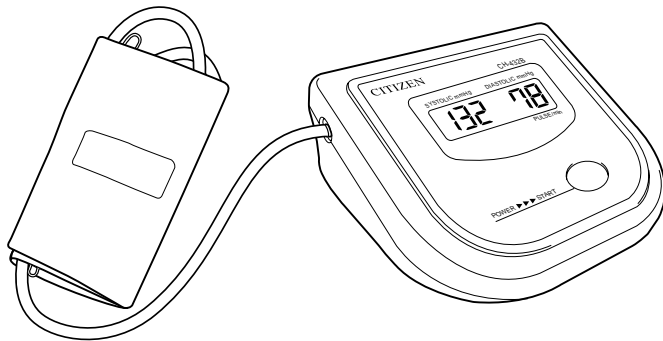


CITIZEN™

INSTRUCTION MANUAL FOR DIGITAL BLOOD PRESSURE MONITOR

English

MODEL CH-432B



CLEANING METHOD OF CUFF

After cleaning the cuff with a neutral detergent, lightly rinse it with water and let it dry in the air. Hard rubbing or wash-

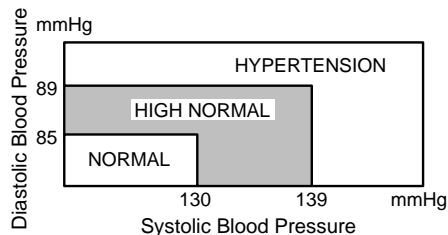
ing in a washing machine will cause air leakage. Also, be careful not to get water into the air hose.

GENERAL REMARKS

General Remarks on blood pressure measurement

- If the cuff is to be deflated quickly, depress "POWER" switch.
- The attached cuff is suited for an arm circumference of 22cm to 32cm.
- When attaching the cuff, rubber cuff hose should be placed on the inside of your arm on top of the arterial.
- Self measurement is no therapy! In no case may you change the dosage of medication prescribed by your physician.
- In operation for blood pressure measurement, you should urinate and should remain relatively still for 10 to 15 minutes prior to measurement.
- Exercise, eating and drinking, smoking, etc., prior to measurement may affect the results.
- The blood pressure varies constantly throughout the day. Measurement should be made regularly at the same time each day.
- Do NOT be impressed by the results of one measurement. Keep a record of blood pressure variations. Many readings tell a story.
- Emotional stress may tend to cause pressure to rise.

- This Product should not be used to monitor cardiac arrhythmia.



For proper measurement of blood pressure

- Take a deep breath five or six times and then relax before measuring blood pressure. If you are tense when taking the measurement, you will not get a valid reading.
- Blood pressure will be elevated when you are in a worrisome or irritated state, suffering from lack of sleep or constipation, or after exercise or a meal.

- Putting on the cuff is one of the most important tasks for ensuring proper measurement of blood pressure. Wind the cuff around the arm and tighten it so that one finger may be inserted between the cuff and arm.
- Do NOT measure blood pressure after bathing or drinking.
- When you feel like relieving yourself, you should do so before measuring blood pressure.
- Measure blood pressure where the room temperature is about 20°C. Do NOT measure blood pressure when it is too cold (below 10°C) or too hot (above 40°C) in the room.
- Do NOT measure blood pressure immediately after drinking coffee or tea or smoking.
- Measure blood pressure with a relaxed and quiet posture. Keep the center of the cuff at the level of your heart, and do NOT move your arm or talk during measurement.
- Do NOT keep on measuring so many times, as your arm will have built up congestion of blood, and you will not get a valid reading.

PRECAUTION FOR USE AND MAINTENANCE

Precautions for use

- If you suffer from heart disease, high blood pressure or other circulatory disease, please consult your doctor first.
- If you feel abnormal pressure of the cuff during use or any other irregularity, reduce the pressure by immediately switching off the power or removing the batteries and consult the sales outlet where purchased.
- If you think the measured value is abnormal or if measuring makes you feel unwell, discontinue use and consult your doctor.
- Measurement of blood pressure may not be possible for someone with a weak pulse or arrhythmia.
- Congestion, swelling, etc. may occur in some people.
- If blood pressure is measured repeatedly, an accurate result will not be achieved. An interval of about 10 minutes should be allowed.

- The memory is erased if the batteries are removed for replacement, etc. and a record should be kept of any necessary data.

Precautions for maintenance

- Do NOT store the blood pressure monitor where it will be exposed to direct sunlight, high temperature (over 60°C), low temperature (below -20°C), high relative humidity (over 95%) or in a dusty place.
- Do NOT expose the blood pressure monitor to under force or vibration, or drop it.
- Remove the battery/batteries when not in use for a long period.
- Do NOT disassemble the apparatus.
- Do NOT bend the cuff or air hose unnecessarily.
- NEVER wipe the blood pressure monitor with thinner or benzene, as they may damage it.

- When the monitor is very dirty, wipe it clean with a cloth moistened with Sterilizing alcohol or a neutral detergent, and then wipe it with a dry cloth. Do NOT use thinner or benzene.

Nature and frequency of maintenance:

This products 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 protect natural environment by respecting national and/or local recycling regulations when disposing of the batteries and the products at the end of their useful lives.

Reference European standard:

This products complies with EC instructions 93/42/EEC (Medical Device Directive) and with the following standards: EN 1060-1: 1995 “Noninvasive Sphygmomanometers, Part 1 General Requirements” and EN 1060-3: 1997 “Noninvasive Sphygmo-manometers, Part 3 Supplementary Requirements for Electromechanical Blood-Pressure Measuring Systems”.

Manufacturer:

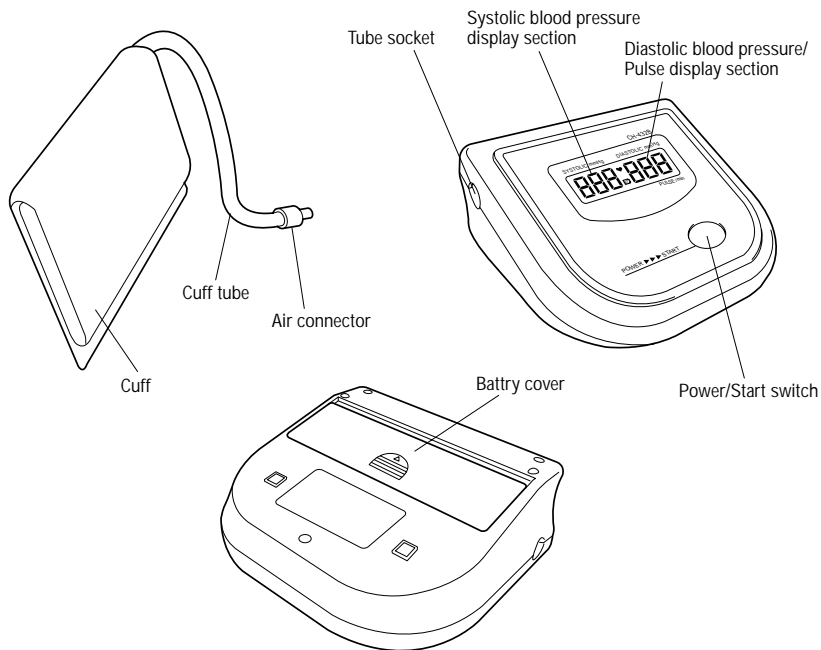
Name: Premier Precision Ltd.
Address: Block E, G-H, 6th floor,
Phase 2, Yip Fat Factory Building,
73-75 Hoi Yuen Road,
Kwun Tong, Kowloon, Hong Kong

European Representative:

Name: WvW elektronische Geräte Vertrieb GmbH.
Address: Robert-Koch-Straße 20,
D-80538 München,
GERMANY

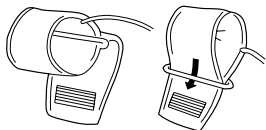


IDENTIFICATION OF PARTS

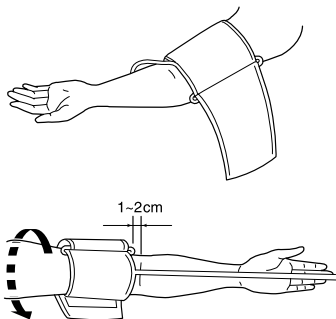


MEASUREMENTS

1. Attaching of Arm Cuff and Posture During Measurement

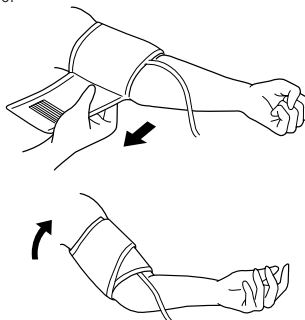


Unfasten and open the cuff as shown in the figure.

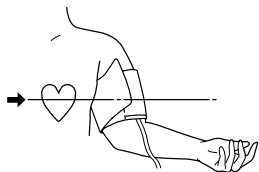


Wind the arm cuff around the left upper arm tightly so that bottom edge of the cuff is positioned about 1 – 2cm above the elbow joint.

- When you will wind the cuff, please wind the cuff next to the skin of possible.
(If measurement is made by rolling the shirts or jacket up over the arm, this will constrict the upper arm and prevent accurate measurement.)
- Cuff tube should be placed on the inside of your arm as figure.

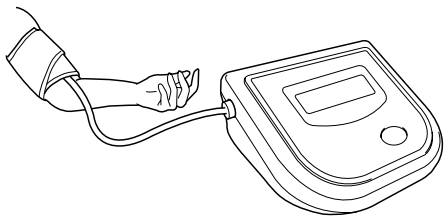


- Please make sure that the cuff is fastened tightly. Note that uneven cuff winding will prevent proper measurements.



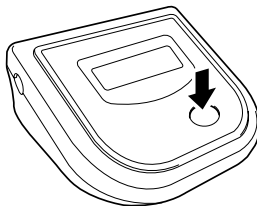
Rest the elbow on a table so that the section of the upper arm is at the height of the heart. Relax the lower arm across the table and remain still, since movement - artifacts may falsify the measuring result.

Make measurements in either a seated or reclining posture with the palm turned upward.

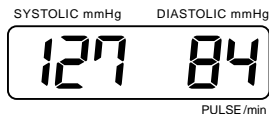


Insert the air connector from the cuff into the tube socket at the mainframe until it is tightly connected.

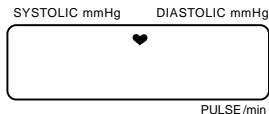
2. Carrying out the Measurement



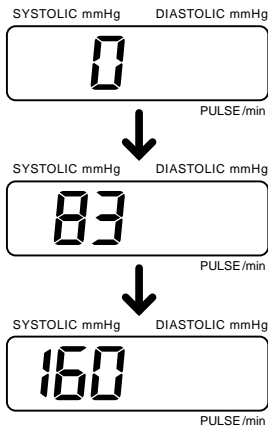
Press the "POWER / START" switch.



When the "POWER / START" switch is pressed, the last-measured systolic blood pressure and diastolic blood pressure are displayed for about 2 seconds.



At the first measurement after battery replacement the mark of "♥" is displayed for about 2 seconds.



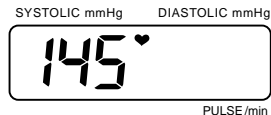
The pressure is automatically heightened to the level for measurement of the blood pressure based on the last-measured systolic blood pressure.

At the first measurement after battery replacement the pressure is heightened to 160mmHg.

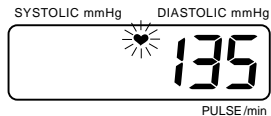
If the level of the pressure is not enough, the pressure is automatically heightened to the level for measurement of the blood pressure again.

When the "POWER / START" switch pressing, the pressure level for measurement will change at optional level over 160 mmHg.

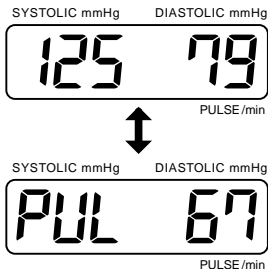
But if the "POWER / START" switch is released before 160 mmHg, the pressure is heightened to 160mmHg.



When the pressure lowers by 15mmHg after pressurization stops, the mark of "♥" is displayed.



If pulse is recognized, the pressure is shifted to the diastolic blood pressure indicating section and change over, synchronized with the pulse.



When the measurement has been completed, the systolic blood pressure, the diastolic blood pressure and the pulse rate are alternately displayed and the air is discharged. The systolic blood pressure and the diastolic blood pressure are displayed for about 2 seconds and the pulse is displayed for about 1 second.

The measured data are registered automatically, as long as they are not error.

When a person with maximum blood pressure of 170 mmHg or higher uses the unit for the first time, or after changing batteries, measure blood pressure using the manual setting. If the automatic pressure setting is used, it may not work.

Automatic Pressure Setting

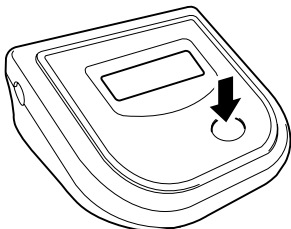
- This product automatically sets the pressure based on the previous measurement, so you can easily measure blood pressure by pressing one button without resetting the pressure for each measurement. If several people use the unit, we recommend using the manual settings as follows.

Manual Pressure Setting

- When several people use the unit, set the pressure value manually. Please note that if the manual pressure setting is not used, pressure will be automatically applied based on the value set by the previous user. If the previous user had a high pressure setting, that high pressure will automatically be used for the current user. If you feel pain in your arm, press the "POWER / START" switch immediately to turn off the power.
 1. Put the arm cuff around your arm, plug the air hose into the unit, and keep your arm at the level of your heart.
 2. Keep the "POWER / START" switch depressed until the pressure display shows the optimal pressure setting. (The optimal pressure setting is about 40 mmHg higher than your usual maximum blood pressure.)
 3. When the pressure display reaches the optimal pressure value, release the "POWER / START" switch. When the "POWER / START" switch is released pressurization will finish and measurement will start. Manual pressure settings can be selected between 160 mmHg - 280 mmHg. If you release the "POWER / START" switch before reaching 160 mmHg, the unit will pressurize to 160 mmHg. If the unit senses that the pressure is not high enough, it will apply more pressure.

3. Turn Power OFF

Press the "POWER / START" switch to turn off.



4. Subsequent Measurement

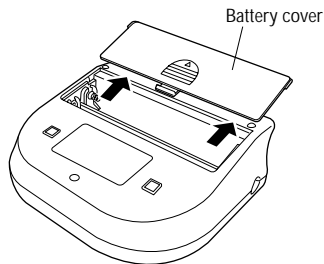
When a measurement is need again, 10 minutes, interval is necessary between measurements.

5. Automatic Power OFF Function


If the unit is left without any operation after measurement, an "Automatic Power-Off Function" runs to turn off the power after approximately 3 minutes. To continue measurement, press the "POWER / START" switch again.

6. Battery Replacement

If the batteries are almost empty, the "BT" mark will be displayed. In this case, batteries should be replaced with new one.




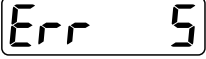


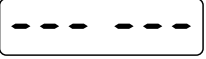
Remove the battery cover at mainframe and replace four type "AA" batteries.

	Batteries are almost empty.
	Batteries are normal.

Note: The memory data are erased when you replace the batteries.

- The batteries that are included power the monitor. They may not last as long as indicated.
- If manganese batteries are used at a low room temperature, such as in the winter or for other reasons, the batteries may not function properly and you may not be able to measure your blood pressure.
- Please dispose of used batteries properly to protect the environmental.

DESCRIPTION OF DISPLAY MARKS

DISPLAY MARK	CONDITION / CAUSE	CORRECTIVE ACTION
<p>SYSTOLIC mmHg DIASTOLIC mmHg</p>  <p style="text-align: center;">PULSE/min</p> <p style="text-align: center;">}</p> <p>SYSTOLIC mmHg DIASTOLIC mmHg</p>  <p style="text-align: center;">PULSE/min</p>	<p>Displayed when the blood pressure could not be measured accurately. (Some noises were detected by the movement of arm during measurement.)</p>	<p>Take off the cuff and wind it again, and carry out measurement once more. Do not move the arm during measurement.</p>
<p>SYSTOLIC mmHg DIASTOLIC mmHg</p>  <p style="text-align: center;">PULSE/min</p>	<p>Displayed when the pulse rate could not be measured.</p>	<p>Take off the cuff and wind it again, and carry out measurement once more. Do not move the arm during measurement.</p>
<p>SYSTOLIC mmHg DIASTOLIC mmHg</p>  <p style="text-align: center;">PULSE/min</p>	<p>Displayed when the batteries are almost empty.</p>	<p>Replace four batteries.</p>
<p>SYSTOLIC mmHg DIASTOLIC mmHg</p>  <p style="text-align: center;">PULSE/min</p>	<p>The unit has a trouble.</p>	<p>Take it to the store where it was purchased for testing.</p>

SPECIFICATIONS

Model No.		CH-432B	
Measuring Principle		Oscillometric Method	
Measurement Localization		Left Upper Arm	
Cuff		Soft Cuff	
Arm Circumference Range		22.0 to 32.0cm	
Measurement Range	Pressure	0 to 280 mmHg	
	Pulse	40 to 180 Pulse/min.	
Accuracy	Pressure	±3 mmHg	
	Pulse	±5% of Reading	
LCD Indication	Pressure	Systolic blood pressure: 3 Digits	
		Diastolic blood pressure: 3 Digits	
	Pulse	Pulse rate: 3 Digits	
	Marks	Measuring	
		Battery Empty	
LCD	View Size	18(H) × 61(W)mm	
	Digit Size (Pressure)	14(H) × 6.5(W)mm	
Switch		POWER / START switch	
Inflation		Automatic Inflation by Internal Pump	
Deflation		Automatic Air-release Valve	
Exhaust		Electromagnetic Valve	
Rated Voltage		6 VDC	
Power Source		4 "AA" Size Batteries	
Power Consumption		4W (Measuring)	
Battery Life	Manganese Batteries	Approx. 200 times	(160 mmHg, 1 time/day, 22°C)
	Alkaline Batteries	Approx. 700 times	
Automatic Power-Off Function		Approx. 3 min.	
Memory Function		1 Memory	
Dimension		129(W) × 121.5(D) × 55(T) [mm]	
Weight		Approx. 300g	
Operating Environment	Temperature	10 to 40°C	
	Humidity	30 to 85%RH	
Storage Environment	Temperature	-20 to 60°C	
	Humidity	10 to 95%RH	

* Specifications and designs may be changed without notice in the event of improvements being made.

●CITIZEN is a registered trademark of Citizen Watch Co., Japan.

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Consumer Electronics Division

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