

# **AND**

## **Digital Blood Pressure Monitor**

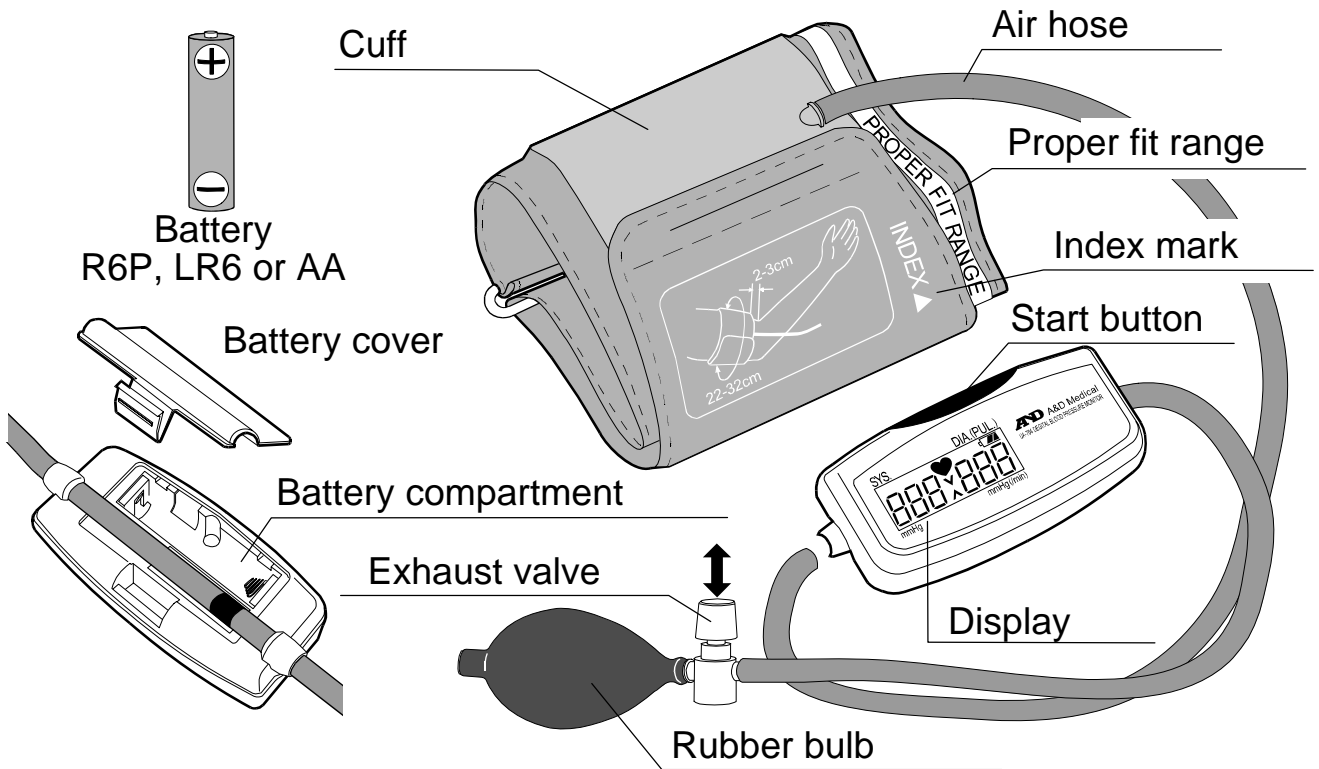
# **UA-704**

[www.distrimed.com](http://www.distrimed.com)

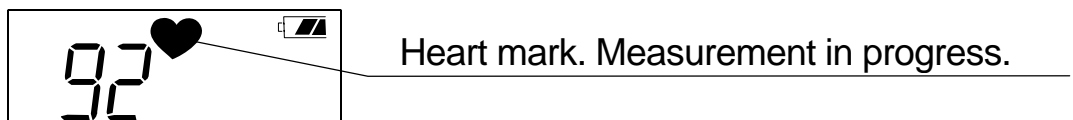
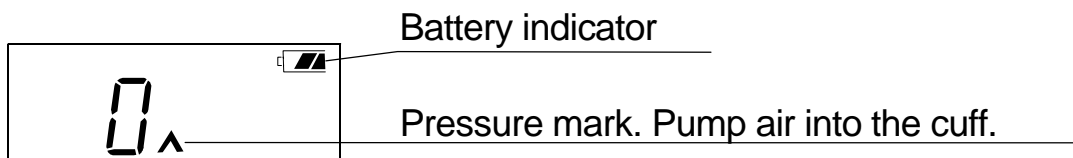
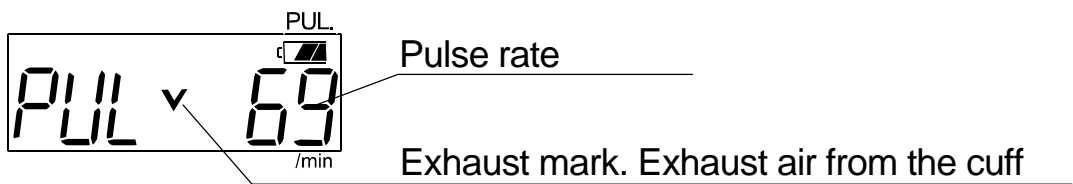
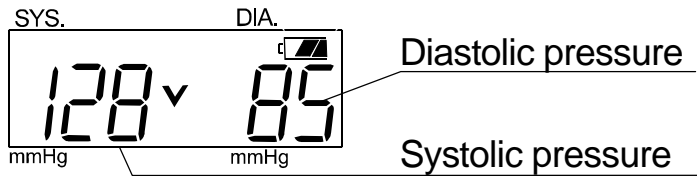
# Precautions

- 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.
- This device is intended for use by adults only.











# Parts Identification



## Display Parts



# Symbols

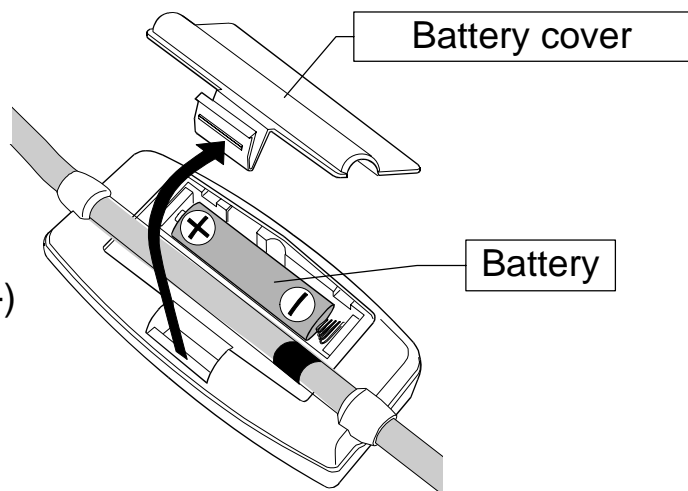
Symbols	Function / Meaning	Recommended Action
	Turns the device on and off.	_____
	Guide to install battery	_____
<b>SN</b>	Serial number	_____
2003 	Date of manufacture	_____
	Type BF: Device, cuff and tubing are designed to provide special protection against electrical shocks.	_____
	Displays when measurement is in progress and flashes when the pulse is detected.	Measurement is in progress -- remain still.
	Flashes when there is air remaining in the cuff at power up. Flashes at the completion of the measurement until exhaust is complete.	Press the exhaust valve button to exhaust air from the cuff.
	Flashes when the pressure is not enough for the measurement.	Pump air into the cuff with the rubber bulb.
 Full Battery	The battery indicator during measurement.	_____
 low Battery	The battery is low when it blinks.	Replace the battery with a new one, when the indicator blinks.
<i>Err</i>	Unstable blood pressure due to movement during the measurement.	Try measuring again. Remain very still during the measurement.
	The systolic and diastolic values are within 10 mmHg of each other.	Fasten the cuff correctly, and try the measurement again.
	The pressure value did not increase during inflation.	
<i>Err CUF</i>	The cuff is not fastened correctly.	
<i>PUL Err</i>	The pulse is not detected correctly.	
 0366	The EC directive medical device label	_____

# Using The Monitor

## Installing / Changing The Battery

Remove the battery cover.

Insert a new battery into the battery compartment as shown, taking care that the polarities (+) and (-) are correct.



## 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.

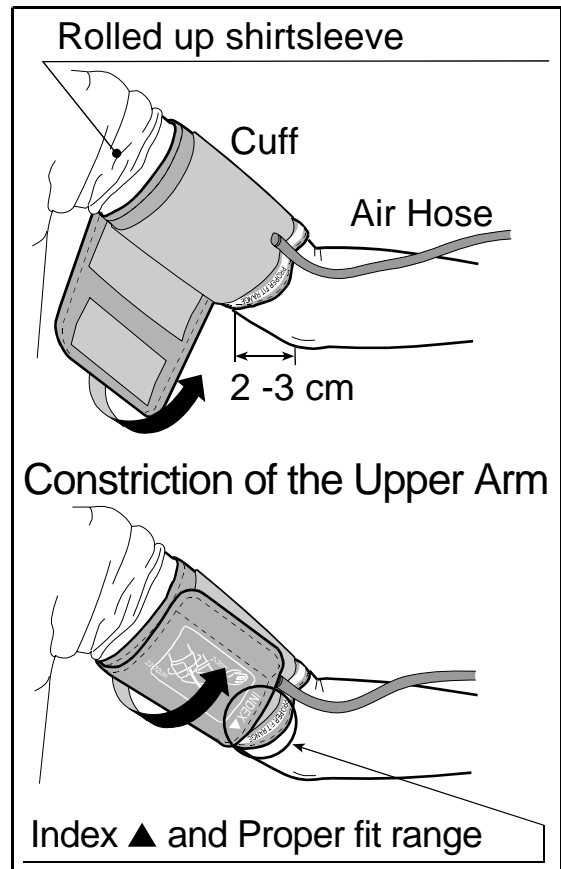
The index ▲ and proper fit range, on the cuff, tell you if you are attaching the correct cuff. (Refer to "**Attaching The Arm Cuff**" on next page)

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# 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.



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
—	Small cuff	—

Arm size: The circumference at the biceps

Note: This UA-704 monitor is NOT designed for using a small cuff.

## After Measurement

Press the exhaust valve button to exhaust air from the cuff.

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

Remove the cuff and record your data.

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

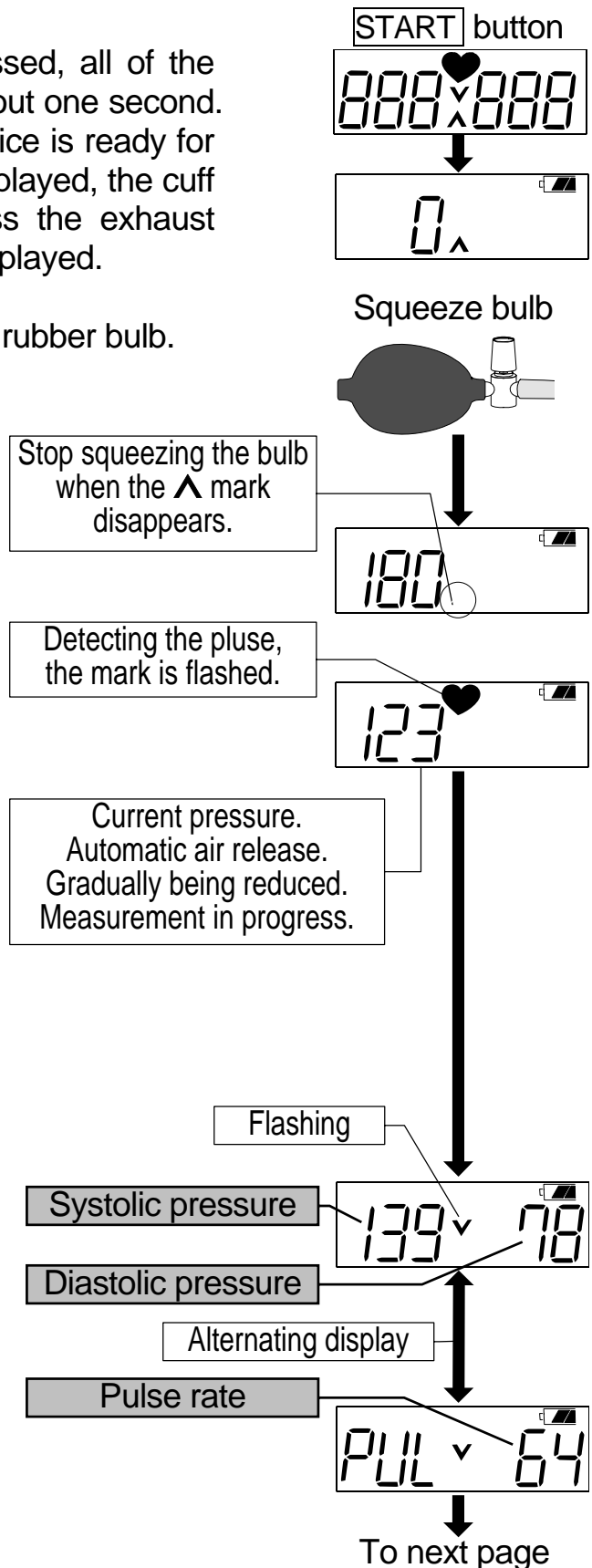
- Place the cuff on the arm (preferably the left arm).
- Press the **START** button.
  - When the **START** button is pressed, all of the display symbols will display for about one second.
  - When the "0" is flashing, the device is ready for measurement. If the **▼** mark is displayed, the cuff has some air trapped in it. Press the exhaust valve button until the **▲** mark is displayed.

- 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.

Note: It is normal for the cuff to feel very tight.

- When pressurization is completed, the automatic exhaust mechanism will gradually reduce the pressure in the cuff and the **♥** mark will display along with the current pressure reading on the left.
  - Remain still during the measurement. When a pulse is detected, the **♥** mark will flash in unison with the pulse of the person being monitored.

- When the measurement is complete, the **▼** mark is displayed. The systolic pressure is displayed on the left. The diastolic 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 display.

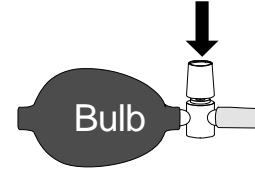
7. Turning the power off  
Press the **START** button to turn the power off. The device will be in standby mode.

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.

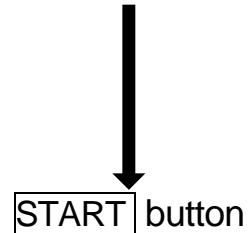
9. Automatic power shut-off function  
If the device is left on after a measurement, it will turn off automatically after about one minute. It may be turned off at any time by pressing the **START** button.

From previous page

Press exhaust valve



Releasing air from the cuff



## 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.



# About 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.

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
- Reduce salt and fat intake
- Maintain proper weight
- Exercise regularly
- Have regular physical checkups

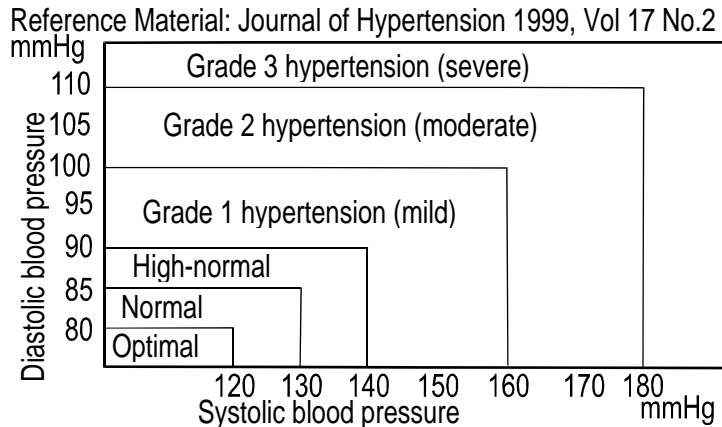
## Why Measure Blood Pressure At Home?

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.

# About Blood Pressure

## WHO Blood Pressure Classification

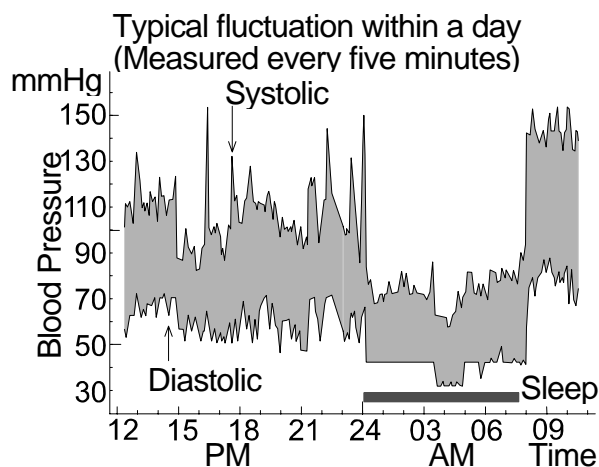
Standards to assess high blood pressure, without regard to age, have been established by the World Health Organization (WHO), as shown in the chart below .





## 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.



# Technical Data

Type	UA-704
Measurement method	Oscillometric measurement
Measurement range	Pressure: 20 - 280 mmHg Pulse: 40 - 200 beats / minute
Measurement accuracy	Pressure: $\pm 3$ mmHg or 2%, whichever is greater Pulse : $\pm 5\%$
Power supply	1 x 1.5V battery (R6P, LR6, or AA)
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
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. 100 [W] x 31 [H] x 51 [D] mm
Weight	Approx. 73 g, excluding battery  0366

Note: Specifications are subject to change without prior notice.