

# **Anovamedical, LLC**

## **MODEL KD-788**



### **Fully Automatic Wrist Cuff Blood Pressure Monitor**

(ELECTRONIC SPHYGMOMANOMETER)

### **OPERATION GUIDE**

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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.

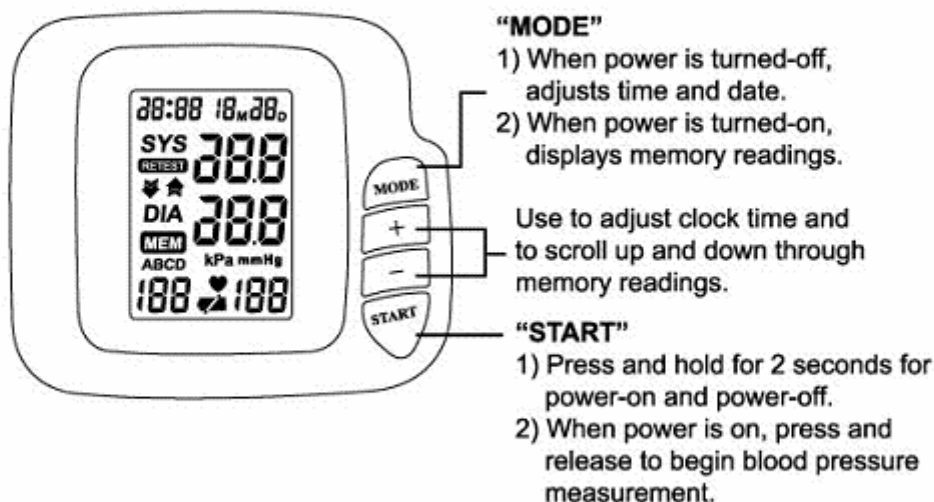
Blood pressure fluctuates continually during the day and night with the highest values usually in the daytime and lowest values usually in the evening. The lowest blood pressure value usually occurs at approximately midnight. Typically, the value begins to increase at approximately 3:00AM, reaching its 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 120 measurements are stored in the memory in four separate groups of 30 measurements each with date and time.

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.

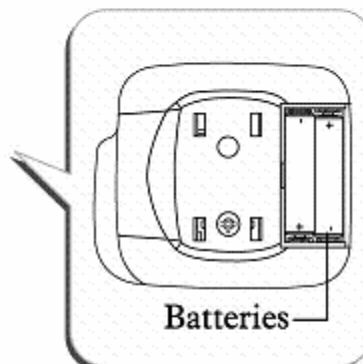
## SPECIFICATIONS

- |  |   |
|--|---|
| (1) Model: KD-788  | (8) Measuring accuracy: $\pm 3$ mmHg                        |
| (2) Machine size: 83mm x 72mm x 30mm   | (9) Heart pulse rate range: 30~180/min                      |
| (3) Cuff size: 340mm x 73mm  | (10) Environmental temperature for using: 41~104°F          |
| (4) Weight: Approx. 125g (excluding batteries)   | (11) Environmental temperature for storage: -4~131°F        |
| (5) Measuring method: Oscillometric method, automatic inflation, automatic measurement, 4 memory groups of 30 measurements each with time and date | (12) Environmental humidity for using: <80%                 |
| (6) Power source: AAA x 2 batteries  | (13) Environmental humidity for storage: <95%               |
| (7) Blood pressure Measuring range: 0mmHg~300mmHg  | (14) Environmental pressure: Atmosphere pressure            |
|  | (15) Battery life: Approx. 1 month with 3-min.usage per day |

# SETUP AND OPERATING PROCEDURES

## 1. BATTERY LOADING

- Open the battery cover on the back of the monitor.
- Insert two "AAA" 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.

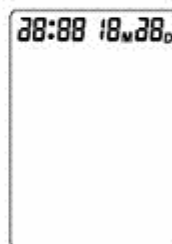


*The equipment, the batteries and cuff, at the end of their usage must be disposed of according to local regulations.*

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## 2. CLOCK AND DATE ADJUSTMENT

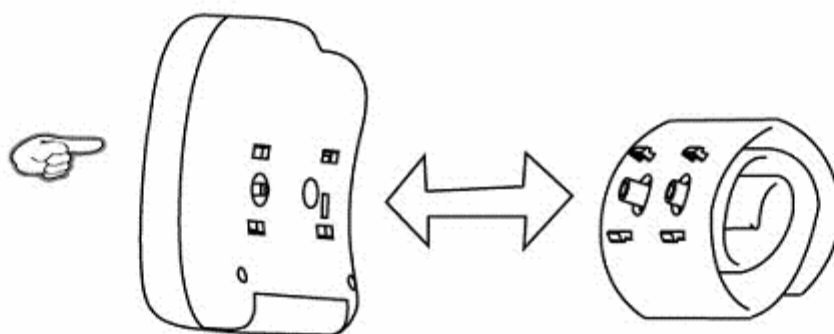
- When the monitor is turned off, press and release the button "MODE" and the number of the month will blink on the LCD display. In this mode, when the button "MODE" is again pressed and released, the day of the month will blink. Press and release the button "MODE" again and the hour will blink. Press and release the button "MODE" 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 "+" the displayed number will increase by one. Each time you press and release the button "-" the displayed number will decrease by one. By holding down the button "+" the displayed number will continue to increase; by holding down the button "-" the displayed number will continue to decrease.
- Set the correct month and then press and release the button "MODE" 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 "MODE", 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. CUFF CONNECTION TO 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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### 4. CUFF WRAPPING ON YOUR WRIST

- 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.
- 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.
- The cuff must be neither too tight nor too loose. You should be able to place one finger between the cuff and your wrist.
- Measure using the same arm each time.
- Do not move your arms, body, or the monitor during blood pressure measurements.
- Stay quiet, calm and at rest for 5 minutes before and during blood pressure measurement.
- 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.

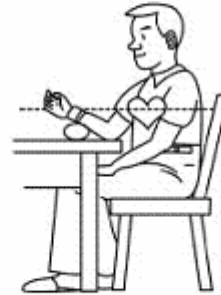


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## 5. BODY POSTURE DURING MEASUREMENT

### Sitting Measurement

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



## 6. TAKING A MEASUREMENT

- With the cuff wrapped around your arm and your body in a comfortable position, press and hold the button "START" until you hear a beep. The LCD display will first verify itself, then it will set itself to read all zeros.



- Press and release the button "START" and the monitor will pump up the cuff; then release the air pressure from the cuff; then show the measurement on the LCD display.



- The monitor power will turn-off automatically after 1 minute of non-use. Alternatively, you can press and hold the button "START" for 3 seconds to manually turn off the monitor

## 7. MEASUREMENT STORAGE IN MEMORY

Once a measurement is displayed, after 10 seconds it will be automatically stored in one of the 4 memory groups of the monitor, "A", "B", "C" or "D". If the LCD display shows a different group than the one in which you want to store the memory, press and release one of the buttons "+" or "-" until the desired group is displayed, then press and release the button "MODE". The measurement will then be stored in the memory group that you selected.



## 8. READING MEASUREMENT RESULTS

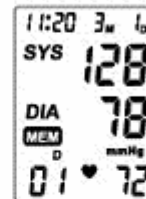
The LCD display will automatically show the systolic and diastolic blood pressure reading in mmHg units after each measurement. The heart rate is also displayed in pulse per minute next to the "♥" symbol.



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## 9. READING MEASUREMENTS IN THE MEMORY

- a. Turn the monitor power on by pressing and holding the button "START" until the LCD display is activated and displays all zeros. Press and release the button "MODE" and the most recent measurement stored in one of the 4 memory groups will be displayed and the number "1" will blink on and off. If more than one measurement is stored in a memory group, press and release the button "+" and the second most recent measurement will be displayed. Repeat this process to view each measurement stored in the memory.



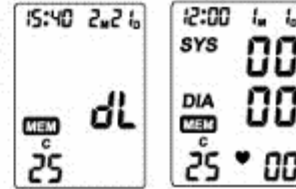
- b. If you want to view measurements stored in a different memory group than the group first displayed, press and release the button "MODE" and the memory group letter will blink on and off. Each time you press and release the button "+" will advance the group displayed from "A" to "B" to "C" to "D". When the group memory you desire is shown, press and release the button "MODE".



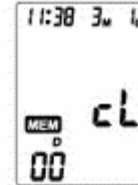
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## 10. DELETING MEASUREMENTS FROM THE MEMORY

- a. To delete a single measurement from memory, display the specific measurement to be deleted, then press and release the buttons "MODE" and "-" at the same time. The LD display will show "dl", then the selected measurement will be deleted from the memory.



- b. To delete all of the measurements in a group memory, display a measurement in the specific group that you want to delete, then press and hold the buttons "MODE" and "-" at the same time for 3 seconds until the LD display shows "cl", then the all measurements in that specific group will be deleted.



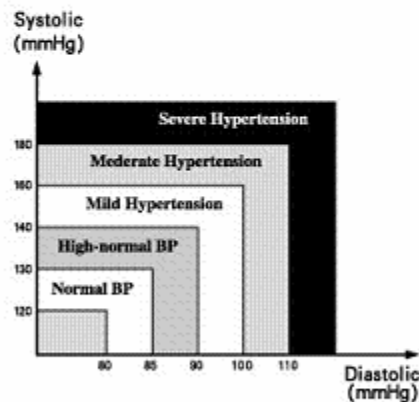
## 11. TURNING THE MONITOR POWER OFF

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 2 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.



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### 13. TROUBLESHOOTING (1)

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

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### 13. TROUBLESHOOTING (2)

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

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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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