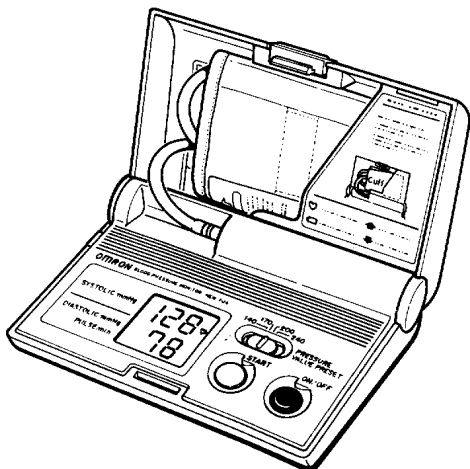


OMRON®

Model HEM-704C

AUTOMATIC OSCILLOMETRIC ELECTRONIC DIGITAL BLOOD PRESSURE & PULSE MONITOR

INSTRUCTION MANUAL



© OMRON HEALTHCARE, INC.

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Introduction

Congratulations on your purchase. The HEM-704C is a lightweight, compact, easy-to-use instrument. Through the use of the oscillometric method of measurement, the HEM-704C is far easier to use. The HEM-704C eliminates the need for a microphone thereby simplifying the procedure. It provides an easy-to-read digital readout of both blood pressure and pulse. Before use be sure to read the instructions completely. For specific information on your own blood pressure, CONTACT YOUR PHYSICIAN.

A Few Words About Blood Pressure

Blood pressure is the force your heart uses to push blood through the arteries and veins (blood vessels). When blood pressure is consistently above normal it is called hypertension (high blood pressure).

The heart is like a pump. When it contracts, it forces blood through the blood vessels, and pressure increases. This is called **SYSTOLIC** Pressure.

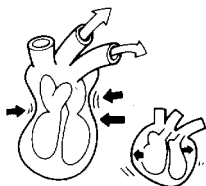
When the heart relaxes between beats, the pressure decreases. This is called **DIASTOLIC** Pressure.

Most physicians consider a "normal" blood pressure reading for an adult to be approximately 120/80. The Systolic (upper) is always recorded first, and the Diastolic (lower) is second.

Your physician may consider other measurements normal for you. Therefore, **CONSULT YOUR PHYSICIAN** to determine your normal blood pressure.



Heart Contracts
(Pressure Increases)



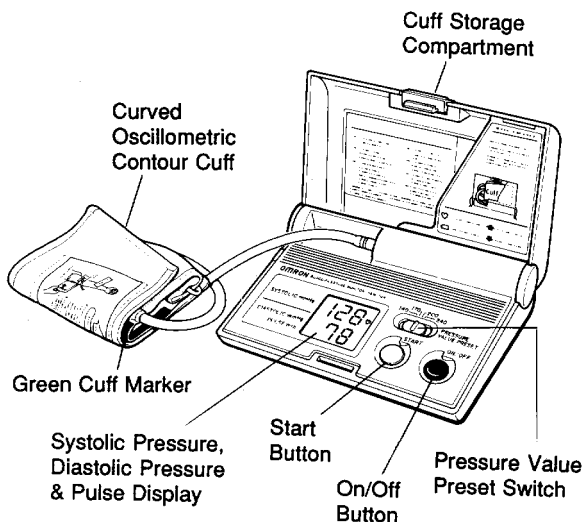
Heart Relaxes
(Pressure Decreases)

Systolic
(Upper Number)

120 / 80

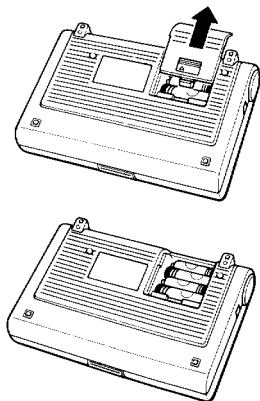
Diastolic
(Lower Number)

Know Your Unit



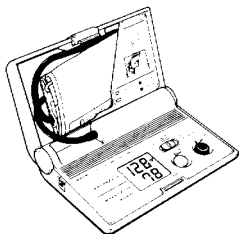
Battery Installation

1. Slide battery cover off.
2. Install batteries so proper \oplus and \ominus polarities on the batteries match polarity of battery compartment.
 - Use 4 "AA" size batteries. (Not included)
 - Remove batteries if unit will not be used for extended periods.
3. If low battery indicator appears in the display, replace all batteries.
 - Long-life alkaline batteries are recommended.

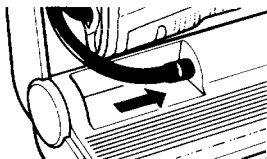


Unit Assembly

1. Open monitor and remove cuff from the storage compartment.



2. The cuff should be already connected to the console. If not, insert the cuff plug completely into the console jack.



A Few Suggestions Before Blood Pressure Measurement

1. Measurement should be taken in quiet places and in a relaxed state.



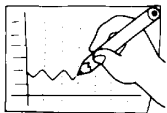
2. Avoid smoking, eating or exercise as the readings will be affected.



3. Try to take your readings at the same time each day for consistency because blood pressure can vary considerably.



4. Keep a record of your blood pressure and pulse for your doctor. Remember, a single measurement doesn't tell the whole story. You need several readings. If you take successive readings, wait 5 to 8 minutes between readings.



5. Remove any tight fitting clothing from the upper arm. Be consistent in the placement of the cuff, e.g., using the same side (right arm or left arm).



6. Stress will raise blood pressure, therefore, avoid measurement during those times.



7. Rest 15 minutes before taking a reading.

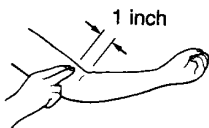
15 minutes



8. Remain still during measurement to avoid inaccurate readings.

Apply Cuff

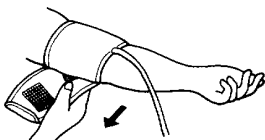
1. Locate the brachial artery by pressing with two fingers about one inch above the elbow crease on the inside of the left arm and determine where the pulse can be felt most strongly.



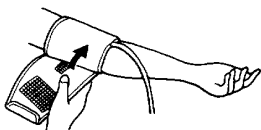
2. The cuff should be already properly assembled. If it is not, then make certain the cuff forms a loop by passing one end of the cuff through the metal D-ring so that the smooth cloth side is on the inside of the cuff loop.



3. Place your left arm through the cuff loop. The bottom edge of the cuff should be approximately 1/2 inch above the elbow and the green cuff marker must lie over the brachial artery which runs on the inside of the arm.



4. Pull the cuff so that the top and bottom edges of the cuff are uniformly tightened around the arm. Press the closure material together to secure the cuff into position.

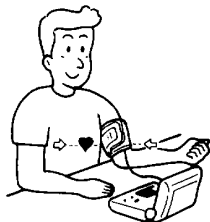


5. Make certain the cuff is snug around the arm and making good contact against the skin.

6. Place your arm on a table so that the cuff is at the same level as your heart.

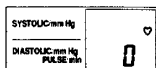
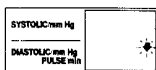
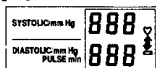
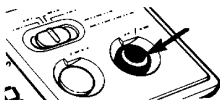
7. Relax your arm and have your palm facing upward.

8. Make certain there are no kinks in the hose.



How To Take A Reading

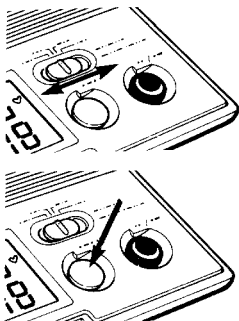
Make certain you follow the suggestions in "A FEW SUGGESTIONS BEFORE BLOOD PRESSURE MEASUREMENT" Section of this manual.



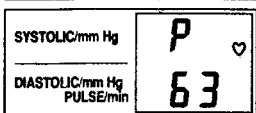
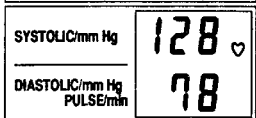
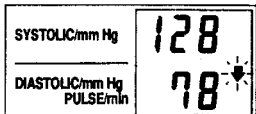
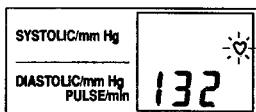
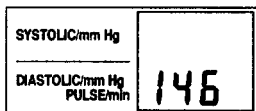
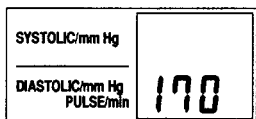
1. Press on/off button.

2. Three sets of symbols appear quickly in sequence.

CAUTION: WAIT FOR "READY TO MEASURE" SYMBOL (HEART SHAPE ♥) BEFORE TAKING MEASUREMENT.



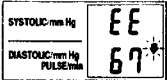
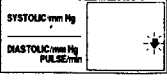
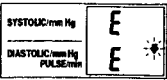
3. Set pressure value switch to 170mmHg position as a starting point if your estimated systolic pressure is unknown.
4. Press the start button. The unit automatically inflates cuff to about 170mmHg. (To inflate more than 240mmHg, keep start button depressed until desired level is reached. **CAUTION: Do not inflate more than 280mmHg.**)



5. Remain still after pumping stops. The cuff deflates automatically.
6. As the cuff pressure deflates, the values will be seen in the display.
7. As the unit continues to deflate it will emit a beep and the "heart" ♥ will flash at the onset of oscillation signals.
8. When measurement is complete, the unit will automatically deflate and the readings will appear in the LCD display.
9. The unit will alternately display blood pressure and pulse readings.
10. Results will be displayed until power is turned off; the unit will automatically shut off in approx. 5 minutes.
11. If it is necessary to discontinue a measurement depress the ON/OFF button which automatically deflates the cuff at a rapid rate.

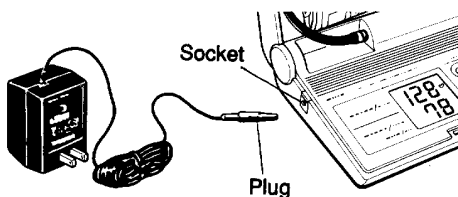
Error Indicators

The following special error symbols will appear in the display if the unit is being used incorrectly:

ERROR SYMBOL	CAUSE	CORRECTION
	1) Cuff under-inflated 2) Movement during measurement	1. Release air pressure in cuff. 2. Wait 10 minutes before taking another reading. 3. Repeat "How To Take A Reading" steps except manually inflate cuff 30mmHg higher than previous inflation value. 4. If you are still experiencing problems call: OMRON HEALTHCARE, INC. Customer Service 1-800-634-4350 (Please indicate Model No.)
	Residual air pressure in cuff	1. Release air pressure in cuff. 2. Wait 10 minutes before taking another reading.
	Cuff over inflated (more than 300 mm Hg) No pulse or blood pressure reading due to 1) Motion 2) Very weak artery pulse	3. Repeat "How To Take A Reading" steps. 4. If you are still experiencing problems call: OMRON HEALTHCARE, INC. Customer Service 1-800-634-4350 (Please indicate Model No.)

Use of Optional AC Adaptor (Accessory item purchased separately)

1. When using AC power, use only the exclusive AC Adaptor (Model 97-ADPT) which can be purchased from: OMRON HEALTHCARE, INC., 300 Lakeview Parkway, Vernon Hills, Illinois 60061. (1-800-634-4350)
2. Insert AC Adaptor plug into the socket located at the left side of the console.
3. Next insert AC Adaptor into a 120-VAC outlet (50 - 60 cycle).

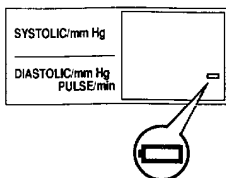


4. When AC Adaptor is removed, disconnect from AC outlet first, then from the console socket. **CAUTION:** To avoid accidents, use only the exclusive AC Adaptor (Model 97-ADPT) as other units vary in output voltage and polarities.

NOTE: The unit is designed not to draw power from the batteries when the AC Adaptor is in use.

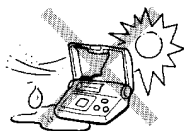
Battery Replacement

1. If low battery indicator appears in display with a constant tone, replace batteries following battery installation steps.
2. Replace all batteries. Long-life alkaline batteries are recommended.

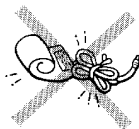


Care and Maintenance

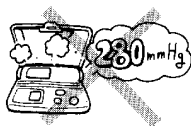
1. Avoid extreme temperatures, humidity, and direct sunlight.



2. Do not tightly fold cuff and hose to avoid damage.



3. Do not inflate unit over 280mmHg.

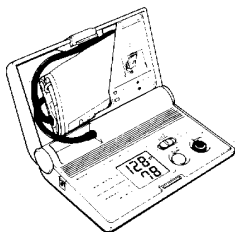


4. Clean only with soft dry cloth. Do not use volatile liquids.



CUFF STORAGE

1. Neatly fold cuff flat.
2. Slide cuff into storage compartment.
3. Insert the tubing behind the cuff.
(Do not crimp the tubing).
4. Close console top for storage.



Limited One Year Warranty

Your new OMRON HEM-704C Oscillometric Monitor is warranted to be free from manufacturing defects for a period of one year under normal use. This warranty extends only to the original retail purchaser.

Should repair be needed within the warranty period, ship the unit prepaid to OMRON HEALTHCARE, INC., 300 Lakeview Parkway, Vernon Hills, Illinois 60061, Attn: Service Dept., together with \$5.00 for return shipping and insurance.

Be sure to include the model number of your unit and your phone number on any correspondence.

We will either repair or at our option replace free of charge any parts necessary to correct defects in materials or workmanship. The above warranty is complete and exclusive. The warrantor expressly disclaims liability for incidental, special or consequential damages of any nature. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.)

Any implied warranties arising by operation of law shall be limited in duration to the term of this warranty. (Some states 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 from state to state. As a condition to the operation of your warranty, the enclosed registration card must be completed and sent to us within 10 days from the date of purchase.

Specifications

MODEL:	HEM-704C
Display:	LCD Digital Display
Measurement Range:	Pressure: 0 ~ 280mmHg Pulse: 40 ~ 200/minute
Accuracy:	Pressure: ± 3 mmHg or 2% of reading Pulse: $\pm 5\%$ of reading
Inflation:	Automatic by electric pump
Deflation:	Automatic pressure release valve
Rapid Pressure Release:	Automatic exhaust valve
Pressure Detection:	Capacitance type pressure transducer
Measurement Method:	Oscillometric method
Pulse Wave Detection:	Capacitance type pressure transducer
Power Source:	4 "AA" batteries (Not included)
Battery Life:	(Approx. 200 times when used for 2 minutes per each 1 time a day)
Operating Temperature/Humidity:	50°F to 104°F (10°C to 40°C) 30 ~ 85% RH maximum
Storage Temperature/Humidity:	-4°F to 140°F (-20°C to 60°C) 10 ~ 95% RH maximum
Console Weight w/Batteries:	Approx. 32 oz (900 g)
Outer Dimensions:	Approx. 9"(w) \times 3 1/3"(d) \times 6"(h) (228 \times 85 \times 155 mm)
Cuff Dimensions:	Approx. 5 1/2"(w) \times 18 8/9"(l) (140 \times 480 mm)
Cuff Range:	For arms 8" to 13" in circumference
Accessories:	Cuff, Instruction manual

Except for batteries, NO USER SERVICEABLE PARTS IN THE CONSOLE (MAIN UNIT).

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

LICENSED UNDER U. S. PAT.

4829419, 4942516, 4896260, 4531182, 4825364, 4686622, 4121284
4396976, 4371923, 4471385, 4120583, 4435732, 4672457, 4739396

Caution

Changes or modifications not expressively approved by OMRON HEALTHCARE, INC. could void the user's authority to operate this product.

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 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 product and 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 radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictée par le ministre des communications.

Distributed by:

OMRON HEALTHCARE, INC.

300 Lakeview Parkway
Vernon Hills, Illinois 60061

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