Semi-automatic blood pressure monitor

© by OMRON Healthcare, M1-Int-5-2

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Dear Customer

Thank you for purchasing an OMRON product. You can be sure you have made a wise choice. By buying the OMRON M1 blood pressure monitor, you have chosen a high-quality, innovative instrument for health monitoring. During its development, particular value was placed upon reliability and easy, convenient handling. Before using for the first time, please read through this manual carefully. If you should still have any questions regarding its use, please contact the OMRON customer service at the given address on the packaging. They will be pleased to help you.

Best wishes for a healthy future.
Yours sincerely,

OMRON HEALTHCARE GmbH

Regular blood pressure monitoring is essential for the prevention, the control and the therapy of hypertension. It helps also to support the doctors’ work.

The World Hypertension League is a worldwide association of experts specialising in hypertension. The World Hypertension League recommends regular blood pressure monitoring by doctors and patients.

As the world’s leading manufacturer OMRON provides a range of products for regular monitoring.

### Important instructions for obtaining meaningful readings

- **Important:** Blood pressure measurement is not suitable in cases of serious arteriosclerosis (hardening of the arteries).
- The pulse display is not suitable for monitoring the frequency of cardiac pacemakers.
- If you suffer from disorders of heart rhythm, known as arrhythmia, you should only use this blood pressure monitor in consultation with your doctor. In certain cases the oscillometric measuring method can produce incorrect readings.
- Pregnant women should only measure their own blood pressure in consultation with their doctor, since the readings may be changed by pregnancy.
- You should avoid eating, drinking (alcohol), smoking and sports before measuring your blood pressure, as this could affect your blood pressure level.
- **Don’t move, don’t speak** while measurement is being taken.
- Make yourself comfortable in a chair and relax before each reading.
- We recommend that you monitor your blood pressure twice a day, in the morning after getting up and in the evening after work, or as advised by your doctor.
- Please remember: Self-measurement is not the same as medical treatment! You should never change the dose of medicines prescribed by your doctor.

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The World Hypertension League recommends regular blood pressure monitoring.
OMRON M1 is a compact, semi-automatic blood pressure monitor. It measures your blood pressure and pulse quickly and simply using the oscillometric measuring method.

OMRON is the world leading manufacturer of blood pressure monitors with the goal to always fulfill the need for reliable regular monitoring.

**Your blood pressure monitor: the benefits**

- **Cuff**
- **Green band**
- **LCD-Display**
- **ON/OFF (O/I) button**
- **Pump**
- **Air release valve button**
- **Battery compartment (downside)**

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**Measuring your blood pressure**

1. **Prepare the unit**
   - Open the battery compartment at the downside of your device and insert the battery. Ensure that battery contacts (+/-) are correct.
   - Connect the air tubes to the sockets.

2. **Switching on the unit**
   - When you press the (O/I) button all the symbols on the display light up for approximately two seconds in order to check the display.
   - Then all the symbols disappear and the air release symbol (●) begins to flash.
   - When preparations for measurement are complete the (◇) symbol appears in the display to indicate that the monitor is ready.
Fitting the cuff and Start

Wrap the cuff around your bare left arm so that the green colored band (indicating the centre of the bladder) is positioned 2 – 3 cm above your elbow joint on the inside of your arm (see picture).

**Important!** If you push up your sleeve, ensure it does not constrict the blood flow in your arm. Close the cuff with the fabric fastener. The green colored band of the cuff must cover the brachial artery.

The standard-sized cuff is designed for an arm circumference of 22 – 32 cm. (For oversized cuffs see page 12).

Lay your arm on a table (e.g. a cushion) with the palm of your hand facing upwards so that the cuff is approximately at heart level. In this way you ensure that the blood pressure measurement obtained is neither artificially high (measurement below heart level) or low (measurement above heart level).

Make sure that the cuff-bladder is not filled with air before you start pumping.

Use the bulb pump to inflate the cuff to approximately 40 mmHg above the expected systolic blood pressure.

The cuff should be inflated briskly in 5 – 10 seconds. Don’t pause during pumping.

The measurement starts

Stop pumping when the required pressure is reached. The air release valve automatically reduces the cuff pressure as the value on the display decreases.

As soon as the monitor detects the pulse beat, the symbol \( \bigcirc \) begins to flash. The displayed pressure of the cuff continues to decrease.

When the pulse beat can no longer be detected while the cuff pressure is decreasing, the systolic and diastolic blood pressure levels (upper value and lower value) are displayed. The pressure symbol \( \bigcirc \) begins to flash. The blood pressure and pulse rate are then displayed alternately.

Press the air release valve and reduce the cuff pressure further until the pressure drop symbol \( \bigcirc \) ceases to blink. When the air has been released completely the \( \bigcirc \) symbol appears on the display.

The blood pressure reading is now complete. The values will continue to be displayed after you have removed the cuff. Only the original air release valve (OMRON-standard) should be used.
### Failure and their possible causes

<table>
<thead>
<tr>
<th>Failure and possible causes</th>
<th>Rectification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorrect measurement is indicated by <strong>E</strong> or <strong>EE</strong></td>
<td>1. Repeat the measurement calmly and without rushing. Do not move your arm and refrain from speaking.</td>
</tr>
<tr>
<td>1. A correct result could not be obtained due to too much movement of the body or arm.</td>
<td>2. Check whether the cuff has put on properly and repeat the measurement.</td>
</tr>
<tr>
<td>2. The cuff is not fitted correctly.</td>
<td>3. Relieve the constriction by removing the article of clothing.</td>
</tr>
<tr>
<td>3. Your clothing has constricted your blood flow.</td>
<td>4. Release the air from the cuff by pressing the valve and restart the measurement. Increase the pressure when inflating the cuff by approx. 40 mmHg.</td>
</tr>
<tr>
<td>4. The cuff has not been inflated sufficiently.</td>
<td>5. Repeat the measurement with less pressure.</td>
</tr>
<tr>
<td>5. The cuff has been over-inflated.</td>
<td></td>
</tr>
<tr>
<td>The pressure does not increase although you are pumping firmly. The cuff was inflated before the symbol (○) was indicated.</td>
<td>Check whether the air tube is connected properly to the socket. Press the air release valve until the symbol (●) goes out and (○) appears, restart the reading.</td>
</tr>
<tr>
<td>The blood pressure levels are extremely low or high, or unlikely values are displayed.</td>
<td>Please follow the instructions on pages 5 – 7 and repeat the measurement.</td>
</tr>
<tr>
<td>The display does not light up when the (on) button is pressed.</td>
<td></td>
</tr>
<tr>
<td>1. The batteries are exhausted.</td>
<td>1. Check the batteries and, if necessary, fit new batteries.</td>
</tr>
<tr>
<td>2. The battery +/- polarity has been reversed.</td>
<td>2. Replace the batteries according to the correct +/- polarity.</td>
</tr>
<tr>
<td>3. The battery contacts are dirty.</td>
<td>3. Clean the batteries contact with a dry cloth.</td>
</tr>
<tr>
<td>□ The batteries are weak or exhausted.</td>
<td>Fit new batteries.</td>
</tr>
</tbody>
</table>
OMRON M1

Maintenance and storage

- For cleaning the monitor only use a soft, lightly moistened cloth. Do not use petroleum spirits, thinners or similar solvents!
- Stains on the cuff can be carefully removed using a moist cloth and soapy water. Do not wash the cuff or make it wet!
- Protect your monitor against vibrations and do not leave it in a place where temperatures are extremely low (below -20 °C) or extremely high (above 60 °C) or with high humidity (+85%).
- Do not use your monitor at very low temperatures (below 10 °C) or very high temperatures (above 40 °C).
- Do not fold the cuff or air tube together too tightly and do not crease them.
- Do not carry out repairs of any kind yourself. If a defect occurs, consult the OMRON Customer Service or seek the advice of your surgical appliance stockist or pharmacist.
- The well confirmed accuracy of this blood pressure monitor is designed to last a long life.
- In order to increase the lifetime of the battery take it out when you store the device for a longer period (2 months).
- It is generally recommended to reconfirm the function and accuracy every 2 years by your OMRON distributor (address see attached literature).

Technical data

This device fulfils the provisions of the 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.

- Model: OMRON M1
- Display: LCD digital display
- Measurement Range:
  - Pressure: 0 to 280 mmHg
  - Pulse: 40 – 200/min.
- Accuracy/Calibration:
  - Pressure: ±3 mmHg or 2% of reading
  - Pulse: ±5% of reading
- Inflation:
  - Manual by inflation bulb
- Deflation:
- Rapid Pressure Release:
- Pressure Detection:
- Power Source:
- Battery Life:
- Operating Temperature:
  - 10 °C to 40 °C
  - 30 to 85% RH
- Storage Temperature:
  - -20 °C to 60 °C
- Console Weight:
  - Approximately 170 g (including battery)
- Outer Dimensions:
  - Approximate 12.5 (W) x 8.5 (D) x 6.0 (H) cm
- Cuff Range:
  - For arms 22 to 33 cm circumference
- Accessories:
  - Cuff, Type M (CR13); inflation system, instruction manual

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

Manufacturer: OMRON Matsusaka Co. Ltd., Japan

CE 0197
OMRON devices are especially designed for regular blood pressure monitoring. OMRON therefore has direct contact with medical specialists and takes advice.

**OMRON spare parts**

Normal cuff, 14 x 48 cm
Arm circumference 22 – 32 cm

Extra large cuffs, 16 x 65 cm
Arm circumference 32 – 42 cm