#### WARNING:

As this medical device uses an alternative small-bore connector design different from those specified in the ISO 80369 series, there is a possibility that a misconnection can occur between this medical device and a medical device using a different alternative small-bore connector, which can result in a hazardous situation causing harm to the patient. Special measures need be taken by the user to mitigate these reasonable foreseeable risks



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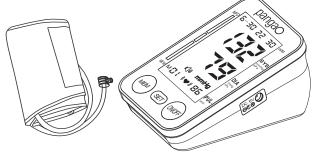
Date: 2023-04-13 Rev:A/2

## **ELECTRONIC BLOOD** PRESSURE MONITOR



## **Instruction Manual**

**MODEL: PG-800B12** 





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#### INTRODUCTION

The Monitor uses the oscillometric method of blood pressure measurement. Measurement Automatic Electronic Blood Pressure Monitor is intended for use by medical professionals or at home to monitor and display diastolic. systolic blood pressure and pulse rate on adult each time, with an arm cuff around the left upper arm according to the instruction in the "ATTACHING THE ARM CUFF", The expected life of the product is 5 years.

The product complies with the electromagnetic compatibility requirement of IEC 60601-1-2 and safety standards of IEC 60601-1 and performance of IEC 80601-2-30 as specified in Regulation (EU)2017/745.

#### **NOTES ON SAFETY**

- \* The warning signs and sample icons shown here are listed for your safe and correct use of the unit, so as to prevent injuries or damages to the device.
- \* The icons and meanings are as follow.

#### Examples of signs



The ⊘ icon indicates prohibitions (what you should not do). Matters involving actual prohibitions are indicated by text or pictures in or near ◊. The left icon refers to "general prohibition".



The **9** icon indicates something that is compulsory (what must always be observed).

Matters involving actual compulsory actions are indicated by text or pictures in or near • .The left icon refers to "general compulsion".



The \( \mathbb{O}\) icon indicates something can't be disassembled or "Don' disassemble" Matters involving actual compulsory actions are indicated by text or pictures in or near (\infty). The left icon refers to "general prohibition".

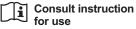


Type BF Applied part

IP Classification: IP20



Please refer to the instructions for use



The following symbol indicates that the device is MR-unsafe:



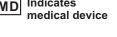
Indicates a medical device that needs to be protected from moisture.

Contact its local authorities to

determine the proper method

of disposal of potentially bio

hazardous parts and accessories.







Indicates



Patient must follow doctor's instruction and should not perform self-judgment and self-treatment by the measuring result, Self-diagnosis of measured results and treatment are dangerous. The device should not be used to judge illness, first aid and continuously monitor measuring.



This device can not be used for Patient transport and surgical care .It can be used in household or fixed places only.

Please press "on/off" button to stop work when you feel uncomfortable with the arm, or if the air is inflating abnormally without stop.

This device should not be used by children under 18 years old or people who cannot express their will, otherwise it will cause harm.

Do not use the unit for purpose other than measuring blood pressure. May cause accident or trouble.

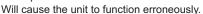
Please do not use mobile phone around the device. Please do not use the device around the magnetic field.



The device is prohibited from being used during movement.

Do not use the equipment in outdoor or shower rooms.

Do not disassemble, repair, or remodel the main unit or the arm cuff of the blood pressure monitor.





#### 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 arm 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 arm 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.
- -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.

To prevent hypertension or keep it under control:

- Do not smoke
- Reduce salt and fat intake
- Exercise regularly
- Have regular physical checkups
- Maintain proper weight

#### 3. Why measure blood pressure at home?

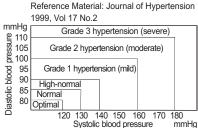
Blood pressure measured at a clinic or doctor's office may cause apprehension and produce an elevated reading. 25 to 30 mmHg higher than that measured at home. Home measurement reduces the effects of outside influences on blood pressure readings, supplements the doctor's readings and provides a more accurate, complete blood pressure history.

#### 4. WHO blood pressure classification

Standards for assessment of high blood pressure, without regard to age, have been established by the World Health Organization (WHO), and shown in chart below.

#### 5. Blood pressure variations

An individual's blood pressure varies greatly on a daily and seasonal basis. It may vary by 30 to 50 mmHg due to various conditions during the day. In 7



Reference Material: Journal of Hypertension

PRECAUTIONS BEFORE USE

1. If you are taking medication, consult with your doctor to determine the most appropriate time to measure your blood pressure. NEVER change a prescribed medication without first consulting with your doctor.

Be sure to note date and time when recording your blood pressure. Consult your

mmHa 150

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Typical fluctuation within a day

(Measured every five minutes)

- 2. For people with irregular or unstable peripheral circulation problems due to diabetes, liver disease, hardening of the arteries, etc., there may be fluctuation in blood pressure values measured at the upper arm versus at the wrist.
- 3. Measurements may be impaired if this device is used near televisions, microwave ovens, X-ray, mobile phone equipment or other devices with strong electrical fields. To prevent such interference, use the monitor at a sufficient distance from such devices or turn them off.
- 4. Before using, should wash your hands.
- 5. Do not measure on the arm which simultaneously used monitoring ME Equipment, otherwise it could cause loss of function.
- 6. Consult your doctor if the unexpected readings are obtained, also please refer to "Trouble shooting" of the manual.
- 7. The reading is probably a little lower than measured in the hospital due to the steady mood at home.
- 8.Cuff pressure range 0-299mmHg

#### **FEATURES OF THE PRODUCT**

- 1. Memory can store 90 measurements.
- 2. Large and clear LCD display.

3. WHO blood pressure classification display.

hypertensive individuals, variations are

Normally, the blood pressure rises while

levels during sleep. So, do not be overly

Take measurements at the same time every

Many readings give a more comprehensive

doctor to interpret your blood pressure data.

manual, and know your normal blood pressure.

day using the procedure described in this

at work or play and falls to its lowest

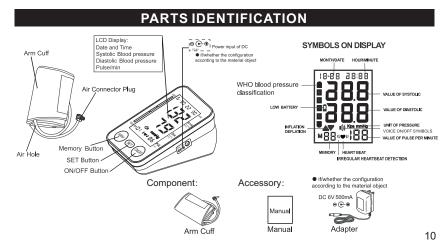
concerned by the results of one

even more pronounced.

blood pressure history.

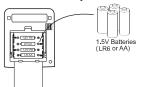
measurement.

- 4. Easy to use, Press a button to automatically measure, record the measurement values and measurement time.
- 5. Automatically turns off (within 1 minute) to save power.



#### **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 LR6, AA batteries.





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

#### **CAUTION**

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- Insert the batteries as shown in the battery compartment. If not, the device will not work.
- When \( \text{LOW BATTERY mark} \) 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.

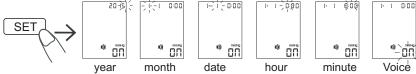
- Batteries, which have fluid on surface or be modified, can not be inserted into the products.
- Battery short circuit must be prevented.
- Battery life varies with the ambient temperature and may be shorten at low temperatures.
- The batteries may leak and cause a malfunction.
- Use the specified batteries 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.



4. Press "MEM" key to adjust the month. Following the same steps to adjust date/hour/ minute/Voice (on/off) until setting completed ("IR" is the On. "IF" is the Of) Non-talking model does not have this function.



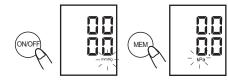
# 

### UNIT CONVERSION mmHg/kPa DISPLAY

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

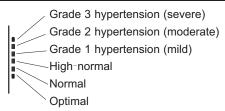
Press "ON / OFF" button for 10 seconds to display unit switching interface, then press "MEM" key to select mmHg / KPa, press "ON / OFF" button to exit.

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.



#### WHO BLOOD PRESSURE CLASSIFICATION DISPLAY

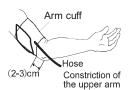
Diastolic blood pressure Reference material: journal of hypertension 1999. vol 17 No.2



#### ATTACHING THE ARM CUFF

- 1.Wrap the arm cuff around the upper arm, about (2-3) cm above the elbow, as shown. place the cuff direct the skin, as clothing may cause a faint pulse, and result in a measurement error.
- 2.constriction of the upper arm, caused by rolling up a shirtsleeve, may prevent accurate readings.
- 3. Secure the arm cuff with Velcro Strip in such a way that it lies comfortably and is not too tight. Lay the arm on the table(palm upwards) so that the arm cuff is at the same height as the heart. Make sure that the tube is not kinked.
- 4. Measure your arm circumference for cuff selection, refer to "Specifications"





#### **HOW TO TAKE PROPER MEASUREMENTS**

For the most accurate blood pressure measurement:

- PATIENT position in NORMAL USE, including:
- 1) comfortably seated .
- 2) legs uncrossed.
- 3) feet flat on the floor.
- 4) back and arm supported.
- 5) middle of the CUFF at the level of .
- Remain still and keep quiet during measurement.
- Relax as much as possible and not talk during the measurement process.
- Measure your blood pressure at about the same time every day.
- Do not measure right after physical exercise or a bath. Take a rest for twenty or thirty minutes before taking the measurement.
- It could affect the readings in the below conditions:
- Within in an hour after dinner, after having wine ,coffee, red tea, sports, bathing; talking, being nervous, being in unsteady mood, bending forward, moving, room temperature dramatically changing during measuring; In the moving vehicles, long time continuous measuring.

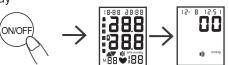
15

16

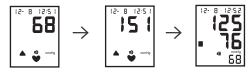
#### **HOW TO MEASURE BLOOD PRESSURE**

- Set up the arm cuff to your upper arm as previous section of "ATTACHING THE ARM 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. such measurements completed, LCD display measurement results.



#### READ MEMORY

Press " MEM " button to inquire memory average values " AUS "Average Value Display: the latest 3 groups of memory average values (Memory values are 17

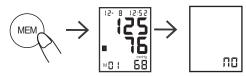
displayed regardless of period).

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 "П" has been to delete all memory.



#### **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.
- 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.Cuff shall be detached from the device softly and slowly. The clean steps for the cuff is provided as following
- \* It is recommended that clean the cuff after each use.
- \* Completely wipe the inner side (the side that 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.



#### **SPECIFICATIONS**

| Measuring Method        | Oscillometric Measurement                      |
|-------------------------|--|
| Indication              | Digital LCD display                            |
| Measuring Range         | Pressure:(30~280)mmHg                          |
|                         | Pulse:(40~199)Beat/min                         |
| Accuracy                | Static Pressure: ±3mmHg Pulse: ±5%             |
| Memory                  | 90 Memories                                    |
| Power supply            | 4x1.5V Batteries(LR6 or AA)                    |
|                         | 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: 96(W)X165(H)X75(D)mm                   |
| Weight                  | Approx: 450g, excluding batteries              |
| Classification          | Type BF  |
| Upper arm circumference | (22~32)cm                                      |
| AC adapter              | INPUT: 100-240V~ 50/60Hz, 0.2A                 |
|                         | OUTPUT: 6V === 500mA                           |

<sup>\*</sup> Specifications may be changed without notice in the event of improvement being made. 20

- 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:  $+5^{\circ}\text{C} - +40^{\circ}\text{C}$ .  $15^{\circ}\text{RH} - 93^{\circ}\text{RH}$  70kPa~106kPa Storage conditions:  $-20^{\circ}\text{C} - +55^{\circ}\text{C}$ .  $0^{\circ}\text{RH} - 93^{\circ}\text{RH}$ 

#### 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                         |
| When you push the                   | Battery worn out                           | Replace new batteries                    |
| POWER button or  Battery icon flash | The polarities of batteries placed wrongly | Insert battery in the correct polarities |

| E1:can't normally Increase pressure         | Check your arm cuff if any air leakage               | Replace arm cuff with new one                              |  |
|---|--|--|--|
| E3 inflate pressure too high                | Pressure value of more than 299mmHg                  | Re-measurement or send back dealer for re-calibrate pressu |  |
| 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 again                          |  |
| The systolic pressure Value or diastolic    | 1.The arm cuff was held lower than your heart        |  |  |
| Pressure value too high                     | 2.The arm cuff was not attached properly             | keeping correct position                                   |  |
| too mgm                                     | 3.You moved your body or spoke during measurement    | and gesture to measure again                               |  |
| The systolic pressure<br>Value or diastolic | 1.The arm cuff was held higher than your heart       | -  |  |
| Pressure value too low                      | 2.you moved your body or<br>Spoke during measurement |  |  |

#### **Appendix 1 Guidance and Manufacturer Declaration Tables**

#### Guidance and manufacturer's declaration-electromagnetic emission

The Model PG-800B12 is intended for use in the electromagnetic environment specified below. The customer or the user of the Model PG-800B12 should assure that it is used in such an environment.

| Emissions test  | Compliance | Electromagnetic environment – guidance   |
|---|------------|--|
| RF emissions<br>CISPR 11                                    | Group 1    | The Model PG-800B12 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<br>CISPR 11                                    | Class B    | The Model PG-800B12 is suitable for use in all establishments, including domestic  |
| Harmonic emissions<br>IEC 61000-3-2                         | А          | establishments and those directly connected<br>to the public low-voltage power supply network<br>that supplies buildings used for domestic   |
| Voltage fluctuations<br>/flicker emissions<br>IEC 61000-3-3 | Complied   | purposes.  |

#### Guidance and manufacturer's declaration – electromagnetic immunity

The Model PG-800B12 are intended for use in the electromagnetic environment specified below. The customer or the user of the Model PG-800B12 should assure that it is used in such an environment.

| Immunity test  | IEC 60601<br>test level   | Compliance<br>level  | Electromagnetic environment - guidance   |
|--|---|--|--|
| Electrostatic<br>discharge<br>(ESD)<br>IEC 61000-4-2 | ±8 kV contact<br>±2 kV, ±4 kV,<br>±8 kV, ±15 kV<br>air  | ±8 kV contact<br>±2 kV, ±4 kV,<br>±8 kV, ±15 kV<br>air   | Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %. |
| Electrostatic<br>transient/burst<br>IEC 61000-4-4    | ± 2 kV for power<br>supply lines100<br>kHz repetition<br>frequency ±1 kV<br>for input/output<br>lines | ± 2 kV for power<br>supply lines 100<br>kHz repetition<br>frequency ±1 kV<br>for input/output<br>lines | Mains power quality should be that of a typical commercial or hospital environment.  |

| Surge<br>IEC 61000-4-5   | ±0.5 kV, ±1 kV<br>differential<br>mode line-line  | ±0.5 kV, ±1kV<br>differential<br>mode line-line                          | Mains power quality should be that of a typical commercial or hospital environment.   |
|--|---|--|---|
| Voltage dips,<br>short<br>interruptions<br>and voltage<br>variations on<br>power supply<br>input lines | 0% UT (100% dip in UT) for 0.5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0% UT (100% dip in UT) for 1 cycleat 0° 70% UT (30% dip in UT) for 25/30 cycles at 0° 0% UT(100% dip in UT) for 250/ 300 cycle at 0° | cycle at 0°, 45°,<br>90°, 135°,180°,<br>225°, 270°, and<br>315°<br>0% UT | Mains power quality should be that of a typical commercial or hospital environment. If the user of the Model PG-800B12 product name requires continued operation during power mains interruptions, it is recommended that the Model PG-800B12 be powered from an uninterruptible power supply or a battery. |

| Power<br>frequency<br>(50/60 Hz)<br>magnetic field<br>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. |
|---|---|----------------|---|
|---|---|----------------|---|

NOTE: UT is the a. c. mains voltage prior to application of the test level.

#### Guidance and manufacturer's declaration-electromagnetic immunity

The Model PG-800B12 are intended for use in the electromagnetic environment specified below. The customer or the user of the Model PG-800B12 should assure that it is used in such an electromagnetic environment.

| test level level |  | Immunity test |  |  | Electromagnetic environment - guidance |
|------------------|--|---------------|--|--|--|
|------------------|--|---------------|--|--|--|

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| Conducted RF<br>IEC 61000-4-6 | 3 Vrms<br>150 kHz to<br>80 MHz 6<br>Vrms 150<br>kHz to 80<br>MHz outside<br>ISM bandsa | 6 V | Portable and mobile RF communications equipment should be used no closer to any part of the Models PG-800B12, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.<br><b>Recommended separation distance</b> $d = \left[\frac{3.5}{V_1}\right]\sqrt{P}$ $d = \left[\frac{12}{V_2}\right]\sqrt{P}$ 80MHz to 800MHz $d = \left[\frac{23}{E_1}\right]\sqrt{P}$ 800MHz to 2.7GHz |
|-------------------------------|--|-----|---|
|-------------------------------|--|-----|---|

| Radiated RF   | 10 V/m               |        | Where <i>P</i> is the maximum output power rating of the transmitter in  |
|---------------|----------------------|--------|--|
| IEC 61000-4-3 | 80 MHz to<br>2.7 GHz | 10 V/m | watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres(m).   |
|               |                      |        | Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range b Interference may occur in the vicinity of equipment marked with the following symbol:  (((•))) |

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.

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a The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz, 24,89 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.

b The compliance levels in the ISM frequency bands between 150 kHz and 80 MHz and in the frequency range 80 MHz to 2,7 GHz are intended to decrease the likelihood that mobile/portable communications equipment could cause interference if it is inadvertently brought into patient areas. For this reason, an additional factor of 10/3 has been incorporated into the formulae used in calculating the recommended separation distance for transmitters in these frequency ranges.

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-800B12 is used exceeds the applicable RF compliance level above, the Model PG-800B12 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-800B12.

d Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

## Recommended separation distances between portable and mobile RF communications equipment and the Model PG-800B12

The Model PG-800B12 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Model PG-800B12 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Model PG-800B12 as recommended below, according to the maximum output power of the communications equipment.

| Rated maximum                 | Separation distance according to frequency of transmitter m |  |  |  |  |  |  |  |  |
|-------------------------------|---|--|--|--|--|--|--|--|--|
| output of<br>transmitter<br>W | 150 kHz to 80<br>MHz outside<br>ISM bands                   | 150 kHz to 80<br>MHz in<br>ISM bands       | 80 MHz to<br>800MHz                                      | 800 MHz to<br>2,7 GHz                      |  |  |  |  |  |
|                               | $d = \left[\frac{3.5}{V_1}\right] \sqrt{P}$                 | $d = \left[\frac{12}{V_2}\right] \sqrt{P}$ | $d = \left\lfloor \frac{12}{E_1} \right\rfloor \sqrt{P}$ | $d = \left[\frac{23}{E_1}\right] \sqrt{P}$ |  |  |  |  |  |
| 0.01                          | 0.12  | 0.12                                       | 0.12   | 0.23                                       |  |  |  |  |  |
| 0.1                           | 0.38  | 0.38                                       | 0.38   | 0.73                                       |  |  |  |  |  |
| 1                             | 1.2   | 1.2  | 1.2  | 2.3  |  |  |  |  |  |
| 10                            | 3.8   | 3.8  | 3.8  | 7.27                                       |  |  |  |  |  |
| 100                           | 12  | 12   | 12   | 23   |  |  |  |  |  |

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 The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27.283 MHz; and 40.66 MHz to 40.70 MHz. The amateur radio bands between 0. 15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz. 7 MHz to 7.3 MHz. 10.1 MHz to 10.15 MHz. 14 MHz to 14.2 MHz. 18.07 MHz to 18.17 MHz, 21.0 MHz to 21.4 MHz, 24.89 MHz to 24.99 MHz, 28.0 MHz to 29.7 MHz and 50,0 MHz to 54,0 MHz.

NOTE 3 An additional factor of 10/3 has been incorporated into the formulae used in calculating the recommended separation distance for transmitters in the ISM frequency bands between 150 kHz and 80 MHz and in the frequency range 80 MHz to 2,7 GHz to decrease the likelihood that mobile/portable communications equipment could cause interference if it is inadvertently brought into patient areas.

NOTE 4 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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#### **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.

Essential performance: Limits of the error of the manometer, ±3mmHq.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.