



Digital Blood Pressure Monitor

Model UA-704

Instruction Manual
Original

ENGLISH

Manuel d'instructions
Traduction

FRANÇAIS

Manual de Instrucciones
Traducción

ESPAÑOL

Manuale di Istruzioni
Traduzione

ITALIANO

使用手冊
翻譯

中文

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Dear Customers

Thank you for 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 device 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 Medical Device Regulations (EU 2017/745) and UKCA Medical Device Regulations 2002 for Medical Products. This is made evident by the CE2797 and UKCA0086 mark of conformity. (2797 and 0086: The reference numbers to the involved notified body.)
- The device is designed for use by people 13 years and older, not newborns or infants.
- This device fulfils the following provisions.

CE₂₇₉₇ Medical Device Regulation (EU 2017/745)

**UK
CA₀₀₈₆ UKCA Medical Devices Regulations 2002**

Intended Purpose

The UA-704 Digital Blood Pressure Monitor is intended to be used by patients to measure systolic and diastolic blood pressure and pulse rate in the home environment. The UA-704 provides the patient with an indication of an irregular heartbeat allowing further medical attention to be sort.

Clinical Benefit

Successful assessment of blood pressure reading in accordance with the device's intended purpose.

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 and cuff with a dry, soft cloth or a cloth dampened with water and a neutral detergent. Never use alcohol, benzine, thinner or other harsh chemicals to clean the device or cuff.
- Avoid tightly folding the cuff or storing the hose tightly twisted for long

periods, as such treatment may shorten the life of the components.

- Take care to avoid accidental strangulation of babies or infants with the hose.
- Do not twist the air hose during the measurement. This may cause injury due to continuous cuff pressure.
- The device and cuff are not water-resistant. Prevent rain, sweat and water from damaging the device and cuff.
- Measurements may be distorted if the device is used close to televisions, microwave ovens, cellular telephones, X-ray or other devices with strong electrical fields.
- Wireless communication devices, such as home networking devices, mobile phones, cordless phones and their base stations, and walkie-talkies can affect this blood pressure monitor. Therefore, a minimum distance of 30 cm should be kept from such devices.
- Used equipment, parts and battery are not treated as ordinary household waste, and must be disposed of according to the applicable local regulations.
- When reusing the device, confirm that the device is clean.
- Do not modify the device. It may cause accidents or damage to the device.
- To measure blood pressure, the arm must be squeezed by the cuff hard enough to temporarily stop blood flow through the artery. This may cause pain, numbness or a temporary red mark to the arm. This condition will appear especially when measurement is repeated successively. Any pain, numbness, or red marks will disappear with time.
- Measuring blood pressure too frequently may cause harm due to blood flow interference. Check that the operation of the device does not result in prolonged impairment of blood circulation, when using the device repeatedly.
- If you have had a mastectomy or lymph node clearance, please consult a doctor before using the device.
- Do not let children use the device by themselves and do not use the device in a place within the reach of infants. This may cause accidents or damage.
- There are small parts that may cause a choking hazard if swallowed by mistake by infants.
- Use of accessories not detailed in this manual may compromise safety.
- Should the battery short-circuit, it may become hot and potentially cause burns.
- Allow the device to adapt to the surrounding environment before use (about one hour).
- Clinical testing has not been conducted on newborn infants and pregnant women. Do not use on newborn infants or pregnant women.
- Do not touch the battery and the patient at the same time. That may result in electrical shock.
- Do not inflate without wrapping the cuff around the upper arm.

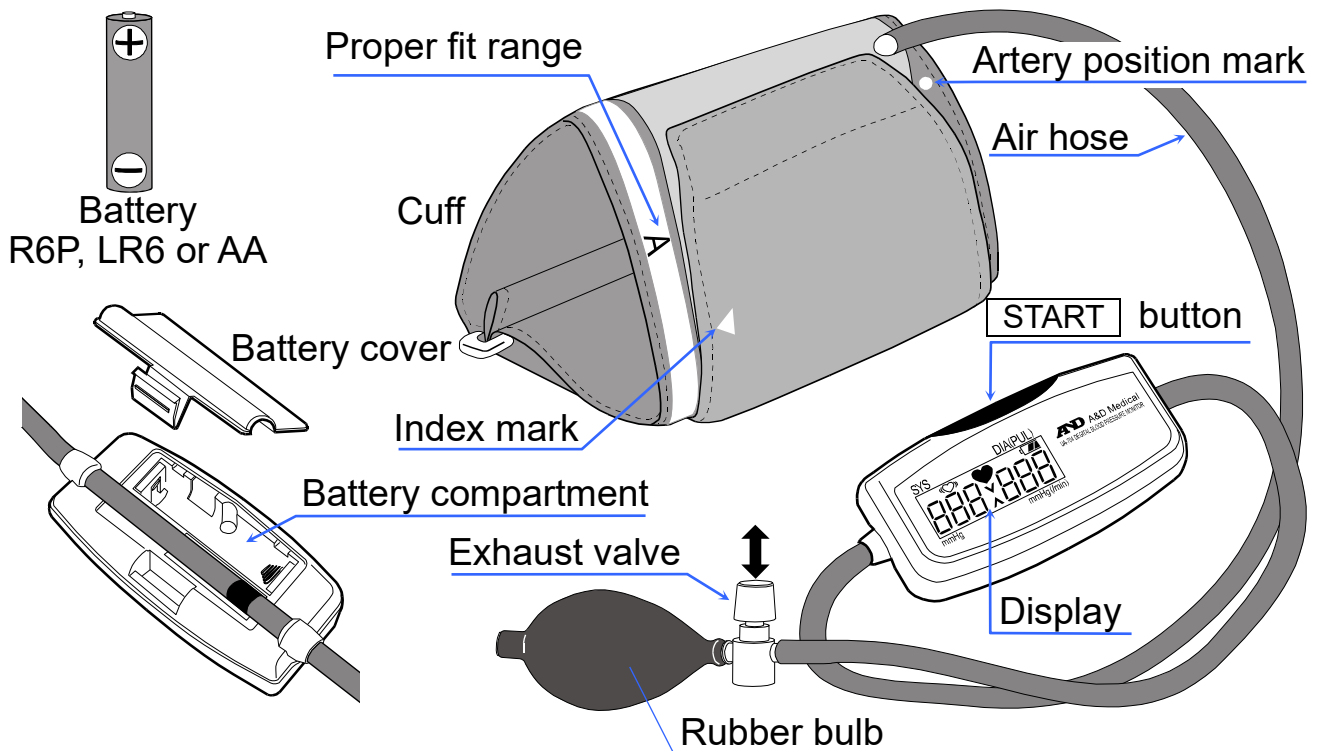
- This is a medical device for use by layperson. Please consult your healthcare provider with any questions or concerns you may have regarding your condition.
- When any serious incident occurs in relation to this device, report to its manufacturer and the competent authority in your country.
- Confirm for proper operation before use, if the packaging is damaged, unintentionally opened and exposed to environmental conditions outside of those specified.
- This device is not intended to diagnose heart arrhythmias. If the Irregular Heart Beat indicator illuminates frequently and is unrelated to patient movement during blood pressure measurement, further medical attention must be sort.

Contraindications

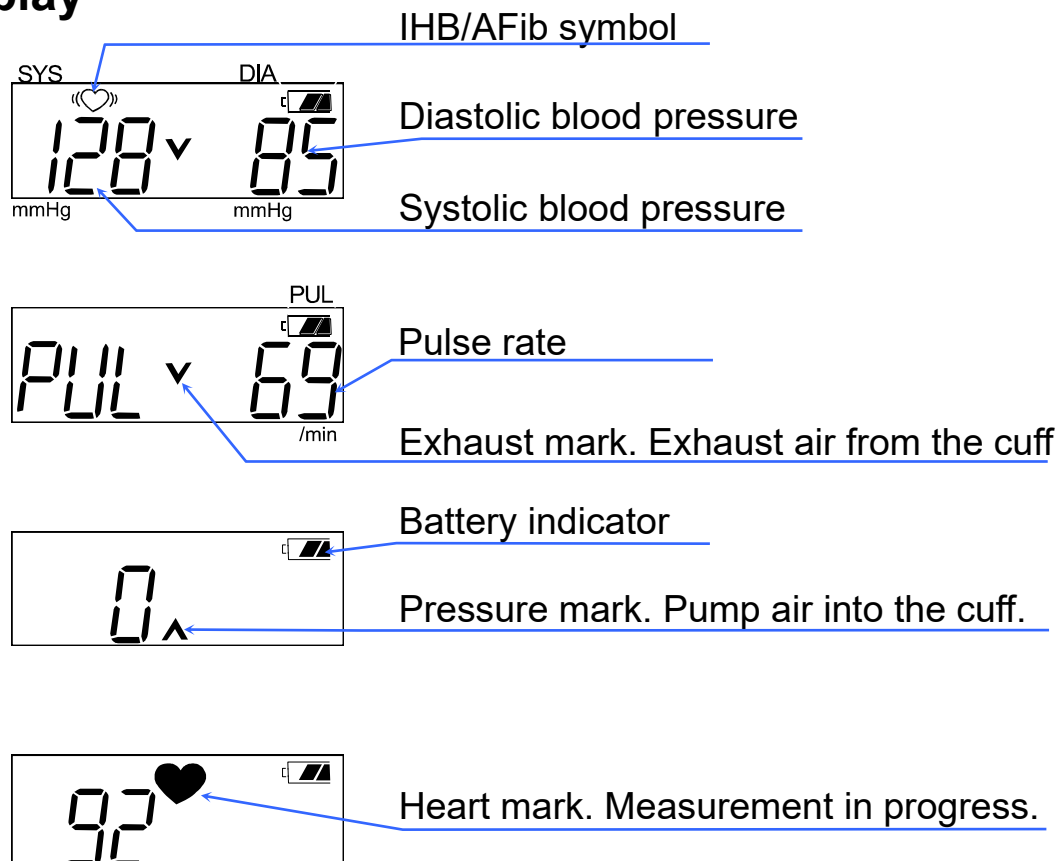
The following are precautions for proper use of the device.

- Do not apply the cuff on an arm with another medical electrical equipment attached. The equipment may not function properly.
- People who have a severe circulatory deficit in the arm must consult a doctor before using the device, to avoid medical problems.
- Do not self-diagnose the measurement results and start treatment by yourself. Always consult your doctor for evaluation of the results and treatment.
- Do not apply the cuff on an arm with an unhealed wound.
- Do not apply the cuff on an arm receiving an intravenous drip or blood transfusion. It may cause injury or accidents.
- Do not use the device where flammable gases such as anesthetic gases are present. It may cause an explosion.
- Do not use the device in highly concentrated oxygen environments, such as a high-pressure oxygen chamber or an oxygen tent. It may cause a fire or explosion.
- Do not provide any servicing and perform maintenance while the medical device is in use.

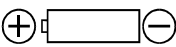
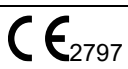
Parts Identification

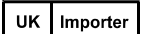


Display



Symbols

Symbols	Function / Meaning	Recommended Action
	Press  to turn on the device. Press  during measurement to enter standby.	_____
	Battery installation guide	_____
	Type BF applied part	_____
	Appears while measurement is in progress. It blinks when the pulse is detected.	Measurement is in progress. Remain as still as possible.
	IHB/AFib symbol Appears when an irregular heartbeat is detected. It may light when a very slight vibration like shivering or shaking is detected.	Apply the cuff correctly, then take another measurement. If the «  » symbol continues to appear, we recommend you to consult with your physician.
	Blinks when there is air remaining in the cuff at power up. Blinks at the completion of the measurement until exhaust is complete.	Press the exhaust valve button to exhaust air from the cuff.
	Blinks when the pressure is not enough for the measurement.	Pump air into the cuff with the rubber bulb.
	FULL BATTERY The battery power indicator during the measurement.	_____
	LOW BATTERY The battery is low when it blinks.	Replace the battery with a new one, when the indicator blinks.
	Unstable blood pressure due to movement during the measurement.	Try the measuring again. Remain very still during the measurement.
	The systolic and diastolic values are within 10 mmHg from each other.	Apply the cuff correctly, and try the measurement again.
	The pressure value did not increase during inflation.	
	<i>Err CUF</i> The cuff is not applied correctly.	
<i>PUL Err</i>	The pulse is not detected correctly.	
	CE marking	_____
	European Authorized Representative	_____
	UK Conformity Assessed marking	_____
	UK Responsible Person	_____
	Medical Device	_____
	Manufacturer	_____
2023 	Date of manufacture	_____

Symbols	Function / Meaning	Recommended Action
	WEEE label	_____
	Refer to instruction manual/booklet *1	_____
	Serial Number	_____
	Unique Device Identifier	_____
	International protection symbol	_____
	Keep dry	_____
	Temperature limit	_____
	Humidity limitation	_____
	Atmospheric pressure limitation	_____
	EU Importer	_____
	UK Importer	_____

*1 The symbol color: Blue

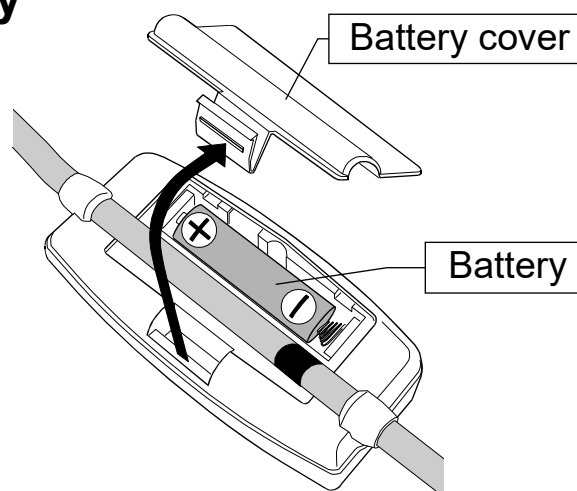
Using the Monitor

Inserting/ Changing the Battery

1. Remove the battery cover.
2. Insert a new battery into the battery compartment as shown, making sure that the polarities (+) and (-) are correct.

Use only R6P, LR6, AA or equivalent battery.

3. Putting on the battery cover.



CAUTION

- Insert the battery as shown in the battery compartment. If inserted incorrectly, the device will not work.
- When  (LOW BATTERY mark) blinks in the display, replace with a new battery.
-  (LOW BATTERY mark) does not appear when the battery is drained.
- The battery life varies with the ambient temperature and may become shorter at low temperatures. Generally, a new LR6 battery will last approximately for 21 months when used six times for measurement each day.
- Use the specified batteries only. The battery provided with the device is for testing and may have a limited life.
- Remove the battery if the device is not to be used for a long time. The battery may cause leakage and operational issues.
- The data stored in memory are cleared when the battery is removed.

Using the Monitor

Selecting the Correct Cuff Size

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

- The arm size is printed on each cuff.
- The index ▲ and proper fit range, on the cuff, tell you if you are applying the correct cuff. (Refer to "**Applying the Arm Cuff**" on the next page.)
- If the index ▲ points outside of the range, contact your local dealer to purchase a replacement cuff.
- The arm cuff is a consumable. If it becomes worn, purchase a new one.

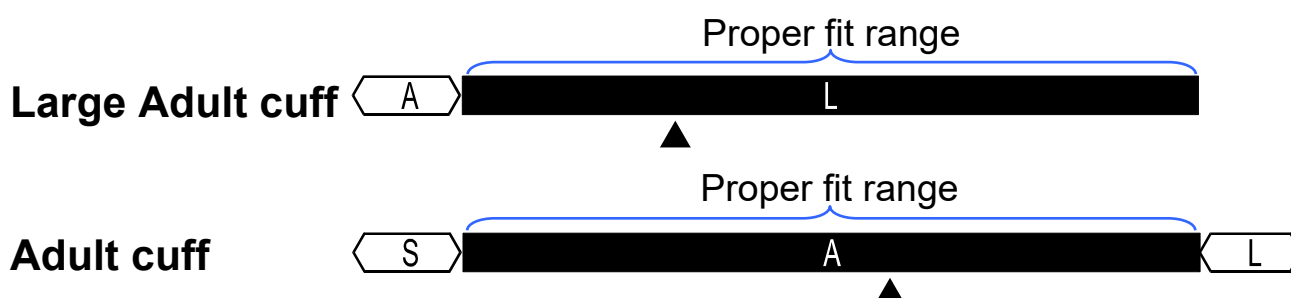
Arm Size	Recommended Cuff Size	Catalog Number
31 cm to 45 cm	Large Adult cuff	CUF-D-LA-ISO
22 cm to 32 cm	Adult cuff	CUF-F-A-ISO

Arm size: The circumference of an upper arm.

Note: The UA-704 is not designed for using a small cuff.

Symbols that are printed on the cuff

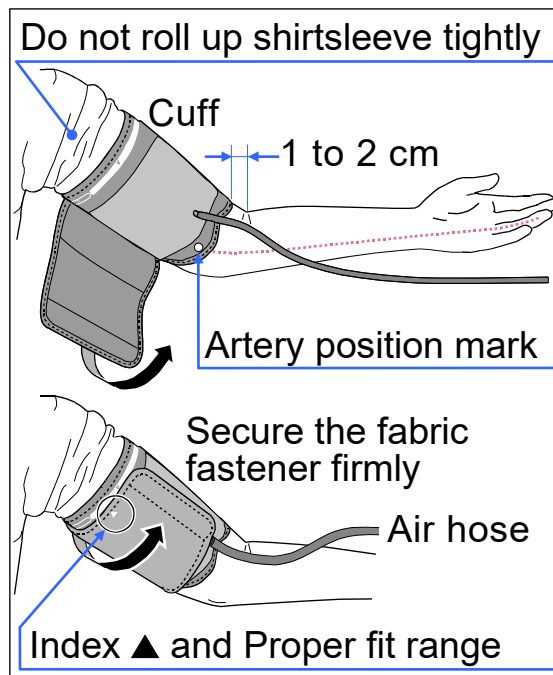
Symbols	Function / Meaning	Recommended Action
●	Artery position mark	Set the ● mark on the artery of the upper arm or in line with the ring finger on the inside of the arm.
▲	Index	_____
REF	Catalog number	_____
A	Proper fit range for the adult cuff. It's printed on the adult cuff.	_____
L	Over range printed on the adult cuff.	Use the large adult cuff instead of the adult cuff.
L	Proper fit range for the large adult cuff. It's printed on the Large adult cuff.	_____
S	Under range printed on the adult cuff.	_____
A	Under range printed on the large adult cuff.	Use the adult cuff instead of the large adult cuff.
LOT	Lot number	_____



Using the Monitor

Applying the Arm Cuff

1. Wrap the cuff around the upper arm, about 1 to 2 cm above the inside of the elbow, as shown.
Apply 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 tightly rolling up a shirtsleeve, may cause inaccurate readings.
3. Confirm that the index ▲ points within the proper fit range.



How to Take Accurate Measurements

For the most accurate blood pressure measurement:

- Sit comfortably on a chair. Place your arm on the table. Do not cross your legs. Keep your feet flat on the floor and straighten your back.
- Relax for about five to ten minutes before taking the measurement.
- Place the arm at center of the cuff and keep the arm at the same level as your heart.
- Remain still and keep quiet during the measurement.
- Do not measure immediately 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

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

Measure your blood pressure according to the section "Measurement".

After Measurement

Press the exhaust valve to exhaust air from the cuff.

Press the **START** button to turn off the power.

Remove the cuff and the readings will be recorded.

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

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

Measurement

1. Apply the cuff on the arm (preferably the left arm).

2. Press the **START** button.

- When the **START** button is pressed, all of the display symbols will be displayed for about one second.
- When the "0" is blinking, the device is ready for measurement. If the ♥ mark is displayed, the cuff has some air trapped in it. Press the exhaust valve button until the ▲ mark is displayed.

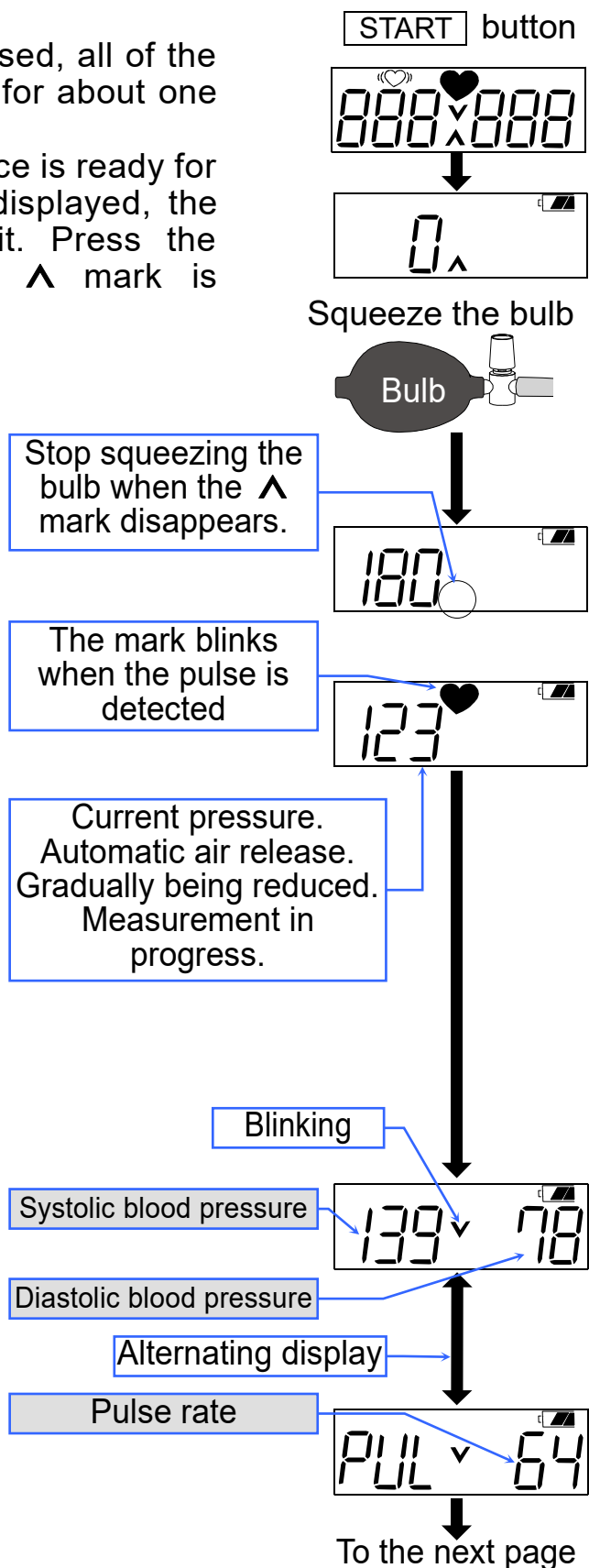
3. Pressurize the cuff by squeezing the rubber bulb.

- The figure on the left of the display shows the current pressure as you inflate the cuff.
- Stop squeezing the rubber bulb when the ▲ mark disappears.

4. When pressurization is completed, the automatic exhaust mechanism will gradually reduce the pressure in the cuff and the ♥ mark will be displayed along with the current pressure reading on the left.

- Remain still during the measurement. When a pulse is detected, the ♥ mark will blink with each pulse beat.

5. When the measurement is completed, the ▼ mark is displayed. The systolic blood pressure is displayed on the left. The diastolic blood pressure is displayed on the right. The pulse rate alternates with the systolic and diastolic displays.



Measurement

6. Press the exhaust valve button to completely release air from the cuff.
 - When a measurement is made with insufficient pressure, the **Λ** mark will be displayed. Re-pressurize the cuff to a pressure. Stop squeezing the rubber bulb when the **Λ** mark disappears.
 - When a measurement is made with an erratic pulse or in a very noisy environment, **Err** will be displayed.

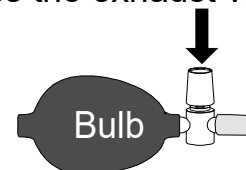
7. Turning the power off
Press the **START** button to turn the power off.
The device will be in standby mode.

8. Subsequent measurements
If a subsequent measurement is required, turn off the power and turn it on again. When " 0 " is displayed, the device is ready for another measurement.
Note: Allow at least three minutes between measurements on the same person.

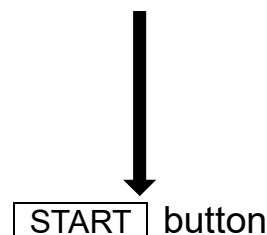
9. Automatic power shut-off function
If the device is left on after a measurement, it will be turned off automatically after about one minute.
It may be turned off at any time by pressing the **START** button.

From the previous page

Press the exhaust valve



Releasing air
from the cuff



START button

Notes for Accurate Measurement

- Sit down in a comfortable position. Place your arm on a table with your palm facing upward and the cuff at the same level as your heart.
- Relax for about five or ten minutes before taking the measurement. If you are excited or depressed by emotional stress, the blood pressure reading may be higher (or lower) than a normal blood pressure reading and the pulse rate 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 may have a strong and rapid effect on your blood pressure.

Measurement

- This device bases its measurements on the heartbeat. If you have a weak or irregular heartbeat, the device may have difficulties determining your blood pressure.
- If the device detects a condition that is abnormal, it will stop the measurement and the error symbol will be displayed. Refer to page 6 for the descriptions of the symbols.
- This blood pressure monitor is intended for use by people 13 years and older.
- The automatic blood pressure monitor's performance may be affected by excessive temperature or humidity, or altitude.

What Is the IHB/AFib Indicator?

When the monitor detects an irregular rhythm during the measurements, the IHB/AFib indicator will appear on the display with the measurement values.

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

What Is the AFib?

The heart contracts due to electrical signals occurring in heart and sends blood through the body. Atrial fibrillation (AFib) occurs when the electrical signal in the atrium becomes confused and leads to disturbances in the pulse interval. AFib can cause blood to stagnate in the heart, which can easily create clots of blood, a cause of stroke and heart attack.

About Blood Pressure

What is Blood Pressure?

Blood pressure is the force exerted by blood against the walls of the arteries. Systolic blood pressure occurs when the heart contracts. Diastolic blood 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 untreated, may cause many health problems including stroke and heart attack. Hypertension can be controlled by altering lifestyle, avoiding stress, and with medication under a doctor's supervision.

To prevent hypertension or to keep it under control:

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

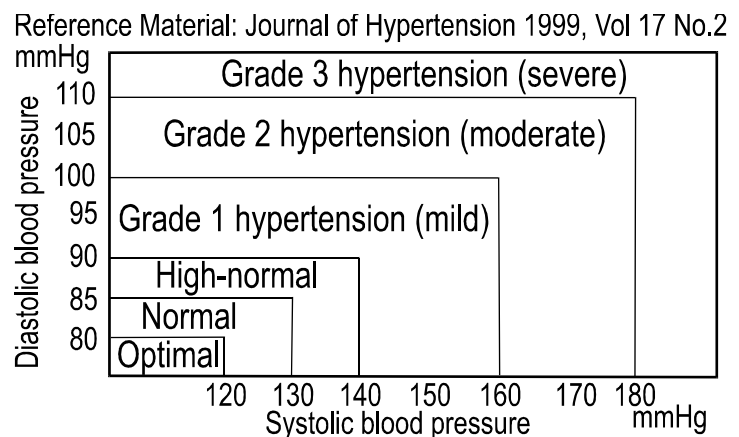
About Blood Pressure

Why Measure Blood Pressure at Home?

Blood pressure measured at a clinic or doctor's office may cause apprehension and may elevate the reading by 25 to 30 mmHg higher than when 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

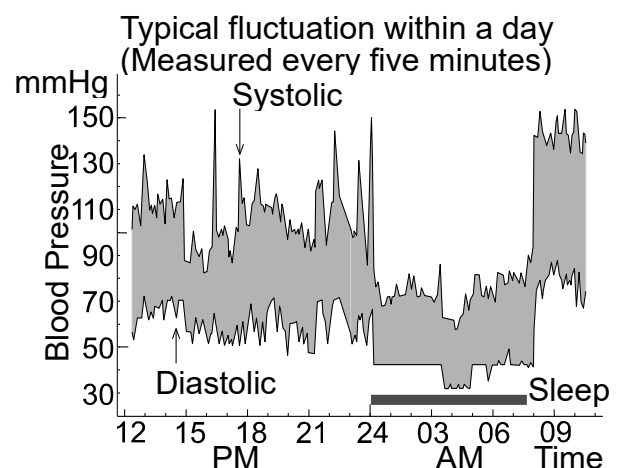
Standards to assess high blood pressure, without regard to age, have been established by the World Health Organization (WHO), as shown in the chart at the right.



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 individuals, variations are even more pronounced. Normally, the blood pressure rises when working or playing 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 Cause	Suggestion
Nothing appears in the display, even when the power is turned on.	Battery is drained.	Replace with a new battery.
	Battery terminals are not in the correct position.	Reinstall the battery with negative and positive terminals matching those indicated on the battery compartment.
The device does not measure. Readings are too high or too low.	The cuff is not applied properly.	Apply the cuff correctly.
	Movement is detected.	Make sure to remain very still and quiet during the measurement.
	The cuff position is not correct.	Sit comfortably and still. Place your arm on a table with your palm facing upward and the cuff at the same level as your heart.
	_____	If you have a very weak or irregular heartbeat, the device may have difficulties in determining your blood pressure.
Other	The value is different from that measured at a clinic or doctor's office.	Refer to "Why Measure Blood Pressure at Home?"
	_____	Remove the battery. Put it back properly and try the measurement again.

Note: If the suggestions described above do not solve the problem, contact the authorized dealer.

Do not attempt to open or repair this product, otherwise your warranty may be 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, contact the authorized dealer in your area or our customer service department. The A&D customer service will provide technical information, spare parts and units to authorized dealers.

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

Technical Data

Type	UA-704
Measurement method	Oscillometric measurement
Measurement range	Pressure: 0 - 299 mmHg Systolic blood pressure: 60 - 279 mmHg Diastolic blood pressure: 40 - 200 mmHg Pulse: 40 - 200 beats / minute
Measurement accuracy	Pressure: ± 3 mmHg Pulse: $\pm 5\%$
Power supply	1 x 1.5V battery (R6P, LR6, or AA)
Number of measurements	Approximately 4000 measurements, when AA Alkaline batteries are used, with pressure value of 180 mmHg at room temperature of 23 °C.
Classification	Internally powered EM equipment Continuous operation mode
Clinical test	According to ISO81060-2: 2018+A1: 2020
EMD	IEC 60601-1-2: 2014+A1: 2020
Operating conditions	+10 to +40 °C / 15 to 85 %RH / 800 to 1060 hPa
Transport / Storage conditions	-20 to +60 °C / 10 to 95 %RH / 700 to 1060 hPa
Dimensions	Approx. 100 [W] x 31 [H] x 51 [D] mm
Weight	Approx. 73 g, excluding battery
Ingress protection	Device: IP20
Applied part	Cuff Type BF 
Useful life	Device: 5 years (when used six times a day) Cuff: 2 years (when used six times a day)
Contents *2	1 Blood Pressure Monitor Unit, 1 Instruction Manual, 1 Battery, 1 EMD Technical Documentation

Accessories sold separately

Cuff	Catalog Number	Cuff Size	Arm Size
	CUF-D-LA-ISO	Large Adult cuff	31 cm to 45 cm
	CUF-F-A-ISO	Adult cuff	22 cm to 32 cm

Arm size: The circumference of an upper arm.

- *2: Confirm that all of the parts are included to ensure that the medical device is ready to perform safely and as intended.

Note: Specifications are subject to change without prior notice.

IP classification is the degrees of protection provided by enclosures in accordance with IEC 60529. This device is protected against solid foreign objects with a diameter of 12 mm or greater, such as a finger. This device is not protected against water.



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