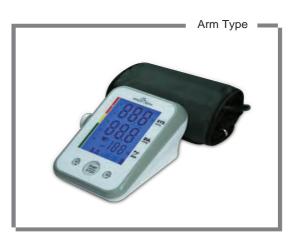
version:1.0



# **User Manual**

Blood Pressure Monitor EBP-095



# Sealthcare-Manager.com EASY AT HOME MEDICAL,LLC

EASY AT HOME MEDICAL,LLC
Any questions,please call toll-free:
1-855-822-6999 M-F 9 a.m.-5 p.m. CST
E-MAIL:service@healthcare-manager.com

- Thank you very much for selecting easy tione Blood Pressure Monitor EBP-095.
- To use the monitor correctly and safely, please read the manual thoroughly.
- Please keep this manual in order to reference in future.

CATALOGUE CATALOGUE **Table of Contents** INTRODUCTION... General Description Safety Information LCD Display Signal Monitor Components BEFORE YOU START.....
 The Choice of Power Supply . Installing and Replacing the Batteries Setting Date, Time and Measurement Unit MEASUREMENT... · Tie the Cuff · Start the Measurement DATA MANAGEMENT.. · Recall the Records · Delete the Records INFORMATION FOR USER... · Tips for measurement Maintenances ABOUT BLOOD PRESSURE.... ..16 · What are systolic pressure and diastolic pressure? What is the standard blood pressure classification? Why does my blood pressure fluctuate throughout the day? Why do I get a different blood pressure at home compared to the hospital?? Is the result the same if measuring on the right arm? TROUBLESHOOTING.. ..18 SPECIFICATIONS.. .19 AUTHORIZED COMPONENTS .... .20 CONTACT INFORMATION....... COMPLIED STANDARDS LIST... .20 ..21 FCC STATEMENT... ..21 EMC GUIDANCE. ..22 1

#### INTRODUCTION

### **♥** General Description

Thank you for selecting easy tome arm type blood pressure Monitor (EBP-095). The monitor features blood pressure measurement, pulse rate measurement and the result storage. The design provides you with two years of reliable service.

Readings taken by the EBP-095 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 instructions for using the product.

Read the manual thoroughly before using the product.

Features:

- · 60mm\*80mm Digital LCD display
- · Maximum 60 records
- · Measuring during inflation technology

### ♥ Safety Information

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

_				
	<b>③</b>	Symbol for "THE OPERATION GUIDE MUST BE READ"	Ж	Symbol for "TYPE B APPLIED PARTS"
	4	Symbol for "MANUFACTURER"	15	Symbol for "ENVIRONMENT PROTECTION – Electrical waste products should not be disposed of with household waste. Please follow local guidelines."
1	SN	Symbol for "SERIAL NUMBER"	===	Symbol for "DIRECT CURRENT"
-	$\Box$	For indoor use only		Symbol for "Class II Equipment"
[ ]	F1	T1A/250V Φ3.6*10CCC	~	Symbol for "MANUFACTURE DATE"



This device is intended for adult use only.

This device is intended for non-invasive measuring and monitoring of arterial blood pressure. It is not intended for use on extremities other than the wrist 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 without asking a 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 absolution.

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.

To avoid measurement errors, carefully read this manual before using the product. The equipment is not AP/APG equipment and not suitable for use in the presence of a flammable anesthetic mixture with air of with oxygen or nitrous oxide.

The operator shall not touch output of batteries/AC adapter and the patient simultaneously. Do not wind air tube in the neck.

Please use ACCESSORIES and detachable partes specified/ authorised by MANUFACTURE. Otherwise, it may cause damage to the unit or danger to the user/patients.

Please note that Luer lock connectors are not used on the product and please DO NOT change any provided connectors.

Manufacturer will make available on request circuit diagrams, component parts list etc. WARNING: No modifications of this equipment is allowed.

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 ack 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 use, the patient will be in 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 alergic reaction or contact injury.

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

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

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 with deviation.

This device may provide contradictory results for any female subject who may be suspected of, or is pregnant. Besides providing inaccurate readings, the effects of this device on the fetus are unknown.

The device has been evaluated clinically using manual cuff/stethoscope auscultation as the reference. Blood pressure measurements determined with this device are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultatory method, within the limits prescribed by the American National Standard, Manual, electronic, or automated sphyamomanometers."

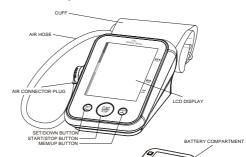
If you have any problems with this device, such as setting up, maintaining or using, please contact the SERVICE PERSONNEL of easy (1) from a Don't open or repair the device by yourself. Please report to easy from if any unexpected operation or events occur.

# **▼ LCD Display Signal**



SYMBOL	DESCRIPTION	EXPLANATION
SYS	Systolic blood pressure	High pressure result
DIA	Diastolic blood pressure	Low pressure result
Pul/min	Pulse	Pulse/minute
	Deflating	CUFF air is exhausting of deflating
ям(88./88)	Current Time	Time(year:month:day:hour:minute)
w(88/88)	Memory	If "MEM" shows, the displayed measurement values is from the memory.
κPa mmHg	Measurement unit	Measurement Unit of the blood pressure (1mmHg=0.133kPa) (1kPa=7.5mmHg)
<u> </u>	Low battery	Batteries are low and need to be replaced
•	Irregular heartbeat	Irregular heartbeat Dection
	Grade	The grade of the blood pressure
•	Heartbeat	Heartbeat detection during measurement
411	Shocking reminder	Shocking will result in inaccurate
*	User 1	Start measurement for user 1 and save the measuring result automatically
<u> </u>	User 2	Start measurement for user 2 and save the measuring result automatically
( ०	Data Enquiry Mode	Recall the records

# **♥** Monitor Components



Component list of pressure measuring system

- 1 Cuff 2 Air pipe 3 PCBA
- 4 Pump 5 Valve

## ▼ List



4. User manual

1. Blood Pressure Monitor 2. Cuff (22cm-32cm) (EBP-095) (8¾-12½) (Type B applied part)



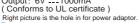
3. 4\*AA Batteries



#### BEFORE YOU START

# **▼** The Choice of Power Supply

- 1.Battery powered mode: 6VDC 4\*AA batteries
- 2.This unit has an optional AC Power adaptor which is available as an accessory.Only use AC adaptor with below specification (not included). Input: 100-240VAC 50/60Hz 0.3A Max Output: 6V ==1000mA



In order to get the best effect and protect your monitor, please use the right battery and special power adaptor.

# **▼ Installing and Replacing the Batteries**

- 1. Slide off the battery cover.
- Install the batteries by matching the correct polarity, as shown.
- 3. Replace the cover.

CAUTION -



Replace the batteries whenever the below happen

- •The Lo+ shows
- The display dims
- The display does not light up

## - 🚱 CAUTION -

- Remove batteries if the device is not likely to be used for some time.
- The old batteries are harmful to the environment, so please do not dispose with other daily trash.
- $\bullet$  Remove the old batteries from the device and follow your local recycling guidelines.
- Do not dispose of batteries in fire. Batteries may explode or leak.

# ♥ Setting Date, Time and Measurement Unit

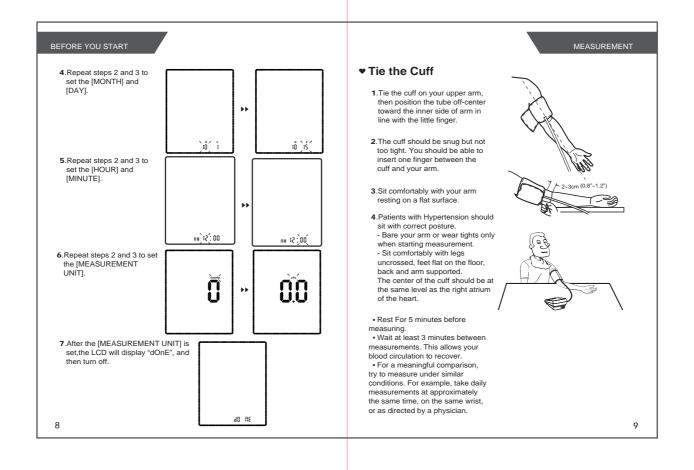
It is important to set the clock before using your blood pressure monitor, so that a time stamp can be assigned to each record that is stored in the memory. (year :2011—2050 time format:12 H)

- 1. When the unit is off, hold "SET" for 3 seconds to enter the mode for year setting.
- 2.Press the "MEM" to change the [YEAR]. Each press will increase the numeral by one in a cycling manner.
- 3. When you get the right year, press "SET" to confirm, and it will divert to the [MONTH] setting.



)20 IY

\"\" |



#### **♥** Start the Measurement

Before you start the measurement, please press the SET button to choose either User 1 or User 2 as the User ID. When the desired User ID is shown, press START/STOP button to confirm the User ID.

1.After selecting the user, press the "START/STOP" to start measurement, and it will finish the whole measurement for the selected user. Take User 1 for example.

LCD display



Inflating and measuring.



2.Press "SET", "MEM" or "START/STOP" button to power off, otherwise it will turn off within 1 minute. Adjust the zero .



Display and save the results. The corresponding backlight shows according to the grade of blood pressure.



 When the monitor is off, please press the "MEM" to show the average value of the latest three records.

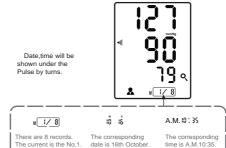
♥ Recall the Records



DATA MANAGEMENT



2. Press MEM button or SET button to rotate the records. Up to 60 records will be stored under each user ID.



10

3. If you want to check another user's records, press START/STOP button to turn off the monitor when it is in the memory recall mode. Then press SET button, the user icon will be shown, press "SET" button to select the desired user ID. press "MEM" button to review the selected user's records.



4. Press the START/STOP button to turn off the monitor. Otherwise, the monitor will shut off within 1 minute after last operation.

# - 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

If you did not get the correct measurement, you can delete all results for the selected user by the following steps below.

1.Hold "MEM" for 3 seconds when the monitor is in the memory mode, then "dEL ALL" will show.





2.Press "MEM" to confirm deleting and the monitor will turn





3.If you don't want to delete the records, press "START/STOP" button or "SET" button to escape.







INFORMATION FOR USER

#### INFORMATION FOR USER

# **▼** Tips for Measurement

Measurements may be inaccurate if taken in the following circumstances.



wait at least 1 hour after dinner or drinking



Wait at least 20 minutes after taking a bath



In a very cold environment



Immediate measurement after tea, coffee, smoking



When talking or moving your fingers



When you want to discharge urine

#### **▼** Maintenance

In order to get the best performance, please follow the instructions below.



Put in a dry place and avoid the sunshine



Avoid intense shaking and collisions



Use wet cloths to remove dirt



Avoid touching water, clean it with a dry cloth in case.



Avoid dusty and unstable temperature environment



Avoid washing the cuff

#### ABOUT BLOOD PRESSURE

#### ♥ 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 is the standard blood pressure classification published by American Heart Association (AHA).

# AHA Home Guideline for Upper Limit of Normal BF

SYS	135 mm Hg
DIA	85 mm Hg

	This chart reflects blood pressure categories defined by American Heart Associa						
			Systolic mmHg (upper#)		Diastolic mmHg (lower#)		
	Blue Normal		less than 120	and	less than 80		
	Blue	Prehypertension	120-139	or	80-89		
•	Yellow	High Blood Pressure (Hypertension) Stage 1	140-159	or	90-99		
	Red	High Blood Pressure (Hypertension) Stage 2	160 or higher	or	100 or higher		
	Red	Hypertensive Crisis (Emergency care needed)	Higher than 180	or	Higher than 110		

Only a physician can tell your normal BP range. Please contact a physician if your measuring result falls out of the range. Please note that only a physician can tell whether your blood pressure value has

#### ♥ Irregular Heartbeat Detector

An irregular heartbeat is detected when a heartbeat rhythm varies while the unit is measuring the systolic and diastolic blood pressure. 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,the irregular heartbeat symbol appears on the symbol when the measurement results are displayed.



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.

#### ABOUT BLOOD PRESSURE

# ♥ Why does my blood pressure fluctuate throughout the day?

1. Individual blood pressure varies multiple times everyday. It is also affected by the way you tie your cuff and your measurement position, so please take the measurement under the same conditions.

2.If the person takes medicine, the pressure will vary more.

3. Wait at least 3 minutes for another measurement.

# ♥ Why do I get a different blood pressure at home compared to the hospital? your blood pressure at home:

The blood pressure is different even throughout the day due to weather, emotion, exercise etc, Also, there is the "white coat" effect, which means blood pressure usually increases in clinical

# ♥ Is the result the same if measuring on the right arm?

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



What you need to pay attention to when you measure

If the cuff is too tight or too loose. If the cuff is tied on the upper arm. If you feel anxious.

Taking 2-3 deep breaths before beginning will be better for measuring. Advice: Relax yourself for 4-5 minutes until you calm down.



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

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
	D: 1 : E	Batteries are exhausted.	Replace with new batteries
No power	Display is dim or will not light up.	Batteries are inserted incorrectly.	Insert the batteries correctly
		AC adaptor is inserted incorrectly.	Insert the AC adaptor tightly
Low batteries Show on the display Batteries are low.		Replace with new batteries	
	E 1 shows	The cuff is not secure.	Refasten the cuff and then measure again.
	E 2 shows	The cuff is very tight	Refasten the cuff and then measure again.
	E 3 shows	The pressure of the cuff is excess.	Relax for a moment and then measure again.
Error massage	E 10 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.
	EExx,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.

SPECIFICATIONS

Power supply	Battery powered mode: 6VDC 4*AA batteries AC adaptor powered mode: (INPUT: 100-240VAC 50/60Hz 0.3A Max OUTPUT: 6V-== 1000mA)(Not Included)		
Display mode	Digital LCD V.A.60mm*80mm (2.36"*3.15")		
Measurement mode	Oscillographic testing mode		
Measurement range	Pressure: 0mmHg~300mmHg(0kPa-40kPa) pulse value:(40-199)times/minute		
Accuracy	Pressure: 5°C-40°C(41°F-104°F)within±3mmHg(0.4kPa) pulse value:±5%		
Normal working condition	Temperature:5℃ to 40℃(41˚F to 104˚F) Relative humidity: ≤85%RH Atmospheric pressure: 86kPa to 106kPa		
Storage & transportation condition	Temperature:-20 C-60 C (-4°F to 140°F) Relative Humidity: 10%RH-93%RH Atmospheric Pressure: 50kPa-106 kPa		
Measurement perimeter of the upper arm	About 22cm~32cm (8¼·12½)		
Net Weight	Approx.388g(13.69oz)(Excluding the batteries)		
External dimensions	Approx.102mm*143mm*73mm(4.02"*5.63"*2.87")		
Attachment	4*AA batteries, one storage bag, user manual		
Mode of operation	Continuous operation		
Degree of protection	Type B applied part		
Protection against ingress of water	IPX0		
Software Version	V01		

#### AUTHORIZED COMPONENTS

**COMPLIED STANDARDS LIST** 

# **♥** Authorized Components

please use the easy@ fome
 authorized adapter. (Not Included)

2.Storage bag.





#### Adapter

Input: 100-240VAC 50/60Hz 0.3A Max Output: 6V --- 1000mA ( Conforms to UL certificate )

# ♥ Contact Information

For more information about our products, please visit ./@althcare-Manager.com, or call @ay@~ome Customer 1-866-822-6999 M-F 9 a.m.-5 p.m.CST.usual problems and customer download, @ay@~ome will serve you anytime.

Risk management	ISO 14971:2007
Labeling	EN 980:2008
User manual	EN 1041: 2008
General Requirements for Safety	IEC 60601-1: 2005
Electromagnetic compatibility	IEC 60601-1-2:2007
Non-invasive Sphygmomanometers General Requirements	ASSI/AAMI SP10:2002/A1:2003/A2:2006/ (R)2008
Software Lifetime	EN 62304:2006/AC:2008

## **▼ FCC Statement**

**♥** Complied Standards List

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

EMC GUIDANCE

# **▼ EMC Guidance**

Table 1 Guidance and MANUFACTURER's declaration – ELECTROMAGNETIC EMISSIONS- for all ME EQUIPMENT and ME SYSTEMS

Guidance and manufacturer's declaration – electromagnetic emissions					
The device is intended for u below. The customer or the such an environment.					
Emissions test Compliance Electromagnetic environment - guidance					
RF emissions CISPR 11	Group 1	The device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.			
RF emissions CISPR 11	Class B				
Harmonic emissions IEC 61000-3-2	Not applicable				
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable				

Table 2 Guidance and MANUFACTURER's declaration – electromagnetic IMMUNITY – for all ME EQUIPMENT and ME SYSTEMS

	led for use in the electromage user of the device should a		
IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	±1 kV line(s) to line(s)	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	-6% Ur (>95% dip in Ur) for 0.5 cycle 40% Ur (60% dip in Ur) for 5 cycles 70% Ur (30% dip in Ur) for 25 cycles -5% Ur (>95% dip in Ur) for 5 s	<5% UT (>95% Up; of the first of the firs	Main power quality should be that of a typical commercial or hospital commercial or hospital commercial or hospital environment. If the user of the device requires continued operation during continued operation during its expension during the commercial or the device be powered from an uninterruptible power supply or a battery.
Power frequency (50/60Hz) magnetic field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Table 4 Guidance and MANUFACTURER's declaration – electromagnetic IMMUNITY – for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING

			nvironment specified below. nat it is used in such an environment.
IMMUNITY test	IEC 60601 TEST LEVEL	Compliance level	Electromagnetic environment - guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Recommended separation distance $d=1.167\sqrt{p}$
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	d = 1.167√P so MHz to 800 MHz d = 2.333 ⟨F 800 MHz to 2.5 CHz where P is the maximum output power rating of the transmitter maximum output power rating of the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fisced RP intransmitter, and determined by the transmitters, as determined by the transmitters are determined by the transmitter are determined by the transmitters are de

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a Field strengths from fixed transmitters, such as base stations for radio (cellular) in Field strengths from fixed transmitters, such as base stations for radio (cellular) contained to the fixed transmitters and the property of the fixed transmitters and extending the cellular fixed fix

Table 6 Recommended separation distances between portable and mobile RF communications equipment and the ME EQUIPMENT or ME SYSTEM – for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING Recommended separation distances between portable and mobile RF communications equipment and the device.

The device is intended for u radiated RF disturbances a can help prevent electroma between portable and mobi device as recommended be communications equipment	re controlled. The custor gnetic interference by management of the pro- le RF communications en alow, according to the management.	ner or the user of the devic aintaining a minimum dista quipment (transmittlers) as	ince nd the	
Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)			
	150 kHz to 80 MHz d = 1.167√P	80 MHz to 800 MHz $d = 1.167 \sqrt{P}$	800 MHz to 2.5 GHz $d = 2.333 \sqrt{P}$	
0.01	0.117	0.117	0.233	
0.1	0.369	0.369	0.738	
1	1.167	1.167	2.333	
10	3.690	3.690	7.378	
100	11.67	11.67	23.33	

separation distance of in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power fining of the standard in the second of the transmitter manufacture.

VICT can be supported to the control of the second of t