# microlife INSTRUCTION MANUAL

Premium Blood Pressure Monitor



Model # BP3GY1-2N

#### 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 upper arm at home or in the doctor's office. 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 during cuff inflation. This device detects the appearance of irregular heartbeats during measurement and provides a warning signal when the irregular heartbeat is detected. The device can be connected via Bluetooth to a smart mobile device running the App.

#### 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 upper arm; ½ inch above the elbow over the artery as indicated on the cuff.

#### 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 under 12, ensure that any children around this device are supervised; some parts are small enough to be swallowed and any present tubes or cables may provide a risk of strangulation.
- Ensure the cuff tubing is not kinked during use as harmful injury may occur due to the effect of blood flow interference caused by high pressure in the cuff not releasing.

#### 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.
- X 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.
- X 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, cuff assembly, batteries and acadapter (if applicable) may be replaced by the user with Microlife supplied replacements. 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:

- X Drop this device or expose it to strong vibrations; sensitive components may be affected resulting in inaccuracies and/or operational issues.
- X 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.
- X 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**

In addition to the standards stated in the Instruction Manual:

- 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.

Please note: According to international standards, your monitor should be checked for accuracy every 2 years.

#### **TYPE**

IP20

Protected against solid foreign particles with a diameter of more than 12.5 mm, no protection against water. Keep Dry.



Type BF Applied Part

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

#### **Expected Life**

Monitor 5 Years
Cuff 2 Years

#### **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® Smart 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.

#### **Federal Communications Commission (FCC) Statement**

#### 15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

#### 15.105(b)

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.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two

#### conditions:

- 1) this device may not cause interference and
- 2) this device must accept any interference, including interference that may cause undesired operation of the device.

#### **Premium Automatic Blood Pressure Monitor**

Instruction Manual

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#### 1. Introduction

#### 1.1. Your Automatic Blood Pressure Monitor

Thank you for purchasing a fully automatic 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 upper arm. It offers clinically proven accuracy and has been designed to be user friendly.

If you have additional questions regarding blood pressure measurements please contact Microlife Customer Service at 1-800-568-4147 or contact your doctor.

#### 1.2. Diabetes validation

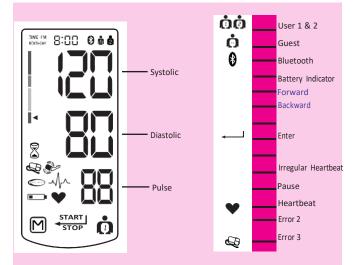
Microlife's commitment to disease-state management has led to our clinical validation for use with diabetes. This is a worldwide first that reinforces our commitment to quality, accuracy and meaningful innovation.

#### 2. Components of your blood pressure monitor

#### 2.1. Measuring unit







#### 2.2. Wide Range Cuff:

For arm circumference 8.7" - 16.5" (22 cm - 42 cm)

If you ever need to buy a replacement cuff, call us toll-free at 1-800-568-4147.

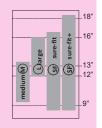
#### **Anti-Slip Cuff:**

Your wide range cuff is equipped anti-slip grips that ease the process of correctly positioning the cuff on your arm.

#### **Cuff Sizing:**

The proper fit is essential for accurate blood pressure readings. The average arm circumference for a woman is 11", and the average for a man is 13". This cuff can accommodate arm circumferences from 8.7" to 16.5" and fits most adults.

Arm circumference should be measured with a measuring tape in the middle of the relaxed upper arm. If the cuff is too small, call 1-800-568-4147 for additional information



#### Note:

- Do not force cuff connection into the opening.
- Make sure the cuff connection is not pushed into the AC adapter port.

#### 3. How do I get started?

#### 3.1. Screen film

There is a protective piece of static film covering the monitor's screen. Please remove it before use.

#### 3.2. Inserting the batteries

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

- a) Remove the battery cover.
- Insert the batteries (4 x size AAA 1.5 V), observing the indicated polarity.
- If a battery warning appears in the display, the batteries are discharged and must be replaced.

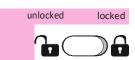
#### Attention!

- After the low battery indicator appears, the device won't function until the batteries have been replaced.
- Please use AAA 1.5 V batteries and replace them all at the same time.
- If the blood pressure monitor is not used for long periods, remove the batteries from the device.

#### 3.3. Power switch / screen lock

To activate your monitor, push the switch on the right hand side of the monitor to the unlocked position.





#### 3.4. Using the interactive touch screen

This monitor features an interactive screen with 2 touch zones which operate similarly to traditional buttons, but require only a light touch of the finger to operate.

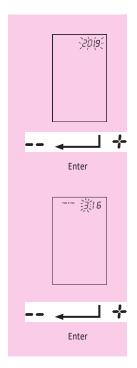
The following functions are made easier through the interactive touch screen:

- · Setting time and date
- Scrolling through memories
- Selecting the user
- Starting/stopping the blood pressure measurement

#### 3.5. Setting the date and time

- After the new batteries are activated and the monitor is unlocked, the year number flashes in the display. You can advance the year by pressing the plus or minus icon. To confirm and then set the month, press enter.
- You can now set the month using the minus and plus. To confirm and then set the day, press enter.
- 3. Please follow the instructions above to set the day, hour and minutes.
- Once you have set the last minute and pressed enter, the date and time are set and the time is displayed.
- 5. If you want to change the date and time, press and hold the time zone down for approximately 3 seconds until the year number starts to flash. Now you can enter the new values as described above.
- 6. To bypass setting date and time, press the time.





#### 3.6. Select the user

This blood pressure monitor is designed to store 120 measurements for each of two users Memories are not stored in guest mode.







Guest Mode

## Before taking a measurement, be certain that the correct user has been selected.

- a) With the monitor unlocked, press and hold the user icon, then release.
- b) The user icon will begin to blink. Tap again to change users.
- c) To confirm your selection wait 3 seconds, or press STOP.

#### 3.7. Select measuring mode: standard or Microlife Averaging Mode (MAM)

This instrument enables you to select either standard (single measurement) or measurement averaging mode (automatic triple measurement).



- a) To select Standard mode, push the switch on the side 1 of the monitor to Position "1."
- b) To select Averaging mode, push the switch to Position "3." Note the "MAM" icon will illuminate on the screen.

If you select 1, then only one measurement will be taken. If you select 3, the unit will inflate and deflate three times resulting in one final averaged measurement.

#### 3.8. Microlife Averaging Mode (MAM)

- In Microlife Averaging Mode (MAM), three measurements are automatically taken in succession and the
  result is then automatically analyzed and displayed.
  Because your blood pressure constantly fluctuates, a
  result determined in this way is more reliable than
  one produced by a single measurement.
- After pressing the STOP/START button the selected Microlife Averaging Mode appears in the display as the MAM symbol.
- 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.



#### 3.9. Connecting the cuff and monitor

Insert the yellow cuff tube connector into the yellow socket on the left side of the instrument.

If your cuff connector is another color, please contact customer service as additional steps are needed to obtain an accurate reading.

#### 3.10. Using the AC power adapter

You may also operate this monitor using the included AC adapter. Use only the included AC adapter to avoid damaging the unit.

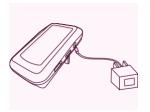
- a) Ensure that the AC adapter and cable are not damaged.
- b) Plug the adapter cable into the AC adapter port on the right side of monitor.
- c) Plug the AC adapter into a 110 V power socket (U.S. or Canada).
- d) Test that power is available by pressing the STOP/START button.

#### Note:

- No power is taken from the batteries while the AC adapter is connected to the instrument.
- If the power is interrupted during a measurement (e.g., by removal of the adapter from the wall socket), the instrument must be reset by removing the plug from the instrument.

If you have any questions regarding the AC adapter, call us at 1-800-568-4147.





#### 4. How do I take a measurement?

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

#### 4.1. Preparing to take a measurement

- Avoid eating and smoking as well as all forms of exertion directly before measurement. These factors influence the measurement result.
   Find time to relax by sitting in an armchair in a quiet atmosphere for about 5 minutes before your measurement.
- Remove any garment that fits closely to your upper arm.
- Always measure on the same arm (normally left).
- Compare measurements at the same time of day, since blood pressure changes during the course of the day (as much as 20–40 mmHg).

#### 4.2. Common errors

Note: Comparable blood pressure measurements always require the same conditions. Conditions should always be quiet.

- All efforts by the user 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 arm artery lies considerably lower or higher than the heart, an
  erroneously high or low blood pressure will be measured. Each 15 cm
  (6") difference in height between your heart and the cuff results in a
  measurement error of 10 mmHg.
- Cuffs that are too narrow or too short result in false measurement values. Selecting the correct cuff is extremely important. Cuff size is dependent upon the circumference of the arm (measured in the center). The permissible range is printed on the cuff. If this is not suitable for your use, please call 1-800-568-4147.
- A loose cuff or a sideways protruding air pocket causes false measurement values.
- With repeated measurements, blood accumulates in the arm, which can lead to false results. Consecutive blood pressure measurements should be repeated after a 1 minute pause or after your arm has been held up in order to allow the accumulated blood to flow away.

#### 4.3. Using the cuff

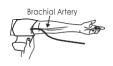
- a) Pass the end of the cuff through the flat metal ring so that a loop is formed. The hook and loop material must be facing outward. (Ignore this step if the cuff has already been prepared.)
- b) Slide the cuff onto your upper left arm. The rubber tube should be on the inside of your arm extending downward to your hand. Make certain the cuff lies approximately 1/2" (1 to 2 cm) above the elbow.

**IMPORTANT:** The red strip on the edge of the cuff (Artery Mark) must lie over the artery which runs down the inner side of the arm.

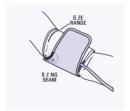
TIP: Align red artery mark to pinky finger.

- c) To secure the cuff, wrap it around your arm and press the hook and loop material together. Check the position of the green SIZING SEAM on the cuff. Ensure green sizing seam overlaps green size range bar.
- d) There should be little free space between the arm and the cuff. You should be able to fit 2 fingers between your arm and the cuff. Clothing must not restrict the arm. Any piece of clothing which does must be removed. Cuffs that don't fit properly result in false measurement values. Measure your arm circumference if you are not sure of proper fit.











- e) Lay your arm on a table so the cuff is at the same height as your heart. Make sure your arm is relaxed and the tube is not kinked.
- f) Remain seated quietly for 5 minutes before you begin the measurement.

#### Comment

If it is not possible to fit the cuff to your left arm, it can also be placed on your right arm. However, all measurements should be made using the same arm. Comparable blood pressure measurements always require the same conditions (relax for several minutes before a reading).



Cuff on right arm

#### 4.4. Taking a measurement

After the cuff has been appropriately positioned the measurement can begin. Remain still during your measurement, do not flex muscles.

- a) Remain seated quietly for 5 minutes before you begin the measurement.
- b) Press the START/STOP button. After the system check, the monitor displays OK and the pump begins to inflate the cuff. On the display, the increasing cuff pressure is continually shown.
- c) After automatically reaching an individual pressure, the pump stops and the pressure will release. The cuff pressure is displayed during the measurement.
- d) When the device has detected your pulse, the heart symbol in the display begins to blink.
- e) When the measurement has been concluded, the air will automatically release from the cuff. The measured systolic and diastolic blood pressure values, as well as the pulse, are now displayed.
- f) The measurement results are displayed until you switch the device off. If no button is pressed for 1 minute, the device switches off automatically.
- g) When the unit is set to the MAM (Microlife Averaging Mode) setting, 3 separate measurements will take place in succession, after which your result is calculated and displayed as a single, averaged measurement (individual results are not displayed). There is a 15 second resting time between each measurement. A count-down indicates the remaining time between measurements. If one of the measurements causes an error message, it will be repeated one more time. If any additional error occurs, the measurement will be discontinued and error code displayed.

Pumping Pressure



Measuring



Systolic



Pulse

Measurement Complete



#### 4.5. Memory: Reviewing readings

At the end of a measurement, this monitor automatically stores each result with date and time. This unit stores 120 memories for each of 2 users.

#### Viewing the stored values

With the unit unlocked, press "M." The display first shows "A," then shows an average of all measurements stored in the unit for that user. Press the plus or minus icon to scroll between stored readings.

Please note: Measurements for each user are averaged and stored separately. Be certain that you are viewing the measurements for the correct user.

To exit, press STOP.

#### Memory full

When the memory has stored 120 results, a new, measured value is stored by overwriting the oldest value.

#### Clear all values

If you are sure that you want to permanently remove all stored values, hold down "M" until "CL" appears and then release "M". If you do not want to clear the values, press STOP. To permanently clear the memory, press "M" while "CL" is flashing.

Individual values cannot be cleared.





#### 4.6. Stopping a measurement

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

#### 4.7. Hypertension risk indicator

The bars on the left-hand edge of the display show the possible range for a blood pressure reading. The reading can fall within the normal (green), borderline (yellow) or danger (orange, dark orange) range.

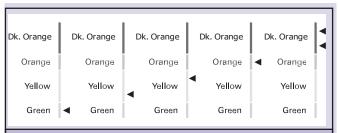
The classification is based on standards established by the  $2017\,AHA$  and ACC.

Refer to the chart in section 7.2 of this instruction manual for details of the classifications.



A triangle is displayed to the right of the traffic light bar according to your measurement.

- If your triangle is in the green zone, your measurement is "Normal," according to AHA/ACC 2017 standards.
- If your triangle is in the lower yellow zone, your measurement is "Elevated."
- If your triangle is in the upper yellow zone, your measurement is "Pre-Hypertensive."
- If your triangle is in the orange zone, it is "Stage 1 Hypertensive."
- If your triangle is in the dark orange zone, it is "Stage 2 Hypertensive."



"Normal" Blood "Elevated" Blood "Stage 1 Hypertension" "Stage 2 Hypertension" "Hypertensive Crisis"

Pressure Reading Pressure Reading Blood Pressure Reading Bl

#### 4.8. Irregular heartbeat detector

The appearance of this symbol  $\sqrt[]{r}$  indicates that certain pulse irregularities were detected during the measurement. In this case, the result may deviate from your normal basal 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 on frequent appearance of the irregular heartbeat symbol

This instrument is an oscillometric blood pressure monitor device that also analyzes pulse frequency during measurement. The instrument is clinically tested.

If pulse irregularities occur during the measurement, the irregular heartbeat symbol is displayed with the measurement.

If the symbol appears frequently or if it suddenly appears more often than usual, we recommend the patient seek medical advice. The instrument does not replace a cardiac examination but serves to detect pulse irregularities at an early stage.

#### 4.9. Battery change indicator

#### **Batteries almost discharged**

When the batteries are approximately 75% used, the battery symbol will flash a few times as soon as the instrument is switched on. Although the instrument will continue to measure reliably, you should obtain replacement batteries.



Batteries discharged – replacements required When the batteries are discharged, the battery symbol will appear, unblinking, as soon as the instrument is switched on. You cannot take any additional measurements and must replace the batteries.



- Open the battery compartment on the bottom of the instrument.
- Replace all of the batteries at the same time, ensure they are correctly connected, as shown on the symbols in the compartment.
- The memory retains all values although date and time (and possibly also set alarm times) must be reset – the year number will flash automatically after the batteries are replaced.
- 4. To set date and time, follow the procedure described in section 3.2.

#### Note:

Use four new AAA 1.5 V batteries. Do not use batteries beyond their expiration date. If the monitor is not going to be used for a prolonged period, the batteries should be removed.

#### 5. Bluetooth functions and application (App)

#### Please download the Microlife Connected Health App

(referred to as App in this document) from Apple's App Store® or Google Play® before connecting your devices. The App can be executed on a number of mobile platforms with the following specifications:



#### **Compatibility:**

- Apple® devices running iOS 8.0 or higher on iPhone®, iPad®, and iPod touch®.
- Android® phones running Android® 5.0 or higher.

#### **Questions?**

- Toaccess the tutorial, go to the App home screen (Microlife Connected Health) and press the "Settings" button.
- Press "Tutorial" and select your topic.
- If you have any issues with your setup, please contact customer service toll free: 1-866-464-6184 for additional support

#### 5.1. Bluetooth® icon indicator (on monitor)

The Bluetooth® icon indicator on your blood pressure monitor, located in the upper left 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.
- If a connection does not occur within 2 minutes, the Bluetooth® function on the monitor will automatically turn off.
- If the bluetooth® icon flashes for 10 seconds and then turns off, there is a problem with the connection.
- The icon will remain unblinking on the monitor when data is uploading to the App.



Bluetooth Icon

#### Troubleshooting: Bluetooth® connection:

- Monitor: Turn off and wait for 1 minute.
- Device (eg. phone): Return to the Main Menu and reselect Download Data again.

If connection issues persist, please contact customer support

toll free: 1-866-464-6184.

#### 5.2. iOS devices:

#### Setting up your iOS device:

- In the settings menu, turn Bluetooth® "ON"
- Select the Microlife Connected Health App
- Select "User Profiles"
- Select "+" at the top of the screen to create a new user profile.
- Review the terms of service, and select "Accept" to proceed.
- Enteryour information and select the check mark to confirm.

#### Connecting the devices for the first time:

On your device:

 Open the Microlife Connected Health App and select "Settings."

On your blood pressure monitor:

 Press and hold the power button on your monitor for 8 seconds. Once connected, a Bluetooth® icon will appear on the blood pressure monitor's screen.

#### On your device:

- Select "Pair Device"
- "Paired Successfully" will appear if connected.

#### Setting up your blood pressure monitor:

Confirm the correct user is selected on your blood pressure monitor:

Confirm the user icon on the top right hand side of



Bluetooth "icon



the monitor screen is set to user 1 or 2.

To change users on your monitor, see section 3.8.

#### Automatic measurement transfer (iOS):

- Open the Microlife Connected Health App
- Select "Download data."
- Take your blood pressure.
- Once complete, the blood pressure monitor will automatically activate a Bluetooth® connection with your iOS device. A Bluetooth® icon will appear on the monitor's screen when connected. (The devices must have been previously connected, and be in range).
- Animage of a blood pressure monitor and a phone connecting will appear, and the readings will transfer.
- Tosave your data and return to the main menu, select the check mark in the upper right hand corner.

Your measurements will now be available for review through the "View Data" button on the home screen.





Download data

#### Manual measurement transfer (iOS):

- 1. Open the Microlife Connected Health App
- Select "User Profiles," and select the profile which you would like to upload. Once selected, the profile will be highlighted, and a check mark will appear to its left.
- 3. Use the home button to exit and return to the main menu.
- Select "Download data." An image of a blood pressure monitor and a phone connecting will appear, and the readings will transfer.
- 5. To save your data and return to the main menu, select the check mark in the upper right hand corner.

Your measurements will now be available for review through the "View Data" button on the home screen.







#### Saving readings stored on your monitor (iOS):

- Open the Microlife Connected HealthApp
- Select the profile which you would like to upload.
   Once selected, the profile will be highlighted, and check mark will appear to its left.
- On your blood pressure monitor: Press and hold the power button for 8 seconds. Once connected, a Bluetooth® icon will appear on the blood pressure monitor's screen.
- Follow steps 4 & 5 in "saving measurements manually"

#### 5.3 Android OS Phones

#### Setting up your phone:

- In the settings menu, turn Bluetooth® "ON"
- Select the Microlife Connected Health App
- Select "User Profile"
- Select "+" at the top of the screen to create a new user profile.
- Review the terms of service, and select "Accept" to proceed.
- Enter your information and select the check mark to confirm.

#### On your blood pressure monitor:

- Confirm the correct user is selected on your blood pressure monitor. The user icon on the top left hand side of the monitor screen should be set to your preference - 1 or 2).
- Press and hold the "START/STOP" button on the monitor for 8 seconds until the Bluetooth® icon flashes.
- To change users on your monitor, see section 3.8.





#### Saving readings to your Android phone:

#### On your phone:

- Open the Microlife Connected Health App
- Select "User Profiles," and then select the profile which you would like to upload (the profile will be highlighted in gray when selected).
- Note: At least one blood pressure reading must betaken and recorded on the monitor before the data can be transferred

#### On your blood pressure monitor:

 Press and hold the power button on your monitor for 8 seconds. Once connected, a Bluetooth®icon will flash on the blood pressure monitor's screen.

#### On your phone:

- Select "Download data." Your phone will automatically search and list available Bluetooth® devices.
- Select your monitor from the list (BP3GY1-2N), and the readings will automatically transfer.
- After the readings have been transfered, a summary of all your readings will be displayed.
- To save your readings and return to the main menu (homescreen), select the check mark in the upper right hand corner.
- To view saved readings, return to the home screen and select "View Data"

Note: If no connection between the monitor and the phone has been made within 10 seconds, a "SCAN" button will appear in the top right corner of the phone's screen

- To search for your monitor again, press "SCAN."
- Once the phone has detected your monitor, select it from the list (BP3GY1-2N).





Bluetooth<sup>®</sup> icon



Download data



#### 6. Error messages/troubleshooting

If an error occurs during a measurement, the measurement is discontinued and a corresponding error code is displayed (example: Error no. 2).



#### Error No. Possible cause(s)/Solutions

ERR 1

Weak signal. The tube may have loosened, or no pulse was detected.\* Ensure cuff connections are tight with proper cuff placement. See section 4.3.

ERR 2



Movement detected. Unnatural pressure impulses influenced the measurement result. Reason: The arm was moved during the measurement (artifact). Repeat measurement, keeping still and quiet.

ERR 3



No pressure detected. Inflation of the cuff takes too long. The cuff is not correctly seated or the hose connection is not tight. Re-position cuff and repeat the measurement.

ERR 5

Abnormal reading. The measured readings indicate an unacceptable difference between systolic and diastolic pressures. Take another reading following directions carefully. Contact your doctor if you continue to get unusual readings.

HI

The cuff pressure is too high. Relax for 5 minutes and repeat the measurement.\*

10

The pulse is too low (less than 40). Repeat the measurement.\*

<sup>\*</sup>If this or any other problem occurs repeatedly, please consult your doctor.

#### Other possible errors and their 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 although the batteries are in place.	Check batteries for the correct polarity.
	2. If the display is unusual, remove the batteries and exchange them for new ones.
The pressure does not rise although the pump is running.	Check the connection of the cuff tube and connect properly.
The device frequently fails to measure blood pressure values or the values measured are too low or high.	1. Check the positioning of the cuff.
	2. Measure blood pressure again in peace and quiet, carefully following the details in section 4.
Every measurement results in a different value, although the device functions normally and normal values are displayed.	Please read the following information and points listed in section 4.2 "Common errors." Repeat the measurement. Please note: Blood pressure fluctuates continually so successive measurements will show some variability.
Blood pressure values differ from those measured by my doctor.	Record the daily development of the measured values and consult your doctor (see section 4.1) Please note: Individuals visiting their doctor frequently experience anxiety which can result in a higher reading than at home under resting conditions.
After the instrument has inflated the cuff the pressure falls very slowly, or not at all. (No reasonable measurement possible.)	1. Check cuff connections.
	2. Ensure the unit has not been tampered with.

#### 7. How is blood pressure measured?

#### 7.1. 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 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).

Blood pressure values must lie within certain normal ranges in order to prevent particular diseases.

Blood pressure is too 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 endangeryour 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.

#### 7.2. Measurement Guidelines

The following standards for assessing high blood pressure (in adults) have been established by the AHA and ACC in 2017.

Category	Systolic (mmHg)	<b>Diastolic</b> (mmHg)
Normal	<120	and <80
Elevated	120	
<b>Hypertension</b> Stage 1 Hypertension		
Stage 2 Hypertension	140	
	≥	>

#### Additional information

- This chart reflects a 2017 update to blood pressure standards.
- 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 doctor.
- Correctly measured diastolic blood pressure values above 120 mmHg require immediate medical treatment.

#### 7.3. What can I do to change my blood pressure?

- a) Consult your doctor.
- 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 constriction caused by deposits in the vessel walls (arteriosclerosis). A deficient supply of blood to important organs (heart, brain, muscles) can result from arteriosclerosis. 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. The latter group can be ascribed to specific organ

- malfunctions. Please consult your doctor for information about the possible origins of your own increased blood pressure values.
- d) There are measures which 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

- Consistently follow all 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. You must receive advice regarding the type and extent of exercise that is appropriate for you.

#### 8. Care and maintenance

- a) The cuff contains a sensitive airtight bubble. Handle this cuff carefully and avoid all types of stress through twisting or buckling.
- b) Clean the device with a soft, dry cloth. Do not use gasoline, thinners or similar solvents. Spots on the cuff can be removed carefully with a damp cloth and soapsuds. Do not wash the cuff in a dishwasher, clothes washer or submerge it in water.
- Handle the tube carefully. Do not pull on it.
   Do not allow the tubing to kink and keep it away from sharp edges.
- d) **Never open the monitor.** This invalidates the manufacturer's warranty.





#### 9. Limited Warranty

Your Automatic Blood Pressure Monitor is **warranted for 5 years** by Microlife USA Inc, against manufacturer defects for the original purchaser only, from date of purchase.

The 5 year warranty applies to the monitor only. The following accessories are warranted for 1 year: cuff and AC adapter. Batteries are not covered by this warranty.

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.

Microlife USA Inc 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 use the below customer service contact information to reach Microlife USA Inc. regarding any warranty concerns. We ask that you please contact us before sending any product back in order to better identify, and more quickly process, your concern.

#### 10. Technical specifications:

Weight	. <mark>320</mark> g (with batteries)
Size:	. 86 (W) x 152 (L) x 43 (H) mm
Storage temperature:	
	. 15 to 90% relative humidity maximum
Operation temperature:	
Atmospheric pressure range	
Display	
Measuring method:	
Pressure sensor	
Measuring range:	
SYS:	. 60 to 255 mmHg
DIA:	. 40 to 200 mmHg
Pulse:	. 40 to 199 perminute
Cuff pressure display range:	.0-299 mmHg
	. Automatically stores the last 120
·	measurements for 2 users (total 240)
Measuring resolution:	, ,
	. Pressure within ±3 mmHg or 2% of
	reading >200 mmHg
	Pulse ± 5% of the reading
Power source	a) 4 AAA batteries, 1.5 V
	b) AC adapter 6 V DC 600 mA
	(voltage 4.5 VDC to 6 VDC)
Accessories:	. Cuff type: Wide range cuff for arm
	circumference 22-42 cm (8.7"-16.5")
	Storage case

Technical alterations reserved. Made in China

#### 11. How to contact us

Microlife USA, Inc.

1617 Gulfto Bay Blvd.

2nd Floor

Clearwater, FL33755

Toll Free Help Line: 1-800-568-4147

Email: custserv@microlifeusa.com

www.microlifeusa.com