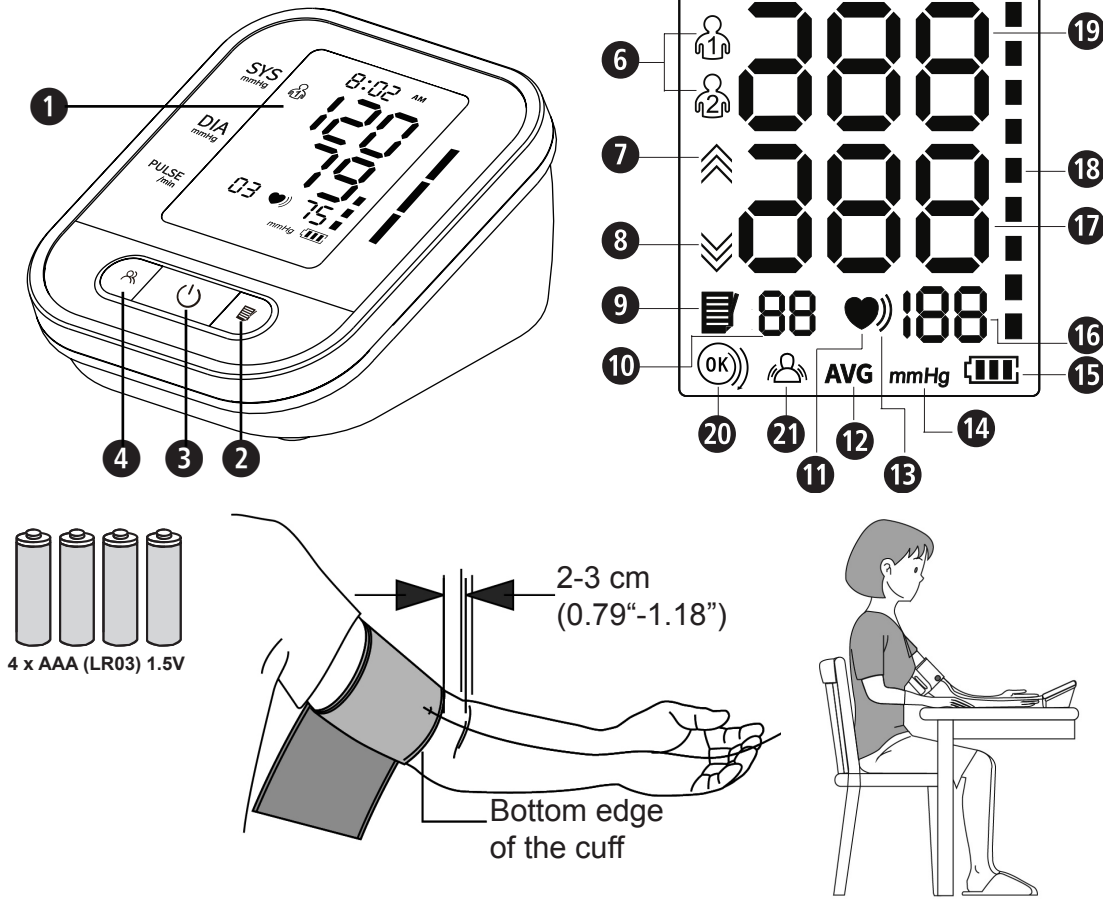


GB Instructions for use
Upper Arm Blood Pressure Monitor BU 509

Instruction manual - *Please read carefully!*

Unit and LC-Display



Intended use

- This upper arm blood pressure monitor is designed to measure the systolic and diastolic pressure and pulse rate of an adult person using non-invasive oscillometric technique through an inflatable cuff placed around the upper arm. The device can be used at home.

Contraindications

- There are no known contraindications.

Explanation of symbols

IMPORTANT

Follow the instructions for use!
Non-observation of these instructions can result in serious injury or damage to the device.

WARNING

These warning notes must be observed to prevent any injury to the user.

CAUTION

These notes must be observed to prevent any damage to the device.

NOTE

These notes give you useful additional information on the installation or operation.

MD Medical device

Temperature range

Ambient pressure limitation

Humidity range

Recycling symbols/codes:

These are used to provide information about the material and its proper use and recycling.

CE CE sign

This side up

Keep away from sunlight

IP21 The device is protected against splashing water. Water splashed against the enclosure from any direction shall have no harmful effects.

SN Serial number

EU REP EU authorized representative

UDI Unique device identifier

Battery change symbol

Keep dry

LOT LOT number

Manufacturer

Date of manufacture

Observe local disposal guidelines!

GB Safety Instructions

Read the instruction manual carefully before using this device, especially the safety instructions and keep the instruction manual for future use. Should you give this device to another person, it is vital that you also pass on these instructions for use.

- Only use the unit for its intended purpose in accordance with the instructions for use. Warranty claims become void if the unit is misused.
- If you have any medical conditions (such as arterial occlusive disease, arrhythmia, atrial or ventricular atrial fibrillation, arteriosclerosis, poor circulation, diabetes, pre-eclampsia or kidney disease), consult your doctor before using the device. These diseases - just like movements, tremors or shivering - can lead to false readings.
- The unit may not be used to check the heart rate of a pacemaker.
- The result of a blood pressure measurement with this device is not suitable for self-diagnosis or self-treatment. To avoid health risks, always follow your doctor's instructions and contact him/her for an assessment of the measurement result.
- Never change the intake of medication prescribed by a doctor as a result of a measurement with this device and consult your doctor for advice on the best time to take the measurement before measuring.
- The device is not suitable for continuous monitoring of a patient, assessment of an existing disease or first aid.
- The device is not suitable for use on patients undergoing surgical treatment and should only be used in specified locations or in private homes.
- Pregnant women should take the necessary precautions and pay attention to their individual circumstances. Please consult your doctor if necessary.
- The patient is an intended operator and all the functions can be safely used.
- If discomfort such as upper arm pain, skin irritation or other discomfort occurs during a measurement, press the start/stop button **3** to deflate the cuff immediately. Loosen the cuff and remove it from the upper arm.
- This device is not designed to be used by persons with limited physical, sensory or mental abilities, or by persons with insufficient experience and/or knowledge, unless under observation by a person responsible for their safety, or unless they have been instructed in the use of the device.
- This device is intended to be used by adults. The unit is unsuitable for children or babies. Contact your doctor, if you want to use this device on young persons. Medical devices are not toys!
- Keep the appliance out of the reach of children.
- The device must not be operated in rooms with high radiation levels or in the vicinity of devices with high radiation levels such as radio transmitters, mobile phones or microwaves or in the vicinity of HF surgical devices, MRI devices (magnetic resonance imaging) or computer tomographs. This may cause malfunctions or incorrect readings.
- Protect the unit from moisture. Should liquid nevertheless penetrate the device, the batteries must be removed immediately and further applications avoided. In this case, contact your specialist dealer or inform us directly.
- Never use the unit outdoors or in damp rooms.
- Never use the unit in moving vehicles (e.g. cars).
- Do not operate the unit near flammable gas (e.g. narcotic gas, oxygen or hydrogen) or flammable liquid (e.g. alcohol).
- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the equipment, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.
- Do not make any modifications to the unit, do not disassemble it and never repair the unit yourself. Have repairs carried out only by authorised service centres.
- Before using the device, it is the user's responsibility to determine that the device is safe and working properly.
- Repeated blood pressure measurements in high numbers can lead to undesirable side effects, e.g. nerve crushing or blood clots.
- In case of performance fluctuations (e.g. inaccurate readings or abnormal display), stop using the device and contact customer service.
- Never place the cuff over injured skin, when a catheter is in place, or during blood transfusions.
- Talk to your doctor before using this device on an arm where there is an intravascular access or therapy or an arterio-venous (A-V) shunt, as there may be a temporary disruption of blood flow which could result in injury.
- Talk to your doctor before using the device if you have had a mastectomy or suffer from circulatory problems or blood disorders, as inflating the cuff may cause bruising.
- To avoid strangulation, always keep the cable and air tube away from children, infants and young children.
- Do not kink or bend the air hose excessively.
- Keep the device away from heavy shocks or vibrations and do not drop it.Never use force, e.g. when putting on the cuff.
- Only inflate the cuff when it is properly applied to the upper arm.
- Remove the cuff if the air is not automatically pumped out during measurement.
- Use only original accessories and spare parts from the manufacturer, otherwise damage to the unit or personal injury may result.
- Observe the local disposal guidelines if you wish to dispose of the unit.
- If you have any doubts about the proper functioning of the unit, stop using it and contact the service centre immediately.
- Swallowing small parts such as packaging material, battery, battery compartment cover, etc. can lead to suffocation. Therefore, never leave children alone with the unit.
- No maintenance or cleaning may be carried out during operation. Follow the maintenance and cleaning instructions in this manual.
- Do not measure blood pressure when other measurements are being taken on the same part of the body at the same time, as these may be disturbed or fail.
- If the ambient temperature is less than 5°C or more than 40°C, the waiting time from minimum storage temperature to use is at least 1 hour; the time from maximum storage temperature is at least 2 hours.
- Remove the batteries if you are not using the device for a long time.

SAFETY NOTES FOR BATTERIES

- Do not disassemble batteries!
- Replace all batteries if the unit display shows the low battery symbol.
- Never leave any low battery in the battery compartment since it may leak and cause damage to the unit.
- Increased risk of leakage! Avoid contact with skin, eyes and mucous membranes! If battery acid comes in contact with any of these parts, rinse the affected area with copious amounts of fresh water and seek medical attention immediately!
- If a battery has been swallowed, seek medical attention immediately!
- Replace all of the batteries simultaneously!
- Only replace with batteries of the same type, never use different types of batteries together or used batteries with new ones!

- Insert the batteries correctly, observing the polarity!
- Remove the batteries from the device if it is not going to be used for an extended period of 3 months or more!
- Keep batteries out of children's reach!
- Do not attempt to recharge batteries! There is a danger of explosion!
- Do not short circuit! There is a danger of explosion!
- Do not throw into a fire! There is a danger of explosion!
- Do not throw used batteries into the household refuse; put them in a hazardous waste container or take them to a battery collection point, at the shop where they were purchased!

Unit and LC-Display

1 LC-Display

2 User memory

3 Start/Stop

4 User selection / settings

5 Time/Date

6 User icon 1/2

7 Inflation icon

8 Deflation icon

9 Memory icon

10 Memory number

11 Pulse icon

12 Average value

13 Symbol irregular heartbeat

14 Blood pressure measuring unit

15 Battery change icon

16 Display of Pulse Rate

17 Display of Diastolic Pressure

18 Blood pressure indicator

19 Display of Systolic Pressure

20 Cuff fitness detection

21 Movement detection

Scope of delivery

First check that the unit is complete. The scope of delivery includes:

- 1 **medisana** Upper Arm Blood Pressure Monitor **BU 509**
- 4 Batteries (type AAA, LR03) 1.5V
- 1 Cuff 22 - 42 cm
- 1 Instruction manual

If you notice any transport damage when unpacking, please contact your dealer immediately.

WARNING

Please ensure that the polythene packing is kept away from the reach of children! Risk of suffocation!

What is blood pressure?

Blood pressure is the pressure created in the blood vessels by each heart beat. When the heart contracts (= systole) and pumps blood into the arteries, it brings about a rise in pressure.

The highest value is known as the systolic pressure and is the first value to be measured. When the cardiac muscle relaxes to take in fresh blood, the pressure in the arteries also falls. Once the arteries are relaxed, a second reading is taken – the diastolic pressure.

Blood pressure classification	
Low blood pressure	systolic <100 diastolic <60
Normal blood pressure	systolic 100 - 139 diastolic 60 - 89
Forms of hypertension	
Mild hypertension	systolic 140 – 159 diastolic 90 – 99
Moderate hypertension	systolic 160 – 179 diastolic 100 – 109
Severe hypertension	systolic ≥ 180 diastolic ≥ 110

WARNING

Blood pressure that is too low represents just as great a health risk as blood pressure that is too high! Fits of dizziness may lead to dangerous situations arising (e.g. on stairs or in traffic)!

- Influencing and evaluating readings**
 - Measure your blood pressure several times, then record and compare the results. Do not draw any conclusions from a single reading.
 - Your blood pressure readings should always be evaluated by a doctor who is also familiar with your personal medical history. When using the unit regularly and recording the values for your doctor, you should visit the doctor from time to time to keep him updated.
 - When taking readings, remember that the daily values are influenced by several factors.Smoking, consumption of alcohol, drugs and physical exertion influence the measured values in various ways.
 - Measure your blood pressure before meals.
 - Before taking readings, allow yourself at least 5-10 minutes rest.
 - If the systolic and diastolic readings seem unusual (too high or too low) on several occasions, despite correct use of the unit, please inform your doctor. This also applies to the rare occasions when an irregular or very weak pulse prevents you from taking readings.

Starting up: Insert / replace batteries

Before you can use your device, you must insert the enclosed batteries. The cover of the battery compartment is located on the back of the unit. Open it and insert 4 1.5V batteries, type AAA LR03. Pay attention to the polarity (as marked in the battery compartment). Close the battery compartment again.

Replace the batteries immediately when the battery change icon **15** appears in the display or when nothing appears in the display after the unit has been switched on.

User setting

Briefly press the “**⌂**” - button **4** to change the user setting. Pressing the “**⌂**” - button **4** briefly again switches between users 1 or 2.

Setting the date and time

The upper arm blood pressure monitor automatically stores up to 90 readings for each user (1 or 2). The memory function stores the readings with the date and time. Set the device to the current date and time before taking a measurement for the first time. The date and time cannot be changed during a measurement.

1. Press and hold button “**⌂**” **4** until the year flashes.
2. Use the button **2** to set the year and then press “**⌂**” **4** again to move to the month setting.
3. Now use the button **2** again to set the month and do the same for the day.
4. After date setting, the time needs to be set. Shortly press button **2** to switch the time system (12 or 24 hour display) and choose the time system you want.
5. After setting the time system, the computer will automatically enter the time setting mode. Adjust the hours and minutes by using the buttons **2** and “**⌂**” **4**.

How to measure correctly

- Take the measurement while sitting and preferably always on the left upper arm.
- Remove the clothing from the upper arm and relax for 5 to 10 minutes before the measurement.
- Relax your arm and rest it loosely, e.g. on a table.
- Keep calm during the measurement: do not move and do not talk, otherwise the measurement results may change.
- Take the measurement at the same time every day.
- Never measure after physical exertion or a bath - wait at least 20 to 30 minutes before taking a measurement.
- Keep your legs still during the measurement and do not cross your legs.

- Always use only the original cuff and no spare parts that have not been approved by the manufacturer.
- The following influences can noticeably change the measurement results: Measurement within one hour after a meal, consumption of alcohol, tea, coffee, restless mood or nervousness, exercise, movements (including bending forward) or drastic changes in room temperature during measurement, measurement in moving vehicles, frequently repeated measurements.

Fitting the cuff

1. Push the end piece of the air tube into the hole on the left side of the unit prior to use
2. Slide the open end of the cuff through the metal bracket so that the Velcro fastener is on the outside and it becomes a cylindrical form. Slide the cuff over your left upper arm.
3. Position the air hose in the middle of your arm in line with your middle finger. The lower edge of the cuff should be 2 - 3 cm above the crease of the elbow (see illustration). Pull the cuff tight and close the Velcro fastener.
4. Measure on the bare upper arm, the cuff should be at about heart level.
5. Only position the cuff on the right arm if it cannot be used on the left arm. Always carry out measurements on the same arm.
6. Correct measuring position in sitting position - see illustration.

Measure the blood pressure

After you have properly applied the cuff, the measurement can be started:

1. Press the START/STOP button **3** to start the measurement. Automatically, the device slowly inflates the cuff to measure your blood pressure and the display shows “00”.
2. The device inflates the cuff until a pressure sufficient for the measurement is reached. The device then slowly deflates the cuff and takes the measurement. As soon as the device detects a signal, the pulse icon **11** starts flashing in the display.
3. When the measurement is finished, the cuff is deflated. The systolic **19** and diastolic **17** blood pressure and the pulse value **16** appear in the display. According to the blood pressure classification, the blood pressure indicator **18** appears next to the corresponding coloured bar. If the device has detected an irregular pulse, the symbol for irregular heartbeat **13** also appears.
4. The measured values are automatically stored in the selected memory (1 or 2). Up to 90 measured values can be stored in each memory. If 90 values are already stored, the oldest value is overwritten.

Cuff fitness detection

The cuff fitness detection icon **20** is always displayed on the screen when the cuff is wore correctly. When the cuff is wore too loosely, the icon will flash to remind you.

Movement detection

The movement detection **21** flashes when body movement is detected. It may cause inaccurate measurement results. Please restart the measurement.

Discontinuing a measurement

If it is necessary to interrupt a blood pressure measurement for any reason (e.g. the patient feels unwell) the START/STOP button **3** can be pressed at any time. The device immediately decrease the cuff pressure automatically.

Disturbing factors

If the cuff is too loose or if there is movement during the measurement, the result will not be determined correctly. Stop the procedure and repeat the measurement with the cuff correctly applied and without movements during the measurement.

Display / delete stored values

In standby mode, press the button **2** once. The unit displays the average blood pressure reading of the last three times (“AVG” **12** lights up). You can then use the button **2** to display further readings.

If you want to delete stored values, press and hold the button **2** for about 3 seconds to clear the memory. “NO” appears on the display.

Automatic switch-off

If no operation is performed for approx. 1 minute, the unit switches off automatically.

Error displays

In the event of unusual measurements, the following indications appear on the display:

Display	Cause / Solution
Er U	The inflation phase takes too long. The inflation pressure does not reach 30 mmHg within 12 seconds - please check the correct fit of the cuff.
Er H	Inflation pressure reaches 295 mmHg - automatic deflation after 20 ms.
Er 1	No pulse detected.
Er 2	Movement, talking or magnetic interference during the measurement process.
Er 3	Abnormal measurement result.
Er 23	Systolic value below 57 mmHg
Er 24	Systolic value above 255 mmHg
Er 25	Diastolic value below 25 mmHg
Er 26	Diastolic value above 195 mmHg

Troubleshooting	
Problem	Cause and solution
No display although the unit is switched on and batteries are inserted	The batteries may be empty. Insert new batteries, observing the polarity. Check whether the unit is defective. If necessary, contact the customer service.
Measurement cannot be carried out or air escapes / no pressure build-up	Put the cuff on correctly. Repeat the measurement after a 30-minute rest period. Do not talk or move during the measurement.
Each measurement produces widely differing results or a measurement is not possible because of an error display.	Repeat the measurement in the correct manner after a 30-minute rest period. Follow all the instructions given in this manual for correct measurement and common causes of incorrect measurements. Slightly deviating results are normal as blood pressure is subject to constant fluctuations.
The measured results differ greatly from the values measured by the doctor	Save the measured values and discuss them with your doctor. It is not uncommon that values not measured at home can deviate greatly.

If you cannot solve a problem, contact customer service. Do not disassemble the unit yourself.

Cleaning and care

Remove the batteries before cleaning the device. Clean the unit and the cuff with a soft cloth lightly moistened with a mild soap solution. Never use harsh detergents, alcohol, naphtha, thinner or petrol etc.. Do not immerse the unit or any accessories in water. Make sure that no moisture enters the unit. Do not use the unit again until it is completely dry. Do not expose the unit to direct sunlight, protect it from dirt and moisture. Do not expose the unit to extreme heat or cold. Clean the unit once a week. Store the unit in a clean and dry place according to the environmental conditions for storage and transport.

Disinfection

We recommend disinfecting the unit with a 70% isopropanol solution for approx. 1 minute before and after each use. To do this, proceed as follows:
Disinfect the housing with a soft cloth slightly moistened in the solution and wipe dry immediately.
Do not disinfect with high-temperature steam or ultraviolet irradiation, as this could damage the unit or accelerate its ageing!

For any cleaning and disinfection, ensure that the specified ambient conditions for operation are observed. No moisture of any kind may penetrate the unit!

Disposal

This product must not be disposed of together with domestic waste. All users are obliged to hand in all electrical or electronic devices, regardless of whether or not they contain toxic substances, at a municipal or commercial collection point so that they can be disposed of in an environmentally acceptable manner. Remove the batteries before disposing of the device/unit. Do not dispose of old batteries with your household waste, but at a battery collection station at a recycling site or in a shop. Consult your local authority or your supplier for information about disposal.

Guidelines and standards

This blood pressure monitor complies with the EU standard for non-invasive blood pressure monitors. It is certified according to EC directives and bears the CE mark (mark of conformity). The blood pressure monitor complies with the European regulations EN 60601-1 and EN 60601-1-2. This device is certified in accordance with EC Guidelines and carries the CE symbol (conformity symbol). The specifications of MDR (EU) 2017/745 are met.

Electromagnetic compatibility: (see attached leaflet)	
Technical specifications	
Name and model	: medisana Upper Arm Blood Pressure Monitor BU 509
Display system	: Digital display
Memory slots	: 2 x 90 for measurement data
Measuring method	: Oscillometric
Power supply	: 6V=4 x 1.5V batteries AAA LR03
Low battery	: 4.2V±0.1V (low battery voltage); <4.0V±0.1V (unit is switched off)
Blood pressure measuring range	: Systole: 57-255 mmHg Diastole: 25-195 mmHg
Measuring range pulse	: 40-199 beats/min.
Maximum measurement deviation of static pressure	: ± 3 mmHg
Maximum measurement deviation of pulse values	: ± 5 %
Mode of operation	: Continuous operation
Service life	: 5 years
Protection against electric shock	: Internally powered ME unit when using batteries, Class II ME unit when using a power supply unit.
Operating conditions	: +5 °C to +40 °C, 15 to 90 % max. relative humidity, atmospheric pressure: 70-106 kPa
Storage and transport conditions	: -20 °C to +55 °C, 10 to 93 % max. relative humidity, atmospheric pressure: 70-106 kPa. During transportation or storage, avoid shocks, direct blows, corrosive gas, exposure to sunlight or rain. Ensure good ventilation.
Dimensions (L x W x H)	: approx. 118 x 98 x 61 mm
Screen size	: approx. 50 x 65 mm
Cuff	: approx. 22 - 42 cm for adults
Weight	: approx. 230 g without batteries
Article number	: 50168
EAN number	: 4897138501686

In the course of continuous product improvements, we reserve the right to make technical and design changes.

The current version of these instructions for use can be found at www.medisana.asia

Warranty and repair terms

Please contact your supplier or the service centre in case of a claim under the warranty. If you have to return the unit, please enclose a copy of your receipt and state what the defect is. The following warranty terms apply:

1. The warranty period for medisana products is 5 years from date of purchase. In case of a warranty claim, the date of purchase has to be proven by means of the sales receipt or invoice.
2. Defects in material or workmanship will be removed free of charge within the warranty period.
3. Repairs under warranty do not extend the warranty period either for the unit or for the replacement parts.
4. The following is excluded under the warranty:
 - a. All damage which has arisen due to improper treatment, e.g. nonobservance of the user instructions.
 - b. All damage which is due to repairs or tampering by the customer or unauthorised third parties.
 - c. Damage which has arisen during transport from the manufacturer to the consumer or during transport to the service centre.
 - d. Accessories which are subject to normal wear and tear.
5. Liability for direct or indirect consequential losses caused by the unit are excluded even if the damage to the unit is accepted as a warranty claim.

Shenzhen AOJ Medical Technology Co., Ltd.

Room 30184-5F, Block A, Building A, Jingfa Intelligent Manufacturing Park, Xiawelyuan, Gushu Community, Xixiang Street, Bao'an District, 518126 Shenzhen, PEOPLE'S REPUBLIC OF CHINA

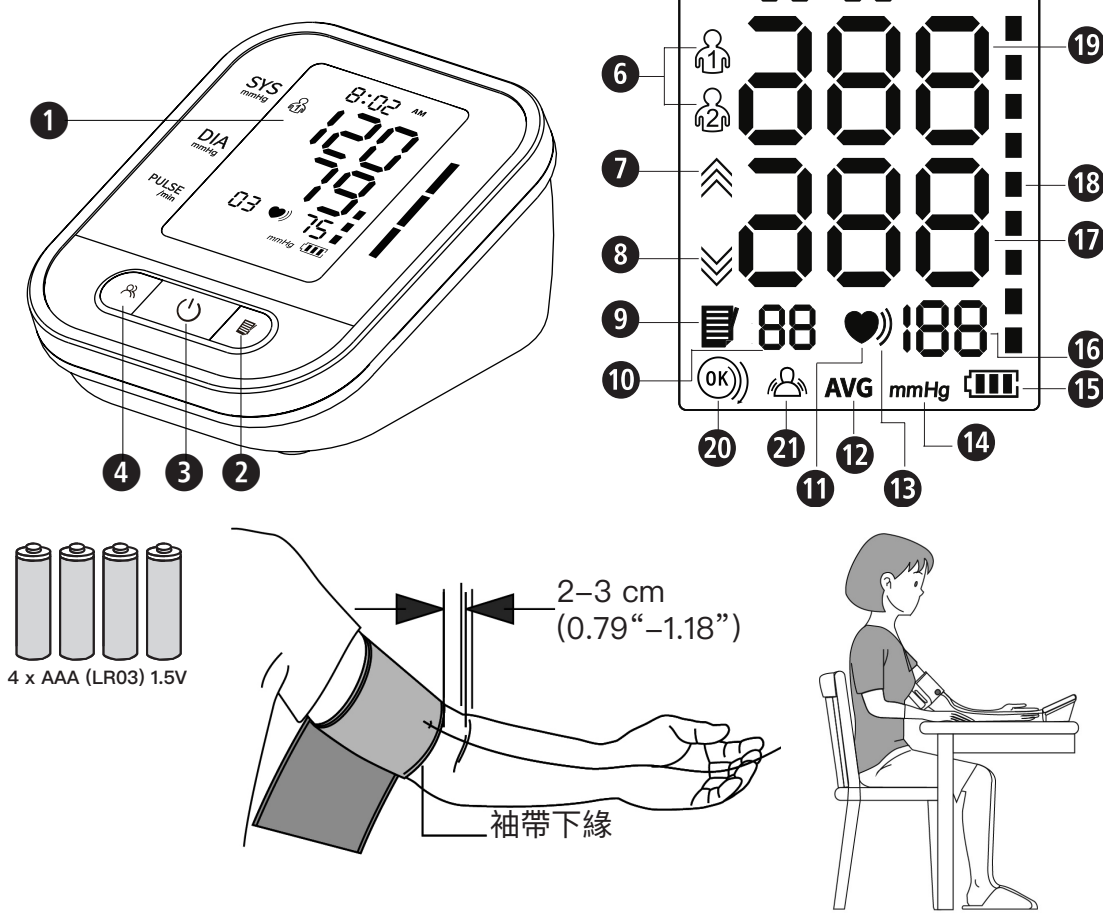
Share Info GmbH

Am Schulzentrum 12, 41564 Kaarst, Germany

TW 使用說明
上臂血壓計 BU 509

使用說明書－請詳閱！

本裝置與液晶顯示幕



預期用途

- 此款上臂血壓計係透過纏繞於上臂之充氣袖帶，以非侵入性震盪法測量成人之收縮壓、舒張壓與脈搏率。本裝置可供居家使用。

禁忌症

- 目前無已知禁忌症。

符號說明

	重要事項 請遵循使用說明！ 未遵守本說明可能造成嚴重傷害或裝置損壞。		醫療器材
	警告 必須遵守本警告事項，以避免使用者受傷。		溫度範圍
	注意 必須遵守本注意事項，以避免本裝置損壞。		環境壓力限制
	備註 本備註提供安裝或操作之實用補充資訊。		濕度範圍
	裝置分類 ：BF 型應用部分		回收符號/代碼： 用於提供材質、正確使用及回收相關資訊。
	更換電池符號		CE 標示
	保持乾燥		此面朝上
	批號		避免陽光直射
	製造商		IP21 本裝置具備防潑水的保護功能。來自任何方向的水灑到外殼上，應不會產生有害影響。
	製造日期		序號
	請遵守當地廢棄處理規範！		歐盟授權代理人
			醫療器材專屬識別碼 (UDI)

TW 安全說明



在使用本裝置之前，請仔細閱讀說明書，特別是安全說明，並妥善保管說明書以供日後參閱。如果您將此設備轉交給他人，務必同時提供這些使用說明。



- 僅依照使用說明書的指示，將本裝置用於其預定用途。若設備被不當使用，保固權利即失效。
- 如果您有任何健康狀況（例如動脈閉塞性疾病、心律不整、心房或心室顫動、動脈硬化、循環不良、糖尿病、子癰前症或腎臟疾病），請在使用本裝置前諮詢您的醫師。這些疾病——就像肢體動作、顫抖或發抖一樣——可能導致錯誤的讀數。
- 本機不得用於測量配戴心律調節器病患的心率。
- 使用本裝置測量的血壓結果不適合用於自行診斷或自行處置。為了避免健康風險，請始終遵循醫師的指示，並聯繫他/她以評估測量結果。
- 不要因使用本裝置的測量結果而隨意調整醫師處方藥物服用，並在測量之前諮詢醫師以獲得最佳測量時間的建議。
- 本裝置不適用於病患之連續監測、既有疾病之診斷評估或急救用途。
- 本裝置不適合用於接受手術治療之病患，應僅在指定地點或私人住宅中使用。
- 懷孕婦女應採取必要防護措施，並注意自身個人狀況。如有必要，請諮詢您的醫師。
- 病患為預期使用者，所有功能均可安全使用。
- 如果在測量過程中出現上臂疼痛、皮膚刺激或其他不適，請立即按下啟動/停止按鈕 ❶ 以使袖帶快速洩氣。請鬆開袖帶並將其從上臂取下。
- 本裝置不適合由身體、感官或心智能力有限的人士使用，或由經驗和/或知識不足的人士使用，除非在負責其安全的人的監護下，或除非他們已接受使用本裝置的指導。
- 本裝置僅供成人使用。本裝置不適用於兒童與嬰兒。如果您想在青少年身上使用此設備，請聯繫您的醫師。醫療器材不是玩具！
- 請將本裝置放置於兒童無法觸及的地方。
- 本裝置不得在輻射強度高的房間內操作，或在高輻射強度設備附近操作，例如無線電發射器、手機或微波爐，或在高頻電手術設備、磁共振成像 (MRI) 設備或電腦斷層掃描裝置附近操作。這可能會導致故障或不正確的讀數。
- 請保護本裝置遠離潮濕。如果液體不慎滲入設備，必須立即移除電池並避免進一步使用。在這種情況下，請聯繫您的專業經銷商或直接告知我們。
- 請勿在戶外或潮濕場所使用本裝置。
- 請勿在移動的車輛中使用本裝置（例如：汽車）。
- 請勿在易燃氣體（例如吸入麻醉劑、氧氣或氫氣）或易燃液體（例如酒精）附近操作本裝置。
- 應避免將此設備與其他設備鄰近或疊放，因為這可能導致操作不當。如果這種使用是必要的，則應觀察此設備及其他設備，以確認它們正常運作。
- 使用未經製造商指定或提供的配件、轉換器和電纜，可能會導致本設備的電磁排放增加或電磁耐受性降低，並可能導致設備運作不正常。
- 可攜式射頻通訊設備（包括天線電纜及外部天線等周邊設備）應至少與設備的任何部分保持 30 公分 (12 英吋) 以上的距離，包括製造商指定的電纜。否則，該設備的效能可能會衰減。
- 請勿對本裝置進行任何改裝，請勿拆解本裝置，亦請勿自行維修本裝置。維修僅得交由授權服務中心執行。
- 在使用本裝置之前，使用者有責任確認本裝置是安全且正常運作的。
- 重複進行大量的血壓測量可能會導致不良的副作用，例如神經壓迫傷害或血栓。
- 若發生性能波動（例如：讀數不準確或顯示異常），請停止使用本裝置並聯繫客服。
- 切勿將袖帶放置於受傷的皮膚上、導管留置處，或正在輸血時使用。
- 在使用本裝置於有血管內管路或治療，或動靜脈 (A–V) 瘻管的手臂之前，請先諮詢您的醫師，因為可能會血流暫時受阻，這可能導致受傷。
- 在使用本裝置之前，如果您曾經接受過乳房切除術或有循環問題或血液病變，請先諮詢您的醫師，因為充氣袖帶可能會造成瘀青。
- 為了避免纏繞窒息，請務必將電源線和氣管遠離兒童、嬰兒及幼童。
- 請勿過度扭折或彎曲空氣軟管。
- 請將本裝置遠離劇烈撞擊或震動，並避免掉落。請勿過度用力，例如佩戴袖帶時。
- 只有在袖帶正確佩戴於上臂時，方可進行充氣。
- 如果在測量過程中本裝置未自動洩氣，請取下袖帶。
- 僅使用製造商原廠配件與備品，否則可能會導致設備損壞或人身傷害。
- 若您想要棄置本裝置，請遵循當地的廢棄處理規範。
- 如果您對設備的正常運作有任何疑慮，請立即停止使用並聯繫服務中心。
- 誤吞小零件，如包裝材料、電池、電池艙蓋等，可能導致窒息。因此，切勿讓兒童單獨與本裝置相處。
- 運輸中請勿執行任何保養或清潔。請遵循本手冊中的維護和清潔指示。
- 在同一部位同時進行其他測量時，請勿測量血壓，因為這可能會受干擾或測量失敗。
- 如果環境溫度低於 5 °C 或高於 40 °C，自最低儲存溫度回溫至使用狀態至少為 1 小時；從最高儲存溫度開始的時間至少為 2 小時。
- 長時間不使用本裝置時請取出電池。

電池安全注意事項

- 請勿拆解電池！
- 如果本裝置顯示低電量符號，請更換所有電池。
- 請勿將任何低電量電池留在電池艙內，因為這可能會導致漏液並損壞本裝置。
- 電池漏液風險增加！避免與皮膚、眼睛及黏膜接觸！如果電池液接觸到這些部件，請用大量清水沖洗受影響的區域，並立即就醫！
- 如果誤吞電池，請立即就醫！
- 請同時更換所有電池！
- 僅更換相同類型的電池，切勿將不同類型的電池一起使用或將舊電池與新電池混合使用！

- 請正確安裝電池，注意極性！
- 如果本裝置在3個月或更長時間內不會使用，請將電池從本裝置中取出！
- 請將電池放置在兒童無法觸及的地方！
- 請勿嘗試對電池充電！有爆炸的危險！
- 請勿短路！有爆炸的危險！
- 請勿丟入火中！有爆炸的危險！
- 請勿將使用過的電池丟入一般垃圾中；將它們放入有害廢棄物容器中，或帶到購買地點的電池回收點！

本裝置與液晶顯示幕

- | | |
|----------|-------------|
| ❶ 液晶顯示幕 | ❷ 使用者記憶體 |
| ❸ 啟動/停止 | ❹ 使用者選擇/設定 |
| ❺ 時間/日期 | ❻ 使用者圖示 1/2 |
| ❼ 充氣圖示 | ❼ 洩氣圖示 |
| ❾ 記憶體圖示 | ❿ 記憶體編號 |
| ⓫ 脈搏圖示 | ⓫ 平均值 |
| ⓫ 心律不整圖示 | ⓫ 血壓測量單位 |
| ⓫ 電池更換圖示 | ⓫ 脈搏率顯示 |
| ⓫ 舒張壓顯示 | ⓫ 血壓指示器 |
| ⓫ 收縮壓顯示 | ⓫ 袖帶配戴偵測 |
| ⓫ 移動偵測 | |

標準配備

首先確認本裝置配件是否齊全。標記內容包括：

- 1 台 medisana 上臂血壓計 BU 509
- 4 顆電池（型號 AAA，LR03）1.5 V
- 1 條袖帶 22–42 公分
- 1 份使用說明書

如果您在拆包時發現任何運輸損傷，請立即聯繫您的經銷商。

警告
請確保塑膠包裝袋遠離兒童！窒息風險！

何謂血壓？

血壓是每次心跳在血管內產生的壓力。當心臟收縮（= 收縮期）並將血液泵入動脈時，會導致壓力上升。
最高值被稱為收縮壓，是第一個被測量的數值。當心肌放鬆以吸入新鮮血液時，動脈內的壓力也會下降。一旦動脈放鬆，將進行第二次測量——舒張壓。

低血壓	收縮壓 <100 舒張壓 <60
正常血壓	收縮壓 100 – 139 舒張壓 60 – 89
高血壓的類型	
輕度高血壓	收縮壓 140–159 mmHg 舒張壓 90–99 mmHg
中度高血壓	收縮壓 160–179 mmHg 舒張壓 100–109 mmHg
重度高血壓	收縮壓 ≥ 180 舒張壓 ≥ 110

警告
血壓過低同樣代表著與血壓過高一樣大的健康風險！眩暈可能引發危險（例如於樓梯或交通中）！

影響與評估讀數

- 請多次測量您的血壓，然後記錄並比較結果。請勿以單次測量數值做判斷。
- 您的血壓讀數應始終由熟悉您個人病史的醫師進行評估。當定期使用本裝置並記錄測量數值以供醫師參考時，您應該不時造訪醫師，並應定期回診更新狀況。
- 在進行測量時，請記住每日測量數值受到多種因素的影響。吸煙、飲酒、用藥及體力活動以不同方式影響測得的測量數值。
- 請於餐前測量您的血壓。
- 在進行測量之前，請至少休息 5–10 分鐘。
- 如果在多次測量中，若正確使用本裝置後，收縮壓和舒張壓的讀數看起來異常（過高或過低），請告知您的醫師。這也適用於那些不規則或非微弱脈搏，導致您無法進行測量的罕見情況。

啟動：插入/更換電池

在您使用本裝置之前，請先安裝隨附電池。電池艙的蓋子位於本裝置的背面。打開艙蓋並安裝 4 顆 1.5 V AAA LR03 電池。請注意極性（如電池艙中所標示）。再次關閉電池艙。
當顯示幕上出現電池更換圖示 ❷，或在本裝置開啟後顯示幕上沒有任何顯示時，請立即更換電池。

使用者設定

短按 “⌂” – 按鈕 ❹ 用於更改使用者設定。再次短按 “⌂” – 按鈕 ❹ 可在使用者 1 和 2 之間切換。

設定日期和時間

上臂血壓計自動為每位使用者（1 或 2）儲存最多90筆讀數。記憶功能會儲存讀數及其日期和時間。在第一次進行測量之前，請將裝置設置為當前日期和時間。在測量過程中，日期和時間無法更改。

- 按住按鈕 “⌂” ❹ 直到年份閃爍。
- 使用按鈕 ❷ 設定年份，然後再次按下 “⌂” ❹ 切換到月份設定。
- 現在再次使用按鈕 ❷ 來設定月份，並對日期進行相同的操作。
- 在設定日期後，需要設定時間。短按按鈕 ❷ 以切換時間系統（12 小時或 24 小時顯示），並選擇您想要的時間系統。
- 在設定時間系統後，將自動進入時間設定模式。使用按鈕 ❷ 和 “⌂” ❹ 調整小時和分鐘。

如何正確測量

- 在坐姿下進行測量，並且最好始終在左上臂進行。
- 在測量前，請將上臂的衣物脫去，並放鬆5至10分鐘。
- 放鬆您的手臂，自然地將其放置在桌面上等地方。
- 在測量過程中保持冷靜：請勿移動或交談，否則可能影響測量結果。
- 每天在固定的時間進行測量。
- 切勿在身體活動或沐浴後立即測量 – 請至少等待 20 到 30 分鐘再進行測量。

- 測量期間請保持雙腿靜止，並且勿翻腳。
- 請始終使用原廠的袖帶，並且不要使用未經製造商批准的備品。
- 以下因素可能會顯著影響測量結果：餐後一小時內的測量、飲酒、飲茶、喝咖啡、情緒躁動或緊張、運動、活動（包括前傾）或測量過程中室內溫度的劇烈變化。在移動的車輛中進行測量、頻繁重複測量。

佩戴袖帶

- 使用前，請將空氣管接頭插入本裝置左側插孔。
- 將袖帶開口端穿過金屬支架，使魔鬼氈位於外側並形成圓筒狀。將袖帶套入您的左上臂。
- 將空氣管置於手臂中央，與中指對齊。袖帶下緣應距肘窩 2–3 公分（參見插圖）。將袖帶拉緊並黏貼魔鬼氈扣。
- 請於裸露上臂測量，袖帶高度應約與心臟同高。
- 僅當左臂無法使用時，才將袖帶佩戴於右臂。始終在同一隻手臂上進行測量。
- 正確的坐姿測量位置 – 請參見插圖。

測量血壓

在您正確地套上袖帶後，可以開始測量：

- 按下 啟動/停止 按鈕 ❸ 以開始測量。本裝置會自動幫袖帶緩慢充氣並測量血壓，顯示幕顯示「00」。
- 本裝置會將袖帶充氣，直到達到足夠的壓力以進行測量。隨後本裝置將袖帶緩慢洩氣並進行測量。一旦本裝置偵測到訊號，顯示幕上的脈搏圖示 ❶ 開始閃爍。
- W測量完成后，袖帶會自動洩氣。收縮壓 ❹ 和舒張壓 ❷ 的血壓以及脈搏值 ❸ 顯示在顯示幕上。根據血壓分類，血壓指標 ❸ 會顯示在相應的顏色條旁邊。若本裝置偵測到脈搏不規則，亦會顯示不規則心跳符號 ❶。
- 測量數值會自動儲存於選定的記憶體（1 或 2）。每個記憶體最多可以儲存 90 筆測量數值。如果已儲存90個值，則最舊的值將被覆蓋。

袖帶配戴偵測

袖帶配戴正確時，袖帶配戴偵測圖示 ❷ 恆亮。袖帶佩戴過鬆時，圖示會閃爍提醒。

動作偵測

偵測到身體晃動時，動作偵測 ❶ 會閃爍。這可能會導致測量結果不準確。請重新啟動測量。

停止測量

如果因任何原因需要中斷血壓測量（例如：病患感到不適），可以隨時按下啟動/停止按鈕 ❸。本裝置會立即自動洩氣。

干擾因素

如果袖帶過鬆或在測量過程中有移動，結果將無法正確判定。停止程序，並在正確佩戴袖帶且測量過程中不移動的情況下重複測量。

顯示/刪除儲存的測量數值

在待機模式下，按一下按鈕 ❷。本裝置會顯示最近 3 次之平均血壓（「AVG」❷ 亮起）。您可以使用按鈕 ❷ 來顯示進一步的讀數。
若要刪除記錄，長按按鈕 ❷ 約 3 秒即可清除記憶體。顯示幕上顯示「NO」。

自動關閑

若約 1 分鐘未進行任何操作，本裝置將自動關機。

錯誤顯示

在出現異常測量時，顯示幕上會顯示以下指示：

顯示幕	原因/解決方案
Er U	充氣階段花費的時間過長。充氣壓力在12秒內未達到 30 mmHg – 請檢查袖帶是否佩戴正確。
Er H	充氣壓力達到 295 mmHg – 20毫秒後自動洩氣。
Er 1	未偵測到脈搏。
Er 2	測量中晃動、說話或磁場干擾。
Er 3	異常測量結果。
Er 23	收縮壓低於 57 mmHg
Er 24	收縮壓值高於 255 mmHg
Er 25	舒張壓低於 25 mmHg
Er 26	舒張壓值高於 195 mmHg

故障排除

問題	原因與解決方案
本裝置已開機並裝入電池，但無顯示。	電池可能已耗盡。插入新電池，注意極性。檢查本裝置是否故障。如有必要，請聯繫客服。
無法進行測量或空氣漏氣/無法加壓。	正確地佩戴袖帶。在休息 30 分鐘後重新進行測量。在測量期間請勿交談或移動。
每次測量產生的結果差異極大，或因顯示錯誤而無法進行測量。	在休息 30 分鐘後，以正確的方式重複測量。請遵循本手冊中提供的所有指示，以確保正確的測量及測量錯誤之常見原因。血壓本就會持續波動，輕微偏差的結果是正常的。
測量結果與醫師所測得的數值差異甚大。	保存測量數值並與您的醫師討論。非居家測量之數值出現較大偏差屬正常現象。

若您無法解決問題，請聯繫客戶服務。請勿自行拆解本裝置。

清潔與保養

清潔本裝置前，請先取出電池。請使用以溫和肥皂水溶液輕微沾濕的軟布，清潔本裝置及袖帶。請勿使用強力清潔劑、酒精、石油醚、稀釋劑或汽油等。請勿將本裝置或任何配件浸入水中。請勿讓水氣進入本裝置。完全乾燥前，請勿使用本裝置。請勿將本裝置暴露於直射陽光下，避免灰塵與潮濕。勿將本裝置置於極端高溫或低溫環境。每週清潔一次本裝置。請依儲存與運輸之環境條件，將本裝置儲存在乾淨且乾燥的地方。

消毒

建議每次使用前後，以 70% 異丙醇溶液消毒本裝置約 1 分鐘。要做到這一點，請按照以下步驟進行：
使用稍微濕潤於溶液的柔軟布料對外殼進行消毒，並立即擦乾。
請勿使用高溫蒸汽或紫外線照射進行消毒，因為這可能會損壞本裝置或加速其老化！

在進行任何清潔和消毒時，務必遵守操作所需的環境條件。嚴禁任何水氣滲入本裝置！

處置



本產品不得與一般垃圾一同處置。所有使用者都有義務將所有電氣或電子設備交回公營或民營回收點，無論這些設備是否含有有毒物質，以便能以環保的方式進行處置。棄置前請先取出電池。請勿將舊電池與一般垃圾一起處理，應將其放置於回收站的電池回收點或商店內。請諮詢當地主管機關或經銷商以獲取有關處置的資訊。

指導方針與標準

本血壓計符合歐盟非侵入性血壓計的標準。本產品依據歐盟指引認證，並標示CE標誌（符合性標誌）。血壓監測器符合歐洲標準 EN 60601-1 和 EN 60601-1-2。本裝置已依據歐盟指引獲得認證，並標示 CE 符號（符合性標誌）。符合歐盟醫療器材規則 (EU) 2017/745 的規範。

電磁相容性：（請參閱隨附說明書）

技術規格 名稱與型號	: medisana 上臂血壓計 BU 509
顯示系統	: 數位顯示
記憶體	: 2 x 90 用於測量數值
測量方法	: 示波法
電源供應	: 6V=4 顆 1.5 V AAA LR03 電池
低電壓	: 4.2V±0.1V（低電壓）； <4.0V±0.1V（本裝置自動關機）
血壓測量範圍	: 收縮壓 57–255 mmHg 舒張壓：25–195 mmHg
脈搏測量範圍	: 40–199 次 / 分鐘
最大測量誤差靜態誤差	: ± 3 mmHg
最大測量誤差脈搏值誤差：	: ± 5 %
操作模式	: 連續使用
使用年限	: 5 年
防止電擊	: 使用電池時為內部供電的醫療電氣設備，使用電源供電器時為II 類絕緣醫療電氣設備。
操作條件	: +5 °C – +40 °C，相對溼度 15%–90% RH，大氣壓力 70–106 kPa
儲存與運輸條件	: –20 °C 至 +55 °C，相對溼度 10%–93% RH，大氣壓力 70–106 kPa。運輸或儲存期間，請避免撞擊、直接敲擊、腐蝕性氣體、陽光直射或雨淋。請確保通風良好。
尺寸（長 x 寬 x 高）	: 約118 x 98 x 61 mm
顯示幕尺寸	: 約50 x 65 mm
袖帶	: 約22–42 cm（成人適用）
重量	: 約230 g（不含電池）
產品編號	: 50168
EAN 條碼	: 4897138501686

在持續的產品改進過程中，我們保留進行技術和設計變更的權利。

這些使用說明最新版本可在 www.medisana.asia 查閱

保固及維修條款

如需提出保固索賠，請聯繫您的經銷商或服務中心。若需退回本裝置，請附上購買收據影本並說明故障內容。以下保固條款適用：

- medisana 產品的保固期為自購買日期起算的 5 年。在保固索賠的情況下，必須透過銷售收據或發票來證明購買日期。
- 保固期內，材料或製造瑕疵將免費修復。
- 保固維修並不延長本裝置或替換零件之保固期。
- 以下項目不在保固範圍內：
 - 所有因不當處理而產生的損害，例如未依本使用說明書操作。
 - 所有因客戶或未經授權的第三方進行維修或篡改所造成的損壞。
 - 在運輸過程中，從製造商到消費者或運輸到服務中心期間所產生的損壞。
 - 正常耗損之配件。
- 即使本裝置損壞屬保固範圍，本裝置所造成之直接或間接損害，本公司概不負責。

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