

OMRON

Automatic Blood Pressure Monitor

Model JPN600
Instruction Manual

3100085-28

Introduction

Thank you for purchasing the OMRON JPN600 Automatic Blood Pressure Monitor.

The OMRON JPN600 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 product is designed to measure the blood pressure and pulse rate of people within the range of the designated arm cuff, following the instructions in this instruction manual.

It is mainly designed for general household use.

Please follow this instruction manual thoroughly.

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

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 doctor. Only a doctor is qualified to diagnose and treat High Blood Pressure.
- Consult your doctor before using this monitor for any of the following conditions: common arrhythmias such as atrial or ventricular premature beats or atrial fibrillation, arterial sclerosis, poor perfusion, diabetes, age, pregnancy, pre-eclampsia, renal diseases.
- Note that PATIENT motion, trembling, shivering may affect the measurement reading.
- Do not use this monitor 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 doctor before using this monitor on the arm with an arterio-venous (A-V) shunt.
- Do not use this monitor with other medical electrical (ME) equipment simultaneously. This may result in incorrect operation of the monitor and/or cause an inaccurate reading.
- Contains small parts that may cause a choking hazard if swallowed by infants.
- Stop using this monitor and consult your doctor if you experience skin irritation or other troubles.

(AC Adapter (optional) Usage)

- Do not use the AC adapter if this monitor or the power cord is damaged. Turn off the power and unplug the power cord immediately.
- Plug the AC adapter into the appropriate voltage outlet. Do not use a multiple-tap.
- 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)

- Always consult your doctor. Self-diagnosis of measurement results and self-treatment are dangerous.
- Consult your doctor before using this monitor for any of the following conditions:
 - If you have had a mastectomy.
 - People with severe blood flow problems or blood disorders as cuff inflation can cause bruising.
- Do not take measurements more than necessary. It may cause bruising due to blood flow interference.
- If there are any abnormalities during measurement, remove the arm cuff.
- Do not use this monitor on infants or persons who cannot express their intentions.
- Do not inflate the arm cuff more than necessary.
- Do not use this monitor for any purpose other than measuring blood pressure.
- Use only the approved arm cuff for this monitor. Use of other arm cuffs may result in incorrect measurement results.
- During measurement, make sure that no mobile phone or any other electrical devices that emit electromagnetic fields is within 30cm of this monitor. This may result in incorrect operation of the monitor and/or cause an inaccurate reading.
- Do not disassemble the monitor or arm cuff. This may cause an inaccurate reading.

(Battery Usage)

- Do not insert the batteries with their polarities incorrectly aligned.
- Use only four "AA" alkaline or manganese batteries with this monitor. Do not use other types of batteries. Do not use new and used batteries together.
- Remove the batteries if this monitor will not be used for 3 months or more.
- Use the battery within recommended period mentioned to it.

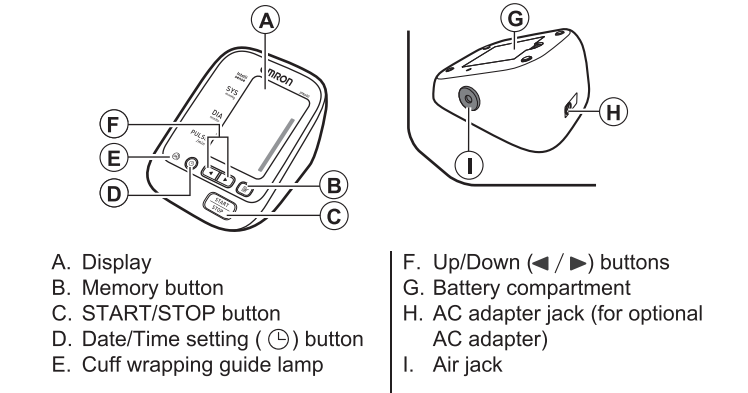
(AC Adapter (optional) Usage)

- Fully insert the power plug.
- When disconnecting the power plug, do not pull the power cord. Be sure to hold the power plug.
- When handling the power cord, observe the following:
 - Do not damage. Do not break it.
 - Do not tamper with it. Do not forcibly bend or pull.
 - Do not twist. Do not bundle during use.
 - Do not pinch. Do not place under heavy objects.
- Wipe the dust off from the power plug.
- Disconnect the power plug if the product will not be used for a long period of time.
- Disconnect the power plug before starting maintenance.
- Use only the original AC adapter designed for this monitor. Use of unsupported adapters may damage and/or may be hazardous to this monitor.

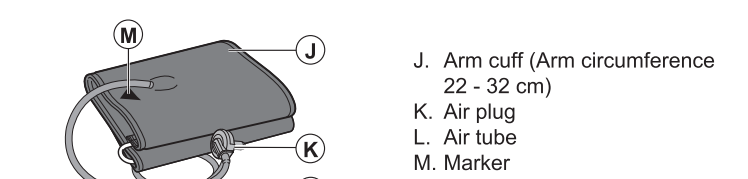
General Precautions

- Do not forcibly bend the arm cuff or the air tube excessively.
- Do not fold or kink the air tube while taking a measurement. This may cause harmful injury by interrupting blood flow.
- Do not plug the air plug, pull on the air plug at the connection with the monitor, not the tube itself.
- Do not apply strong shocks and vibrations to or drop the monitor and arm cuff.
- Do not inflate the arm cuff when it is not wrapped around your arm.
- Read and follow the "Important information regarding Electro Magnetic Compatibility (EMC)" in the "6. Technical Data".
- Do not use this monitor outside the specified environment. It may cause an inaccurate reading.
- Dispose of this monitor, components and optional accessories according to applicable local regulations. Unlawful disposal may cause environmental pollution.
- Please check (for example, by observation of the limb concerned) if this monitor is not causing a prolonged impairment of PATIENT blood circulation.
- If this monitor is stored at the maximum or minimum storage and transport temperature and is moved to an environment with a temperature of 20°C, we recommend waiting for approx. 2 hours before using the monitor.

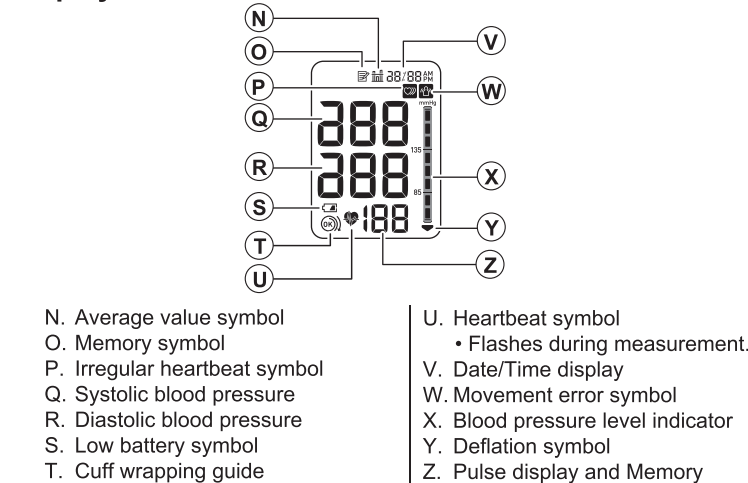
1. Overview Monitor:



Arm cuff:



Display:



Before Taking a Measurement

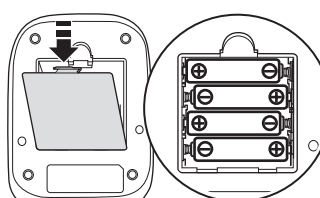
- To help ensure an accurate reading, follow these directions:
- Avoid bathing, drinking alcohol or caffeine, smoking, exercising and eating for 30 minutes before taking a measurement.
 - Rest for at least 5 minutes before taking the measurement.
 - Stress raises blood pressure. Avoid taking measurements during stressful times.
- Measurements should be taken in a quiet place.
- Remove tight-fitting clothing from your arm.

2. Preparation

2.1 Installing/Replacing the Batteries

- Remove the battery cover.

- Insert 4 "AA" batteries as indicated, into the battery compartment and then replace the battery cover.



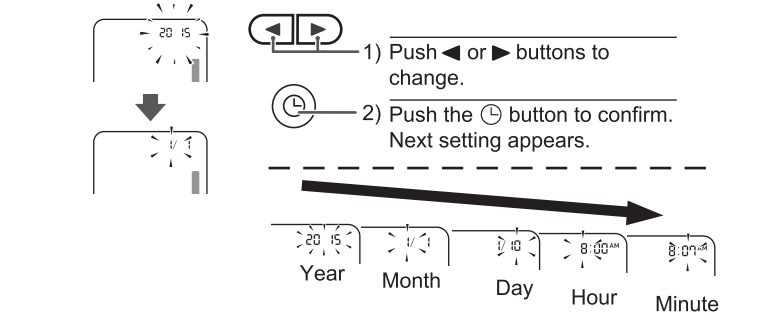
Notes:

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

2.2 Setting the Date and Time

- Press the (C) button.

- Set the monitor to the correct date and time before taking a measurement for the first time.



- Press the START/STOP button to store the setting.

- Notes:**
- If the batteries have been replaced, the date and time setting will need to be reset.
 - If the date and time are not set, "----" appears during or after measurement.

3. Using Your Monitor

3.1 Applying the Arm Cuff

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

- Insert the air plug into the air jack securely.



- Put your arm through the cuff loop.



The bottom edge of the arm cuff should be 1 to 2 cm above the elbow. Marker (arrow under the air tube) is centred on the middle of your inner arm.



- Close the fabric fastener FIRMLY.



Notes:

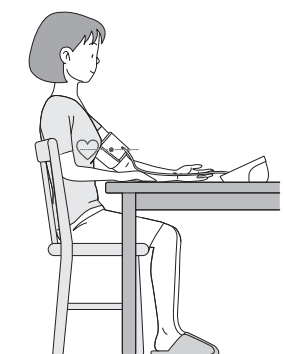
- When you take a measurement on the right arm, the air tube will be at the side of your elbow. Be careful not to rest your arm on the air tube.

- The blood pressure can differ between the right arm and the left arm, 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 both arms differ substantially, please check with your doctor as to which arm to use for your measurement.

3.2 How to Sit Correctly

To take a measurement, you need to be relaxed and comfortably seated at comfortable room temperature.

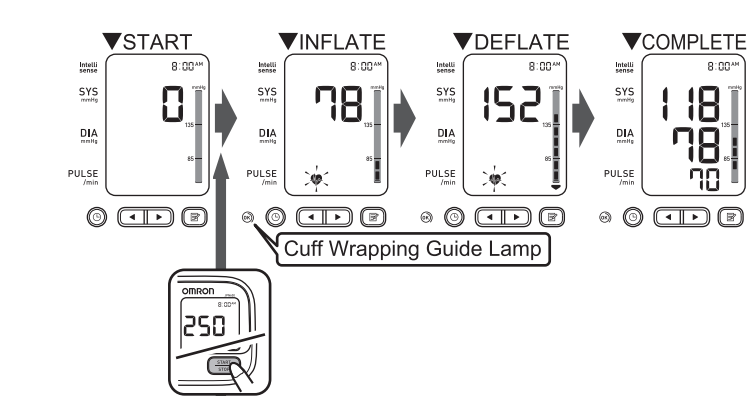
- Sit in a chair with your legs uncrossed and your feet flat on the floor.
- Sit with your back and arm being supported.
- The arm cuff should be placed on your arm at the same level as your heart.



3.3 Taking a Measurement

- Notes:**
- To cancel a measurement, press the START/STOP button to release the air in the arm cuff.
 - Remain still and do not talk while taking a measurement.

- 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.

Note: Wait 2-3 minutes before taking another blood pressure measurement. Waiting between readings allows the arteries to return to their prior condition to taking the blood pressure measurement.

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

Cuff Wrapping Guide Lamp:

The cuff wrapping guide lamp () lights in green, the cuff is correctly wrapped tightly enough on the arm and the reading is accurate and reliable. If it does not light, the reading is not reliable due to the incorrect wrapping of the cuff. Please wrap the cuff again, taking care to wrap it correctly and take the measurement again.

- Remove the arm cuff.

- Press the START/STOP button to turn the monitor off. The monitor automatically stores the measurement in its memory. It will automatically turn off after 2 minutes.

Important:

- 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	≥ 135 mmHg
Diastolic Blood Pressure	≥ 85 mmHg

This criteria is for home blood pressure measurement.

- Your blood pressure monitor includes an irregular heartbeat feature. Irregular heartbeats can influence the results of the measurement. The irregular heartbeat algorithm automatically determines if the measurement is usable or needs to be repeated. If the measurement results are affected by irregular heartbeats but the result is valid, the result is shown together with the irregular heartbeat symbol (). If the irregular heartbeats cause the measurement to be invalid, no result is shown. If the irregular heartbeat symbol () is shown after you have taken a measurement, repeat the measurement. If the irregular heartbeat symbol () is shown frequently, please make your doctor aware of it.

- If you move during measurement, the movement error symbol () will appear on the display. Keep still and repeat the measurement.

Using the Guest Mode

The monitor stores measurement values for one user in the memory. The guest mode can be used to take a single measurement for another user. No measurement values are stored in the memory when the guest mode is selected.

- Press and hold the START/STOP button for more than 3 seconds. The date/time display will disappear.



- Release the START/STOP button when the date/time display turns off. The arm cuff will start to inflate automatically.

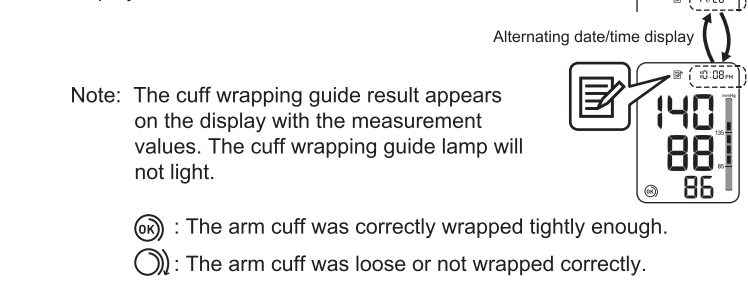
3.4 Using the Memory Function

The monitor automatically stores the result up to 90 sets. It can also calculate an average reading based on the measurements from the last three readings taken within 10 minutes. If there are only two readings in memory for that period, the average will be based on two readings. If there is one reading in memory for that period, the average will be based on one reading.

- Notes:**
- If the memory is full, the monitor will delete the oldest reading.
 - When viewing the reading taken without setting the date and time, "----" is displayed instead of the date and time.

To View the Readings Stored in Memory

- Press the (M) button. The Memory number appears for a second before the pulse rate is displayed. The newest set is numbered "1".



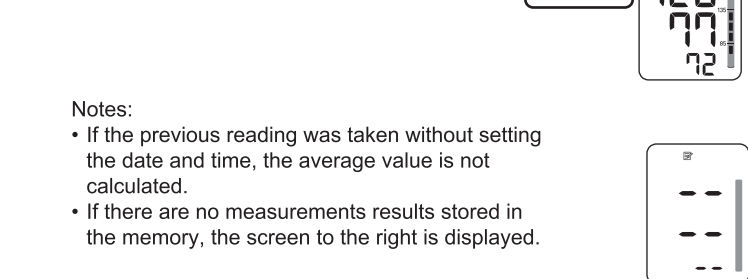
- (M): The arm cuff was correctly wrapped tightly enough.
- (M): The arm cuff was loose or not wrapped correctly.

- Press the (M) or (M) button to view the readings stored in memory.

- (M): To the older readings
- (M): To the more recent readings

To View the Average Value

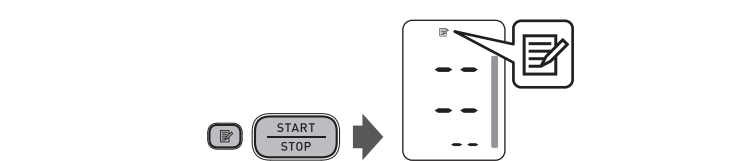
- Press and hold the (M) button for more than 3 seconds.



- Notes:**
- If the previous reading was taken without setting the date and time, the average value is not calculated.
 - If there are no measurements results stored in the memory, the screen to the right is displayed.

To Delete All the Values Stored in Memory

When the memory symbol (M) appears, first press the Memory button. Then while holding it down, press the START/STOP button simultaneously for more than 3 seconds.



Note: You cannot partially delete the stored readings.

4. Troubleshooting and Maintenance

4.1 Error Messages

Error Display	Cause	Remedy
	Irregular heartbeat is detected.	Remove the arm cuff. Wait 2 - 3 minutes and then take another measurement. Repeat the steps in section 3.3. If this error continues to appear, contact your doctor.
	Movement during measurement.	Carefully read and repeat the steps in section 3.3.
	Cuff is not applied correctly.	Apply the arm cuff correctly. Refer to section 3.1.
	The batteries are low.	Recommend to replace 4 batteries with new ones at this time. Refer to section 2.1.
	The batteries are depleted.	Immediately replace the 4 batteries with new ones. Refer to section 2.1.
	Air plug disconnected.	Insert the plug securely. Refer to section 3.1.
	Arm cuff not applied correctly.	Apply the arm cuff correctly. Refer to section 3.1.
	Air is leaking from the arm cuff.	Replace the cuff with the new one. Refer to Chapter 5.
	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.	Repeat measurement. Remain still and do not talk during measurement. Refer to section 3.3.
	The arm cuff was inflated above 299 mmHg when inflating the cuff manually.	Do not inflate the cuff above 299 mmHg. Refer to section 3.3.
	Movement during measurement.	Repeat 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.
	Device error.	Contact your local OMRON representative.

4.2 Troubleshooting

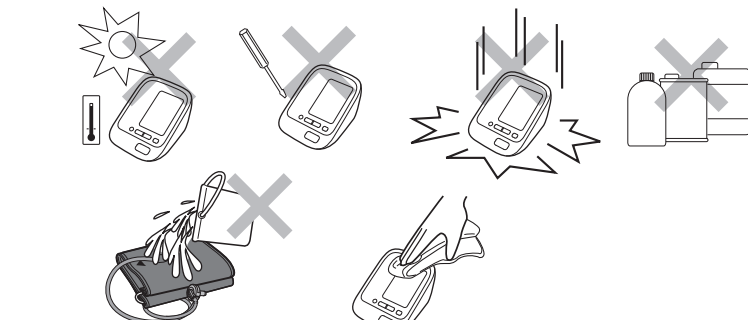
In case of any of the below problems occur during measurement, first check that no other electrical device is within 30cm. If the problem persists, please refer to the table below.

Problem	Cause	Remedy
The reading is extremely low (or high).	Arm cuff not applied correctly.	Apply the arm cuff correctly. 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 tube 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 Chapter 5.
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 readings 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 empty.	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.		Press the START/STOP 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 local OMRON representative.

4.3 Maintenance

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

- Do not subject the monitor and the cuff to extreme temperatures, humidity, moisture or direct sunlight.
- Do not fold the cuff or tubing tightly.
- Do not disassemble the monitor or components.
- Do not subject this monitor to strong shocks or vibrations (for example, dropping the monitor to the floor).
- Do not use volatile liquids to clean this monitor.
- Do not wash the arm cuff or immerse it in water.
- Do not use petrol, thinners or similar solvents to clean the arm cuff.
- Do not carry out repairs of any kind yourself. If a defect occurs, consult your local OMRON representative.



- The monitor should be cleaned with a soft, dry cloth.
- Use a soft, moistened cloth and neutral soap to clean the arm cuff.

Note: Read and follow the "Correct Disposal of This Product" in the Technical Data Section when disposing of this monitor and any used accessories or optional parts.

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 two years to ensure correct functioning and accuracy. Please consult your local OMRON representative.

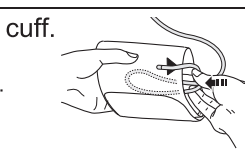
4.4 Storage

- Keep your monitor in its storage case when not in use.
- Store your monitor and the components in a clean, safe location.

- Unplug the air plug from the air jack.

- Gently fold the air tube into the arm cuff.

Note: Do not bend the air tube excessively.



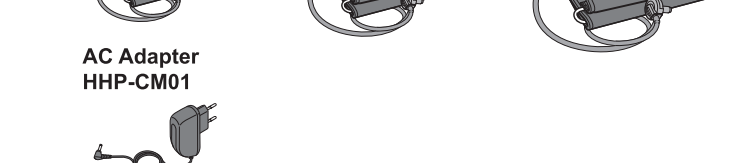
- Place the arm cuff and monitor in the storage case.

Do not store your monitor and other components in the following situations:

- If your monitor and other components are wet.
- Locations exposed to extreme temperatures, humidity, direct sunlight, dust or corrosive vapors such as bleach.
- Locations exposed to vibrations, shocks or where it will be at an angle.

5. Optional Parts

Small Cuff HEM-CS24 Arm circumference 17 - 22 cm	Medium Cuff HEM-CR24 Arm circumference 22 - 32 cm	Wide Range Soft Cuff HEM-RML31 Arm circumference 22 - 42 cm
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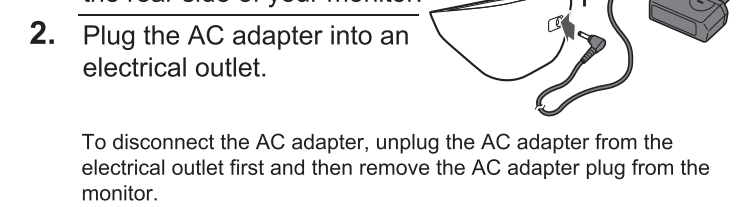
- AC Adapter HHP-CM01**
- Notes:**
- Please check with your local OMRON representatives for the appropriate optional parts.
 - Please use AC Adapter HHP-BH01 in India.

Using the Optional AC Adapter

Note: Make sure to use an easily accessible power socket in which to connect and disconnect the AC adapter.

- Insert the AC adapter plug into the AC adapter jack on the rear side of your monitor.

- Plug the AC adapter into an electrical outlet.



To disconnect the AC adapter, unplug the AC adapter from the electrical outlet first and then remove the AC adapter plug from the monitor.

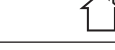
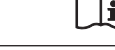
6. Technical Data

Product Description	Automatic Blood Pressure Monitor
Model	JPN600
Display	LCD Digital Display
Measurement Method	Oscillometric method
Measurement Range	Pressure: 0 to 299 mmHg
Blood pressure measurement range	20 to 280 mmHg
Pulse measurement range	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	90 measurements with date and time
IP classification	Monitor: IP20 Optional AC adapter (HHP-CM01): IP21 (HHP-BH01): IP22
Rating	DC6V 4W
Operation mode	Continuous operation
Power Source	4 "AA" batteries 1.5V or Optional AC adapter (INPUT AC100-240V 50-60Hz 0.12-0.065A)
Battery Life	Approx. 1000 measurements (using new alkaline batteries)
Durable period (Service life)	Monitor: 5 years Cuff: 1 year
Applied Part Protection Against Electric Shock	Optional AC adapter: 5 years
Operating conditions	Class II ME equipment (Optional AC adapter) +10 to +40°C / 15 to 95% RH (non-condensing) / 700 to 1060 hPa
Storage and transport conditions	-20 to +60°C / 10 to 95% RH (non-condensing) / 700 to 1060 hPa
Console Weight	Approx. 280g without batteries
Cuff Weight	Approx. 130g
Outer Dimensions	Approx. 107 (w) mm × 79 (h) mm × 141(l) mm
Cuff Dimensions	Approx. 145 mm × 466 mm (Cuff: arm circumference 22 to 32 cm)
Cuff Tube Material	Nylon, polyester, polyvinyl chloride
Package Contents	Main unit, arm cuff, instruction manual, battery set, storage case

- Notes:**
- Subject to technical modification without prior notice.
 - In the clinical validation study, the 5th phase was used on 85 subjects for determination of diastolic blood pressure.
 - This monitor is clinically investigated according to the requirements of ISO 81060-2:2013.
 - This monitor has not been validated for use on pregnant patients.
 - IP classification is degrees of protection provided by enclosures in accordance with IEC 60529.
 - The monitor and optional AC adapters are protected against solid foreign objects of 12.5 mm diameter and greater such as a finger. The optional AC adapter (HHP-CM01) is protected against vertically falling water drops which may cause issues during a normal operation.

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.

Symbols description	
	Applied part - Type BF Degree of protection against electric shock (leakage current)
	Class II equipment. Protection against electric shock
	CE Marking
	Serial number
	LOT number
	Temperature limitation
	Humidity limitation
	Atmospheric pressure limitation
	Indication of connector polarity
	For indoor use only
	OMRON's trademarked technology for blood pressure measurement
	Identifier of cuffs compatible for the device
	Cuff positioning indicator for the left arm
	Marker on the cuff to be positioned above the artery
	Range pointer and brachial artery alignment position
	Not made with natural rubber latex
	Range indicator of arm circumferences to help selection of the correct cuff size.
	Need for the user to consult this instruction manual.
	Need for the user to follow this instruction manual thoroughly for your safety.
	Direct current
	Alternating current
	Date of manufacture
	Arm circumference
Product production date is integrated in the Serial number, which is placed on the product and/or sales package: the first 4 digits mean year of production, the next 2 digits mean month of production.	