

# Anovamedical, LLC

## MODEL KD-797



### Fully Automatic Wrist Cuff Blood Pressure Monitor (ELECTRONIC SPHYGMOMANOMETER)

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# IMPORTANT INFORMATION

## NORMAL BLOOD PRESSURE FLUCTUATION

Physical activity, excitement, stress, eating, drinking, smoking and many other activities and factors (including taking a blood pressure measurement) all influence blood pressure value. Because of this, it is most unusual to obtain identical multiple blood pressure readings.

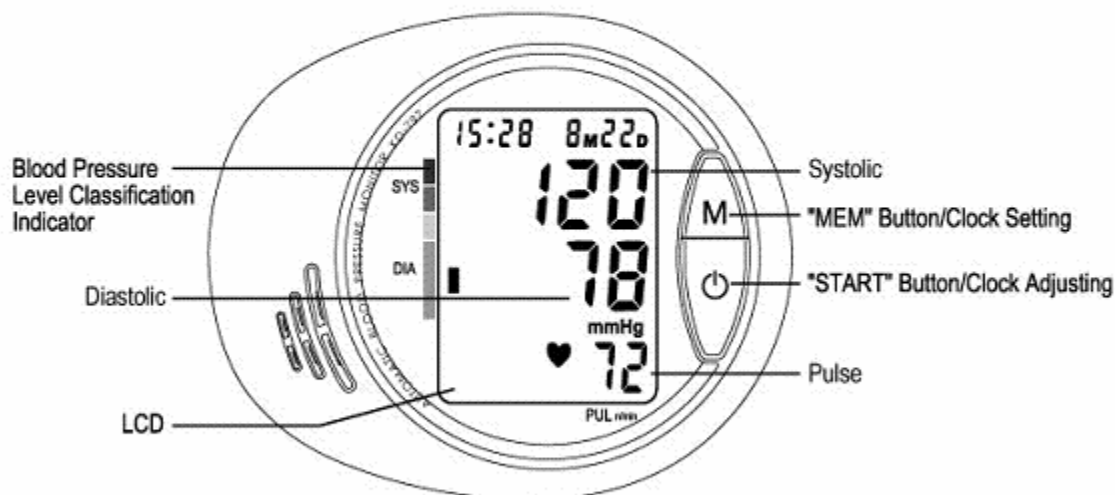
Blood pressure fluctuates continually during the day and night with the highest values usually in the daytime and lowest values usually in the evening. The lowest blood pressure value usually occurs at approximately midnight. Typically, the value begins to increase at approximately 3:00AM, reaching its highest level during the daytime when most people are awake and active.

Considering the above information, the way to collect day-to-day blood pressure measurements that can be meaningfully compared is to measure your blood pressure at approximately the same time or times each day.

When re-measuring blood pressure, always wait a minimum of 3 to 5 minutes between measurements to allow the blood circulation in your arm to recover. Remember, it is normal and it is expected that you will not obtain identical multiple blood pressure readings.

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## PARTS AND DISPLAY INDICATORS



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## PRODUCT DESCRIPTION

Using Oscillometric methodology and silicon integrated pressure sensor technology; blood pressure and heart rate are measured automatically and non-invasively. The LCD display visually shows blood pressure and heart pulse rate measurements and the most recent 60 measurements are stored in the memory with date and time. The voice processor audibly announces each displayed blood pressure and heart pulse rate measurement.

This blood pressure monitor is designed for use with adults and should never be used with infants or young children. Consult your physician or other health care professional before use with older children.

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## SPECIFICATIONS

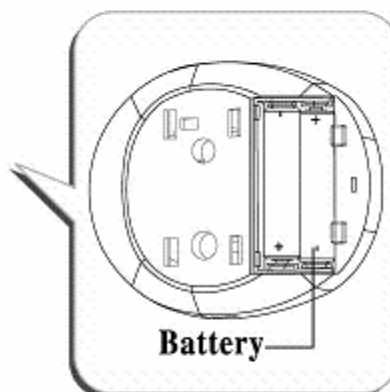
- |   |  |
|---|--|
| (1) Model: KD-797   | (8) Power source: AAA x 2 batteries                  |
| (2) Classification: Class II, Type B  | (9) Pressure measuring range: 0-300mmHg              |
| (3) Machine size: 88mm x 73mm x 29mm  | (10) Measuring accuracy: $\pm 3$ mmHg                |
| (4) Cuff size: 300mm x 70mm   | (11) Heart rate range: 30-180/min                    |
| (5) Weight: Approx. 120g (excluding batteries)                                      | (12) Environmental temperature for using: 41~104°F   |
| (6) Measuring method: oscillometric method, automatic air inflation and measurement | (13) Environmental humidity for using: <85%          |
| (7) Memory volume: 60 measurements with time and date                               | (14) Environmental temperature for storage: -4~131°F |
|   | (15) Environmental humidity for storage: <95%        |
|   | (16) Environmental pressure: atmosphere pressure     |
|   | (17) Battery life: Approx. 1 month with normal usage |

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# SETUP AND OPERATING PROCEDURES

## 1. BATTERY LOADING

- Open the battery cover on the back of the monitor.
- Insert two "AAA" size batteries taking care that the "+" and "-" ends of the batteries are inserted correctly.
- Close the battery cover.
- When the LCD display shows a battery signal, the batteries must be replaced for accurate readings.
- Do not use rechargeable batteries with a voltage of 1.2 V ( the typical voltage for rechargeable batteries) , because they are not suitable for this product and will cause inaccurate readings. Batteries with a voltage of 1.5 V, (disposable or rechargeable "AAA") must be used.
- Remove the batteries if the monitor will not be used for a month or more. This will avoid damage from the possibility of leaking batteries.

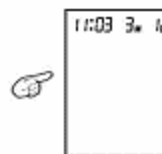


*The equipment, the batteries and cuff, at the end of their usage must be disposed of according to local regulations.*

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## 2. CLOCK AND DATE ADJUSTMENT

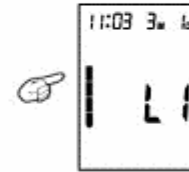
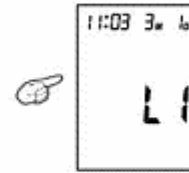
- When the monitor is turned off, press and release the buttons "MEM" and START "⏻" at the same time and the number of the month will blink on the LCD display. In this mode, when the button START "⏻" is pressed and released, the day of the month will blink. Press and release the button START "⏻" again and the hour will blink. Press and release the button START "⏻" again and the minutes will blink.
- When the month, day, hours or minutes that you wish to set is blinking, each time that you press and release the button "MEM" the displayed number will increase by one. By holding down the button "MEM" the displayed number will continue to increase.
- Set the correct month and then press and release the button "MEM" and repeat the process to set the day, hour, and minutes.
- Note that the hours are displayed as 1 through 24 rather than 1AM through 12 Noon and 1PM through 12 Midnight.
- After setting the minutes, when you press and release the button START "⏻", you exit the time and date adjusting mode and the numbers on the LCD display will no longer blink.
- When batteries are replaced, the time and date must be reset.



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### 3. VOICE PROCESSOR LANGUAGE SETUP

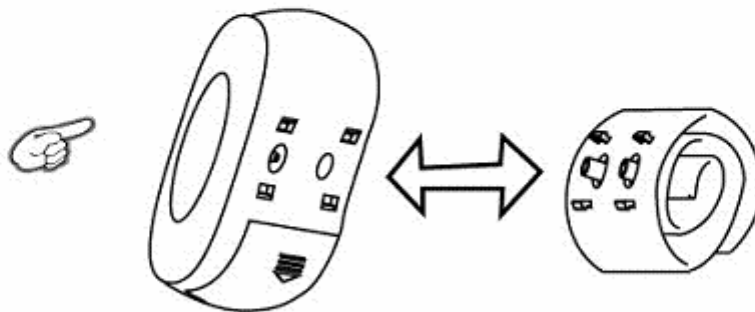
- a. Voice processor language selection: When the monitor is turned off, press and hold down the button "MEM" until "L1" appears on the LCD display and the voice processor announces "Français". If you continue to hold the button "MEM" down, "L2" will appear on the LCD display and the voice processor will announce "English", then "L3" will appear on the LCD display and the voice processor will announce "Español". When the language of choice appears and is announced, release the button "MEM". Note that when "L0" appears on the LCD display, the voice processor is powered-off and no voice announcements will be made.
- b. Voice processor volume setting: Once you have selected a language, again press and hold down the button "MEM". A line of dashes will appear on the left side of the LCD display and as each new dash appears the monitor will sound a chime. The amount of dashes that appear and the louder the chime sounds, the louder the voice processor volume is set. Release the button "MEM" when the volume is set at the loudness that you desire. Once you have set the volume, the monitor will exit the language and volume adjustment mode.



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### 4. CUFF CONNECTION TO THE MONITOR

The cuff is attached to the monitor when it is packaged. Should the cuff become unattached, align the two plugs and four brackets of the cuff with the plug sockets and bracket sockets of the monitor and press the cuff to the monitor until the plugs and brackets are securely attached.



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## 5. CUFF WRAPPING ON YOUR WRIST

- a. Place the cuff around a bare wrist  $\frac{1}{2}$  to  $\frac{3}{4}$  of an inch above the wrist joint on the open-hand side of the wrist.
- b. While seated, place the arm with the cuffed wrist in front of your body on a desk or table with the palm up. If the cuff is correctly placed, you can read the LCD display when your arm is held open-hand side-up in front of your body.
- c. The cuff must be neither too tight nor too loose. You should be able to place one finger between the cuff and your wrist.
- d. Measure using the same arm each time.
- e. Do not move your arms, body, or the monitor during blood pressure measurements.
- f. Stay quiet, calm and at rest for 5 minutes before and during blood pressure measurement.
- g. If the cuff becomes dirty, remove it from the monitor and wash it by hand in a mild detergent, then rinse it thoroughly in cold water. Allow the cuff to dry before using for a blood pressure measurement. Never dry the cuff in a clothes dryer and never iron the cuff.



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## 6. BODY POSTURE DURING MEASUREMENT

### Sitting Measurement – Recommended Position

- a. Sit upright.
- b. Place the arm with the cuff in front of you with your elbow resting on a chair or table with the palm up.
- c. The cuff should be at the same level as your heart.
- d. Placing your arm on the monitor's plastic case as shown in the picture aids in maintaining a correct and still arm position.



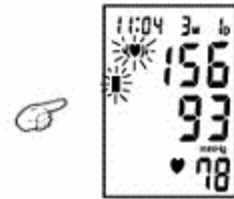
## 7. TAKING AND READING A MEASUREMENT

- a. With the cuff wrapped around your wrist and your body in a comfortable position, press and release the button **START** "O". You will hear a beep and the LCD display will first verify itself, then it will set itself to read all zeros.
- b. If the monitor has previous blood pressure measurements in the memory, the LCD will momentarily display the most recent measurement reading before it sets itself to all zeros.



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- c. If the voice function is on, the monitor will speak out measurement tips and then state, "Now, if you are ready, let's begin".
- d. The monitor will pump up the cuff; then release the air pressure from the cuff; then show the measurement on the LCD display. If the voice feature is activated, it will announce the blood pressure and heart pulse rate measurements and it will state the classification of the measurements according to the standards of the World Health Organization (WHO).



## 8. IRREGULAR HEARTBEAT

If an irregular heartbe at is detected during a blood pressure reading , the heart symbol display will show the symbol “(♥)” and both the heart symbol and the blood pressure classification indicator “■” will blink , see picture to the right.

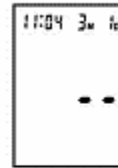
## 9. READING MEASUREMENTS IN THE MEMORY

- a. When the monitor is turned off (the time and date remain displayed), press and release the button “MEM”. The LCD display will show the number of measurements in the memory; then the most recent measurement will be displayed. If more than one measurement is in the memory, press and release the button “MEM” again and the second most recent measurement will be displayed. Repeat this process to view each measurement stored in the memory.
- b. If the voice function is on, the voice processor will announce each measurement in the memory when the measurement is shown on the LCD display. The voice processor will also state how each measurement is classified according to the World Health Organization (WHO).
- c. After reading the measurements in the memory, press and release the button “MEM” or the button START “⏻” and the monitor will power-off . When in the memory reading mode, the monitor will power-off automatically after ten seconds of non-use.




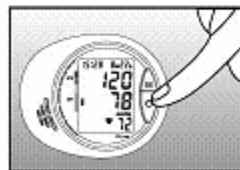
## 10. DELETING MEASUREMENTS FROM THE MEMORY

When in the memory reading mode, pressing and holding the button “MEM” for 3 seconds will delete all measurements from the memory once the monitor sounds three “beeps”. After the “beeps” the LCD display will momentarily show two dashes, then the LCD display will show that no measurements are in the memory.



## 11. TURNING THE MONITOR POWER OFF

The monitor power will turn-off automatically after 3 minutes of non-use after measurement displaying and storing. Alternatively, you can press and hold the button START “” for 3 seconds to manually turn off the monitor.

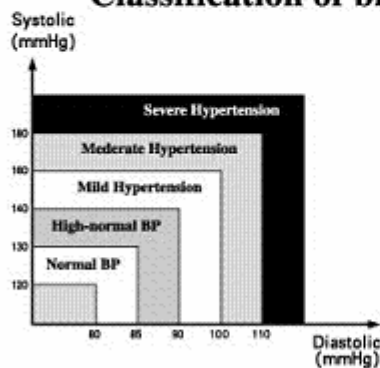


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## 12. ASSESSING HIGH BLOOD PRESSURE FOR ADULTS

The following standards for assessing high blood pressure (without regard to age or gender) have been established as a guide by the World Health Organization (WHO). Please note that other risk factors (e.g. diabetes, obesity, smoking, etc.) need to be taken into consideration and may affect these figures. Consult with your physician for accurate assessment.

### Classification of blood pressure for adults



BLOOD PRESSURE CLASSIFICATION	SBP mmHg	DBP mmHg	COLOR INDICATOR
Optimal	<120	<80	GREEN
Normal	120-129	80-84	GREEN
High-Normal	130-139	85-89	GREEN
Stage 1 Hypertension	140-159	90-99	YELLOW
Stage 2 Hypertension	160-179	100-109	ORANGE
Stage 3 Hypertension	≥ 180	≥ 110	RED

WHO/ISH Definitions and Classification of Blood Pressure Levels

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### 13. TROUBLESHOOTING (1)

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>SOLUTION</b>
<b>LCD Display shows battery symbol</b>	<b>Batteries are low</b>	<b>Install new batteries</b>
<b>LCD Display shows RETEST symbol</b>	<b>Arm or blood pressure monitor was moved during testing</b>	<b>Re-test taking care to not move your arm or the blood pressure monitor</b>
	<b>The cuff does not inflate properly or pressure falls quickly during testing</b>	<b>Make certain the cuff is fully inserted into the blood pressure monitor</b>
	<b>Irregular heartbeat (arrhythmia)</b>	<b>People with light arrhythmia may re-test. It is inappropriate for people with serious arrhythmia to use this blood pressure monitor.</b>

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### 14. TROUBLESHOOTING (2)

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>SOLUTION</b>
<b>LCD Display shows "EE"</b>	<b>The blood pressure monitor did not inflate sufficiently. The cuff was not properly wrapped</b>	<b>Review the cuff wrapping and testing sections of the instructions and re-test.</b>
<b>LCD Display shows abnormal result</b>	<b>The cuff position was not correct or it was not properly tightened</b>	<b>Review the cuff wrapping and testing sections of the instructions and re-test.</b>
	<b>Body posture was not correct during testing</b>	<b>Review the body posture and testing sections of the instructions and re-test.</b>
	<b>Speaking, arm or body movement, angry, excited or nervous during testing</b>	<b>Re-test when calm and without speaking or moving during the test</b>

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## **WARRANTY INFORMATION**

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Your Fully Automatic Blood Pressure Monitor, including the cuff, is warranted to be free of defects in materials and workmanship appearing within one (1) year from the date of purchase, when used in accordance with the instructions provided with the monitor.

We will, at our option, repair or replace without charge any monitor or cuff covered by the above warranty. Repair or replacement is our only responsibility and your only remedy under the above warranty.

To obtain warranty service information including the address of a repair location and handling fees, if any, visit our Internet Site, [www.AnovaMedical.com](http://www.AnovaMedical.com).

When returning product for service, you must include a store receipt as proof-of-purchase. Include a letter with your name, address, phone number, and email address (optional if you wish to communicate by email), and a brief description of the specific problem. Pack the product properly to prevent damage in transit. We recommend that you insure the product and request a delivery receipt.

ANOVA SHALL NOT BE LIABLE FOR LOSS OF USE OR ANY OTHER INCIDENTAL, CONSEQUENTIAL OR INDIRECT COSTS, EXPENSES OR DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions may not apply to you.

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