

OMRON

Automatic Blood Pressure Monitor

Model HEM-7124
Instruction Manual



9200708-6A

Introduction

Thank you for purchasing the OMRON HEM-7124 Automatic Blood Pressure Monitor.

The OMRON HEM-7124 is a compact, fully automatic blood pressure monitor, operating on the oscillometric principle. It measures your blood pressure and pulse rate simply and quickly. For comfortable controlled inflation without the need of pressure pre-setting or re-inflation the device uses its advanced "IntelliSense" technology.

Intended Use

This device is a digital monitor intended for use in measuring blood pressure and pulse rate in adult patient population who can understand this instruction manual with the arm circumference range printed on the arm cuff. The device detects the appearance of irregular heartbeats during measurement and gives a warning signal with the measurement result.

Please read this instruction manual thoroughly before using the device.

Please keep for future reference. For specific information about your own blood pressure, CONSULT YOUR PHYSICIAN.

Important Safety Information

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

(General Usage)

- ▲ DO NOT adjust medication based on measurement results from this blood pressure monitor. Take medication as prescribed by your physician. Only a physician is qualified to diagnose and treat High Blood Pressure.
- ▲ Consult your physician before using the device in pregnancy including pre-eclampsia, or if diagnosed with arrhythmia or arteriosclerosis.
- ▲ Do not use the device on the injured arm or the arm under medical treatment.
- ▲ Do not apply the arm cuff on the arm while being on an intravenous drip or blood transfusion.
- ▲ Consult your physician before using the device on the arm with an arterio-venous (A-V) shunt.
- ▲ Do not use the device with other medical electrical (ME) equipment simultaneously.
- ▲ Do not use the device in the area the HF surgical equipment, MRI, or CT scanner exists, or in the oxygen rich environment.
- ▲ The air tube may cause accidental strangulation in infants.
- ▲ Contained small parts that may cause a choking hazard if swallowed by infants.
- ▲ **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)

- ▲ Always consult your physician. Self-diagnosis of measurement results and self-treatment are dangerous.
- ▲ People with severe blood flow problems, or blood disorders, should consult a physician before using the device, as the arm cuff inflation can cause bruising.
- ▲ Remove the arm cuff if it does not start deflating during the measurement.
- ▲ Do not use this device on infants or persons who cannot express their intentions.
- ▲ Do not use the device for any purpose other than measuring blood pressure.
- ▲ Use only the approved arm cuff for this device. Use of other arm cuffs may result in incorrect measurement results.
- ▲ Do not use a mobile phone or other devices that emit electromagnetic fields, near the device. This may result in incorrect operation of the device.
- ▲ Do not disassemble the monitor or arm cuff. This may cause an inaccurate reading.
- ▲ Do not use in a location with moisture, or a location where water may splash on the device. This may damage the device.
- ▲ Do not use the device in a moving vehicle (car, airplane).
- ▲ Do not take measurements more than necessary. It may cause bruising due to blood flow interference.
- ▲ Consult your physician before using the device if you had a mastectomy.
- ▲ Read "If your systolic pressure is more than 210 mmHg" of this instruction manual, if your systolic pressure is known to be more than 210 mmHg. Inflating to a higher pressure than necessary may result in bruising where the cuff is applied.

(Battery Usage)

- ▲ Do not insert the batteries with their polarities incorrectly aligned.
- ▲ Use only 4 "AA" alkaline or manganese batteries with this device. Do not use other types of batteries. Do not use new and used batteries together.
- ▲ Remove the batteries if the device will not be used for three months or more.

General Precautions

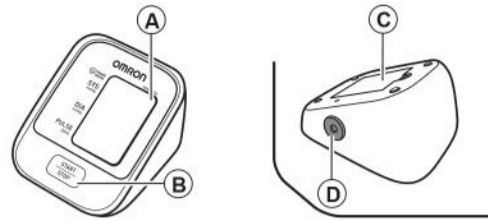
- Do not forcibly crease the arm cuff or the air tube excessively.
- Do not press the air tube while taking a measurement.
- To unplug the air plug, pull on the air plug at the connection with the monitor, not the tube itself.
- Do not drop the monitor or subject device to strong shocks or vibrations.
- Do not inflate the arm cuff when it is not wrapped around your arm.
- Do not use the device outside the specified environment. It may cause an inaccurate reading.
- Read and follow the "Important information regarding Electro Magnetic Compatibility (EMC)" in the EMC information provided with this device.
- Read and follow the "Correct Disposal of This Product" in "6. Specifications" when disposing of the device and any used accessories or optional parts.

1. Know Your Device

Contents:

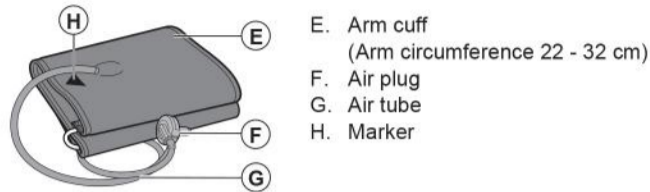
Monitor, arm cuff, instruction manual, battery set

Monitor:



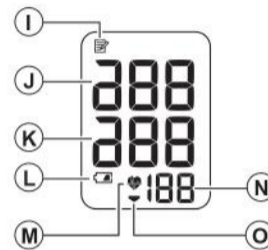
- A. Display
B. START/STOP button
C. Battery compartment
D. Air jack

Arm cuff:



- E. Arm cuff
(Arm circumference 22 - 32 cm)
F. Air plug
G. Air tube
H. Marker

Display:



- I. Memory symbol
J. Systolic blood pressure
K. Diastolic blood pressure
L. Battery symbol (low/depleted)
M. Heartbeat symbol (Flashes during measurement.)
N. Pulse display
O. Deflation symbol
- Note: If your systolic or diastolic pressure is outside the standard range (above 134/84 mmHg) the Heartbeat symbol (♥) will blink. Please refer to Section 3.3.

2013 ESH/ESC Guidelines for the management of arterial hypertension
Definitions of hypertension by office and home blood pressure levels

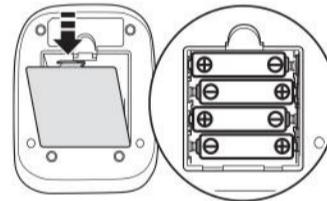
	Office	Home
Systolic Blood Pressure	≥ 140 mmHg	≥ 135 mmHg
Diastolic Blood Pressure	≥ 90 mmHg	≥ 85 mmHg

These are form statistical values for blood pressure.

2. Preparation

2.1 Battery Installation

1. Remove the battery cover.



2. Insert 4 "AA" batteries as indicated in the battery compartment.

3. Replace the battery cover.

Notes:

- When the depleted battery symbol (□) appears on the display, turn the monitor off and remove all the batteries. Replace with 4 new batteries at the same time. Long life alkaline batteries are recommended.
- The measurement values continue to be stored in memory even after the batteries are replaced.
- The supplied batteries may have a shorter life.

▲ Disposal of used batteries should be carried out in accordance with the national/local regulations for the disposal of batteries.

3. Using the Device

3.1 Applying the Arm Cuff

Remove tight-fitting clothing or tight rolled up sleeve from your left upper arm. Do not place the arm cuff over thick clothes.

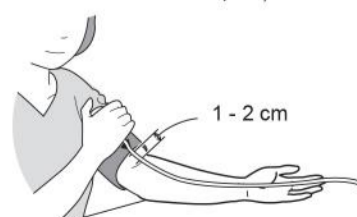
1. Insert the air plug into the air jack securely.



2. Wrap the arm cuff firmly in place around your left upper arm.



The bottom edge of the arm cuff should be 1 to 2 cm above the elbow. Air tube is on the inside of your arm and aligned with your middle finger.



3. Secure closed with the fabric fastener.



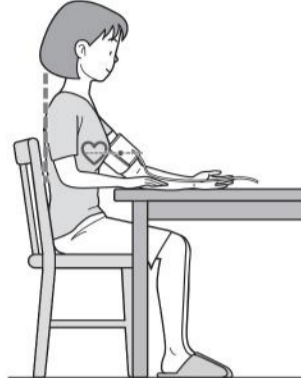
Notes:

- When you take a measurement on the right arm, the air tube will be at the side of your elbow. Be careful not to rest your arm on the air tube.
- The blood pressure can differ between the right arm and the left arm, also the measured blood pressure values can be different. OMRON recommends to always use the same arm for measurement. If the values between both arms differ substantially, please check with your physician which arm to use for your measurements.

3.2 How to Sit Correctly

To take a measurement, you need to be relaxed and comfortably seated, under comfortable room temperature. Avoid bathing, drinking alcohol or caffeine, smoking, exercising or eating 30 minutes before taking a measurement.

- Sit on a chair with your legs uncrossed and your feet flat on the floor.
- Sit upright with your back straight.
- Sit with your back and arm being supported.
- The arm cuff should be placed on your arm at the same level as your heart.



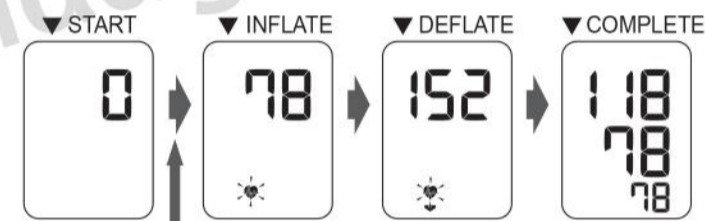
3.3 Taking a Measurement

Notes:

- To stop a measurement, press the START/STOP button once to release the air in the arm cuff.
- Remain still while taking a measurement.

1. Press the START/STOP button.

The arm cuff will start to inflate automatically.



If your systolic pressure is more than 210 mmHg

After the arm cuff starts to inflate, press and hold the START/STOP button until the monitor inflates 30 to 40 mmHg higher than your expected systolic pressure.

Notes:

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

2. Remove the arm cuff.

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

The monitor automatically stores the measurement result in its memory. It will automatically turn off after 2 minutes.

Note: Wait 2-3 minutes before taking another measurement. Waiting between measurements allows the arteries to return to the condition prior to taking a measurement.

▲ Always consult your physician. Self-diagnosis of measurement results and self-treatment are dangerous.

3.4 Using the Memory Function

The monitor automatically stores the last measurement values (blood pressure and pulse rate).

To View the Measurement Values Stored in Memory

1. Press and hold the START/STOP button for more than 5 seconds.

The last measurement value is displayed along with the memory symbol.



Notes:

- If your systolic or diastolic pressure is outside the standard range, the heartbeat symbol will blink when the measurement result is displayed.
- If there are no measurements results stored in the memory, the screen to the right is displayed.

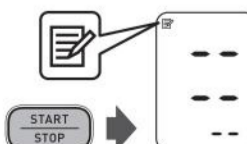


2. Press the START/STOP button to turn the monitor off.

It will automatically turn off after 2 minutes.

To Delete the Values Stored in Memory

Press and hold the START/STOP button for more than 15 seconds.



4. Error Messages and Troubleshooting

4.1 Error Messages

Error Display	Cause	Solution
	The batteries are low.	Recommend to replace the batteries with new ones ahead of time. Refer to section 2.1.
	The batteries are depleted.	Replace 4 batteries with new ones at once. Refer to section 2.1.
E1	Air plug disconnected.	Insert the plug securely. Refer to section 3.1.
	Arm cuff is applied too loosely.	Apply the arm cuff tighter. Refer to section 3.1.
	Air is leaking from the arm cuff.	Replace the cuff with a new one. Refer to section 5.3.
E2	Movement during measurement and the arm cuff has not been inflated sufficiently.	Repeat measurement. Remain still and do not talk during measurement. Refer to section 3.3.
		If "E2" appears repeatedly, inflate the cuff manually until it is 30 to 40 mmHg above your previous measurement result. Refer to section 3.3.
E3	The arm cuff was inflated exceeding the maximum allowable pressure, and then deflated automatically.	Do not touch the arm cuff and/or bend the air tube while taking a measurement. Do not inflate the arm cuff more than necessary. Refer to section 3.3.
E4	Movement during measurement.	Repeat measurement. Remain still and do not talk during measurement. Refer to section 3.3.
E5	Clothing is interfering with the arm cuff.	Remove any clothing interfering with the arm cuff. Refer to section 3.1.
Er	Device error.	Contact your local OMRON representative.

4.2 Troubleshooting

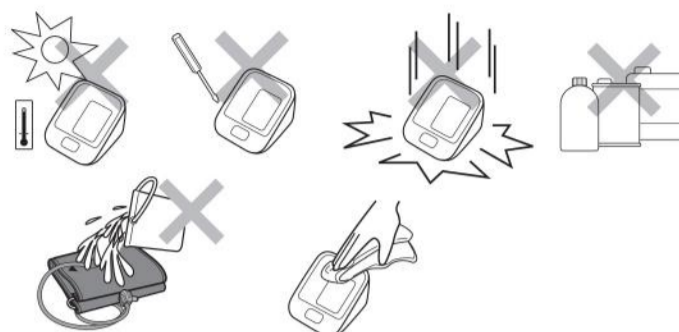
Problem	Cause	Solution
The measurement result is extremely high (or low).	Arm cuff is applied too loosely.	Apply the arm cuff tighter. Refer to section 3.1.
	Movement or talking during measurement.	Remain still and do not talk during measurement. Refer to section 3.3.
	Clothing is interfering with the arm cuff.	Remove any clothing interfering with the arm cuff. Refer to section 3.1.
Arm cuff pressure does not rise.	The air connector is not securely connected into the air jack.	Make sure that the air tube is connected securely. Refer to section 3.1.
	Air is leaking from the arm cuff.	Replace the arm cuff with a new one. Refer to section 5.3.
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 3.1.
Cannot measure or the results are too low or too high.	The arm cuff has not been inflated sufficiently.	Inflate the cuff so that it is 30 to 40 mmHg above your previous measurement result. Refer to section 3.3.
Nothing happens when you press the buttons.	The batteries are depleted.	Replace the 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.	<ul style="list-style-type: none"> Press the START/STOP button and repeat measurement. Replace the batteries with new ones. If the problem continues, contact your local OMRON representative. 	

5. Maintenance and Storage

5.1 Maintenance

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

- Store the device and the components in a clean, safe location.
- Do not use any abrasive or volatile cleaners.
- Do not wash the device and any components or immerse them in water.
- Do not use petrol, thinners or similar solvents to clean the device.



- Use a soft and dry cloth, or a soft and moistened cloth and neutral soap to clean on the monitor and the arm cuff.
- Changes or modification not approved by the manufacturer will void the user warranty. Do not disassemble or attempt to repair the device or components. Consult your local OMRON representative.

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 device inspected every 2 years to ensure correct functioning and accuracy. Please consult your local OMRON representative.

5.2 Storage

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

Note: Do not bend or crease the air tube excessively.



Do not store the device in the following situations:

- If the device is wet.
- Locations exposed to extreme temperatures, humidity, direct sunlight, dust or corrosive vapours such as bleach.
- Locations exposed to vibrations, shocks or where it will be at an angle.

5.3 Optional Parts

Arm circumference
22 - 32 cm



Medium Cuff
HEM-CR24

Arm Cuff

Arm circumference
22 - 42 cm



Wide Range Soft Cuff
HEM-RML31

6. Specifications

Product description	Automatic Blood Pressure Monitor
Model	HEM-7124
Display	LCD Digital Display
Measurement method	Oscillometric method
Measurement range	Pressure: 0 to 299 mmHg Pulse: 40 to 180 beats/min.
Accuracy	Pressure: ± 3 mmHg Pulse: ± 5 % of display reading
Inflation	Fuzzy-logic controlled by electric pump
Deflation	Automatic pressure release valve
Memory	Last Measurement
Rating	DC6 V 4 W
Power source	4 "AA" batteries 1.5 V
Battery life	Approx. 1000 measurements (using new alkaline batteries)
Applied part	= Type BF
Protection against electric shock	Internally powered ME equipment
Operating temperature/humidity	+10 to +40 °C / 30 to 85 % RH
Storage temperature/humidity/air pressure	-20 to +60 °C / 10 to 95 % RH / 700 to 1060 hPa
IP classification	IP 20
Weight	Monitor: Approx. 250 g without batteries Arm cuff: Approx. 130 g
Outer dimensions	Monitor: Approx. 103 (w) mm x 80 (h) mm x 129 (l) mm Arm cuff: Approx. 145 mm x 466 mm
Cuff circumference	22 to 32 cm
Cuff/ Tube material	Nylon, polyester, polyvinyl chloride
Package contents	Monitor, arm cuff, instruction manual, EMC information, battery set

Notes:

- These specifications are subject to change without notice.
- In the clinical validation study, the 5th phase was used on 85 subjects for determination of diastolic blood pressure.
- This device is clinically investigated according to the requirements of ISO 81060-2:2013.
- This device has not been validated for use on pregnant patients.
- IP classification is degrees of protection provided by IEC 60529.

CE0197

- 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.

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 product 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 return 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.

Manufacturer	OMRON HEALTHCARE Co., Ltd. 53, Kunotsubo, Terado-cho, Muko, KYOTO, 617-0002 JAPAN
EU-representative	OMRON HEALTHCARE EUROPE B.V. Scorpius 33, 2132 LR Hoofddorp, THE NETHERLANDS
Asia Pacific HQ	OMRON HEALTHCARE SINGAPORE PTE LTD. 438A Alexandra Road, #05-05/08 Alexandra Technopark, Singapore 119967 www.omronhealthcare-ap.com
Production facility	OMRON HEALTHCARE MANUFACTURING VIETNAM CO., LTD. Binh Duong Province, VIETNAM