

## Solar Charging Manual Inflation Blood Pressure Monitor Model HEM-SOLAR

- Instruction Manual
- Mode d'emploi
- Gebrauchsanweisung
- Manuale di istruzioni
- Manual de instrucciones
- Gebruiksaanwijzing
- РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ

• كتيب الإرشادات

EN

FR

DE

IT

ES

NL

RU

AR

**A Good Sense of Health**

IM-HEM-4500-SOLE-01-03/09

5322504-1A

Download from [Www.Somanuals.com](http://Www.Somanuals.com). All Manuals Search And Download.

## Contents

### **Before using the unit**

Introduction .....	3
Important Safety Information .....	4
1. Overview .....	7
2. Preparation .....	11
2.1 Connecting/Replacing/Charging the Batteries .....	11

### **Operating instructions**

3. Using the Unit.....	17
3.1 How to Sit Correctly When Taking a Measurement .....	17
3.2 Applying the Arm Cuff .....	19
3.3 Taking a Reading .....	22
4. Quick Reference Guide .....	26

### **Care and maintenance**

5. Handling Errors and Problems .....	27
5.1 Error Messages.....	27
5.2 Troubleshooting .....	29
6. Maintenance and Storage .....	31
7. Optional Parts .....	33
8. Technical Data.....	34
9. Some Useful Information about Blood Pressure .....	37

## Introduction

Thank you for purchasing the OMRON HEM-SOLAR Upper Arm Blood Pressure Monitor.

The OMRON HEM-SOLAR is a manual inflation blood pressure monitor, operating on the oscillometric principle. It measures your blood pressure and pulse rate simply and quickly.

The OMRON HEM-SOLAR also recharges the battery using Solar Power. Allowing for use in various situations and locations.



**Please read this instruction manual thoroughly before using the unit. For specific information about your own blood pressure, CONSULT YOUR DOCTOR.**

## Important Safety Information

Consult your doctor during pregnancy, arrhythmia and arteriosclerosis. Please read this section carefully before using the unit.

### **Warning:**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

#### **(General Usage)**

- Always consult your doctor. Self-diagnosis of measurement results and self-treatment are dangerous.
- People with severe blood flow problems, or blood disorders, should consult a doctor before using the unit. Cuff inflation can cause internal bleeding.

#### **(Battery Usage)**

- If battery fluid should get in your eyes, immediately rinse with plenty of clean water. Consult a doctor immediately.

#### **(AC Adapter Usage)**

- Never plug in or unplug the power cord from the electric outlet with wet hands.

### **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.

#### **(General Usage)**

- Do not leave the unit unattended with infants or persons who cannot express their consent.
- Do not use the unit for any purpose other than measuring blood pressure.
- Do not disassemble the unit, arm cuff or inflation bulb.
- Use only the approved arm cuff for this unit. Use of other arm cuffs may result in incorrect measurement results.
- Do not inflate the arm cuff over 299 mmHg.
- Do not use a mobile phone near the unit. This could cause a malfunction.

**(Battery Usage for “AAA” batteries only)**

- If battery fluid should get on your skin or clothing, immediately rinse with plenty of clean water.
- Use only two “AAA” size batteries with this unit. Do not use other types of batteries.
- Do not insert the batteries with their polarities incorrectly aligned.
- Replace old batteries with new ones immediately. Replace both “AAA” batteries at the same time.
- Remove “AAA” batteries if the unit will not be used for three months or more.
- Do not use new and used batteries together.

**(Rechargeable battery Usage)**

- Do not use If the Rechargeable battery gets wet.
- Do not charge the battery below/above 0°C to 40°C.
- Use only the original Rechargeable battery designed for this unit. Please refer to Chapter 7.

**(AC Adapter Usage)**

- Use only the original AC adapter designed for this unit. Use of unsupported adapters may damage and/or may be hazardous to the unit.
- Plug the AC adapter into the appropriate voltage outlet.
- Do not use the AC adapter if the unit or the power cord is damaged. Turn off the power and unplug the power cord immediately.

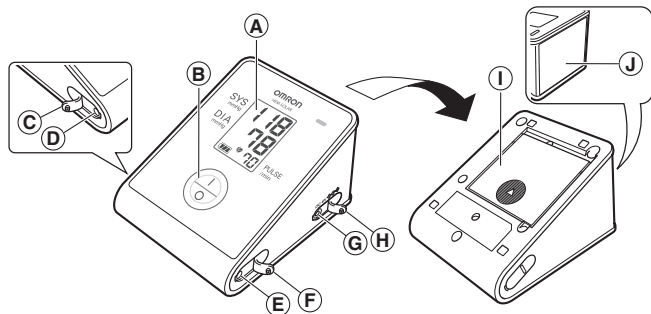
**General Precautions**

- Do not operate unit in a moving vehicle (car, airplane).
- Do not apply strong shocks and vibrations to or drop the unit and arm cuff.
- Do not take measurements after bathing, drinking alcohol, smoking, exercising or eating.
- Do not forcibly bend the arm cuff or bend the air tube excessively.
- When removing the air tube, pull on the edge of the tube at the connection with the main unit not the middle of the tube.
- Do not inflate the arm cuff when it is not wrapped around your arm.
- Do not wash the arm cuff or immerse it in water.

- Read and follow the “Important information regarding Electro Magnetic Compatibility (EMC)” in the Technical Data Section.
- Read and follow the “Correct Disposal of This Product” in the Technical Data Section when disposing of the device and any used accessories or optional parts.

## 1. Overview

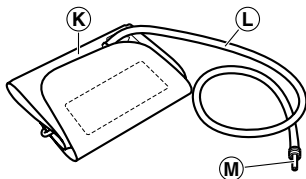
### Main unit



- |   |                        |
|---|------------------------|
| A. Display                              | I. Battery compartment |
| B. I/O button (Power switch)            | J. Solar panel         |
| C. Air connector cap for cuff           |                        |
| D. Air connector for cuff               |                        |
| E. Air connector for inflation bulb     |                        |
| F. Air connector cap for inflation bulb |                        |
| G. AC Adapter jack                      |                        |
| H. AC Adapter jack cap                  |                        |

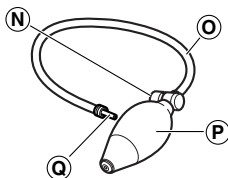
EN

## Arm Cuff



- K. Arm cuff  
(Medium cuff: arm circumference 22-32 cm)
- L. Air Tube
- M. Air Plug

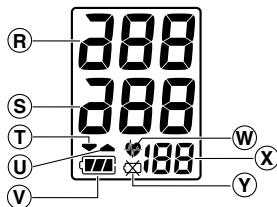
## Inflation Bulb



- N. Air Release Button
- O. Air Tube
- P. Air Inflation Bulb
- Q. Air Plug



## Display

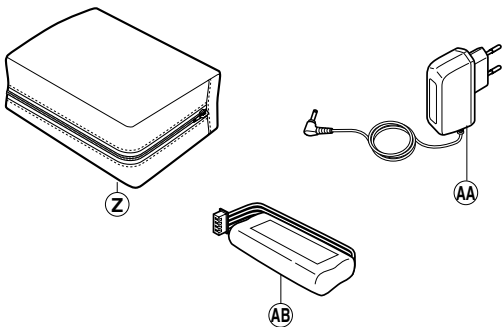


- R. Systolic blood pressure
- S. Diastolic blood pressure
- T. Deflation symbol
- U. Reinflation symbol
- V. Rechargeable battery indicator

- W. Heartbeat symbol
  1. Flashes during measurement
  2. If flashing after measurement completed, indicates blood pressure out of recommended range\*
- X. Pulse display
- Y. Battery low symbol

\* **Note:** If your systolic or diastolic pressure is outside the standard range (above 135/85 mmHg) the Heartbeat symbol (♥) will blink. Please refer to Chapter 3.3.

## Package contents (others)



- Z. Storage case  
AA. AC adapter  
AB. Rechargeable battery

- Instruction manual
- Guarantee card
- Blood pressure pass

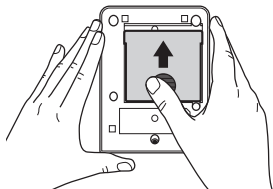
## 2. Preparation

### 2.1 Connecting/Replacing/Charging the Batteries

To make use of the Charging function, first insert the Rechargeable battery, attach the AC adapter, then charge up the battery.

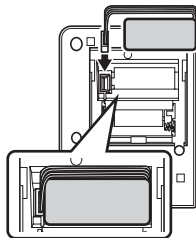
#### Connecting the Rechargeable Battery

1. Turn the main unit upside down.
2. Slide the battery cover in the direction of the arrow while pressing the ribbed part of the cover.



3. Connect the Rechargeable battery to the main unit.

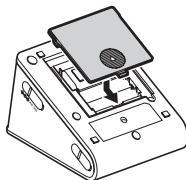
**Note:** When replacing the Rechargeable battery, pull the cables and disconnect the Rechargeable battery from the main unit.



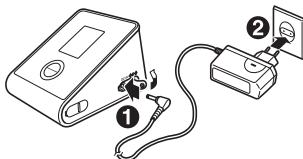
EN

- Put the battery cover back in place.

Slide the battery cover as indicated, until it clicks into place.



- Insert the AC adapter plug into the AC adapter jack, then plug the AC adapter into an electrical outlet.

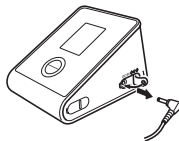


- After the battery is fully charged, remove the AC adapter plug from the monitor and close the AC adapter jack cap.



**Notes:**

- The orange LED is lit while the battery is being charged by the AC adapter. After the battery is fully charged, the orange LED goes out.
- Charge up the Rechargeable battery with the AC adapter before taking a measurement for the first time or in case the Rechargeable battery becomes low or empty.



## Rechargeable battery Life & Charging

The Rechargeable battery life can be confirmed in the bottom left corner of the display.



Full power



Half remaining



Remaining power is low.



Charge the Rechargeable battery ahead of time.



The Rechargeable battery is empty. The unit turns off after 30 seconds.


Recharge the rechargeable battery or insert two “AAA” size batteries instead.

### Notes:

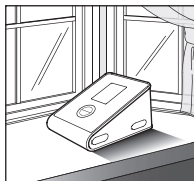
- Charge the Rechargeable battery as soon as the Rechargeable battery indicator shows low.
- When the Rechargeable battery indicator goes out, the Rechargeable battery is empty or not connected. Connect and charge up the Rechargeable battery.
- In case of using two “AAA” size batteries together with the Rechargeable battery, the Rechargeable battery indicator (  ) starts flashing then lights up when the Rechargeable battery is empty.
- In case of using two “AAA” size batteries together with the Rechargeable battery, the battery low symbol (  ) starts flashing then lights up when the “AAA” batteries are exhausted.
- Use two disposable “AAA” size batteries to avoid the unit turning off after the Rechargeable battery becomes empty.
- This device operates on rechargeable battery, two “AAA” size batteries, or by AC adapter.
- Two “AAA” size batteries are not included.

EN

## How to Charge the Battery

When the Rechargeable battery indicator shows remaining power is low (  ) on the display, charge the battery.

1. Open the window and face the Solar panel to the sunlight near the window.



2. The orange LED is lit while the battery is being charged by solar power.






### Caution:

- When charging the battery, disconnect the air tubes of the arm cuff and the inflation bulb, make sure to close two air connector caps and AC adapter jack cap.
- Charge the battery inside with the direct rays of the sun near a window. The battery won't be charged by room light. Do not leave the unit outdoors and avoid getting the unit wet from rain.
- If the Rechargeable battery life becomes extremely short, it might be a temporary problem with the capacity. Charge the battery with the AC adapter.
- To keep the Rechargeable battery capacity longer, avoid frequent short charges.
- The Rechargeable battery might be empty after purchasing or in case the unit has not been used for more than a month. Charge the battery with the AC adapter once. Then the Rechargeable battery will be ready for use.

**Charging time and the Capacity of the Rechargeable battery**

To charge the battery the following conditions are needed.

Weather	Lux	To fully charge the battery	4 hours continuous charge with a southern exposure
 Clear	more than 80000lux	35 hours continuous charge	40 measurements
 Fair	50000lux	90 hours continuous charge	20 measurements
 Cloudy	20000lux	600 hours continuous charge	5 measurements

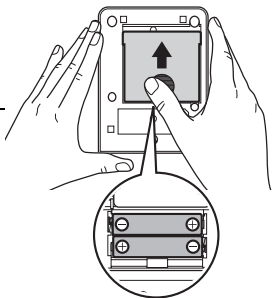
**Note:** The capacity might change depending upon the weather situation.

## Installing/Replacing the “AAA” size Batteries

1. Turn the main unit upside down.

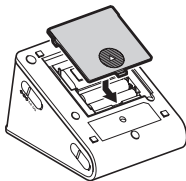
2. Slide the battery cover in the direction of the arrow while pressing the ribbed part of the cover.


3. Install or replace two “AAA” size batteries so that the + (positive) and - (negative) polarities match the polarities indicated on the battery compartment.





4. Put the battery cover back in place.

Slide the battery cover as indicated, until it clicks into place.



If the battery low symbol (  ) appears on the display, replace both batteries at the same time.

- When the battery low symbol (  ) starts to blink, you will still be able to use the unit for a short while. You should replace the batteries with new ones ahead of time.
- When the symbol (  ) remains lit, the batteries are exhausted. You should replace the batteries with new ones at once.
- Remove the batteries if the unit will not be used for three months or more.
- Dispose of batteries according to applicable local regulations.

Two new “AAA” alkaline batteries will last for approximately 1500 measurements, when used to take two measurements a day.



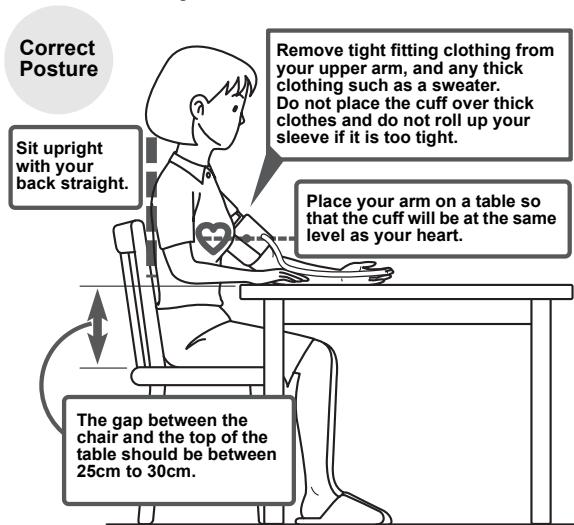
### 3. Using the Unit

#### 3.1 How to Sit Correctly When Taking a Measurement

Correct posture during measurement is necessary to get accurate results.

##### Notes:

- Measurements should be taken in a quiet place and you should be in a relaxed, seated position. Make sure that the room is not too hot or too cold.
- Avoid eating, drinking alcohol, smoking, or exercising for at least 30 minutes before taking a measurement.
- Do not move or talk during measurement.



EN

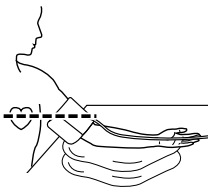
### Incorrect Posture

- Arched back (leaning forwards)
- Sitting cross-legged
- Sitting on a sofa or at a low table so that you tend to lean forward



These situations could lead to higher blood pressure values due to strain or the arm cuff being lower than the heart.

If the arm cuff is at a lower position than your heart use cushions etc., to adjust the height of your arm.



## 3.2 Applying the Arm Cuff

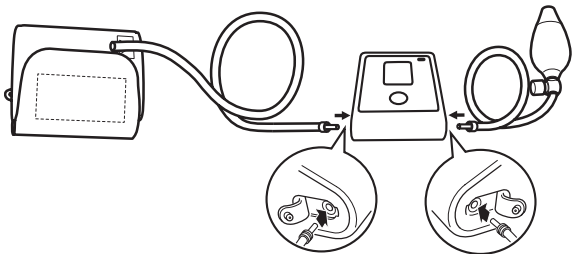
### Notes:

- Be sure to wrap the arm cuff correctly so that you get accurate results.
- Measurements can be taken in light clothing. However, please remove thick clothes, such as sweaters, before taking a reading.
- You can take a measurement on either your left or right arm. The blood pressure can differ between the right arm and the left arm and therefore also the measured blood pressure values can be different. Omron recommends to always use the same arm for measurement. If the values between the two arms differ substantially, please check with your doctor which arm to use for your measurement.

### Taking measurements on the left arm

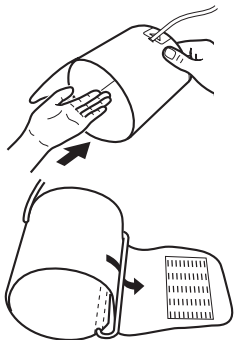
1. Open two Air connector caps, then insert the air plugs of the arm cuff and the inflation bulb into their respective air connectors.

**Note:** Be sure to use the appropriate size arm cuff. Should you require a small cuff, ensure that the small bulb is used together with the small cuff. Please refer to Chapter 7.



EN

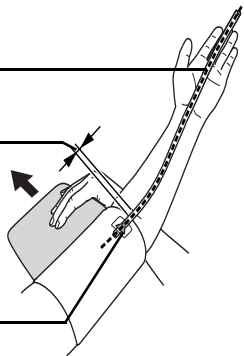
2. Put your left arm through the cuff loop.



**Note:** If the cuff is not assembled, pass the end of the cuff furthest from the tubing through the metal D-ring to form a loop. The smooth cloth should be on the inside of the cuff loop.

- 
3. Position the arm correctly.

- 1) The air tube should run down the inside of your forearm and be in line with your middle finger.
- 2) The bottom of the cuff should be approximately 1 to 2 cm above your elbow.
- 3) Apply the cuff to your upper arm so that the coloured marker (blue arrow under tube) is centered on the middle of your inner arm and points down the inside of the arm.

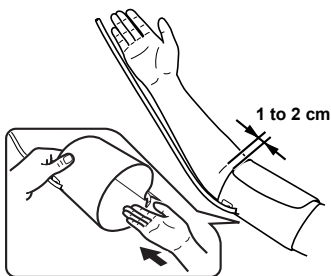


- 
4. When the cuff is positioned correctly, close the fabric fastener **FIRMLY**.

## Taking measurements on the right arm

Apply the cuff so that the air tube is at the side of your elbow.

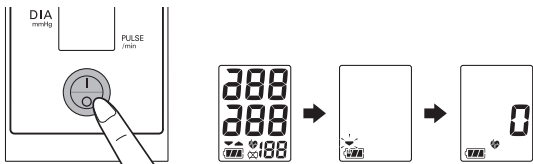
- Be careful not to rest your arm on the air tube, or otherwise restrict the flow of air to the cuff.
- The cuff should be 1 to 2 cm above the elbow.



### 3.3 Taking a Reading

#### 1. Preparation

- 1) Press the air release button to release any air in the arm cuff.
- 2) Press the I/O button to turn the unit on.
- 3) All items in the display will be displayed briefly.
- 4) The deflation symbol will flash.
- 5) Finally, the heartbeat symbol will appear and 0 is displayed.



**Note:** If the deflation symbol does not disappear soon, press the air release button to release any air in the arm cuff.

#### 2. Pump the inflation bulb to inflate the arm cuff.

- 1) Inflate the cuff until it is 30 to 40 mmHg above your expected systolic blood pressure value.



ex) If your expected blood pressure is around 140mmHg, inflate the arm cuff to between 170 and 180 mmHg. Inflate the cuff rapidly so that the pressure is reached in about five seconds.

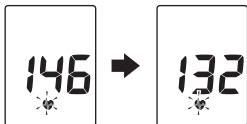
- 2) When the desired pressure has been achieved, release the inflation bulb. Remain still and do not talk.

**Notes:**

- If the reinflation symbol (▲) appears, squeeze the inflation bulb to re-inflate the arm cuff.
- Do not inflate the arm cuff more than necessary.

**3.** Measurement starts.

Measurement starts automatically after you stop inflating the arm cuff. Decreasing numbers appear on the display and the heartbeat symbol flashes.



Remain still and do not talk during measurement.

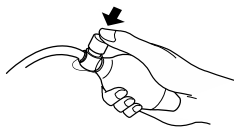
**Note:** To cancel a measurement, press the I/O button to turn off the unit and press the air release button to release the air in the arm cuff.

**4.** Measurement ends.

When the measurement is finished, the deflation symbol flashes on the display. Blood pressure and pulse rate values are displayed.

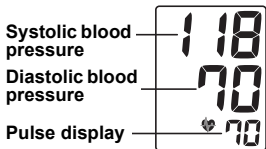


Press the air release button to release the air in the arm cuff until the deflation symbol is no longer displayed.



EN

5. Check the measurement results.



**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.

- 
6. Undo the fastener and remove the arm cuff.
- 
7. Press the I/O button to turn the unit off.

**Note:** If you forget to turn the unit off, it will automatically shut itself off after five minutes.

**Note:** Self-diagnosis of measured results and treatment are dangerous. Please follow the instructions of your doctor.



**Important:**

- If your systolic or diastolic pressure is outside the standard range, the heartbeat symbol will blink when the measurement result is displayed.

Recent research suggests that the following values can be used as a guide to high blood pressure for measurements taken at home.



Systolic Blood Pressure	Above 135 mmHg
Diastolic Blood Pressure	Above 85 mmHg

This criteria is for home blood pressure measurement. For professional office blood pressure measurement criteria, please refer to Chapter 9 “Some Useful Information about Blood Pressure”

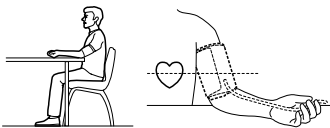
## 4. Quick Reference Guide

Use this as a quick reference guide only. If you are using this device for the first time, please read carefully Chapter 3 of this Instruction Manual.

To help ensure a reliable reading, avoid eating, drinking alcohol, smoking, or exercising for at least 30 minutes before taking a measurement.

**Note:** Remove any tight-fitting clothing from your upper arm.

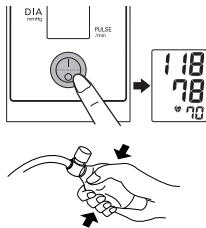
1. Sit on a chair with your feet flat on the floor and place your arm on a table so that the arm cuff will be at the same level as your heart.



2. Apply the arm cuff to your upper arm. The coloured marker should be centred on the inside of your arm and point down the inside of your forearm and is in line with your middle finger.

3. Secure the cuff around your arm using the fabric fastener strip.

4. Press the I/O button to turn the unit on, then pump the inflation bulb to inflate the cuff.  
After measurement is complete and the measurement results are displayed, press the air release button to release any air in the cuff.




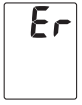


5. Press the I/O button to turn the unit off.



**Note:** Always wait at least 2-3 minutes before taking another blood pressure measurement.

## 5. Handling Errors and Problems

### 5.1 Error Messages

Error Display	Cause	Remedy
	Cuff is under inflated.	Press air release button and restart the measurement with a higher inflation level. Carefully read steps under section 3.3.
	Movement during measurement	Repeat measurement. Remain still and do not talk during measurement. Refer to section 3.3.
	Air tube disconnected.	Insert the air tube securely. Refer to section 3.2.
	Arm cuff not applied correctly.	Apply the arm cuff correctly. Refer to section 3.2.
	Clothing is interfering with the arm cuff.	Remove any clothing interfering with the arm cuff. Refer to section 3.2.
	Air is leaking from the arm cuff.	Replace cuff with new one. Refer to Chapter 7.
	The arm cuff was inflated above 299 mmHg.	Release your hand from the air inflation bulb before the pressure reaches 299 mmHg. Refer to section 3.3.
	A malfunction has occurred.	Contact your OMRON distributor or Customer Services as mentioned on the package.

EN

Error Display	Cause	Remedy
	Pressure is too low.	Press the inflation bulb to inflate the arm cuff until the reinflation symbol goes out. Or, deflate the arm cuff and repeat measurement after checking that the heartbeat symbol (  ) has been displayed. Refer to section 3.3.

## 5.2 Troubleshooting

Problem	Cause	Remedy
The reading is extremely low (or high).	Arm cuff not applied correctly.	Apply the arm cuff correctly. Refer to section 3.2.
	Movement or talking during measurement.	Remain still and do not talk during measurement. Refer to section 3.3.
	Clothing is interfering with the arm cuff.	Remove any clothing interfering with the arm cuff. Refer to section 3.2.
Arm cuff pressure does not rise.	Is the air tube securely connected into the main unit?	Make sure that the air tube is connected securely. Refer to section 3.2.
	Air is leaking from the arm cuff.	Replace the arm cuff with a new one. Refer to Chapter 7.
Arm cuff deflates too soon.	The arm cuff is loose.	Apply the cuff correctly so that it is firmly wrapped around the arm. Refer to section 3.2.
Cannot measure or readings are too low or too high.	Has the arm cuff been inflated sufficiently?	Inflate the cuff so that it is 30 to 40 mmHg above your previous measurement result. Refer to section 3.3.
	Is the air release button being pressed during inflation?	Be careful not to press the air release button during measurement.

EN

<b>Problem</b>	<b>Cause</b>	<b>Remedy</b>
The unit loses power during measurement.	The batteries are empty.	Charge the battery or replace the AAA size batteries with new ones. Refer to section 2.1.
Nothing happens when you press the buttons.	The batteries are empty.	Charge the battery or replace the AAA size batteries with new ones. Refer to section 2.1.
	The batteries have been inserted incorrectly.	Insert the batteries with the correct (+/-) polarity. Refer to section 2.1.
Other problems.	Press the I/O button and repeat measurement. If the problem continues, try replacing the batteries with new ones. If this still does not solve the problem, contact your OMRON retail outlet or distributor.	

## 6. Maintenance and Storage

To protect your unit from damage, please observe the following:

- Do not subject the main unit, cuff and inflation bulb to extreme temperatures, humidity or moisture.
- Do not fold the cuff or tubing tightly.
- Do not disassemble the unit.
- Do not carry out repairs of any kind yourself. If a defect occurs, consult the OMRON distributor or Customer Services as mentioned on the packaging.
- Do not subject the unit to strong shocks or vibrations (for example, dropping the unit on the floor.)
- Do not use volatile liquids to clean the unit. **THE UNIT SHOULD BE CLEANED WITH A SOFT, DRY CLOTH.**
- Do not wash the arm cuff or immerse it in water.
- Use a soft, moistened cloth and soap to clean the arm cuff.
- Do not store the unit where it will be exposed to chemical or corrosive vapours.

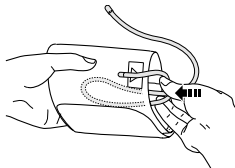


## Storage

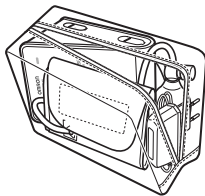
Keep the unit in its storage case when not in use.

1. Unplug the air tube from the air connector.
2. Gently fold the air tube into the arm cuff.

**Note:** Do not bend the air tube excessively.



3. Place the arm cuff, inflation bulb and main unit in the storage case.



## Calibration and Service

- The accuracy of this blood pressure monitor has been carefully tested and is designed for a long service life.
- It is generally recommended to have the unit inspected every two years to ensure correct functioning and accuracy. Please consult your authorised OMRON dealer or the OMRON Customer Service at the address given on the packaging or attached literature.

**Note:** Inspections are normally not covered by guarantee, please check the included guarantee card.



## 7. Optional Parts

### Medium Arm Cuff

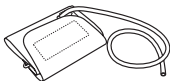
Arm circumference  
22 - 32 cm



CM1-9997578-9

### Large Arm Cuff

Arm circumference  
32 - 42 cm



CL1-9996760-3

### Regular bulb



4997965-1

### Small cuff and bulb combination

Arm circumference 17 - 22 cm



CSB-4997099-9

### Small Arm Cuff

Arm circumference 17 - 22 cm



CS-4997067-0

**Note:** Should you require a small cuff, please ensure that the small cuff and small bulb are used together. They may also be purchased as a combination set.

### Rechargeable battery



1140626-7

### AC Adapter "R"



R Adapter-9997605-0

EN

## 8. Technical Data

<b>Product Description</b>	Manual Inflation Blood Pressure Monitor
<b>Model</b>	OMRON HEM-SOLAR (HEM-4500-SOLE)
<b>Display</b>	LCD Digital Display
<b>Measurement Method</b>	Oscillometric method
<b>Measurement Range</b>	Pressure: 0 mmHg to 299 mmHg Pulse: 40 to 180/min.
<b>Accuracy</b>	Pressure: $\pm 3$ mmHg Pulse: $\pm 5\%$ of display reading
<b>Inflation</b>	Manual by inflation bulb
<b>Deflation</b>	Automatic pressure release valve
<b>Pressure Detection</b>	Capacitive pressure sensor
<b>Power Source</b>	Rechargeable battery 2.4V (600 mAh), AC/DC adapter (6V = 4W), or 2 "AAA" batteries 1.5V (not included)
<b>Battery life</b>	Rechargeable battery: Approximately 280 uses when battery is fully charged when inflated to 170 mmHg at 23°C Approximately 300 charge cycles (when charged at 23°C/65%RH) 2 "AAA" batteries: Approximately 1500 uses with new alkaline batteries when inflated to 170 mmHg at 23°C 10°C to 40°C/ 30 to 85% RH
<b>Operating temperature/ Humidity</b>	-20°C to 60°C/ 10 to 95% RH
<b>Storage temperature/ Humidity/ Air Pressure</b>	700-1060 hPa
<b>Console Weight</b>	Approximately 205 g without batteries
<b>Cuff Weight</b>	Approximately 130 g
<b>Outer Dimensions</b>	Approximately 90 (w) mm $\times$ 75 (h) mm $\times$ 125 (l) mm
<b>Cuff Dimensions</b>	Approximately 146 mm $\times$ 446 mm (Medium cuff: arm circumference 22 to 32 cm)
<b>Cuff material</b>	Nylon
<b>Package Content</b>	Main unit, medium cuff, regular bulb, AC adapter, Rechargeable battery, storage case, instruction manual, guarantee card, blood pressure pass.

**Note:** Subject to technical modification without prior notice.



- This device fulfils the provisions of EC directive 93/42/EEC (Medical Device Directive).
- This blood pressure monitor is designed according to the European Standard EN1060, Non-invasive sphygmomanometers Part 1: General Requirements and Part 3: Supplementary requirements for electromechanical blood pressure measuring systems.
- This OMRON product is produced under the strict quality system of OMRON Healthcare Co. Ltd., Japan. The Core component for OMRON blood pressure monitors, which is the Pressure Sensor, is produced in Japan for assembly.

### **Important information regarding Electro Magnetic Compatibility (EMC)**

With the increased number of electronic devices such as PC's and mobile (cellular) telephones, medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation.

Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the EN60601-1-2 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.

This medical device manufactured by OMRON Healthcare conforms to this EN60601-1-2:2001 standard for both immunity and emissions.

Nevertheless, special precautions need to be observed:

- Do not use mobile (cellular) telephones and other devices, which generate strong electrical or electromagnetic fields, near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation. Recommendation is to keep a minimum distance of 7 m. Verify correct operation of the device in case the distance is shorter.

Further documentation in accordance with EN60601-1-2:2001 is available at OMRON Healthcare Europe at the address mentioned in this instruction manual.

Documentation is also available at [www.omron-healthcare.com](http://www.omron-healthcare.com).

### **Correct Disposal of This Product (Waste Electrical & Electronic Equipment)**



This marking shown on the product or its literature, indicates that it should not be disposed of, with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

This product does not contain any hazardous substances.

## 9. Some Useful Information about Blood Pressure

### What is Blood Pressure?

Blood pressure is a measure of the force of blood flowing against the walls of the arteries. Arterial blood pressure is constantly changing during the course of the heart's cycle.

The highest pressure in the cycle is called the *Systolic Blood Pressure*; the lowest is the *Diastolic Blood Pressure*.

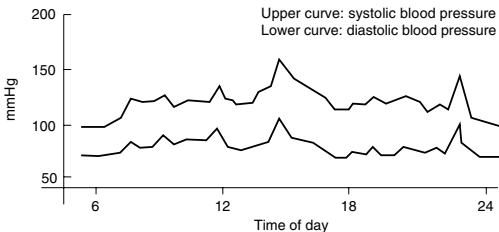
Both pressure readings, the *Systolic* and *Diastolic*, are necessary to enable a doctor to evaluate the status of a patient's blood pressure.

### Why is it a Good Thing to measure Blood Pressure at Home?

Having your blood pressure measured by a doctor can cause anxiety which is itself a cause of high blood pressure. As a variety of conditions affect blood pressure, a single measurement may not be sufficient for an accurate diagnosis.

Many factors such as physical activity, anxiety, or the time of day, can influence your blood pressure. Thus it is best to try and measure your blood pressure at the same time each day, to get an accurate indication of any changes in blood pressure. Blood pressure is typically low in the morning and increases from afternoon to evening. It is lower in the summer and higher in the winter.

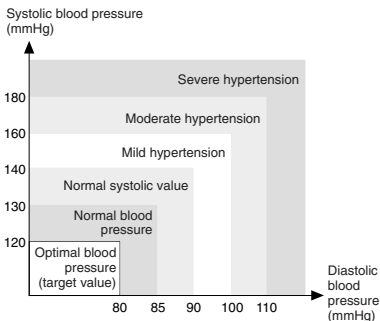
Blood pressure is measured in millimetres of mercury (mmHg) and measurements are written with the systolic pressure before the diastolic e.g. A blood pressure written as 135/85, is referred to as 135 over 85 mmHg.



Example: fluctuation within a day (male, 35 years old)


### **Classification of Blood Pressure by the World Health Organization**

The World Health Organization (WHO) and the International Society of Hypertension (ISH) developed the Blood Pressure Classification shown in this figure.



This classification is based on the blood pressure values measured on people in a sitting position in outpatient departments of hospitals.

**Note:** There is no universally accepted definition of hypotension. However, those having the systolic pressure below 100 mmHg are assumed as hypotensive.

<b>Manufacturer</b> 	<b>OMRON HEALTHCARE CO., LTD.</b> 24, Yamanouchi Yamanoshita-cho, Ukyo-ku, Kyoto, 615-0084 Japan		
<b>EU-representative</b> <table border="1" data-bbox="114 281 291 351"> <tr> <td data-bbox="114 281 197 351">EC</td> <td data-bbox="197 281 291 351">REP</td> </tr> </table>	EC	REP	<b>OMRON HEALTHCARE EUROPE B.V.</b> Kruisweg 577, 2132 NA Hoofddorp, The Netherlands <a href="http://www.omron-healthcare.com">www.omron-healthcare.com</a>
EC	REP		
<b>Production Facility</b>	<b>OMRON DALIAN Co., Ltd.</b> Economic & Technical Development Zone Dalian 116600, China		
<b>Subsidiary</b>	<b>OMRON HEALTHCARE UK LTD.</b> Opal Drive Fox Milne, Milton Keynes MK15 0DG, United Kingdom		
	<b>OMRON Medizintechnik Handelsgesellschaft mbH</b> John-Deere-Str. 81a, 68163 Mannheim, Germany <a href="http://www.omron-medizintechnik.de">www.omron-medizintechnik.de</a>		
	<b>OMRON SANTÉ FRANCE SAS</b> 14, rue de Lisbonne, 93561 Rosny-sous-Bois Cedex, France		

Made in China

## Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>