases of irregular heartbeat (Arrhythmia), measurements made with this instrument should only be evaluated after consultation with your doctor.
- Familiarize yourself with the section titled "About Blood Pressure". It contains important information on the dynamics of blood pressure readings and will help you to obtain the best results.

NOTE! This device contains sensitive electronic components. Avoid strong electrical or electromagnetic fields in the direct vicinity of the device (e.g. mobile telephones, microwave ovens) during use. These can lead to erratic results. Do not attempt to service or repair this device yourself. Should a malfunction occur, refer to the back of this booklet for service information.

2. ABOUT BLOODPRESSURE

2.1. What is Blood Pressure?

Simply put, arterial blood pressure is the force of blood exerted against the walls of the arteries. There are two components to blood pressure - systolic and diastolic pressure. Systolic, the higher pressure, occurs during contraction of the heart. Diastolic, the lower pressure, occurs when the heart is at "rest."

Your level of blood pressure is determined in the circulatory center of the brain and adjusts to a variety of situations through feedback from the nervous system. To adjust blood pressure, the strength and frequency of the heart (Pulse), as well as the width of circulatory blood vessels is altered. Blood vessel width is effected by fine muscles in the blood vessel walls.

Blood pressure is traditionally measured in millimeters of mercury (mmHg). It is recorded as systolic/diastolic. For example a systolic of 120 and diastolic of 80 would be recorded 120/80.

Blood pressure is a dynamic vital sign - one that changes constantly throughout the day. A person's "resting" blood pressure is the pressure that exists first thing in the morning while a person is still at rest and before consumption of food or drink.

2.2. What is a Normal Blood Pressure?

A systolic pressure of less than 120mmHg and a diastolic pressure of under 80mmHg are recognized as normal by the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, 2003.

Note:

Blood pressure does increase with age, so you must check with your doctor to find out what is "normal" for you! Even with normal blood pressure values, a regular self-check with your blood pressure monitor is recommended. You can detect possible changes in your values early and react appropriately. If you are undergoing medical treatment to control your blood pressure, keep a record of values along with time of day and date. Show these values to your doctor. Never use the results of your measurements to independently alter the drug doses prescribed by your doctor.

2.3. What Influences Blood Pressure?

Blood pressure is influenced by many factors including age, weight, physical conditioning, past illness, time of day, altitude, activity, and climate, to name just a few. In general, blood pressure is lower in the morning and increases throughout the day. It is lower in warm weather, and higher in cold weather.

Periodic recalibration

Sensitive measuring devices must be checked for accuracy from time to time. We therefore recommend a periodic inspection of your unit by an authorized ADC® dealer every 2 years.

ADC® is pleased to provide more extensive information on calibration, contact our Customer Service Department for more details.

9. WARRANTY

The blood pressure monitor 6016 is warranted for 5 years from date of purchase. This warranty includes the instrument and the cuff. The warranty does not apply to damage caused by improper handling, accidents, improper use, or alterations made to the instrument by third parties. The warranty is only valid after the product is registered online at www.adctoday.com.

10. QUALITY STANDARDS

Device standard:

Device corresponds to the requirements of the European standard for non-invasive blood pressure monitors.

EN1060-1 / 12:95

EN1060-3 / 09:97

DIN 58130

ANSI / AAMI SP10

(US Standard)

Electromagnetic compatibility:

Device fulfills the stipulations of the European standard EN 60601-1-2

Clinical testing:

The clinical performance test was carried out in Germany according to the DIN 58130 / 1997 procedure N6 (sequential).

The stipulations of the EU-Guidelines 93/42/EWG for Medical Products Class IIa have been fulfilled.

The manufacture of the devices takes place according to the terms of the European standard for blood pressure measuring devices (see Quality Standards) under the supervision of the Technical Monitoring Association Essen (RWTüV-Essen). You must consult ADC® if there are technical problems with this blood pressure instrument. Never attempt to repair the instrument yourself! Any unauthorized opening of the instrument invalidates all warranty claims!

8. CARE, MAINTENANCE, AND RECALIBRATION

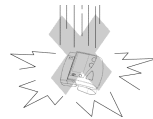
a) Do not expose the device to extreme temperatures, humidity, dust, or direct sunlight.



b) The cuff contains a sensitive air-tight bladder. Handle this carefully and avoid all types of straining the unit through twisting or buckling it.



c) Clean the device with a soft, dry cloth. Do not use gasoline, thinners, or similar solvents. Spots on the cuff can be removed carefully with a damp cloth and soapsuds. The cuff must not be washed!



d) Do not drop the instrument or treat it roughly in any way. Avoid strong vibrations.



e) Never open the device! An opened device will no longer remain in calibration.

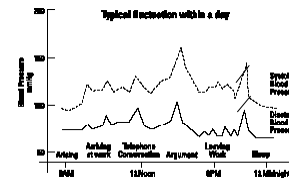
Physical activity can have a significant short term impact on blood pressure. Work, exercise, smoking, eating, drinking - even talking, laughing, or crying will all affect a person's blood pressure.

Your diet, including beverages containing caffeine or alcohol, may affect blood pressure. Emotional stress can have a dramatic impact on your blood pressure.

Even repeated blood pressure measurements taken without adequate rest between readings will alter your blood pressure as the vessels in your arm engorge with blood. Many of these influences are only temporary or short term, though chronic (long term) exposure to some factors may result in permanently elevated blood pressure levels.

2.4. Does Blood Pressure Vary?

Constantly. An individual's blood pressure varies greatly on a daily and seasonal basis. It changes throughout one's lifetime. It is not uncommon for systolic pressure to vary by 40mmHg or more throughout the course of a single day! While generally not as volatile, diastolic pressure can still vary significantly. In hypertensive individuals, variations are even more pronounced. Normally, blood pressure is at its lowest during sleep and rises in the morning and throughout the day. The chart (right) illustrates the fluctuations that could occur in a typical day.



2.5. What is Hypertension?

Hypertension (high blood pressure) is elevated systolic or diastolic levels. In 90 to 95 percent of the diagnosed cases, the specific causes are unknown, although the condition is often linked with family history, and lifestyle. This is referred to as essential hypertension. In the remaining cases, high blood pressure is a symptom of an underlying, often treatable condition, which if corrected, may normalize blood pressure. This less common type is known as secondary hypertension. Hypertension, if left untreated, may contribute to kidney disease, heart attack, stroke, or other debilitating illnesses. The following standards for assessment of high blood pressure (without regard to age) have been established by the Joint National Committee, 2003.

Range Classifications	Systolic Blood Pressure	Diastolic Blood Pressure	Precaution Measures
Normal	<120	<80	Monitor regularly
Prehypertension	120 - 139	80 - 99	Contact your physician
H Y P E R T E N S I O N			
Stage 1 (Moderate)	140 - 159	90 - 99	Contact your physician immediately
Stage 2 (Severe)	160+	100+	Contact your physician URGENTLY

(JNC-7 report: Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure / 2003)

Remember only a physician is qualified to interpret the readings obtained from your blood pressure monitor. No attempt should ever be made at self-diagnosis or treatment.

Other possible malfunctions and their elimination

If problems occur when using the device, the following points should be checked and if necessary, the corresponding measures are to be taken:

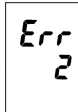
Malfunction	Remedy
The display remains blank when the instrument is switched on although the batteries are inserted.	1. Check the polarity of the batteries to ensure they are inserted correctly. 2. If the display is unusual, re-insert batteries or exchange them for fresh batteries.
The device frequently fails to measure the blood pressure values, or the values measured are too low (too high).	1. Check the positioning of the cuff. 2. Measure the blood pressure again in peace and quiet under observation of the process made in Section 5.
Every measurement produces a different value	1. Read Section 5.2 " Common sources of error. " Repeat the measurement. NOTE: Blood pressure fluctuates continually so successive measurements will show some variability.
Blood pressure values measured differ from those values measured by your physician.	1. Record the daily development of the values measured and consult your doctor. NOTE: Individuals visiting their doctor frequently experience anxiety which can result in a higher reading at the doctor's than obtained at home under resting conditions.

Further Information

Blood pressure is subject to fluctuation even for healthy people. Comparable measurements always require the same conditions (Quiet conditions)! If, in spite of observing all these factors, the fluctuations are larger than 15mmHg, and/or you hear irregular pulse tones, consult your doctor. For licensing, this device has been subjected to strict clinical tests. The computer program used to measure the blood pressure values was tested by experienced specialist physicians in Germany. The same computer program is used in every individual device.

7. ERROR MESSAGES/TROUBLESHOOTING

If an error occurs during a measurement, the measurement is discontinued and a corresponding error code is displayed (Example: Err 2).



Error No.	Possible cause(s)
Err 1	No pulse has been detected.
Err 2	Unnatural pressure impulses influenced the measurement result. The arm was moved during the measurement.
Err 3	The inflation of the cuff takes too long. The cuff is not correctly seated.
Err 5	The measured readings indicated an unacceptable difference between systolic and diastolic pressures. Take another reading following directions carefully. Contact your doctor if you continue to get unusual readings.

2.6. Can Hypertension be Controlled?

Although essential hypertension cannot be cured, it can usually be controlled by altering lifestyle (including diet), adopting a program of exercise, stress management and, where necessary, with medication under a doctor's supervision.

To help reduce the risk of hypertension, or keep it under control, the American Heart Association (AHA) recommends the following:

- Don't smoke
- Reduce salt and fat intake
- Maintain proper weight
- Exercise regularly
- Have regular physical checkups

2.7. Why Measure Blood Pressure at Home?

Clinical studies have shown improved detection and treatment of hypertension when regular home blood pressure monitoring is done in consultation with a physician.

Blood pressure measured in a doctor's office or hospital setting may cause anxiety and lead to an elevated reading - a condition referred to as "white coat hypertension."

Home measurements generally reduce the "outside" influences on blood pressure readings, and can provide a more comprehensive and meaningful blood pressure history.

Note:

While it is important to keep an accurate record of your blood pressure measurements, don't be overly concerned by the results of any one measurement. Individual results may be influenced by spiking of your pressure due to diet, anxiety, or mis-measurement resulting from excessive arm movement, or misapplication of the cuff. Many readings taken at the same time each day give a more comprehensive blood pressure history.

Always be sure to note the date and time when recording blood pressure and pulse measurements. For best results, and with time permitting, 3 successive measurements may be taken daily. Make sure to allow at least 5 minute intervals between measurements. Discard any reading that appears suspect and record the average of the remaining readings.

2.8. How is Blood Pressure Measured?

Health care professionals traditionally use a device known as a sphygmomanometer along with a stethoscope - essentially a professional version of the very same instrument you have purchased. The sphygmomanometer is a system consisting of an inflatable bladder contained within a cuff, inflation bulb with air control valve, and pressure measuring manometer (gauge). The gauge may be mechanical or mercurial. The cuff is wrapped around the limb and inflated to constrict blood flow to the artery. As pressure is released from the cuff through the deflation valve, blood flow returns to the artery producing pulse beats known as Korotkoff sounds, which are detected with the stethoscope. Systolic pressure is recorded at the onset of these sounds. Diastolic pressure is generally recorded when the sounds disappear (when blood flow to the artery returns to normal).

6.3. Stop printing

If you would like to stop printing, press the **PRINTER** button during the printing process.



Note:

Further details regarding the printer can be found in the printer instruction manual.

6. PRINTER FUNCTIONS – PRINTER SOLD SEPARATELY AS AN ACCESSORY

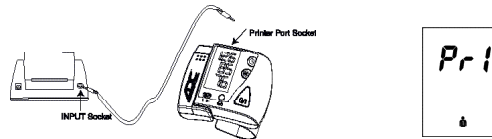
This unit can be used in conjunction with the ADC® Diagnostic Printer. When used in conjunction with the Diagnostic Printer, your blood pressure monitor will print out measurements stored in the memory by simply pressing the PRINTER button. Make sure you set the unit to User 1 or User 2 based on the data you want to print.

6.1. How to print the last stored measurement. (One reading)

- a) Connect the printer to the monitor and switch the printer ON (for details refer to the printer manual).
- b) Press the PRINTER button of the monitor once. The display will show "Pr1" and the printer will print the last stored measurement for the active User (User 1 or User 2).

6.2. How to Print a Chart and all Readings

- a) Connect the printer with the monitor and switch the printer ON (for details refer to the printer manual).
- b) Press the PRINTER button on the monitor and hold it for at least 3 seconds. The display will change from "Pr1" followed by "Pr2". Release the PRINTER button and the printer will print all stored measurements with a corresponding chart.



2.9. How should I record my blood pressure?

Record your blood pressure by setting up a simple chart in a spiral bound notebook as shown below, or use the included record book.

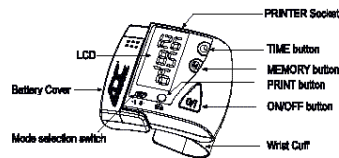
Date	Time	Reading	Pulse
4/24/98	7:50AM	128/83	72
4/25/98	8:00AM	135/77	77
4/26/98	7:45AM	130/75	71
4/27/98	2:00PM	153/89	80

If you like you can add a column for comments about your condition at the time of measurement, or a listing of any factors that may have influenced your readings (such as "had a cold", or "just returned from vacation").

For best results, and with time permitting, 3 successive measurements may be taken daily. Make sure to allow at least 5 minute intervals between measurements. Discard any reading that appears suspect and record the average of the remaining readings. If this method is used, be sure to note that the readings are averaged.

3. COMPONENTS OF YOUR BLOOD PRESSURE MONITOR

The illustration below shows your blood pressure monitor (model # 6016), consisting of:

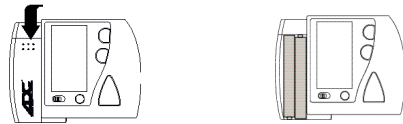


Fits wrist sizes 13.5-19.5cm (5.3"-7.7")

4. SETTING UP YOUR BLOOD PRESSURE MONITOR

4.1. Inserting the batteries

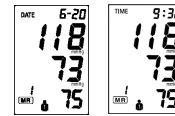
After you have unpacked your device, insert the batteries. The battery compartment is located on the left side of the device (see illustration).



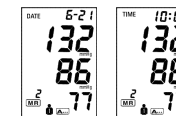
- Remove cover by pushing down with thumb.
- Insert the batteries (2 x size AAA 1.5V), observing the indicated polarity.
- If the battery warning appears in the display, the batteries are expired and must be replaced by new ones.

Further Information

When the unit is in Average Mode, the time between measurements is carefully controlled to ensure accuracy. If you take successive measurements when the unit is in the single measurement mode, wait for 5 minutes in a relaxed position before you repeat a measurement. Make sure all measurements are taken in a seated position.



(MR1: Values of the last measurement.)

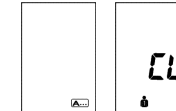


(MR2: Values of the measurement before MR1.)

5.8. Clearing the Memory

Attention!

To delete all stored readings, press the MEMORY button for at least 7 seconds. The display will show the symbol "CL" and 3 short beeps will sound to indicate deletion of stored readings.



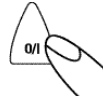
Note:

If your last stored measurement was taken in the Average Mode, you will see an "A" icon with a short beep during the deletion procedure. (The display will show these symbols during deletion of all stored measurements if the last measurement is taken from the Average Mode). Also, you will clear the memory if you take the batteries out.

d) When the unit is set to the Average Mode setting, 3 separate measurements will take place in succession followed by a calculation of your detected blood pressure value. There will be 15 seconds of resting time in-between each measurement. A countdown indicates the remaining time and a beep will sound 5 seconds before the 2nd and 3rd readings begin. If one of the measurements causes an error message, it will be repeated one more time. If any additional errors occur, the measurement will be discontinued and error code Err2 will be displayed.

5.6. Discontinuing a measurement

If it is necessary to interrupt a blood pressure measurement for any reason (e.g. the patient feels unwell), the O/I (ON/OFF) button can be pressed at any time. The device then immediately lowers the cuff pressure automatically and enters into sleep mode.



5.7. Memory – storage and recall of the measurements

This blood pressure monitor automatically stores each of the last 30 measurement values per user. Be sure to select the desired user (either User 1 or User 2) before accessing the stored measurements. By pressing the MEMORY button, the last measurement (MR1) as well as the last 29 measurements of that user (MR2, MR3, ..., MR30) can be displayed one after the other. (MR1: Values of the last measurement. (MR2-MR30: Values of the measurements before MR1.)

Attention!

- After the battery warning appears, the device will not function until the batteries have been replaced.
- Use "AAA" Long-Life or Alkaline 1.5V Batteries. The use of rechargeable batteries is not recommended.
- If the blood pressure monitor is left unused for long periods, remove the batteries from the device. **NOTE:** This will delete all memory.

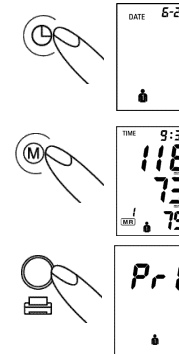
Functional check:

Press and hold the O/I (ON/OFF) button to test all the display elements. When the device is functioning correctly, all display elements will be properly displayed.

4.2. Sleep mode

If this device is loaded with batteries, it will remain in sleep mode when not in use (It will not turn off completely unless the batteries are removed). In this mode, the time and user icon will be displayed. You can conduct the following operations during this mode.

- Reading the set date: Press the TIME button. The date set will be displayed for 2 seconds. For more information, refer to Section 4.3.
- Recalling the measurements: Press the MEMORY button. The stored measurements will be displayed. For more information, refer to Section 5.7.
- Printing the measured data: Press the PRINT button. The stored measurement can be printed. For more information, refer to Section 6.

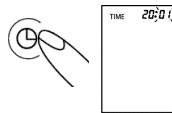


4.3. Setting the time and date

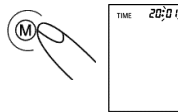
This blood pressure monitor incorporates an integrated clock with date display. Each time a measurement is taken, the device will record the blood pressure values along with the exact time and date of the measurement. You must enter the date and current time. (Example: Entering 2002-06-20, 09:30):

Use the following steps to set the date and time

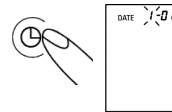
1) Press and hold the TIME button for three seconds. User 1 or 2 will begin flashing. Press the TIME button again briefly. Now you can begin changing the time and date.



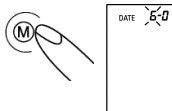
2) The corresponding year can now be entered by pressing the MEMORY button. (Example: 1 press advances 1 year)



3) Press the TIME button again. The display now switches to the current date, with the blinking character representing the month.



4) The corresponding month can now be entered by pressing the MEMORY button. (Example: 5 presses advances 5 months)



5.5. Measuring Procedure

a) Once you've selected the correct user, and measurement mode you can press the 0/1 (ON/OFF) button to begin. After you press the 0/1 button the pump begins to inflate the cuff. In the display, the increasing cuff pressure is continually displayed. (Fig. 1)



Fig. 1

b) After reaching the inflation pressure, the pump stops and the pressure slowly falls. The cuff pressure (large characters) is displayed during the measurement. When the device has detected the pulse, the heart symbol in the display begins to blink and a beep tone is audible for every pulse beat. (Fig. 2)

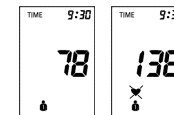


Fig. 2

c) When the measurement has been concluded, a long beep tone sounds. The measured systolic and diastolic blood pressure values, as well as the frequency, are now displayed. (Pulse=number of heartbeats each minute) Example (Fig. 3): Systolic 118, Diastolic 73, Pulse 75. The measurement results are displayed, until you switch the device off. If no button is pressed for 5 minutes, the device switches to sleep mode automatically.

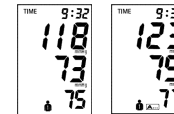


Fig. 3

b) The distance between the cuff and the hand should be approx. 10 mm (1/2").

c) Secure the cuff with the hook and loop closure, so that it lies comfortably and not too tight. No space should remain between the cuff and the wrist.

d) Lay your arm on a table, with the palm upwards.



Support the arm a little with a cushion, so that the cuff rests at about the same height as the heart. Remain still for 2 minutes, before beginning the measurement.

5.4. Measurement Mode Selection (Single or Average Mode)

After the cuff has been appropriately positioned, and you've selected User 1 or User 2, the measurement can begin:

a) If you want to take an Average Mode measurement, position the slide switch to the 3. Remember, in this mode, the unit takes 3 measurements (one after another) and calculates the result. There is a 15 second rest time between measurements. The unit beeps five seconds before the 2nd and 3rd readings begin. **(Fig. 1)** (Data obtained in Average Mode are indicated by the "MAM" symbol.)



Fig. 1

b) If you want to take a Single Mode measurement, position the slide switch to the 1. In this mode there is only one measurement cycle. **(Fig. 2)**



Fig. 2

5) Press the TIME button again. The last two characters (day) are now blinking

6) The corresponding day can now be entered by pressing the MEMORY button. (Example: 19 presses advances 19 days)

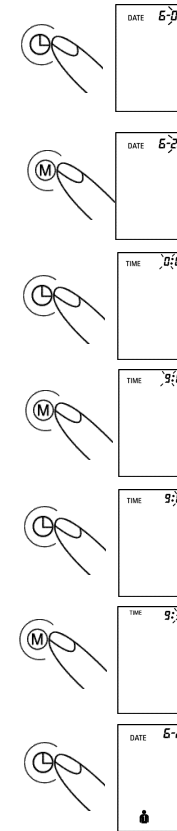
7) Press the TIME button again. The display now switches to the time, with the blinking character representing the hour.

8) The corresponding hour can now be entered by pressing the MEMORY button. (Example: 9 presses advances 9 hours)

9) Press the TIME button again. The last two characters (minutes) now blink

10) The exact time can now be entered by pressing the MEMORY button. (Example: 30 presses advances 30 minutes). **NOTE:** Go past 12 for PM time.

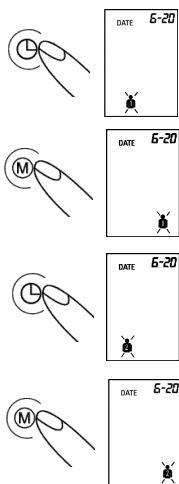
11) After all settings have been made, press the TIME button once again. The date is briefly displayed and then the time. The input is now confirmed and the clock begins to run.



4.4. User selection:

This advanced blood pressure monitor allows you to track blood pressure readings for 2 individuals independently.

- Before measurement make sure you set the unit for the intended user. The unit can track results for 2 individuals. (User 1, User 2)
- The unit is preset to User 1. Push and hold the TIME button for 4 seconds to initiate the user selection.
- When the user icon is flashing, press the MEMORY button to toggle between users.
- When the correct user is selected wait three seconds for the user icon to stop flashing. The monitor is now ready for use.
- Repeat the procedure again to change users again.



Further Information

With each press of the button (TIME, MEMORY) one input is made (e.g. switching over from hours to minutes, or altering the value by 1). However, if you keep the respective button depressed, you can switch more quickly to the desired mode, or find the desired value respectively.

5. THE MEASUREMENT PROCEDURE

5.1. Before measuring:

- Avoid eating, and smoking as well as all forms of exertion directly before the measurement. All these factors influence the measurement result. Try and find time to relax by sitting in an armchair in a quiet atmosphere for about ten minutes before the measurement.
- Always measure on the same wrist (normally left).
- Attempt to carry out the measurements regularly at the same time of day, since blood pressure changes during the course of the day.

5.2. Common sources of error:

Note:

Comparable blood pressure measurements always require the same conditions! These are normally always quiet conditions.

- All efforts by the patient to support the arm can increase blood pressure. Make sure you are in a comfortable, relaxed position and do not activate any of the muscles in the measurement arm during the measurement. Use a cushion for support if necessary.
- If the wrist artery lies considerably lower (higher) than the heart, an erroneously higher (lower) blood pressure will be measured! (Each 15cm/6" difference in height results in a measurement error of 10mmHg!)
- A loose cuff causes false measurement values.
- With repeated measurements, blood accumulates in the respective arm, which can lead to false results. Correctly executed blood pressure measurements should therefore first be repeated after a 5 minute pause or after the arm has been held up in order to allow the accumulated blood to flow away (after at least 3 minutes).

5.3. Fitting the cuff

- Remove all objects and jewelry (e.g. wristwatch) from the wrist in use. Put the cuff over the wrist with the monitor face on the inside of the wrist.