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# **INSTRUCTION MANUAL**



# **Automatic Blood Pressure Monitor** with **Printer** Model **HEM-705CP**



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## **INTRODUCTION**

Thank you for purchasing the Omron® HEM-705CP Intellisense® Automatic Blood Pressure Monitor with Printer

Fill in for future reference
DATE PURCHASED:
SERIAL NUMBER:
Staple your purchase receipt here.

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 HEM-705CP comes with the following components:

- Monitor
- Standard Cuff (9"-13" arm circumference)

• Printer

- Printer Tape
- Instruction Manual printed in English and Spanish

The HEM-705CP Intellisense® Automatic Blood Pressure Monitor with Printer 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:

- 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.
- Operate the unit only as intended. Do not use for any other purpose.
- The unit is intended for use in measuring blood pressure and pulse rate in adult patient population. Do not use on infants.
- Do not use a cellular phone near the unit. It may result in operational failure.
- Do not plug or unplug the adapter power cord with wet hands.
- Changes or modifications not approved by Omron Healthcare will void the user warranty. Do not disassemble or attempt to repair the unit or components.

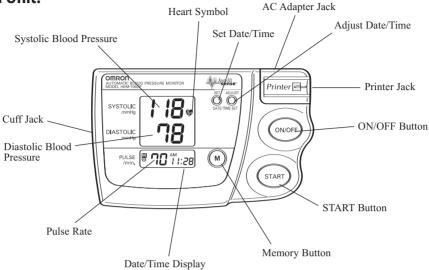
# **BEFORE TAKING A MEASUREMENT**

To ensure a reliable reading follow these recommendations:

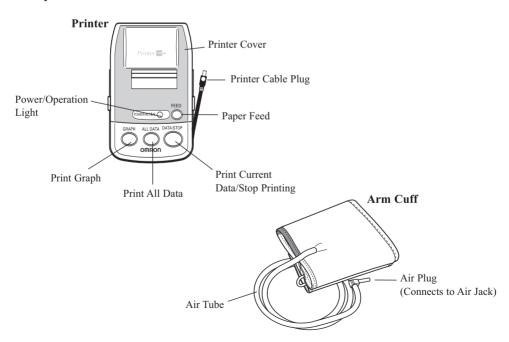
- 1. Avoid eating, smoking, and exercising for 30 minutes before taking a measurement. Rest for at least 15 minutes before taking the measurement.
- 2. Stress raises blood pressure. Avoid taking measurements during stressful times.
- 3. Measurements should be taken in a quiet place.
- 4. Remove tight-fitting clothing from your left arm.
- 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 physiological characteristics.

# KNOW YOUR UNIT

## **Main Unit:**

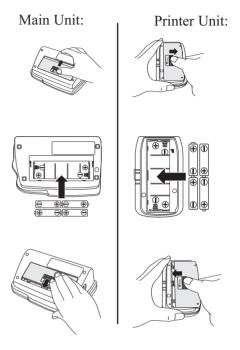


## **Components:**



## **BATTERY INSTALLATION/REPLACEMENT**

- Press the ▼ OPEN indicator on the battery cover and slide the 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.



#### **BATTERY REPLACEMENT**

Low Battery Indicator

When the Low Battery Indicator appears on the display screen remove all the batteries. Replace with four new batteries at the same time. Long-life alkaline batteries are recommended.

**NOTE:** Measurement values stored in the memory will not be deleted during battery replacement. After replacing the batteries, reset the date and time. Refer to page 9, Setting the Date and Time.

# CONNECTING THE PRINTER

1. Remove the printer cord from around the printer unit.



2. Connect the printer to the blood pressure monitor. Insert the cable plug with the indicator facing upward.



**CAUTION:** Inserting the cable plug in any other position will damage the monitor.

## **LOADING THE PRINTER PAPER**

This printer uses OMRON® thermal paper, part number 90TRP. Use only this thermal paper or thermal paper of similar size, width 38mm, roll diameter not to exceed 26mm

**NOTE:** For information on where to purchase printer paper visit our website at www.omronhealthcare.com or call customer service at 1-800-634-4350

1. Open the printer cover in the direction as indicated by the arrow symbols in the illustration



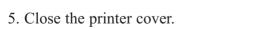
2. Peel back the glued edge of the printer paper. Cut off the first 4 inches of the paper with a pair of scissors.

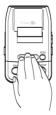


3. Insert the edge of the printer paper in paper feeding slot. Press the FEED button until the paper extends approximately 3 inches.



4. Insert the paper through the printer cover. Make sure the paper extends out from the top.







## **SETTING THE DATE AND TIME**

The Blood Pressure Monitor automatically stores up to 28 measurement values with the date and time.

Set the monitor to the current date and time before taking a measurement for the first time. If the current date and time is not set, a default date and time will display.

#### 1. SETTING THE YEAR

When the batteries are installed, the 12:00 AM will display.

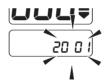


Press and hold the SET button for 2 seconds to adjust the year.

SET ADJUST

DATE/TIME SET

The year flashes on the display.



### 2. SETTING THE YEAR

The year can be set between 2001 and 2030. When the display reaches 2030, it will return to 2001.

Press the ADJUST button to advance by increments of one year.



Press the SET button to set the current year.

20 05

The month flashes on the display.

**NOTE:** Press and hold the ADJUST button to advance the value quicker.

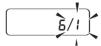
# **SETTING THE DATE AND TIME**

### 3. SETTING THE MONTH

Press the ADJUST button to advance by increments of one month.

Press the SET button to set the current month.

The day flashes on the display.



### 4. SETTING THE DAY

Press the ADJUST button to advance by increments of one day. Press the SET button to set the current day.

The hour flashes on the display.



#### 5. SETTING THE HOUR

Press the ADJUST button to advance by increments of one hour.

Press the SET button to set the current hour.

The minutes flash on the display.



### 6. SETTING THE MINUTE

Press the ADJUST button to advance by increments of one minute.

Press the SET button to set the current minute.

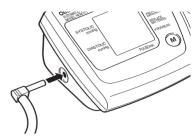
The unit will be ready to take a reading.



7. Press the ON/OFF button to turn the display off.

# **APPLYING THE ARM CUFF**

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

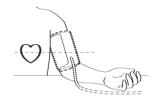


2. Remove tight-fitting clothing from your upper arm.



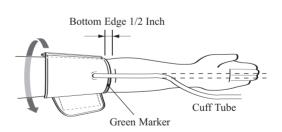
3. Sit in a chair with your feet flat on the floor. Place your arm on a table so the cuff is level with your heart.





## APPLYING THE CUFF ON THE LEFT UPPER ARM

4. Put your arm through the cuff loop. The Green Marker on the cuff should lie over the brachial artery on the inside of the arm. The air tube runs down the inside of your arm. The bottom of the cuff should be approximately 1/2" above your elbow.

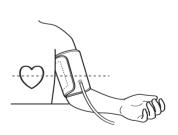


# **APPLYING THE ARM CUFF**

- 5. Pull the cuff so the top and bottom edges are tightened evenly around your arm.
- 6. When the cuff is positioned correctly, press the sewn hook material FIRMLY against the pile side of the cuff.
- 7. Make certain the cuff fits snugly around your arm. The cuff should make good contact with your skin.

**NOTE:** You should be able to fit your index finger between the cuff and your arm easily, so you can pull the cuff off and on.

- 8. Relax your arm and turn your palm upward.
- 9. Be sure there are no kinks in the air tubing.



# **TAKING A MEASUREMENT**

The monitor automatically determines your ideal inflation level. In rare circumstances when a higher inflation may be necessary, the monitor automatically re-inflates the cuff up to 30mmHg higher than the initial inflation and restarts the measurement.

The monitor detects the pulse during inflation. Do not move your arm and remain still during the measurement.

### 1. Press the ON/OFF button

All display symbols appear on the screen. The cuff starts to inflate automatically.

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

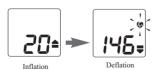


#### 2. Press the START button

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.



3. Inflation stops automatically and the measurement is started.



As the cuff deflates, decreasing numbers appear on the display. The Heart Symbol • flashes at every heartbeat.

## **TAKING A MEASUREMENT**

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



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

**NOTE:** The monitor will automatically turn off after five minutes.



### INSTRUCTIONS FOR SPECIAL CONDITIONS

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



#### NOTE:

- Do not apply more pressure than necessary.
- The monitor will not inflate above 299 mmHg.

## **USING THE MEMORY FUNCTION**

Every time you complete a measurement the monitor stores the blood pressure and pulse rate in the memory. The Blood Pressure Monitor automatically stores up to 28 measurement values. When 28 sets of measurement values are stored in the memory, the oldest record is deleted to save the most recent measurement values.

### TO DISPLAY THE MEASUREMENT VALUES

The date and time is alternately displayed with the measurement values.

1. **Press the** M **button down** while the Heart Symbol **\*** is displayed. The most recent measurement values will be displayed.



### **NOTES:**

- Press the button repeatedly to display the next values.
- Press and hold the button to display the values faster.
- 2. **Press the START/STOP** button to turn the power off.

### TO DELETE ALL VALUES STORED IN THE MEMORY

You cannot partially delete records stored in the memory. All records will be deleted.

1. Press and hold the (M) memory button and START button simultaneously for more than 2 seconds.



## **USING THE PRINTER**

The HEM-705CP printer unit has the capability to print all the of measurement values stored in the memory of the Blood Pressure Monitor.

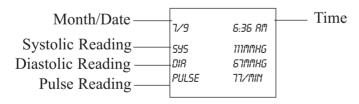
#### NOTES:

- The correct date and time must be set up on the monitor before taking a reading. If the date and time is not set, the numerical values will not appear on the print out.
- The printer unit must be connected to the monitor. The monitor does not have to be ON to operate the printer unit.
- The printer unit will automatically shut off when the printing is completed.
- To stop printing, press the DATA/STOP button at any time.

# 1. TO PRINT THE MOST RECENT MEASUREMENT VALUES Press the DATA/STOP button.

The numeric results of the most recent reading will print.





## **USING THE PRINTER**

#### 2. TO PRINT ALL THE MEASUREMENT VALUES

#### Press the ALL DATA button.

The numeric printout will list all of the readings stored in the memory starting with the oldest reading to the most recent reading followed by the average of all the stored readings.



The stored data will print as illustrated in the following example:

Systolic Ro Colum	_	Di		Reading umn	
					Pulse Reading Column
Month(s)	(3-6) D. T.	mmHg SYS	/ DIA	/min PUL	Column
Date —	20)15	113	75	67	<ul> <li>Oldest reading stored</li> </ul>
Time/Hour —	23 11	117 113	69 71	64 63	
11110/110 01	3 14 5 7	110 112	67 66	66 64	
	15 7 20 12	110 106	61 66	64 65	
	3 12	110	65	64	
	10 12 12 14	108 111	61 56	67 62	
	14 7 21 15	107 111	64 64	64 64	Most recent reading
	22 12	121 112	62 64	66	
	*AV.	112	65	65 —	——— Average of all stored
					readings

## **Month(s)** – The month or months will print.

For example: If the blood pressure readings were stored during the months of March through June, then the printout will indicate 3-6.

## **Date** – The day's date will print.

For example: If the measurement was stored on June 1st, then the printout will indicate 1 under the column "D".

## **Time/Hour** – The hour in military time will print.

For example: If the measurement was stored at 3:00pm, then the printout will indicate 15 under the column "T".

## **USING THE PRINTER**

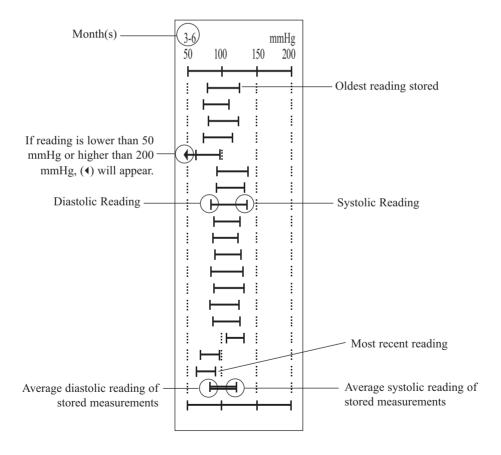
### 3. TO PRINT A GRAPH OF ALL MEASUREMENT VALUES

### Press the GRAPH button.

The graph will list all of the readings stored in the memory.



The stored data will print as illustrated in the following example:



# 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:

- Keep the monitor in the storage case when not in use.
- Do not forcefully bend the arm cuff or air tube. 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. Never immerse the monitor or any components in water.
- Store the monitor in a safe and dry location. 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.

# TROUBLESHOOTING TIPS

## **PRINTER UNIT:**

PROBLEM	CAUSES	SOLUTIONS
No power.	Worn batteries	Replace all 4 "AA" batteries. Reference page 7.
	Incorrect battery installation	Check the battery installation or proper placement of the battery polarities.
	Printer not connected	Connect printer to BP Monitor.
No data will print.	Cable plug not inserted correctly or damaged.	Insert cable plug in correct position. Reference page 8. Contact Customer Service for repair information.
	No measurement values are stored in the memory	Make sure the date and time is set-up in the monitor. Take a reading then print. Reference page 17.
Not all data stored in the memory will print.	Worn batteries.	Replace all 4 "AA" batteries. Reference page 7.
POWER/ACTIVE Light is blinking		
Printer paper will not feed.	Printer paper jammed.	Remove jammed paper and install roll again. Reference page 9.
	Ran out of paper.	Install new roll of paper.

# **ERROR INDICATORS**

SYMBOL	CAUSE	CORRECTION
E	Monitor did not detect pulse rate	Remove the arm cuff. Refer to "Applying the arm cuff" on page 12. Wait 2-3 minutes. Take another measurement.
EE	Cuff under-inflated	Remove the arm cuff. Read "Taking a Measurement" on page 14. Wait 2-3 minutes.
E	Cuff over-inflated	Take another measurement.
Φ	Batteries are worn	Replace the four batteries. Refer to page 7 for battery installation.

# TROUBLESHOOTING TIPS

PROBLEM	CAUSES AND SOLUTIONS
No power.	Replace all worn batteries.
No display appears on the unit	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".

## **QUICK REFERENCE GUIDE**

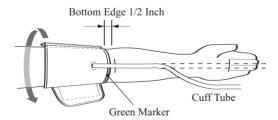
To ensure a reliable reading, avoid eating, smoking, and exercising for 30 minutes before taking a measurement. You should try to measure your blood pressure at the same time each day. Avoid taking measurements during stressful times.

1. Remove any tight-fitting clothing from your upper arm.



- 2. Sit in a chair with your feet flat on the floor and place your arm on a table so the cuff is at the same level as your heart.
- 3. Put your arm through the cuff loop. The bottom of the cuff should be approximately 1/2" above the elbow. The Green Marker on the cuff should lie over the brachial artery on the inside of the arm.

  Tube should run down center of arm even with your middle finger.



4. Wrap the cuff firmly in place around your arm using the closure strip.

## **QUICK REFERENCE GUIDE**

5. Press the ON/OFF button. Display symbols appear.



6. Press the START button. The cuff starts to inflate automatically.



Remain still and do not talk during the measurement.

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

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



**NOTE:** 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.

## **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

Your HEM-705CP, IntelliSense Automatic Blood Pressure Monitor, excluding the monitor cuff, 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 monitor cuff is warranted to be free from defects in materials and workmanship appearing within one year from the date of purchase 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 contact Omron Healthcare's Customer Service by calling 1-800-634-4350 for the address of the repair location and the return shipping and handling fee. Information for warranty service is available on our website at www.omronhealthcare.com.

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.

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: www.omronhealthcare.com

Call toll free: 1-800-634-4350

# **SPECIFICATIONS**

# MAIN UNIT:

Model:	HEM-705CP	
Display:	LCD Digital Display	
Measurement Range:	Pressure: 0 to 299 mmHg	
	Pulse: 40 to 180/minute	
Accuracy/Calibration:	Pressure: ±3 mmHg	
	Pulse: ±5% of reading	
Inflation:	Automatic by electric pump	
Deflation:	Active electronic control valve	
Rapid Pressure Release:	Active electronic control valve	
Pressure Detection:	Capacitive pressure sensor	
Measurement Method:	Oscillometric method	
Pulse Wave Detection:	Capacitive pressure sensor	
Power Source:	4 "AA" batteries or AC adapter	
Battery Life:	Approximately 300 uses	
Operating	50°F to 104°F (10°C to 40°C)	
Temperatures/Humidity:	30 to 85% RH maximum	
Storage	-4°F to 140°F (-20°C to 60°C)	
Temperatures/Humidity:	10 to 95% RH maximum	
Main Unit Weight:	Approximately 13.4 oz (380g) not including batteries	
Main Unit Dimensions:	Approximately 4 ½" (l) x 7" (w) x 2 ½" (h)	
	(115 mm x 177 mm x 71 mm)	
Cuff Dimensions:	Approximately 5 1/2" x 19" (140 mm x 480 mm)	
Cuff Circumference:	Fits arm circumference 9" to 13"	
Contents:	Arm cuff, printer, paper roll, instruction manual	
Optional Accessories:	AC Adapter - model number HEM-ADPT1	
Sold Seperately	Small Adult Cuff - Arm circumference size 7" - 9"	
	Large Adult Cuff - Arm circumference size 13" - 17"	
UPC Code:	0 73796 70536 7	

**NOTE:** These specifications are subject to change without notice.

## **PRINTER UNIT:**

Power Source:	4 "AA" batteries (not included)
Battery Life:	Approximately 300 uses (current data)
Paper Usage:	Approximately 200 uses for 1 roll (current data)
(Printer) Weight:	Approximately 6 oz. (170 g) (not including batteries)
(Printer) Dimensions:	Approximately 4 ½" (1) x 2 ½" (w) x 2" (h)
	(123 mm x 72 mm x 50 mm)

**NOTE:** These specifications are subject to change without notice.

Made in China

Manufactured by OMRON

Distributed by: **OMRON HEALTHCARE, INC.** 1200 Lakeside Drive Bannockburn, Illinois 60015-1243 www.omronhealthcare.com

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