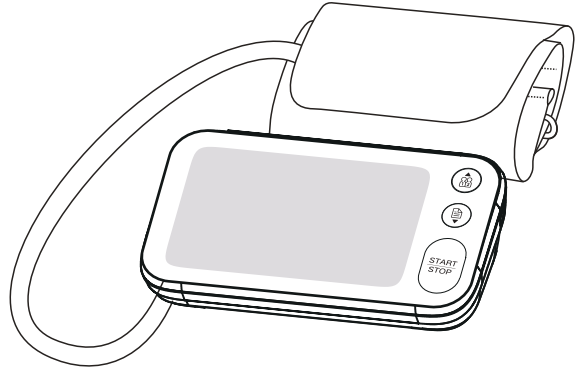
FondCircle

Smart Devices. Connected Care.

Blood Pressure Monitor



User Manual

Model: FBP-A2 Version: 1.0.0_2508

Manufactured for FondCircle Inc.
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Email: support@fondcircle.com
Tel: 1-877-899-7770 (US) (Mon-Fri, 8:00 AM-5:00 PM PST)
Web: www.fondcircle.com

FOREWORD

Thank you for purchasing the FondCircle Blood Pressure Monitor. This product uses the oscillometric method to measure blood pressure. Before each measurement, the device establishes a "zero pressure" equivalent to atmospheric pressure, then inflates the cuff while detecting pressure oscillations caused by pulse rates. These oscillations are used to calculate systolic and diastolic blood pressure, as well as pulse rate.

This user manual contains important safety and care information, and provides step-by-step instructions for using this blood pressure monitor. FondCircle assumes no liability and provides no warranty for any damage (including indirect damage) resulting from failure to comply with this user manual. Please read through this user manual carefully before using the product and strictly follow all safety precautions.

Video Tutorials

Scan the QR code to watch the tutorial videos, which demonstrate how to use the Blood Pressure Monitor safely.

Online Manual

Scan this QR code to get the manual as a PDF, which can be enlarged and viewed on your mobile device.

Quick Start Guide

Scan this QR code to download the Bluetooth Quick Start Guide as a PDF, which can be enlarged and viewed on your mobile device.

App Download

Scan the QR code with your phone or tablet to download the FondCircle App.

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NO.	Name	Quantity
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2	Upper Arm Cuff: 22-45 cm	1
3	User Manual	1
4	Quick Start Guide	1
5	AA Batteries	4
6	USB-C Cable	1

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WARNINGS AND PRECAUTIONS

PRECAUTIONS

- This device is intended for indoor, home use and is not intended for self-use in public areas.
- This device is portable, but it is not intended for use during patient transport.
- This device is not suitable for continuous monitoring during medical emergencies or operations.
- This device is intended for non-invasive measuring and monitoring of arterial blood pressure. It is not intended for use on extremities other than the arm, or for any purpose other than obtaining a blood pressure measurement.
- This device is for adults. Do not use this device on newborns or infants. Do not use it on children and adolescents unless otherwise instructed by a medical professional.
- Consult with your physician before using this monitor if you suffer from the following conditions:
  - Common arrhythmias such as premature ventricular beats or atrial fibrillation.
  - Peripheral arterial disease, pregnancy, preeclamsia, or implantation of electrical devices.
  - Undergoing intravascular therapy, arteriovenous shunt, or mastectomy.

Please note that any of these conditions may affect measurement readings, in addition to patient motion, trembling or shivering.

- Do not use this device for diagnosis or treatment of any health problems or diseases. Please consult with your physician first whether the blood pressure or pulse rate readings can be used as an input in determining clinical actions. Please note that clinical actions can only be determined by the physician, otherwise it may lead to delayed treatment or other dangerous situations.

- If you are taking medication, consult your physician to determine the proper time to measure your blood pressure.
- This device may be used only for the intended use described in this manual, the manufacturer shall have no liability for any incidental, consequential, or special damages caused by misuse or abuse.
- Please use the device under the environment which is provided in the user manual. Otherwise, the performance and lifetime of the device will be impacted and reduced.
- The device may require up to 30 minutes to warm up/cool down from the minimum/maximum storage temperature before it is ready for use.
- The blood pressure monitor, its adapter, and the cuff are suitable for use within the patient environment.
- Do not wash the cuff in a washing machine or dishwasher.
- The device contains sensitive electronic components. To avoid measurement errors, avoid taking blood pressure measurements near a strong electromagnetic field radiated interference signal or electrical fast transient/burst signal.
- Wireless communication equipment, such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies may cause interference that may affect the accuracy of measurements. A minimum distance of 1 foot (30 cm) should be kept from such devices during a measurement.
- The blood pressure monitor is intended for use by medical staff and laypersons, and the patient is also an intended user or operator.

CAUTION

- Do not attempt to repair the unit yourself if it malfunctions. Only have repairs carried out by authorized service centers.
- It is recommended that the performance should be checked after repair, maintenance, and every two years of use, by retesting the requirements in limits of the error of the cuff pressure indication and air leakage (testing at least at 50 mmHg and 200 mmHg). Please contact manufacturer or distributor for authorized service personnel.
- Store your device, cuff, and adapter in a clean and dry place, protect it against extreme moisture, heat, lint, dust and direct sunlight. Never place any heavy objects on it.
- Make sure the rubber tube of the cuff is not squeezed, stretched, or kinked during storage.
- Dispose of accessories, detachable parts, and the device according to the local guidelines.

WARNINGS

- Do not apply the cuff on an arm that has an intravenous drip or a blood transfusion attached.
- Do not kink, fold, stretch, compress, or otherwise deform the tube during measuring, as the cuff pressure might continuously increase, which could prevent blood flow and may result in injury.
- Taking blood pressure measurements too frequently could disrupt blood circulation and cause injuries.
- Do not apply cuff to areas on patient where skin is delicate or damaged. Check cuff site frequently for irritation.
- Do not place the cuff on the arm of a person whose arteries or veins are undergoing medical treatment, i.e. intra-vascular access or intra-vascular therapy or an arteriovenous (A-V) shunt, which could disrupt blood circulation and cause injuries.
- Do not place the cuff on the arm on the same side of a mastectomy (especially when lymph nodes have been removed). It is recommended to take measurements on the unaffected side.

- Do not wrap the cuff on the same arm to which another monitoring device is applied. One or both devices could temporarily stop functioning if you maintenance or while being time.
- Check (by observation of the concerned limb) that the operation of the device does not result in prolonged impairment of patient blood circulation.
- On the rare occasion of a fault causing the cuff to remain fully inflated during measurement, loosen and remove the cuff immediately. Prolonged high pressure applied to the arm (cuff pressure >300 mmHg or constant pressure >15 mmHg for more than 3 minutes) might lead to bruising and discolored skin.
- Do not use this device with high-frequency (HF) surgical equipment at the same time.
- This device should not be used in conjunction with oxygen rich environments and is not intended for use or in conjunction with flammable agents.
- Do not touch output of the batteries/adapter and the user simultaneously.
- The power cord is considered the disconnect device for isolating this equipment from supply mains.
- Do not position the equipment so that it is difficult to reach or disconnect.
- Do not use this device if you are allergic to polyester, nylon, or plastic.
- Only use accessories approved by manufacturer. Using unapproved accessories might cause damage to the unit and injure users.
- If you experience discomfort during a measurement, such as pain in the arm or other complaints, press the power button immediately to release the air from the cuff.
- Do not use the device while under maintenance or while being serviced.

- The air tube poses a risk of strangulation. Furthermore, the small parts of product and batteries present a choking hazard if swallowed. They should therefore always be kept away from infants/children.

NOTICE

- You can use this device to take your own measurement, no third-party operator is required.
- Adapter is specified as a part of ME EQUIPMENT.
- At the request of authorized service personnel, circuit diagrams, component part lists, descriptions, and calibration procedures will be made available by the manufacturer or distributor.
- The expected lifetime of the cuff may vary by the frequency of washing, skin condition, and storage state.
- Please report to the manufacturer and the competent authority of the Member State/the FDA in which you are established about any serious incident that has occurred in relation to this device.

SYMBOLS

The symbols below may be in the user manual, labeling, or other components. They are required for standard use.

	Manufacturer		Type BF applied part
	Date of manufacture		Direct current
		SN	Serial number
	Recyclable	MD	Medical device
	For indoor use only		Class II equipment
	Consult instructions for use or consult electronic instructions for use	LOT	Batch code
	Refer to instruction manual/booklet Note: The background color of the symbol is blue.		
	Caution Indicates that caution is necessary when operating the device or control close to where the symbol is placed, or that the current situation needs operator awareness or operator action in order to avoid undesirable consequences.		
	The symbol indicates that the product should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling.		
	MR Unsafe To identify an item which poses unacceptable risks to the patient, medical staff or other persons within the MR environment.		

FEATURES

- 124 × 76 mm Digital LCD display
- Systolic, Diastolic Blood Pressure, and Pulse Display
- Date/Time Indication
- Maximum 250 records per user

PRODUCT DESCRIPTION

GENERAL DESCRIPTION

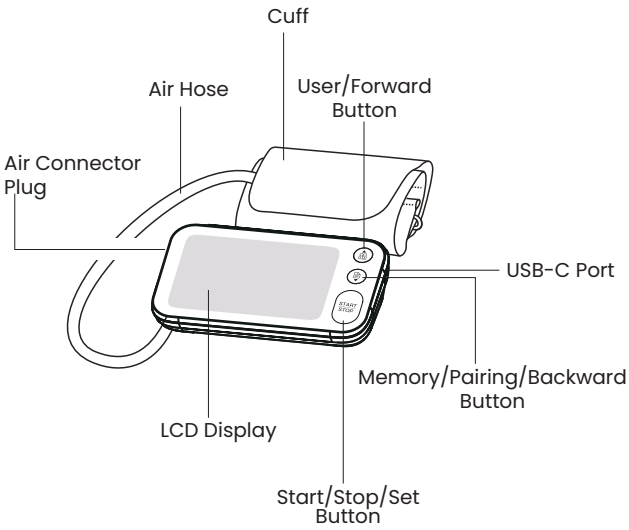
The monitor features blood pressure measurement, pulse rate measurement, and result storage. Readings taken by the FBP-A2 are equivalent to those obtained by a trained observer using the cuff and stethoscope auscultation method.
This manual contains important safety and care information, and provides step by step instructions for using the product. Read the manual thoroughly before using the product.

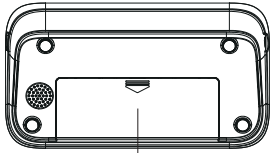
RECEIVING AND INSPECTING YOUR MONITOR

Check that the device packaging has not been tampered with and make sure that all contents are present. Before use, ensure that there is no visible damage to the device or accessories and that all packaging material has been removed.
If you have any doubts, do not use the device and contact your retailer or the specified customer service address.

STRUCTURE

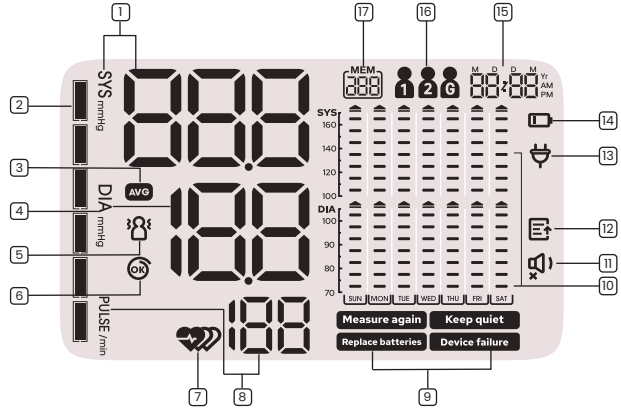
Monitor Components



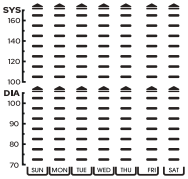


Battery Compartment

LCD Display Symbol



Symbol	Explanation
1	Systolic blood pressure reading
2	Blood pressure level See the blood pressure classifcation on page 30.
3	AVG Average value symbol Appears when viewing the average value of the latest 7 days under the memory mode.
4	Diastolic blood pressure reading
5	Excessive body motion detector symbol Appears when talking, moving, or shaking of the arm with the cuff on is detected during a measurement. NOTE: The measured blood pressure reading may not be accurate when this symbol is displayed with the reading.
6	Cuff wearing OK symbol Appears when the cuff is wrapped well.
7	Pulse rate symbol Flashes when decteted during a measurement.
	Irregular pulse rate symbol Appears when decteted during a measurement. Refer to page 28 for more information.

Symbol	Explanation
8	Pulse display Pulse rate appears after the measurement.
9	Warning Messages Refer to page 30 for more information.
10	 Blood Pressure Trends Appears when viewing the blood pressure trends of the specified period of the past 7 days under the memory mode. The X-axis of the histogram represent the time, while the Y-axis represents the value of systolic and diastolic pressure. Refer to page 20 for more information.
11	Voice broadcast The function of voice broadcast is turned off.
12	Data pending to transmit symbol Displays when the data transmission failed. The measurements are saved on the device and will be sent when a successful connection is achieved.
13	Adapter power mode/Adapter error symbol Appears when the power is supplied by AC adapter. Or appears along with "bAt H&" Replace batteries " to indicate the voltage of the blood pressure monitor is high.
14	Low Battery symbol Indicate the battery is low when appears with "BAt Lo & Replace batteries ."
15	Date/Time display
16	User ID symbol The user ID number appears when the monitor is operated by the selected user.
17	Memory symbol Indicate it is in the memory mode and which the group of memory it is.

MEASUREMENT PRINCIPLE

This product uses the oscillometric measuring method to detect blood pressure.

Before every measurement, the unit establishes a "zero pressure" equivalent to the air pressure. It starts inflating the arm cuff while the unit detects pressure oscillations generated by beat-to-beat pulsatile, which is used to determine the systolic and diastolic pressure and pulse rate.

INDICATIONS FOR USE

This Blood Pressure Monitor is intended for use in measuring blood pressure and pulse rate in patients with arm circumferences from 22 to 45 cm (8.6 to 17.7 inch), and is intended for adult population, including those who with conditions of diabetes, pregnancy, or pre-eclampsia.

It is intended indoor use only.

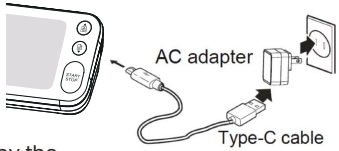
HOW TO USE

PREPARATION BEFORE USE

1. App

Before using the Blood Pressure Monitor, download and install the FondCircle® app. Always use the latest version of the app. You can download it from Google Play or the App Store.

2. Choice of Power Supply



- **Battery Powered Mode:**

6V DC, 4 AA batteries

- **AC Adapter Powered Mode:**

5V⎓1A (Optional)

(Use the AC adapter authorized by the manufacturer.)

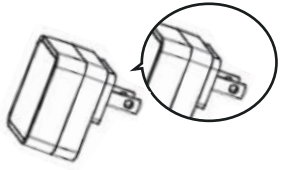
Uplug the adapter to disconnect from the utility power.

⚠ CAUTION

To ensure optimal performance and protect your monitor, always use the correct batteries and an approved power adapter that complies with local safety standards.

- **Authorized Component**

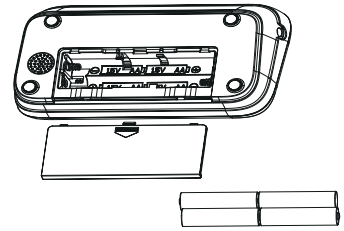
Please use the authorized adapter.



Adapter
Type: BLJ06L050100U-U
Input: 100-240V, 50-60Hz, 0.2A max
Output: 5V ⎓ 1000 mA (Optional)

3. Installing and Replacing the Batteries

- Open the battery cover.
- Install the batteries by matching the correct polarity, as shown.
- Replace the battery cover.



Replace the batteries whenever the following happens:

- The bAt Lo +  shows.
- The display is dim.
- The display does not light up.



⚠ CAUTION

- New and used batteries, or different types of batteries shall not be used together.
- Remove batteries if the device is not likely to be used for some time.
- Do not heat or deform the batteries, or dispose of them in fire.
- Batteries should not be disposed of with household waste.
- Please check with your local authority for battery recycling advice.

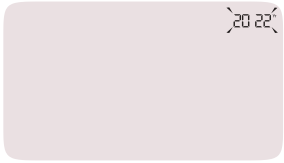
FUNCTION SETTING

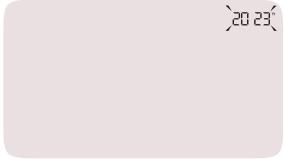
1. Setting the Date, Time, and Voice

It is important to set the date and time before using your blood pressure monitor for the first time, so that a correct time stamp can be assigned to each record that is stored in the memory.
(The setting range of the year: 2022-2052, Time format: 24H/12H)

- **When the monitor is off, press and hold the "START/STOP" button to enter the year setting.**

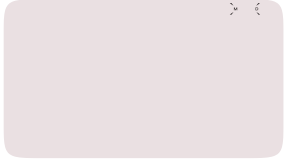
(If the voice is on, it will broadcast "Please set up the product before measurement. Set the year.")
Press the **"USER"** or **"MEM"** button to change the year.

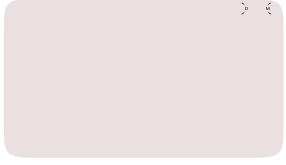




- **Press the "START/STOP" button to confirm the year, then the date format will flash. Press the "USER" or "MEM" switch the date format between month/day and day/month.**

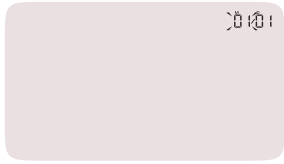
(If the voice is on, it will broadcast "Set the date format. You can set the format as day, month, year or month, day and year.")

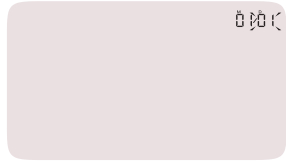




- **Press the "START/STOP" button to confirm the date format, then the month will flash. Repeat the same steps to set the month and day.**

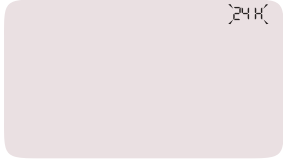
(If the voice is on, it will broadcast "Set the date.")

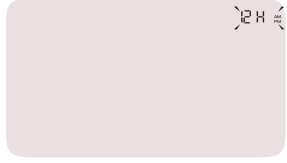




- **Repeat the same steps to set the time formate between 24H and 12H.**

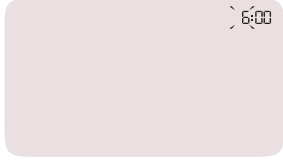
(If the voice is on, it will broadcast "Set the time format.")

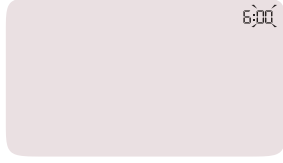




- **Repeat the same steps to set the hour and minute.**

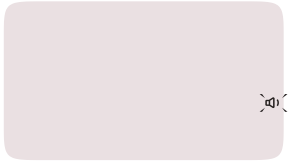
(If the voice is on, it will broadcast "Set the time.")



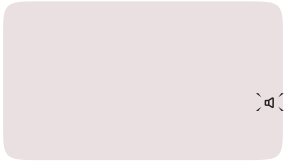


- **After confirming the minute, it will enter the voice setting. Press the "USER" or "MEM" button to change the voice volume.**

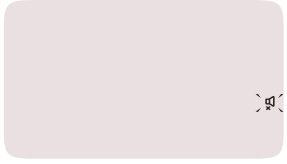
(If the voice is on, it will broadcast "Set the voice for you.")



Volume 1: Voice On



Volume 2: Voice On



Voice Off

- **After confirming the voice setting, the LCD will display all your selections, followed by "do nE," and the device will automatically turn off.**

Note:

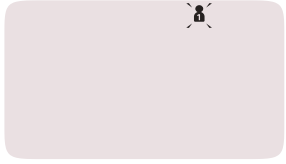
- The date and time will automatically be set when the monitor is paired with the app.
- The device will automatically enter setup mode when the batteries are installed for the first time.
- You can also access the voice settings by pressing and holding the **"USER"** button.

2. Setting a User ID

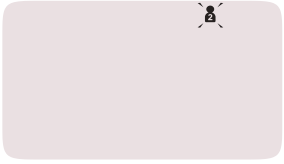
There are 3 user IDs available. User and , each with 250 memory spaces, are designed for 2 different people to save their measured values separately. The user , with no memory space, is reserved for guest.

- **When the monitor is off, press the "USER" button to display the current user ID. Press the "USER" button again to switch the user ID among the user , and .**

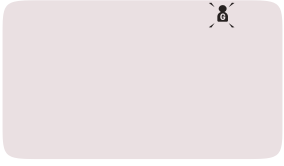
(If the voice is on, it will broadcast "Select the user" and broadcast the current user ID.)



User 1



User 2

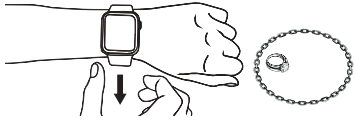


Visitor

- **Press the "START/STOP" button to confirm the selected user ID and it will enter the measurement automatically.**
- **Press the "MEM" button to confirm the selected user ID, and it will enter the memory query automatically.**

3. Applying the Cuff

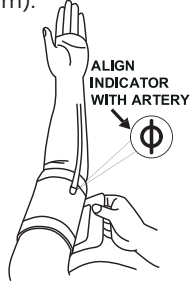
Only use a cuff that has been approved by the manufacturer for this device model. Before use, confirm that it fits your arm circumference.



- Remove all jewelry, such as watches or bracelets, from your left arm.

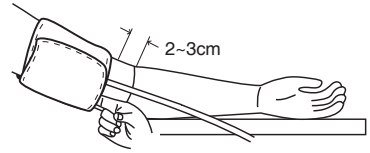
Note: If your doctor has diagnosed you with poor circulation in your left arm, use your right arm instead.

- Roll or push up your sleeve to expose the skin. Make sure your sleeve is not too tight.
- Hold your arm with your palm facing up and tie the cuff on your upper left arm. Align the artery indicator ϕ with the main artery (on the inside of your arm).

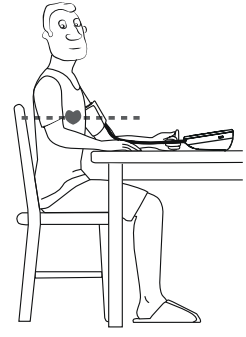


Note: Locate the main artery by pressing with 2 fingers approximately 2 cm above the bend of your elbow on the inside of your left arm. Identify where the pulse can be felt the strongest. That is your main artery.

- Make sure the bottom edge of the arm cuff is 2-3 cm above the inside elbow, then wrap the cuff securely.



- Sit upright in a comfortable chair with your back against the backrest of the chair. Keep your feet flat and your legs uncrossed. Place your arm resting comfortably on a flat table. The cuff worn on your arm should be placed at the same level as your right atrium of the heart.
- Take 5-6 deep breaths, then begin measuring.



Helpful Tips:

- Take the measurement in a silent room.
- Rest for 5 minutes before a measurement.
- Wait at least 3 minutes before another measurement. This allows your blood circulation to recover.
- Be relaxed and do not move and talk during the measurement procedure.
- For a meaningful comparison, try to measure under similar conditions. For example, take daily measurements at approximately the same time, on the same arm, or as directed by a physician.

STARTING THE MEASUREMENT

You can use your monitor without pairing it to a smart device. To pair the monitor with a smart device, refer to the other sections.

1. When the monitor is off, press the **"START/STOP"** button to turn it on. The measurement will begin, and you should remain still and silent until the measurement is complete.

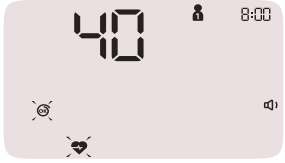
Note: If the voice function is on, the monitor will say, "Starting measurement, please remain still and quiet," before completing the measurement. (For example, with User 1 and voice on.)

Note: You can stop the measurement at any time by pressing the **"START/STOP"** button.

Cuff wrap detection



Inflating and measuring
(a pulse rate is detected)



Display and save
the measurement result
(If the voice is on, it will broadcast
your measuring result.)



2. To turn off the monitor, press the **"START/STOP"** button again, or the monitor will automatically shut off after 1 minute of inactivity.

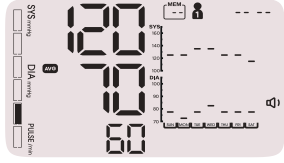
- During a measurement, if an irregular pulse rate is detected, the symbol will appear in the measurement result.
- During a measurement, if there is excessive body motion, the symbol will flash for about 5 seconds and then recheck. If the motion is no longer detected, the symbol will disappear; if still detected, the symbol will remain displayed in the final measurement result.

Note: The measured blood pressure reading may not be accurate if this symbol is displayed.



RECALLING THE RECORDS

1. When the monitor is off, press the **"MEM"** button, and the user ID will blink.
2. Press the **"USER"** or **"MEM"** button to switch the user ID between user 1 and 2. Press the **"START/STOP"** button to confirm the selected user ID.
3. The LCD will display the average value of all the records of last 7 days and a chart of the BP trends over the last 7 days.
   (Example shown below for User 1)
   (If the voice is on, it will broadcast: "Average, your blood pressure is 120, 70, pulse is 60, your blood pressure is normal.")

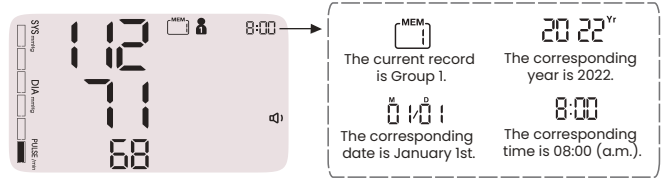


Note:

- The BP trends chart is a histogram designed to display the average blood pressure values for a specified period of the last 7 days, helping the user visually track their blood pressure changes.
- If there are no measurements for a given day within that period, the histogram for that day will be blank.
- For the BP trends chart, the X-axis represents time (from left to right: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, to Saturday), while the Y-axis represents the average values of systolic (high) pressure and diastolic (low) pressure for each day within the specified period.
- The data displayed on the top left indicates the maximum average systolic pressure value from the past 7 days, while the bottom left shows the minimum average diastolic pressure value from the past 7 days.

- If the maximum average systolic pressure exceeds 170mmHg or the maximum average diastolic pressure exceeds 110mmHg, the symbol " " will be displayed.
- If the minimum average systolic pressure is lower than or equal to 100mmHg, or the minimum average diastolic pressure is lower than or equal to 70mmHg, the grid corresponding to 100mmHg or 70mmHg will be highlighted.

4. Press the **"USER"** or **"MEM"** button to display the next record.



The time and date will display alternately.

Note:

If there is untransmitted data, the symbol will display on the record.

The latest record (1) is shown first. Each new measurement is assigned to the first (1) record, and all other records are pushed back one position (e.g., record 2 becomes record 3, and so on). The last record (250) will be dropped from the list.

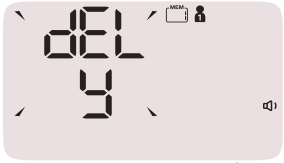
When the voice feature is enabled, it will broadcast the record for you.

DELETING THE RECORDS

Delete the records by following the steps below.

A: Delete One Record (Example shown below for User 1)

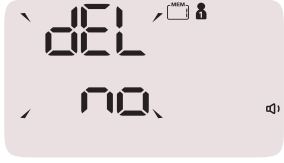
- Enter the memory recall mode as described in the previous section, "Recalling the Records," and find the record you want to delete.
- Press and hold the **"MEM"** button for about 3 seconds. The LCD will display "dEL y" and blink. (If the voice feature is on, it will broadcast: "Delete current data.")



- Press the **"START/STOP"** button to confirm the deletion. The LCD will display "dEL donE," and the previous record will be displayed. (If the voice feature is on, it will broadcast: "Successfully deleted.")

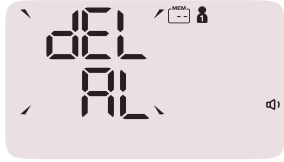


Note:
Before confirming the deletion, you can press the **"USER"** or **"MEM"** button to switch the LCD display from "dEL y" to "dEL no." Press the **"START/STOP"** button to cancel the deletion. If the voice feature is on, it will broadcast: "Cancel."

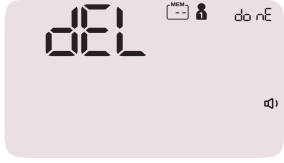


B: Delete All Records (Example shown below for User 1)

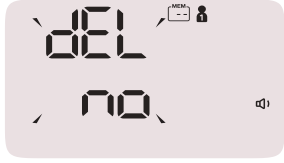
- Enter the memory recall mode as described in the previous section, "Recalling the Records."
- Press and hold the **"USER"** and **"MEM"** buttons for about 3 seconds. The LCD will display "dEL AL" and blink. (If the voice feature is on, it will broadcast: "Delete all data.")



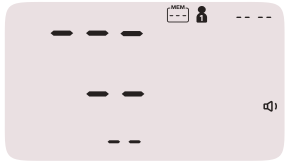
- Press the **"START/STOP"** button to confirm the deletion. The LCD will display "dEL donE". (If the voice feature is on, it will broadcast: "Successfully deleted.")



Note:
Before confirming the deletion, you can press the **"USER"** or **"MEM"** button to switch the LCD display from "dEL AL" to "dEL no." Press the **"START/STOP"** button to cancel the deletion. If the voice feature is on, it will broadcast: "Cancel."

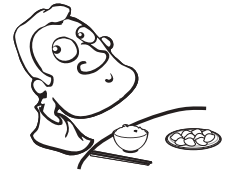


- Once deleted, your readings cannot be restored. The LCD will display "---" as shown in the following picture.
- Press the **"START/STOP"** button to turn off the monitor, or it will power off automatically within 1 minute.



TIPS FOR MEASUREMENT

Measurements may be inaccurate if taken in the following circumstances.



Within 1 hour after dinner or drinking



Immediate measurement after tea, coffee, smoking



Within 20 minutes after taking a bath



When talking or moving your fingers



In a very cold environment



When you want to discharge urine

CLEANING AND DISINFECTION

CLEANING

In order to get the best performance, follow the instructions below:
Step 1: Make sure to switch off and unplug the device prior to cleaning.
Step 2: Use a soft cloth with soapy water to clean the cuff first, then use a soft cloth with clean water to remove residual soap until there is no visible residual contaminants. Make sure that no liquid gets into the cuff.
Step 3: Use a dry, soft cloth to wipe the cuff and to remove residual moisture.
Step 4: Dry the cuff in a well-ventilated place after cleaning.

DISINFECTION PROCESS

Step 1: Make sure to turn off and unplug the device prior to disinfection.
Step 2: Use a soft cloth with 70% isopropanol to disinfect the cuff for about 10 minutes. Make sure that no liquid gets into the cuff.
Step 3: Use a clean, dry cloth or towel to wipe off the disinfectant until there is no visible residue.
Step 4: Dry the cuff in a well-ventilated place after disinfection.

- For single patient multiple use, it's recommended to clean the device surface once a month or whenever it's necessary.
- For multiple patient multiple use, it's recommended to clean the device before and after usage. Maintenance procedures should be taken as per instruction.

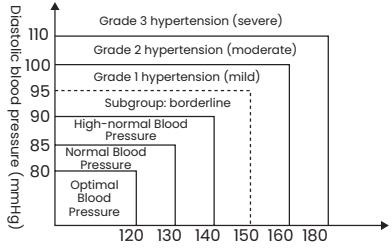
ABOUT BLOOD PRESSURE

SYSTOLIC AND DIASTOLIC PRESSURE

- When the ventricles contract and pump blood out of the heart, blood pressure reaches its maximum value—**called systolic pressure.**
- When the ventricles relax, blood pressure reaches its minimum value—**called diastolic pressure.**

STANDARD BLOOD PRESSURE CLASSIFICATION

The blood pressure classification published by World Health Organization (WHO) and International Society of Hypertension (ISH) in 1999 is as follows:



Blood Pressure (mmHg) \ Level	Optimal	Normal	High-normal	Mild	Moderate	Severe
SYS	<120	120-129	130-139	140-159	160-179	≥180
DIA	<80	80-84	85-89	90-99	100-109	≥110

⚠ CAUTION

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

IRREGULAR PULSE RATE DETECTOR

An irregular pulse rate is detected if there is an irregular rhythm during blood pressure measurement. The monitor records pulse intervals and calculates an average.

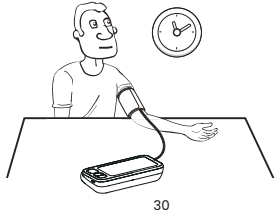
- **If two or more pulse intervals** are recorded and each differs from the average by more than ±25%, the irregular pulse symbol will appear with the results.
- **If four or more pulse intervals** are recorded and each differs from the average by more than ±15%, the same symbol will appear.

⚠ CAUTION

- The appearance of the irregular pulse rate (IPR) icon indicates a pulse irregularity was detected during the measurement.
- This is **not necessarily** a cause for concern. However, if the symbol appears frequently, consult a healthcare professional.
- Results from the irregular pulse rate detector **cannot** be used for clinical judgment on their own. Seek medical advice before making any health-related decisions.

WHY DOES MY BLOOD PRESSURE FLUCTUATE THROUGHOUT THE DAY?

- Individual blood pressure varies multiple times every day. It is also affected by how you tie the cuff and your measurement position. Take measurements under the same conditions whenever possible.
- If the person takes medication, blood pressure may vary more.
- Wait at least 3 minutes before taking another measurement.



WHY DO I GET A DIFFERENT BLOOD PRESSURE AT HOME COMPARED TO THE HOSPITAL?

Blood pressure can differ throughout the day due to weather, emotions, exercise, etc. There is also the "white coat" effect, which means blood pressure often increases in clinical settings.
Key factors that affect measuring blood pressure at home:

- f the cuff is tied properly.
- If the cuff is too tight or too loose.
- If the cuff is tied on the upper arm.
- If you feel anxious.
- Taking 2-3 deep breaths before measuring can help.
- Advice: Relax yourself for 4-5 minutes until you are calm.

IS THE RESULT THE SAME IF MEASURING ON THE RIGHT ARM?

It is generally okay to measure on either arm, but results may vary for different individuals. We recommend measuring on the same arm each time for consistency.

ERRORS AND TROUBLESHOOTING

If any abnormality arises during use, please check the following points:

Problem	Symptom	Potential Cause	Solution
No power	Display does not light up.	Batteries are depleted.	Replace with new batteries.
		Batteries are inserted incorrectly.	Insert the batteries correctly.
		Adapter is inserted incorrectly.	Insert the AC adapter correctly.
High battery	Replace batteries & bAt H shows	The battery is too high.	Replace with new batteries.
Low battery	Replace batteries, & bAt Lo shows	The battery is too low.	Replace with new batteries.
Error message	Measure again & E 01 shows	The cuff is loose.	Readjust the cuff before measurement.
	Keep quiet & E 02 or shows	Excessive body motion (such as shaking of the arm with the cuff on or weak pulse is detected.)	Do not move during measurement and measure again.
	Measure again & E 03 shows	No pulse is detected.	Readjust the cuff again before measurement.
	Device failure & E 04 shows	The measurement failed.	Relax for 5 minutes and measure again.
	EExx shows	Hardware error (XX can be some digita symbol, such as 01, 02, 03, etc.)	Turn off monitor and measure again. If EExx still appears on the display, please contact the retailer or our customer service.
	Replace batteries & bAt H shows	The voltage of the blood pressure monitor is high.	Replace with the authorized adapter.
Warning message	"Out" shows	Out of measurement range.	Relax for a moment and then measure again. If the problem persists, contact your physician.

Note: If the product still does not work, contact Customer Service. Under circumstance should you disassemble or attempt to repair the unit by yourself.

SPECIFICATIONS

Measurement mode	Oscillographic testing mode
Measurement range	Rated cuff pressure: 0-299 mmHg Measurement pressure: SYS: 60-230 mmHg DIA: 40-130 mmHg Pulse value: 40-199 bpm
Accuracy	Static Pressure: 5-40°C within ±3 mmHg Pulse value: ±5% Clinical validation: Mean difference within ±5 mmHg; Standard deviation ≤8 mmHg
Power Supply	Battery powered mode: 4x AA batteries, 6V DC AC adapter powered mode: 5V⎓1A (optional)
Operating Conditions	Temperature: 5-40°C (41-104°F) Relative Humidity: 15-90%, non-condensing, but not requiring a water vapor partial pressure >50 hPa Atmospheric Pressure: 70-106 kPa
Storage & transportation condition	Temperature: -20-60°C (-4-140°F) Relative Humidity: ≤93%, non-condensing, at a water vapor pressure up to 50 hPa Atmospheric Pressure: 50-106 kPa
Display mode	Digital LCD V.A.124 mm × 76 mm
Measurement perimeter of the upper arm	22-45cm Cuff model AC2245-05 is intended for adult population or those who are in pregnancy or suffer from diabetes.
External dimensions	178 × 101 × 42.89 mm
Weight	Approx. 343 g (excluding batteries and cuff)
Mode of operation	Continuous operation
Degree of protection	Type BF applied part
Protection against ingress of water	IP21 It means the device could be protected against solid foreign objects of 12.5mm Φ and greater, and against vertically falling water drops.
Device classification	Battery Powered Mode: Internally Powered ME Equipment AC Adapter Powered Mode: Class II ME Equipment
Expected lifetime	Device: 3 years or 30,000 measurements (may vary based on usage conditions) Cuff: 10000 times Alkaline battery: About 200-300 times
Types of use/reuse	Multiple patient multiple use

Warning: No modification of this equipment is allowed.
Note: This blood pressure monitor complies with ISO 81060-2: 2018 (including pregnant and diabetics).

EMC GUIDANCE

The ME Equipment or ME System is suitable for home healthcare environments.

Essential Performance:

Accuracy of measuring blood pressure and pulse rate

Measurement Range	Systolic pressure: 60-230 mmHg Diastolic pressure: 40-130 mmHg Pulse: 40-199 beats/minute
Rated Cuff Pressure	0-299 mmHg (0-39.9 kPa)
Accuracy	Pressure: ±3 mmHg / 0.4 kPa
Laboratory Reproducibility	≤ 3 mmHg

The Basis Safety of the Blood Pressure Monitor (FBP-A2) is as following:

Deviation from normal operation that poses an unacceptable risk to the patient or operator.

Warning:

- Don't be near the active HF surgical equipment and the RF shielded room of an ME system for magnetic resonance imaging, where the intensity of EM disturbances is high.
- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the equipment including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

Technical description:

1. All necessary instructions for maintaining basic safety and essential performance with regard to electromagnetic disturbances for the excepted service life.
2. Guidance and manufacturer's declaration - electromagnetic emissions and immunity.

Table 1

Guidance and Manufacturer's Declaration–Electromagnetic Emissions	
Emissions Test	Compliance Level
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	Class B
Harmonic emissions IEC 61000-3-2	Class A
Voltage fluctuations/flicker emissions IEC 61000-3-3	Comply

Table 2

Guidance and Manufacturer's Declaration–Electromagnetic Immunity		
Immunity Test	IEC 60601-1-2 Test Level	Compliance Level
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV signal input/output 100 kHz repetition frequency	±2 kV for power supply lines Not Applicable 100 kHz repetition frequency
Surge IEC61000-4-5	±0.5 kV, ±1 kV differential mode ±0.5 kV, ±1 kV, ±2 kV common mode	±0.5 kV, ±1 kV differential mode Not Applicable
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% U_T; 0,5 cycle. At 0°, 45°, 90°, 135°,180°, 225°, 270° and 315°. 0% U_T; 1 cycle and 70% U_T; 25/30 cycles; Single phase: at 0°. 0% U_T; 250/300 cycle	0% U_T; 0,5 cycle. At 0°, 45°, 90°, 135°,180°, 225°, 270° and 315°. 0% U_T; 1 cycle and 70% U_T; 25/30 cycles; Single phase: at 0°. 0% U_T; 250/300 cycle
Power frequency magnetic field IEC 61000-4-8	30 A/m 50 Hz/60 Hz	30 A/m 50 Hz/60 Hz
Conduced RF IEC61000-4-6	3 V 0,15 MHz-80 MHz 6 V in ISM and amateur radio 190 bands between 0,15 MHz and 80 MHz 80% AM at 1 kHz	3 V 0,15 MHz-80 MHz 6 V in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80% AM at 1 kHz
Radiated RF IEC61000-4-3	10 V/m 80 MHz-2,7 GHz 80% AM at 1 kHz	10 V/m 80 MHz-2,7 GHz 80% AM at 1 kHz
NOTE U_T is the a.c. mains voltage prior to application of the test level.		

Table 3

Guidance and Manufacturer's Declaration—Electromagnetic Immunity								
	Test Frequency (MHz)	Band (MHz)	Service	Modulation	Maximum Power (W)	Distance (m)	IEC 60601-1-2 Test Level (V/m)	Compliance Level (V/m)
Radiated RF IEC61000-4-3 (Test specifications for enclosure port immunity to RF wireless communications equipment)	385	380-390	TETRA 400	Pulse modulation 18 Hz	1.8	0.3	27	27
	450	430-470	GMRS 460, FRS 460	FM ± 5k Hz deviation 1 kHz sine	2	0.3	28	28
	710 745 780	704-787	LTE Band 13, 17	Pulse modulation 217 Hz	0.2	0.3	9	9
	810 870 930	800-960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation 18 Hz	2	0.3	28	28
	1720 1845 1970	1700-1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4,25; UMTS	Pulse modulation 217 Hz	2	0.3	28	28
	5240 5500 5785	5100-5800	WLAN 802.11 a/n	Pulse modulation 217 Hz	0.2	0.3	9	9

FCC STATEMENT

FCC ID: OU9TMB2273BT

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.
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Regulatory Compliance

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 radio/TV technician for help.

RF Exposure Compliance

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

WARRANTY AND CUSTOMER SUPPORT

Warranty

The device is covered by a 12-month warranty from the date of purchase, subject to the following terms and conditions.

The warranty does not cover:

- The batteries, packaging, or any other consumables.
- Damage resulting from improper use, including but not limited to:
  - Unauthorized disassembly or modification of the device.
  - Accidental dropping or impact during use or transportation.
  - Failure to follow the instructions provided in the user manual.

To claim warranty service, users must provide proof of purchase and comply with the terms outlined in the user manual.

Customer Support:

Email: support@fondcircle.com
Tel: 1-877-899-7770 (US) (Mon-Fri, 8:00 AM-5:00 PM PST)
Web: www.fondcircle.com