



Microlife BP W70 BT (BP3KN1-3B)

User Manual

English

Important Product and Safety Information



Follow Instructions for Use. This document provides important product operation and safety information regarding this Blood Pressure Monitor. Please read this document thoroughly before using the device and keep for future reference.

This blood pressure monitor is an automatic digital blood pressure measuring device for use by adults on the wrist at home. It enables a very fast and reliable measurement of the systolic and diastolic blood pressure, as well as the pulse rate, by way of the oscillometric method. This device detects the appearance of irregular heartbeats during measurement and provides a warning signal when the irregular heartbeat is detected.

This blood pressure monitor IS intended to be used:

- For self-measurement/monitoring of blood pressure and pulse in adults; whereas the person being measured may be the user/operator of the device.
- Within a home healthcare environment.
- With a cuff located upon the user's wrist; ½ inch from the hand.

This blood pressure monitor IS NOT intended for use with:

- Pregnancy
- Preeclampsia
- Children under 12
- Neonatal patients

WARNING – Potentially hazardous situation that if not avoided may result in serious injury or death.

- Self-measuring means monitoring, not diagnosis or treatment. Unusual values must always be discussed with your doctor. Under no circumstances should you independently alter the dosages of any drugs prescribed by your physician
- Consult your physician before using this device if any of the following or similar conditions are present: arrhythmias such as atrial or ventricular premature beats or atrial fibrillation, arterial sclerosis, poor perfusion, diabetes, age, pregnancy, preeclampsia, renal diseases. Motion during measurement, including trembling or shivering may affect the measurement.
- Though not for use with children fewer than 12, ensure that any children around this device are supervised; some parts are small enough to be swallowed.

DO NOT:

- Use this device if you think it is damaged or anything appears unusual (e.g. sporadic operation, open packaging upon purchase).
- Use the displayed pulse for checking the frequency of heart pacemakers as this device is not suitable for this action.

- Open/modify this device; inaccuracy and/or harmful injury may result.
- Conduct many frequent measurements as this may result in harmful injury due to blood flow interference.
- Place the Cuff over a wound as this may cause further injury.
- Place and pressurize the Cuff over/near any present intravascular access or therapy, or arteriovenous shunt, as this may cause blood flow interference and result in harmful injury.
- Place and pressurize the Cuff over a limb near the side of a mastectomy as this may cause harmful injury.
- Use the Blood Pressure Monitor on a limb simultaneously with other medical equipment on the same limb due to possible interference with such medical equipment.
- Maintain pressure in the Cuff applied to the limb for a prolonged amount of time. Ensure that circulation in the limb is not impaired by checking circulation if prolonged/repeated exposure to pressure occurs.
- Service the device when being used or when power is supplied. When the device is not in use and power is removed, batteries may be replaced by the user. No other parts/components are accessible.



CAUTION – Potentially hazardous situation that if not avoided may result in minor/moderate injury, property damage, and/or damage to the device

- This device contains sensitive electronics components. Avoid strong electrical or electromagnetic fields in the direct vicinity of the device (e.g., mobile telephones, microwave ovens). These can lead to temporary impairment of the measuring accuracy. Move the device to another location if interference is determined.
- When not using the Blood Pressure Monitor for extended lengths of time, remove the batteries to avoid potential battery leakage and damage to the monitor.
- When replacing the batteries, ensure all the batteries are replaced simultaneously to avoid battery damage and potential damage to the monitor. Microlife USA does not recommend using rechargeable batteries.
- To avoid inaccurate measurements and to lessen any discomfort from Cuff pressure, ensure the Cuff is placed correctly on the limb and fits correctly when snug (not tight), as indicated by markings with the Cuff.
- Consult your physician in cases of frequent irregular heartbeat detections.
- This Risk Indicator feature is provided in order to help you understand your potential blood pressure risk. However, this feature is neither a diagnosis nor a substitute for a medical examination. It is important to consult with your physician to determine your risk.

DO NOT:

- Drop this device or expose it to strong vibrations; sensitive components may be affected resulting in inaccuracies and/or operational issues.
- Use the Blood Pressure Monitor outside of its specified operation temperature and humidity rating, or if stored outside of its specified storage temperature and humidity rating. Avoid storage in direct sunlight.
- Use this device in a moving vehicle; inaccurate measurements may result.
- Use third party accessories. Only use Microlife authorized accessories, such as cuffs or AC adapters, as those not approved for use with the device may provide inaccurate measurements, injury, and/or damage the device.

STANDARDS

This medical device is compliant with:

- Medical device and non-invasive blood pressure monitor standards IEC 60601-1, IEC 60601-1-2, IEC 60601-1-11, and AAMI/ANSI/IEC 80601-2-30, and
- Electromagnetic standards IEC 60601-1-2, along with FCC Part 15, and
- Clinical Testing per standard ISO 81060-2:2013 was conducted on blood pressure device using the same measurement technology.

TYPE

IP22: Protected against solid foreign objects of 12.5 mm diameter and greater. Protected against vertically falling water drops when the device is tilted up to 15°.

Type BF Applied Part



Batteries and electronic instruments must be disposed of in accordance with the locally applicable regulations, not with domestic waste.

FCC

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 may cause undesired operation. Changes or modifications to the product are not approved by Microlife USA and could void the user's authority to operate the equipment under FCC jurisdiction.

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. The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Trademark Usage:

Apple, the Apple logo, iPad, and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.

Android and Google Play are both trademarks of Google Inc.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks in this Blood Pressure Monitor is under license. Other trademarks and trade names are those of their respective owners.

Wrist Blood Pressure Monitor

Instruction Manual

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1. Introduction

1.1. Your automatic wrist blood pressure monitor

Thank you for purchasing a fully automatic wrist blood pressure monitor. Your monitor is designed to provide fast and reliable digital readings of your pulse, and systolic / diastolic blood pressure using the oscillometric method on your wrist. It offers clinically proven accuracy and has been designed to be user friendly.

Before using your blood pressure monitor, please read this instruction manual carefully to ensure correct use. If you have additional questions regarding blood pressure measurements please contact your doctor.

1.2. Inflation mode technology

Please note that this device employs "Inflation Mode Technology." This means your blood pressure is measured while the wrist cuff is inflating, rather than first inflating to a peak pressure, and then measuring during a slow deflation process. With this process, it is a normal occurrence for the inflation speed to vary. This unique technology provides a faster, more comfortable blood pressure reading for you.

If you have any questions about your blood pressure reading or monitor, please call us at 1-888-287-1915.

2. How is blood pressure measured?

2.1. What is blood pressure, and why does it fluctuate?

Your level of blood pressure is determined in the circulatory center of the brain and adjusts to a variety of situations through feedback from the nervous system. To adjust blood pressure, the strength and frequency of the heart (pulse), as well as the width of circulatory blood vessels is altered.

Blood vessel width is affected by way of fine muscles in the blood vessel walls. Your level of arterial blood pressure changes periodically during heart activity. During the "blood ejection" (Systole), the value is highest (systolic blood pressure value). At the end of the heart's "rest period" (Diastole), pressure is lowest (diastolic blood pressure value). Your blood pressure values must lie within certain normal ranges in order to prevent particular diseases.

2.2. Measurement guidelines

Blood pressure is very high if your systolic blood pressure is over 160 mmHg and/or your diastolic pressure is above 100 mmHg, while at rest. In this case, please consult your physician immediately. Long-term values at this level endanger your health due to continual damage to the blood vessels in your body.

If your systolic blood pressure values are between 140 mmHg and 159 mmHg and/or the diastolic blood pressure values are between 90 mmHg and 99 mmHg, consult your physician. Regular self-checks are necessary.

If you have blood pressure values that are too low (i.e., systolic values under 105 mmHg and/or diastolic values under 60 mmHg), consult your physician. Even with normal blood pressure values, a regular self-check with your blood pressure monitor is recommended. You can detect possible changes in your values early and react appropriately.

If you are undergoing medical treatment to control your blood pressure, keep a record of values along with time of day and date. Show these values to your physician.

Never use the results of your measurements to independently alter the medication prescribed by your physician.

Which values are normal?

The following standards for assessing high blood pressure (in adults) have been established by the American Heart Association (AHA) and American College of Cardiology (ACC) in 2017.

Category	Systolic (mm Hg)	Diastolic (mm Hg)
Normal	<120	and <80
Elevated	120-129	and <80
Hypertension		
Stage 1 Hypertension	130-139	or 80-89
Stage 2 Hypertension	140-179	or 90-119
Hypertensive Crisis	≥180	or ≥120

Additional information

- If your values are mostly normal under resting conditions but exceptionally high under conditions of physical or psychological stress, it is possible that you are suffering from so-called "labile hypertension." Consult your physician.

2.3. What can I do to change my blood pressure?

- a). Consult your physician.
- b). Increased blood pressure values (various forms of hypertension) are associated with considerable health risks over time. Arterial blood vessels in your body are endangered due to constrictions caused by deposits in the vessel walls (arteriosclerosis). A deficient supply of blood to important organs (heart, brain, muscles) can result. Furthermore, the heart will become structurally damaged with increased blood pressure values.
- c). There are many different causes of high blood pressure. We differentiate between the common primary (essential) hypertension and secondary hypertension. Secondary hypertension can be ascribed to specific organ malfunctions. Please consult your physician for information about the possible origins of your own increased blood pressure values.
- d). There are measures you can take to reduce and even prevent high blood pressure. These measures must be permanent lifestyle changes.

1) Eating habits

- Strive for a normal weight corresponding to your age. See your doctor for your ideal weight.
- Avoid excessive consumption of common salt.
- Avoid fatty foods.

2) Previous illnesses

Follow consistently any medical instructions for treating illness such as:

- Diabetes (diabetes mellitus)
- Fat metabolism disorder
- Gout

3) Habits

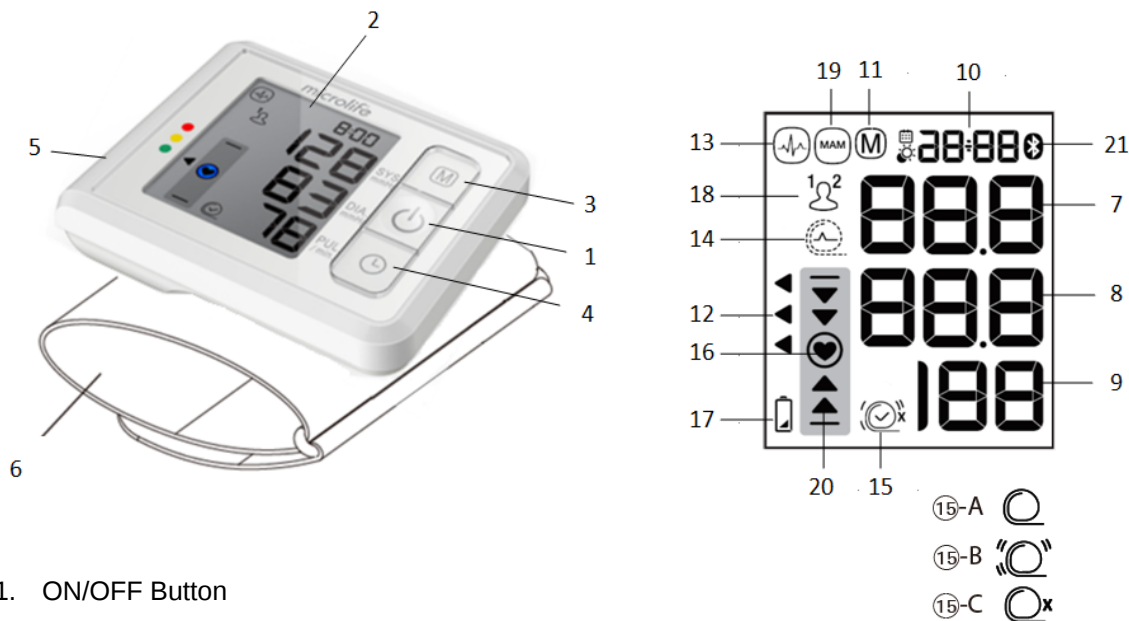
- Give up smoking completely.
- Drink only moderate amounts of alcohol.
- Restrict your caffeine consumption (e.g., coffee).

4) Physical constitution

- After a preliminary medical examination, do regular exercise.
- Choose sports which require stamina and avoid those which require strength.
- Avoid reaching the limit of your performance.
- With previous illnesses and/or an age of over 40 years, please consult your doctor before beginning your exercise routine. He will advise you regarding the type and extent of exercise that is appropriate for you.

3. Components of your blood pressure monitor

The illustration shows your blood pressure monitor, consisting of:



1. ON/OFF Button
2. Display
3. M-button (memory)
4. Time Button
5. Battery Compartment
6. Cuff
7. Systolic Value
8. Diastolic Value
9. Pulse Rate
10. Date/Time
11. Stored Value
12. Traffic Light Indicator
13. Irregular Heartbeat (IHB) Symbol
14. Cuff Signal Indicator «ERR 1»
15. Cuff Fit Check
 - A: Suboptimal Cuff Fit
 - B: Arm Movement Indicator «ERR 2»
 - C: Cuff Pressure Check «ERR 3»
16. Pulse Indicator
17. Battery Display
18. User Indicator
19. MAM Mode
20. Heart Level Indicator
21. Active Bluetooth®

4. How do I get started?

4.1. Inserting the batteries

After you have unpacked your device, insert the batteries. The battery compartment is located on the side of the device.

- a). Remove the battery cover.

To open battery cover: Turn the monitor over, locate the pull on cover and use your finger tip to pull it towards you. *To close battery cover:* Align cover in the battery compartment at approximately a 15 degree angle, inserting the tabs into the holes found on the inside. Once the back of the cover has been seated, push down on the battery cover pull.

- b). The door will click into place.

- c). Insert the batteries (2 x size AAA 1.5 V), following the indicated polarity.

If the battery warning appears in the display, the batteries are discharged and must be replaced with new ones.

Attention!

- After the low battery indication warning appears, the device will not function until the batteries have been replaced.
- Please use “AAA” Long Life or Alkaline 1.5V batteries. When replacing batteries, replace all at the same time, and ensure they are correctly connected, as shown on the symbols in the compartment.

If the blood pressure monitor is left unused for long periods, remove the batteries from the device.

4.2. Selecting standard or MAM mode

Before each measurement, select standard (single measurement) or MAM mode (automatic double measurement). In MAM mode, 3 measurements are automatically taken in succession and the result is then automatically analysed and displayed. Because the blood pressure constantly fluctuates, a result obtained in this way is more reliable than when a single measurement is performed

- After the new batteries are fitted, MAM mode ON/OFF selection will appear on the display first. Press the M-button to select ON or OFF the MAM mode. Press the Time Button to confirm and then select the Heart Level Indicator. To change to standard mode (single measurement), press the Time Button until the MAM mode selection menu appears and select OFF.
- The bottom, right hand section of the display shows a 1, 2 or 3 to indicate which of the 3 measurements is currently being taken.
- There is a break of 15 seconds between the measurements. A count down indicates the remaining time.
- The individual results are not displayed. Your blood pressure will only be displayed after

all 3 measurements are taken.

- Do not remove the cuff between measurements.
- If one of the individual measurements was questionable, an additional measurement is automatically taken.

4.3. Selecting Heart Level Indicator

Keeping the wrist at the same height level as heart during measurement is one of the most important facts to use a wrist blood pressure monitor. Incorrect wrist position might lead to an inaccurate result. Follow the instruction of the Heart Level Indicator to make sure the wrist height is the same level as heart.

- After the MAM mode is selected, the Heart Level Indicator ON/OFF selection will appear on the display. Press the M-button to select ON or OFF the Heart Level Indicator. Press the Time Button to confirm and then enter the date and time setting.
- There are 5 levels of height detection plus a blue LED indicator to help the user determine if the monitor is at the correct height.
- When the monitor is at higher position relative to your heart, 1 or 2 downward arrow(s) appear to remind you to lower the wrist slowly until the blue LED is lighted with a heart symbol. Conversely, 1 or 2 upward arrow(s) appear when your wrist height is lower to heart level and raise the wrist higher as indication.
- Adjust your wrist to correct height level and keep about 2 sec, the monitor will start measurement automatically.
- Please retain this wrist height during measurement, and do not move even in the interval time of MAM mode until the result displayed on the LCD.
- The blue LED will blank off during measurement to save the battery power and appear again with the result when the measurement is finished.
- If the user doesn't adjust the wrist at correct heart level in time (about 9 sec), the monitor will still start measurement with upward/downward arrows as an indication. However, we recommend to repeat the measurement to make sure getting an accurate result.

4.4. Setting the date and time

- After selecting the Heart Level Indicator, the year number flashes in the display. You can set the year by pressing the M-button. To confirm and then set the month, press the time button.
- Press the M-button to set the month. Press the time button to confirm and then set the day.
- Follow the instructions above to set the day, hour and minutes.
- Once you have set the minutes and pressed the time button, the date and time are set and the time is displayed.

- If you want to change the date and time, press and hold the time button down for approx. 3 seconds to enter setting menu. Press time button twice to skip MAM mode/ Heart Level Indicator setting until the year number starts to flash. Now you can enter the new values as described above.

4.5. Setting the user

This device allows to store the results for 2 individual users.

- Select the intended user (user 1 or user 2) by pressing the time button.
 Before each measurement, ensure that the correct user is selected.

5. How do I take a measurement?

Please note: You should always be seated before and during the measurement.

5.1. Preparing to take a measurement

- Avoid activity, eating or smoking immediately before the measurement.
- Sit down on a back-supported chair and relax for 5 minutes. Keep the feet flat on the floor and do not cross your legs.
- Always measure in a sitting position and on the same wrist. Use the wrist which usually shows higher blood pressure values.
- Remove any items of clothing and your watch, for example, so that your wrist is free.
- Always ensure that the cuff is positioned correctly, as shown in the pictures illustrated on the short instruction card.
- Fit the cuff comfortably but not too tight. The cuff will cover a wrist circumference of 13.5 – 23 cm (5.25 – 9.06 inches).
- Support your arm in a relaxed position and ensure that the device is at the same height as your heart.

5.2. Common errors

Note:

Comparable blood pressure measurements always require the same conditions. These are normally always quiet conditions.

- All efforts to support the arm can increase blood pressure. Make sure you are in a comfortable, relaxed position and do not flex any of the muscles in the measurement arm during the measurement. Use a cushion for support if necessary.
- If the wrist artery lies considerably lower (higher) than the heart, an erroneously higher (lower) blood pressure will be measured. (Each 15 cm/6" difference in height results in a measurement error of 10 mmHg.)
- A loose cuff causes false measurement values.
- With repeated measurements, blood can accumulate in the respective arm, which can lead to false results. Correctly executed blood pressure measurements should therefore first be repeated after a 1 minute pause or after the arm has been held up in order to allow the

accumulated blood to flow away.

5.3. Taking a measurement

- Select standard (single measurement) or MAM mode (automatic double measurement): see details in chapter 4.2
- Press the ON/OFF button to start the measurement.
- After Heart Level Indicator checked (see details in chapter 4.3), the cuff will now pump up automatically. Relax, do not move and do not tense your arm muscles until the measurement result is displayed. Breathe normally and do not talk.
- The Cuff Fit Check on the display indicates that the cuff is perfectly placed. If the icon 15-A appears, the cuff is fitted suboptimally, but it is still ok to measure.
- The measurement is performed during the inflation. The inflation speed may vary, this is a normal occurrence.
- During the measurement, the pulse indicator flashes in the display.
- The result, comprising the systolic and the diastolic blood pressure and the pulse rate is displayed. Note also the explanations on further display symbols in this booklet.
- Remove and switch off the monitor. (The monitor does switch off automatically after approx. 1 min.).

 You can stop the measurement at any time by pressing the ON/OFF button (e.g. if you feel uneasy or an unpleasant pressure sensation).

5.4. Stopping a measurement

If it is necessary to interrupt a blood pressure measurement for any reason (e.g., the patient feels unwell), the POWER button can be pressed at any time. The device then immediately lowers the cuff pressure automatically and enters into sleep mode.

5.5. Appearance of the Irregular Heartbeat (IHB) Symbol

This symbol indicates that certain pulse irregularities were detected during the measurement. In this case, the result may deviate from your normal blood pressure – repeat the measurement.

In most cases, this is no cause for concern. However, if the symbol appears on a regular basis (e.g. several times a week with measurements taken daily) we advise you to tell your doctor. Please show your doctor the following explanation:

Information for the doctor on frequent appearance of the IHB symbol

This device is an oscillometric blood pressure monitor that also analyses pulse irregularity during measurement. The IHB symbol is displayed after the measurement, if pulse irregularities occur during measurement. If the symbol appears more frequently (e.g. several times per week on measurements performed daily) we recommend the patient to seek medical advice.

This device does not replace a cardiac examination, but serves to detect pulse irregularities

at an early stage.

6. Data Memory

This model is designed for two users and can store up to 99 blood pressure readings for each user.

Select either user 1 or 2 by pressing the time button.

Viewing the stored values

Press the M-button briefly, when the device is switched off. The display first shows «M» and «A», which stands for the average of the last 3 measurements in memory.

Pressing the M-button again displays the previous value. Pressing the M-button repeatedly enables you to move from one stored value to another.

 Blood pressure readings with suboptimal cuff fit 15-A are not considered in the average value.

Memory full

Pay attention that the maximum memory capacity of 99 memories is not exceeded. **When the 99 memory is full, the oldest value is automatically overwritten with the 100th value.**

Values should be evaluated by a doctor before the memory capacity is reached – otherwise data will be lost.

Clearing all values

Make sure the correct user is activated.

If you are sure that you want to permanently remove all stored values, hold down the M-button (the device must have been switched off beforehand) until «CL ALL» appears and then release the button.

To permanently clear the memory, press the time button while «CL ALL» is flashing.

Individual values cannot be cleared.

 Cancel deletion: press ON/OFF button while «CL ALL» is flashing.

7. Battery change indicator

Low battery

When the batteries are approximately $\frac{3}{4}$ empty the battery symbol will flash as soon as the device is switched on (partly filled battery displayed). Although the device will continue to measure reliably, you should obtain replacement batteries.

Flat battery – replacement

When the batteries are flat, the battery symbol will flash as soon as the device is switched on (flat battery displayed). You cannot take any further measurements and must replace the batteries.

1. Open the battery compartment at the back of the device.
 2. Replace the batteries – ensure correct polarity as shown by the symbols in the compartment.
 3. To set date and time, follow the procedure described in «Section 5.».
-  The memory retains all values although date and time must be reset – the year number therefore flashes automatically after the batteries are replaced (after MAM mode and Heart Level Indicator setting).

Which batteries and which procedure?

-  Use 2 new, long-life 1.5 V, size AAA alkaline batteries.
-  Do not use batteries beyond their date of expiry.
-  Remove batteries if the device is not going to be used for a prolonged period.

Using rechargeable batteries

You can also operate this device using rechargeable batteries.

-  Only use «NiMH» type reusable batteries.
-  Batteries must be removed and recharged when the flat battery symbol appears. They should not remain inside the device as they may become damaged (total discharge as a result of low use of the device, even when switched off).
-  Always remove the rechargeable batteries if you do not intend to use the device for a week or more.
-  Batteries cannot be charged in the blood pressure monitor.
Recharge batteries in an external charger and observe the information regarding charging, care and durability.

8. Bluetooth® functions and application (App)

This device can be used in conjunction with a smartphone running the «Microlife Connected Health+» App. The Bluetooth® connection is automatically active after the measurement has been completed.

-  Please download the “Microlife Connected Health+” App from Apple’s App Store® or Google Play® before pairing your devices.
-  If you have any issues with your setup, please contact customer service toll free: 1-800-568-4147 for additional support.

Activating your Bluetooth®

The Bluetooth® icon indicator on your blood pressure monitor, located in the upper right portion of the screen, is designed to provide information about the connection between your device and the monitor. Please note the following:

- The Bluetooth® icon on your blood pressure monitor will flash initially when ready to connect with a device, and continue flashing for 2 minutes until a connection occurs.
- To manually activate the Bluetooth® on your monitor, press and hold the power button for approximately 4 seconds or until the Bluetooth® icon starts blinking.
- If a connection does not occur within 2 minutes, the Bluetooth® function on the monitor will automatically turn off.
- Note: At least one blood pressure reading must be taken and recorded on the monitor before the data can be transferred

Pairing your device:

- Download the App to your phone.
- Create User Profile on App.
- Confirm phone’s Bluetooth® is turned on.
- Open the App on your phone.
- Select “Dashboard” from the App’s home screen.
- Press and hold the POWER/START button on the monitor for approx. 4 seconds or until the Bluetooth® icon starts blinking.
- On the App press the “sync” button located on the “Dashboard” screen.
- Data in monitor should successfully transfer over to the App on your phone.

For more detailed information visit www.microlife.com/technologies/connect.

9. Error messages/troubleshooting

If an error occurs during the measurement, the measurement is interrupted and an error message, e.g. «ERR 3», is displayed.

Error	Description	Potential cause and remedy
«ERR 1»	Signal too Weak	The pulse signals on the cuff are too weak. Reposition the cuff and repeat the measurement.*
«ERR 2»	Error signal	During the measurement, error signals were detected by the cuff, caused for instance by movement or muscle tension. Repeat the measurement, keeping your arm still.
«ERR 3»	No pressure in the cuff	An adequate pressure cannot be generated in the cuff. A leak may have occurred. Check that the cuff is correctly connected and is not too loose. Replace the batteries if necessary. Repeat the measurement.
«ERR 5»	Abnormal result	The measuring signals are inaccurate and no result can therefore be displayed. Read through the checklist for performing reliable measurements and then repeat the measurement.*
«ERR 6»	MAM Mode	There were too many errors during the measurement in MAM mode, making it impossible to obtain a final result. Read through the checklist for performing reliable measurements and then repeat the measurement.*
«ERR 21»	Heart Level Indicator error	Possibly some problem occurs on the sensor for Heart Level Indicator. Turn off and remove the battery then repeat measurement. If still displayed, please contact your local Microlife-Service.
«HI»	Pulse or cuff pressure too high	The pressure in the cuff is too high (over 299 mmHg) OR the pulse is too high (over 199 beats per minute). Relax for 5 minutes and repeat the measurement.*
«LO»	Pulse too low	The pulse is too low (less than 40 beats per minute). Repeat the measurement.*

	Problem with Bluetooth® connection	If any problem occurs with the Bluetooth® connection, the Bluetooth® icon blinks rapidly for approximately 10 seconds. To solve the problem, please visit www.microlife.com/connect .
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* Please immediately consult your doctor, if this or any other problem occurs repeatedly.

☞ If you think the results are unusual, please read through the information in «Section 5.» carefully.

Other possible malfunctions and solutions

If problems occur when using the device, the following points should be checked and, if necessary, the corresponding measures are to be taken:

Malfunction	Remedy
The display remains blank when the instrument is switched on.	1. Check batteries for correct polarity. 2. If the display is unusual, re-insert batteries or exchange them.
The device frequently fails to measure blood pressure values, or the values measured are too low (too high).	1. Check the positioning of the cuff. 2. Measure blood pressure again in peace and quiet, carefully following the details in Section 5.
Every measurement produces a different value.	Please read the following information listed in Section 5.2 " Common sources of error. " Repeat the measurement. Please note: Blood pressure fluctuates continually so successive measurements will show some variability. Allow 1-2 minutes between readings.
Blood pressure values measured at your doctor's office differ from your measurements.	Record the daily development of the measured values and consult your doctor. Please note: Individuals visiting their doctor frequently experience anxiety which can result in a higher reading than at home under resting conditions.

10. Safety, Care, Accuracy Test and Disposal

⚠ Safety and protection

- Follow instructions for use. This document provides important product operation and safety information regarding this device.

Please read this document thoroughly before using the device and keep for future reference.

- This device may only be used for the purposes described in these instructions. The manufacturer cannot be held liable for damage caused by incorrect application.
- This device comprises sensitive components and must be treated with caution. Observe the storage and operating conditions described in the «Technical Specifications» section.
- Protect it from:
 - water and moisture
 - extreme temperatures
 - impact and dropping
 - contamination and dust
 - direct sunlight
 - heat and cold
- The cuffs are sensitive and must be handled with care.
- Only pump up the cuff once fitted.
- Do not use this device close to strong electromagnetic fields such as mobile telephones or radio installations. Keep a minimum distance of 3.3 m from such devices when using this device.
- Do not use this device if you think it is damaged or notice anything unusual.
- Never open this device.
- If the device is not going to be used for a prolonged period the batteries should be removed.
- Read the additional safety information provided within the individual sections of this instruction manual.
- The measurement results given by this device is not a diagnosis. It is not replacing the need for the consultation of a physician, especially if not matching the patient's symptoms. Do not rely on the measurement result only, always consider other potentially occurring symptoms and the patient's feedback. Calling a doctor or an ambulance is advised if needed.



Ensure that children do not use this device unsupervised; some parts are small enough to be swallowed. Be aware of the risk of strangulation in case this device is supplied with cables or tubes.

Device care

Clean the device only with a soft, dry cloth.

Cleaning the cuff

Carefully remove any marks on the cuff with a damp cloth and mild detergent.

Accuracy test

We recommend this device is tested for accuracy every 2 years or after mechanical impact (e.g. being dropped). Please contact your local Microlife-Service to arrange the test (see foreword).

11. Guarantee

Limited 1 year warranty:

Your Automatic Wrist Blood Pressure Monitor is warrantied for 1 year by the manufacturer, against manufacturer defects for the original purchaser only, from date of purchase.

The 1 year warranty applies to the monitor. Batteries are not covered by this warranty. There are no user serviceable parts inside. The warranty does not apply to consequential and incidental damages, or damage caused by batteries, improper handling, and accidents.

Professional use, not following the operating instructions, and alterations made to the monitor or accessory by third parties, are also not included in this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

The manufacturer will investigate your concern. A monitor or accessory as defined by this warranty, determined to be out of specification, will be replaced and shipped to you at no cost. A monitor or accessory as defined by this warranty, determined to be within specification, will be returned to you with a report of findings, at no cost.

Please call customer service: 1-888-287-1915 to obtain the address of the inspection center regarding any warranty concerns. We ask that you please contact customer service before sending any product back in order to better identify, and more quickly process, your concern.

12. Technical specifications

Operating conditions:10 - 40 °C / 50 - 104 °F
15 - 90 % relative maximum humidity

Storage conditions:-20 - +55 °C / -4 - +131 °F
15 - 90 % relative maximum humidity

Weight:120 +/-5 g (including batteries)

Dimensions:82 x 64 x 13.9 mm

Cuff size:13.5 – 23cm (5.25 – 9.06 inches)

Measuring procedure:Oscillometric, corresponding to Korotkoff method: Phase I
systolic, Phase V diastolic

Measurement range:SYS: 60~255 mmHg
DIA: 40~200 mmHg
40 - 199 beats per minute – pulse

Cuff pressure display range: 0 - 299 mmHg

Resolution:1 mmHg

Static accuracy: pressure within ± 3 mmHg

Pulse accuracy: ± 5 % of the readout value

Voltage source:2 x 1.5 V alkaline batteries; size AAA

Battery lifetime:approx. 300 measurements (using new batteries)

IP Class: IP22

Expected service life: Device: 5 years or 10000 measurements
Accessories: 2 years

Atmospheric pressure range : ...70KPa -106KPa

Accessories included :user manual , Storage Box , Gift box , BP diary , 2xAAA
Batteries

Technical alterations reserved.

13. How to contact us

Distributed by:
Microlife USA, Inc.
1617 Gulf to Bay Blvd.
Clearwater, FL 33755
Toll Free Help Line: 1-800-568-4147
Email: custserv@microlifeusa.com
www.microlifeusa.com