OMRON

INSTRUCTION MANUAL

7 series Automatic Wrist Blood Pressure Monitor

Model BP652

ESPAÑOL

ENGLISH

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INTRODUCTION

Thank you for purchasing the OMRON® BP652 IntelliSense® Automatic Wrist Blood Pressure Monitor.

Fill in for future reference.

DATE PURCHASED:_____

SERIAL NUIMBER:_____

- *Staple your purchase receipt here*
- *Register your product on-line at www.register-omron.com*

The monitor is compact and easy-to-use at home, at work, and during travel. Perfect for people who frequently monitor their own blood pressure.

Your new digital blood pressure monitor uses the oscillometric method of blood pressure measurement. This means the monitor detects your blood's movement through your brachial artery and converts the movements into a digital reading. An oscillometric monitor does not need a stethoscope so the monitor is simple to use.

Clinical research has proven a direct relationship between blood pressure in the wrist and blood pressure in the arm. Changes in wrist blood pressure reflect changes in arm blood pressure because the arteries in the wrist and the arm are close to each other. Frequently measuring the blood pressure in your wrist will provide your physician with an accurate indication of changes in your blood pressure.

The BP652 comes with the following components:

• Monitor • Storage Case • 2 "AAA" Alkaline Batteries

• Instruction Manual printed in English and Spanish • Quick Start Guide

The BP652 IntelliSense® Automatic Wrist Blood Pressure Monitor is intended for home use.

SAVE THESE INSTRUCTIONS

SAFETY INFORMATION

To assure the correct use of the product, basic safety measures should always be followed including the warnings and cautions listed in this instruction manual.

SAFETY SYMBOLS USED IN THIS INSTRUCTION MANUAL	
⚠ **WARNING**	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION**	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property.

OPERATING THE DEVICE

⚠ Contact your physician for specific information about your blood pressure. Self-diagnosis and treatment using measured results may be dangerous. Follow the instructions of your physician or licensed healthcare provider.

⚠ DO NOT adjust medication based on measurement results from this blood pressure monitor. Take medication as prescribed by your physician. Only a physician is qualified to diagnose and treat High Blood Pressure.

⚠ The monitor is not intended to be a diagnostic device.

⚠ If battery fluid should get in your eyes, immediately rinse with plenty of clean water. Contact a physician immediately.

⚠ If you have a condition that may compromise circulation, you may get an inaccurate reading with this device. Consult your physician before using this device.

⚠ Read all of the information in the instruction manual and any other literature in the box before operating the unit.

⚠ This device is intended for use in measuring blood pressure and pulse rate in the adult population. Do not use this device on infants or persons who cannot express their intentions.

⚠ Operate the device only as intended. Do not use the device for any other purpose.

⚠ Dispose of the device, components and optional accessories according to applicable local regulations. Unlawful disposal may cause environmental pollution.

SAFETY INFORMATION

⚠ Do not use a cellular phone near the device. It may result in an operational failure.

⚠ Use only Omron authorized parts and accessories. Parts and accessories not approved for use with the device may damage the unit.

⚠ Use only 1.5 V "AAA" alkaline batteries with this device. Do not use other types of batteries. This may damage the unit.

CARE AND MAINTENANCE

⚠ Do not subject the monitor to strong shocks, such as dropping the unit on the floor.

⚠ Do not submerge the device or any of the components in water.

⚠ Store the device and the components in a clean, safe location.

⚠ Changes or modification not approved by the manufacturer will void the user warranty. Do not disassemble or attempt to repair the unit or components.

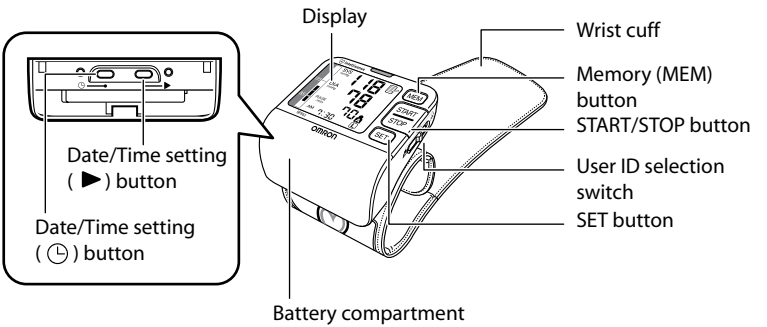
BEFORE TAKING A MEASUREMENT

To ensure a reliable reading follow these recommendations:

1. Avoid eating, drinking alcohol, smoking, exercising, and bathing for 30 minutes before taking a measurement. Rest for at least 15 minutes before taking the measurement.
2. Stress raises blood pressure. Avoid taking measurements during stressful times.
3. The cuff can be applied to your left or right wrist.
4. Measurements should be taken in a quiet place.
5. Position the unit at heart level throughout the measurement.
6. Remain still and do not talk during the measurement.
7. Wait 2-3 minutes between measurements. The wait time allows the arteries to return to the condition prior to taking the blood pressure measurement. You may need to increase the wait time depending on your individual physiological characteristics.
8. Keep a record of your blood pressure and pulse readings for your physician. A single measurement does not provide an accurate indication of your true blood pressure. You need to take and record several readings over a period of time. Try to measure your blood pressure at the same time each day for consistency.

KNOW YOUR UNIT

Main Unit:



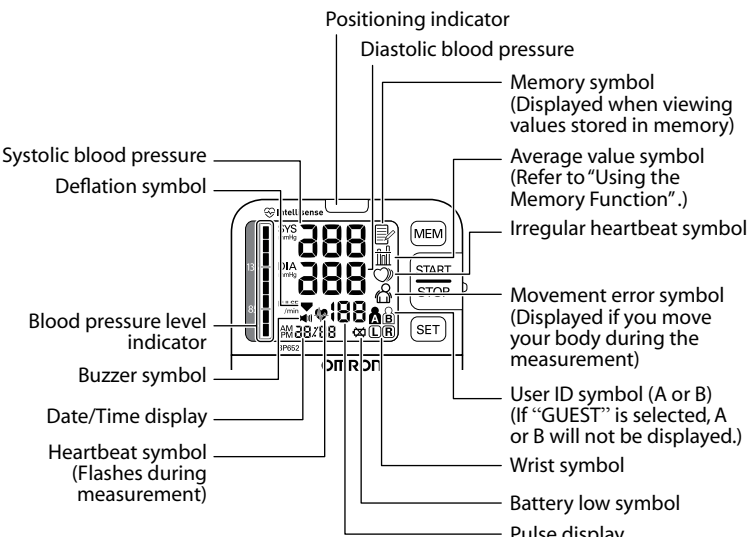
Components:

2 "AAA" Alkaline Batteries

Instruction Manual

Quick Start Guide

UNIT DISPLAY



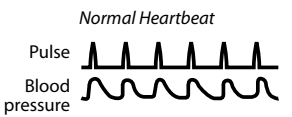
DISPLAY SYMBOLS

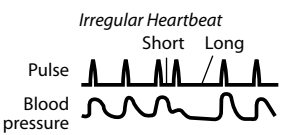
IRREGULAR HEARTBEAT SYMBOL ( )

When the monitor detects an irregular rhythm two or more times during the measurement, the Irregular Heartbeat Symbol ( ) will appear on the display with the measurement values.

An irregular heartbeat rhythm is defined as a rhythm that varies by less than 25% from the average rhythm or 25% more than the average rhythm detected while the monitor is measuring the systolic and diastolic blood pressure.

If the irregular heartbeat symbol ( ) displays with your measurement results, we recommend you consult your physician. Follow the directions of your doctor.

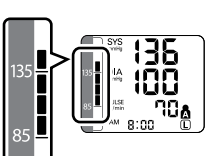




MOVEMENT ERROR SYMBOL ( )

The Movement Error Symbol ( ) is displayed if you move your body during the measurement. Please remove the wrist cuff, and wait 2-3 minutes. Reapply the wrist cuff and take another measurement.

Internationally recognized guidelines for upper limit of normal home blood pressure readings are as follows:



Home Guideline for Upper Limit of Normal BP	
Systolic Blood Pressure	135 mmHg
Diastolic Blood Pressure	85 mmHg

DISPLAY SYMBOLS

This is a general guideline because blood pressure depends on age and morbidity. A lower home blood pressure goal may be recommended for certain patients, including diabetic patients, pregnant women, and patients with renal failure.

⚠ **WARNING**

Contact your physician for specific information about your blood pressure. Self-diagnosis and treatment using measured results may be dangerous. Follow the instructions of your physician or licensed healthcare provider.

⚠ **WARNING**

DO NOT adjust medication based on measurement results from this blood pressure monitor. Take medication as prescribed by your physician. Only a physician is qualified to diagnose and treat High Blood Pressure.

⚠ **WARNING**

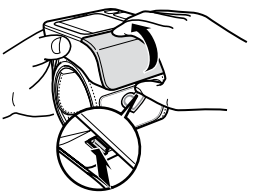
The monitor is not intended to be a diagnostic device.

BATTERY INSTALLATION

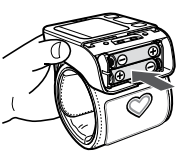
⚠ **CAUTION**

Use only 1.5V "AAA" alkaline batteries with this device.

1. Press the hook on the bottom of the battery cover and lift the cover off in the direction of the arrow.

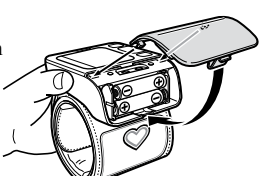


2. Install 2 "AAA" size batteries so the + (positive) and - (negative) polarities match the polarities of the battery compartment as indicated.



3. Set the date and time.
   Refer to "Setting the Date and Time".

4. Replace the battery cover.
   NOTE: Make sure that the battery cover is securely in position.



BATTERY INSTALLATION

BATTERY REPLACEMENT

Low Battery Indicator

When the Low Battery Indicator appears on the display, turn the monitor off and remove all the batteries. Replace with 2 new batteries at the same time. Long-life alkaline batteries are recommended.

> ⚠ **WARNING**
> If battery fluid should get in your eyes, immediately rinse with plenty of clean water. Contact a physician immediately.

NOTES:
- Turn the unit off before replacing the batteries. If the batteries are removed while the unit is still on, the date and time will be reset to that of the previous use. The measurement results are not deleted.
- When the batteries are replaced, you may need to reset the date and time. If the year is flashing on the display, refer to "Setting the Date and Time".
- The batteries included with the device may have a shorter life.

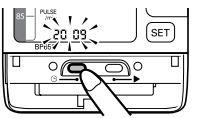
> ⚠ **CAUTION**
> Dispose of the device, components and optional accessories according to applicable local regulations. Unlawful disposal may cause environmental pollution.

SETTING THE DATE AND TIME

Set the monitor to the current date and time before taking a measurement for the first time.

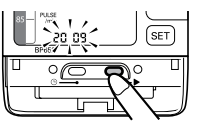
1. TO START THE SETTING

Press the Date/Time Setting button (◷) to adjust the date and time.
The year flashes on the display.



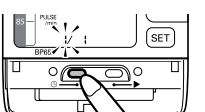
2. SETTING THE YEAR

Press the Date/Time Setting button (▶) to advance by increments of one year.
Press the Date/Time Setting button (◷) to set the current year.



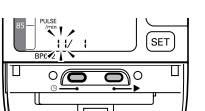
The month flashes on the display.

NOTES:
- The year can be set between 2009 and 2030. When the display reaches 2030, it will return to 2009.
- Press and hold the (▶) button to increase the date and time values faster.



3. SETTING THE MONTH

Press the Date/Time Setting button (▶) to advance by increments of one month.
Press the Date/Time Setting button (◷) to set the current month.



The day flashes on the display.

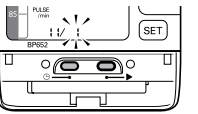
SETTING THE DATE AND TIME

4. SETTING THE DAY

Press the Date/Time Setting button (▶) to advance by increments of one day.

Press the Date/Time Setting button (🕒) to set the current day.

The hour flashes on the display.



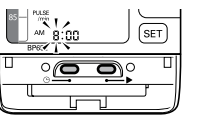
5. SETTING THE HOUR

The time is set using AM or PM.

Press the Date/Time Setting button (▶) to advance by increments of one hour.

Press the Date/Time Setting button (🕒) to set the current hour.

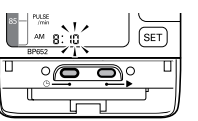
The minute flashes on the display.



6. SETTING THE MINUTE

Press the Up button (▶) to advance by increments of one minute.

Press the Date/Time Setting button (🕒) to set the minute setting.



7. TO TURN THE MONITOR OFF

Press the START/STOP button.

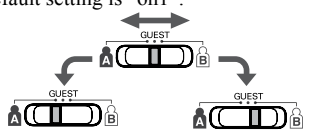
SETTING THE ADVANCED POSITIONING SENSOR (APS)

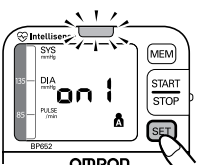
You can change the options for various settings on your monitor. Pressing the SET button to change a setting. Press the MEM button to select the options for that setting. After selecting a setting, press the START/STOP button to confirm the setting and turn the power off.

SETTING THE POSITIONING INDICATOR

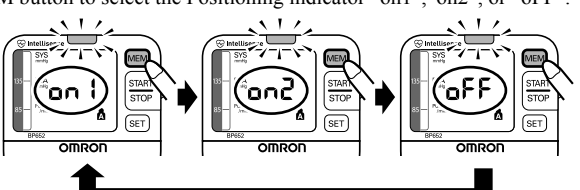
1. Select your User ID.

2. Press the SET button.
   NOTE: The default setting is “on1”.





3. Press the MEM button to select the Positioning indicator “on1”,“on2”, or “oFF”.



on1: After the Positioning indicator lights in blue for more than 2 seconds, or in orange for more than 5 seconds, measurement starts automatically, even though the monitor is not in the proper position.

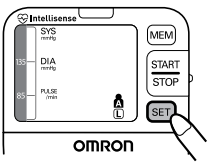
on2: The Positioning indicator lights in blue for more than 2 seconds, measurement starts automatically.
Measurement will not start if it lights in orange.

oFF: Measurement starts without the Positioning indicator.

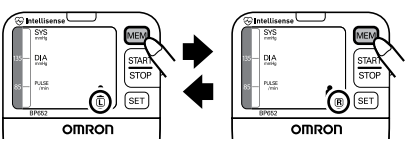
SETTING THE ADVANCED POSITIONING SENSOR (APS)

SETTING FOR RIGHT OR LEFT WRIST MEASUREMENT

1. While in the setting mode, press the SET button until the wrist symbol (Ⓛ or Ⓡ) appears on the display.
   NOTES: • The default setting is "Ⓛ".
   • After you choose "oFF" for the Positioning indicator, the monitor skips this process.

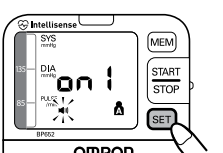


2. Press the MEM button to select the left wrist (Ⓛ) or the right wrist (Ⓡ).

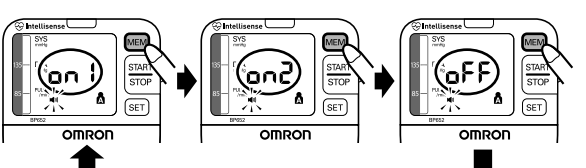


SETTING THE BUZZER

1. While in the setting mode, press the SET button until the buzzer symbol (🔊) appears on the display.
   NOTE: The default setting is "on1" or "on", depending on the Positioning indicator you set.



2. Press the MEM button to select the buzzer setting.



SETTING THE ADVANCED POSITIONING SENSOR (APS)

If the Positioning indicator is “on1” or “on2”:
on1: The buzzer sounds only when the monitor is in proper position.
on2: The buzzer sounds a series of two short blips if your wrist is too far away from the measuring position, and beeps when your wrist is in the proper position.
oFF: The buzzer will not sound.

If the Positioning indicator is “oFF”:
on: The buzzer sounds when pressing any buttons.
oFF: The buzzer will not sound.

RESETTING TO THE DEFAULT SETTING

The positioning indicator is set “on1”, the wrist for measurement is set “Ⓛ”, and the buzzer is set “on1” as default.
To reset to the default setting, press and hold the SET button while in the setting mode, then press the START/STOP button simultaneously for more than 2 seconds.

APPLYING THE WRIST CUFF

⚠ CAUTION

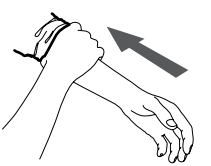
Read all of the information in the instruction manual and any other literature in the box before operating the unit.

⚠ CAUTION

This device is intended for use in measuring blood pressure and pulse rate in the adult population. Do not use this device on infants or persons who cannot express their intentions.

APPLYING THE CUFF ON THE LEFT WRIST

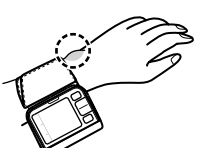
1. Roll up sleeve. Make sure your sleeve is not rolled up too tightly on your arm. This may constrict the flow of blood in your arm.



2. Wrap the cuff directly against your skin.
   Do not apply over clothing. Place the cuff over your left wrist with your left thumb facing upward.

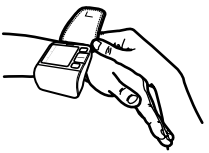
3. Position the cuff leaving a clearance of approximately 1/2 to 1 inch between the cuff and the bottom of your palm.

4. Hold the bottom part of the cuff and wrap it around the wrist so it fits comfortably and securely around your wrist.
   NOTE: Make sure the wrist cuff does not cover the protruding part of the wrist bone on the outside of the wrist.



APPLYING THE WRIST CUFF

5. Fold the remaining part of the wrist cuff back out of the way.



APPLYING THE CUFF ON THE RIGHT WRIST

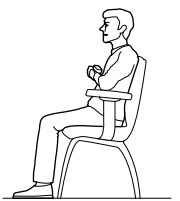
When taking a measurement using the right wrist position the cuff as shown in the illustration.

Refer to “Setting for Right or Left Wrist for Measurement”.

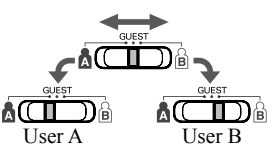
TAKING A MEASUREMENT

The monitor is designed to take measurements and store the measurement values in memory for two people using USER ID A and USER ID B. The monitor can be used to take a single measurement using the GUEST mode are not stored in the memory.

1. Sit comfortably in a chair with your feet flat on the floor.



2. Select your User ID (A or B).



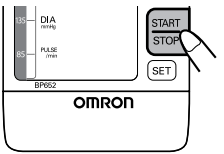
3. Hold your arm across your chest at heart level.
   Hold your elbow firmly to avoid body movement.
   Sit still and do not talk or move during the measurement.

4. When arm is in correct position orange light will turn on.

TAKING A MEASUREMENT

5. Press the START/STOP button.

   All symbols appear on the display.



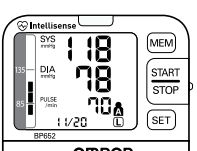
The cuff starts to inflate automatically.

As the cuff inflates, the monitor automatically determines your ideal inflation level.
This monitor detects your blood pressure and pulse rate during inflation.
The Heartbeat Symbol (♥) flashes at every heartbeat.

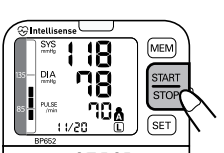
Remain still and do not move until the entire measurement process is completed.

NOTE: To stop the inflation or measurement, push the START/STOP button. The monitor will stop inflating, start deflating, and will turn off.

5. After the monitor has detected your blood pressure and pulse rate, the cuff automatically deflates. Your blood pressure and pulse rate are displayed.



6. Press the START/STOP button to turn the monitor off.



NOTE: The monitor will automatically turn off after two minutes.

USING THE MEMORY FUNCTION

Every time you complete a measurement the monitor stores the blood pressure and pulse rate for each user (A and B) in the memory. The monitor automatically stores up to 100 sets of measurement values (blood pressure and pulse rate) for each user (A and B). When 100 sets of measurement values are stored, the oldest record is deleted to save the most recent values.

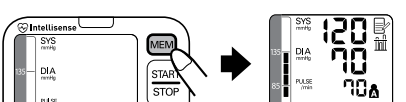
AVERAGING FUNCTION

The monitor calculates the average reading based on up to the three most recent sets of measurement values taken within 10 minutes of the most recent reading.

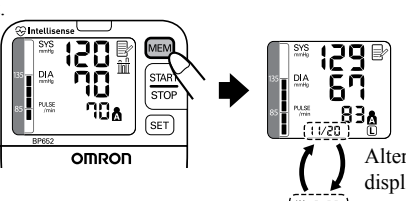
NOTE: If two sets of measurement values are stored in the memory for the 10 minute period, the average is based on the two sets of measurement values. If only one set of measurement values is stored, this is displayed as the average.

TO DISPLAY THE MEASUREMENT VALUES

1. Press the MEM button to display the average reading based on the three most recent sets of measurement values taken within 10 minutes of the most recent reading. The Average Value Symbol (📊) appears on the display when the average reading is shown.



2. Press the MEM button to display the set of measurement values from the most recent to the oldest.



USING THE MEMORY FUNCTION

NOTES: • The date and time are alternately displayed with the measurement values.
• Press the MEM button repeatedly to display the next values.
• Press and hold the MEM button to display the values faster.

3. Press the START/STOP button to turn the monitor off.

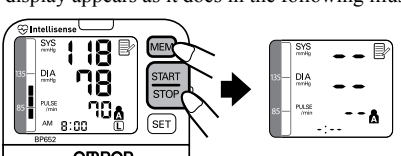
TO DELETE ALL VALUES STORED IN THE MEMORY

The values stored in the memory are deleted by User ID. You cannot partially delete values stored in the memory. All values for the user you select will be deleted.

1. Select your User ID (A or B).

2. Press the MEM button to turn the monitor on.

3. While holding the MEM button, press the START/STOP button down for more than 5 seconds until the display appears as it does in the following illustration.



4. Press the START/STOP button to turn the monitor off.
NOTE: The monitor will automatically turn off after two minutes.

CARE AND MAINTENANCE

To keep your digital blood pressure monitor in the best condition and protect the unit from damage, follow the directions listed below:

Do not forcefully bend the cuff. Do not fold tightly.

Clean the monitor with a soft dry cloth.
Do not use any abrasive or volatile cleaners.
Do not attempt to clean the cuff.

⚠ **CAUTION**
Do not submerge the device or any of the components in water. Do not subject the monitor to extreme hot or cold temperatures, humidity or direct sunlight.

⚠ **CAUTION**
Store the device and the components in a clean, safe location.

⚠ **CAUTION**
Do not subject the monitor to strong shocks, such as dropping the unit on the floor.

Remove the batteries if the unit will not be used for three months or longer. Always replace all the batteries with new ones at the same time.

Use the unit consistent with the instruction provided in this manual.
Use only authorized parts and accessories.

Use the unit in a manner consistent with the instructions provided in this manual.

⚠ **CAUTION**
Use only Omron authorized parts and accessories. Parts and accessories not approved for use with the device may damage the unit.

⚠ **CAUTION**
Changes or modification not approved by the manufacturer will void the user warranty. Do not disassemble or attempt to repair the unit or components.

ERROR INDICATORS

SYMBOL	CAUSE	CORRECTION
	Monitor could not detect pulse wave.	Take another measurement and remain still until the measurement is complete.
	Cuff under-inflated. Cuff not applied correctly.	Remove the monitor from your wrist. Read “Taking a Measurement”. Wait 2-3 minutes. Take another measurement.
	Cuff over-inflated.	
	Device error.	Contact Customer Service.
	Movement during measurement.	Keep still and take another measurement.
	Irregular or weak pulses are detected.	Remove the monitor from your wrist. Wait 2-3 minutes and then take another measurement. Repeat the steps in section “Applying the Wrist Cuff.” If this symbol continues to appear, contact your doctor.
	Batteries are worn.	Replace the batteries. Refer to “Battery Installation”.

TROUBLESHOOTING TIPS

PROBLEM	CAUSES AND SOLUTIONS
No power. No display appears on the unit.	Replace both batteries with new ones at the same time. Check the battery installation for proper placement of the battery polarities.
Measurement values appear too high or too low.	Blood pressure varies constantly. Many factors including stress, time of day, how you wrap the cuff, may affect your blood pressure. Review the sections “Before Taking a Measurement” and “Taking a Measurement”.

FCC STATEMENT

Note:

POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for U.S.A. only)
This product 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. The product 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 the product does cause harmful interference to radio or television reception, which can be determined by turning the product on and off, 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 product and the receiver.
- Connect the product 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.

POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for Canada only)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled “Digital Apparatus”, ICES-003 of the Canadian Department of Communications.

Cet appareil numérique respecte les limites de bruits radioeléctriques applicables aux appareils numériques de Clase B prescrites dans la norme sur le materiel brouilleur: “Appareils Numériques”, ICES-003 édictée par le minister des communications.

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

LIMITED WARRANTY

Your BP652 IntelliSense® Automatic Wrist Blood Pressure Monitor, excluding the wrist cuff and batteries, is warranted to be free from defects in materials and workmanship appearing within 5 years from the date of purchase, when used in accordance with the instructions provided with the monitor. The above warranties extend only to the original retail purchaser.

We will, at our option, repair or replace without charge any monitor or wrist cuff covered by the above warranties. Repair or replacement is our only responsibility and your only remedy under the above warranties.

To obtain warranty service contact Customer Service by calling **1-800-634-4350** for the address of the repair location and the return shipping and handling fee.

Enclose the Proof of Purchase. Include a letter, with your name, address, phone number, and description of the specific problem. Pack the product carefully to prevent damage in transit. Because of possible loss in transit, we recommend insuring the product with return receipt requested.

THE FOREGOING IS THE SOLE WARRANTY PROVIDED BY OMRON IN CONNECTION WITH THIS PRODUCT, AND OMRON HEREBY DISCLAIMS ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IMPLIED WARRANTIES AND OTHER TERMS THAT MAY BE IMPOSED BY LAW, IF ANY, ARE LIMITED IN DURATION TO THE PERIOD OF THE ABOVE EXPRESS WARRANTY.

OMRON SHALL NOT BE LIABLE FOR LOSS OF USE OR ANY OTHER SPECIAL, INCIDENTAIL, CONSEQUENTAIL OR INDIRECT COSTS, EXPENSES OR DAMAGES.

This warranty provides you with specific legal rights, and you may have other rights that vary by jurisdiction. Because of special local requirements, some of the above limitations and exclusions may not apply to you.

FOR CUSTOMER SERVICE

Visit our web site at: www.omronhealthcare.com
Call toll free: 1-800-634-4350

SPECIFICATIONS

Model:	BP652 (HEM-6052-Z)
Display:	LCD Digital Display
Measurement Range:	Pressure: 0 to 299 mmHg, Pulse: 40 to 180/min.
Accuracy/Calibration:	Pressure: ±3mmHg or 2% of reading Pulse: ±5% of reading
Inflation:	Automatic by electric pump
Deflation:	Automatic pressure release valve
Rapid Air Release:	Automatic exhaust valve
Measurement Method:	Oscillometric method
Power Source:	1.5V 2 “AAA” batteries
Battery Life:	Approx. 300 uses with 2 new alkaline batteries
Operating Temperature /Humidity:	50ºF to 104ºF (10ºC to 40ºC) /15 to 90% RH
Storage Temperature / Humidity/Air Pressure:	-4ºF to 140ºF (-20ºC to 60ºC) /10 to 95% RH 700-1060 hPa
Main Unit Weight:	Approximately 4 oz. (114g) not including batteries
Main Unit Dimensions:	Approx. 2 3/4”(l) × 2 3/4”(w) × 7/8” (h) (70 mm × 70 mm × 21 mm) (not including the wrist cuff)
Measurable circumference of wrist:	Approximately 5 1/4” to 8 1/2” (13.5 to 21.5 cm)
Memory:	Up to 100 readings per user
Contents:	Main Unit, Storage Case, 2 “AAA” Alkaline Batteries, Instruction Manual, and Quick Start Guide

= Type B

NOTE: These specifications are subject to change without notice.

Omron Healthcare, Inc.
1200 Lakeside Drive
Bannockburn, IL 60015
www.omronhealthcare.com
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