



Digital Blood Pressure Monitor

Model UA-774

Instruction Manual

ENGLISH

Manuel d'instructions

FRANÇAIS

Manual de Instrucciones

ESPAÑOL

Manuale di Istruzioni

ITALIANO

使用手冊

中文

Contents

| | |
|--|----|
| Dear Customer..... | 2 |
| Preliminary Remarks | 2 |
| Precautions | 2 |
| Parts Identification | 3 |
| Symbols | 4 |
| Using The Monitor | 5 |
| Installing / Changing The Batteries | 5 |
| Connecting The Air Hose..... | 5 |
| Selecting The Correct Cuff..... | 5 |
| Attaching The Arm Cuff | 6 |
| How To Take Proper Measurements..... | 6 |
| Measurement (Operation)..... | 6 |
| After Measurement | 6 |
| Measurements | 7 |
| Normal Measurement With Storing Data | 7 |
| Measurement With The Desired Systolic Pressure | 8 |
| Notes For Proper Measurement | 8 |
| Operation Mode | 9 |
| WHO Classification Indicator | 9 |
| Pressure Bar Indicator | 9 |
| What Is An Irregular Heartbeat? | 10 |
| About Blood Pressure..... | 10 |
| What Is Blood Pressure?..... | 10 |
| What Is Hypertension And How Is It Controlled?..... | 10 |
| Why Measure Blood Pressure At Home? | 10 |
| WHO Blood Pressure Classification | 10 |
| Blood Pressure Variations..... | 11 |
| Troubleshooting | 11 |
| Maintenance | 12 |
| Technical Data | 12 |

Dear Customer

Congratulations on purchasing a state-of-the-art A&D blood pressure monitor, one of the most advanced monitors available today. Designed for ease of use and accuracy, this monitor will facilitate your daily blood pressure regimen.

We recommend that you read through this manual carefully before using the device for the first time.

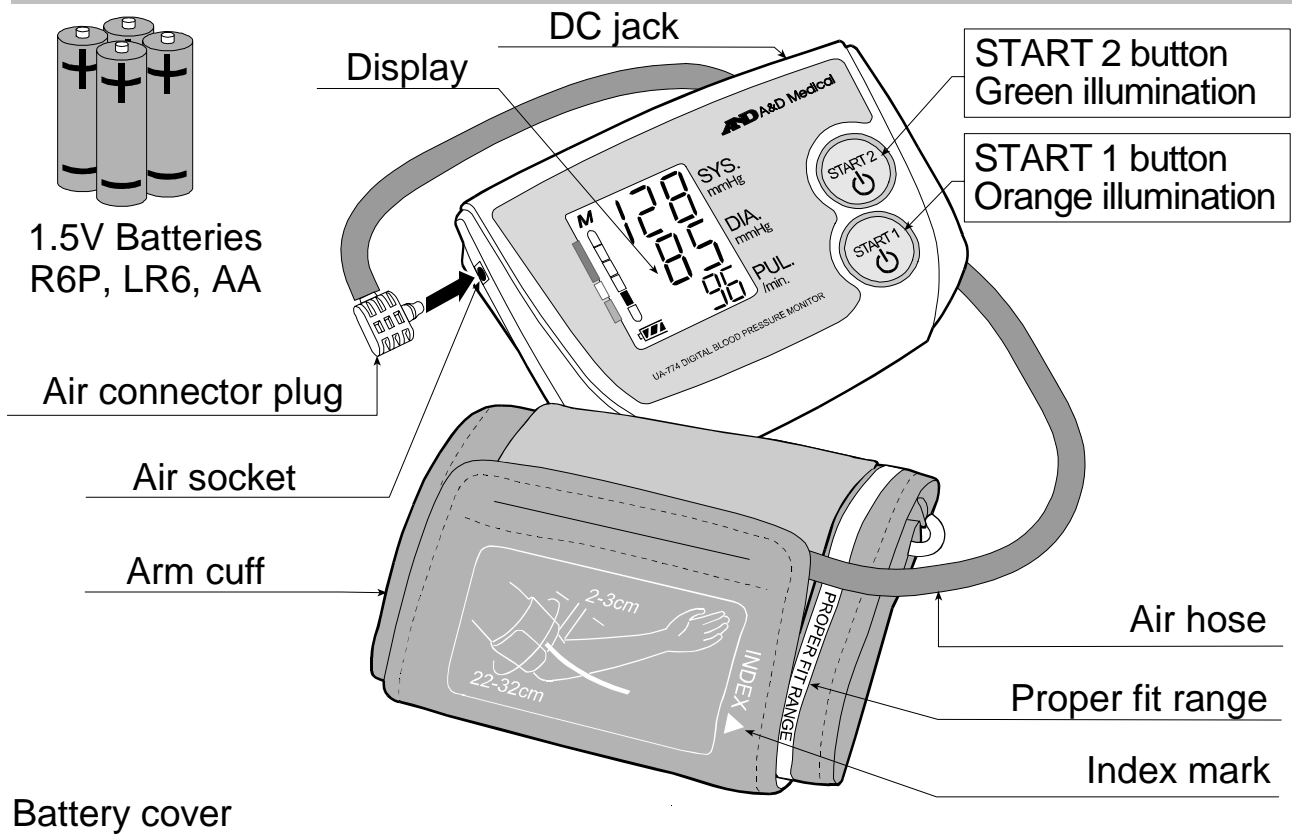
Preliminary Remarks

- ☐ This device conforms to the European Directive 93/42 EEC for Medical Products. This is made evident by the CE mark of conformity accompanied by the reference number of the designated authority.
- ☐ The device is designed for use on adults only, not newborns or infants.
- ☐ Environment for use
The device is for use indoors.

Precautions

- ☐ Precision components are used in the construction of this device. Extremes in temperature, humidity, direct sunlight, shock or dust should be avoided.
- ☐ Clean the device with a soft, dry cloth. Never use thinner, alcohol, benzene, or a wet cloth.
- ☐ Avoid tightly folding the cuff or storing the hose tightly twisted for long periods, as such treatment may shorten the life of the components.
- ☐ The device and cuff are not water-resistant. Prevent rain, sweat and water from soiling the device and cuff.
- ☐ Measurements may be distorted if the device is used close to a television, microwave oven, cellular telephone, X-ray or other devices with strong electrical fields.
- ☐ Used equipment, parts and batteries are not treated as ordinary household waste, and must be disposed of according to the applicable local regulations.

Parts Identification



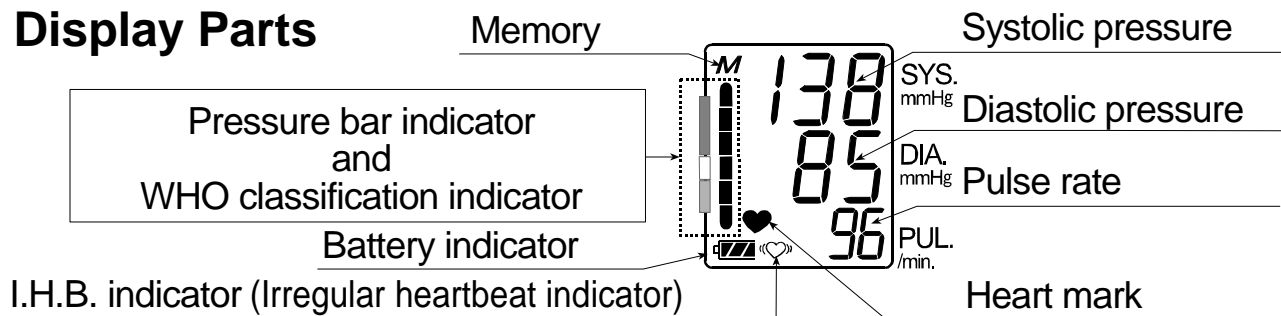
The START Button Operations

Normal measurement with storing data
Press the **START 1** or **START 2** button.


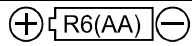











Recalling data
Press and hold the **START 1** or **START 2** button.

Unrecorded measurement (*Guest mode*)
Press both **START** buttons.

Display Parts



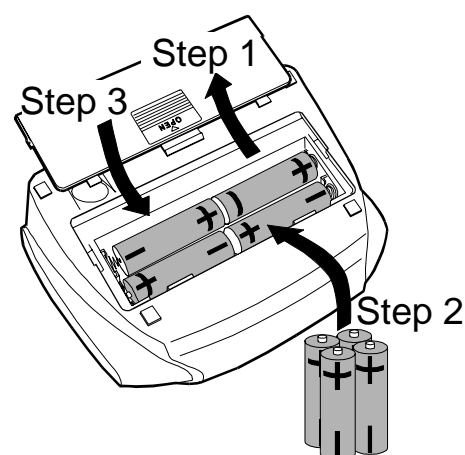
Symbols

| Symbols | Function / Meaning | Recommended Action |
|---|--|---|
|  | Standby and Turn the device on. | _____ |
|  | Battery installation guide | _____ |
|  | Direct current | _____ |
| SN | Serial number | _____ |
| 2002  | Date of manufacture | _____ |
|  | Type BF: Device, cuff and tubing are designed to provide special protection against electrical shocks. | _____ |
|  | The indicator while measurement is in progress. It blinks while detecting the pulse. | Measurement is in progress. Remain as still as possible. |
|  | Irregular Heartbeat indicator. (I.H.B.) The indicator that detects irregular heartbeats or any excessive body movement during the measurement. | _____ |
| M | Previous measurements stored in memory of each button. | _____ |
|  Full Battery | The battery power indicator during measurement. | _____ |
|  low Battery | The battery is low when it blinks. | Replace all batteries with new ones, when the indicator blinks. |
|  | Unstable blood pressure due to movement during the measurement. | Try measurement again. Remain very still during the measurement. |
| | The systolic and diastolic values are within 10 mmHg of each other. | Check the air hose connector plug and cuff. Fasten the cuff correctly, and try the measurement again. |
| | The pressure value did not increase during inflation. | |
|  | The cuff is not fastened correctly. | Check the air hose connector plug and cuff. Fasten the cuff correctly, and try the measurement again. |
|  PUL. DISPLAY ERROR | The pulse is not detected correctly. | |
| SYS | Systolic blood pressure in mmHg | _____ |
| DIA | Diastolic blood pressure in mmHg. | _____ |
| PUL./min | Pulse per minute | _____ |
|  0366 | EC directive medical device label | _____ |



Using The Monitor

Installing / Changing The Batteries

1. Slide the battery cover up to open it.
 2. Remove the used batteries and insert new batteries into the battery compartment as shown, taking care that the polarities (+) and (-) are correct.
 3. Slide the battery cover down to close it.
- Use only R6P, LR6 or AA batteries.

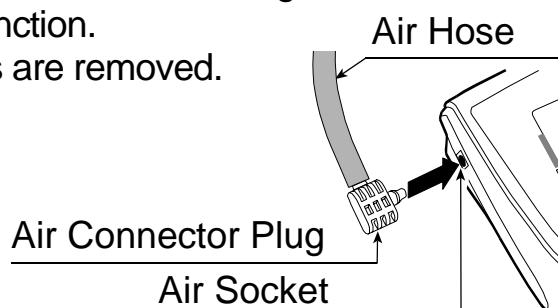


CAUTION

- ❑ Insert the batteries as shown in the battery compartment. If not, the device will not work.
- ❑ When  (LOW BATTERY mark) blinks in the display, replace all batteries with new ones. Do not mix old and new batteries. It may shorten the battery life, or cause the device to malfunction.
- ❑  (LOW BATTERY mark) does not appear when the batteries are drained.
- ❑ Battery life varies with the ambient temperature and may be shorter at low temperatures.
- ❑ Use the specified batteries only. The batteries provided with the device are for testing monitor performance and may have a limited life.
- ❑ Remove the batteries if the device is not to be used for a long time.
The batteries may leak and cause a malfunction.
- ❑ Stored data are cleared when the batteries are removed.

Connecting The Air Hose

Insert the air connector plug into the air socket firmly.



Selecting The Correct Cuff

Using the correct cuff size is important for an accurate reading. If the cuff is not the proper size, the reading may yield an incorrect blood pressure value.

- ❑ The index ▲ and proper fit range, on the cuff, tell you if you are attaching the correct cuff. (Refer to "**Attaching The Arm Cuff**" on next page)
- ❑ If the index ▲ points outside of the range, contact your local dealer for replacement.



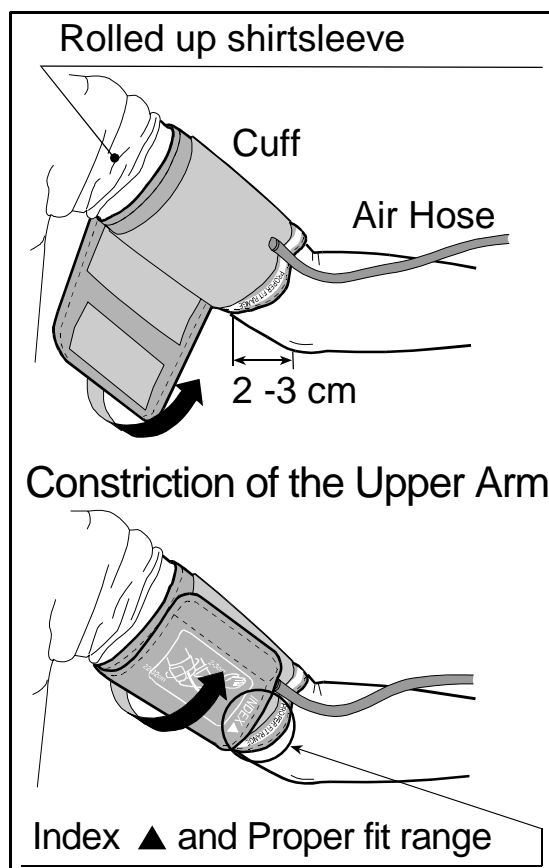
| Arm Size | Recommended Cuff Size | Order No. |
|----------------|-----------------------|--------------------------|
| 32 cm to 42 cm | Large cuff | UA-CUFBLALB |
| 22 cm to 32 cm | Medium cuff | UA-CUFCAULB, UA-CUFDAULB |
| 18 cm to 22 cm | Small cuff | UA-CUFBCHLB |

Arm size: The circumference of upper arm at the midpoint between the shoulder and elbow.

Using The Monitor

Attaching The Arm Cuff

1. Wrap the cuff around the upper arm, about 2 - 3 cm above the elbow, as shown. Place the cuff directly against the skin, as clothing may cause a faint pulse and result in a measurement error.
2. Constriction of the upper arm, caused by rolling up a shirtsleeve, may prevent accurate readings.
3. Confirm that the index ▲ points within the proper fit range.



How To Take Proper Measurements

For the most accurate blood pressure measurement:

- ☐ Sit comfortably at a table. Rest your arm on the table.
- ☐ Relax for about five to ten minutes before measurement.
- ☐ Place the center of the cuff at the same height as your heart.
- ☐ Remain still and keep quiet during measurement.
- ☐ Do not measure right after physical exercise or a bath. Rest for twenty or thirty minutes before taking the measurement.
- ☐ Try to measure your blood pressure at the same time every day.

Measurement (Operation)

During measurement, it is normal for the cuff to feel very tight.

Select a measurement mode (operation of the device).

Normal measurement with storing data :Press the **START 1** or **START 2** button.

Unrecorded measurement : Press both **START** buttons.

Recalling data : Press and hold the **START 1** or **START 2** button to recall data.

Clearing data : Remove the batteries and re-install them.

After Measurement

After the measurement has completed, remove the cuff and record your data, then press the **START 1** or **START 2** button to turn off the power.

Note: The device has an automatic power shut-off function, which turns the power off approximately one minute after measurement.

Allow at least three minutes between measurements on the same person.

Measurements

- ❑ Model UA-774 is designed to detect the pulse and to inflate the cuff to a systolic pressure level automatically.
- ❑ If your systolic pressure is expected to exceed 230 mmHg or you use the optional cuff, read "Measurement with the desired systolic pressure" on next page.
- ❑ Model UA-774 can store the last thirty sets of data for each button. We recommend that if two people regularly use the device, one uses the **START 1** button and the other uses **START 2** button, to prevent confusion over stored data.

Normal Measurement With Storing Data

1. Place the cuff on the arm (preferably the left arm).
Sit quietly during measurement.

2. Press the **START 1** (or **START 2**) button.
The average blood pressures and last data number are displayed briefly. Then current pressure is displayed, as the measurement begins. The cuff starts to inflate. It is normal for the cuff to feel very tight. A pressure bar indicator is displayed during measurement.

Note: If you wish to stop inflation at any time, press either **START** button again.

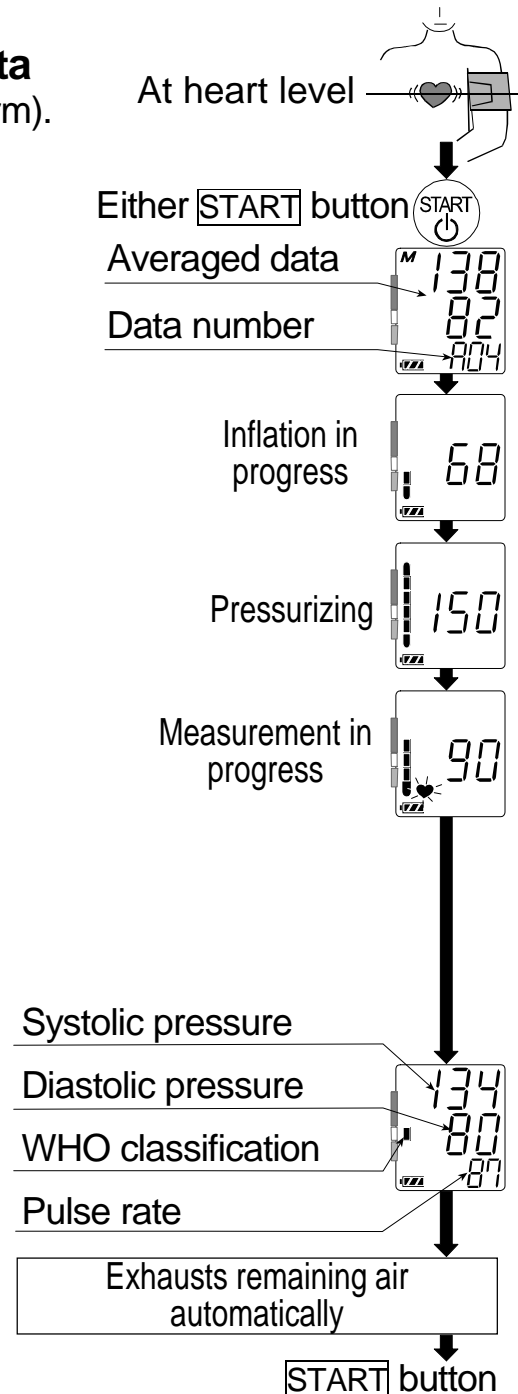
3. When inflation is complete, deflation starts automatically and the ♥ (heart mark) blinks, indicating that the measurement is in progress. Once the pulse is detected, the mark flashes with each pulse beat.

Note: If an appropriate pressure is not obtained, the device starts to inflate again automatically.

4. When the measurement is complete, the systolic and diastolic pressure readings and pulse rate are displayed and stored. The cuff exhausts the remaining air and deflates completely.

5. Press either **START** button again to turn off the power.

Note: Model UA-774 is provided with an automatic power shut-off function.
Allow at least three minutes between measurements on the same person.

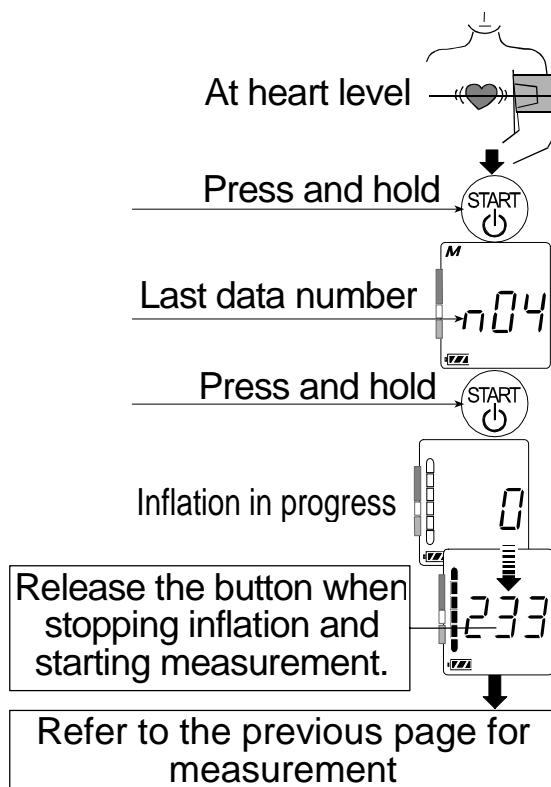


Measurements

Measurement With The Desired Systolic Pressure

- ❑ If your systolic pressure is expected to exceed 230 mmHg or you use the optional cuff, use this procedure.

1. Place the cuff on the arm (preferably the left arm).
2. Press and hold the **START 1** (or **START 2**) button to display the last data number.
3. Press and hold the **START 1** (or **START 2**) button again until a number about 30 to 40 mmHg higher than your expected systolic pressure appears.
4. Release the **START 1** (or **START 2**) button to start measurement, when the desired number is reached. Then continue to measure your blood pressure as described on the previous page.



Notes For Proper Measurement

- ❑ Sit down in a comfortable position. Place the arm to be used for the measurement on a table or other support so that the center of the cuff will be at the same height as your heart.
- ❑ Relax for about five or ten minutes before taking a measurement. If you are excited or depressed by emotional stress, the measurement will reflect this stress as a higher (or lower) than normal blood pressure reading and the pulse reading will usually be faster than normal.
- ❑ Your blood pressure varies constantly, depending on what you are doing and what you have eaten. What you drink can have a very strong and rapid effect on your blood pressure.
- ❑ This device bases its measurements on the heartbeat. If you have a very weak or irregular heartbeat, the device may have difficulty determining your blood pressure.
- ❑ Should the device detect a condition that is abnormal, it will stop the measurement and display an error symbol. Refer to page 4.
- ❑ Model UA-774 is intended for use by adults only. Consult with your physician before using this device on a child. A child should not use this device unattended.

Operation Mode

1. Normal measurement with storing data (Refer to page 7)

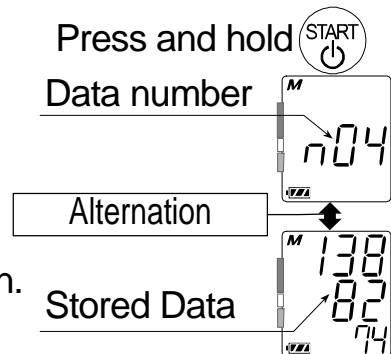
Press the **START 1** (or **START 2**) button. Blood pressure is measured and data is stored within the device. The device can store the last thirty sets of data for each button. We recommend that if two people regularly use the device, one uses the **START 1** button and the other uses **START 2** button.

□ Recalling data

Press and hold the **START 1** (or **START 2**) button to recall the data. Stored data are automatically displayed in order from the last data.

□ Clearing data

Remove batteries to clear all data. Re-install them again.



2. Unrecorded measurement (Guest mode)

Press both of the **START 1** and **START 2** buttons at once. An unrecorded measurement is started.

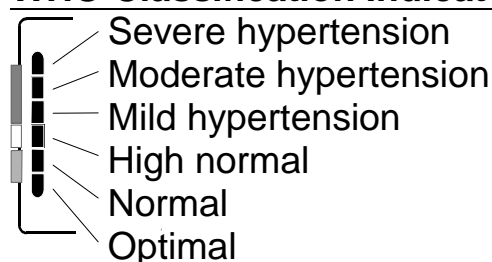
3. Measurement with the desired systolic pressure

Refer to last page for the measurement with the desired systolic pressure.

WHO Classification Indicator

Each of the six segments of the bar indicator corresponds to the WHO blood pressure classification described on the next page.

WHO Classification Indicator



Example:

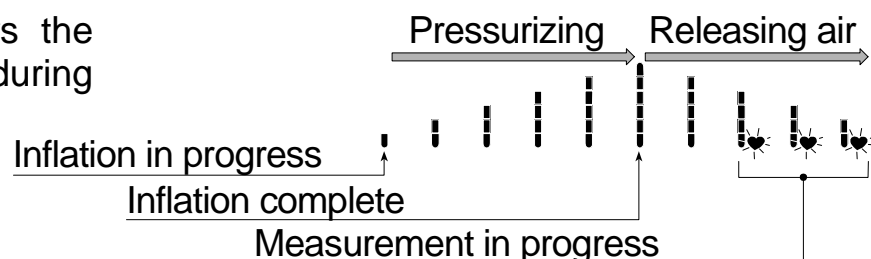
Moderate hypertension



■: The indicator displays a segment, based on the current data, corresponding to the WHO classification.

Pressure Bar Indicator

The indicator monitors the progress of pressure during measurement.



What Is An Irregular Heartbeat?

Model UA-774 blood pressure monitor provides a blood pressure and pulse rate measurement even when an irregular heartbeat occurs. An irregular heartbeat is defined as a heartbeat that varies by 25% from the average of all heartbeats during the blood pressure measurement. It is important that you be relaxed, remain still and do not talk during measurements.

Note: We recommend contacting your physician if you see this «♥» indicator frequently.

About Blood Pressure

What Is Blood Pressure?

Blood pressure is the force exerted by blood against the walls of the arteries. Systolic pressure occurs when the heart contracts. Diastolic pressure occurs when the heart expands. Blood pressure is measured in millimeters of mercury (mmHg). One's natural blood pressure is represented by the fundamental pressure, which is measured first thing in the morning while one is still at rest and before eating.

What Is Hypertension And How Is It Controlled?

Hypertension, an abnormally high arterial blood pressure, if left unattended, can cause many health problems including stroke and heart attack. Hypertension can be controlled by altering one's lifestyle, avoiding stress, and with medication under a doctor's supervision. To prevent hypertension or to keep it under control:

- ☐ Do not smoke
- ☐ Exercise regularly
- ☐ Reduce salt and fat intake
- ☐ Have regular physical checkups
- ☐ Maintain proper weight

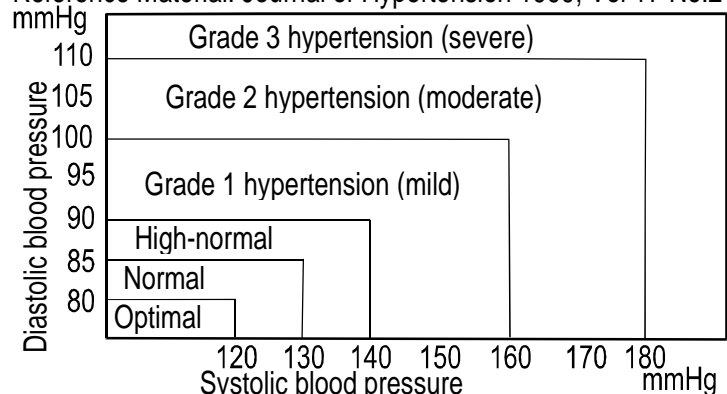
Why Measure Blood Pressure At Home?

Blood pressure measured at a clinic or doctor's office may cause apprehension and can produce an elevated reading, 25 to 30 mmHg higher than that measured at home. Home measurement reduces the effects of outside influences on blood pressure readings, supplements the doctor's readings and provides a more accurate, complete blood pressure history.

WHO Blood Pressure Classification

Standards to assess high blood pressure, without regard to age, have been established by the World Health Organization (WHO), as shown in the chart at the right.

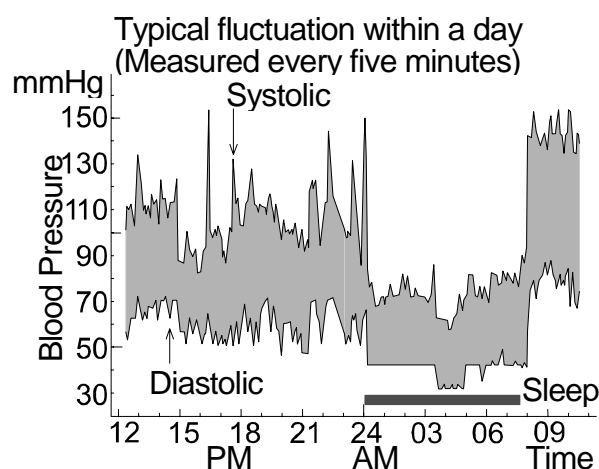
Reference Material: Journal of Hypertension 1999, Vol 17 No.2




Blood Pressure Variations

An individual's blood pressure varies greatly on a daily and seasonal basis. It may vary by 30 to 50 mmHg due to various conditions during the day. In hypertensive individual variations are even more pronounced. Normally, the blood pressure rises while at work or play and falls to its lowest levels during sleep. So, do not be overly concerned by the results of one measurement.

Take measurements at the same time every day using the procedure described in this manual to get to know your normal blood pressure. Regular readings give a more comprehensive blood pressure history. Be sure to note date and time when recording your blood pressure. Consult your doctor to interpret your blood pressure data.



Troubleshooting

| Problem | Possible Reason | Recommended Action |
|---|--|---|
| Nothing appears in the display, even when the power is turned on. | Batteries are drained. | Replace all batteries with new ones. |
| | Battery polarities are not in the correct position. | Reinstall the batteries with their negative and positive end matching those indicated in the battery compartment. |
| The cuff does not inflate. | Battery voltage is too low.  (LOW BATTERY mark) blinks. [If the batteries are drained completely, the mark does not appear.] | Replace all batteries with new ones. |
| The unit does not measure. Readings are too high or too low. | The cuff is not fastened properly. | Fasten the cuff correctly. |
| | You moved your arm or body during the measurement. | Make sure you remain very still and quiet during the measurement. |
| | The cuff position is not correct. | Sit comfortably and still. Raise your hand so that the cuff is at the same level as your heart. |
| | _____ | If you have a very weak or irregular heart beat, the device may have difficulty in determining your blood pressure. |

| | | |
|-------|---|---|
| Other | The value is different from that measured at a clinic or doctor's office. | See "Why measure blood pressure at home?". |
| | _____ | Remove the batteries. Re-install them properly and try the measurement again. |


Note: If the actions described above do not solve the problem, contact the dealer. Do not attempt to open or repair this product, as any attempt to do so will make your warranty invalid.

Maintenance

Do not open the device. It uses delicate electrical components and an intricate air unit that could be damaged. If you cannot fix the problem using the troubleshooting instructions, request service from your dealer or from the A&D service group. The A&D service group will provide technical information, spare parts and units to authorized dealers.

The device was designed and manufactured for a long service life. However it is generally recommended to have the monitor inspected every 2 years, to ensure proper functioning and accuracy. Please contact either your authorized dealer or A&D for maintenance.

Technical Data

| | |
|-------------------------|---|
| Type | UA-774 |
| Measurement method | Oscillometric measurement |
| Measurement range | Pressure: 20 - 280 mmHg Pulse: 40 - 200 beats / minute |
| Measurement accuracy | Pressure: ± 3 mmHg or 2%, whichever is greater Pulse: $\pm 5\%$ |
| Power supply | 4 x 1.5V batteries (R6P, LR6 or AA) |
| Upper arm circumference | 22 - 32 cm using the medium cuff |
| Classification | Type BF  |
| Clinical test | According to ANSI / AAMI SP-10 1987 |
| EMC | IEC 60601-1-2: 2001 |
| Data memory | Last 30 measurements for each START button |
| Operating condition | +10°C to +40°C / 30%RH to 85 %RH |
| Storage condition | -10°C to +60°C / 30%RH to 85 %RH |
| Dimensions | Approx. 147 [W] x 64 [H] x 110 [D] mm |
| Weight | Approx. 300 g, excluding batteries |

 0366

Note: Specifications are subject to change without prior notice.



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