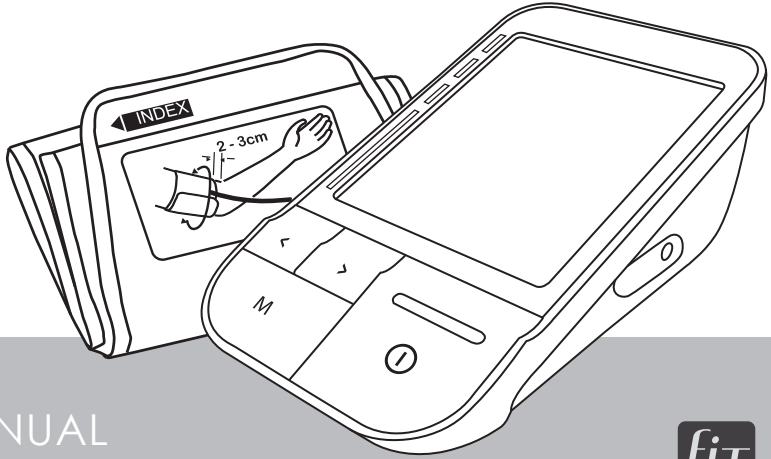
DIGITAL AUTOMATIC BLOOD PRESSURE MONITOR



USER MANUAL

MODEL : MD41W0/MD41W1

fiT G.LAB

INTRODUCTION

Thank you for purchasing this blood pressure monitor. Please read this manual thoroughly before use. Contact your physician if you have any queries about your blood pressure.

This fully automatic instrument utilizes the non-invasive oscillometric method, which detects your blood movement through you brachial artery, for measuring your blood pressure and pulse rate, and the result will display on a digital panel. Without using a stethoscope, you can get the readings promptly and easily.

This device conforms to European Council Directive 93/42/EEC concerning medical devices. This is made evident by the CE mark of conformity accompanies by the reference number of the designated authority.

This device complies with :

- EN ISO 81060 standard relating to non-invasive sphygmomanometers Part 1: Requirements and test methods for non-automated measuremnt types and EN 1060 standard relating to non-invasive sphygmomanometers Part 3: Supplementary requirements for electro-mechanical blood pressure measuring systems.
- EN 60601 standard relating to medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance and essential performance – Collateral standard: Electromagnetic compatibility – Requirements and tests.
- EN 1060-4:2004 standard relating to non-invasive sphygmomanometers - Part 4: Test procedures to determine the overall system accuracy of automated non-invasive sphygmomanometers.
- ISO 81060-2:2013 standard relating to non-Invasive sphygmomanometers - Part 2: Clinical validation of automated measurement type.
- IEC 80601-2-30:2009+A1:2013 standard relating to medical electrical equipment - Part 2-30: Particular requirements for the basic safety and essential performance of automated type non-invasive sphygmomanometers.

Indication for Use

This device is for use by medical professional or home users. It is intended to measure the systolic and diastolic blood pressure of an adult individual by using a non-invasive technique, in which an inflatable cuff is wrapped around the upper arm.

SAFETY NOTES

WARNING	WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	CAUTION indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

WARNING

- Consult your physician before starting to measure your blood pressure.
- Like any oscillometric blood pressure measurement devices, certain medical conditions can affect the measurement accuracy, among others:
  - Disorder of the cardiac rhythm
  - Very low blood pressure
  - Very low blood perfusion
  - Patients in shock
  - Diabetes
  - Vessel anomalies
  - People with electrical implants such as a cardiac pacemaker
  - Women who are pregnant
  - Patient who are pre-eclamptic
  - Patient motion during measurement

  Due to their condition the oscillometric measurement method can produce incorrect readings. This represents a risk for your health, since values may be interpreted incorrectly. Always consult your physician to determine what will be suitable for you.
- This product does not and is not intended to provide a medical diagnosis. Measurement results are for reference only. Self-diagnosis and treatment, e.g. regarding medication, using measured results represents a risk for your health. Always consult with a licensed physician for determination of appropriate medication and dosage thereof. Follow the instructions of your physician or licensed healthcare provider.

SAFETY NOTES

- Please note that technically related measuring tolerances are possible. Please see the section “TECHNICAL SPECIFICATION”.
- Any cuff related blood pressure measurement in high repetition rates, can lead to severe measurement side effects, e.g.
  - A nerve compression with temporary wrist/ hand paralysis
  - The release of an arterial or venous thrombus, which can cause a life threatening situation.

  Please contact your physician about the specific risks of cuff pressure in your specific case.
- The “irregular heartbeat” function does not replace a cardiac examination, but may help to detect potential heart rate irregularities at an early stage. Always consult your physician to determine what will be suitable for you.
- The “irregular heartbeat” function is not designed for diagnosing or treating an arrhythmic disorder. Arrhythmia can only be ascertained by a licensed physician.
- The “WHO BLOOD PRESSURE CLASSIFICATION” chart is not intended to replace a medical diagnosis. This chart is only for reference for different classifications of blood pressure.
- If you notice abnormal or suspicious variations in blood pressure measurements, consult your physician immediately.
- Women who underwent a breast or axillaries lymph node removal operation should consult a physician or licensed healthcare provider before starting blood pressure measurements.
- This device must be used in accordance to the specified ambient conditions, otherwise the accuracy of readings might be affected. See “TECHNICAL SPECIFICATION” for details.
- Do not wrap the cuff around body parts other than your upper left arm. Misuse represents a risk to your health.
- This product is not intended for use by or on children, toddlers and infants or on persons who cannot express their consent, e.g. persons with mental disorders or the like. Consult your physician for alternative methods of measuring a child’s blood pressure.
- Packaging materials are a deadly hazard for children and can cause suffocation. Remove all packaging materials immediately and keep them away from children at all times.
- This product contains small parts that may present a choking hazard to children. Keep the unit and all parts out of reach of children.

SAFETY NOTES

- Proper cuff size is important for accurate measurements. Only use the device on adults who have the right upper arm circumference for this unit. See “TECHNICAL SPECIFICATION” for suitable arm circumferences.
- Electromagnetic interference: Avoid strong electrical or electromagnetic fields in the direct vicinity of the device (e.g. mobile phones, microwave ovens) while it is in operation, an inaccurate measurements may result. To prevent such interference, use the unit at a sufficient distance from such devices or turn the disturbances off.
- Batteries should not be charged or reactivated by any other means. The batteries may explode.
- Take extra precaution to keep a leaking battery away from fire as there is a risk of ignition or explosion.
- In case battery fluid leaks and come into contact with your eyes or skin, do not rub and immediately rinse with plenty of clean water and seek medical advice.
- Do not use the equipment where flammable gas (e.g. anaesthetics gas, oxygen or hydrogen) or flammable liquid (e.g. alcohol) are present.
- Do not use any cuffs and accessories other than those explicitly recommended by the manufacturer for use with this product. Cuffs and accessories not approved for use with this device may cause damage to your health and to the product.
- The tubing presents a strangulation hazard. Keep this product away from children and those who require close supervision, e.g. people with mental disorders.
- Do not drape tube around neck. This presents a strangulation hazard.

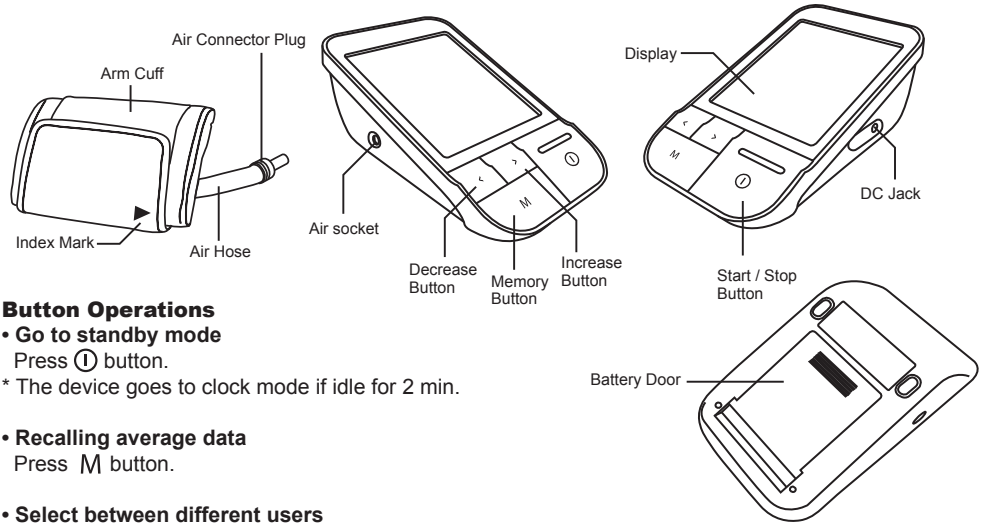
CAUTION

- This device should not be used when your arm has been wounded/ injured or when a catheter has been inserted. Such use may result in injury.
- Remove any kind of arm jewellery or the like before taking a measurement. This could cause bruises.
- Do not place the arm cuff over heavy clothing (e.g. a jacket or sweater sleeve) as the blood pressure monitor will not be able to take a proper measurement and there is an elevated danger of acquiring hematoma or skin marks during the course of the measurement.
- In case the cuff does not stop inflating, interrupt the measurement by pressing the ON/OFF button and open the cuff at once.
- In case battery fluid leaks, do not touch the battery fluid. Avoid skin contact (e.g. put on protective gloves) and clean the battery compartment with dry cloth.
- Do not disassemble the device, it may cause damage to yourself and to the product. If you cannot fix the problem using the “TROUBLESHOOTING” instructions, request service from your dealer.
- When applying the cuff, make sure there are no wrinkles in the cuff as this could cause bruises.
- Blood pressure measurements can lead to temporary marks on the skin at the site of the cuff placement. This is especially the case in high repetition rates, in hypertonic patients and in patients with weak heart rates. In rare cases a mark may persist for couple of days. Please contact your physician about these specific risks of cuff pressure in your specific case.
- Do not exert any kind of pressure on the hose during measurement, e.g. laying your arms or any other object on the hose. This could cause incorrect measurements.

MAINTENANCE AND STORAGE

- The blood pressure monitor is constructed by precision electronic components. Accuracy of readings and the instrument's service life depend on careful handling. Protect the unit against hard knocks (e.g. dropping the unit), moisture, water, dirt, dust, chemicals, extreme hot or cold temperatures, major temperature fluctuations, direct exposure to sunlight and heat sources which are too close (e.g. stoves, heating radiators). This may damage the unit. The device must be stored in the specified ambient conditions. Please see section "Technical Specification" for details.
- The device is designed and manufactured for a long service life. However it is generally recommended to have the monitor inspected every 2 years to ensure proper functioning and accuracy. Please contact your dealer for maintenance.
- Never immerse and/or spill water or any other liquid onto the monitor or any components, otherwise liquid may enter it and cause damage.
- Never use rechargeable batteries. This may damage the unit.
- Replace all batteries at the same time and use batteries of the same type. Do not mix old and new batteries.
- Never attempt to repair, open and/or disassemble the unit or adjust it yourself. This may cause damage to the unit and impair functions. If you cannot fix the problem using the "TROUBLESHOOTING" instructions, request service from your dealer.
- Do not drop or insert any object into any openings or hoses. This may damage the unit.
- Do not press the buttons with excessive force or with pointed objects.
- Clean your device and cuff carefully only with a slightly moistened soft cloth and dry it immediately with a soft dry cloth. Do not press.
- Do not use any aggressive solvents, cleaning agents, detergents or any other strong chemicals (e.g. thinner, alcohol, benzene) to clean the device.
- When storing the device, make sure that no heavy objects are placed on top of it.
- Do not fold the cuff and tubing tightly. The cuff tube should not have any sharp kinks and keep it away from sharp edges.
- Leaking batteries may damage the unit. If you do not intend to use the unit for longer periods, remove the batteries from the battery compartment before placing the device in storage.
- Used equipment, parts and batteries are not treated as ordinary household waste, and must be disposed according to applicable local regulations for material disposal. Unlawful disposal may cause environmental pollution.

PART IDENTIFICATION



Button Operations

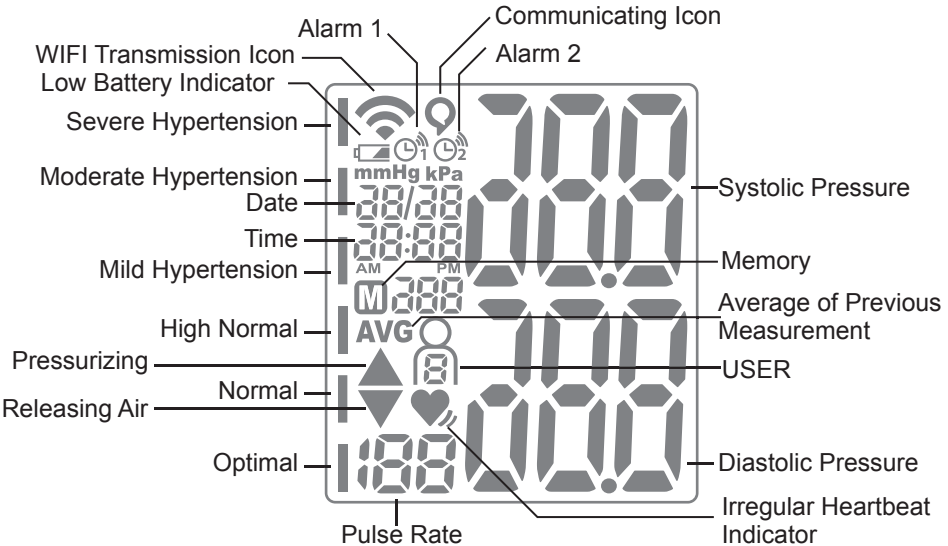
- **Go to standby mode**
  Press ⏻ button.

* The device goes to clock mode if idle for 2 min.

- **Recalling average data**
  Press M button.

- **Select between different users (User 1 / User 2 / User 3 / User 4)**
  Press [<] or [>] button

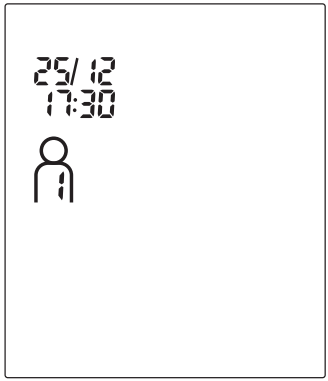
DISPLAY READINGS



CLOCK MODE & STANDBY MODE

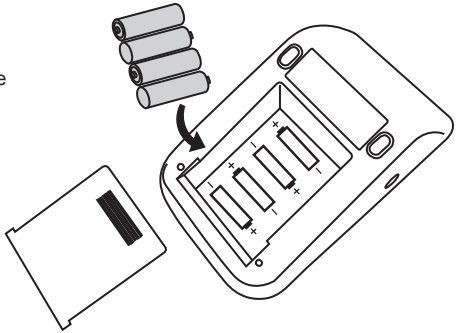
Clock Mode

Standby Mode



INSTALL/ CHANGE BATTERIES

1. Push the battery cover located on the bottom side on the unit as shown in the figure.
2. Remove old batteries and insert new ones. Use LR03 or AAA alkaline batteries and use batteries of the same type only.
3. Make sure the battery polarities (+) and (-) match the making on the battery compartment.
4. Place back the battery door.

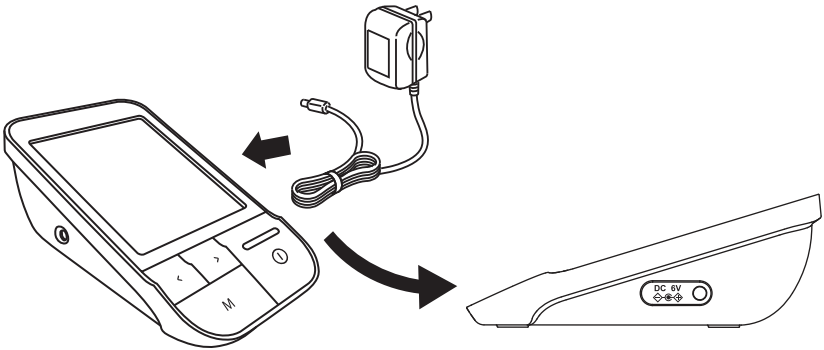


NOTE:

- Insert the batteries as shown in the battery compartment. If not, the device will not work or even be damaged.
- When battery power becomes weak, the [ ] icon and “E6” appear in the display, replace all batteries with new ones. Do not mix old and new batteries.
- Never use rechargeable batteries. This may damage the unit.
- Battery life may vary with ambient temperature and may be shorter at low temperature.

USE OPTIONAL AC ADAPTOR (Accessory item sold separately)

1. Insert the AC adapter cord into the socket on the right side of the device.
2. Insert the AC adapter plug into the outlet.
3. To remove the AC adapter, first disconnect the adapter plug from the AC outlet, then the adapter cord from the device.



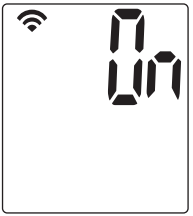
NOTE:

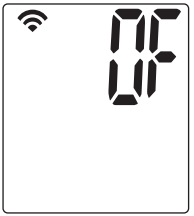
- Optional AC adaptor should comply with the requirement of IEC 60601-1 standard.
- Use only the exclusive AC adapter specified by authorized dealers. Other AC adapter may vary in output voltage and polarities and may represent a risk on your life and damaging the device.
- When the AC adapter is in use, the device does not draw power from batteries.

TO SET CLOCK / WIFI

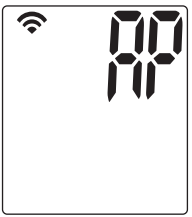
After inserting batteries or press and hold [M] button for 5 sec to enter clock setting mode

1. "Year" will blink on display automatically
2. Press [<] / [>] button to select year
3. Press [M] button to confirm and "Month" will blink
4. Press [<] / [>] button to select month
5. Press [M] button to confirm and "Day" will blink
6. Press [<] / [>] button to select day
7. Press [M] button to confirm and "Hour" will blink
8. Press [<] / [>] button to adjust to desired hour
9. Press [M] button to confirm and "Minute" will blink
10. Press [<] / [>] button to adjust to desired minute
11. Press [M] button to confirm
12. "" WIFI icon is displayed and "On" will blink
13. Press [<] / [>] button to select WIFI on or off.
14. Set the WIFI to "On" mode, press and hold [<] and [>] buttons for 3 seconds to enter "AP" mode.
15. "AP" is shown and "" WIFI icon will blink.
16. Install and open the application (APP) - G.LAB fit on your smartphone or tablet. Go to the setting manual and click [Change WIFI network].
17. The APP will search and list all the available signal. Select your blood pressure monitor on the list. After connected to your WIFI network, the "" icon on the blood pressure monitor will turn on and stop blinking, settings are done.





Press [<] / [>] button to select WIFI on or off



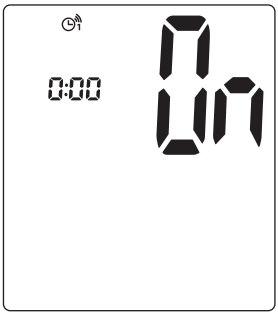
Press [<] and [>] button for 3 seconds to enter "AP" mode.

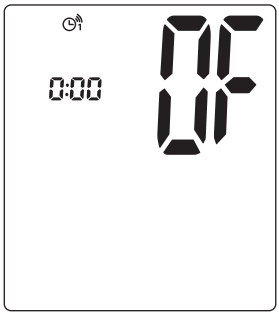
Install the application (APP) - G.LAB fit.

Note: Please repeat the above steps when using new WIFI network.

TO SET ALARM CLOCK

1. To enter the alarm clock setting mode, press and hold [⏻] button until Alarm 1 [ ] icon or Alarm 2 [ ] icon is flashing on the display. Press [<] / [>] to select between [] and []. Press [M] button to confirm your selection.
2. [On] or [OF] icon will blink, press [<] / [>] button to switch between ON and OFF. Press [M] button to confirm.

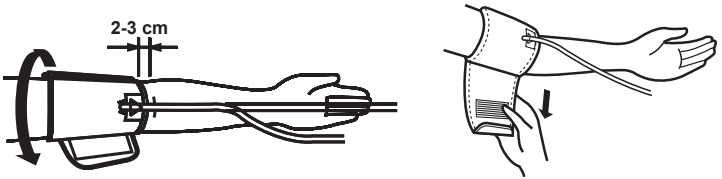




3. When [On] icon is selected, “Hour” will blink. Press [<] / [>] button to adjust to desired hour. Press [M] button to confirm.
4. “Minute” will blink. Press [<] / [>] button to adjust to desired minute. Press [M] button to confirm and settings are done. The alarm icon is turned on on the display.
5. To turn off the alarm, enter the alarm clock setting mode and select the desired alarm icon. Press [M] button to confirm your selection. Press [<] / [>] button to switch to [OF] and press [M] button to confirm. The alarm is turned off.

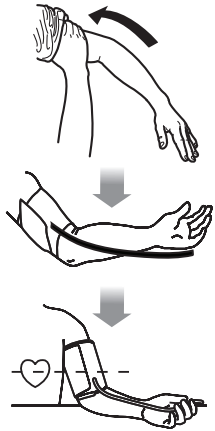
TO APPLY ARM CUFF

1. Pass the end of the cuff furthest from the tubing through the metal ring to form a loop. The smooth cloth should be the inside of the cuff loop.
2. Put your left arm through the cuff loop. The bottom of the cuff should be approximately 2 – 3 cm above the elbow. The white artery mark on the cuff should lie over the brachial artery on the inside of the arm. The tube should run down the centre of arm and even with the middle finger. Do not place the arm cuff over heavy clothing (e.g. jacket or sweater sleeve) as the blood pressure monitor will not be able to take proper measurement. Blood circulation in the arm should not be restricted by tight clothing or other objects.
3. Pull the cuff so that the top and bottom edges are fitted evenly around your arm.



4. When the cuff is positioned correctly, press the sewn hook material firmly against the pile side of the cuff.
5. Make sure the cuff fits snugly around your arm. The cuff should make good contact with your skin.
6. If the cuff is assembled correctly, the sewn hook material will be on the outside of the cuff loop and the metal ring will not touch your skin.
7. Insert the cuff tubing into the socket on the left side of the unit. Make sure it is inserted firmly in the main unit that there are no kinks in the cuff tubing.

BEFORE MEASURING BLOOD PRESSURE



1. Applying the arm cuff, following the instruction in “TO APPLY ARM CUFF”.
2. Rest at least for 5 minutes before each measurement. Otherwise there may be erroneous results.
3. Sit comfortably on a chair with your feet flat on the floor. Do not cross your feet. Place your left arm on a table so the cuff is level with your heart.
4. Relax your arm and turn your palm upward.
5. Relax, keep still and do not talk during the measurement in order not to distort the result.

NOTE:

- This instrument is intended for use on and by adult only. Do not use this device on or by children, toddlers and infants.
- For reliable monitoring and reference of blood pressure, it is recommended to do the measurement daily at the same time.
- In order to obtain a resting condition blood pressure, do not take alcoholic and caffeinated beverages, smoke, exercise or bath for at least 30 minutes before taking a measurement.
- To minimize measurement variations due to physical activity, relax for five to ten minutes before taking a measurement. If you are excited by emotional stress or muscular movement, the measurement result may be inaccurate.
- You should not be physically tired or exhausted while taking measurement.
- Perform measurements in a quiet and relaxed environment at room temperature.
- Remain relax, still and do not speak during measurement since the accuracy of any blood pressure measurement with this device can be affected by those multitude of causes.
- Always wait at least 5 minutes between measurements to allow the blood circulation in your arm to return to normal. You may need to increase the waiting time depending on your individual physiological characteristic.
- Should the device detect an abnormal condition, it stops the measurement and will display an error code. See “TROUBLESHOOTING” for more details.
- This device measures blood pressure based on heartbeat. If you have a very weak or an irregular heartbeat, the device may have difficulty in determining your blood pressure. (An irregular heartbeat is defined as a heartbeat that varies by 25% from the average of all heartbeats during measurement.)
- Do not exert any kind of pressure on the air tube during measurement, e.g. laying your arm or any other object on the air tube. This could cause incorrect measurements.

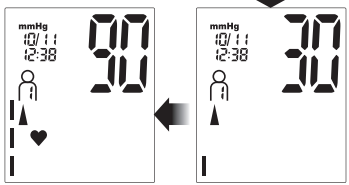
TO MEASURE YOUR BLOOD PRESSURE

1. Follow the instruction in “BEFORE MEASURING BLOOD PRESSURE” to make yourself ready.
2. Press [⏻] button to turn the device from clock mode to standby mode.
3. Press [<] / [>] to select user memory 1,2,3 or 4. Confirm selection by pressing [⏻] button. Then press [⏻] to start the measurement.
   OR
   Press [⏻] second time to start the blood pressure measurement.
4. The cuff starts to inflate. It is normal for the cuff to feel very tight. A pressure bar indicator is displayed during measurement. See “PRESSURE BAR INDICATOR” for more details.
5. Once the pulse is detected, the [♥] blinks with each pulse beat, indicating that the measurement is in progress.
6. When the measurement is complete, the systolic and diastolic pressure and pulse rate are displayed and stored.

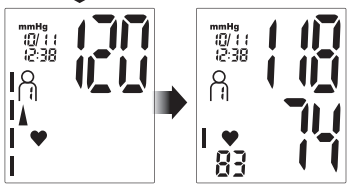
NOTE:
You can stop inflation by pressing [⏻] button at any time.

Deflation for start measuring

Record number and User ID are displayed



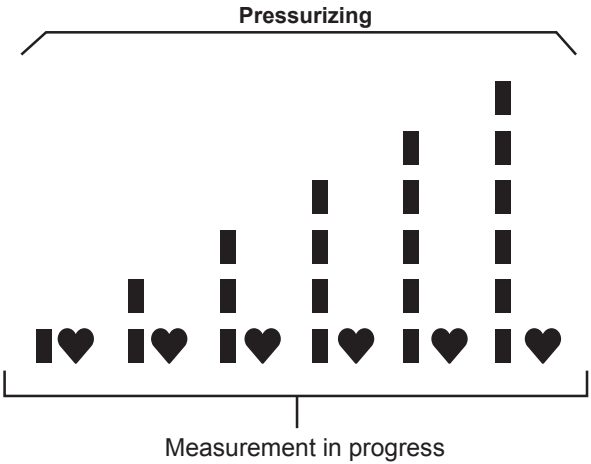
Inflation in progress



Measurement result shown

PRESSURE BAR INDICATOR

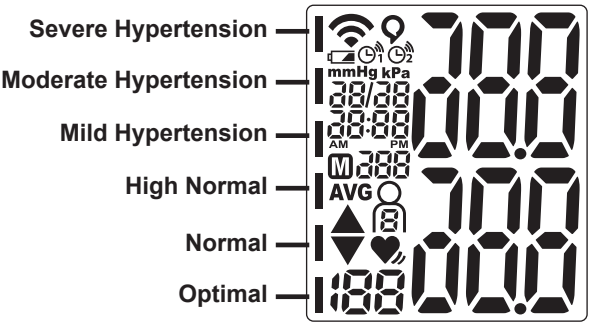
The indicator monitors the progress of pressure during measurement.



WHO CLASSIFICATION INDICATOR

Each of the six segments of the bar indicator corresponds to the WHO blood pressure classification.

WHO Classification Indicator:



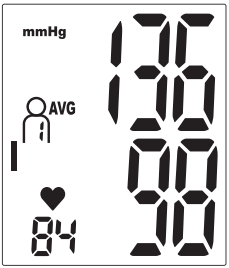
TO RECALL AVERAGE AND PREVIOUS MEASUREMENT DATA

This device has a memory capability to store the measurement readings for each user. Every time you complete the measurement, the device automatically stores the measurement result.

1. Press [M] button in standby mode to enter the memory mode, the average blood pressure for the latest 3 measurements is displayed.
2. Press [>] button to view average data for lastest 7 days AM record (5:00 - 9:00 am).
3. Press [>] button to view average data for lastest 7 days PM record (6:00 - 8:00 pm).
4. Press [>] button to view the lastest measurement record.
5. Continue to press [>] button to view older measurement records.
6. Press [<] button to view previous measurement records.

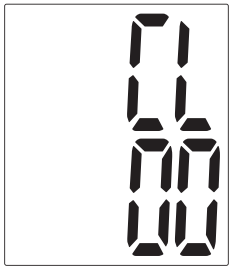
TO DELETE MEASUREMENT DATA

1. Press [M] button simultaneously when the device is showing average or previous measurement data of selected user.
2. Press and hold [<] and [>] for 3 seconds until [CL] and [00] are shown.
3. All measurement data for the selected user will be deleted.



Press [M]

Press and hold [<] and [>] at the same time



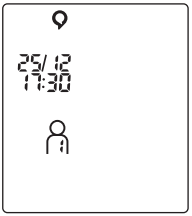
All memories cleared

CONTROL WITH YOUR VOICE

Amazon Echo includes Alexa can be used to give commands to the blood pressure monitor.

Connecting the blood pressure monitor to Alexa:

1. On your smartphone or tablet, download the Amazon Alexa app from your app store.
2. Open the Alexa app and log in to your amazon.com account.
3. Select “Skills” from the menu and search for “G Doctor” skill.
4. Plug the AC adaptor to the blood pressure monitor.
   (Ref. to “USE OPTIONAL AC ADAPTOR”)
5. Connect your blood pressure monitor to your WIFI network.
   (Ref. to “TO SET CLOCK / WIFI”)
6. Open the G.LAB fit app and select “Smart Home” from the setting menu. Turn on the communicating function, the “ ” icon will be shown on the blood pressure monitor.



Giving voice commands

When using the skill, you need to specify the name which the blood pressure monitor use and also specify the user ID. Use the blood pressure monitor name(s) you set up already. These are shown in the G.LAB fit app. (Setting > Smart Home)

The preset name of blood pressure monitor is “BPM” and the preset user ID is “user 1”. To give voice commands to the blood pressure monitor, please say “ Ask - BPM ” + below skill:

To check the last measurement record:

- *“Ask (BPM) get (user 1) last reading”*
- *“Ask (BPM) what is (user 1) last reading”*
- *“Ask (BPM) give me last data of (user 1)”*
- *“Ask (BPM) find last reading of (user 1)”*
- *“Ask (BPM) give me (user 1) last data”*

To check the average measurement record:

- *“Ask (BPM) get (user 1) average reading”*
- *“Ask (BPM) what is (user 1) average reading”*
- *“Ask (BPM) give me average data of (user 1)”*
- *“Ask (BPM) find average data of (user 1)”*
- *“Ask (BPM) give me (user 1) average data”*

WHAT IS AN IRREGULAR HEARTBEAT

This blood pressure monitor provides a blood pressure and pulse rate measurement even when an irregular heartbeat occurs. An irregular heartbeat is defined as a heartbeat that varies by 25% from the average of all heartbeats during the blood pressure measurement. It is important that you are relaxed, remain still and do not talk during measurements.

NOTE:

- We recommend you to contact your physician if you see this [♥] indicator frequently.
- The “irregular heartbeat” function does not replace a cardiac examination, but may help to detect potential heart rate irregularities at an early stage. Always consult your physician to determine what will be suitable for you.
- The “irregular heartbeat” function is not designed for diagnosing or treating an arrhythmic disorder. Arrhythmia can only be ascertained by a licensed physician.

ABOUT BLOOD PRESSURE

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.

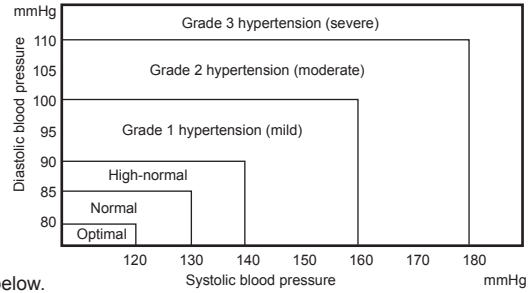
What Is Hypertension And How Is It Controlled?
Hypertension, an abnormally high arterial blood pressure, if left unattended, can cause many health problems including stroke and heart attack. Hypertension can be controlled by altering one's lifestyle, avoiding stress, and with medication under a doctor's supervision. To prevent hypertension or to keep it under control:

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

Why Measure Blood Pressure At Home?
Blood pressure measured at a clinic or doctor's office may cause apprehension and can 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.

WHO Blood Pressure Classification
Standards to assess high blood pressure, without regard to age, have been established by the World Health Organization (WHO), as shown in the chart below.

Reference Material: Journal of Hypertension 1999, Vol 17 No.2



TROUBLESHOOTING

Nothing appears in the display, even when the power is turned on	Batteries are drained	Replace all batteries with new ones
	Battery polarities are not in the correct position	Re-install the batteries with their negative and positive ends matching their indicated in the battery compartment
	Loose in plug or contact with outlet (IF AC adaptor is used)	Check the wiring to make sure plug & outlet are properly secured
ERROR code 1 (E1) appears	The cuff position is not correct	Sit comfortably and still. Ensure that the cuff is at the same level as the heart
ERROR code 2 (E2) appears	You moved your arm or body during measurement	Make sure you remain very still and quiet during the measurement
ERROR code 3 (E3) appears	The cuff position is not fastened properly	Fasten the cuff correctly

ERROR code 3 (E3) appears	The cuff may not be applied	Check whether tube connection of the cuff is secured to the unit properly
ERROR code 4 (E4) appears	The unit does not measure	If you have a very weak or irregular heart beat, the device may have difficultly in determining your blood pressure
	There is a measuring Error	Sit comfortably and still. Fasten the cuff again carefully
ERROR code 5 (E5) appears	Cuff over inflated	The measurement range is over 300 mmHg. It is recommended to see the doctor as soon as possible.
ERROR code 6 (E6) appears	Low battery	The battery power is too low to function. Replace the batteries with new ones.
The monitor keeps inflating	Circuit locked	Remove and reinsert the batteries and then proceed to take measurement again.

TECHNICAL SPECIFICATION

Display	: LCD Display
Measurement Range	: Systolic Pressure: 50-250 mmHg ; Diastolic Pressure: 30-200 mmHg Pulse : 40-180 beats/minute
Accuracy	: Pressure : +/-3 mmHg Pulse : +/-5% of reading
Resolution	: Pressure : 1 mmHg Pulse : 1 beat / minute
Measurement Method	: Non-invasive, Oscillometric method
Power Source	: 4 x 1.5V AAA batteries (battery life 300 times)
Optional AC Adaptor	: Input 100-240V, 50-60 Hz ; Output 6V@600mA (service life 5000 times)
Operating Temperature / Humidity	: +5˚C to +40˚C, 15-93% RH maximum
Storage Temperature / Humidity	: -25˚C to +70˚C, up to 93% RH maximum
Operation, storage and transport atmospheric pressure	: 700hPa to 1060hPa
Outer Dimensions	: Approx. 164 x 99 x 46mm
Arm Circumference	: 22-36cm (Original), 17-22cm (Optional), 35-44cm (Optional), 22-44cm (Optional)
Accessories	: Cuff, User Manual, Storage Pouch, Batteries(Optional), AC Adaptor(Optional)
Classification	: Application part Type BF
Key to symbols	: Application part Type BF : Class II equipment symbol

SYMBOLS

Symbols	Function / Meaning
SN	Serial Number
	Manufacturer
	Type BF: Device, cuff and tubing are designed to provide special protection against electrical shocks.
SYS	Systolic Blood Pressure in mmHg
DIA	Diastolic Blood Pressure in mmHg
PUL	Pulse
CE 0123	EC Directive Medical Device Label
	Caution
EC REP	Authorized Representative in the European Community
	WEEE Label
	Refer to instruction manual / booklet
	Keep dry

NOTICE:
• Operation mode : Continuous
• ⚠ Attention, Consult ACCOMPANYING DOCUMENTS.

Appendix I

Guidance and manufacture's declaration – electromagnetic emission		
The *Sphygmomanometer (MD41W0/MD41W1)* is intended for use in the electromagnetic environment specified below. The customer or the user of the *Sphygmomanometer (MD41W0/MD41W1)* should assure that it is used in such an environment.		
Conducted and radiated RF EMISSIONS	**Compliance**	**Electromagnetic environment - guidance**
RF emissions CISPR 11	Group 1	The *Sphygmomanometer (MD41W0/MD41W1)* 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 emission CISPR 11	Class B	The *Sphygmomanometer (MD41W0/MD41W1)* is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.

Guidance and manufacture's declaration – electromagnetic immunity			
The *Sphygmomanometer (MD41W0/MD41W1)* is intended for use in the electromagnetic environment specified below. The customer of the user of *Sphygmomanometer (MD41W0/MD41W1)* should assure that it is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment - guidance**
Electrostatic discharge IEC 61000-4-2	± 8 kV contact ± 15 kV air	± 8 kV contact ± 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 %.
Rated power frequency magnetic fields IEC 61000-4-8	50 Hz: 30 A/m 60 Hz: 30 A/m	50 Hz: 30 A/m 60 Hz: 30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Appendix II

Guidance and manufacture's declaration – electromagnetic immunity

The *Sphygmomanometer (MD41W0/MD41W1)* is intended for use in the electromagnetic environment specified below. The customer of the user of *Sphygmomanometer (MD41W0/MD41W1)* should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted disturbances induced by RF fields IEC 61000-4-6	3 V_{rms}[a] 0.15 MHz - 80 MHz 6 V_{rms}[a] in ISM and amateur radio bands between 0,15 MHz and 80 MHz[b] 80% AM at 1 kHz	3 V_{rms}[a] 0.15 MHz - 80 MHz 6 V_{rms}[a] in ISM and amateur radio bands between 0,15 MHz and 80 MHz[b] 80% AM at 1 kHz	Portable and mobile RF communications equipment should be used no closer to any part of the *Sphygmomanometer (MD41W0/MD41W1),* including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = \left[\frac{6}{E}\right]\sqrt{P}$ where P is the maximum output power rating of the transmitter in Watts (W), d is the minimum recommended separation distance in meters (m), and E is the immunity test level in V/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. Interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF EM fields IEC 61000-4-3	10 V/m[c] 80 MHz - 2.7 GHz 80% AM at 1 kHz	10 V/m[c] 80 MHz - 2.7 GHz 80% AM at 1 kHz	

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

[a] r.m.s., before modulation is applied.

[b] 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 to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.

[c] Before modulation is applied.

Appendix III

Recommended separation distances between portable and mobile RF communications equipment and the *Sphygmomanometer (MD41W0/MD41W1)*

The *Sphygmomanometer (MD41W0/MD41W1)* is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the *Sphygmomanometer (MD41W0/MD41W1)* can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the *Sphygmomanometer (MD41W0/MD41W1)* as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)	
	3 V_{rms}	10 V/m
0.01	0.200	0.060
0.1	0.632	0.190
1	2.000	0.600
10	6.33	1.90
100	20.0	6.00

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (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 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Appendix IV

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

WARNING

- To comply with the limits of the Class B digital device, pursuant to Part 15 of the FCC Rules, this device is comply with Class B limits. All peripherals must be shielded and grounded. Operation with non-certified peripherals or non-shielded cables may results in interference to radio or reception.
- Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

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 my cause undesired operation.

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.

Grandway Technology (Shenzhen) Limited,
Block 7, Zhu Keng Industrial Zone,
Ping Shan District, 518118 Shenzhen,
PEOPLE'S REPUBLIC OF CHINA

EC REP

Shanghai International Trading Corp. GmbH (Hamburg)
Eiffestrasse 80, 20537 Hamburg, Germany.

CE 0123

P/N: 83-M41W0-SEN00A-R #1017
MADE IN CHINA