

Blood Pressure Monitor

Wrist Strap Blood Pressure Monitor

Owner's Manual

Model : 3060



Dear 3060 System Owner :
Thank you for purchasing the 3060 Blood Pressure Monitoring System. This manual provides important information to help you operate this system correctly. Before using this product, please read the following contents thoroughly and carefully.
With the compact size and easy operation of this 3060 Blood Pressure Monitoring System, you can easily monitor your blood pressure by yourself at any time or place. In addition, this system can help you and your healthcare professionals to monitor and adjust your treatment plans, and keep your blood pressure under control.
If you have other questions regarding this product, please contact the place of purchase.

IMPORTANT SAFETY PRECAUTIONS READ THIS BEFORE USE

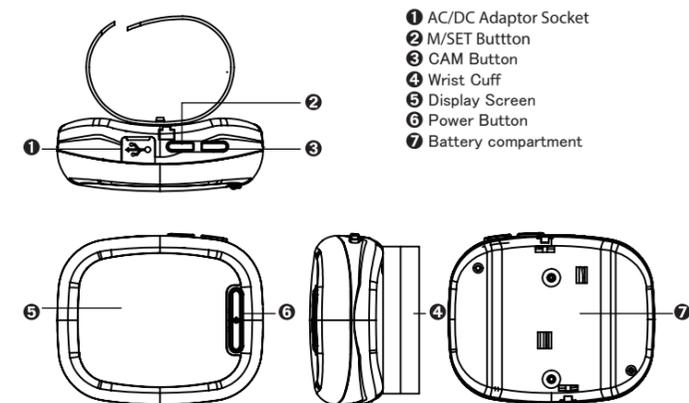
1. Use this device ONLY for the intended use described in this manual.
2. Do **NOT** use accessories which are not specified by the manufacturer.
3. Do **NOT** use the device if it is not working properly or damaged.
4. Do **NOT** use the equipment where aerosol sprays are being used, or where oxygen is being administered.
5. Do **NOT** use under any circumstances on newborns.
6. This device does **NOT** serve as a cure for any symptoms or diseases. The data measured are for reference only. Always consult your doctor to have the results interpreted.
7. Keep the equipment and its flexible cord away from hot surfaces.
8. Do **NOT** apply the cuff to areas other than the place directed.
9. Do **NOT** remove plastic wrapping membrane to ensure the waterproof function.
10. Proper maintenance and periodically calibration are essential to the longevity of your device. If you are concerned about your accuracy of measurement, please contact local customer service for help.

KEEP THESE INSTRUCTIONS

BEFORE YOU BEGIN

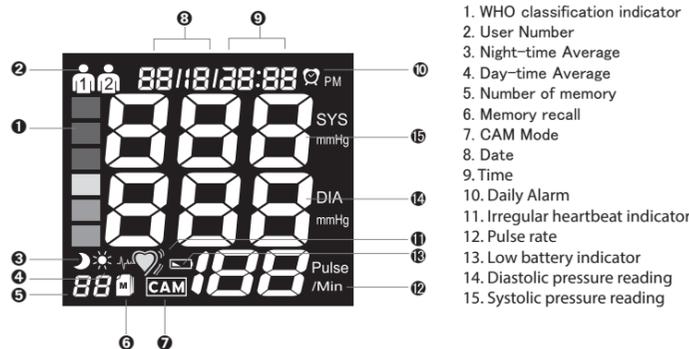
- Intended Use
The 3060 system is a system designed to measure the systolic and diastolic blood pressure and pulse rate by using a non-invasive technique in which an inflatable cuff is wrapped on the wrist. It is intended for individuals age 18 and above for use at home and in clinical settings. The device is not to be used for the diagnosis or screening of hypertension or for testing on newborns.
- Test Principle
Blood pressure is measured non-invasively at the wrist based on oscillometric method. This device is **NOT** able to take measurements in the presence of common arrhythmia, such as atrial or ventricular premature beats or atrial fibrillation. It may produce reading error.

MONITOR OVERVIEW



Do not use the accessory or equipments which are not certified by Manufacture. It might increased emissions or decreased immunity of this system.

DISPLAY SCREEN



1. WHO classification indicator
2. User Number
3. Night-time Average
4. Day-time Average
5. Number of memory
6. Memory recall
7. CAM Mode
8. Date
9. Time
10. Daily Alarm
11. Irregular heartbeat indicator
12. Pulse rate
13. Low battery indicator
14. Diastolic pressure reading
15. Systolic pressure reading

SETTING THE MONITOR

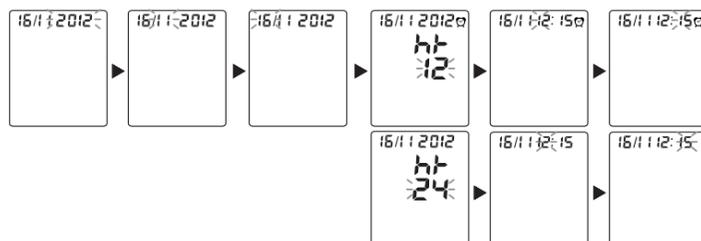
Before using your monitor for the first time, check and update these settings. Make sure you complete the steps below and save the desired settings.

Entering the Setting Mode

Start with the monitor off. Press and firmly hold M/SET for 3 seconds until the "2012" flashes on the upper right corner.
If the meter is idle for 1.5 minutes, it turns to no time setting: "--/--/--".

Setting the Date and the Time

With the year flashing, press M/SET button until the correct year appears. Press CAM button to set.
With the month flashing, press M/SET button until the correct month appears. Press CAM button to set.
With the day flashing, press M/SET button until the correct day appears. Press CAM button to set.
With the hour flashing, press M/SET button to select the desired time system 24hr or 12hr, AM/PM only displays while the 12hr system is selected. Press CAM button to set.
With the minute flashing, press M/SET button until the correct minute appears. Press CAM button to set and exit from date/time setting.



NOTE

1. If the meter is idle for 1.5 minutes during the setting mode, it will switch off automatically

Setting the Alarm

With device in standby status, press and firmly hold M/SET button and CAM button at the same time for 2 seconds until an alarm icon flashes on the upper right corner.

Release the both buttons and then "1" will flash on the screen, press M/SET button to switch between alarm "1" and "2".

Press CAM button with the hour flashing, press M/SET button until the desired hour appears. Press CAM button to set.
With the minute flashing, press M/SET button until the desired minute appears.
Press CAM button to set. The meter will switch off automatically.

At the time of your alarm, the meter will beep and automatically turn on. You can press every button to silence the alarm. When the alarm "1" or "2" flashing, press CAM button to switch off the alarm, the display "ON" changed to be "OFF"

USER NUMBER SELECTION

This system stores blood pressure measurements for up to two users. Each user has 60 memories stored separately.

1. With device in standby status, user 1 is the default user. Press START button and M/SET button for 1 second till User "1" icon hides and User "2" icon shows.
2. When User "2" icon displays, Press START button and M/SET button for 1 second again, User "1" icon displays and hides User "2" icon.

TESTING YOUR BLOOD PRESSURE BEFORE MEASUREMENT

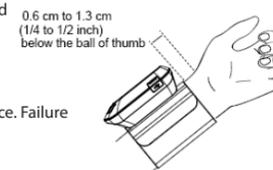
- Avoid caffeine, tea, alcohol and tobacco for at least 30 minutes before measurement.
- Wait 30 minutes after exercising or bathing before measurement.
- Sit or lie down for at least 10 minutes before measurement.
- Do not measure when feeling anxious or tense.
- Take a 5-10 minute break between measurements. This break can be longer if necessary, depending on your physical condition
- Keep the records for your doctor as reference.
- Blood pressure naturally varies between each arm. Always measure your blood pressure on the same wrist.

CORRECT APPLICATION OF THE PRESSURE CUFF

Slide the cuff onto your wrist. Wrap the cuff comfortably around your wrist.



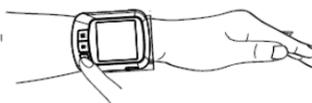
The top margin of the meter should be about 0.6 cm to 1.3 cm (1/4 to 1/2 inch) below the ball of thumb. When the cuff is positioned correctly, fold the loose end back and secure it in place by pressing the pile material firmly against the hook material.



Warning!!
Always apply the wrist cuff before turning on the device. Failure to do so will damage the device.

TESTING YOUR BLOOD PRESSURE

- Step1** Sit down for at least 10 minutes before measurement.
- Step2** Apply the wrist cuff



Step3 Press the POWER button and place your arm in front of your chest. Relax and make sure the device is at the same height as your heart. Holding the elbow of the arm wearing the wrist cuff with your other hand helps you hold still during measurement. Remain still and do not talk or move during the measurement.



TAKING MEASUREMENTS

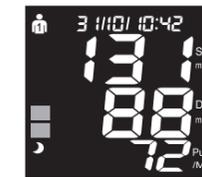
TAKING A SINGLE MEASUREMENT

Always apply the pressure cuff before turning on the monitor.

1. Touch the Power button to turn the monitor on, move the device to be the same height as the heart. When the position is correct, a red bar and a yellow bar flash on the display and device starts automatically. Otherwise, two red bars flashing indicate the position is too high while two green bars flashing to prompt too low.
2. "0" displays on LCD which means device is under auto zero resetting.
3. Pump starts to inflate and pressure in cuff increases to working pressure.
4. The heart symbol "♥" will show silently when pulse is detected during the inflation. When signal of pulse becomes strong, "♥" icon starts to flash.



5. After the measurement, the monitor displays the systolic pressure, diastolic pressure and pulse rate with a long beeper sounds. The reading is classified by color bar which divided according to WHO classification of blood pressure.



If IHB is detected, LCD displays the measurement with "♥" icon flashing 8 times to remind users of irregular heartbeat.

Note

- If you press Power button during measurement, the monitor will be turned off.
- If the pulse rate symbol is shown as "♥" instead of "♥", this indicates that the monitor has detected an irregular heart beat.

PROSMEASUREMENT MODE

Always apply the pressure cuff before turning on the monitor.

1. Press CAM button to begin. move the device to be same height as the heart, when the position is correct, a red bar and a yellow bar flash on the display and device starts automatically. Otherwise, two red bars flashing indicates the position is too high while two green bars flashing means too low. "0" displays on LCD which means device is under auto zero resetting. LCD shows [CAM] in Pros mode; "1" means 1st measurement.



2. Pump starts to inflate and pressure in cuff increases to working pressure.



3. The heart symbol "♥" will show silently when pulse is detected during the inflation. When signal of pulse becomes strong, "♥" icon starts to flash and a beep is heard for every heartbeat.



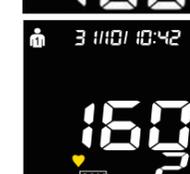
4. After the 1st measuring, cuff deflates completely and device comes into 60 seconds count down.



5. Pump starts to inflate and pressure in cuff increases to working pressure.

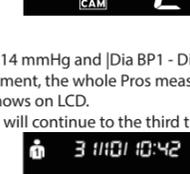


6. The heart symbol "♥" will show silently when pulse is detected during the inflation. When signal of pulse becomes strong, "♥" icon starts to flash and a beep is heard for every heartbeat.

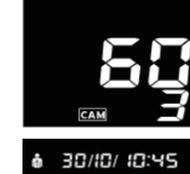


Note

- If the reading meet the condition of [SYS BP1-SYS BP 2] <14 mmHg and [Dia BP1 - Dia BP2] <9 mmHg as well as pulse rate > 60 for 1st and 2nd measurement, the whole Pros measurement finished after the two measurements and the result shows on LCD.
- If the reading does not meet the mentioned condition, it will continue to the third turn measurement.
- 7. After the 2nd measuring, cuff deflates completely and device comes into 60 seconds count down.



8. Pump starts to inflate and pressure in cuff increases to working pressure.



9. The heart symbol “♥” will show silently when pulse is detected during the inflation. When signal of pulse becomes strong, “♥” icon starts to flash and a beep is heard for every heartbeat.



Note

If the reading meet the condition of [SYS BP1-SYS BP 2] >15mmHg or [Dia BP1 - Dia BP2] >10 mmHg as well as pulse rate> 60 for 1st and 2nd measurement, the whole Pros function finished with 3 times measurement and the result shows on LCD.

10. Pros averaged values and the corresponding color bars----WHO classification of blood pressure ---- will be displayed on LCD.

○ If arrhythmia is detected, LCD displays the measurement with “♥” icon flashing 8 times to remind users of irregular heartbeat (show IHB icon whenever pulse less than 42 beat / min-instead of former 48)



Note

If the meter is idle for 1.5 minutes, it will switch off automatically.

AVERAGING RESULT MODE

Press M/SET button, the average of all storage shows on LCD. Press M/SET button again, the average of storage measured in day shows on LCD. Press M/SET button one more, the average of storage measured at night shows on LCD.



MEMORY RECALL AND DELETION

The device stores 90 most recent blood pressure test results along with respective dates and times in the monitor memory for each user. To recall the memory, touch the Power button to turn the monitor on.

1. Press M/SET button, the single memory reading appears. Per the setting, the larger memory number indicates the newer record.



Note

CAM will show on LCD if the measurement is taken under CAM mode.

2. Press M/SET button again to display the next memory. Review all test results stored in the monitor.
3. Delete the memory
With device in standby status, hold down M/SET button for 7 seconds until “CL” flashes on LCD, press M/SET button to confirm with two short beeps and all memories removed.
4. Exit the memory
Press Power button and the monitor will turn off.



NOTE
The deleting operation will delete all the readings in memory, not only single reading.

MAINTENANCE

BATTERY
Your monitor comes with one 4.2V Li-on rechargeable battery.

LOW BATTERY SIGNAL
The monitor will display the message below to alert you when the monitor power is getting low. The symbol appears along with display messages: The monitor is functional and the result remains accurate, but it is time to recharge the battery.

RECHARGE THE BATTERY

1. Battery charge display
It is time to charge the battery. Plug USB in to enter battery charge mode.

- NOTE**
- Recharging of the battery does not affect the test results stored in memory.
 - Recharging of the battery does not affect any function other than blood pressure measuring.
 - Measuring during battery recharging is prohibited.

CARING FOR YOUR MONITOR

To avoid the monitor attracting dirt, dust or other contaminants, wash and dry your hands thoroughly before use.

- CLEANING**
- To clean the monitor exterior, wipe it with a cloth moistened with tap water or a mild cleaning agent, then dry the device with a soft dry cloth. Do NOT flush with water.
 - Do NOT use organic solvents to clean the monitor.
 - Do NOT wash the pressure cuff.
 - Do NOT iron the pressure cuff.

- MONITOR STORAGE**
- Storage condition: -20°C to 55°C (-4°F to 131°F), below 95% relative humidity.
 - Always store or transport the monitor in its original storage case.
 - Avoid dropping or heavy impact.
 - Avoid direct sunlight and high humidity.

No modifications of 3060 Blood Pressure Monitoring System allowed by persons other than the manufacturer.

DETAILED INFORMATION

REFERENCE VALUES
Clinical studies show that adult diabetes is often accompanied by elevated blood pressure. People with diabetes can reduce their heart risk by managing their blood pressure along with diabetes treatment**.

Monitoring your routine blood pressure trend helps you to know your body condition. Human blood pressure naturally increases after reaching middle age. This symptom is a result of continuous ageing of the blood vessels. Further causes include obesity, lack of exercise and cholesterol (LDL) adhering to the blood vessels. Rising blood pressure accelerates hardening of the arteries, and the body becomes more susceptible to apoplexy and coronary infarction. The recommended blood pressure range is as below :

Classification	Systolic Pressure (mmHg)	Diastolic (mmHg)
Hypotension*2	Less than 90	Less than 60
Normal*3	Less than 120	Less than 80
Pre-hypertension*3	120 – 139	80 – 89
Stage 1 Hypertension*3	140 – 159	90 – 99
Stage 2 Hypertension*3	160 or more	100 or more

*2: National Heart, Lung, and Blood Institute, Diseases and Conditions
*3: The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. NIH Publication. 2003. No. 03-5233
*4: American Diabetes Association: The Diabetes-Heart Disease Link Surveying Attitudes, Knowledge and Risk (2002)

SYSTEM TROUBLESHOOTING

If you follow the recommended action but the problem persists, or error messages other than the ones below appear, please call your local customer service. Do not attempt to repair by yourself and never try to disassemble the monitor under any circumstances.

ERROR MESSAGES

MESSAGE	CAUSE	WHAT TO DO
	Inflation or pressure error.	Refit cuff tightly and correctly. If error still remains, contact local customer service for help.
	Blood pressure measurement error	Refit cuff tightly and correctly. Relax and repeat the measurement. If error still remains, contact local customer service for help.
	Improper movement detected during measurement.	Relax and repeat the measurement.
	No pulse detected	Refit cuff tightly and correctly. Relax and repeat the measurement. If error still remains, contact local customer service for help.
	The position is moved when the measurement is taking.	Relax and repeat the measurement. Remain still and do not talk or move during the measurement.
	Problems with the monitor	Review the instructions and repeat the test. If the monitor still does not work, please contact the local customer service for help.

TROUBLESHOOTING

1. If no display appears after pressing the POWER button :

POSSIBLE CAUSE	WHAT TO DO
Batteries exhausted.	Replace the batteries.
Batteries incorrectly installed or absent.	Check that the batteries are correctly installed.

2. If the heart rate is higher/lower than user's average :

POSSIBLE CAUSE	WHAT TO DO
Movement during measurement.	Repeat measurement.
Measurement taken just after exercise.	Rest at least 30 minutes beforehand.

3. If the result is higher/lower than user's average measurement :

POSSIBLE CAUSE	WHAT TO DO
May not be in correct position while measuring.	Adjust to the correct position to measure.
Blood pressure naturally varies from time to time.	Keep in mind for next measurement.

4. If the cuff inflates again while measuring :

POSSIBLE CAUSE	WHAT TO DO
Cuff is not fastened.	Fasten the cuff again.

If user's blood pressure is higher than the pressure the device has inflated, the device will automatically increase the pressure and start to inflate again. Stay relaxed and wait for the measurement.

DETAILED INFORMATION

REFERENCE VALUES
Human blood pressure naturally increases after reaching middle age. This symptom is a result of continuous ageing of the blood vessels. Further causes include diabetes, lack of exercise and cholesterol (LDL) adhering to the blood vessels. Rising blood pressure accelerates hardening of the arteries, and the body becomes more susceptible to apoplexy and coronary infarction.

Definitions and Classification of blood pressure levels according to 2007 ESH-ESC Practice Guidelines for the Management of Arterial Hypertension :

Category	Systolic (mmHg)	Diastolic (mmHg)
Optimal	< 120	and < 80
Normal*3	120–129	and/or 80–84
High normal	130–139	and/or 85–89
Grade 1 hypertension	140 – 159	and/or 90 – 99
Grade 2 hypertension	160–179	and/or 100–109
Grade 3 hypertension	≥ 180	and/or ≥ 110
Isolated systolic hypertension	≥ 140	and < 90

Isolated systolic hypertension should be graded (1, 2, 3) according to systolic blood pressure values in the ranges indicated, provided that diastolic values are < 90mmHg.

Source: The European Society of Hypertension and European Society of Cardiology Task Force Members. 2007 ESH-ESC Practice Guidelines for the Management of Arterial Hypertension. J Hypertens 2007; 25: 1751-1762.

SYMBOL INFORMATION

Symbol	Referent	Symbol	Referent
	Consult instructions for use		Authorized representative in the European Community
	Manufacturer		Class II
	Serial number		Humidity limitation
	Caution, consult accompanying documents		Water-proof grade
	Type BF Equipment		CE mark
	Dispose of in accordance with the requirements of your country.		Temperature limitation
	Keep away from sunlight		Keep dry

SPECIFICATIONS
SYSTEM PERFORMANCE

Power source	4.2V Li-ion
Size of monitor w/o cuff	82.5 (L) x 68.1 (W) x 29.8 (H) mm,134 with cuff
Cuff type	soft wide range 12-21 cm (4.7"-8.3" inches) with air tube 70 cm
Memory	Maximum 60 memory records for each user
Power saving	Automatic power off if system idle for 1.5 minutes
System operating condition	10°C to 40°C (50°F to 104°F), 15-95% RH 0 ~ 3000 meter height (700hPa-986hPa)
Meter storage condition	-20°C to 55°C (-4°F to 131°F), 15-95% RH

BLOOD PRESSURE MEASUREMENT PERFORMANCE

Pressure range	20 - 280 mmHg
Heart rate range	40 - 200 beat per minute
Systolic Measurement Range	50 mmHg -250 mmHg
Diastolic Measurement Range	30 mmHg -180 mmHg
Pulse Rate Measurement Range	40 -200 beats / minute
Maximum inflation pressure	280 mmHg
Accuracy of Pressure	±3 mmHg or ±2% of the reading
Accuracy of Pulse rate	±4% of the reading
Measurement unit	mmHg

This device has been tested to meet the electrical and safety requirements of: IEC/EN 60601-1, IEC/EN 60601-1-2
Reference to Standards:
• EN 1060-1 /-3, NIBP-requirements
• IEC60601-1 General requirement for safety
• IEC60601-1-2 Requirements for EMC
• EN1060-4, NIBP clinical investigation
• AAMI / ANSI / IEC 80601-2-30, ANSI/AAMI/ISO 81060-2, NIBP requirements

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