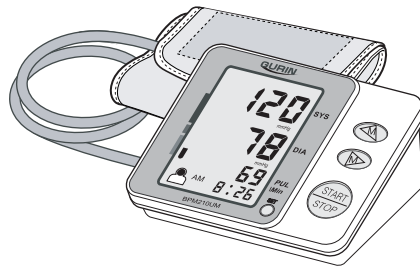# GURIN

Distributor:

CE

GURIN

Lead a Healthy Life...

Instruction Manual

Fully Automatic Upper Arm Style

Digital Blood Pressure Monitor

Model No.: BPM210UM

- Thanks for choosing the Digital Blood Pressure Monitor.
- Please read this instruction manual before using your unit.
- Please keep this instruction manual safe for future use.

Table of Contents

Introduction

■ The unit uses the oscillometric method of blood pressure measurement. It means the unit detects the movement of your blood through your brachial artery, and converts your blood pressure into a digital reading. The unit is simple to use because a stethoscope is not needed while using an oscillometric monitor.

■ The unit stores automatically 180 sets of measurement values for 2 users (2*90) with the measuring date and time in the memory. You can read the stored data conveniently by pressing the memory buttons.

    🏃   Type B applied part

    ⚠   Attention, consult ACCOMPANY DOCUMENTS

Important Safety Notes

To assure the correct use of the product basic safety measures should always be followed including the precautions listed below:

■ Read all information in the instruction manual and any other literature included in the box before using the unit.

■ Contact your physician for specific information about your blood pressure. Follow the instructions of your healthcare provider.

■ Operate the unit only as intended. Do not use for any other purpose.

■ The unit is intended to use in measuring blood pressure and pulse rate for adult only, not recommended for neonatal baby.

■ Do not use a cellular phone near the unit. It may result in operational failure.

■ Please avoid using in high radiant area in order to make your measuring data correctly.

■ Do not plug or unplug the adapter power cord with wet hands.

■ Do not disassemble or attempt to repair the unit or components.

⚠ Do not use the equipment where flammable gas (such as anesthetic gas, oxygen or hydrogen) or flammable liquid (such as alcohol) are present
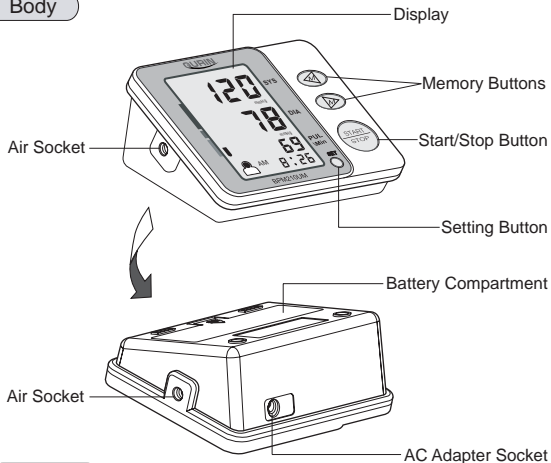
🚯 Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC.
The device, accessories and the packaging have to be disposed of waste correctly at the end of the usage.
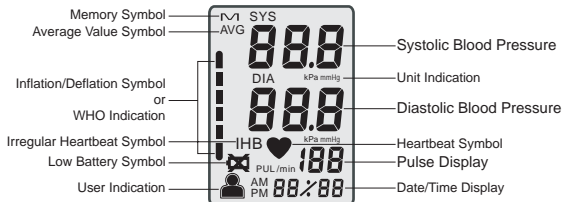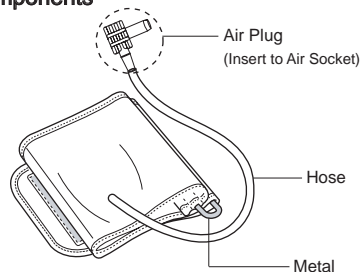please follow Local Ordinances or Regulations for disposal.

Main Unit

Body

Display

Memory Buttons

Start/Stop Button

Air Socket

Setting Button

Battery Compartment

Air Socket

AC Adapter Socket

Display

Memory Symbol

Average Value Symbol

SYS

AVG

Systolic Blood Pressure

DIA

Unit Indication

Inflation/Deflation Symbol
or
WHO Indication

Diastolic Blood Pressure

IHB

Irregular Heartbeat Symbol

Heartbeat Symbol

Low Battery Symbol

Pulse Display

PUL/min

User Indication

AM
PM

Date/Time Display

Accessorial Components

Arm Cuff

Air Plug
(Insert to Air Socket)

Hose

Metal

⚠ If your arm cuff is broken or not functional. Please use a new cuff.

⚠ A new arm cuff does not include an air plug. Please continue to use the old air plug on the new arm cuff.

Power

● 4 AA Alkaline Batteries

● AC Adapter (not included)

⚠Warning:1. do not use rechargeable batteries.

2. When using optional AC adapter, the AC adapter must comply with the requirements of standard IEC60601-1:1988+A1:1991+A2:1995.

3. Optional AC adapter technical specification:
Rated output voltage: 6V   Output current: 1-2A

Instruction Manual

● Please keep the instruction manual well after using.

Unit Display

Irregular Heartbeat Symbol(IHB)

When the unit detects an irregular rhythm two or more time during the measurement, the Irregular Heartbeat Symbol will appear on the display with the measurement values.

An irregular heartbeat rythm is defined as a rhythm that is more than 25% slower or 25% faster from the average rhythm detected while the monitor is measuring the systolic blood pressure and the diastolic blood pressure.

Normal Heartbeat

Pulse

Blood pressure

Irregular Heartbeat

Short   Long

Pulse

Blood pressure
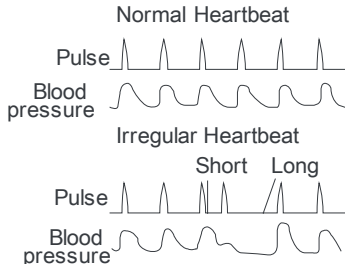
If the Irregular Heartbeat Symbol (IHB) displays with your measurement results, we recommend you consult your physician.
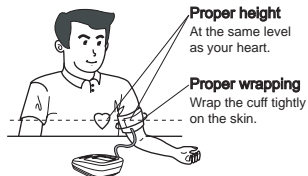Follow the directions of your doctor.

Before Taking A Measurement

1. Avoid eating, drinking, alcohol, smoking, exercsing and bathing for 30 minutes before takinga measurement. Rest for at least 15 minutes before taking the measurement.

2. Stress raises blood pressure. Avoid taking measurements during stressful times.

3. The cuff can be applied to your left or right wrist.

4. Measurements should be taken in a quiet place.

5.Position the unit at heart level throughout the measurement.

6. Remain still and do not talk during the measurement.

7. Keep a record of your b;ood pressure and pulse readings for your physician. A single measurement does not provide an accurate indication of your trueblood pressure. You need to take and record several readings over a period of time. Try to measureyour blood pressure at the same time each day for consistency.

8. Wait 30~60 seconds between measurements.
The wait time allows the arteries to return to the condition prior to taking the blood pressure mesurement.You may need to increase the wait time depending on you individual physiological characteristics.

1. Please take off thick clothing and keep yourself quiet for 5~10 minutes before taking a measurement.

2. Remove all clothes from your upper arm allowing the cuff to fit directly on the skin.

Proper posture
Keep your body straight and relaxing.

Proper height
At the same level as your heart.

Proper wrapping
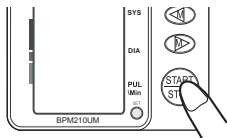Wrap the cuff tightly on the skin.

3. The hose runs down the inside of your arm. The bottom of the cuff should be approximately 1~2cm above your elbow.
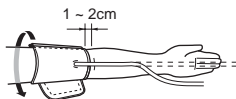
4. Wrap the cuff properly around your upper arm. Not more than 2-finger-room allowed between the cuff and your arm.

1 ~ 2cm

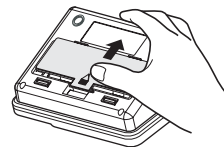5. Press the START/STOP button. All symbols appear, then the cuff starts to inflate automatically.

6. The blood pressure and pulse rate are displayed when the measurement completed, and the arm cuff deflates completely.
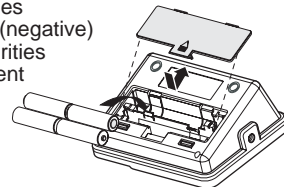
SYS

DIA

PUL /Min

START STOP

SET

BPM210UM

120
78
69
AM 8:26

How to Install Battery

1 Remove the battery cover from the battery compartment.
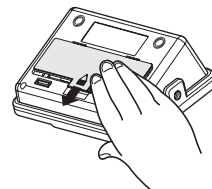
2 Install 4 "AA" size batteries so the + (positive) and - (negative) polarities match the polarities of the battery compartment as indicated.

3 Replace the battery cover.

⚠ The battery cover will be closed tight when you hear a clicking sound.

Caution!

- Use four identical 1.5V alkaline batteries type AA LR6.
- Replace all of the batteries if the symbol of low battery appears on the display.
- Never leave any low battery in the battery compartment since they may leak and cause damage to the unit.

Initialization

## How to Set the Date and Time ···

■ The unit automatically stores 180 sets measurement values for 2 users (2*90) with the date and time. Set the unit to the current date and time before taking a measurement for the first time. A default date and time will display if the current date and time is not set.

1. All informations will appear on the display when the batteries are installed at the first time, after 2 seconds the year flashes on the display. This remind you to set the date and time.

2. Long press the setting button until the year is displayed when the unit powered off.
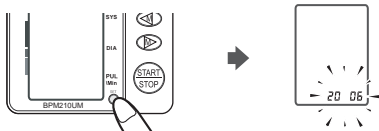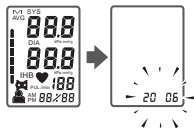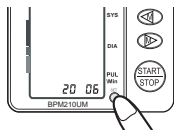
3. Press the ▷ memory up button to increase one year.
   Press the ◁ memory down button to decrease one year.

Year Setting
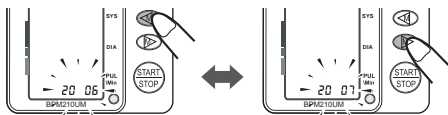
⚠ The year can be set between 2006 and 2030. When the display reaches to 2030, it will return to 2006.
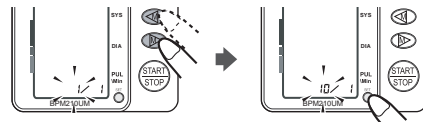
4. Press the Setting button to set the current year.
   After that the month flashes on the display.

5. Press the ▷ memory up button to increase one month.
   Press the Setting button to set the current month.
   After that the day flashes on the display.

8

Initialization

··

Month Setting

Day Setting
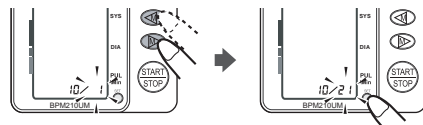
6. Setting the hour and minute by using the same way.

Hour Setting

Minute Setting

7. After setting the minute, next step to select display unit (kPa or mmHg).

Unit Setting

8. After completing all the settings, press the START/STOP button to shut off.

9

How to Use the Arm Cuff ·······························
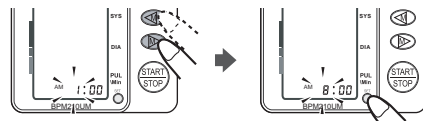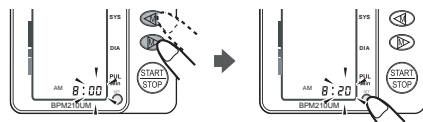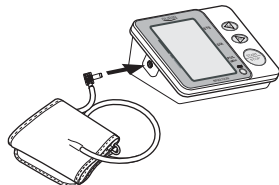
1 Make sure the air plug is inserted properly in the main unit.

2 Remove all clothes from your upper arm allowing the cuff to fit directly on the skin.
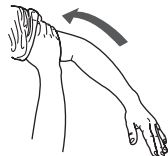
3 Sit in a chair with your feet flat on the floor. Place your arm on a table so as to level the cuff to your heart.

4 Pass the end of the cuff through the metal, and keep the hose outward.

5 Put your arm through the loop, and pull it up to the position of your upper arm.
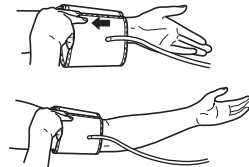
6 The hose runs down the inside of your arm. The bottom of the cuff should be approximately 1~2cm above your elbow.

1 ~ 2cm
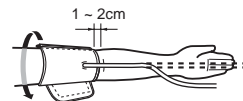
7 Wrap the cuff properly around your upper arm. Not more than 2-finger-room allowed between the cuff and your arm.
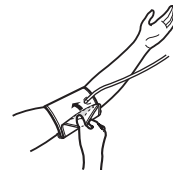
8 Have your upper arm relax, keep your palm upward and the fingers curving naturally, then turn on the unit and start to measure.
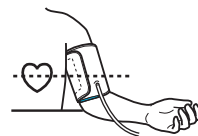
User Setting

How to Select Users ··

1 Press the Setting button when the unit powered off. The current user's mark will be displayed on the screen.

⚠ Long press the Setting button is to set the date and time.

2 Press the Setting button again to change the current user. The another user's mark will be displayed on the screen.

3 The two users' mark will be displayed alternately when repeat pressing the Setting button.
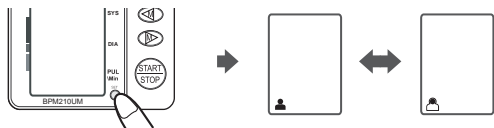
⚠ To select a user by using the same way before taking a measurement or reading the memory.

12

Take a Measurement

How to Take a Measurement ··································

1 Press the START/STOP button.

All display symbols appear on the screen. The cuff starts to inflate automatically.

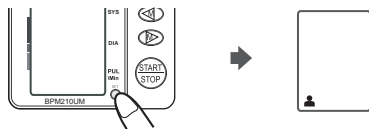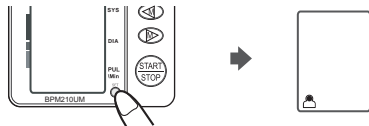**2** Inflation stop automatically and the measurement is started.

The heartbeat symbol flashes once a pulse is detected.

3 The blood pressure and pulse rate are displayed when the measurement completed.

The cuff is deflated automatically, and all of the measurement results are stored in the memory with date and time.

The IHB symbol will be displayed if arrhythmia is detected.

"kPa" display "mmHg" display "IHB" display
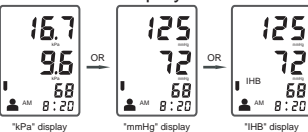
4 Press the START/STOP button to turn off the unit.

The unit will automatically turn off after 2 minutes if you have forgotten to turn off it.

※ INSTRUCTIONS FOR SPECIAL CONDITIONS

In order to accelerate the measurement time for the systolic pressure more than 180 mmHg, press and hold the memory button until the unit inflates 30 to 40 mmHg higher than your suspected systolic pressure if you know. (The unit will not inflate above 299 mmHg).

Please rest for at least 3 minutes before taking the next measurement.

13

Use the Memory Function

How to Use the Memory Function ·······································

■ The unit stores the blood pressure and pulse rate in the memory after completing a measurement every time. It can automatically store 180 sets of measurement values for 2 users (2*90). The oldest record is deleted to save the latest measurement value when any one user more than 90 sets.

■ The unit also calculates an average reading based on the values of the latest 3 times measurement taken.

■ Please select the user before reading the memory.

▶ To display the average value

Press the ◀ memory down button. The average value symbol will display on the screen with the average reading.

▶ To display the measurement values
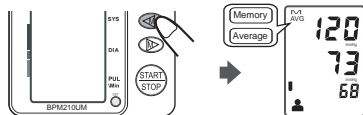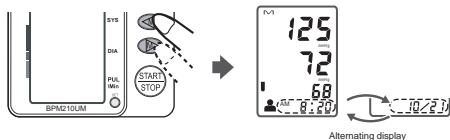
Press the ◀ memory down button to view the latest measurement value.
Press the ▶ memory up button to view the oldest measurement value.
Press the button repeatedly to display the next value.

Alternating display

▶ To delete all values stored in the memory

When reading the measurement values, press and hold the ◀ memory down button, then press START/STOP button for about 3-4 seconds.
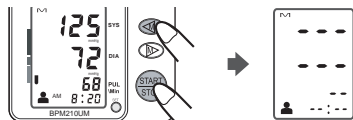
About Blood Pressure

Blood Circulation ··

The blood circulation is responsible for supplying the body with oxygen. Blood pressure is the pressure exerted on the arteries.

The systolic blood pressure value (higher pressure or top value) represents the blood pressure produced by contraction of the heart muscle.

The diastolic blood pressure value (lower pressure or lower value) represents the blood pressure produced by relaxation of the heart muscle.

Systolic Blood Pressure   Diastolic Blood Pressure

Contraction of the heart muscle	Relaxation of the heart muscle
Extrude blood	Blood return heart
Pressure increased to the blood vessel	Pressure decreased to the blood vessel
=	=
Higher pressure	Lower pressure
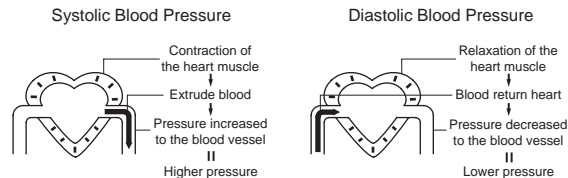
Classification of Blood Pressure ·······································

After each measurement is completed, the LCD display will show your position automatically on the six segments of the bar indicator which corresponds to WHO Blood Pressure Indicator.

Diastolic Blood Pressur (mmHg)

110 — Severe hypertension
100 — Moderate hypertension
      Mild hypertension
90 — Normal systolic value
85 — Normal blood pressure
80 — Optimal blood pressure (target value)

120 130 140 160 180   Systolic Blood Pressure (mmHg)

WHO
Red
Yellow
Green
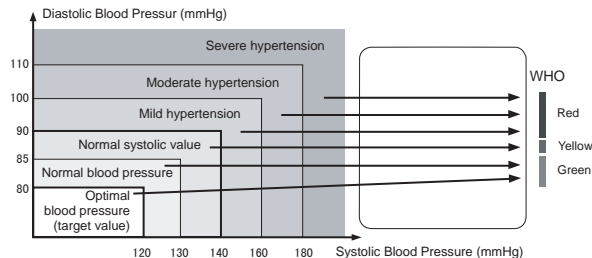
Note!
When a person's systolic and diastolic pressures fall into different categories, the higher category should apply.

Exceptional Situations

Error Indicators

■ The following symbol will appear on the display when measuring abnormal.

| Symbol	Cause	Correction
Err	The course of inflating appears error.	Wrap the cuff properly.
		Make sure that the air plug is properly inserted in the unit.
		Inflate over again after ensuring.
	When measurement fails.	Do not move your arm and body, and keep quiet.
		Measure over again according to correct way.
Lo	When the batteries power are too low.	Replace all of the worn batteries with new ones.

Eliminate Fault

Problem	Causes and Solutions
No power.	Replace all the worn batteries with 4 new ones.
No display appears on the display screen.	Check the battery installation for proper placement of the batteries polarities.
Measurement values appear too high or too low.	Blood pressure varies constantly. Many factors including stress, time of day, how you wrap the cuff, may affect your blood pressure. Review the sections "Proper Use of the Arm Cuff" and "Take a Measurement".

Care and Maintenance

Care

- Keep the unit in the storage case when not in use.
- Clean the unit with a soft dry cloth. Do not use any abrasive or volatile cleaners.
- Never immerse the unit or any components in water.
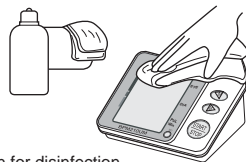
* If needed, please use ultraviolet radiation for disinfection

Maintenance

● Do not clean the body and cuff with naphtha, thinner or gasoline etc.	● Do not wet the cuff or attempt to clean the cuff with water.
● Store the unit in a clean and dry location. Do not subject the unit to extreme hot or cold temperature, humidity and direct sunlight.	● Remove the batteries if the unit will not be used for 3 months or longer. Always replace all of the batteries with new ones at the same time.
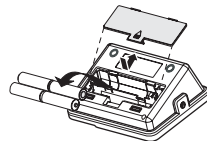
※ Use the unit consistent with the instructions provided in this manual. Use only authorized parts and accessories.

Specifications

Model No.		BPM210UM
Display		LCD Digital Display
Measuring Principle		Oscillometric Method
Measurement Localization		Upper Arm
Measurement Range	Pressure	0 ~ 299 mmHg (0 ~ 39.9 kPa)
	Pulse	40 ~ 199 Pulses/min
Accuracy	Pressure	± 3 mmHg (0.4 kPa)
	Pulse	± 5% of reading
LCD Indication	Pressure	3 Digits Display of mmHg or kPa
	Pulse	3 Digits Display
	Symbol	Memory/Average/IHB/Heartbeat/Low Battery, etc.
Inflation		Automatic by Internal Pump
Deflation		Automatic by Air Valve
Rapid Air Release		Automatic by Air Valve
Memory Function		2 Zones with 90 Memories for Each
Power Source		4 AA Alkaline Batteries or AC/DC Adapter; D.C. 6V
Automatic Power-Off		In 2 Minutes
Main Unit Weight		Approx. 330g (Batteries not included)
Cuff		Soft Arm Cuff
Accessorial Components		Cuff, Batteries, Instruction Manual
Operating Environment	Temperature	10 ~ 40 °C (50 ~ 104 °F)
	Humidity	15 ~ 90%RH (Noncondensing)
	Barometric Pressure	105 ~ 80 kPa
Transport and Storage Environment	Temperature	-20 ~ 60 °C (-4 ~ 140 °F)
	Humidity	10 ~ 95%RH (Noncondensing)

Indications for Use Statement

■ The unit is intended to be used to measure blood pressure (systolic and diastolic) and heart rate from the upper arm by using the oscillometric method.

■ The unit is intended for usingin only adult population,not applied to the other populations such as neonatal baby.

■ It can't be used while the wirst (arm) has bleeding or wound to avoid the blood flowing from the wound in pressurzing.

Statement

■ The intended use: The unit is intended to be used by adults at home or medical centre to measure blood pressure and pulse rate from the upper arm.

■ The unit satisfies the requirements of IEC60601-1 Medical electrical equipment,EN1060-1:Non-invasive sphygmomanometer,EN1060-3: Non-invasive sphygmomanometer

■ The unit has passed the EMC Test.

■ The Unit complies with IEC 80601-2-30.

■ 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 sphygmomanometers.

■ The risk of patient and user can be lowered to acceptable level.

■ Substitution of a cuff different from that supplied might result in measurement error.

■ Specifications are subject to change without notice due to improvements in performance.

■ Federal law restricts this device to sale by or on the order of a physician.

■ Equipment not suitable for use in the presence for flammable mixtures

■ The unit might not meet its performance specifications if stored or used outside the following spcified temperature and humity ranges.

Warranty Information

■ The unit, excluding the unit cuff, is guaranteed to be free of defects in workmanship and materials for a period of two years from the date listed on the purchase record. when used in accordance with the instructions provided with the unit. The unit cuff is warranted to be free from detects in materials and workmanship appearing within one year from the date listed on the purchase record when the unit is used in accordance with the instructions provided with the unit.

■For repair under this warranty. Our authorized service agent must be advised of the fault within the period of the warranty. This warranty covers parts and labor only under normal operations. A transportation fee or freight fee that may be incurred will be the owner's responsibility. Any defect resulting from natural causes, e.g., flood, hurricane etc., is not within this guarantee. This guaranty does not cover damage incurred by: use of the unit not in accordance with the instructions, accidental damage, or being tampered with or serviced by unauthorized service agents.

■ Unit subjected to misuse, abuse, and neglect of these manual content, non-instructional purposes; unauthorized repair or modifications will be excluded from this warranty. This guarantee specifically excludes expendables and consumables, for example batteries. All warranty claims must be directed to the distributor responsible for the sale of the device. The content of this warranty is subject to change without further notice.

■ Periodical check:
Sensitive measuring devices must be checked from time to time for accuracy and leakage, we therefore recommend that the performance should be checkedevery 2 years
Check and maintenance and repair for the unit, please contact the local distributorfor details.

Notes