Dear Customer

Thank you for purchasing this OMRON product. OMRON products are known for their reliability and advanced technology. By buying this OMRON 637IT wrist blood pressure monitor with USB computer interface and position sensor you have chosen for a high quality and innovative instrument. We hope that you will be fully satisfied with your new blood pressure monitor.

Please take your time to read this instruction manual carefully before using it for the first time.

If you still have questions please contact your OMRON dealer or the distributor as mentioned on the packaging. They will be pleased to help you.

We wish you a healthy future!
Notes on Safety

Important instructions for obtaining meaningful readings
Avoid eating and drinking (alcohol), smoking, sport and taking medicines before measuring your blood pressure as this could affect your blood pressure level.

Before you start sit comfortably on a chair and relax. It is recommended to check your blood pressure at least twice a day, in the morning after getting up and in the evening after work, or as advised by your doctor.

Do not move and do not speak while the measurement is being taken. Avoid measuring your blood pressure while you are in a moving vehicle.

Allow an interval of at least three minutes between readings. Otherwise congestion of blood might occur and distort the readings. Always remove the cuff between readings.

Bare your wrist and take off your watch and jewellery before applying the cuff. Do not constrict the flow of your blood if you push up your sleeve.

Cautions
Blood pressure measurement is not suitable in case of serious arteriosclerosis (hardening of the arteries).

The pulse rate indicator 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 oscillometric measurement methods 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 the pregnancy.

Please remember: Self-measurement is not the same as medical treatment! You should never change the dose of medicines as prescribed by your doctor!

Before using your OMRON 637IT for the first time
Your blood pressure monitor: the benefits
The OMRON 637IT is a compact fully automatic wrist blood pressure monitor. Operating on the oscillometric principle it measures your blood pressure and pulse rate comfortable and quickly from the wrist. It contains an intelligent system for “fuzzy” controlled inflation, known as “Intellisense”. This is an advanced method of oscillometric measurement. No pre-setting of re-inflation is necessary.

The OMRON 637IT has a Position Sensor. The Position Sensor is able to determine the optimal height of your wrist (heart level) for the blood pressure measurement. Measuring at the heart level is extremely important since measuring at a higher or lower position will give wrong results.

The OMRON 637IT has a large DOT matrix display enabling you to enlarge the digits and showing you graphs. Together with the USB computer interface and the built in alarm function for same time measurements or pill intake your OMRON 637IT is the optimal device to manage your blood pressure.
How to Insert the Batteries

Use this monitor after inserting batteries in the main unit.

1. Open the battery compartment.

2. Insert the batteries (Type LR03 / AAA) as shown in the figure. Ensure the polarity (+/-) of the batteries is correct.

3. Close the battery cover.

How to Measure Blood Pressure Correctly

How to wrap the cuff

In order to measure your blood pressure correctly it is needed to wrap the cuff around your wrist in a correct way. If not, correct measurements are not possible. Please follow the coming instructions (left wrist):

1) Make sure that your wrist is bare and will be wrapped over your skin.
2) Make sure that you clothing is not constraining the flow of your blood.
3) Make sure that the wrist (left or right) to measure is selected from the settings menu (see also page 15). The left wrist is preset.
4) Place the cuff over your left wrist with your thumb facing upwards. Leave app 10-15 mm between the cuff and the bottom of the palm of your hand as shown in the figures.

4) Pull the wrist cuff upward and close the cuff firmly with the Velcro tape as shown.

You can use your 637IT also on your right hand after selecting right wrist measurement in the SETTING MODE.

People with a slender wrist (wrist circumference of less than 145mm) may feel loose because the cuff may not be wrapped firmly. Please do not force the cuff it will not affect the measurement.

How to obtain a correct posture

Achieving a correct posture before measuring your blood pressure is important since an incorrect posture might give you incorrect readings. To achieve a correct posture please follow the instructions (see pictures):
1) Sit down and stretch your back.
2) Relax yourself by relieving the stress from your shoulders and arms.
3) Breath several times deeply and return to natural respiration.
4) Do not sustain your wrist with your other hand and avoid stress in your hand by making firm grips or large extensions.

Correct Posture

Incorrect Posture

Measuring your blood pressure and pulse

If you have achieved the correct posture you can start the measurement. When you measure for the first time the Position Sensor and the Signal will be ON and measuring at the left wrist will be pre set.

• Push the O/I button to activate your 637IT and the Position Sensor Screen will be displayed.
How to Measure Blood Pressure

- Sustain your elbow with your other hand or a table to avoid movement.

- Adjust the height of your wrist by using your elbow as a fulcrum. When the ( ) sign you will hear a beeping sound indicating that your blood pressure monitor is at the correct height (heart height). The ( ) sign will change in the ( ) sign and the measurement will start.

How to enlarge the reading

- The results will be shown on your display. By pushing the ( ) buttons you can enlarge the readings.

How to Use the Memory Function

Your OMRON 637IT blood pressure monitor is able to store maximum 90 measurements including date and time. When your blood pressure monitor is holding 90 measurements the oldest will be deleted to store a new measurement.

Press the (M) memory button when your blood pressure monitor is switched off. The latest measurement will be displayed. Each time you push ( ) button an earlier measurement will be displayed. By pushing the ( ) button a later reading is displayed.

By pushing the GRAPH button the selected measurement is displayed in a weekly graph (see also How to use the graph function). Push the memory button to return to the memory display again.
How to use the graph function

This monitor has the possibility to display the stored measurements as a graph. In order to get a clear history of your blood pressure the measurements are put in time zones:
- Morning: Measurements made between 0:00 and 9:59
- Daytime: Measurements made between 10:00 and 17:59
- Evening: Measurements made between 18:00 and 23:59
The last measurement in each time zone will be displayed. For example if you measure 3 times in the same time zone on the same day only the third reading will be displayed. On the other hand all readings will be stored in the memory (See also page 11).

There are three different graphs available:
- All data graph: displays all measurements per week
- Morning data graph: displays all morning measurements per week
- Evening data graph: displays all evening measurements per week
No graph display is provided for daytime data only.

To display the graph push the GRAPH CALL button.

All Data Graph is displayed.

Push the GRAPH CALL button again to display the Morning Data Graph.

Push the GRAPH CALL button again to display the Evening Data Graph.
- Each time you push the GRAPH CALL button, All, Morning, and Evening data are displayed in that order repeatedly.

How to change the settings

The settings of your OMRON 637IT blood pressure monitor can be changed according to your own preferences and comfort.

To enter the setting menu please press the SET button when your blood pressure monitor is switched off. By using (        ) you can select your preference. By pressing the SET button again you lock your preference and proceed to the next item as shown in the figure. The on/off button (O/I) can be used to switch the monitor off again.
Auto memory

You can either enable (ON) or disable (OFF) the memory function of your blood pressure. When the auto memory function is switched off the measurement will not be stored. When using your OMRON 637IT monitor with more than one person it is recommended to disable the auto memory function. The auto memory function mode is ON when you purchased your OMRON 637IT (factory preset).

Position sensor

The position sensor of your OMRON 637IT can be switched ON or OFF. In the factory preset the position sensor is enabled. If the position sensor is switched ON you can choose to have the optimal wrist height supported by an acoustic sound (SIGNAL ON or OFF).

Left or right wrist measurement

Normally blood pressure is measured on the left wrist (factory preset). With your OMRON 637IT you can choose to use the monitor either on your left or right wrist. It is recommended to use the same wrist when for optimal comparisons of your blood pressure fluctuations.

Alarm

Your blood pressure monitor has the possibility to set an alarm twice a day. The alarm function can be used to monitor your blood pressure at the same time every day or as a reminder for pill intake.

The alarm will sound for 2 minutes. By pushing the O/I button the alarm will stop. The alarm will not sound when the blood pressure monitor is used (e.g. for measuring or graph display) at the moment the alarm is set.

You can set the requested hour by pushing (      ) when flashing. Press SET to lock the hour and proceed with the minutes. By pushing the (      ) you can set the minutes. Press SET to confirm and to proceed. Push either (      ) to enable (      ) or disable (     ) the alarm. Press SET to lock the settings.

Screen of indicating that the alarm is sounding
Time

You can change the time and date setting of your blood pressure monitor. When reaching the time screen you will see the Gregorian calendar. The year will be flashing.

1. By using the (      ) buttons you can set the current year.
2. By pushing the SET button you will lock the year and proceed to the next setting.

For setting the month, date and time repeat step 1 and 2. After setting the minutes you will proceed to the DELETE DATA screen.

Delete data

In this screen you are able to delete all stored measurements from you OMRON 637IT. Please be careful that deleted data cannot be restored. The factory preset is NO. If you choose YES the monitor will ask for a confirmation “ARE YOU SURE?”. To cancel select NO to confirm DELETE DATA select YES.

After deleting all stored measurements the “Data Deleted Screen” will be shown. All the stored measurements are deleted and the monitor will be turned off.

If the stored measurements are not deleted you will proceed to the RESET SETTINGS screen.

Reset settings

In this menu you can choose to reset all the settings to the “factory preset” settings. The factory preset for this menu is NO. If you choose YES by using the (      ) button the monitor will ask you for a confirmation “ARE YOU SURE?” After confirmation by selecting YES all the settings will be changed to the factory mode.

The monitor will return to the AUTO MEMORY SCREEN. You can turn off your monitor by pushing the O/I button.

How to use the computer interface

This blood pressure monitor has a computer interface and is supplied with software to transfer the memory of the blood pressure monitor to your personal computer.

Required operating environment

The following operating environment is required to operate the communication software as supplied on the CD-ROM.

- Personal computer : PC/AT compatible with CPU of 80486 or above or with any Pentium processor.
- Memory (RAM) : 16 MB or more
- Hard disk : Free area of 10 MB or more is necessary
- Display : 640 x 480 pixels or more
- Disk drive : CD-ROM drive
- Connection port : Free USB connection port

How to install the software

1) Turn on your personal computer

......Your windows desktop is displayed

2) Insert the CD-ROM in the disk drive

3) Open the control panel

• Click the “Start” button.
• Point the mouse pointer to “Settings” on the menu.
• Click “Control Panel”

4) Open the “Add/Remove Programs” by double clicking the icon

5) Execute the installation

• Click the “install button”
• Follow the instructions
• The software is installed on your personal computer

How to uninstall the software

1) Open the control panel

• Click the “Start” button
• Choose “Settings”
• Click “Control Panel”

2) Open the “Add/Remove Programs” icon by double clicking

3) Delete the application

• Click “BPFile” from the list
• Click the Add/Remove button
• ..... The confirmation screen is displayed
• Click “Yes”
• ..... "BPFile” is deleted
• Click “OK”
How to connect your 637IT blood pressure monitor to your PC

Connect your 637IT blood pressure monitor with your PC using the included USB cable. The mini USB connector (small connector) should be connected to your 637IT blood pressure monitor and the normal USB connector (large connector) should be plugged into your personal computer.

How to use the software

Open the BPFile application from the program list or your desktop and the following screen is shown on the screen.

How to create a data file

- Press the “DATA” button on your screen
- Press the “Dir” button on your screen and name the file.
- Press “OK”
- The file can be opened in most windows programs like Excel, Word

How to set the time

- Press the “TIME” button on your screen.
- The time and date are read from your 637IT blood pressure monitor
- Change the time and date if applicable in the white field

- By pressing the “DATA” button you are able to transfer the memory of your 637IT blood pressure monitor to your personal computer.
- By pressing the “TIME” button you are able to set the date and time in your 637IT blood pressure monitor.
- By pressing the “ID” button you are able to set your personal name in your 637IT blood pressure monitor.
- By pressing the “CLOSE” button you are closing the program.
What is blood pressure?

Blood is pumped to artery by the beat (contraction and expansion) of a pump called the heart. The pressure to pump out blood to artery is called the "systolic blood pressure." The pressure when the heart expands as the blood having circulated the whole body returns is called the "diastolic blood pressure."

Health and blood pressure

Blood pressure fluctuates being affected by everyday life and age. Hypertension is a sign that can cause dangerous diseases such as cerebral apoplexy or myocardial infarction to occur easily. By understanding the state of your blood pressure, review your health and lifestyle.

Hypertension guide

The World Health Organization (WHO) and the International Society of Hypertension (ISH) established the Blood Pressure Classification. Use this Classification as the guide to know the state of your blood pressure. However, if you are concerned with your blood pressure, be sure to follow the instructions of your doctor.

- There is no universally accepted definition of hypotension. Generally speaking, those with the systolic pressure below 100 mmHg are considered to be hypotension.

- This classification is made based on the blood pressure values measured at upper arm by sitting on the chair in the hospital regardless of the age.

Blood pressure at the upper arm and wrist

Wrist Blood Pressure Monitor

Blood pressure is usually measured at brachial artery. As the wrist arterial vessel is connected to the brachial vessel, wrist blood pressure values are close to brachial ones and reflect the change of brachial blood pressures. However in case there is a circulatory disorder such as arterial infarction, fairly large difference is observed between the brachial and the wrist blood pressure values. After consulting with your doctor, use the wrist blood pressure together with the brachial pressure for your health management.
Diabetes, hyperlipemia, or hypertension accelerates arterial sclerosis, which causes dangerous diseases such as cerebral apoplexy or myocardial infarction or induces arterial stenosis or peripheral circulatory disorder.

In these cases, the wrist and brachial blood pressure values may differ greatly. (Even in healthy people, a difference of 20 mmHg may occur if the measuring conditions are not proper. Therefore, do not try to diagnose the measurement values by yourself, but be sure to follow the instructions of your doctor.) In addition, difference of wrist and brachial blood pressure values may somewhat get affected by the physiological conditions at the time of measurement. However, the blood pressure values measured at wrist and upper arm usually fluctuate in the same manner.

Therefore, you can check the fluctuation tendency of blood pressure by measuring the wrist blood pressure.

Differences between blood pressure measured at home and at the doctor’s office

Normally blood pressure measured at home tends to be lower than when measured at the doctor’s office. This can be as much as 20 mmHg due to that you feel more relaxed at home and feel slightly tense when visiting the doctor. To manage your blood pressure it is important to monitor and register your blood pressure at home.

Since blood pressure is fluctuating from beat to beat and is influenced by daily activities measurements can differ from measurement to measurement.

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. Please make sure no water will enter the main unit!
- Keep your monitor in the storage case protected from extreme temperatures and humidity.
- Do not carry out repairs of any kind yourself. If a defect occurs consult your OMRON dealer or distributor.
- Please take the batteries out if the monitor is not used for a long period (app. 2 months or more).
- Electro Magnetic fields can influence the measurement. Do not use a portable phone near the unit.

Disposal of this product and used batteries should be carried out in accordance with the national regulations for the disposal of electronic products.

Diseases influencing blood pressure values

Error indication

If the measurement is not made correctly, the following error can be displayed.

<table>
<thead>
<tr>
<th>Error</th>
<th>Cause</th>
<th>How to correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>You moved your wrist during measurement.</td>
<td>Measure your blood pressure again without moving your wrist until the measurement is completed. (Refer to Page 10.)</td>
</tr>
<tr>
<td></td>
<td>You moved your arm or body during measurement.</td>
<td>Measure your blood pressure again without moving your arm or body. (Refer to Page 10.)</td>
</tr>
<tr>
<td></td>
<td>You moved your arm or body extensively during measurement.</td>
<td>Measure your blood pressure again without moving your arm or body. (Refer to Page 10.)</td>
</tr>
<tr>
<td></td>
<td>Batteries are worn out.</td>
<td>Replace both batteries with new ones. (Refer to Page 6.)</td>
</tr>
<tr>
<td></td>
<td>Trouble caused by abnormality in function.</td>
<td>Please contact the nearest OMRON dealer.</td>
</tr>
</tbody>
</table>

- If you cannot resolve the problem even after taking the above-mentioned measures, please contact the nearest OMRON dealer.
Troubleshooting

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Possible cause</th>
<th>How to correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batteries are worn out.</td>
<td>Replace the batteries with new ones. (See to Page 6.)</td>
<td></td>
</tr>
<tr>
<td>The directions of polarities of inserted batteries (+ and -) are wrong.</td>
<td>Insert the batteries correctly. (Refer to Page 6.)</td>
<td></td>
</tr>
<tr>
<td>The wrist cuff is not held at the level of the heart.</td>
<td>Measure your blood pressure again in correct posture. (Refer to Page 9.)</td>
<td></td>
</tr>
<tr>
<td>The wrist cuff is not wrapped firmly.</td>
<td>Wrap the wrist cuff correctly. (Refer to Page 7.)</td>
<td></td>
</tr>
<tr>
<td>Too much stress is applied on your shoulder or arm.</td>
<td>Relax yourself and make measurement.</td>
<td></td>
</tr>
<tr>
<td>You are talking or moving your hands during measurement.</td>
<td>Be still and make measurement.</td>
<td></td>
</tr>
<tr>
<td>The blood pressure values differ from the values measured at brachial.</td>
<td>Refer to the section on “Wrist Blood Pressure Monitor.” (Refer to Page 21.)</td>
<td></td>
</tr>
<tr>
<td>Blood pressure values are displayed before the monitor inflates to the required value.</td>
<td>Air is leaking from the wrist cuff.</td>
<td>Contact the store where the unit was sold or the nearest OMRON distributor.</td>
</tr>
<tr>
<td>Blood pressure value fluctuates each time of measurement. Or the blood pressure values are displayed abnormally high (low).</td>
<td>Blood pressure value tends to fluctuate depending on the mental state during measurement or the measuring time. Breathe deeply to relax yourself and make measurement again. (Refer to Page 22.)</td>
<td></td>
</tr>
</tbody>
</table>

* If you cannot resolve the problem even after taking the above-mentioned measures, please contact the nearest OMRON dealer or distributor.

Spare parts and accessories

OMRON considers, due to the used high company and quality standards, the main unit as a non-serviceable part because of the necessity of proper calibration after replacement of high-tech components.

The cuff can be replaced by an authorised expert.

Specifications

- **Name**: OMRON Fully Automatic Blood Pressure Monitor for measurement on the wrist
- **Model**: 637IT
- **Display**: Dot matrix LCD display
- **Measurement**: Oscillometric method
- **Measurement Range**: Pressure; 0 to 299 mmHg, Pulse rate; 40 to 180 /min.
- **Accuracy**: Pressure; within +/-3 mmHg, Pulse rate; within +/-5% of reading
- **Inflation**: Automatic inflation with pump
- **Deflation**: Automatic rapid deflation
- **Pressure Detection**: Electrostatic capacity semi-conductor pressure sensor
- **Power supply**: Two LR03 batteries (AAA)
- **Battery Life**: Approximately 300 times of measurement when using alkaline batteries (In case of the monitor is used three times a day inflating to 170 mmHg at the room temperature of 22°C)
- **Operating Temperature and Humidity**: +10° to +40°C, 30 to 85% RH
- **Storage temperature and humidity**: -20° to +60°C, 10 to 95% RH
- **Measurable circumference of wrist**: 135 to 215 mm
- **Weight of Main Unit**: Approximately 150 g (not including batteries)
- **External Dimensions**: 78 (W) x 65.5 (H) x 37.2 (D) mm (not including the wrist cuff)
- **Electric Shock Protection**: Internal power supply appliance type B
- **Accessories**: Two LR03 alkaline batteries for monitoring use, storage case, Instruction Manual, USB cable, software

* In the interest of product improvement, specifications are subject to change without notice.

EU-Representative: OMRON Healthcare Europe B.V. Kruisweg 577 NL-2132-NA Hoofddorp

[Safety CE mark]