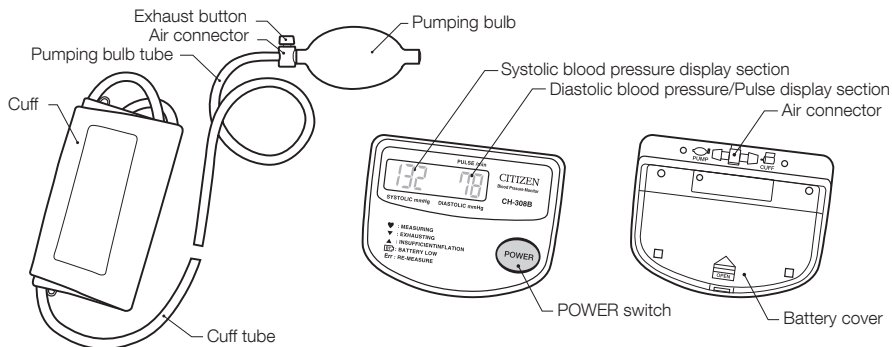


## INSTRUCTION MANUAL FOR DIGITAL BLOOD PRESSURE MONITOR

### REF CH-308B

#### IDENTIFICATION OF PARTS



## GENERAL REMARKS

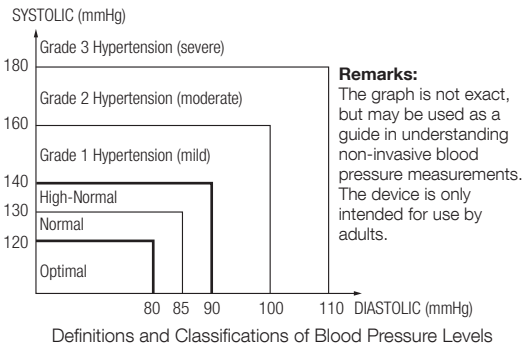
### General remarks on blood pressure and blood pressure measurement

1. To deflate the cuff quickly, press the "Exhaust button".
2. The attached cuff (model SCN-004) is suitable for arm circumferences of 22-32 cm.
3. When attaching the cuff, adjust the position of the cuff so that the blue marker is located in the center of your arm and the hem of the cuff is 1-2 cm above your elbow.
4. The monitor is not intended to be a diagnostic device, because it is intended for home use.
5. Self measurement is not therapy! In no event should you change the dosage of your medication prescribed by your physician.
6. As preparation for measuring your blood pressure, you should urinate and then remain relatively still for 10 to 15 minutes prior to measurement.
7. Exercising, eating, drinking, smoking, etc., prior to measurement may affect the results.
8. Your blood pressure varies constantly throughout the day. Measurements should be taken regularly at the same time each day.
9. DO NOT place too much emphasis on the results of one measurement. Keep a continuing record of your blood pressure variations. A complete picture can only be obtained from a large number of readings.
10. Emotional stress tends to cause your blood pressure to rise.

### To obtain correct blood pressure measurements

1. Take five or six deep breaths and then relax before measuring your blood pressure. If you are tense when taking the measurement, you will not get a valid reading.
2. Your blood pressure will be elevated if you are anxious or irritated, suffering from lack of sleep or constipation, or have just taken some exercise or eaten a meal.

3. Wrap the cuff around your arm and tighten it so that one finger can be inserted between the cuff and arm.
4. DO NOT measure your blood pressure after bathing or drinking.
5. If you feel the need to urinate, do so before measuring your blood pressure.
6. Measure your blood pressure where the room temperature is around 20°C. DO NOT measure your blood pressure when it is too cold (below 10°C) or too hot (above 40°C) in the room.
7. DO NOT try to measure your blood pressure immediately after drinking coffee or tea or after smoking.
8. Measure your blood pressure when you are relaxed and still. Keep the center of the cuff at the level of your heart and DO NOT move your arm or talk.
9. DO NOT measure blood pressure when the cuff has been on your arm for a few minutes or more. During this time, your arm will have built up a higher blood pressure and you will not get valid reading.
10. The figure below shows the blood pressure classifications under the WHO standards.



11. Intended Use
  - This device is noninvasive blood pressure monitor by oscillometric method. This device can measure the systolic blood pressure (SYS), the diastolic blood pressure (DIA) and the pulse rate automatically.
  - This device is intended to be used for checking personal health condition at home under the direction of a physician and is not intended to be a diagnostic device.
  - This device is not intended for use with neonates or infant, and not intended for automatic cycling measurement.

### Measure your blood pressure at the same time each day.

\* Your blood pressure changes all the time. This means that data gathered over a long period has far more significance than data from just one measurement. For this reason, you must measure your blood pressure on a daily basis. Ideally, you should measure your blood pressure at the same time each day, wherever possible.

## PRECAUTIONS FOR USE AND MAINTENANCE

### Precautions for use

1. If you suffer from heart disease, high blood pressure or other circulatory disease, consult your physician before using the monitor.
2. If the cuff pressure feels abnormal or you experience any other irregularity while using the cuff, reduce the pressure immediately by pressing the "Exhaust button", detach the cuff or unplug the air hose connector from the monitor and then consult the sales outlet where you purchased the monitor.
3. If you think the measurement is abnormal or if measurement makes you feel unwell, discontinue use and consult your physician.
4. Blood pressure measurement may not be possible for anyone with a weak pulse or arrhythmia.

5. Repeated blood pressure measurement may cause problems such as congestion or swelling in some people.
6. Frequently repeated blood pressure measurements will not give accurate results. Allow an interval of about 1 minute between measurements.
7. If you suffer from a severe problem with blood circulation in your arms, consult your physician before using the monitor. Failure to do so could be hazardous to your health.
8. Measurement may not be possible for anyone with insufficient blood flow to the area where measurements will be taken or who suffers from a frequent irregular heartbeat. Consult your physician for advice on whether to use the monitor.
9. DO NOT wrap the cuff around an injured arm.
10. DO NOT wrap the cuff around an arm in which a drip (intravenous infusion) is inserted, or which is being used for blood transfusion as part of medical treatment. Doing so could result in an injury or a serious accident.
11. DO NOT use the monitor in the vicinity of flammable gases such as those used for anaesthesia. Doing so could ignite the gases and cause an explosion.
12. DO NOT use the monitor in enriched oxygen environments such as a hospital's hyperbaric chamber or oxygen tent. Doing so could ignite the oxygen and cause a fire.
13. DO NOT use mobile phones near the monitor as this could result in a malfunction.
14. If you use a cardiac pacemaker, consult your physician before using the monitor.
15. Be sure to use this unit only for measuring blood pressure. DO NOT use it for any other purpose.
16. Be sure to use only our authorized parts and accessories. Parts and accessories not approved for use with the device may damage the unit.
17. DO NOT use this unit on infants.
18. Blood pressure measurement may not be possible for anyone with common arrhythmias such as atrial or ventricular premature beats or atrial fibrillation.

## Maintenance Precautions

1. DO NOT store the blood pressure monitor in locations exposed to direct sunlight, high temperatures (over 60°C), low temperatures (below -20°C), high relative humidity (over 95%) or excessive amounts of dust. Make sure to store the blood pressure monitor, where children, pets and or pests are not there.
2. DO NOT drop the blood pressure monitor or subject it to other shocks or vibration.
3. Remove the batteries if the monitor will be left unused for a long period.
4. DO NOT attempt to disassemble the monitor.
5. DO NOT bend the cuff or the air hose excessively.
6. If the monitor is very dirty, wipe it clean with a cloth moistened with sterilizing alcohol or a neutral detergent. Then wipe it with a dry cloth.
7. NEVER clean the blood pressure monitor with thinners or benzene, as this could damage the monitor.
8. To clean the cuff, wipe it with a moist cloth. Avoid hard rubbing, as this will cause air leakages. Take care also not to get water into the air hose.



**Warning**

No modification of this device is allowed.

## Symbols Explanation

- CE 0086 : The CE marking is meant to provide information to market inspectors in the EU member countries.
- : Type BF applied part
- : Keep dry
- : Warning
- : Refer to instruction manual before use
- : Appliance compliance WEEE directive
- : Accumulators and battery packs for separate collection
- : Manufacturer

	<b>Warning</b>
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The device has been tested and homologated in accordance with EN60601-1-2 for EMC. This does not guarantee in any way that the device will not be affected by electromagnetic interference. Avoid using the device in high electromagnetic environment.

### Nature and frequency of maintenance:

This product is designed for use over an extended period of time; however, it is generally recommended that it be inspected every two years to ensure proper function and performance.

### Protect the nature environment:

Please help to protect natural environment by respecting national and/or local recycling regulations when disposing of the battery and the product at the end of their useful live.

### WEEE MARK

If you want to dispose this product, do not mix with general household waste. There is a separate collection systems for used electronics products in accordance with legislation under the WEEE Directive (Directive 2002/96/EC) and is effective only within European Union.



### Information for Users on Collection and Disposal of used Batteries.

The symbol in this information sheet means that used batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of used batteries, please take them to applicable collection points. For more information about collection and recycling of batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.



### Information on Disposal in other Countries outside the European Union.

This symbol is only valid in the European Union. If you wish to discard used batteries, please contact your local authorities or dealer and ask for the correct method of disposal.

### Note for the battery symbol.

The symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

## Reference European standard:

The blood pressure measuring device corresponds to regulation EN60601-1, EN1060-1, EN1060-3, EN1060-4.

### Calibration:

The blood pressure measuring device is generally recommended to have the monitor inspected every two years to ensure correct functioning and accuracy. Please contact a distributor.



Name: **CITIZEN SYSTEMS (H.K.) LIMITED**

Address: 62 Hung To Road, Kwun Tong, Kowloon, Hong Kong

### European Representative:

Name : WwW elektronische Geräte Vertrieb GmbH

Address : Fintelmannstraße 20/Eingang, Martin-Heydert-Straße, D-14109 Berlin, Germany  
• For technical data, please contact our European Representative

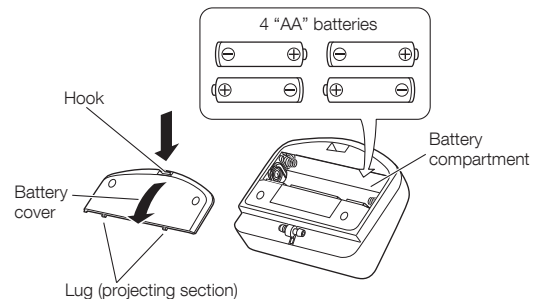


## LOADING THE BATTERIES

(Batteries supplied with the unit should be loaded in compartment before you use the blood pressure monitor.)

### 1 Open the cover of battery compartment.

Pressing the hook down, pull the cover toward you to open.



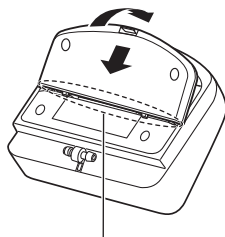
\* If the Blood pressure monitor is left unused for an extended period of time, the batteries should be removed from the compartment.

### 2 Place batteries in the compartment.

Put the batteries paying attention to the positive and negative terminal symbols ⊕ and ⊖.

### 3 Close the battery cover.

Fitting the lugs of the cover at the mating recesses of the battery compartment body, push the hook to close the cover.



Fit the lugs (projections) at the recesses.

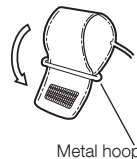
#### REMOVING THE BATTERIES

- When the icon is displayed or nothing appears in the display, replace the old batteries with four new ones. All four batteries should be changed at once.
- The memory is erased if the batteries are removed for replacement. It is recommended to make note of the data stored in memory prior to changing batteries.
- Do not use rechargeable batteries.
- Do not use alkaline (LR6) and manganese (R6P) batteries together.
- Batteries included are for demonstration purposes only. Battery life may be shorter than specified.
- When disposing of used batteries, comply with governmental regulations or environmental public institution's rules that apply in your country/area.

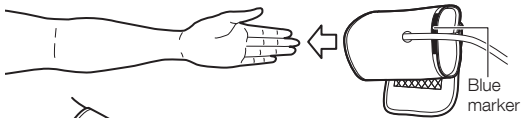
## MEASURING YOUR BLOOD PRESSURE

### 1 ATTACHING THE CUFF

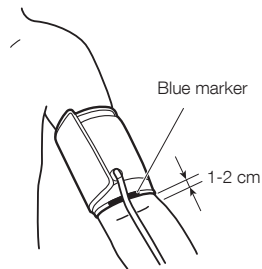
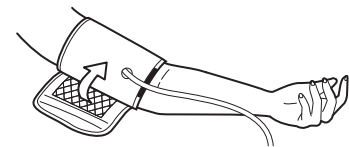
- 1 Unroll the cuff and thread the end through the metal hoop so that the side with the hook-and-loop fastener is on the outside.



- 2 Put the cuff around your arm so that the blue marker comes to the palm side.

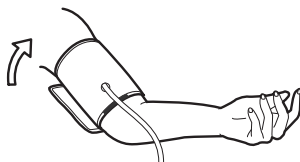
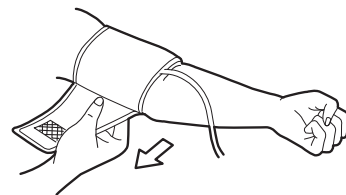


- 3 Adjust the position of the cuff so that the blue marker is located in the center of your arm and the hem of the cuff is 1-2 cm above your elbow.

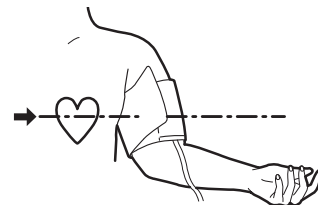


- \* The cuff should be put on the bare arm or over a light-weight underwear.
- \* If you wear a heavy-weight top, please remove it.

- 4 Pull the end of the cuff outwards so that the cuff is snug around your arm and then secure the end to the hook-and-loop fastener.



- 5 Place your arm on a table or the like, so that the center of the cuff comes to the height of your heart.



- 6 Relax your arm and lightly open your hand, with the palm upward.

#### Q & A

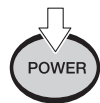
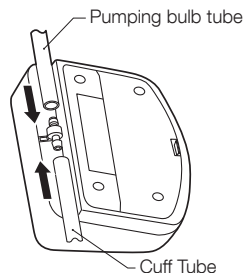
- Q** Why is the blood pressure measured at home different from that measured by the physician or at a hospital?
- A** Your blood pressure may vary due to exercise, the ambient temperature or your mental state. When you have a physician or nurse measure your blood pressure, the pressure value is likely to be 10 to 20 mmHg higher than usual due to anxiety and/or stress. Knowing what affects your blood pressure helps you to better monitor your health.
- Q** Why does the blood pressure obtained vary with measurement?
- A** Our blood pressure is adjusted by automatic nerve function. Blood pressure differs with every heart beat. We are likely to think that our blood pressure is constant, but it varies if you take measurements in repetition. Blood pressure is susceptible to the time of day, such as morning and afternoon, season and atmospheric temperature. In addition, blood pressure is easily affected by mental stress or emotional ups and downs. It tends to increase when you feel tension or decrease when you are relaxed.



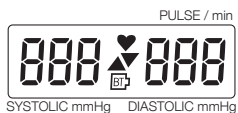
Always consult your physician for an interpretation of your blood pressure readings and to determine the proper treatment.

## 2 Turn Power On

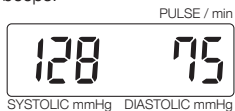
Push the cuff tube and Pumping bulb tube over the air connectors.



Press the "Power" switch for Power on.

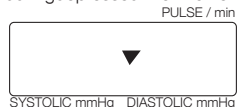


All display mark appear for approx. 1 second and buzzer beeps.



After all display marks are disappeared, the last measured systolic and diastolic blood pressure values are displayed. (Value of Pulse is not memorized nor displayed).

Memory function works on for approximately 2 second or duringdepressed the "Power" switch.



After memorized blood pressure value is disappeared, deflation mark "▼" appears.



If there is some air remaining in the cuff, release air with the exhaust button until the "0" appears. The buzzer beeps three times.

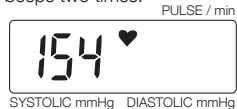
The unit is now ready to take new measurement.

## 3 Pressurize the cuff

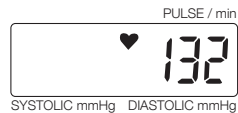


Pressurize the cuff by pumping bulb until you have a reading of approximately 30 to 40 mmHg higher than your regular systolic blood pressure.

Note: At pressure of 140, 170, 200, 240 mmHg, the buzzer beeps two times.



When pressurization is completed, the automatic the automatic air release system will gradually reduce cuff pressure, and Measuring Mark "♥" will appear on the display indication that measurement is in progress.



When a pulse is detected, the pressure value moves to the right side of the display. At this time Measuring Mark "♥" flashes with a short beep at the same time as pulse rate.



When the diastolic pressure valve is detected, the measurement is completed and buzzer beep. Systolic pressure is displayed on the left and diastolic pressure on the right side of the display.

After completion of measurement, the mark "▼" appears.



Approximately 2 seconds later, blood pressure values and pulse appear alternatively on the display.

## 4 Press the exhaust button

Press the exhaust button valve to completely release the air in the cuff.

## 5 Power off

Press the "POWER" switch to turn off.


About 3 minutes after the last measurement was obtained, the power will be turned off, automatically.

## KEY TO DISPLAY ICONS



Display mark	Condition/Cause	Corrective action
	The cuff was not inflated to more than 30-40 mmHg above your systolic pressure.	Raise the set pressure value by higher level.
	The cuff was inflated to more than 280 mmHg.	Exhaust the air within the cuff.
	Appears when the blood pressure could not be measured accurately.	Repeat measurement again.
	"PUL Err" is displayed when the pulse value is below 40 or above 201.	Repeat measurement again.
	Appears when the battery becomes weak.	Replace the battery.
	Device has a trouble.	Ask purchased shop.

## BEFORE REQUESTING REPAIRS OR TESTING

Make sure to check the following before sending your blood pressure monitor away to be tested or repaired.

Problem	Checks	Response
Display stays blank when you press the "POWER" switch.	Check whether the batteries are dead.	Replace all the batteries with new ones.
	Check whether the batteries are installed the right way round (⊕ and ⊖ oriented correctly).	Load the batteries in the correct direction.
No measurements can be taken.	Check whether the measurement icon ♥ is displayed.	Attach the cuff properly.
	Check whether the cuff is attached correctly.	
	Did you stay calm during measurement?	Measure your blood pressure again, making sure to remain still.
	Note that blood pressure measurement may not be possible for someone with an extremely weak pulse or cardiac arrhythmia (irregular pulse).	
Your blood pressure readings are abnormally high or low compared with those taken in hospital.	 See Q & A	
Other phenomena		Remove the batteries from the unit and change them with new ones.

## SPECIFICATIONS

Measurement system:	Oscillometric method	
Measurement Localization	Upper Arm	
Cuff:	Soft cuff	
Arm circumference range:	22.0 to 32.0 cm	
Measurement range:	Pressure	0 to 280 mmHg
	Pulse	40 to 200 pulse/min
Accuracy:	Pressure	±3 mmHg
	Pulse	±5% of reading
LCD displays:	Pressure	3 digits
	Pulse	3 digits
	Icons	Measuring: ♥ Exhaust: ▼ Re-Measure: ▲ Battery: 
Switch:	POWER switch	
Inflation:	Manual Inflation by Pumping Bulb	
Deflation:	Air release system	
Rated voltage:	6 V DC --- 0.1 W (--- : direct current)	
Exhaust:	Quick Exhaust Valve	
Power supply:	4 "AA" Size Batteries	
Battery duration:	Approx. 1000 times Manganese (160 mmHg, 1 time / day, 22°C)	
Automatic Power Off function:	Approx. 3 min. (after activated)	
Dimensions:	123 (W) x 95 (D) x 44 (H) mm	
Weight: (Apparatus and batteries)	Approx. 410 g	
Operating conditions:	Temperature	10°C to 40°C
	Humidity	30% to 85% RH
Storage conditions:	Temperature	-20°C to 60°C
	Humidity	10% to 95% RH
Electric shock protection:	Internal power unit	
Degree of Protection	 Type BF applied part	
Mode of operation:	Continuous operation	
Service Life:	5 years	
Cuff's Life:	Approx. 2000 times	
Accessories:	Set includes a cuff, Pump, 4 AA batteries (R6P) for the monitor, Instruction Manual.	

\* Applied part for this device is Cuff.

\* A range in barometric pressure 105 kPa to 70 kPa

- Overall system accuracy of this device is met with the requirement of item 7.9 of EN1060-3.

EN1060-3 : Non-invasive sphygmomanometers Part 3 (European Standard)