

of disposal of potentially bio hazardous parts and accessories.

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# **Requests from Manufacturer**

Make sure there is no connection tubing kinking before start measuring to avoid any injury to patient.

For any patient, do not measure more than 3 times continuously, it should be at least above 5 minutes of interval rest between any two measurements, otherwise will cause extravasated blood. Do not measure your blood pressure over 6 times each day.

Do not apply the cuff over a wound as this can cause further injury.

Do not measure on the wrist which is on the side of a mastectomy, otherwise

it could cause injury Observe the air pressure value from the LCD display.

When measuring, it could not exceed 280 mmHg, otherwise Please press "on/off " button to stop

Do not use force to bend the wrist cuff or the air tube.

Do not knock or drop the main unit.

Always use the specified accessories in the manual, the use of other parts not approved by the manufacturer may cause faults or injuries

For service information, parts list etc., please contact the dealer.

-The PATIENT is an intended OPERATOR.

Will cause the unit to function erroneously.

- -Not servicing and maintenance while the ME EQUIPMENT is in use. -The user can maintain the product, the maintenance method is described in
- the maintenance instructions of manual
- -Stop using the equipment immediately, if it is in contact with water.

# ABOUT BLOOD PRESSURE

1. What is blood pressure? Blood pressure is the force exerted by blood against the walls of the arteries. Systolic

pressure occurs when the heart contracts. Diastolic pressure occurs when the heart expands

Blood pressure is measured in millimeters of mercury (mmHg). One's natural blood pressure is represented by the fundamental pressure, which is measured first thing in the morning while one is still at rest and before eating.

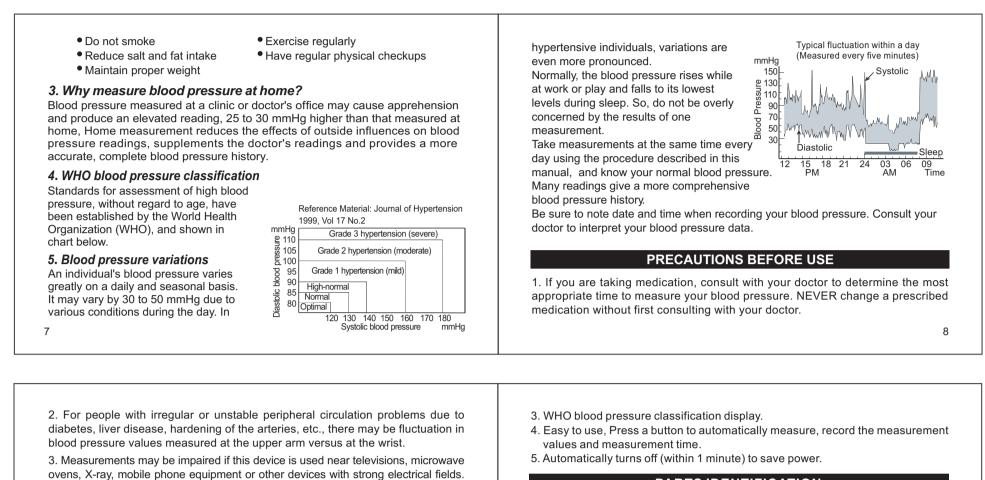
2. What is hypertension and how is it controlled?

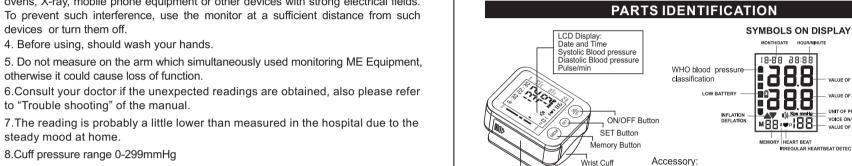
Hypertension, an abnormally high arterial blood pressure, if left unattended, can cause many health problems including stroke and heart attack.

Hypertension can be controlled by altering lifestyle, avoiding stress and with medication under a doctor's supervision.

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To prevent hypertension or keep it under control:





FEATURES OF THE PRODUCT

1. Memory can store 90 measurements.

2. Large and clear LCD display

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devices or turn them off.

steady mood at home.

4. Before using, should wash your hands.

otherwise it could cause loss of function.

to "Trouble shooting" of the manual.

8.Cuff pressure range 0-299mmHg

**INSERT OR REPLACE BATTERIES** 

- 1. Remove the battery cover.
- 2. Insert new batteries into the battery compartment as shown, taking care that the polarities(+) and (-)are correct.
- 3. Close the battery cover, Use only LR03, AAA batteries.

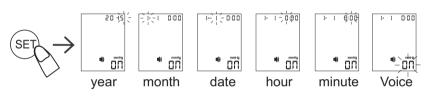
the authorized collecting party subject to the regulation of each individual territory.

Disposal of empty battery to

# CAUTION

- Insert the batteries as shown in the battery compartment. If not, the device will not work. • When 1 (LOW BATTERY mark) blinks in the display, replace all batteries with new ones. Do not mix old and new batteries. It may shorten the battery life, or cause the device to malfunction.
- (LOW BATTERY mark) does not appear when the batteries run out.
- Please ensure to distinguish positive polar "+" and negative polar "-" of batteries when replacing batteries.
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4. Press "MEM" key to adjust the month. Following the same steps to adjust date/hour/ minute/Voice (on/off) until setting completed (" III" is the On, " IF" is the Of f) Non-talking model does not have this function.



### UNIT CONVERSION mmHg/kPa DISPLAY

The goods have mm Hg(mmHg), kPa (kPa) two kinds of blood pressure display units(mmHg factory to express).

Press "ON / OFF" button for 10 seconds to display unit switching interface, then press "MEM" key to select mmHg / KPa, press "ON / OFF" button to exit.

• Batteries, which have fluid on surface or be modified, can not be inserted into the products.

Manual

CASE

- · Battery short circuit must be prevented.
- Battery life varies with the ambient temperature and may be shorten at low
- The batteries may leak and cause a malfunction.
- Use the specified batteries only. The batteries provided with the device are for testing monitor performance and may have a shorter life.
- Used batteries may leak and damage the main unit. Pleases observe the following points.
- \* If you are not going to use the unit for a long period of time (approximately three months or more), remove the batteries.
- \* Replace worn batteries with their polarities in the correct direction.

## TIME AND VOICE ON/OFF OF SYSTEM SETUP

1. Press "SET" key to Time display.

2. In the off state, Press and hold "SET" key until the year number displays and flashes on LCD to enter setting mode. 3. Press "MEM" key to adjust the year, then press "SET" key again to save your setting and enter the month setting mode.



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VALUE OF SYSTOL

VALUE OF DIASTOLI

UNIT OF PRESSUR

VOICE ON/OFF SYMBOL VALUE OF PULSE PEI

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The units will be chosen by the above shows mmHg/kPa after decontrol, After the nomal boot unit values are shown as blood pressure. Also select memory unit value changes.



Optimal

## WHO BLOOD PRESSURE CLASSIFICATION DISPLAY

Diastolic blood pressure Reference material: journal of hypertension 1999. vol 17 No.2

Grade 3 hypertension (severe) Grade 2 hypertension (moderate) Grade 1 hypertension (mild) High-normal Normal



## 1. Fastening the wrist cuff

- 1) Wrap the wrist cuff around your wrist about (1-2)cm above your hand as shown in the figure at the right.
- 2) Fasten the wrist cuff tightly by using the Velcro Strip. For proper measurements, fasten the wrist cuff tightly and measure on a bare wrist.

### 2. How to take proper measurements

- For best accuracy in blood pressure measurement:
- Sit comfortably at a table. Rest your wrist on the table.
- Relax for about 5 to 10 minutes before measurement.
- Raise your hand so that the wrist cuff is at the same level as your heart.
- Remain still and keep quiet during measurement.
- Do not measure left after physical exercise or a bath. • Measure your blood pressure at about the same time every day.
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### **READ MEMORY**

Press " MEM " button to inquire memory average values " RUS "Average Value Display: the latest 3 groups of memory average values (Memory values are displayed regardless of period).

Press "MEM" button, a memory reading out the latest measurements ,"MEM" for the buttons(UP). "SET" button for the memory (DOWN)

Power Measurement closure or after the end of the state .can press the "MEM" button read out the latest measurement of memory.

### DELETE MEMORY

The state read out the memory press the (memory) button five seconds, the LCD display "
<sup>¶</sup>
<sup>¶</sup>
<sup>¶</sup>
<sup>¶</sup>
<sup>¶</sup>
<sup>¶</sup>
<sup>has been to delete all memory.</sup>



# **CLEAN AND MAINTENANCE**

1.Keep this device in the case provided with the device when you do not use it. 2.Do not fold the arm cuff too tightly.

	SPECIFICATIONS
Measuring Method	Oscillometric Measurement
Indication	Digital LCD display
Measuring Range:	Pressure:(30~280)mmHg Pulse:(40~199)Beat/min
Accuracy:	Static Pressure: $\pm$ 3mmHg Pulse: $\pm$ 5%
Memory:	90 Memories
Power supply:	2x1.5V Batteries(LR03 or AAA) use alkaline battery, measure above 200 times
Operating condition:	+5°C~+40°C. 15%RH~93%RH Atmospheric pressure: 70kPa~106kPa
Storage condition:	-20°C~+55°C. 0%RH~93%RH Atmospheric pressure:50kPa~106kPa
Dimensions:	Approx: 62(W)X78(H)X31(D)mm
Weight:	Approx: 130g, excluding batteries
Classification	Type BF
Wrist circumference	(13.5~19.5)cm

\* Specifications may be changed without notice in the event of improvement being made. 19

E1:can't normally Increase pressure	Check your wrist cuff if any air leakage	Replace wrist cuff with new one	
E3 inflate pressure too high	Pressure value of more than 299mmHg	Re-measurement or send bac dealer for re-calibrate pressure	
E2E4:have shaking while measurement	Hand or body shaking while measurement	keeping static and correct gesture to measure again	
Battery icon on	Battery low power	Replace battery and measure aga	
The systolic pressure Value or diastolic	1.The wrist cuff was held lower than your heart		
Pressure value too high	2.The wrist cuff was not attached properly	keeping correct position and gesture to measure again	
loo nign	3.You moved your body or spoke during measurement		
The systolic pressure Value or diastolic	1.The wrist cuff was held higher than your heart		
Pressure value too low	2.you moved your body or Spoke during measurement		

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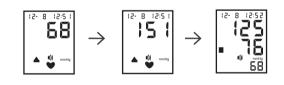
Guidance and manufacturer's declaration - electromagnetic immunity

# HOW TO MEASURE BLOOD PRESSURE

1. Fasten the wrist cuff according to the instructions in "ATTACHING THE WRIST CUFF." 2. Press the "ON/OFF" button. All icons appear two seconds on DISPLAY, then switch to measurement, and display "0" or last measurement record.



3. Start measurement, the cuff in the strap will automatically inflate. The mark () will flash on LCD. When complete, the results will be displayed.



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- 3.Clean the monitor with a soft dry cloth. Do not use any cleaning solution.
- 4.Do not submerge the device or any components in water
- 5. Store the device and the components in a clean and safe location.
- 6. The clean steps for the cuff is provided as following.
- \* Completely wipe the inner side (the side that I contacts skin) of the cuff with a soft cloth lightly moistened with 75% Ethyl alcohol 3 times. Replace the soft cloth after each wipe.
- \* Then air dry the cuff.

#### CAUTION

- \* Do not submerge the device or any of the components in water.
- Do not subject the monitor to extreme hot or cold temperatures humidity or direct sunlight.
- \* Store the device and the components in a clean, safe location. \* Do not subject the monitor to strong shocks, such as dropping the unit on the floor. \* Remove the batteries if the unit will not be used for three months or
- longer. Always replace all the batteries with new ones at the same time. • This product is designed for use over an extended period of time; however, it
- is generally recommended that it be inspected and calibrated every two years to ensure proper function and performance. See the Calibration Method for more details.

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- 1. Type of protection against electric shock: INTERNALLY POWERED EQUIPMENT. 2.Degree or protection against electric shock: TYPE BF APPLIED PART.
- 3. Mode of operation: CONTINUOUS OPERATION
- 4. Equipment not suitable for category AP& APG equipment use in presence. STATEMENT

#### the system might not meet its performance specifications if stored or used outside the temperature and humidity as mentioned below: Operating conditions: +5°C~+40°C. 15%RH~93%RH 70kPa~106kPa

Storage conditions: -20°C~+55°C. 0%RH~93%RH

When you push the

Battery icon flash

POWER button or

TROUBLE SHOOTING					
If you have trouble in using the unit please check the following points first.					
ERROR DISPLAY	POSSIBLE CAUSE	HOW TO CORRECT			
Nothing is displayed	No battery installation	Insert batteries			

Replace new batteries

polarities

Insert battery in the correct

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#### Appendix 1 Guidance and Manufacturer Declaration Tables

Battery worn out

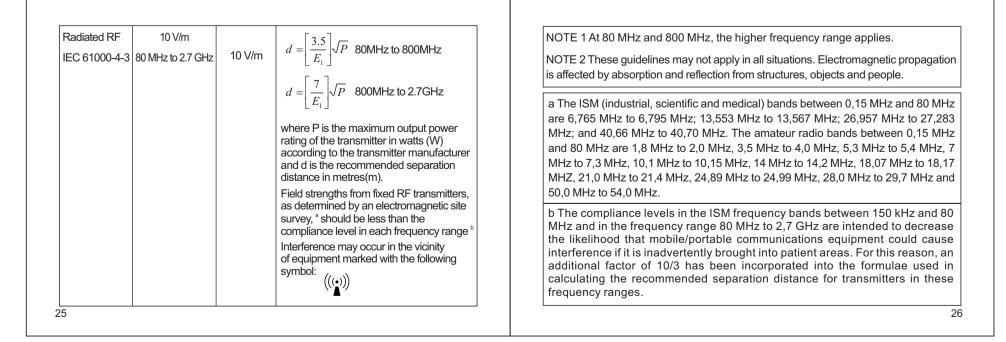
placed wrongly

The polarities of batteries

	Appendix i ourdance and Manufacturer Deciaration Tables			
Guidance and manufacturer's declaration – electromagnetic emissions				
The Model PG-800A33 Series Electronic Blood Pressure Monitor is intended for use in the electromagnetic environment specified below. The customer or the user of the Model PG-800A33 Series Electronic Blood Pressure Monitor should assure that it is used in such an environment.				
Emissions	Compliance	Electromagnetic environment-guidance		
RF emissions CISPR 11	Group 1	The Model PG-800A33 Series Electronic Blood Pressure Monitor 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	The Model PG-800A33 Series Electronic Blood Pressure Monitor is used in home and it's		
Harmonic emissions IEC 61000-3-2	N. A.	powered by DC 3V		
Voltage fluctuations/flicker emissions IEC 61000-3-3	N. A.			

Guidance and manufacturer's declaration - electromagnetic immunity The Model PG-800A33 Series Electronic Blood Pressure Monitor is intended for

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment- guidance	Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD)IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15KV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 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 %.	Conducted RF IEC 61000-4-6	6 Vrms	N/A	Portable and mobile RF communications equipment should be used no closer to any part of the Model PG-800A33 Series Electronic Blood Pressure Monitor including cables, than the recommended
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8		30 A/m, 50/60Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.				separation distance calculated from the equation applicable to the frequency of the transmitter. <b>Recommended separation distance</b>
NOTE U <sub>⊤</sub> is th	ne a.c. mains volta	age prior to applic	ation of the test level				$d = \left\lfloor \frac{3.5}{V_1} \right\rfloor \sqrt{P}$



c Field strengths from fixed transmitters, such as base stations for radio (cellular/ cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Model PG-800A33 Series Electronic Blood Pressure Monitor is used exceeds the applicable RF compliance level above, the Model PG-800A33 Series Electronic Blood Pressure Monitor should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Model PG-800A33 Series Electronic Blood Pressure Monitor.

d Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the Model PG-800A33 Series Electronic **Blood Pressure Monitor** 

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The Model PG-800A33 Series Electronic Blood Pressure Monitor is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Model PG-800A33 Series Electronic Blood Pressure Monitor can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Model PG-800A33 Series Electronic Blood Pressure Monitor as recommended below, according to the maximum output power of the communications equipment. Separation distance according to frequency of transmitter

Rated maximum	Separation distance according to frequency of transmitter			
output of transmitter			800 MHz to 2.7 GHz	
w	$d = \left[\frac{3.5}{V_1}\right] \sqrt{P}$	$d = \left[\frac{3.5}{E_1}\right] \sqrt{P}$	$d = \left[\frac{7}{E_1}\right]\sqrt{P}$	
0.01	0.12	0.12	0.23	
0.1	0.38	0.38	0.73	
1	1.2	1.2	2.3	
10	3.8	3.8	7.3	
100	12	12	23	
			2	

For transmitters rated at a maximum output power not listed above the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for 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.

## **CALIBRATION METHOD**

1. Press and hold the "ON/OFF, MEM" button at the same time, load the battery, enter the static air pressure calibration mode after the LCD screen is fully displayed, and then release the button.

2. Press ON/OFF to close the internal air valve.

3. Connect the external standard barometric interface and the digital barometer interface to the cuff interface.

4. External input 50mmHg and 200mmHg standard static air pressure, and observe the air pressure value displayed at the position of the LCD systolic pressure (SYS) and the value of the digital pressure gauge should be in the range of +/-3mmHg.

# Caution

1. ME devices can be used in exposed environments, including electromagnetic interference environment to ensure basic safety and basic performance unchanged. 2.In the event of any serious event related to this product, such as serious adverse event, significant alteration of the product resulting in change of intended use, etc., it will be reported to the manufacturer and the competent authorities of the user and/or the member states where the patient is located.

### Notes:

Essential performance: Limits of the error of the manometer, ±3mmHg.Reproducibility of the blood pressure determination, ±3mmHg. Clinical benefits: Accurate measurement of SBP and DBP, clinical performance meets the requirements of ISO 81060-2:2018.