

CVS/pharmacy

ARM

Blood Pressure Monitor

PROFESSIONAL

Instruction Manual
Instrucciones de Uso



Model #BP3MW1-4BCVS

Please Note:

This medical instrument must be used according to instructions to ensure accurate readings

Professional Blood Pressure Monitor

Instruction Manual

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1. Introduction

1.1. Features of your Professional Blood Pressure Monitor

Your blood pressure monitor is a fully automatic digital blood pressure measuring device for use by adults on the upper arm at home or in your doctor's/nurse's office. It enables very fast and reliable measurement of the systolic and diastolic blood pressure as well as the pulse by way of the oscillometric method. This device offers clinically proven accuracy and has been designed to be user friendly.

Up to 20% of women develop hypertension during pregnancy. This disease (preeclampsia or toxemia) affects the final outcome of about 5% of all pregnancies. Preeclampsia is a disorder that occurs only during pregnancy. It can be recognized by a clear increase in blood pressure and high protein levels in the urine. The measurement precision of this device has been proven clinically in a comprehensive study carried out by Professor Andrew Shennan at St. Thomas' Hospital, London. This study proved the reading reliability of this monitor during pregnancy and in the presence of preeclampsia, making it the first such home-use monitor that is clinically validated for such use and especially suitable for pregnant women. Of course, this device can be used also after the pregnancy or by other family members.

The memory data can be transferred to the PC (personal computer) running the Microlife Blood Pressure Analyzer (BPA) software by connecting the monitor via cable. The device can also be used in connection with smart mobile devices running the APP and via Bluetooth.

Before using, please read this instruction manual carefully and then keep it in a safe place. Please contact your doctor for further questions on the subject of blood pressure and its measurement.

Attention!

1.2. Important information about self-measurement

- Self-measurement means control, not diagnosis or treatment. Unusual values must always be discussed with your doctor. Under no circumstances should you alter the

dosages of any drugs prescribed by your doctor.

- The pulse display is not suitable for checking the frequency of heart pacemakers.
- In cases of irregular heartbeat, measurements made with this instrument should only be evaluated after consultation with your doctor.

Electromagnetic interference:

The device contains sensitive electronic 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.

2. Important information on blood pressure and its measurement

2.1. How does high/low blood pressure arise?

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.

2.2. Which values are normal?

Blood pressure is too high if your diastolic pressure is above 100 mmHg and/or your systolic blood pressure is over 160 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 drug doses prescribed by your physician.**

Which values are normal?

The following standards for assessing high blood pressure (in adults) have been established by the National Institutes of Health JNC7, 2003.

Category	Systolic (mmHg)	Diastolic (mmHg)
Normal	<120	and <80
Pre-Hypertension	120-139	or 80-89
Hypertension		
Stage 1 Hypertension	140-159	or 90-99
Stage 2 Hypertension	≥160	or ≥100

Further 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 doctor.
- Correctly measured diastolic blood pressure values above 120 mmHg require immediate medical treatment.

This device is not intended for use on children 12 years of age or younger.

2.3. What can be done if regular high or low values are obtained?

- 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).

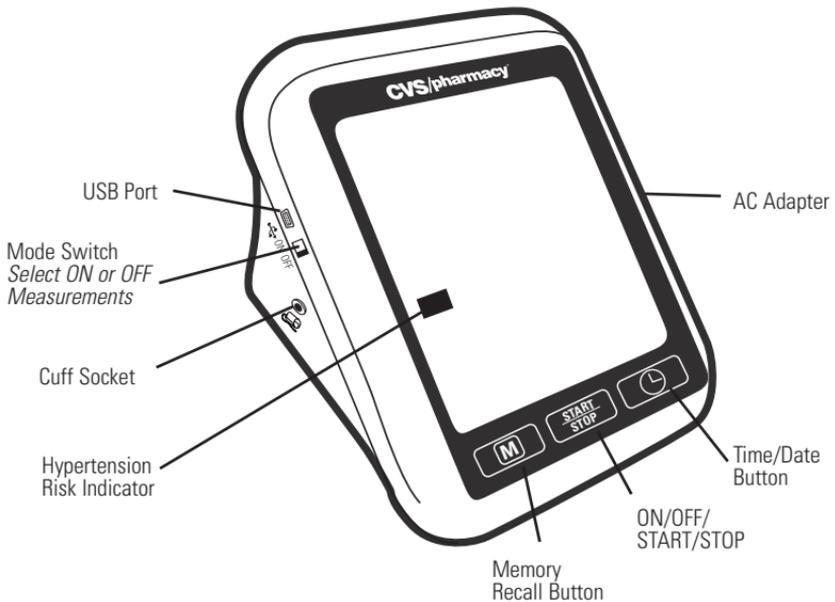
4) Physical constitution

- **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.

3. Components of your blood pressure monitor

a) Measuring unit



b) Wide Range Soft Cuff:

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

If you ever need to buy a replacement cuff, call CVS/pharmacy® Blood Pressure Support toll-free at 1-866-464-6184.



Please Note:

Arm circumference should be measured with a measuring tape in the middle of the relaxed upper arm. Do not force cuff connection into the opening. Make sure the cuff connection is not pushed into the AC adapter port. If the cuff is too small, call 1-866-464-6184 for further information.

4. Using your blood pressure monitor for the first time

4.1. Inserting the batteries

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

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



Low Battery Indicator

Attention!

- After the low battery indicator appears, the device won't function until the batteries have been replaced.
- Please use "AA" Long-Life or Alkaline 1.5 V batteries.
- If the blood pressure monitor is not used for long periods, remove the batteries from the device.



4.2. Using the touch pad

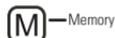
This monitor features three touch pad "buttons" which operate similarly to traditional buttons, but require only a light touch of the finger to operate.

- The buttons are MEMORY, START/STOP, and TIME.



4.3. Setting the date and time

1. After the new batteries are activated, the year number flashes in the display. You can advance the year by pressing the "M" button. To confirm and then set the month, press the TIME button.
2. You can now set the month using the "M" button. To confirm and then set the day, press the TIME button.
3. Please follow the instructions above to set the day, hour and minutes.
4. Once you have set the last minute and pressed the TIME button, 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 button down for approximately 3 seconds until the year number starts to flash. Now you can enter the new values as described above.



Memory



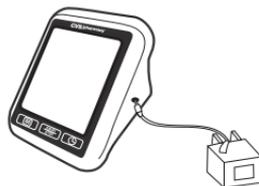
Time/Date
Button



4.4. 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 START/STOP 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 CVS/pharmacy® Blood Pressure Support at 1-866-464-6184.

4.5. Cuff tube connection

Insert the cuff tube into the opening on the left side of the instrument.



4.6. Select the user

This blood pressure monitor is designed to store 120 measurements for each of two users. In addition, there is a guest mode in which results are not stored.



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

- With the unit off, press and release the TIME button to cycle through users ("1," "2" or "OFF" (guest mode)).
- Press the START/STOP button to make your selection.



4.7. Select the measuring mode: standard or measurement averaging mode (MAM)

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



With the unit off, press the Time button for 3 seconds and then the screen will show the current MAM mode. You can

click M button to switch between Standard mode and Average mode.

To select Standard mode, please choose OFF

To select Average mode, please choose On

If you select OFF, then only one measurement will be taken. If you select ON, the unit will inflate and deflate three times resulting in one final average.



4.8. Measurement averaging mode technology (MAM)

- In Measurement 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 START/STOP button the selected Measurement 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.

5. Measurement procedure

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

5.1. Before 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 ten 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).

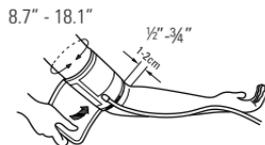
5.2. Common sources of error

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 1-866-464-6184.
- 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.

5.3. Fitting the cuff

- a) The cuff is wide rang and soft for easier use. Please remove tight or bulky clothing from your upper arm.
- b) Wrap the cuff around 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" to 3/4" (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.

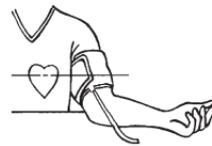
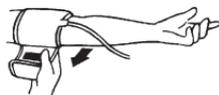
- c) To secure the cuff, wrap it around your arm and press the

hook and loop material together.

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 the tube is not kinked.

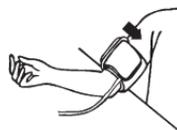
f) Remain seated quietly for two minutes before you begin the measurement.



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

5.4. Measuring procedure

After the cuff has been appropriately positioned the measurement can begin:

- Press the START/STOP button. After a series of short beeps, the pump begins to inflate the cuff. On the display, the increasing cuff pressure is continually shown.
- After automatically reaching an individual pressure, the pump stops and the pressure slowly falls. The cuff pressure is displayed during the measurement.

Pumping
Pressure



- c) When the device has detected your pulse, the heart symbol in the display begins to blink.
- d) 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.
- e) The measurement results are displayed until you switch the device off. If no button is pressed for 1 minute, the device switches off automatically.
- f) When the unit is set to the MAM (Measurement Averaging Mode) setting, 3 separate measurements will take place in succession, after which your result is calculated and displayed as a single, averaged measurement. There is a 15 second resting time between each measurement. A count-down indicates the remaining time and a beep will sound for 5 seconds before the 2nd and 3rd readings begin.



Measurement Complete

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.

Expanding the averaged measurement to see the three individual readings:

This function allows you to view the three individual measurements used to calculate the Measurement Averaging Mode (MAM) reading.

- a) After taking an averaging mode measurement, hold the memory button for 3 seconds until you hear a short beep. (Do not hold the button longer than 7 seconds or you will delete all the readings in the memory.)
- b) Release the button and watch the screen. It will automatically scroll through the 3 measurements used in the reading.

5.5. Memory – displaying the last 120 measurements

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 off, press the "M" button. The display first shows "A," then shows an average of all measurements stored in the unit. Please note: Measurements for each user are averaged and stored separately. Be certain that you are viewing the measurements for the correct user.

Pressing the "M" button again displays the previous value. To view a particular stored memory, press and hold the "M" button to scroll to that stored reading.

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 the "M" button (the instrument must have been switched off beforehand) until "CL" appears and then release the button. If you do not want to clear the values, press the START/STOP button. To permanently clear the memory, press the "M" button while "CL" is flashing.

Individual values cannot be cleared.



5.6 Morning / Evening Hypertension Average

Morning Hypertension usually occurs as a surge in blood pressure upon waking up, this Blood Pressure Monitor (BPM) will average readings taken between 4:00 A.M. and 11:50 A.M.. Evening hypertension, sometimes called nocturnal hypertension, is characterized by high blood pressure that persists from night time until early morning; this BP monitor will average reading taken between 6:00 P.M. and 11:59 P.M..

With the unit off, press the M (Memory) pad to display the average reading for the

current user.

Press the M pad again, the screen will show the average of all reading taken between 4:00 A.M. and 11:50 P.M. The screen will display the sun icon.

When you press the M (Memory) pad a third time, the screen will show the average of all readings taken between 6:00 P.M. and 11:59 P.M.. The screen will display the moon icon.

After 30 seconds, the screen will display the last taken value. You can continuously press the M (Memory) pad to view each value individually.

5.7. Discontinuing a measurement

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

5.8. Setting the medication reminder

This instrument allows you to set two alarm times at which an alarm signal will then be triggered. This can be a useful aid, for instance as a reminder to take medication or to remind you to take your blood pressure at the same time each day.



1. To set an alarm time, press the TIME button (the instrument must have been switched off beforehand), and immediately afterwards the "M" button, and hold both down until the bell symbol appears in the bottom left of the display. Then release both buttons. The flashing "1" in the display indicates that the first alarm time can now be set.
2. Press the TIME button to set the hours – the hours display flashes and pressing the "M" button allows you to set the alarm hour. To confirm, press the TIME button.

3. The minute display will now flash. The minutes can be set using the "M" button. To confirm, press the TIME button again.



4. The bell symbol will now flash. Use the "M" button to select whether the alarm time is to be active (bell) or inactive (crossed-out bell). To confirm, press the TIME button.



To set a second alarm time, proceed as above but if the "1" flashes, press the "M" button to select "2" and confirm with the TIME button.



- An active alarm time is indicated by the bell symbol in the display.
- The alarm sounds at the set time every day.
- To switch off the alarm when it is sounding, press the START/STOP button.
- To permanently switch off the alarm, proceed as above (steps 1-4) and select the crossed-out bell symbol. This will then disappear from the display.
- The alarm times must be re-entered each time the batteries are replaced.

5.9. Hypertension risk indicator

The bars on the left-hand edge of the display show you the range within which the indicated blood pressure value lies. Depending on the height of the bar, the readout value is either within the normal (green), borderline (yellow) or danger (orange, red) range.

The classification is based on standards established by the National Institutes of Health JNC7, 2003.

Refer to the chart in section 2.2 of this instruction manual for details of the classifications.

Green 	Yellow  Green 	Yellow  Green 	Orange  Yellow  Green 
Red 			
Indication of a "Normal" Blood Pressure	Indication of a "Pre-Hypertension" Blood Pressure	Indication of a "Stage 1 Hypertension" Blood Pressure	Indication of a "Stage 2 Hypertension" Blood Pressure

The traffic light bar illuminates according to your measurement.

- If your measurement has only the green bar, your measurement is "Normal," according to NIH standards.
- If your measurement shows the yellow bar, your measurement is "Pre-Hypertension."
- If your measurement shows the orange bar, it is "Stage 1 Hypertension."
- If your measurement shows the red bar, it is "Stage 2 Hypertension."

5.10. Irregular heartbeat detector

The appearance of this symbol  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.

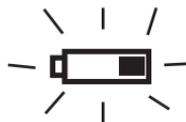
If pulse irregularities occur during the measurement, the irregular heartbeat symbol is displayed with the measurement.

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.

5.11. Battery charge 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 (if at least one of the batteries still has some charge). 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 further measurements and must replace the batteries.



1. Open the battery compartment on the bottom of the instrument.
2. Replace the batteries – ensure they are correctly connected, as shown on the symbols in the compartment.
3. 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 4.3.

Note:

Use four new, Long-Life 1.5 V AA 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.

Using rechargeable batteries

You can also operate this instrument using rechargeable batteries.

- Please use only type "NiMH" reusable batteries.
- If the battery symbol () appears, the batteries must be removed and

recharged. They must not remain inside the instrument, as they may become damaged through total discharge even when switched off. The batteries must NOT be discharged in the blood pressure monitor. If you do not intend to use the instrument for a week or more, always remove the rechargeable batteries.

- Recharge these batteries using an external charger and follow manufacturer's instructions carefully.

6. Software functions

This unit can be used in connection with your computer (PC / MAC) running the PC Link blood pressure analyzer software. Your computer will allow a capacity of monitoring 80 patients, each with 1000 data (note: overuse will lower system efficiency). The memory

data can be transferred to the computer by connecting the monitor via the included USB cable. User can get the BPA (Blood Pressure Analyzer) software either the provided

CD or download the BPA on Microlife web site:
<http://www.microlife.com/support/software/>

System Requirements for Windows Blood Pressure Analyzer Rev.: 3.2.5 or higher

- Windows XP, Vista, 7 & 8
- CD-ROM Drive
- Minimum 256 MB RAM
- 500 MB Available Hard Disk Space
- USB Port Version 1.0 or Higher
- Compatible Blood Pressure Monitor with USB Port

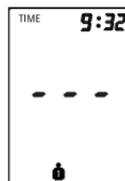
System Requirements for Mac Blood Pressure Analyzer Rev.: 3.2.5 or higher

- Mac (intel processor), with OSX 10.6.8 or later
- Internet Connectivity
- Minimum 512 MB RAM
- 10 MB Available Hard Disk Space (HFS+)
- USB Port (Version 1.1/2.0)
- Compatible Blood Pressure Monitor with USB Port

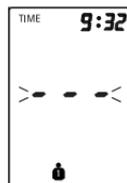
6.1. Installation and data transmission

a) install the BPA software on your PC or MAC computer, users can choose BPA revision 3.2.5 or higher revision.

b) Connect the monitor via USB cable with the PC. Three horizontal bars will appear on the display and last for 3 seconds.



c) The bars will then flash to indicate that the connection between computer and device is successfully made. As long as the cable is plugged, the bars will keep flashing and the buttons are disabled.



During the connection, the device is completely controlled by the computer. Please refer to the "Help" file in the software for detailed instructions or call 1-866-464-6184.

7. CVS Application

Please download Microlife BPM Application from the App Store or Google Play before attempting to pair your devices. Microlife BPM Applications can be executed on a mobile platform, which comply with the required compatibility as the following:

Compatibility:

- Pairing your device running iOS 6.0 or higher on iPhone, iPad, and iPod touch.
- Pairing your device running Android 2.3.3 or higher on Android Phone and Android Tablets

Connection between Blood Pressure Monitor and Mobile Device:

a). Please switch the slide switch to "On" to turn on Bluetooth function on your device.

Next, press the I/O for 8 sec until the BT icon appears on the screen.

b). The BT icon will flash on the screen for 60 sec for users to pair devices, if there is

no any operations implemented in 1 min, then the BT function will be turned off.

c). Turn Bluetooth "On" under the setting Menu on the iOS or Android device.

d). Open Microlife BPM APP to pair and connect your Blood Pressure

Monitor.

Data Transmission:

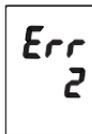
Please make sure your Blood Pressure Monitor and your iOS / Android device are in connecting status before you do data transmission

- a). Open Microlife BPM APP on your iOS or Android mobile device.
- b). When you choose "Download all data", the App will show a data transmitting display on the screen as below:
- c). After finishing data transmitting, the App will directly enter a summary page.

Microlife BPM Application can transfer, store and convert formats and display medical device data on your mobile device without modifying the data. So, you can record, collect and track your data from a mobile device to eventually share with others.

8.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	The tube may have loosened, or no pulse was detected.* Ensure cuff connections are tight with proper cuff placement. See section 5.3.
ERR 2	Unnatural pressure impulses influenced the measurement result. Reason: The arm was moved during the measurement (artefact). Repeat measurement, keeping still and quiet.
ERR 3	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	The measured readings indicated 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.*

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

***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

The display remains blank when the instrument is switched on although the batteries are in place.

The pressure does not rise although the pump is running.

The device frequently fails to measure blood pressure values or the values measured are too low or high.

Every measurement results in a different value, although the device functions normally and normal values are displayed.

Blood pressure values differ from those measured by my doctor.

Remedy

1. Check batteries for the correct polarity.
2. If the display is unusual, remove the batteries and exchange them for new ones.

Check the connection of the cuff tube and connect properly.

1. Check the positioning of the cuff.
2. Measure blood pressure again in peace and quiet, carefully following the details in Section 5.

Please read the following information and points 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.**

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.**

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.

9. Care and maintenance

- a) Do not expose the device to either extreme temperatures, humidity, dust or direct sunlight.
- b) The cuff contains a sensitive airtight bubble. Handle this cuff carefully and avoid all types of stress through twisting or buckling.
- c) 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. **The cuff must not be washed in a dishwasher, clothes washer or submerged in water.**
- d) Handle the tube carefully. Do not pull on it. Do not allow the tubing to kink and keep it away from sharp edges.
- e) Do not drop the monitor or treat it roughly in any way. Avoid strong vibrations.
- f) **Never open the monitor.** This invalidates the manufacturer's warranty.
- g) Batteries and electronic instruments must be disposed of in accordance with the locally applicable regulations, not with domestic waste.
- h) Please ensure that children do not use this devices unsupervised; some prts are small enough to be swallowed. Be aware of the risk of strangulation in case this device is supplied with cables or tubes.



i) Please do not use the device if you think it is damaged or if anything appears unusual.

Further information

Blood pressure is subject to fluctuations, even in healthy people.

Comparable measurements always require the same conditions (quiet conditions)! If fluctuations in readings are larger than 15 mmHg, and/or you hear irregular pulse tones, consult your doctor.

Never attempt to repair the instrument yourself.

Any unauthorized opening of the instrument invalidates all warranty claims.

10. Warranty

Your Professional Blood Pressure Monitor is **guarante for a lifetime** against manufacturer defects for the original purchaser only, from date of purchase. The warranty does not apply to damage caused by improper handling, accidents, professional use, not following the operating instructions or alterations made to the instrument by third parties.

Lifetime warranty only applies to the instrument. All accessories including the cuff, AC adapter and software are guaranteed for one year.

There are no user serviceable parts inside. Batteries or damage from old batteries is not covered by the warranty.

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

11. Certifications

Device standard:

Device corresponds to the requirements of the standard for non-invasive blood pressure monitors:

AAMI/ ANSI/ IEC 80601-2-30

IEC 60601-1

IEC 60601-1-2

IEC 60601-1-11

- Bluetooth system to V4.0

- FCC Part 15C

Electromagnetic compatibility:

Device fulfills the stipulations of the International standard IEC 60601-1-2

Clinical testing:

Clinical performance tests were carried out in the US according to ANSI/AAMI standard.

The B.H.S. (British Hypertension Society) clinical protocol was used to measure the accuracy of this product. Blood pressure units using the same measurement technology are graded "AA" for systolic/diastolic accuracy by independent investigators using the BHS protocol. This is the highest grading available for blood pressure monitors. Please see bhsoc.org for more information.

12. Technical specifications:

Weight:	468 g (with batteries)
Size:	110 (W) x 120 (L) x 85 (H) mm
Storage temperature:	-20 to +55°C (-4° to +131°F)
Humidity:	15 to 90% relative humidity maximum
Operation temperature:	10 to 40°C (50° to 104°F)
Display:	LCD (Liquid Crystal Display)
Measuring method:	Oscillometric
Pressure sensor:	Capacitive
Measuring range:	
SYS/DIA:	30 to 280 mmHg
Pulse:	40 to 200 per minute
Cuff pressure display range:	0-299 mmHg
Memory:	Automatically stores the last 120 measurements for 2 users (total 240)
Measuring resolution:	1 mmHg
Accuracy:	Pressure within ± 3 mmHg or 2% of reading >200 mmHg Pulse $\pm 5\%$ of the reading
Power source:	a) 4 AA batteries, 1.5 V b) AC adapter 6 V DC 600 mA (voltage 4.5 V DC to 6 V DC)
Battery life:	Approximately 500 measurements.
Expected service life:	5 years

Cuff life: 2 years

IP Classification IP20

Accessories: Cuff type: Wide range soft cuff for arm
circumference 22-42 cm (8.7"-16.5")

BP analyzer software CD

USB (A to mini B) cable

Storage case

Technical alterations reserved.

The adapter was made by Dee Van Enterprise Co., Ltd,

Model number is: DSA-6E-05 US 6006010

Made in China



Read the instructions carefully before using this device.



Type BF applied part.



IP20: Protected against solid foreign particles with a diameter of more than 12.5 mm, no protection against water)

Version of user's manual: BP3MW1-4BCVS IB-001

Not for use on children 12 years of age or younger.

13. How to contact us

Distributed by: CVS Pharmacy, Inc.

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www.cvs.com 1-800-shop-CVS

Toll Free Customer Support Line: 1-866-464-6184

Email: CVSbpsupport@microlifeusa.com

Federal Communications Commission (FCC) Statement

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.

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.

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

15.19

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 of the device.

Statements and Trademarks



This Product operates in the unlicensed ISM band at 2.4GHz. In case this Product is used around the other wireless devices including microwave and wireless LAN, which operate same frequency band of this Product, there is a possibility that interference occurs between this Product and such other devices. If such interference occurs, please stop the operation of other devices or relocate this Product before using this Product or do not use this Product around the other wireless devices.



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Manufacturer's declaration – Electro Magnetic Compatibility (EMC)

Guidance and manufacturer's declaration – electromagnetic immunity

Guidance and manufacturer's declaration – electromagnetic immunity

Guidance and manufacturer's declaration –