Automatic Upper Arm

Blood Pressure Monitor

USER'S MANUAL

Equivalent Model: JZ-254-A
(Dick Shirth 40 then)



A Special Thanks To You...

Thank you for choosing our automatic upper arm blood pressure monitor. We're proud

of the care and quality that goes into the manufacture of each and every item that bears our name. Only the finest materials are used to assure you of a timeless instrument designed for optimum performance. With proper care and maintenance, your automatic blood pressure monitor is sure to provide you with years of reliable service.

Thank you for your support. It is indeed our pleasure to serve you.

Introduction and Intended Use

It is a fully automatic digital blood pressure monitor designated for adults used at home. It enables very fast and reliable measurement of systolic and diastolic blood pressure as well as pulse through the oscillometric method. Our product has no use of mercury and the stethoscope, so the monitor is safe and simple to use.

Before using, please read this instruction manual carefully and then keep it in a safe place. Please consult your doctor for further questions on the subject of blood pressure and its measurement.

Remember...

- Only a healthcare professional is qualified to interpret blood pressure measurements correctly.
- · This device is NOT intended to replace regular medical checkups.
- It is recommended that your physician reviews your procedure for using this device.
- Blood pressure readings obtained by this device should be verified before
 prescribing or making adjustments to any medications used to control
 hypertension. Under no circumstances should YOU alter the dosages of any
 drugs prescribed by your doctor.

- · This monitor is intended for use by adults only. Consult with your physician before using this instrument on a child.
- In the case of irregular heartbeat (Arrhythmia), measurements taken with this instrument should only be evaluated after consultation with your doctor.
- Familiarize yourself with the section titled "Important Information on Blood Pressure and its Measurement". It contains important information on the dynamics of blood pressure readings and will help you understand blood pressure.

NOTE!

 Do not attempt to repair this device yourself. When a malfunction occurs, please refer to local distributor or the manufacturer for help.

Contraindication

Use of this instrument on patients under dialysis therapy or on anticoagulant, antiplatelets, or steroids could cause internal bleeding.

Warnings and Precautions



- · Warning: This device contains sensitive electronic components. Avoid strong electrical or electromagnetic fields in the direct vicinity of the device (e.g. mobile telephones, microwave ovens) during use. This can result in erratic measurements.
- · Warning: Do not use cuffs, AC adapters or batteries that do not meet the requirement. Please refer to Technical Specification section.
- · Warning: Do not use batteries and the AC adapter to provide power at the same

time.

- Warning: The product require an optimal environment condition for storing and operating in order to function normally. Please refer to Technical Specification section.
- Warning: The ac adapter which is intended to connect the USB interface of Blood Pressure Monitor has not been evaluated according to IEC 60601-1.
 The safety of the product shall be reappraised when the power is supplied by an ac adapter from other products.
- Warning: Remove the battery if the device is not likely to be used for a long time.
- Warning: Do not put your device near flammable gas.
- Cautions: To avoid any possibility of accidental strangulation, keep this unit away from children and do not drape tubing around your neck.
- Cautions: To avoid damaging the device, keep this unit away from children and pets.
- Cautions: The standard material used for the bladder and tubing is latex-free.
- Attention: The pulse display is net Suitable for checking the frequency of heart pacemakers!
- Attention: In case of irregular heartbeat, measurements made with this
 instrument should only be evaluated after consultation with your doctor.
- Attention: Dispose of the device, components and optional accessories according to applicable local regulations. Unlawful disposal may cause environmental pollution.

The user should contact the manufacturer for assistance, if needed, in setting up, using or maintaining the device.

2. Important Information on Blood Pressure and its Measurement

2.1. How does high or low blood pressure arise?

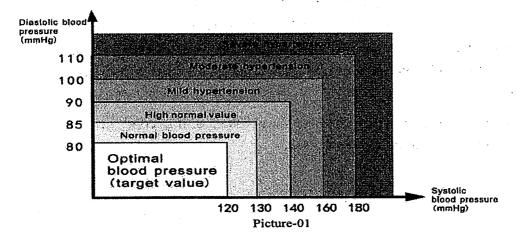
Your level of blood pressure is determined by the central nervous system and adjusts to a variety of situations through feedback. To adjust blood pressure, the strength and speed of the heart(Pulse), as well as the width of circulatory blood vessels is altered. Blood vessel width is controlled by fine muscles in the blood vessel walls.

Your level of arterial blood pressure changes periodically during heart activity: During the "blood ejection" (Systole) the value is the highest (systolic blood pressure value). At the end of the heart's "rest period" (Diastole) pressure is the lowest (diastolic blood pressure value).

Blood pressure values must lie within a certain range in order to prevent particular diseases.

2.2 What values are normal?

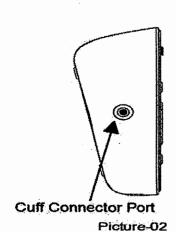
Please refer to the diagram below

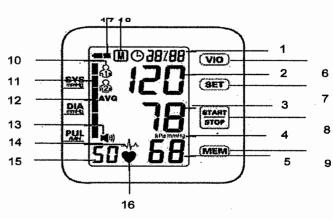


If you have a normal blood pressure, a regular self-check with your blood pressure monitor is recommended. You can detect any changes of your blood pressure early and react appropriately. If you are undergoing medical treatment to control your blood pressure, keep a record of values along with time of day and date.

Show these values to your physician. Never alter drug prescribed by your physician without consulting.

3. Components of Your Blood Pressure Monitor





Picture-03

The symbols on the Picture-03

1-Time & Date;

2-Systolic blood pressure;

3-Diastolicblood pressure;

4-unit;

5-Pulse rate;

6-Vioce Button:

7-Sett Button:

8-Start/Stop Button;

9-Memory Button;

10-USER Symbol;

11-WHO Blood Pressure Indication;

12-Average Reading;

13-Sound:

14- Irregular heartbeat symbol:

15-Memory number:

16-Heartbeat symbol (Flashes during

measurement);

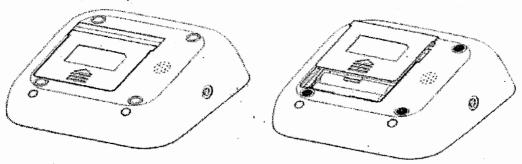
17-Low Battery;

18-Memory Reading

4. Using your Monitor for the First Time

4.1 Battery Installation

- 1. Remove the battery cover by pushing it in the direction shown on the cover.
- 2. Install 4 "AAA" batteries so the + (positive) and (negative) polarities match the polarities of the battery compartment. (Longlife alkaline batteries are recommended)



4.2 Using the AC Adapter

Warning: no battery should be installed while using the AC adapter

- 1. Use a USB cable to connect the monitor and the AC Adaptor.
- 2. The USB cable should work in any Android smartphoen (not Apple product).
- 3. Unplug the AC adaptor after measurements.

4.2 System Settings

- 1. Select User
 - Press SET button for at least 3 seconds, symbol should flashes on the display. Press MEM button to select user. Press SET button to confirm.
- 2. Setting Time & Date (Year, Month, Day, Hour, and the Minute) Follow part 1. Select User. After selecting the user, the year will flash on the display, press MEM button to increase the number by increments of one (press and hold the MEM button to increase faster). Press SET to set the current year, then the month flashes on the display.

Repeat the procedure above the setting the month, day, hour, and the minute.

Note: there is 2 mode for time 24-hours/12-hours, initial mode is 24-hours, press memory button to set the time mode, when you select 12-hours mode, time will display with AM and PM. Press Setting button to confirm.

- 3. Setting unit: This monitor can change units between mmhg and Kpa. After setting the time, PR OFF or PR ON will flash. Press MEM button to switch. PR OFF indicates mmHg unit. PR ON indicates kPa unit. Press SET button to confirm.
- 4. Setting Voice ON/OFF: Press Vioce button, SP OFF or SP ON will display, press again to select and confirm

4.3. Cuff tube connection

Insert the cuff tube into the opening on the left side of the monitor indicated by the drawing of a cuff

5. Measurement Procedure, Error Messages & Other Indication

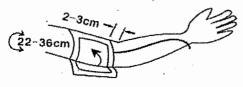
Note: You should always be seated and calm before and during measurement.

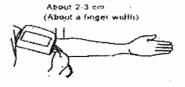
5.1. Before measurement:

- Do not eat, smoke or do any exercise before taking the measurement. These
 activities will affect the accuracy of the result. Relax for 10mins before
 measurement, and relax for 30mins after intensive exercise.
- Remove any garment from your upper arm. Do not roll up the sleeve, it may add pressure to your arm, and affect the result,
- Always measure on the same arm (normally left, close to your heart)

5.2. Applying the cuff

- 1. Apply the cuff to your left upper arm so the air tube is on the inside of your arm and aligned with your middle finger. The lower end of the cuff should be approximately 2cm above your elbow (about the width of two fingers)
- 2. Wrap the cuff firmly, allowing only one finger to fit between the cuff and your arm (about 1cm width).

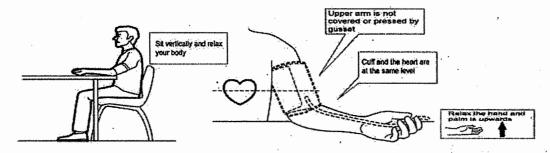




3. If your heart is on the right side, then apply the cuff to your right upper arm with procedures above.

5.3. Measurement Procedure

1. Sit on a chair, have your back straight. Put your lower arm flat on the table with your palm up. See the picture below for a better understanding.

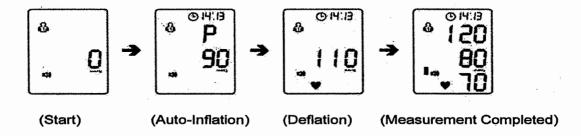


2. Press the START/STOP button to start the measurement. The cuff starts to inflate automatically. The

LCD display shows the increasing pressure level of the cuff. The monitor determines your ideal inflation level, and stops inflation when it reach that level. It then start to detects your pulse.

- 3. Cuff starts to deflate, and the number of pressure decreases.
- 4. When the measurement completes. Your blood pressure and pulse rate are displayed.
- 5. Pressure START/STOP button to turn the monitor off. It will turn of automatically after one minute.

Note: Keep your body from making any movement until the whole measurement is completed.



5.4. Memory Function

At the end of a measurement, this monitor automatically stores the result with date and time. The monitor stores 99 sets of measurement readings each for 2 users (User 1 and 2)

Review your result

- 1. Select the User, please refer to section 4.2 (page 6).
- 2. Press MEM button, your last measurement result displays on the screen. The first reading shown will be the average of your last 3 results. Press MEM button again, the monitor displays previous result from the recent to the older.
- 3. When measure more than 99 times, the No. 99 reading will be deleted and the new reading will be stored.

Delete Memory

- a. Delete a single reading
 - When the reading you want to delete shown displays, hold the SET button, "DEL should display on the upper right corner, press MEM button to delete.
- b. Delete entire readings

Hold the MEM button for at least 3 seconds (do not let loose), press SET button, then

displays, stop holding MEM and SET buttons together, all readings will be deleted.

5.5. Discontinue a Measurement

If it is necessary to interrupt a blood pressure measurement for any reason (e.g the patient feels unwell), the Start/Stop button can be pressed at any time. The device then immediately lowers the cuff pressure automatically.

5.6. Irregular Heartbeat Indication =

When the monitor detect irregular rhythms, the Irregular Heartbeat Symbol () will display on the lower left corner of the screen.

An irregular heartbeat rhythm is a rhythm that varies by less than 25% from the average rhythm or 25% more than the average rhythm detected while the monitor is measuring the systolic and diastolic blood pressure.

If the irregular heartbeat symbol displays, please consult your physician.

5.7. Error Messages

The following symbol will appear when the measurement is abnormal.

SYMBOL	CAUSE	CORRECTION	
No display appears	Weak battery or improper placement	Replace both batteries with new ones. Check the battery installation for proper placement of the battery polarities.	
Er P	Fail to inflate	Check the cuff if is leaking air or Insert the air plug securely	
Er 1	Air is leaking too fast or Pulse is too weak	Check the cuff and measure again	
Er 2	Signal interference	Remove anything that may interfere the pulse detection. (Cloth, Loud sound. Electromagnetic Wave. Etc)	
Er 3	Didn't get a normal result Apply the cuff and measure again		
ні	HI Cuff over inflated Repeat measurement again		

Trouble removal

Problem	Check	Cause and solutions
	Check the battery power	Replace new one
No power	Check the polarity position	Installation for proper placemen of the batteries polarities
	If the air plug inserted securely	Insert into the air socket tightly
No inflation	If the plug broken or leak	Change a new cuff
E- and star models	If the arm moved when inflate	The arm should remain still
Err and stop working	If chatting during measurement	Do not talk when measure
Cuff leak	If the cuff wrapped too loosely	Wrap the cuff tightly
Curr reak	If the cuff broken	Change a new cuff

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Please contact the distributor if you can't solve the problem, do not disassemble the unit byyourself!

6. Care and Maintenance

Wash hands after each time measurement

If one device is used by different patients, wash hands before and after each use

- a). Do not expose the device to either extreme temperatures, humidity, dust or direct sunlight.
- b). The cuff contains a sensitive air-tight bubble. Handle this cuff carefully and avoid all types of stress through twisting or buckling
- c). Clean the device with a soft, dry cloth. Do not use gas, thinners or similar solvents. Spots on the cuff can be removed carefully with a damp cloth and soapsuds.
- d). Handle the tube carefully. Do not pull on it. Do not allow the tubing to kink and keep it away from sharp edges
- e). Do not drop the monitor or treat it roughly in any way. Avoid strong vibrations. f). Never open the monitor This invalidates the manufacturers warranty
- g). Batteries and electronic instruments must be disposed of in accordance with the locally applicable regulations, not with domestic waste.

6.1. Accuracy test

Sensitive measuring devices must be checked for accuracy from time to time. We recommend a periodical inspection of your monitor by an authorized dealer every year. Please turn to local distributor or the manufacturer.

Caution: Change or modification without approval will void the user warranty. Do not disassemble or repair any component.

Caution: Do not submerge the monitor and the cuff in water.

Reminder: Remove the battery if the monitor will not be used for three months or longer.

7. Technical Specifications

Prefer users: Adult Display: LCD Digital Display Pressure

altitude:70KPa~ 106Kpa

Measuring method: Oscillometric method Pressure sensor: Capacitive

Measuring range: SYS/DIA: 0 to 280 mmHg Pulse: 40 to 199 per

minute; Pressure display range: 0-299 mmHg

Memory: Automatically stores the last 99 measurements for 2

users (total 180) Measuring resolution: 1 mmHg

Accuracy: Pressure within ± 3 mmHg Pulse ± 5 % of the reading Power source: $4 \times AAA$ batteries (AAA battery: 1.5V)

AC adapter 6 V DC 1000mA (Optional)

Cuff circumference: 22 - 32 cm (8.7" - 12.6")

Automatically power off: 60 seconds

Wight:290g(batteries and AC adapter is not included) Size: 100(W) x 112 (L) x 158(H)

mm

Accessories: 1×Blood Pressure Monitor, 1×Cuff, 1×Users manual, 1×storage bag Expected service life of the device and accessories: 7

years

Technical alterations reserved!

ENVIRONMENTAL REQUIREMENTS

OPERATING CONDITIONS

Temperature: 5°C to 40°C Humidity: 15%

to 80%

RH Pressure altitude: 70KPa~ 106Kpa

STORAGE AND SHIPPING CONDITIONS

Temperature: -20°C to 55°C Humidity: 10% to 93% RH Pressure altitude: 70KPa~

106Kpa

8. Warranty

Your blood pressure monitor is guaranteed for 2 years against manufacturers' defects for the original purchaser only, from date of purchase. The warranty does not apply to damage caused by improper handling, accidents (voltage spiking, earthquake, nature disasters, etc.), unprofessional use, not following the operating instructions or alterations made to the instrument by third parties.

Warranty only applies to the monitor and the cuff. The USB charging cable is not included.

There are no user serviceable parts inside. Batteries or damage from old batteries is not covered by the warranty.

Note: According to international standards, your monitor should be checked for accuracy every year.

*The return or repair should include the proof of purchase and the warranty card provided in the user manual. The proof of purchase is your purchase receipt with the date of purchase.

9. Warranty Card

Marie Carlos Car	Faults	Reasons	What is repaired
The First Repair			
	Date:	Repaired By:	
	Faults	Reasons	What is repaired
The Second Repair			
	Date:	Repaired By:	