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# OMRON

## **Instruction Manual**

## AUTOMATIC BLOOD PRESSURE MONITOR Model M5



A Good Sense of Health

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#### Introduction

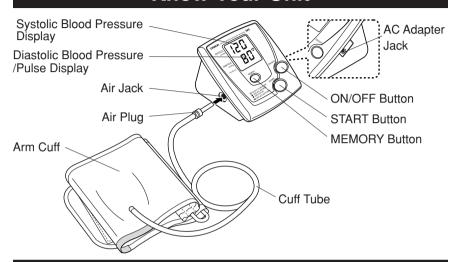
Thank you for purchasing the Omron M5 Automatic Blood Pressure Monitor. This completely automatic instrument quickly measures your blood pressure and pulse rate and displays them on an extra large digital panel.

Your new M5 uses the oscillometric method of blood pressure measurement. This means the monitor detects your blood's movement through your brachial artery and converts the movements into a digital reading. An oscillometric monitor does not need a stethoscope so the monitor is simple to use. The cuff fills with air at the push of a button and automatically deflates when the measurement is complete. Error indicators alert you to incorrect procedures and an automatic power-off function conserves the batteries:

Please read this instruction manual thoroughly before using the Omron M5 Automatic Blood Pressure Monitor.

For specific information on your own blood pressure, CONTACT YOUR DOCTOR

### **Know Your Unit**

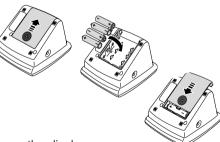


## **Battery Installation / Replacement**

- Slide the battery cover off in the direction of the arrow.
- Install or replace four "AA" size batteries so + (positive) and -(negative) polarities match the polarities of the battery compartment as indicated.
- 3. Replace the battery cover.

#### Note:

- If the Low Battery Indicator appears on the display, replace all four batteries. Long-life alkaline batteries are recommended.
- Remove the batteries if the monitor will not be used for an extended period of time.





#### **Care and Maintenance**

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

Do not subject your monitor to extreme temperatures, humidity, or direct sunlight.

Do not fold the cuff and tubing tightly.

Do not inflate the monitor over 280 mmHg.

Do not disassemble the monitor.

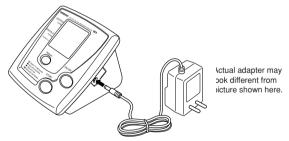
Do not subject the monitor to strong shocks, such as dropping it on the floor.

Do not clean the monitor with volatile liquids.

THE MONITOR SHOULD BE CLEANED WITH A SOFT, DRY CLOTH ONLY.

# How to Use the Optional AC Adaptor (Accessory Item Sold Separately)

- When using AC power, use only the exclusive AC adapter that can be purchased from Omron dealers.
- 2. Insert the AC adapter cord into the jack on the right side of the monitor.



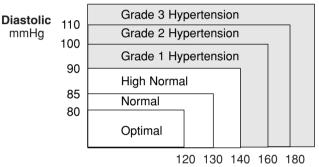
- 3. Insert the AC adapter plug into the outlet.
- 4. To remove the AC adapter, disconnect the adapter plug from the AC outlet first and then disconnect the cord from the monitor's jack. To avoid possible damage to the monitor, use only the exclusive AC adapter specified by Omron dealers. Other adapters may vary in output voltage and polarities.

Note: The monitor is designed not to draw power from the batteries when the AC adapter is in use.

#### **About Blood Pressure**

The World Health Organization (WHO) and International Society of Hypertension (ISH) jointly developed the following Blood Pressure Classification. This classification, however, is only a general guidline because your optimum blood preesure depends on your age, morbidity, and treatment strategy by doctor. CONSULT YOUR DOCTOR TO DETERMINE YOUR OPTIMUM BLOOD PRESSURE.

#### WHO - ISH Blood Pressure Classification



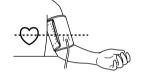
Systolic mmHg

	Systolic (mmHg)	Diastolic (mmHg)
Optimum	< 120	< 80
Normal	< 130	< 85
High-Normal	130 -139	85 - 89
Grade 1 Hypertension	140 -159	90 - 99
Grade 2 Hypertension	160 - 179	100 - 109
Grade 3 Hypertension	> 180	> 110

- For further information about the WHO-ISH classification, www.oms.ch/ncd/cvd/HT-Guide.html
- There is not a universally accepted definition of hypotension (low blood preesure), but a systolic preasure below 100mmHg is usually regarded as hypotension.

### **Before Measurement**

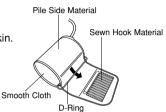
- Avoid eating, smoking, and exercising for at least 30 minutes before taking a measurement. Also rest for at least 15 minutes before taking your first reading.
- Stress raises blood pressure. Avoid taking measurements during stressful times.
- 3. Remove tight-fitting clothing from your left upper arm.
- 4. Measurement should be taken in a quiet place and you should be in a relaxed, seated position. Rest your left arm on the arm of a chair or on a table so that the cuff is at the same level as your heart.

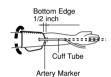


5. Remain still and do not talk during the measurement.

## **How to Apply the Arm Cuff**

- If the cuff is assembled correctly, the sewn hook material will be on the outside of the cuff loop and the metal D-ring will not touch your skin.
- Pass the end of the cuff furthest from the tubing through the metal D-ring to form a loop. The smooth cloth should be on the inside of the cuff loop.
- Put your left arm through the cuff loop. The bottom of the cuff should be approximately 1/2 inch above the elbow. The green artery marker on the cuff should lie over the brachial artery on the inside of the arm. Tube should run down center of arm even with the middle finger.
- Pull the cuff so that the top and bottom edges are tightened evenly around your arm.
- When the cuff is positioned correctly, press the sewn hook material FIRMLY against the pile side of the cuff.
- Make certain the cuff fits snugly around your arm.
   The cuff should make good contact with your skin.
- 7. Sit in a chair with your feet flat on the floor and place your arm on a table so that the cuff is at the same level as your heart.
- 8. Relax your arm and turn your palm upward.
- Be sure there are no kinks in the air tubing.











**NOTE:** If the circumference around your arm is greater than 32 cm you will need to use a large adult size cuff. The large adult cuff is an accessory item and it is sold separately. You may purchase this cuff by calling Omron representative or dealers.

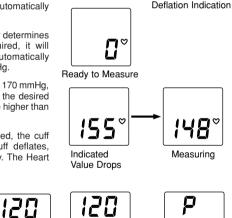
## How to Take a Reading

Be sure to read "Before Measurement" and "How to Apply the Arm Cuff" before taking a reading.

- 1. Press the ON/OFF button.
  - a) All display symbols appear for approximately one second. This is the initial LCD test.
  - b) The display symbols disappear and the Deflation Indication symbol ( → ) starts to flash.
  - c) When the monitor completes the necessary preparations before measurement, the Heart symbol (♥) appears in the screen.

**NOTE:** Wait for the Heart symbol ( ) before taking a measurement.

- By pressing the START button the unit automatically inflates the cuff to 170 mmHg.
  - a) If during your measurement the monitor determines that a higher pressure value is required, it will momentarily stop deflation and automatically increase the pressure value by 40 mmHq.
  - b) To set inflation level manually higher than 170 mmHg, press and hold the START button until the desired pressure value is reached. Do not inflate higher than 280 mmHg.
- When the correct pressure value is reached, the cuff starts to deflate automatically. As the cuff deflates, decreasing numbers appear on the display. The Heart symbol ( ) flashes at every heartbeat.
- 4. When the measurement is complete, the Heart symbol (♥) stops flashing and your blood pressure and pulse rate are displayed alternately. Results will be displayed until you turn the unit off. The unit will automatically shut off in approximately 5 minutes.



**Blood Pressure** 

Reading Display

Pulse Reading

Display

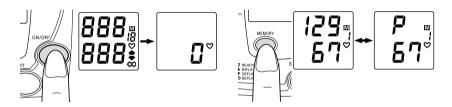
Initial LCD Test

REMEMBER TO KEEP A RECORD OF YOUR BLOOD PRESSURE AND PULSE MEASUREMENTS.

### **How To Use the Memory Function**

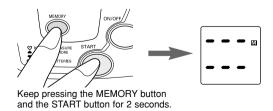
This monitor has a memory capable of storing fourteen (14) sets of readings. Every time you complete the measurement, the monitor automatically stores blood pressure and pulse rate.

- Push the MEMORY button to recall stored readings while the Heart Symbol (Q) is displayed.
- When fourteen (14) sets of readings are stored in memory, the oldest set will be deleted to store a new set.



 To delete stored readings, press the MEMORY button and the START button simultaneously, then all the readings will be deleted.

NOTE: You cannot delete the stored readings partially.



# **Error Indicators**

Error Symbol	Cause	Correction	
EE 57÷	Cuff under-inflated.	Wait 2-3 minutes and take another measurement. Repeat steps listed under	
E 88÷	Movement during measurement  No pulse or blood pressure reading due to very weak artery pulse.	"How to Take a Reading" but manually inflate the cuff 40 mmHg higher than the previous inflation value.	
E **	Cuff over-inflated (more than 300 mmHg).	Carefully read and repeat steps listed under "How to Take a Reading."	
	Batteries have run down.	Replace all four "AA" batteries.	

If you continue to experience difficulty obtaining a reading, contact your nearest OMRON representative or dealer.

# **Specifications**

Model:	M5
Display:	LCD Digital Display
Measurement Range:	Pressure: 0-280 mmHg, Pulse: 40-180/minute
Accuracy:	Pressure: ±3 mmHg or 2% of the reading Pulse: ±5% of reading
Inflation:	Automatic by electric pump
Deflation:	Automatic pressure release valve
Rapid Pressure Release:	Automatic exhaust valve
Pressure Detection:	Capacitance type pressure sensor
Measurement Method:	Oscillometric method
Pulse wave Detection:	Capacitance type pressure sensor
Power Source:	4 "AA" batteries, Optional AC Adaptor
Battery Life:	Approx. 300 uses when used once a day for 2 minutes
Operating Temperature/Humidity:	10°C to 40°C, 30-85% RH maximum
Storage Temperature/Humidity:	-20°C to 60°C, 10-95% RH maximum
Console Weight:	Approx. 430g (not including batteries)
Outer Dimensions:	Approx. 125mm (l) x 119mm (w) x 94mm (h)
Cuff Dimensions:	Approx. 140mm x 480mm
Arm Circumference:	(22cm - 32cm)
Accessories:	Cuff, Instruction manual

#### **Optional Large Cuff:**

For arm circumference 32 to 38cm.

NOTE: These specifications are subject to change without notice.

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# **OMRON**

Product of OMRON Corporation, Japan

OMRON HEALTHCARE SINGAPORE PTE LTD.

83 Clemenceau Avenue #11-01, UE Square Singapore 239920