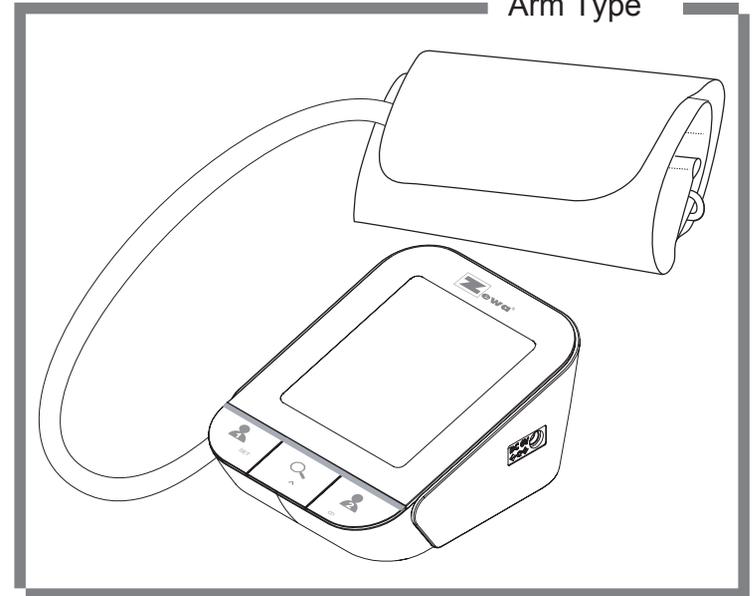




# User Manual

Blood Pressure Monitor UAM-910BT

Arm Type



Contains FCC ID: OU9AW8001-LS

Manufactured for Zewa, Inc.  
12960 Commerce Lakes Drive#29  
Fort Myers, FL 33913 USA  
[www.zewa.com](http://www.zewa.com)  
Toll Free Customer Service:  
1-888-993-3592  
[warranty@zewa.com](mailto:warranty@zewa.com)

- Thank you very much for selecting Zewa Blood Pressure Monitor UAM-910BT.
- Please do read the user manual carefully and thoroughly so as to ensure the safe usage of this product, and keep the manual well for further reference in case you have problems.

## Table of Contents

INTRODUCTION .....	2
• General Description	
• Indications for Use	
• Contraindications	
• Measurement Principle	
• Safety Information	
• LCD Display Signal	
• Monitor Components	
BEFORE YOU START .....	7
• The Choice of Power Supply	
• Installing and Replacing the Batteries	
• Setting Date, Time, and Measurement Unit	
• Pair-up the Blood Pressure Monitor with Your Bluetooth Device	
MEASUREMENT .....	11
• Tie the Cuff	
• Start the Measurement	
DATA MANAGEMENT .....	13
• Recall the Records	
• Delete the Records	
• Data Transmission	
INFORMATION FOR USER .....	15
• Tips for measurement	
• Maintenance	
ABOUT BLOOD PRESSURE .....	17
• What are systolic pressure and diastolic pressure?	
• What is the standard blood pressure classification?	
• Why my blood pressure varies even in one day?	
• Why the blood pressure I get from the hospital is different from home?	
• The result is different from one arm to the other	
TROUBLESHOOTING .....	19
SPECIFICATIONS .....	20
AUTHORIZED COMPONENTS .....	21
CONTACT INFORMATION .....	21
COMPLIED STANDARDS LIST .....	21
FCC STATEMENT .....	22
EMC GUIDANCE .....	22

## ♥ General Description

Thank you for selecting Zewa arm type Blood Pressure Monitor (UAM-910BT). The monitor features blood pressure measurement, pulse rate measurement and the result storage. The design provides you with two years of reliable service.

Reading taken by the UAM-910BT are equivalent to those obtained by a trained observer using the cuff and stethoscope auscultation method.

This manual contains important safety and care information, and provides step by step instruction for using the product.

Read the manual thoroughly before using the product.

Features:

- 92mm x 78mm Blue LCD display with white backlight
- Up to 60 pieces of record stored for each user
- Measure-during-inflating Technology

## ♥ Indications for Use

1. The Zewa Blood Pressure Monitor is a digital monitor intended for use in measuring blood pressure and heartbeat rate with arm circumference ranging from 22cm to 32 cm (about 9-12.6 inches).
2. The monitor detects the appearance of irregular heartbeats during measurement and gives a warning signal with readings.
3. It is intended for adult use in the home/domestic setting only.

## ♥ Contraindications

1. The device is contraindicated for any person who is connected to a wearable or implantable electronic device or instrument such as a pacemaker or defibrillator.
2. The device is not intended to be a diagnostic device. Contact your physician if hypertensive values are indicated.

## ♥ Measurement Principle

This product uses the Oscillometric Measuring method to detect blood pressure. Before every measurement, the unit establishes a "zero pressure" equivalent to the air pressure. Then it starts inflating the arm cuff, meanwhile, the unit detects pressure oscillations generated by beat-to-beat pulsatile, which is used to determine the systolic and diastolic pressure, and also pulse rate. The device also compares the longest and the shortest time intervals of detected pulse waves to mean time interval then calculates standard deviation. The device will display a warning signal with the reading to indicate the detection of irregular heartbeat when the difference of the time intervals over.

## ♥ Safety Information

The below signs might be in the user manual, labeling or other component. They are the requirement of standard and using.

	Symbol for "THE OPERATION GUIDE MUST BE READ"		Symbol for "TYPE BF APPLIED PARTS"
<b>SN</b>	Symbol for "SERIAL NUMBER"		Symbol for "ENVIRONMENT PROTECTION – Waste electrical products should not be disposed of with household waste. Please follow local guidelines."
	The Bluetooth Combination Mark		Symbol for "DIRECT CURRENT"
	Symbol for "MANUFACTURE DATE"		

## CAUTION

This device is intended for adult use only.

This device is intended for no-invasive measuring and monitoring of arterial blood pressure.

It is not intended for use on extremities other than the arm or for functions other than obtaining a blood pressure measurement.

Do not confuse self-monitoring with self-diagnosis. This unit allows you to monitor your blood pressure. Do not begin or end medical treatment based solely physician for treatment advice.

If you are taking medication, consult your physician to determine the most appropriate time to measure your blood pressure. Never change a prescribed medication without consulting your Physician.

When the device was used to measure patients who have common arrhythmias such as atrial or ventricular premature beats or atrial fibrillation, the best result may occur deviation. Please consult your physician about the result.

If the cuff pressure exceeds 40 kPa (300 mmHg), the unit will automatically deflate. Should the cuff not deflate when pressures exceeds 40 kPa (300 mmHg), detach the cuff from the arm and press the START/STOP button to stop inflation.

The equipment is not AP/AGP equipment and not suitable for use in the presence of a flammable anesthetic mixture with air with oxygen or nitrous oxide.

The operator shall not touch output of batteries and the patient simultaneously.

To avoid measurement errors, please avoid the condition of strong electromagnetic field radiated interference signal or electrical fast transient/burst signal.

The user must check that the equipment functions safely and see that it is in proper working condition before being used.

This device is contraindicated for any female who may be suspected of, or is pregnant. Besides provided inaccurate readings, the affects of this device on the fetus are unknown.

Manufacturer will make available on request circuit diagrams, component parts list etc.

This unit is not suitable for continuous monitoring during medical emergencies or operations.

Otherwise, the patient's arm and fingers will become anaesthetic, swollen and even purple due to a lack of blood.

Please use the device under the environment which was provided in the user manual. Otherwise, the performance and lifetime of the device will be impacted and reduced.

During using, the patient will contact with the cuff. The materials of the cuff have been tested and found to comply with requirements of ISO 10993-5:2009 and ISO 10993-10:2010. It will not cause any potential sensitization or irritation reaction.

Please use ACCESSORIES and detachable partes specified/ authorised by MANUFACTURE.

Otherwise, it may cause damage to the unit or danger to the user/patients.

The device doesn't need to be calibrated in two years of reliable service.

Please dispose of ACCESSORIES, detachable parts, and the ME EQUIPMENT according to the local guidelines.

If you have any problems with this device, such as setting up, maintaining or using, please contact with SERVICE PERSONNEL of Transtek. Don't open or repair the device by yourself.

Please report to Transtek if any unexpected operation or events occur.

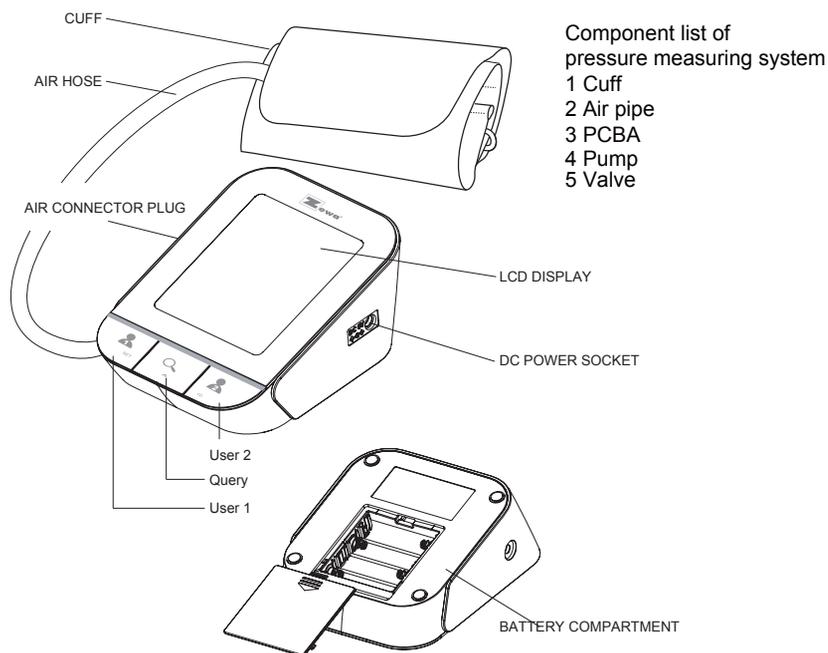
Please use the soft cloth to clean the whole unit. Don't use any abrasive or volatile cleaners.

## ♥ LCD Display Signal



SYMBOL	DESCRIPTION	EXPLANATION
<b>SYS</b>	Systolic Blood Pressure	High blood pressure
<b>DIA</b>	Diastolic Blood Pressure	Low blood pressure
<b>Pul/min</b>	Pulse per minute	Beats per minute, BPM
	User 1	Start measurement for user 1, save and transmit the measuring result
	User 2	Start measurement for user 2, save and transmit the measuring result
	Shocking reminder	Shocking will result in inaccurate
	Low Battery	Low battery and please replace the batteries.
<b>mmHg</b>	mmHg	Measurement unit of blood pressure (1mmHg=0.133kPa)
<b>kPa</b>	kPa	Measurement unit of blood pressure (1kPa=7.5mmHg)
	Memory	Display the serial number of the measurement
	Current Time	Month/Day (Hour:Minute)
	Deflating	Exhaust the air in the cuff
	Arrhythmia	Irregular Heartbeat
	Heartbeat	Heartbeat detection during the measurement
	Data pending to transmit	Measurement data stored in the equipment
	Data transmitting	Data is transmitting
	The average value	The average value of latest three records

## ♥ Monitor Components



## ♥ List

1. Blood Pressure Monitor (UAM-910BT)



3. 4×AA batteries



2. Cuff (Type BF applied part) (22-32cm)



4. User manual

## ♥ The Choice of Power Supply

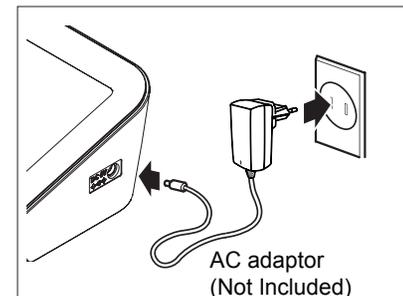
1. Battery powered mode:

6VDC 4×AA batteries

2. AC adaptor powered mode:

100-240V~, 50-60HZ, 400mA  
(Not Included)

Please unplug the adaptor when not in use.



Note:

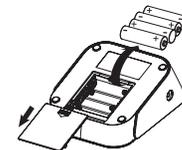
The adaptor interface is located on the right side of the monitor. Place NO obstacles on the right side for easy pull-off adaptor.

### CAUTION

In order to achieve the best performance and protect you monitor, please use the authorized / specified battery and power adaptor.

## ♥ Installing and Replacing the Batteries

1. Open the battery door.
2. Insert the batteries according to the polarity indications.
3. Close the battery door.



Replace the batteries under following circumstances:

- displays on the LCD.
- The LCD display dims.
- When powering on the monitor, the LCD doesn't light up.

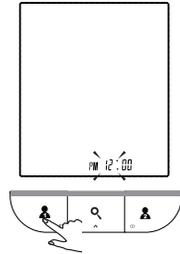
### CAUTION

- Remove batteries if the device is not likely to be used for some time.
- Worn batteries are harmful to the environment. Do not dispose with daily garbage.
- Remove the old batteries from the device following your local recycling guidelines.
- Do not dispose of batteries in fire. Batteries may explode or leak.

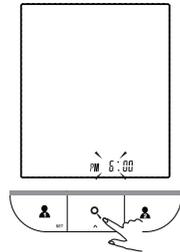
## ♥ Setting Date, Time and Measurement Unit

Please proceed to time setting before your initial use so as to ensure each piece of record are labled with a time stamp.  
(The setting range of year is 2012-2052. Time format: 12H)

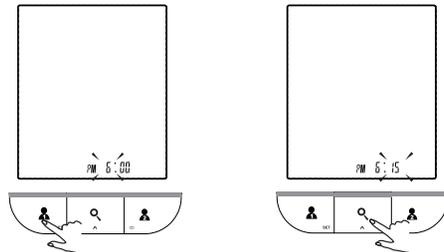
1. When the monitor is OFF, press and hold "User 1" button to enter Time Setting Mode.



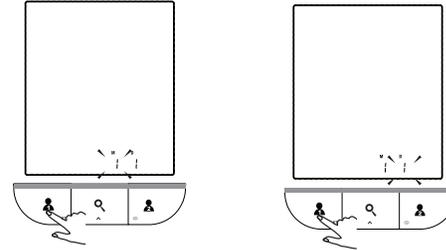
2. As pictured in the right, the blinking numeral representing [HOUR]. Press "Query" button to change the numeral. Each press will increase the numeral by one in a cycling manner.



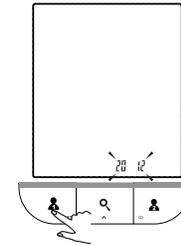
3. Press "User 1" button again to confirm [HOUR]. Then the numeral representing [MINUTE] blinks.



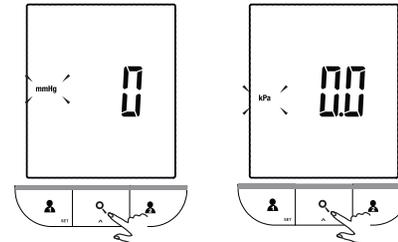
4. Repeat step 2 and 3 to confirm [MONTH] and [DAY].



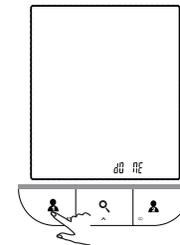
5. Repeat step 2 and 3 to confirm [YEAR].



6. Repeat step 2 and 3 to confirm the measurement unit.



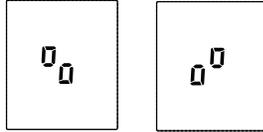
7. After confirming the measurement unit, the LCD will display "dONE" and then shut off.



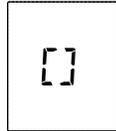
## ♥ Pair-up the Blood Pressure Monitor with Your Bluetooth Device

1. Turn on Bluetooth and the Zewa app. Make sure both are ON when pair-up is proceeding.

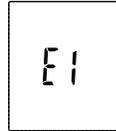
2. When the monitor is OFF, press and hold the  button (User 2) to start pair-up. The symbol  and the symbol  will be shown on the LCD alternatively, indicating pair-up is proceeding.



If **SUCCEED**, symbol  will be shown on the LCD.



If **FAIL**, symbol  will be shown on the LCD.



3. The monitor will shut off after Pair-up process is complete.

**Bluetooth Module No.:** AW8001  
**RF Frequency Range:** 2402 MHz to 2480 MHz  
**Output Power Range:** 0 dBm  
**Supply Voltage:** 1.8-3.6 V  
**Transmitting Distance:** 10 meters

### CAUTION

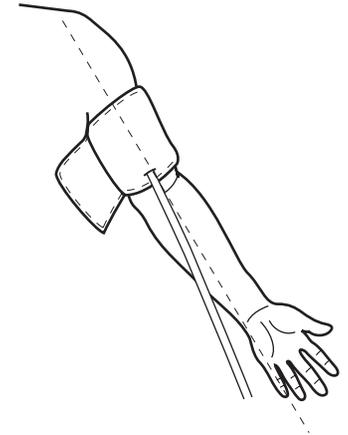
- Interference may occur in the vicinity of equipment marked with the following symbol . And UAM-910BT may interfering vicinity electrical equipment.
- Sensitive people, including pregnant women pre-eclamptic and those who implanted medical electronic instruments, should avoid using the unit whenever possible.
- Keep the monitor at least 20 centimeters away from the human body (especially the head) when the data transmission is proceeding after measurement.
- To enable the data transmission function, this product should be paired to Bluetooth end at 2.4 GHz.

#### How to mitigate possible interference?

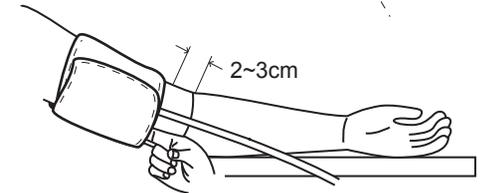
1. The range between the device and BT end should be reasonably close, from 1 meter to 10 meters. Please ensure no obstacles between the device and BT end so as to obtain quality connection and to lower the RF output range.
2. To avoid interference, other electronic devices (particularly those with wireless transmission / Transmitter) should be kept at least 1 meter away from the monitor.

## ♥ Tie the Cuff

1. Tie the cuff on your upper arm, the position the tube off-center toward the inner side of arm in line with the little finger.

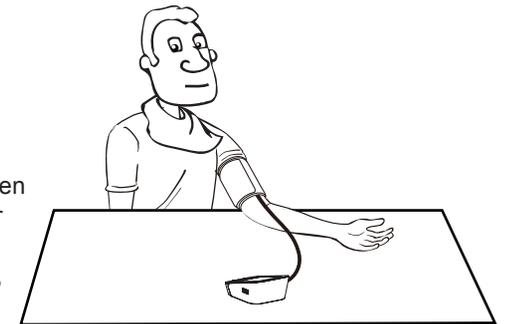


2. The cuff should be snug but not too tight. You should be able to insert one finger between the cuff and your arm.



3. Sit comfortably with your left arm resting on a flat surface.

- Resting for 5 minutes before measuring.
- Wait at least 3 minutes between measurements. This allows your blood circulation to recover.
- For a meaningful comparison, try to measure under similar conditions. For example, take daily measurements at approximately the same time, on the same arm, or as directed by a physician.

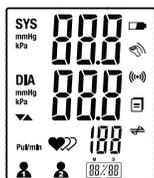


## ♥ Start Measurement

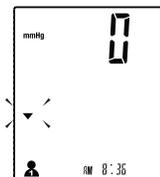
When the monitor is off, press the User 1 button to turn on the monitor and it will finish the whole measurement, and then save the measurement data for User 1. The same to User 2.

1. When the monitor is off, press the User 1 button to turn on the monitor.

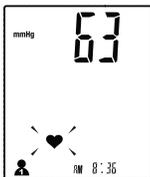
LCD display



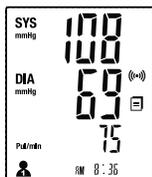
Adjust to zero.



Inflating and measuring.



Display and save the results. The data transmission will proceed.



2. Press the User 1 button to power off, otherwise it will turn off with one minute.



Tips:

- A. When finish the whole measurement, press another user button, the blood monitor will begin measuring again.
- B. Maximum 60 records are both for user 1 and user 2.

## ♥ Recall the Records

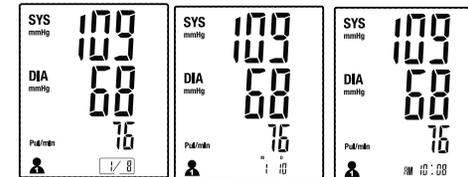
1. When the monitor is OFF, press “Query” button to access the memory. It will display the average value of the latest three records for the user ID which completes the last measurement first.



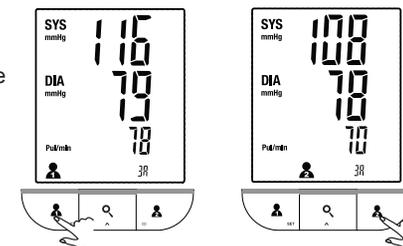
2. Press “Query” button to rotate the history records.



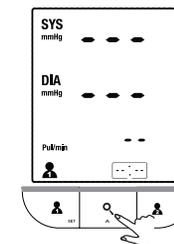
\* The record number, measuring date and measuring time will be displayed alternatively.



3. When in the memory mode, press the User 1 button to recall the measurement history of User 1, or press the User 2 button to recall the measurement history of User 2.



4. When no history stored for the specific user in the monitor, press “Query” button and the LCD will display as pictured to the right.

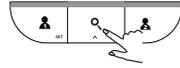


### CAUTION

The most recent record (1) is shown first. Each new measurement is assigned to the first (1) record. All other records are pushed back one digit (e.g., 2 becomes 3, and so on), and the last record (60) is dropped from the list.

## ♥ Delete the Records

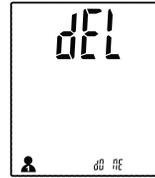
1. When under the query mode, press and hold "Query" button for 3 seconds to clear the memory.



2. When the LCD display "dEL ALL", press "Query" button to confirm.



3. The LCD will display "dEL dOnE" and then shut off.



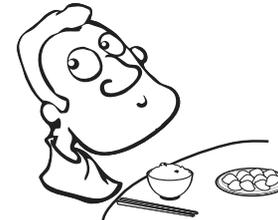
4. If you wish to stop clearing the memory, you may press the other button, rather than "Query" button to turn off the monitor, or wait until the monitor shuts off.

## ♥ Data Transmission

- Once the UAM-910BT is successful paired-up with your smartphone, please open the Zewa App and turn on your Bluetooth. Keep smartphone and scale in transmission distance. Take a new blood pressure measurement. Once the measurement is finished, the data is automatically transferred to the app.
- The symbol  will disappear after successful data transmission, and you may check your personal health data stored in your smartphone.
- If the data transmission fails, the symbol  will remain. The pending measurement data will be transmitted to your smartphone when next measurement is complete.

## ♥ Tips for Measurement

It can cause inaccuracy if the measurement is taken in the following circumstances.



Within 1 hour  
after dinner or drinking



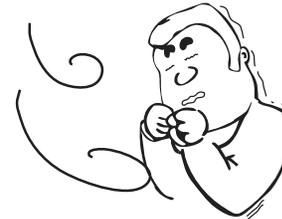
Immediate measurement  
after tea, coffee, smoking



Within 20 minutes  
after taking a bath



When talking or moving your fingers



In a very cold environment

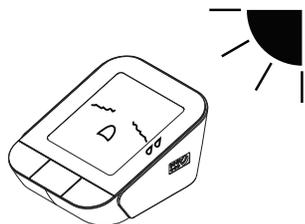


When you want to discharge urine



## ♥ Maintenance

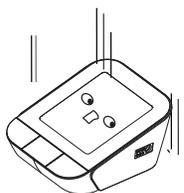
To obtain the best performance, please follow below instructions.



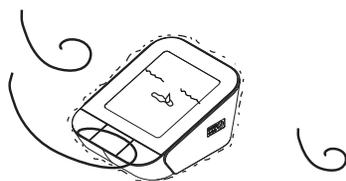
Put in a dry place and avoid the sunshine



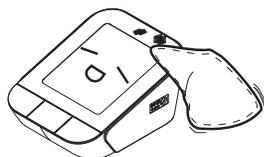
Avoid immersing it in the water. Clean it with a dry cloth in case.



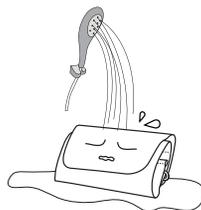
Avoid shaking and collision



Avoid dusty environment and unstable temperature surrounding.



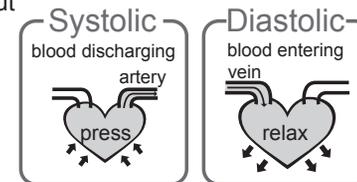
Use the slightly damp cloth to remove the dirt.



Avoid washing the cuff.

## ♥ What are systolic pressure and diastolic pressure?

When ventricles contract and pump blood out of the heart, the blood pressure reaches its maximum value in the cycle, which is called systolic pressure. When the ventricles relax, the blood pressure reaches its minimum value in the cycle, which is called diastolic pressure.



## ♥ What is the standard blood pressure classification?

The chart on the right illustrates the blood pressure classification mode by American Heart Association (AHA).

This chart reflects blood pressure categories defined by American Heart Association.

Blood Pressure Category	Systolic mmHg (upper#)		Diastolic mmHg (lower#)
Normal	less than 120	and	less than 80
Prehypertension	120-139	or	80-89
High Blood Pressure (Hypertension) Stage 1	140-159	or	90-99
High Blood Pressure (Hypertension) Stage 2	160 or higher	or	100 or higher
Hypertensive Crisis (Emergency care needed)	Higher than 180	or	Higher than 110

The AHA recommends the following guidelines for upper limit of normal blood pressure readings at home.

### AHA Home Guideline for Upper Limit of Normal BP

Systolic Blood Pressure	135 mm Hg
Diastolic Blood Pressure	85 mm Hg

## ♥ Irregular Heartbeat Detector

This Blood Pressure Monitor is equipped with an intelligent function of Irregular Heartbeat (IHB) Detector. During each measurement, this equipment records the heartbeat intervals and works out the standard deviation. If the calculated value is larger than or equal to 15, this equipment will light up the IHB symbol on the screen when displaying the measuring result.



### CAUTION

The appearance of the IHB icon indicates that a pulse irregularity consistent with an irregular heartbeat was detected during measurement. Usually this is NOT a cause for concern. However, if the symbol appears often, we recommend you seek medical advice. Please note that the device does not replace a cardiac examination, but serves to detect pulse irregularities at an early stage.

### ♥ Why my blood pressure varies even in one day?

1. Individual blood pressure varies every in one day, it also affected by the way you tie your cuff and your measurement position, so please take the measurement at the same condition.
2. The varies of the pressure is greater if the person take medicine.
3. Waiting at least 3 minutes for another measurement.



### ♥ Why the blood pressure I get from the hospital is different from home?

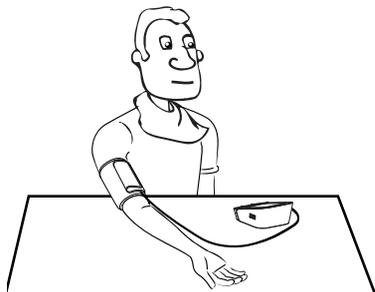
The blood pressure is different even during 24 hour because of the weather, emotion, exercise etc, specially the “white coat” in hospital which makes the results are higher than the ones at home.

When measuring at home, please check:

- If the cuff is tied properly.
- If the cuff is too tight or too loose.
- If the cuff is tied on the upper arm.
- If you feel anxious pressured.
- You had better take deep breath 2-3 times before beginning.
- Advice: adjust yourself for 4-5 minutes until you calm down.

### ♥ The result is different from one arm to the other.

It is ok for both arms, but there will be some different results for different arm, so suggest you measure the same arm every time.



This section includes a list of error messages and frequently asked questions for problems you may encounter with your blood pressure monitor. If the product is not operating as you think it should, check here before fit servicing.

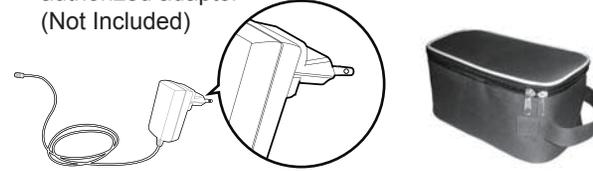
PROBLEM	SYMPTOM	CHECK THIS	REMEDY
<b>No power</b>	Display will not light up.	Batteries are exhausted.	Replace with new batteries
		Batteries are inserted incorrectly.	Insert the batteries correctly
		AC adaptor is inserted incorrectly.	Insert the AC adaptor tightly
<b>Low batteries</b>	Display is dim or shows 	Batteries are low.	Replace with new batteries
<b>Error message</b>	E 1 shows	Communication error	Check if the APP is on, operate and send the data again.
	E 3 shows	The cuff is not secure.	Readjust the cuff and relax for a moment and then measure again.
	E10 or E11 shows	The monitor detected motion while measuring.	movement can affect the measurement. Relax for a moment and then measure again.
	E20 shows	The measurement process does not detect the pulse signal.	Loosen the clothing on the arm and then measure again
	E21 shows	The treatment of the measurement failed.	Relax for a moment and then measure again.
	EEx, shows on the display.	A calibration error occurred.	Retake the measurement. If the problem persists, contact the retailer or our customer service department for further assistance. Refer to the warranty for contact information and return instructions.

<b>Power supply</b>	Battery powered mode: 6VDC 4×AA-size batteries AC adaptor powered mode: 100-240 V~, 50-60 Hz, 400 mA (Not Included)
<b>Display mode</b>	Blue LCD with white backlight V.A. = 78mm x 92mm
<b>Measurement mode</b>	Oscillographic testing mode
<b>Measurement range</b>	Pressure: 0-40kpa(0~300mmHg) pulse value:(40-199)times/minute
<b>Accuracy</b>	Pressure: 5℃-40℃ within ±0.4 kPa (3 mm Hg) Pulse Value: ±5%
<b>Working condition</b>	Temperature:5℃-40℃ Relative Humidity ≤85%RH Atmospheric Pressure: 86-106 kPa
<b>Storage &amp; transportation condition</b>	Temperature:-20℃-60℃ Relative Humidity 10%-93%RH Atmospheric Pressure: 50-106 kPa
<b>Measurement perimeter of the upper arm</b>	About 22cm - 32cm
<b>Weight</b>	Approx.499g(Excluding the dry cells)
<b>External dimensions</b>	Approx.120×160×69mm
<b>Attachment</b>	4×AA batteries,user manual, storage bag
<b>Mode of operation</b>	Continuous operation
<b>Degree of protection</b>	Type BF applied part
<b>Device Classification</b>	Battery Powered Mode: Internally Powered ME Equipment AC Adaptor Powered Mode: Class II ME Equipment
<b>IP Classification</b>	IP22
<b>Software Version</b>	V01

20 WARNING: No modification of this equipment is allowed.

## ♥ Authorized Components

1. Please use the ZEWA authorized adaptor (Not Included)
- 2.Storage bag.



**Adaptor**  
**Type:** UE08WCP-060100SPA  
**Input:** 100-240V, 50-60Hz,400mA  
**Output:** 6V  $\bar{\bar{}}$  1A  
 (Expected Service Life: 50,000 Hours)

## ♥ Contact Information

For more information about our products, please visit [www.zewa.com](http://www.zewa.com). you can get customer service, usual problems and customer download, Zewa will serve you anytime.

Manufactured for Zewa, Inc.  
 12960 Commerce Lakes Drive#29  
 Fort Myers, FL 33913 USA  
[www.zewa.com](http://www.zewa.com)  
 Toll Free Customer Service:  
 1-888-993-3592  
[warranty@zewa.com](mailto:warranty@zewa.com)

## ♥ Complied Standards List

<b>Risk Management</b>	ISO 14971:2007
<b>Labeling</b>	EN 980:2008
<b>User Manual</b>	EN 1041:2008
<b>General Requirements for Safety</b>	IEC 60601-1:2005/A1:2012
<b>Performance and Clinical Requirements</b>	ANSI/AAMI/IEC 80601-2-30:2009 ANSI/AAMI/ISO 81060-2:2009
<b>Electromagnetic Compatibility</b>	IEC 60601-1-2:2007

## ♥ FCC Statement

Note:

POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for U.S.A. only)

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the product does cause harmful interference to radio or television reception, which can be determined by turning the product on / off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and the receiver.
- Connect the product into an outlet on a circuit which is different from what the receiver is connected to.
- Consult the dealer or an experienced radio / TV technician for help.

## ♥ EMC Guidance

1. MEDICAL ELECTRICAL EQUIPMENT needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the ACCOMPANYING DOCUMENTS

2. Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies can affect this equipment and should be kept at least a distance  $d=3, 3m$  away from the equipment.

(Note: As indicated in Table 6 of IEC 60601-1-2:2007 for ME EQUIPMENT, a typical cell phone with a maximum output power of 2 W yields  $d=3, 3m$  at an IMMUNITY LEVEL of 3V/m)