

OMRON User Manual BP6100

3 Series Wrist Blood Pressure Monitor



Know Your Monitor

1 Contents

Monitor, 2 “AAA” alkaline batteries, storage case, instruction manual, quick start guide

2 Monitor



a. Wrist cuff (Wrist circumference 5.3" to 8.5" (13.5 cm to 21.5 cm))

b. Display

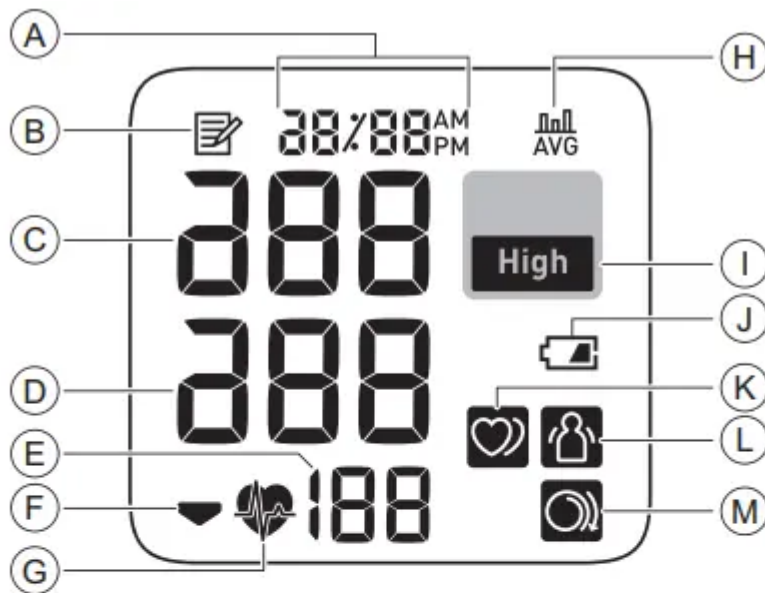
c. Battery compartment



d. [Memory] button

e. [Date/Time setting] button

f. [START/STOP] button

3 Display and Symbols



A	Date and time display
B	 Memory symbol Appears when viewing readings stored in the memory.
C	Systolic blood pressure reading
D	Diastolic blood pressure reading
E	Pulse display / Memory number Pulse rate appears after the measurement. When pressing the  button, the memory number appears for approximately one second before the pulse rate appears on the display.

F		Deflation symbol Appears during cuff deflation.
G		Heartbeat symbol Flashes while taking a measurement.
H		Average value symbol Appears when viewing the average readings of the latest 2 or 3 readings taken within 10 minutes span.
I		High symbol Appears if your systolic blood pressure is 130 mmHg or above and/or the diastolic blood pressure is 80 mmHg or above. Refer to section 1.4 for more information.
J		Battery symbol (low) Flashes when batteries are low.
		Battery symbol (depleted) Appears when batteries are depleted.
K		<p>Irregular heartbeat symbol</p> <p>Appears along with readings when an irregular rhythm is detected 2 or more times during a measurement. An irregular heartbeat rhythm is defined as a rhythm that is 25% less or 25% more than the average rhythm detected while your monitor is measuring blood pressure. If it continues to appear, we recommend you to consult with and follow the directions of your physician.</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Normal Heartbeat</p> <p>Pulse </p> <p>Blood pressure </p> </div> <div> <p>Irregular Heartbeat</p> <p>Pulse </p> <p>Blood pressure </p> </div> </div>
L		Movement error symbol Appears along with readings when your body is moving during a measurement. If it appears, remove the wrist cuff, and wait for 2 to 3 minutes. Then, remain still and take another measurement.
M		Cuff wrap guide symbol Appears if the wrist cuff is wrapped around the wrist too loosely while taking a measurement. It also appears when viewing past readings.

4 Classification of BP (Blood Pressure)

ACC/AHA 2017 Hypertension guidelines define categories of BP in adults as below.

Categories of BP in Adults*

BP Category	Systolic BP	Diastolic BP
Normal	< 120 mmHg and < 80 mmHg	
Elevated	120 - 129 mmHg and < 80 mmHg	
Hypertension		
Stage 1	130 - 139 mmHg or 80 - 89 mmHg	
Stage 2	≥ 140 mmHg or ≥ 90 mmHg	

* Individuals with Systolic BP and Diastolic BP in 2 categories should be designated to the higher BP category.

BP indicates blood pressure (based on an average of ≥ 2 careful readings obtained on ≥ 2 occasions).

Source: ACC/AHA 2017 High Blood Pressure Clinical Practice Guideline

Warning

- NEVER diagnose or treat yourself based on your readings. ALWAYS consult with your physician.

Using Your Monitor

1 Taking a Measurement

Note

- To stop the measurement, press the [START/STOP] button once to deflate the wrist cuff.

Caution


- 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.
- Remain still and DO NOT talk while taking a measurement.

1. Press the [START/STOP] button.


All symbols appear on the display before starting the measurement.

2. Remain still and do not move or talk until the entire measurement process is completed.

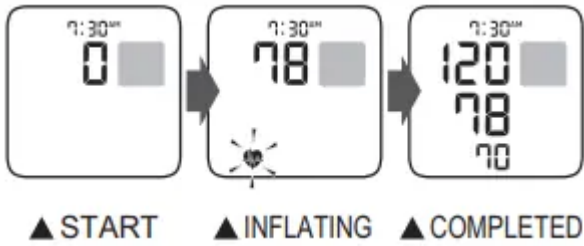
As the cuff inflates, your monitor automatically determines your ideal inflation level. This monitor detects your blood pressure and pulse rate during inflation.

The “” symbol flashes at every heartbeat.

Note

- When the “” symbol is displayed, the wrist cuff is not applied correctly. Press the [START/STOP] button to turn your monitor off, then apply the cuff correctly.

After your monitor has detected your blood pressure and pulse rate, the cuff automatically deflates. Your blood pressure and pulse rate are displayed. If either the systolic or the diastolic reading is high (refer to section 1.3), the “High” symbol appears.



3. Press the [START/STOP] button to turn your monitor off.

Note

- Your monitor will automatically turn off after 2 minutes.
- Wait 2 - 3 minutes between measurements. The wait time allows the arteries to decompress and return to their pre-measurement form. You may need to increase the wait time depending on your individual physiological characteristics.

Using Memory Function

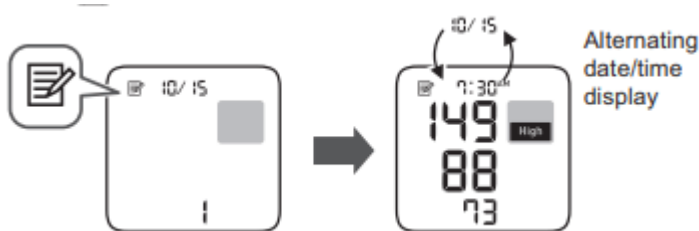
Your monitor automatically stores up to 60 readings.

Note

- This monitor can be used by multiple users. When you use memory function with other users, track (or manage) your own readings appropriately.

1 Viewing the Readings Stored in Memory

1. Press the  button.




The Memory number appears for one second before the pulse rate is displayed. The most recent reading set is numbered “1”.

Note


- If the reading is high (refer to section 1.3), the “High” symbol appears.
- If there are no readings stored in the memory, the screen to the right is displayed.
- If the memory is full, the monitor will delete the oldest readings.




2. Press the  button repeatedly to scroll through the previous readings stored in the memory.

2 Viewing the Average Reading

Your monitor can calculate an average reading based on the latest 2 or 3 readings taken within 10 minutes span.

1. When your monitor is off, press and hold the  button for more than 2 seconds.



Note


- If there are only 2 readings in the memory for that period, the average will be based on these 2 readings.
- If the average reading is high (refer to section 1.3), the “  ” symbol appears.

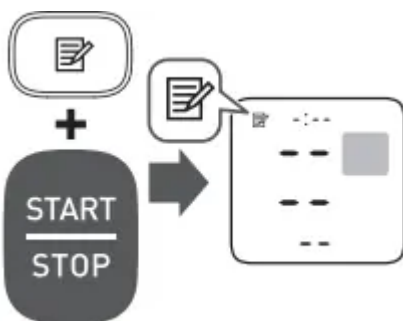


Other Settings

1 Deleting All Readings Stored in Memory

1. Press the  button, then the “  ” symbol appears.

2. While holding the  button down, press and hold the [START/STOP] button for more than 2 seconds.



Note

- All readings will be deleted. You cannot partially delete the readings stored in the memory

Error Messages and Troubleshooting

In case of any of the below problems occur during measurement, first check that no other electrical device is within 12 inches (30 cm). If the problem persists, please refer to the table below.

E1 appears or the wrist cuff does not inflate.

- The wrist cuff is not applied correctly.
 - Apply the wrist cuff correctly, then take another measurement. Refer to section 2.4.
- Air is leaking from the wrist cuff.
 - Contact customer service. Refer to chapter 10.


E3 appears

- The wrist cuff is overinflated exceeding 300 mmHg.
 - Do not touch the wrist cuff while taking a measurement.

E4 appears

- You move or talk during a measurement. Vibrations disrupt a measurement.
 - Remain still and do not talk during a measurement.

E5 appears  /  appears  appears

- The pulse rate is not detected correctly.
 - Apply the wrist cuff correctly, then take another measurement. Refer to section 2.4. Remain still and sit correctly during a measurement. If the “” symbol continues to appear, we recommend you to consult with your physician.

Er appears

- The monitor is malfunctioned.
 - Press the [START/STOP] button again. If “Er” still appears, contact customer service. Refer to chapter 10.



flashes

- Batteries are low.
 - Replacing all batteries with 2 new alkaline batteries is recommended. Refer to section 2.1.



appears or the monitor is turned off unexpectedly during a measurement

- Batteries are depleted.
 - Immediately replace all batteries with 2 new alkaline batteries. Refer to section 2.1.

No power. Nothing appears on the display of the monitor.

- Batteries are completely depleted.
 - Immediately replace all batteries with 2 new alkaline batteries. Refer to section 2.1.
- Battery polarities are not properly aligned.
 - Check the battery installation for proper placement. Refer to section 2.1.

Readings appear too high or too low.

- Blood pressure varies constantly. Many factors including stress, time of day, and/or how you apply the wrist cuff, may affect your blood pressure. Review sections 2.3 - 2.5 and chapter 3.

Any other problems occur.

- Press the [START/STOP] button to turn the monitor off, then press it again to take a measurement. If the problem continues, remove all batteries and wait for 30 seconds. Then re-install batteries. If the problem still persists, contact customer service. Refer to chapter 10

Maintenance

1 Maintenance

To protect your monitor from damage, please follow the directions below:

- Changes or modifications not approved by the manufacturer will void the user warranty.

Caution

- DO NOT disassemble or attempt to repair this monitor or other components. This may cause an inaccurate reading.

2 Storage

Keep your monitor in the storage case when not in use.

- Store your monitor in a clean, safe location.

Do not store your monitor:

- If your monitor is wet.
- In locations exposed to extreme temperatures, humidity, direct sunlight, dust or corrosive vapors such as bleach.
- In locations exposed to vibrations or shocks.

3 Cleaning

- Do not use any abrasive or volatile cleaners.
- Use a soft dry cloth or a soft cloth moistened with neutral soap to clean your monitor and wrist cuff, and then wipe them with a dry cloth.
- Do not wash or immerse your monitor and wrist cuff in water.
- Do not use gasoline, thinners or similar solvents to clean your monitor and wrist cuff.

4 Disposal

Dispose of your monitor and other components according to applicable local regulations. Unlawful disposal may cause environmental pollution.

Specifications

Model	BP6100 <small>REF</small> HEM-6180-Z
Display	LCD digital display
Cuff pressure range	0 to 299 mmHg
Blood pressure measurement range	SYS: 60 to 260 mmHg DIA: 40 to 215 mmHg
Pulse measurement range	40 to 180 beats / min.
Accuracy	Pressure: ± 3 mmHg Pulse: $\pm 5\%$ of display reading
Inflation	Automatic by electric pump
Deflation	Automatic rapid deflation
Measurement method	Oscillometric method
Operation mode	Continuous operation
IP classification	IP 22
Rating	DC3 V 3.0 W
Power source	2 "AAA" alkaline batteries 1.5 V
Battery life	Approximately 300 measurements (using new alkaline batteries)
Durable period (Service life)	5 years
Operating conditions	+50°F to +104°F (+10°C to +40°C) / 15 to 90% RH (non-condensing) / 800 to 1060 hPa
Storage / Transport conditions	-4°F to +140°F (-20°C to +60°C) / 10 to 90% RH (non-condensing)
Weight	Approximately 3.0 oz. (86 g) not including batteries
Dimensions	Approximately 3.7" (w) × 2.4" (h) × 0.8" (l) (93 mm × 62 mm × 20 mm) (not including the wrist cuff)
Measurable wrist circumference	5.3" to 8.5" (13.5 to 21.5 cm)
Memory	Stores up to 60 readings
Contents	Monitor, storage case, 2 "AAA" alkaline batteries, instruction manual, quick start guide
Protection against electric shock	Internally powered ME equipment
Applied part	Type BF (wrist cuff)
Maximum temperature of the applied part	Lower than +118.4°F (+48°C)

Note

- These specifications are subject to change without notice.
- This monitor is clinically investigated according to the requirements of ISO 81060-2:2013. In the clinical validation study, K5 was used on 85 subjects for determination of diastolic blood pressure.
- 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. This monitor is protected against solid foreign objects of 0.5 inches (12.5 mm) diameter and greater such as a finger, and against oblique falling water drops which may cause issues during a normal operation.

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.