

Introduction

The OMRON M7 measures your blood pressure and pulse simply and quickly from the arm, without the use of an inflation bulb or stethoscope. The measurement values are stored in the memory of the OMRON M7. The OMRON M7 includes the standard cuff for arm circumferences ranging from 22 to 42 cm.

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Digital Automatic Blood Pressure Monitor



Instruction manual

page



1 How to obtain meaningful blood pressure readings

General

- This manual contains important information for safe use of the OMRON M7. Follow this manual to prevent wrong measurement values, injury and damages.
- The OMRON M7 is not suitable for measuring the frequency of cardiac pacemakers.
- Consult your doctor during pregnancy, arrhythmia and arteriosclerosis as this can influence the measurement.
- Avoid eating, drinking (alcohol), smoking, doing sports and taking a bath before measurement.
- Be calm and relaxed before and during measurement.
- You should never change the dose of medicines prescribed by your doctor.
- Store the OMRON M7 in a dry, closed place with a temperature between -20°C and 60°C.
- Remove the batteries if you do not intend to use the OMRON M7 for 3 months or more.

Tips for use

- Check your blood pressure at least twice a day (before breakfast, after work).
- Use the OMRON M7 only for yourself.
- Measure your blood pressure before taking an antidepressant.

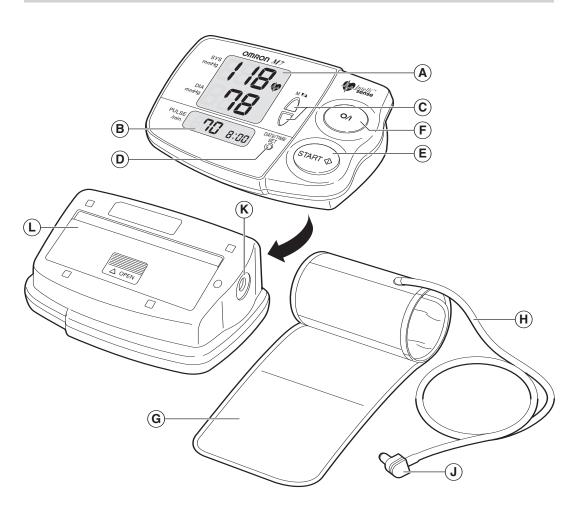
- Do not discard the air plug.
- When using the AC adapter, keep the batteries in the main unit.
- Use both the AC adapter and the batteries to extend battery life.
- Do not measure your blood pressure while you are in a vehicle.
- Always measure on the same arm.
- Wrap the cuff around your arm before start of measurement.

Caution

- Only the OMRON M7 cuff can be used on this device. Other cuffs must not be attached.
- Operating temperature between 10°C and 40°C.
- Operating environment must be free from excessive vibrations, shocks, electrical noise, corrosive gas, etc.
- Stay out of sunlight during measuring.
- Keep portable phones 5 meters away during measurement.
- Do not wrap the cuff around any object other than your arm.
- Do not fold or crush the cuff and the air tube.
- Do not drop the OMRON M7.



2 Overview



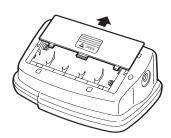
- A Display blood pressure
- **B** Display pulse, date and time
- C Memory buttons (▼/▲)
- **D** Date/time setting button
- **E** Start button
- F On/off button
- **G** Cuff
- H Air tube

- J Air plug
- K Air jack
- **L** Battery compartment

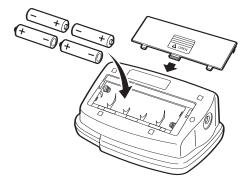


3 Preparation

3.1 Insert batteries

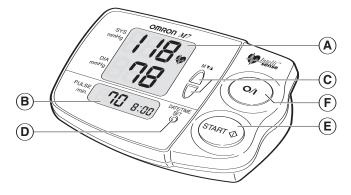


1 Slide off the battery cover.



2 Insert four batteries as indicated in the battery compartment and close compartment.
Caution! Use four identical 1.5V batteries type AA!

3.2 Control functions



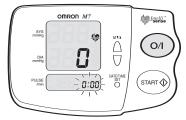
- A Display blood pressure
- **B** Display pulse, date and time
- C Memory buttons (▼/▲)
- **D** Date/time setting button
- E Start button
- F On/off button



3.3 Set date and time

At the first time you set the OMRON M7 the factory settings (12.00 - 1/1 - 2003) will be displayed. Another time the actual date and time will be displayed.

Note: use the grey-coloured button to carry out the instruction.

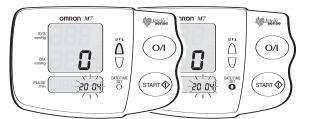


1 Press on/off button.



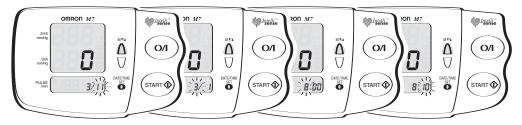
2 Press date/time setting button for 2 seconds to proceed to year setting.

Note: use a thin stick to press date/time settings button.



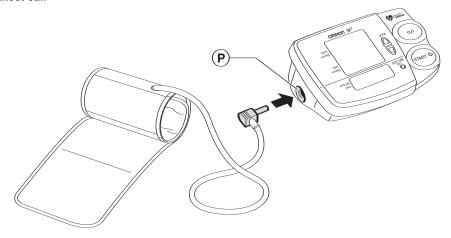
3 Press memory buttons (▼/▲) to set the year.
Note: keep memory button down to fast forward.

Note: if display reaches 2030, it will return to 2003. Press date/time setting button to proceed to date setting.



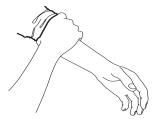
4 Use memory buttons (▼/▲) and date/time setting button to set successively month, hour and minutes.

3.4 Connect cuff



P Air jack

3.5 Fit cuff

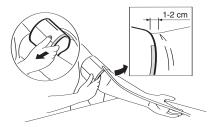


1 Bare your arm.

Caution! Push up your sleeve: avoid constricting the blood flow!

Caution! Do not inflate the cuff when not wrapped around the arm!

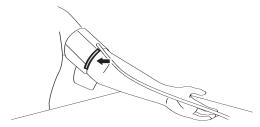
1 Insert air plug in air jack.



2 Open the cuff with right hand and cover the cuff over your left upper arm.

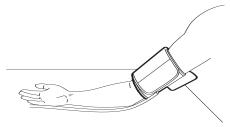
OMRON

M7 English

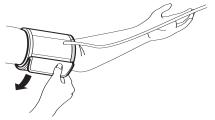


Note: keep marked edging on the inside of your elbow joint.

Note: keep the tube even with your middle finger.



Note: for right arm use, keep the tube under your elbow and parallel with your little finger.



3 Hold the cuff, wrap it around your arm.
Caution! Be sure the cuff fits closely; do not pinch your arm!

4 Operation

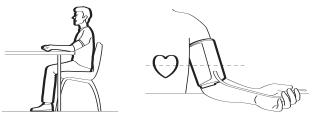
4.1 Measurement



- Q Systolic blood pressure in mmHg.
- R Diastolic blood pressure in mmHg.
- **S** Heart symbol: flash measurement takes place, light up measurement finished.
- T Battery exhausted: batteries are weak/exhausted.
- **U** Inflation: cuff inflates and measurement starts.
- V Deflation: measurement finished and cuff deflates.
- W Memory: stored measurements displayed.
- **X** Average: average value of last 3 measurements displayed.
- Y Pulse: heartbeats per minute.
- Z Date/time.



Caution! Allow an interval of at least three minutes between two successive measurements!



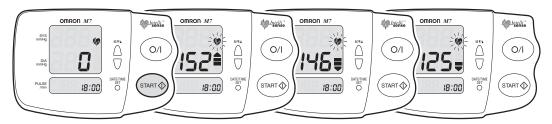
- 1 Sit comfortably at a table with your feet flat on the floor and rest your arm on the table.
- 2 Relax your arm and turn your palm upward.Caution! Cuff at heart height during measurement!



3 Press on/off button.

Caution! Wait for zero and the heart symbol to continue!

Caution! Do not remove cuff during inflation!



4 Press start button and release within 3 seconds.

Note: the unit inflates the cuff. If required, the unit automatically increases the pressure by 30 mmHg. **Caution**! Sit still, do not move or speak!



Note: Wait for automatic deflation.

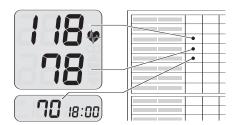


5 If your systolic blood pressure is known to be more than 220 mmHg, press and hold the start button until the monitor inflates 30 or 40 mmHg higher than your estimated systolic blood pressure.
Caution! Do not apply more pressure than necessary. The monitor will not inflate above the 300 mmHg!

4.2 Read display

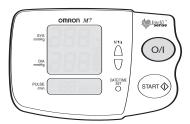


1 Read values of blood pressure and pulse from displays.



2 Note values in your personal blood pressure pass.

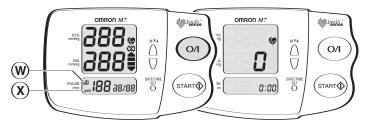




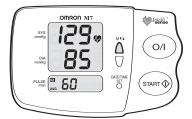
3 Press on/off button to turn off power.
Note: power automatically switches off after 5 minutes.

5 Memory

5.1 Recall previous values



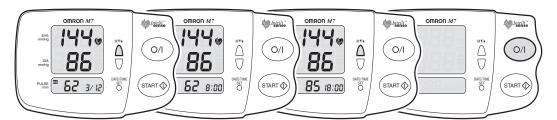
- W Memory: stored measurements displayed.
- X Average: average value of the last 3 measurements displayed.
- 1 Press on/off button to turn on power.
 Caution! Wait for zero and the heart symbol to continue!



2 Press memory button (▲).

 $\textbf{Note} \hbox{: display shows average value of last 3 blood pressures and heartbeats}.$





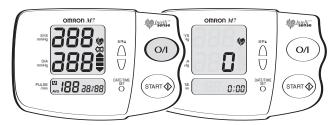
3 Press memory buttons (V/▲) for latest and previous values.

Press on/off button to turn off power.

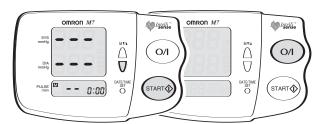
Note: display shows alternately date and time of measurement.

Note: keep memory buttons (∇/\triangle) pushed to fast forward.

5.2 Erase memory



1 Press on/off button to turn on power.
Caution! Wait for zero and the heart symbol to continue!



2 Press memory button (▼) and start button simultaneously to erase memory.

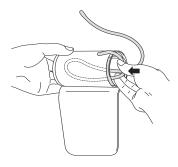
Note: press memory button (▼) first because the start button will start inflation.

Caution! All stored values will be erased!

Press on/off button to turn off power.



6 Storage



Slightly fold air tube and insert in cuff.
 Note: do not disconnect air tube.



2 Put cuff and main unit in storage case.

- Remove the batteries if you do not intend to use the OMRON M7 for 3 months or more.
- Store the OMRON M7 in the carton in a dry, closed place with a temperature between -20°C and 60°C.



7 Error: causes and rectifications

| Indication | Error | Cause | Rectification |
|---------------------|--|---|--|
| EE. | Incorrect inflation | Movement | Repeat measurement. If necessary, hold start button to inflate manually |
| E * | Correct measurement not possible | Movement, sound Incorrect fastening cuff Operation start button for more than 3 seconds | Follow instructions, repeat measurement |
| | Cuff leaks air | Fit new cuff | |
| E * | | Cuff pressure too high | Follow instructions, repeat measurement |
| Er | Abnormal memory function | | Consult your OMRON retail outlet or distributor |
| | Low voltage | Batteries weak/exhausted | Fit four new identical 1.5V batteries type AA, follow instructions |
| Display empty | | AC adapter disconnected | Connect AC adapter correctly, follow instructions |
| No data in memor | y | Unplugged AC adapter without batteries | Fit four new identical 1.5V batteries type AA |
| Inexplicable values | S | Wrong working method | Follow instructions, repeat measurement |



8 Maintenance and spare parts

Cleaning instruction

- Use a soft, dry cloth to wipe stains from the OMRON M7.
- Use a soft, slightly moistened cloth and soap to clean main unit and cuff of the OMRON M7.
 Caution! Do not use petrol, thinners or similar solvents!

Caution! Do not wash the cuff!

 Do not carry out repairs of any kind yourself. If a defect occurs, consult your OMRON retail outlet or distributor as mentioned on the packaging.

Calibration

 It is recommended to have the OMRON M7 inspected every two years to ensure correct function and accuracy. Consult your OMRON retail outlet or OMRON distributor as mentioned on the packaging.

Replace cuff

• Remove the air plug to re-use it with a new cuff.

Replace batteries

 Remove the battery out of the battery compartment and insert four new identical 1.5V batteries type AA.

Spare parts

 Due to high company quality standards, OMRON considers the main unit as a non-serviceable part because of the need for proper calibration after replacement of high tech components.

Attention! Disposal of batteries and the OMRON M7 should be carried out in accordance with the national regulations for the disposal of electronic products.

9 Technical data

Product name

Model Display

Measurement range

Accuracy Inflation Deflation

Pressure detection

Memory Power supply

Battery life
Operating temperature / Humidity

Operating environment Storage temperature / Humidity

Weight

Outer dimensions

Accessories Optional parts Note



Manufacturer

EU-representative

OMRON Digital Automatic Blood Pressure Monitor

M7

Digital LCD

Pressure: 0 - 299 mmHg / Pulse: 40 - 180/minute Pressure: ± 3 mmHg / Pulse: ± 5% of display reading

Automatic inflation (Fuzzy control)

Automatic air release by controlled air release valve

Electrostatic capacity pressure sensor

90 Measurements

4 x 1.5V batteries type AA / AC adapter (optional part)

New batteries will last for approximately 300 measurements

+10°C to +40°C / 30% to max. 85% relative humidity

Free from excessive vibrations, shocks, magnetic fields, electrical noise, etc.

-20°C to +60°C /10% to max. 95% relative humidity

Main unit approximately 400 g, excluding batteries, cuff approximately 130 g Approximately 165 mm (W) x73 mm (H) x 110 mm (D), cuff approximately

150 mm (W) x 582 mm (L) arm circumference 22 cm to 42 cm

Cuff model HEM-CUFF-P, hard case, instruction manual, guarantee card, blood pressure pass

AC adapter, extended tube

Subject to technical modification without prior notice



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OMRON HEALTHCARE Co., Ltd.

24, Yamanouchi Yamanoshita-cho, Ukyo-ku, Kyoto, 615-0084 Japan OMRON HEALTHCARE EUROPE B.V., Kruisweg 577, NL-2132 NA Hoofddorp

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.



10 General information about blood pressure

Blood circulation

The blood circulation is responsible for supplying the body with oxygen. Blood pressure is the pressure exerted on the arteries.

The systolic blood pressure value (higher pressure or top value) represents the blood pressure produced by contraction of the heart muscle.

The diastolic blood pressure value (lower pressure or lower value) represents the blood pressure produced by relaxation of the heart muscle.

Classification of blood pressure

The World Health Organisation (WHO) and the International Society of Hypertension (ISH) developed the blood pressure classification. This classification is based on the blood pressure values measured while sitting on a chair in the outpatient department of a hospital.

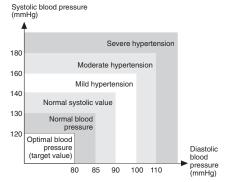
Health and blood pressure

The incidence of hypertension increases with age. In addition, a lack of exercise, excess body fat and high levels of cholesterol (LDL), which sticks to the inside in blood vessels, reduces elasticity of these vessels. Hypertension accelerates arterial sclerosis which can lead to very serious conditions such as stroke and myocardial infarction. For these reasons it is very important to know whether the blood pressure is within a healthy range. Blood pressure fluctuates from minute to minute, throughout the day. Therefore it is essential to take regular measurements to help you identify an average blood pressure.

Symptoms of high blood pressure

High blood pressure can go unnoticed for a long time, since it does not cause noticeable symptoms. The following are all possible causes of abnormally high blood pressure:

- Overweight
- High cholesterol level



According to the blood pressure classification by the WHO/ISH.



- Smoking
- Excessive alcohol consumption
- · Stress and emotional upset
- Excessive consumption of salt
- · Lack of physical exercise
- · Genetic/hereditary predisposition
- Underlying illnesses, such as kidney disorders or endocrine disturbance

Blood pressure measurement

Measuring your blood pressure daily enables you to recognize high blood pressure at an early stage and obtain medical treatment.

The oscillometric method of measurement determines your blood pressure by measuring the pressure fluctuations caused by the pulse waves.

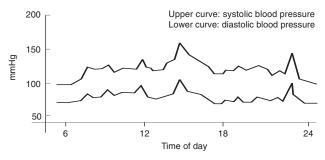
Since your blood pressure fluctuates within a day (see graphic next page), you should always measure it at the same time each day to ensure that the measurements are genuinely comparable. At the doctor's surgery, nervousness and tension may

cause your blood pressure to be higher than in familiar circumstances at home. This is known as "White Coat Hypertension".

Treatment of high blood pressure

If your blood pressure reaches upper values of 140 - 160 mmHg and lower values of 90 - 95 mmHg in repeated measurements over several days, you should consult your doctor for detailed medical examination. You can assist the treatment prescribed by your doctor in the following ways:

- Loose weight and lower your cholesterol level by reducing the calories and fat in your diet. Cut down on animal fats and eat more fruit and vegetables.
- Reduce the consumption of alcohol.
- Reduce the intake of salt: the German League for Combating High Blood Pressure recommends six grams of salt per day (i.e. one teaspoon) on average.
- · Stop smoking.
- Take regular exercise.
- Monitor your blood pressure.



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