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# **INSTRUCTION MANUAL**



# Automatic Blood Pressure Monitor with ComFit<sup>™</sup> Cuff

Model HEM-780



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## INTRODUCTION

Thank you for purchasing the Omron HEM-780 IntelliSense<sup>™</sup> Automatic Blood Pressure Monitor with ComFit<sup>™</sup> Cuff.

Fill-in for future reference	
DATE PURCHASED:	
SERIAL NUMBER:	

Staple your purchase receipt here.

This completely automatic instrument quickly measures your blood pressure and pulse rate. The measurement reading is clearly displayed on a large digital panel.

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.

The Omron HEM-780 IntelliSense<sup>™</sup> Automatic Blood Pressure Monitor is intended for home use.

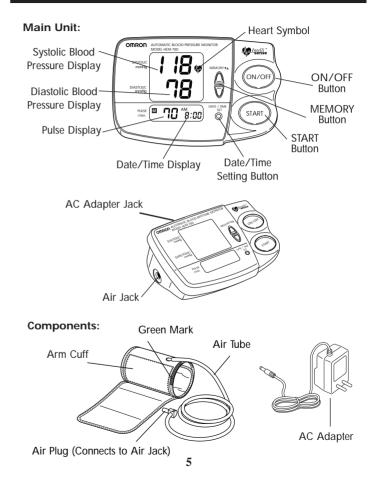
## SAVE THESE INSTRUCTIONS

# **IMPORTANT SAFETY NOTES**

To assure the correct use of the product basic safety measures should always be followed including the precautions listed below:

- $\square$  Read all information in the instruction book and any other literature included in the box before using the unit.
- ☑ Contact your physician for specific information about your blood pressure. Follow the instructions of your healthcare provider.
- $\blacksquare$  Operate the unit only as intended. Do not use for any other purpose.
- $\square$  The unit is intended for use in measuring blood pressure and pulse rate in adult patient population. Do not use on infants.
- $\square$  Do not use a cellular phone near the unit. It may result in operational failure.
- ☑ Changes or modifications not approved by Omron Healthcare will void the user warranty. Do not disassemble or attempt to repair the unit or components.

# **KNOW YOUR UNIT**



### SUGGESTIONS BEFORE TAKING **A MEASUREMENT**

- 1. Avoid eating, smoking, and exercising 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. Remove tight-fitting clothing from your left arm.
- 4. Measurements should be taken in a quiet place.
- 5. Sit in a chair with your feet flat on the floor. Rest your left arm on a table so that the cuff is at the same level as your heart.
- 6. Remain still and do not talk during the measurement.
- 7. 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.
- 8. 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 physical characteristics.

# HOW TO INSTALL THE BATTERIES

- 1. Slide the battery cover off in the direction of the arrow.
- 2. Install 4 "AA" size batteries so the + (positive) and – (negative) polarities match the polarities of the battery compartment as indicated.
- **3.** Replace the battery cover.
- NOTES: If the Low Battery Indicator appears on the display, replace all four batteries. Long-life alkaline batteries are recommended.

Remove the batteries if the monitor will not be used for an extended period of time.

If the batteries are removed for a long period of time, Date / Time display setting will need to be reset. Refer to "How to Set the Date and the Time".

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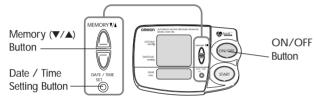


# HOW TO SET THE DATE AND TIME

The Blood Pressure Monitor automatically stores up to 90 measurements values. The memory function stores the date and time with measurements values.

- Set the monitor to the correct date and time before taking a measurement for the first time.
- If the correct date and time is not set, the measurement values will not be stored in the memory.

#### Date / Time Set Buttons



#### 1. Press the ON / OFF button

The Power is turned on.

When you turn on the power for the first time, all the items on the display illuminate, and then "AM 12:00" blinks.

2. Press the Date / Time Setting button for more than 1 Second The year blinks.



Each time you press the Memory  $(\blacktriangle)$  button, the year advances by one year. When you press the Memory  $(\blacktriangledown)$  button, the year moves back by one year.



# HOW TO SET THE DATE AND TIME

**4. Press the Date / Time Setting button.** The year is set, then the month blinks.



# 5. Press the Memory $(\nabla/\triangle)$ button and set the month to the current month.

Each time you press the Memory ( $\blacktriangle$ ) button, the month advances by one month. Each time you press the Memory ( $\triangledown$ ) button, the month moves back one month.

**6. Press the Date / Time Setting button.** The month is set and the day blinks.



# 7. Press the Memory (♥/▲) button and set the day to the current date.

Each time you press the Memory ( $\blacktriangle$ ) button, the date advances by one day. Each time you press the Memory ( $\blacktriangledown$ ) button, the date moves back one day. If you keep pressing the Memory ( $\blacktriangledown$ ) button, you can fast advance the date.

**8. Press the Date / Time Setting button.** The date is set and the hour blinks



#### 9. In the same manner, set the hour and the minute.

Set the hour and the minute by using the Memory  $(\mathbf{V}/\mathbf{A})$  button and the Date / Time Setting button following the previously mentioned procedure.

#### 10. After setting, check the time.

11. Press the ON / Off button.

The power is turned off.

If you set the minute and press the Date /Time Setting button, the unit starts to display the time.



When the unit starts to display the time, a colon (:) blinks.

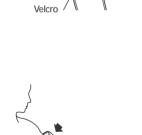
• The range to set the year is 2003 to 2030. If the year reaches 2030, it will return to 2003

#### HOW TO APPLY THE ARM CUFF ON YOUR LEFT ARM

**1.** Make sure the air plug is securely inserted in the main unit. Air Plug



- **2.** Remove tight-fitting clothing from your upper arm.
- **3.** Sit in a chair with your feet flat on the floor and place your arm on a table so that the cuff will be at the same level as your heart.
- **4.** Hold the cloth velcro on the cuff with your other hand.
- **5.** Turn the palm of your hand upward. Apply the cuff on your upper arm.



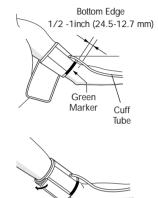
#### HOW TO APPLY THE ARM CUFF ON YOUR LEFT ARM

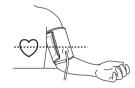
**6.** Align the Green Marker on the cuff over the brachial artery on the inside of the arm.

The cuff tube should run down the center of the arm even with the middle finger.

The bottom of the cuff should be approximately 1/2" - 1" above your elbow.

- **7.** Secure the cuff around your arm using the cloth velcro.
- **8.** Make sure the cuff is wrapped firmly in place.
- **9.** Relax your arm and place your elbow on the table.





# HOW TO TAKE A MEASUREMENT

- 1. Press the ON/OFF button.
  - a) All display symbols appear for approximately one second.
  - b) When the monitor becomes ready to measure, the Heart Symbol ( 🏟 ) appears on the display.



2. Press the START button and remain still.

As the cuff begins to inflate, the monitor automatically determines your ideal inflation level. Because this monitor detects the pulse even during inflation, do not move your arm and remain still until the entire measurement completes.

#### NOTE:

If you want to stop the inflation or measurement, press the ON/OFF button. The monitor will stop inflating and start deflating rapidly, and the monitor will turn off.

3. Inflation stops automatically and measurement is started.

As the cuff slowly deflates, decreasing numbers appear on the display and the Heart Symbol ( 🌪 ) flashes at every heartbeat. In rare circumstances, a higher

inflation may be necessary.

In those cases, the monitor reinflates the cuff up to 30 mmHg higher than initial inflation and restarts the measurement.

### HOW TO TAKE A MEASUREMENT

4. When the measurement is complete, the arm cuff completely deflates and your blood pressure and pulse rate are displayed.



#### NOTE:

The monitor automatically stores blood pressure and pulse rate into the memory.

5. Press the ON/OFF button to turn the monitor off.

#### NOTE:

If you forget to turn the monitor off, it will automatically shut itself off after five minutes.

#### Instructions for special conditions:

• If your systolic pressure is known to be more than 220 mmHg, press and hold the START button until the monitor inflates 30 to 40 mmHg higher than your suspected systolic pressure.



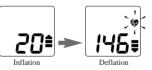
Continue to press button

#### NOTE:

Do not apply more pressure than necessary. The monitor will not inflate above 280 mmHg.

#### NOTE:

Wait 2-3 minutes before taking another blood pressure measurement. Waiting between readings allows the arteries to return to the condition prior to taking the blood pressure measurement.



# HOW TO USE THE MEMORY FUNCTION

The Blood Pressure Monitor stores up to 90 measurement values with the date and time. When 90 sets of measurement values are stored in the memory, the oldest record is deleted to save the most recent measurement values

If the date and time is not set, the measurement values will not be stored in the memory.

1. Press the ON/OFF Button to turn the power on. Wait for the Heart ( $\mathbf{o}$ ) Symbol to appear on the display.



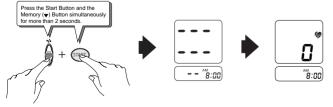
- 2. Press the MEMORY (**A**) Button to display the most recent measurement values. The time and date alternate on the display for each measurement.
- Memory (▼ / ▲)
- 3. Press the MEMORY (**v**) Button again to display previous measurement values.
- 4. Press the START/STOP button to turn the power off.

#### HOW TO DELETE ALL MEASUREMENT VALUES

Press and hold the START Button and MEMORY (▼) Button simultaneously for more than 2 seconds. All records will be deleted.

#### NOTE:

You cannot partially delete the stored records.

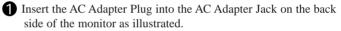


# HOW TO USE THE AC ADAPTER

Use only the authorized Omron AC Adapter, Model Number HEM-ADPT1, with this monitor. Use of any other adapter may cause damage to the monitor and will void the user warranty.

# To connect the AC Adapter Plua AC Adapter

AC Adapter Jack



Plug the AC Adapter into a 120V AC outlet (50-60 cycles).

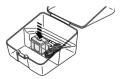
To disconnect the AC Adapter remove the AC Adapter from the electrical outlet first and then remove the AC Adapter Plug from the monitor.

#### NOTE:

The monitor is designed not to draw power from the batteries when the AC Adapter is used.

#### To store the AC Adapter

Place the AC Adapter in the AC Adapter storage area in the AC Adapter storage case.



# 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:

**Clean the monitor with a soft dry cloth.** Do not use any abrasive or volatile cleaners. Do not attempt to clean the cuff. Never immerse the monitor or any components in water.

**Store the monitor in a safe and dry location.** Do not fold the cuff and tubing tightly. Do not subject the monitor to extreme hot or cold temperatures, humidity and direct sunlight.

Avoid subjecting 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.

# ERROR INDICATORS

Error Symbol	Cause	Correction
<b>EE</b>	Cuff under-inflated.	Remove arm cuff. Wait 2-3 minutes and take another measurement. Repeat steps listed under "How To Take A Measurement".
	Movement during Measurement No pulse or blood pressure reading due to very weak artery pulse.	Inflate the cuff 40 mmHg higher than the previous inflation value.
<b>5</b>	Cuff over-inflated (more than 300 mmHg).	Carefully read and repeat steps listed under "How To Take A Measurement."
	Batteries have run down.	Replace all four "AA" batteries.
An Er mark is displayed.	This trouble is caused by abnormal memory function.	Contact Omron Customer Service Toll Free: 1-800-634-4350

# 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.

# WARRANTY INFORMATION

#### **Limited Warranties**

Your HEM-780 IntelliSense<sup>™</sup> Automatic Blood Pressure Monitor, excluding the monitor cuff, is warranted to be free from defects in materials and workmanship appearing within 5 years, when used in accordance with the instructions provided with the monitor. The monitor cuff is warranted to be free from defects in materials and workmanship appearing within one year, when the monitor is 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 monitor 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, ship the monitor and all of the components, together with proof of purchase and a note explaining the problem with \$5.00 for return shipping and insurance to:

Omron Healthcare, Inc. Attn: Repair Department 300 Lakeview Parkway Vernon Hills, IL 60061

Be sure to include the model number, your name and your phone number on the enclosed note and any other correspondence.

ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THE APPLICABLE WRITTEN WARRANTY ABOVE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

OMRON SHALL NOT BE LIABLE FOR LOSS OF USE OR ANY OTHER INCIDENTAL, CONSEQUENTIAL OR INDIRECT COSTS, EXPENSES OR DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

#### FOR CUSTOMER SERVICE

Visit our web site at: Call toll free: www.omronhealthcare.com 1-800-634-4350 (US and Canada)

### WARRANTY INFORMATION

#### Limited Warranties (Outside of the USA and Canada)

Your HEM-780 IntelliSense<sup>™</sup> Automatic Blood Pressure Monitor, excluding the monitor cuff, is warranted to be free from defects in materials and workmanship appearing within 5 years, when used in accordance with the instructions provided with the monitor. The monitor cuff is warranted to be free from defects in materials and workmanship appearing within one year, when the monitor is used in accordance with the instructions provided with the monitor. The above warranties extend only to the original retail purchaser.

Should repair be needed during the warranty period, please contact the authorized distributor in your country.

The above warranty is complete and exclusive. The warrantor expressly disclaims liability for incidental, special, or consequential damages of any nature. (Some countries do not allow the exclusion or limitation of incidental or consequential damages, so the above warranty may not apply to you.)

Any implied warranties arising by the operation of law shall be limited in duration to the term of this warranty. (Some countries do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

This warranty gives you specific legal rights and you may have other rights which vary country to country.

# SPECIFICATIONS

Model:	HEM-780	
Display:	LCD Digital Display	
Measurement Range:	Pressure: 0 to 280 mmHg Pulse: 40-180/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	
Pressure Detection:	Capacitive pressure sensor	
Measurement Method:	Oscillometric method	
Pulse Wave Detection:	Capacitance type pressure sensor	
Power Source:	4 "AA" batteries, AC Adapter HEM-ADPT1	
Battery Life:	Approx. 300 uses when used once	
	a day for 2 minutes	
Operating Temperature/ Humidity:	50°F to 104°F (10°C to 40°C) 30 to 85% RH maximum	
Storage Temperature/ Humidity:	-4°F to 140°F (-20°C to 60°C) 10 to 95% RH maximum	
Main Unit Weight:	Approximately 14 oz. (400g) not including batteries	
Main Unit Dimensions:	Approx. 6 1/2" (1) x 4" (w) x 2 7/8" (h) (165mm x 102mm x 73mm)	
Cuff Size:	Approximately 6" (w) (152 mm)	
	Cuff tube 23 5/8" (1) (600 mm)	
Cuff Circumference:	Fits arm circumferences 9" to 17" (228 mm to 432 mm)	
Contents:	Main Unit, ComFit™ Cuff, AC Adapter, 4 "AA" Batteries, Instruction Manual, and, Storage Case.	
UPC Code:	0 73796 78000 5	

NOTE: These specifications, to improve performance, are subject to change without notice.

# NOTES

# NOTES

Made in China

#### Manufactured by: OMRON HEALTHCARE, INC.

300 Lakeview Parkway Vernon Hills, Illinois 60061 www.omronhealthcare.com

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