

5.1 Upper arm blood pressure monitor

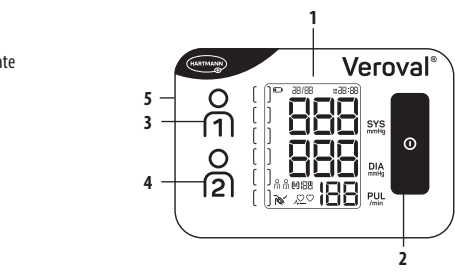
Dear customer
 Thank you for choosing a HARTMANN blood pressure monitor. The Veroyal® BPU 22 is a quality product intended for fully automatic blood pressure measurement on the upper arm of adults and is suitable for clinical and domestic use. Requiring no preliminary settings, this blood pressure monitor easily and automatically inflates for simple, quick and reliable measurement of the systolic and diastolic blood pressure and the pulse rate.
 The monitor also indicates if it detects an irregular heartbeat.

We wish you the best of health.
 Please read these instructions for use carefully before handling the device for the first time. Correctly measuring your blood pressure depends on an appropriate handling of the device. These instructions for use are designed to teach you each step in taking your own blood pressure measurements using the Veroyal® BPU 22. You will be given important and useful hints to ensure that you obtain reliable results for your personal blood pressure profile. Use the monitor in accordance with the information provided in the instructions for use. Please store these instructions carefully and ensure other users can access them. Check the packaging for any damage and that the contents are complete.

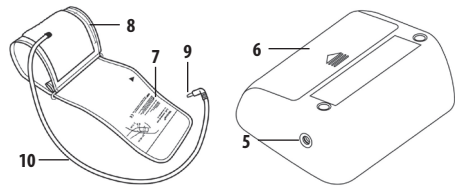
- Package contents**
- Blood pressure monitor
 - Universal upper arm cuff
 - 4 x 1.5 V AA batteries
 - Storage bag
 - Instructions for use with warranty certificate

1. Device and display description

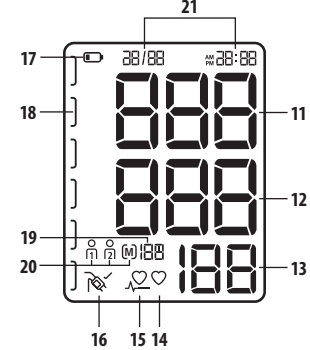
- Blood pressure monitor**
- 1 Extra large LCD display
 - 2 START/STOP button
 - 3 Memory button for User 1
 - 4 Memory button for User 2
 - 5 Cuff connector socket
 - 6 Battery compartment



- Cuff**
- 7 Cuff with application instructions
 - 8 Size indicator to correctly fit cuff
 - 9 Cuff plug
 - 10 Cuff tube



- Display**
- 11 Systolic blood pressure
 - 12 Diastolic blood pressure
 - 13 Pulse rate
 - 14 Flashes when the device is measuring and the pulse rate is detected
 - 15 Irregular heartbeat symbol
 - 16 Cuff fit check symbol
 - 17 Battery symbol
 - 18 Traffic light system for your values/progress bar
 - 19 Average value (AM), morning (AM), evening (PM) / memory space number
 - 20 User memory
 - 21 Date and time display



2. Important information

See table on extra page.

Important instructions for use

Intended use
 The fully automatic blood pressure monitor Veroyal® BPU 22 is intended for clinical and home use for the non-invasive measurement of diastolic and systolic blood pressures and pulse rate of adults by means of an inflatable cuff which is wrapped around the upper arm.
 The use of the device does not require a specific knowledge or professional ability.
Intended user
 The patient is the intended operator, except in case of patients that require special assistance.
Patient population
 • Adults whose upper arm circumference is within the range indicated on the cuff.
 • Only use the monitor to take blood pressure measurements on the upper arm. Do not place the cuff on other areas of the body.
 • Only use the supplied cuff or an original replacement cuff. The measured values may otherwise be incorrect.
 • If measured values are questionable, repeat the measurement.

- Do not leave the monitor unattended near small children or persons who cannot operate it themselves. There is a risk of strangulation if the cuff tube becomes wrapped around the neck. Swallowing small parts that have detached from the device can also result in suffocation.
- Do not under any circumstances carry out blood pressure measurements on newborns, babies or toddlers.
- Do not use the monitor for diagnosis in clinical situations where the patient is in immediate danger.
- Please note that the pressure build-up in the cuff can lead to temporary disruption of medical devices being used at the same time on the same arm.
- The function of the arm on which the cuff is placed may become impaired during inflation.
- If you are carrying out the measurement on another person, please ensure that using the blood pressure monitor does not have a lasting negative effect on the blood circulation.
- People with restricted physical, sensory or mental skills should be supervised by a person responsible for their safety and receive instructions from this person on how to use the device.
- Taking measurements too often within a short time period as well as maintaining continuous cuff pressure can disrupt the blood circulation and cause injuries. Please take a break between measurements and do not bend or fold the air tube. If the monitor malfunctions, remove the cuff from the arm.
- Always consult your doctor about if and when the blood pressure monitor can be used by pre-eclampsia patients during pregnancy.
- Always consult your doctor about if and when the blood pressure monitor can be used by persons who have had a mastectomy or lymph node clearance.
- If a possible allergic skin reaction occurs on the arm where the cuff is used, discontinue its use and consult a physician.
- Do not use the blood pressure monitor together with a high frequency surgical device.
- The device is not intended for use in vehicles (e.g. ambulances) or helicopters.

- Contraindications**
- Please do not place the cuff over a wound as this may cause further injuries.
 - If an intravenous treatment is being carried out or a venous catheter is inserted in the arm, blood pressure measurements can lead to injury. Never use the cuff on the arm to which these conditions apply.
 - If you are prone to hematomas, do not put on a cuff nor carry out a blood pressure measurement.
 - Do not use the blood pressure monitor in the absence of a full arm.

- Important instructions for self-measurements**
- Even minor changes in internal and external factors (e.g. deep breathing, stimulants, talking, excitement, environmental factors) can lead to fluctuations in blood pressure. This explains why deviating values are often measured at the doctor or pharmacist.
 - Measurement results fundamentally depend on the measurement location and the position of the patient (sitting, standing, reclining). They are also influenced by e.g. physical activity and physiological preconditions of the patient. For comparable values, carry out the measurement in the same location and in the same position.
 - Cardiovascular disease can result in erroneous readings or lower the accuracy of the measurement. The accuracy may also be affected if you have very low blood pressure, diabetes, circulatory disorders and arrhythmias and chills or tremors.

- Consult your doctor before measuring your own blood pressure if ...**
- you are pregnant. Blood pressure may vary during pregnancy. Regular blood pressure monitoring is particularly important if you have high blood pressure, because elevated values may affect foetal development. Always check with your doctor if and when you should measure your own blood pressure, especially if you suffer from pre-eclampsia.
 - you have diabetes, liver function disorders or narrowing of blood vessels (e.g. arteriosclerosis, peripheral arterial disease) as these may cause anomalous values.
 - you have certain blood disorders (e.g. haemophilia) or severe circulatory disorders or are taking blood-thinning medication.
 - you are on dialysis or taking anticoagulant medication (anticoagulants), platelet aggregation inhibitors or steroids.
 - you wear a pacemaker, which may cause anomalous values. The blood pressure monitor itself does not affect a pacemaker. Please note that the pulse rate displayed is not suitable for checking the frequency of pacemakers.
 - you tend to bruise easily and/or are sensitive to pressure pain.
 - you suffer from severe heart rhythm disorders or cardiac arrhythmias. Due to the oscillometric measurement method used, incorrect measured values may be obtained in some cases or it may not be possible to measure blood pressure.
 - this symbol appears often, it may indicate heart rhythm disorders. Please consult your doctor in that case. Severe heart rhythm disorders may sometimes produce false measurements or reduce the measurement accuracy. Please discuss with your doctor whether taking your own blood pressure is appropriate for you.

- The readings taken by you are for your information only – they are not a substitute for a medical examination. Discuss your measured values with your doctor and never make a medical decision based on these measurements (e.g. medications and their dosage).
- Taking your own blood pressure is not a substitute for medical treatment. Do not interpret your measured values yourself and do not use them for self-prescribing treatment or for self-prescribing your own medication. Do not trust his or her diagnosis. Take medication only as prescribed by your doctor and do not alter the dose on your own accord. Discuss with your doctor the appropriate time to measure your blood pressure.

An irregular heartbeat is present when the heart rhythm deviates by more than 25 % from the median heart rhythm. The contraction of the heart muscle is stimulated by electrical signals. A disorder of these electrical signals is called an arrhythmia. This may be due to a genetic predisposition, stress, age, lack of sleep, exhaustion or similar factors. A doctor can establish whether an irregular heartbeat is the result of an arrhythmia.

Heart rhythm disorders are disturbances of the normal rate or rhythm of the heartbeat. A distinction should be made between mild and severe heart rhythm disorders. This can only be determined by a special examination carried out by a doctor.

- Power supply (batteries, power supply unit)**
- Observe the polarity labels plus (+) and minus (-).
 - Only use high-quality batteries (see specification in Chapter 11 'Technical data'). If you use low-quality batteries, we can no longer guarantee the specified number of measurements.
 - Never mix old and new batteries or batteries from different manufacturers.
 - Remove flat batteries immediately.
 - Replace batteries if the battery symbol remains illuminated.
 - Always replace all the batteries at the same time.
 - If you do not intend to use the monitor for a longer period of time, you should remove the batteries to prevent possible leakage.
 - If you use the monitor with the power supply unit, position the monitor so that you can disconnect the power supply at any time.

- Information about batteries**
- **Choking hazard**
 Small children could swallow batteries and suffocate on them. Keep the packaging, batteries and the monitor out of the reach of children.
 - **Risk of explosion**
 Do not throw batteries into a fire.
 Batteries must not be charged or short-circuited.
 If a battery has leaked, wear protective gloves and clean the battery compartment with a dry cloth. If liquid from a battery cell comes into contact with skin or eyes, clean the affected area with water and seek medical attention if necessary.
 - Protect batteries from excessive heat.
 - Do not disassemble, open or crush batteries.

- Safety information concerning the device**
- This blood pressure monitor is not waterproof.
 - This blood pressure monitor is made of high-quality electronic precision components. The accuracy of the measured values and the lifetime of the device depend on careful handling.
 - Protect the device from violent shaking, hitting or vibrations and do not let it drop on the ground.
 - Do not bend or fold the cuff excessively.
 - Never open the device. The device must not be modified or dismantled, and must not be repaired by the user. Repairs may only be carried out by authorized specialists.
 - Do not inflate the cuff when it is not properly applied to the upper arm.
 - Use the device only with the approved upper arm cuff. The device may otherwise sustain external or internal damage.

- The cuff tube may only be removed from the unit by pulling on the corresponding connector plug. Never pull on the tube itself.
- Do not expose the device to extreme temperatures, humidity, dust or direct sunlight as this may cause it to malfunction.
- Keep the packaging, batteries and device out of reach of children.
- Protect the device and cuff against contact with pets and pests in order to avoid damage.
- Please comply with the storage and operating conditions defined in Chapter 11 'Technical data'. Storing or using the device outside the specified temperature and humidity range can affect the accuracy of the measurement or the function of the device.
- If the device was not stored within the minimum/maximum permissible storage conditions, a waiting period of at least 2 hours must be observed before using it under the specified operating conditions (Chapter 11 'Technical data') or an ambient temperature of approx. 20 °C.
- Do not use the device in explosive environments with inflammable gases or concentrated oxygen.

- Instructions regarding electromagnetic compatibility**
- The device is suitable for use in all environments listed in these instructions for use, including domestic environments.
 - It may only be possible to use the device to a limited extent in the presence of electromagnetic disturbances. This could result in issues such as error messages or the failure of the display/device.
 - Avoid using this device directly next to other devices or stacked on top of other devices, as this could lead to faulty operation. However, if it is necessary to use the device in the manner described above, this device and the other devices must be monitored to ensure that they are working properly.
 - The use of accessories other than those specified or provided by the manufacturer of this device may result in increased electromagnetic emissions or a decrease in the device's electromagnetic immunity and lead to faulty operation.
 - Failure to comply with the above can impair the performance characteristics of the device.
 - Do not use the device near strong electromagnetic fields and keep it away from radio equipment and mobile phones. Portable and mobile high-frequency and communication devices, such as telephones and mobile phones, can impair the functionality of this electronic medical device. Therefore keep a minimum distance of 30 cm.
 - Further documentation in accordance with the electromagnetic compatibility standard can be requested from the manufacturer or the customer service (contact details see Chapter 10).

Instructions for the measurement function check
 Every Veroyal® device has been carefully tested by HARTMANN for measurement accuracy and has been developed with a view to a long service life. We recommend carrying out a metrological check every 2 years for devices in professional use, for example, in pharmacies, medical practices or hospitals. Please also observe the national regulations specified by the legislator. Metrological checks may only be carried out by the competent authorities or authorized maintenance providers against cost reimbursement.

- Disposal information**
- This product (monitor and cuff) is subject to the European Directive 2012/19/EU on Waste Electrical and Electronic Equipment and is marked accordingly. Never dispose of electronic equipment in your household waste. Please obtain information about your local regulations on the proper disposal. This protects the environment and human health.
 - The batteries comply with the European Directive 2013/56/EU. To protect our environment, empty batteries must not be disposed of in household waste. Please comply with the relevant waste-disposal regulations or use public collection points, recycling points or electronic retailers.

3. Blood pressure information

- Two values must be measured to determine blood pressure:
- Systolic (upper) blood pressure, which is produced when the heart contracts and pumps blood into the blood vessels.
- Diastolic (lower) blood pressure, which is produced when the heart is expanded and fills with blood again.
- Blood pressure values are displayed in mmHg.

For improved assessment of the results, a traffic light system is located on the left side of the Veroyal® BPU 22 which is a direct result indicator, making it easier to categorise the measured value. The World Health Organisation (WHO) and the European Society of Cardiology (ESC) & European Society of Hypertension (ESH) have developed the following summary for classifying blood pressure values:

Resulting indicator	Evaluation	Systolic pressure	and/or	Diastolic pressure
Red	Grade 3 hypertension	above 179 mmHg	and/or	above 109 mmHg
Orange	Grade 2 hypertension	160 – 179 mmHg	and/or	100 – 109 mmHg
Yellow	Grade 1 hypertension	140 – 159 mmHg	and/or	90 – 99 mmHg
Green	High normal	130 – 139 mmHg	and/or	85 – 89 mmHg
Green	Normal	120 – 129 mmHg	and/or	80 – 84 mmHg
Green	Optimal	up to 119 mmHg	and	up to 79mmHg

- Established hypertension (high blood pressure) is defined as having a systolic value of at least 140 mmHg and/or a diastolic value of at least 90 mmHg.
- In general, low blood pressure (hypotension) is defined as a systolic value below 105 mmHg and a diastolic value of 60 mmHg. However, the threshold between normal and low blood pressure (hypotension) is not as accurately specified as the threshold for high blood pressure (hypertension). Hypotension may be associated with symptoms such as dizziness, fatigue, tendency to faint, visual disturbances or high pulse rate. In order to ensure that hypotension or the corresponding symptoms are not attendant symptoms of serious illness, a doctor should be consulted in case of doubt.

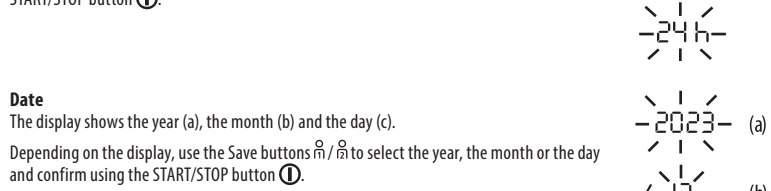
Constantly elevated blood pressure significantly increases the risk of developing other disorders. Physical consequences of high blood pressure, e.g. heart attack, stroke and organ damage, are the most common causes of death worldwide. Daily blood pressure monitoring is therefore an important measure that can help to protect you from these risks. You should discuss this with your doctor, especially if you have frequently elevated or borderline blood pressure values (see Chapter 3 'Blood pressure information'). Your doctor will initiate appropriate measures.

4. Preparing the measurement

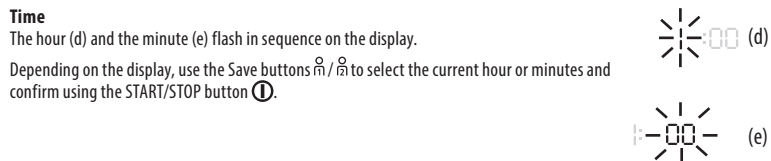
- Inserting/changing the batteries**
- Open the battery cover on the bottom of the device. Insert the batteries (see Chapter 11 'Technical data'). Ensure correct polarity (+ and -) when inserting the batteries. Close the battery lid. or flash on the display. Set the date and time as described above.
 - If the Change battery symbol is permanently illuminated, blood pressure can no longer be measured and you need to replace all the batteries.

Setting the date, time
 It is very important that you set the date and time correctly. This is the only way to save your measured values correctly, with the date and time, for subsequent retrieval. This is also important for correctly using all the memory and analysis functions.

- To switch to settings, reinsert the batteries or press the START/STOP button for 5 seconds. Proceed as follows:



- If the 12-hour format is selected, the month is displayed before the day.



The device switches off automatically once all data has been set.

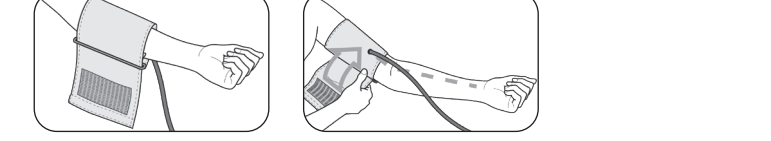
The measured values will remain in the memory when the batteries are changed. The date and time settings will also be saved.

5. Measuring your blood pressure

The 10 golden rules of blood pressure measurement
 Many factors play a role in blood pressure measurement. These ten general rules help you to correctly carry out the measurement.

1. Rest for about 5 minutes before measuring your blood pressure. Even working at your desk increases blood pressure by an average of about 6 mmHg systolic and 5 mmHg diastolic.
2. Do not consume any nicotine or caffeine up to one hour before measurement.
3. Do not measure when you have a strong urge to urinate. A full bladder can increase blood pressure by about 10 mmHg.
4. Measure your blood pressure on a completely bare upper arm and in a comfortable upright seated position. The blood circulation must not be constricted by a rolled-up sleeve, for example.
5. If you are using a wrist monitor, hold the cuff at heart height during measurement. The cuff of an upper arm monitor is naturally positioned at the correct height.
6. Please do not talk or move when measuring your blood pressure. Talking increases values by about 6–7 mmHg.
7. Wait for at least one minute between each measurement so that the blood vessels are ready, by removing the pressure applied to them.
8. The date and time are conveniently and easily recorded with the measured values as well as any medications you have taken, with the Veroyal® medic.connect app.
9. Take measurements regularly. Even if your values have improved, you should continue to check them for monitoring purposes.
10. Always take measurements at the same time of day. Because a person has about 100,000 different blood pressure values every day, individual measurements are not meaningful. Only regular measurements taken at the same time each day over a longer period of time give a meaningful assessment of blood pressure values.

- Applying the blood pressure monitor**
- Before applying the cuff, insert the cuff socket into the connector socket on the left side of the device.
 - Do not mechanically constrict, compress or bend the sleeve tube.
 - Blood pressure must be measured on a bare upper arm. If the cuff is completely open, thread the end of the cuff through the metal ring to form a loop. Position the cuff on the upper arm so that the lower edge is 2–3 cm above the crook of the arm and above the artery. The tube points to the centre of the palm.



- Now bend your arm slightly, grasp the free end of the cuff, wrap it firmly round your arm and close the hook-and-loop fastener.

The cuff should fit firmly but not tightly. You should be able to insert two fingers between the arm and the cuff. Make sure the tube is not twisted or damaged.

Important: It is essential that the cuff is correctly applied to obtain correct measurements. The cuff included with the device is a universal cuff for upper arm circumferences of 22 to 42 cm. The white arrow must point to an area within the sizing scale. If it is outside the range, it is not possible to guarantee a correct measurement result.

This innovative Veroyal® device with Comfort Air Technology ensures comfortable measurement. The individual inflation pressure is determined independently for each measurement and depends on the corresponding systolic blood pressure value. This allows for more comfortable upper arm measurements.

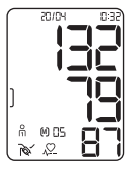
- Carrying out the measurement**
- You should take your blood pressure in a quiet place, in a relaxed and comfortable seated position.
 - Measurement can be taken on the right or left arm. We recommend you perform the measurement on the left upper arm. Over the long term, the arm giving higher readings should be used for blood pressure monitoring. However, if there is a very clear difference between readings on either arm, you need to check with your doctor which arm you should use for the measurement.
 - Always measure on the same arm and place your forearm in a relaxed position on a support.
 - We recommend that you sit with your back against the back of the chair. Place both feet flat on the floor next to each other. Do not cross your legs. Relax your forearm and hand with your palm facing upwards on a support and make sure the cuff is at the height of your heart.
 - Do not measure your blood pressure after taking a bath or playing sports.

- Do not eat, drink or exercise for at least 30 minutes before the measurement.
- Please wait for at least one minute between two measurements.

Starting the measurement

- Start a measurement only after applying the cuff because the cuff may otherwise be damaged by the excess pressure that is created. Press the START/STOP button . The appearance of all display segments, followed by the time and date, indicates that the device is carrying out an automated check and is ready for use.
- Check the display segments for completion (see Chapter 1 'Device and display description').
- After about 0.5 seconds the cuff inflates automatically. If this inflation pressure is insufficient or if interference is experienced during measurement, the device will increase pressure to the appropriate higher pressure value in increments of 40 mmHg. During inflation, the results indicator on the left of the display also increases at the same time.
- If the cuff has been applied firmly enough on the arm, the cuff symbol appears on the display. If the cuff symbol does not appear in the display, the cuff has not been fitted securely enough and the error message appears on the display after a few seconds.

- Do not speak or move for the duration of the measurement.
- As the cuff pressure is released, the heart symbol flashes and the dropping pressure in the cuff is shown on the display.
- After the measurement is complete, the systolic and diastolic blood pressure as well as the pulse rate appear simultaneously.



- In addition to the measured values, the time, date, the associated user memory or as well as the associated memory numbers (e.g. M05) are shown. While the result of the measurement is displayed, you can assign the values to the corresponding user memory by pressing the button. If you do not assign the values to the corresponding user memory, the measured values are automatically stored in the user memory shown on the display.
- You can use this results indicator on the left of the display to classify your measurement result (see table in Chapter 3 'Blood pressure information').
- To switch off the device, press the START/STOP button , otherwise the device will automatically switch off after 1 minute.

- If you wish to stop the measurement for any reason, simply press the START/STOP button . The inflation or measurement process is interrupted and cuff pressure is automatically released.
- If an irregular heartbeat was detected during the measurement, the display will show the heart symbol . However, the measurement may also have been disrupted by body movement or speaking. It is best to repeat the measurement. If you see this symbol regularly when measuring your blood pressure, we recommend that your doctor checks your heart rhythm.

6. Memory function

- User memory**
- The Veroyal® BPU 22 stores up to 100 measurements in each user memory. The most recent measurement is always saved together with the date and time in memory slot no. 1 and all older saved values are moved up one memory slot. Once all memory slots are occupied, the oldest value is deleted.
 - The device has two memory buttons, and , that are used to record the measurement results for two separate users. represents the measured values for the first user, represents the measured values for the second user. After the measurement is finished, you can assign the measured value to the respective person by pressing and . This assignment can be made for 10 seconds. If you do not assign them, the measured value is automatically stored in the user memory that is currently displayed.
 - The time of the measurement is also saved, along with each of the blood pressure values, to enable the morning and evening averages to be determined. The time saved in the device must therefore be set correctly to the actual time (see Chapter 4, section 'Setting the date and time').

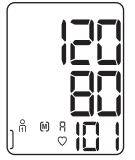
Veroyal® BPU 22 features the following measurement data storage functions (according to the guidelines of the European Society of Hypertension (ESH)):

- Individual measured value memory
- Average value of all measured blood pressure values per user
- Average value of the morning values
- Average value of the evening values

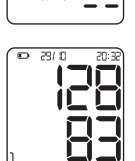
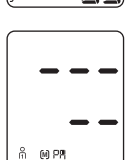
- The memory recall is activated by pressing the or button with the device switched off. For values saved in the first user memory button, press the button, for the second user memory press the memory button.

Average values

- After selecting the respective user memory, the corresponding symbol or and appear on the display. The average value of all the data stored for the particular user memory is displayed.



- By pressing the button again (or the button if you are in user memory 2), the average values for all morning measurements 'PMT' (00:00 to 11:59) for the past 7 days (including the current day) appear.
- By pressing the button again (or the button if you are in user memory 2) the average values for all evening measurements 'PNT' (12:00 to 23:59) taken on the last 7 days (including the current day) appear.



- If there is no morning or evening value for the past 7 days in the memory, dashes will be shown on the display instead of the morning or evening average values. If no values at all are stored in the memory, then dashes will also be displayed instead of the overall average value.

- Individual measured values**
- By pressing the button again (or the button if you are in user memory 2), all memory values can be retrieved one after the other, starting with the most recently measured value.
 - If an irregular heartbeat was detected during measurement, that information is also stored and displayed when the measured value is retrieved from the device's memory along with the systolic and diastolic blood pressure readings, pulse rate, time, date and year.
 - You can cancel the memory recall at any time by pressing the START/STOP button .
 - Otherwise, the device will switch off automatically after a few seconds.
 - Even if the power supply is interrupted, e.g. when changing the batteries, the stored values will still be available.

Deleting saved readings
 All data saved can be deleted separately for user memory and user memory . To do so, press the button of the corresponding user memory (or). The average 'A' value will then appear on the display. Press and hold the user memory button for 5 seconds. 'CL 00' appears on the display. All data in the selected user memory are now deleted. If you release the button early, no data will be deleted.

7. Explanation of error messages

Error	Possible causes	Remedy
Monitor cannot be switched on	Batteries are missing, inserted incorrectly or flat.	Check the batteries. If necessary, replace with four new identical batteries.
Cuff will not inflate	The cuff connector plug is incorrectly positioned in the connector socket of the monitor. Wrong cuff type connected.	Check the connection between the cuff connector plug and socket. Verify that only an approved Veroyal® cuff and connector are being used.
E1	Pulse could not be detected correctly.	Check that the cuff has been positioned correctly. Do not talk or move during measurement.
E2	Systolic or diastolic blood pressure could not be detected.	Check that the cuff has been positioned correctly. Do not talk or move during measurement.
E3	The cuff was applied too firmly or too loosely or the cuff is defective.	Apply the cuff so that two fingers fit between the cuff and the upper arm.
E4	The air tube is not correctly connected to the monitor. Check that the connector plug is correctly positioned. If this error occurs frequently, you should use a new cuff.	
E5	Error during measurement.	Please rest for at least 1 minute, then take the measurement again (see Chapter 5 'Measuring your blood pressure').
E6	Inflation pressure is higher than 300 mmHg.	Please rest for at least 1 minute, then take the measurement again (see Chapter 5 'Measuring your blood pressure').
E7	A system error has occurred.	Contact customer service if this error message appears.
E8	The batteries are almost empty.	Replace batteries.
Implausible measured values	Implausible measured values often occur due to inappropriate handling of the device or mistakes during the measuring procedure.	Please refer to Chapter 5 'Measuring your blood pressure' as well as the safety information. Then repeat the measurement.

- Switch the device off if an error symbol appears. Check for all possible causes and follow the 10 golden rules (Chapter 5 'Measuring your blood pressure') as well as the instructions for self-measurement from Chapter 2 'Important information'.
- Relax for one minute and then take the measurement again.

- 8. Monitor maintenance**
- Only use a soft, damp cloth to clean the device. Please do not use thinner, alcohol, detergents or solvents.
 - The cuff can be cleaned carefully using a slightly damp cloth and mild soap solution. Do not completely immerse the cuff in water.
 - It is recommended to clean and disinfect the cuff regularly or after each use, especially when used by several users, to prevent infection. The cuff should be disinfected, particularly on the inside, by wiping with a disinfectant. Use a disinfectant that is compatible with the cuff materials, e.g. 75 % ethanol or isopropyl alcohol. To protect from external influences, keep the device, the cuff and these instructions in the storage bag.
 - If you store a device and cuff, do not place any heavy objects on the device and the cuff. Remove the batteries.

- 9. Warranty conditions**
- We offer a 3-year warranty for this high-quality blood pressure monitor from the purchase date and in accordance with the conditions listed below.
 - Warranty claims must be made during the warranty period. The purchase date must be documented by an appropriately completed and stamped warranty certificate or proof of purchase.
 - Within the warranty period, HARTMANN will replace or repair free of charge any faulty device components caused by material faults or manufacturing errors. This does not extend the warranty period.
 - For local warranty conditions, please consult the local warranty certificate.
 - This device is solely intended for the purpose stated in these instructions for use.
 - The manufacturer is not liable for damage or injuries resulting from improper handling, use or unauthorized interference. Accessory parts that are subject to wear and tear (batteries, cuffs, etc.) are excluded from the warranty. Claims for compensation are limited to the value of the product; compensation for consequential damage or injury is expressly excluded.
 - In warranty cases, please send the monitor with cuff and, if applicable, the power



腕式血壓計

尊敬的顧客朋友

感謝閣下購買保曼公司 HARTMANN 的血壓計。Veroyal® BPU 22 是用於對成年人全自動上臂血壓測量的優質產品，且適於臨床和家庭使用。本產品在無需預設的情況下可以通過方便、自動的充氣實現對收縮壓和舒張壓以及脈搏的簡單、快速和安全的測量。

顯示屏也會對心律不齊進行提示。

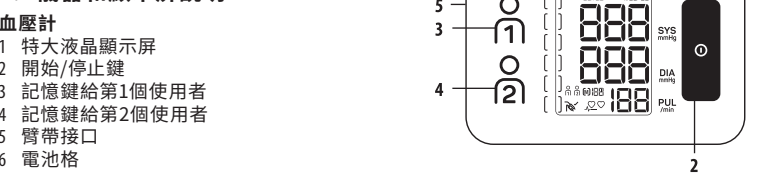
您上臂式血壓計

請在首次使用前仔細閱讀本使用說明書。只有正確操作血壓計才能獲得正確的血壓測量結果。這些使用說明目的在教您每個使用 Veroyal® BPU 22 來進行自己的血壓測量的步驟。您將會獲得重要且有幫助的建議以便您能夠獲得關於您個人血壓記錄的可靠結果。請根據使用說明書中的信息使用本產品。請妥善保存本說明書以便其他用戶可隨時取閱。請檢查產品包裝有無破損及包裝內容物是否完整。

包裝內容

- 血壓計
- 專用上臂帶
- 4個1.5V AA電池
- 收納袋
- 使用說明書和保證書

1. 儀器和顯示屏說明



2. 重要事項

請參閱附頁的表格。

重要使用說明

Veroyal® BPU 22 是用於對成年人全自動上臂血壓測量的優質產品，且適於臨床和家庭使用。且是非侵入性並通過繃塊在上臂上的充氣帶來測量成人收縮壓和舒張壓以及脈搏率。

使用此產品不需要任何的專業知識及技能。

除了需要另外協助的患者外，患者可自行操作此產品。

患者群體

- 上臂帶在臂帶所示範圍內的成年人。
- 該產品只能用於在上臂上進行血壓測量。請勿將臂帶繃縛在身體其他部位。
- 必須使用隨行或原裝的備用臂帶。否則測量值會是錯誤的。
- 如果對測量值的正確性存疑，請重測測量。

切勿在無人看管的情況下將本產品放置在嬰幼兒和無法獨立操作本產品的人士周圍。

切勿對新生兒及嬰、幼兒測量血壓。

在患者處於直接危險的臨床情況下，請勿使用此測量儀進行測量。

請注意，臂帶開始充氣可能會造成同時使用在同一手臂的其他醫療設備的臨時故障。

臂帶充氣時可能會減輕相關手臂的活動功能。

如對其他人進行測量，請注意在測量前將血液循環造成持續不良影響。

身體、感官或精神狀況受限的人應由負責其安全的人員監督，並從該人員處獲得有關如何使用設備的說明。

在短時間過於頻繁的測量和持續臂帶壓力可能會中斷血液循環並造成受傷。請保持測量之間的時間間隔並且請勿彎曲或扭折軟管。

請務必諮詢您的醫生，了解妊娠期間妊娠毒血症患者是否以及何時可以使用血壓計。

皮膚病、皮膚瘙癢或皮膚病的人請詢問醫師是否以及何時可以使用血壓計。

如手臂上出現可能性的皮膚過敏反應，請移除臂帶並諮詢醫師。

血壓計不得連同高頻外科設備一起使用。

此產品不適於車上(如救護車)及直昇機上使用。

禁忌症

請不要將臂帶放在傷口上，因為這可能會導致進一步的傷害。

如果正在進行靜脈內治療或靜脈導管插入手臂，則測量血壓可能會導致受傷。切勿在以上這些條件下的手臂上使用臂帶。

如果您容易出現血腫，請勿戴上手臂帶或進行血壓測量。

不要在沒有完整手臂的情況下使用血壓計。

自測的重要說明

即使是在和外生因素(例如深呼吸、興奮劑、談話、興奮、環境因素)的微小變化也會導致脈搏動。這也解釋了為什麼在測量前不要說話或移動。

測量結果基本上取決於測量位置和患者的姿勢(坐、臥、站)。它們也會受到例如，患者的身體活動和生理前影響。為了相同的測量值，請在相同地方和相同位置進行測量。

心血管疾病會導致錯誤的讀數或降低測量的準確性。如果您患有非常低的高血壓、糖尿病、循環系統疾病和心律失常以及寒顫或震顫，準確性也可能會受到影響。

如有以下情況，請在自行測量血壓前諮詢您的醫生

懷孕。血壓在孕早期期間可能出現變化。如果血壓升高，特別需要定期檢查，因為血壓升高可能會影響胎兒的發育。特別是在出現妊娠毒血症的情況下，請務必諮詢您的醫生，何時應進行血壓測量。

患有糖尿病、肝功能障礙或血管狹窄(例如動脈硬化、外周動脈血管疾病)等疾病。在這些情況下可能會造成測量值偏差。

患有某些血液疾病(例如血友病)或嚴重的循環系統疾病或正在服用血液稀釋藥物。

您正在進行透析或服用抗凝藥物(抗凝劑)或小板聚集劑或類固醇。

您患有起搏器，這可能會造成測量值出現偏差。血壓計本身不會對起搏器造成任何影響。

請注意，錯誤的讀數不適用於檢查起搏器頻率。

易出血血腫/或對壓力疼痛敏感。

患有嚴重的、速率不齊。採用示波測量方法可能在某些情況下造成測得的測量值錯誤或無測量結果。

如果測量標誌出現多次，則可能提示患有心律不齊。在這種情況下，請聯絡您的醫生。嚴重的心律不齊可能會導致測量結果錯誤或對測量精度造成不良影響。請與您的醫生討論，確定血壓計自行測量是否適用於您。

您自己測得的血壓值僅能作為參考。無法替代醫療檢查。將您測得的測量值與您的醫生進行商談，切勿作出自我醫療診斷。(例如服用什麼藥物及其劑量)

血壓自測不等於診療。因此，請勿自行判斷測量值和自我診療。請根據您的醫生的指導進行測量並信任他的診斷。所以請根據您的醫生的處方服藥並且切勿自行更改劑量。請與您的醫生商定定期測量血壓的合適時間。

當心律偏離中心心律超過 25% 時，就會出現心律不齊。心臟的收縮是由電信號引導。這些電信號的紊亂稱為心律失常。這可能導致暈倒、壓力、疲勞、睡眠不足、疲勞或類似因素造成的。醫生可以確定心律不齊是否心律失常的結果。

心律失常是心跳正常速率或節律的紊亂。應區分程度和嚴重度心律失常。只能通過醫生進行的特殊檢查來確定。

電源(電池、電源供應器)

請注意正確的極性(“+”和“-”)。

僅使用優質電池(參見第 11 章“技術數據”中的規格)。如果您使用劣質電池，我們將不再保證指定的測量次數。

切勿混用新舊電池或不同製造商的電池。

立即取出沒電的電池。

如電池標誌(☺)自然亮起，請更換電池。

一直同時更換所有的電池。

如果您長時間不使用顯示屏，您應該取出電池以防止可能的洩漏。

如果您將顯示屏與電源裝置一起使用，請將顯示屏放置在可以隨時斷開電源的位置。

關於電池的說明

嚴重的危險

切勿將電池丟入火中。

切勿將電池短路。

如果電池中的液體溢出，請戴上防護手套，並用一塊乾布清潔電池格。如果電池中的液體與皮膚或眼睛發生接觸，請用清水清潔相關部位並尋求醫療救助。

防止電池過熱。

請勿折彎、折開或粉碎電池。

安全注意事項

該血壓計不具有防水性能。

該血壓計由優質電子精密零件製成。測量值的精確性和血壓計的使用壽命取決於使用習慣。

保護血壓計以防止受到嚴重震動、撞擊、震盪或墜地。

請勿過度彎曲或扭折臂帶。

切勿拆開血壓計。不得更改、拆裝或自行修理血壓計。維修只能由經過授權的專業人員完成。

如果臂帶在上臂繃縛不正確，切勿給臂帶充氣。

血壓計只能搭配經過許可的上臂式臂帶。否則可能會造成血壓計內部或外部受損。

臂帶軟管只能通過拉動血壓計相應的連接插頭拔下。切勿自行拉動軟管。

請勿將血壓計置於極端溫度、濕度、灰塵或直接陽光直射下，否則可能會造成功能故障。

請勿將儀器、電池和血壓計放置在幼兒無法觸及的地方。

保護血壓計和臂帶免受藥物和毒品的污染，以免損壞。

請遵守第 11 章“技術數據”中定義的存儲和操作條件。在規定的溫度和溫度範圍之外存放或使用本儀器會影響測量的準確性或其功能。

如果本儀器未在允許的最小/最大存放條件下存放。在規定的操作條件下使用前必須觀察至少 2 小時的等待期(第 11 章“技術數據”)或環境溫度約為 20°C 存放本儀器。

請勿在有易燃氣體或濃氣的易爆環境中使用本儀器。

關於電磁兼容性的說明

本儀器的操作列舉在本工作說明中的所有環境，包括家庭環境。

在有電磁干擾的情況下，本儀器的使用可能會受到限制。由此可能會出現例如錯誤提示或顯示/儀器故障等問題。

應避免本儀器緊靠其他儀器或與其他儀器疊放使用，否則可能導致運行錯誤。如果的確需要使用此方式使用，則應對本儀器和其它儀器運行監察，以確保它們運作正常。

使用非本儀器製造商指定或提供的配件時，可能會增加電磁輻射或降低儀器的電磁抗擾性，從而導致運行錯誤。

如不遵守上述事項，可能會損害儀器性能。

請勿在強電磁場附近使用儀器，並遠離無線電設備和手機。攜帶式和移動式高頻和通信設備，例如電話和行動電話，可能會損害這種電子醫療設備的功能。因此，請您至少保持 30 公分的距離。

其他關於電磁兼容性標準的文件可以向製造商或者客戶服務索取(聯繫方式見第 10 章)。

測量技術檢查說明

每個 Veroyal® 血壓計的測量精確度均經過 HARTMANN 的檢驗，設計滿足長期使用的要求。我們建議您每兩年對測量方式使用的血壓計(例如在藥房、診所或醫院中使用)進行測量技術檢查。此外，請遵守相關的國家法律法規。測量技術檢查只能以報廢的方式通過相關政府機構或授權的維護服務機構完成。

關於授權的信息

本產品符合關於廢舊電氣和電子儀器設備的歐洲條約 2012/19/EU 並進行相應處理。決不要將電子設備作為生活垃圾處理。請您獲取關於適當棄置的當地規範。這樣做可以保護環境和人的健康。

電池符合歐洲條約 2013/56/EU。為了保護我們的環境，廢舊電池不能作為生活垃圾棄置。請遵守相關的廢物處理規定或使用公共收集點、回收點或電子零售商。

3. 關於知識的知識

如無確定您的血壓，必須測量兩個血壓值：

• 收縮壓(上壓)：指心臟收縮時將血液泵入血管中產生的血壓。

• 舒張壓(下壓)：指心臟舒張時使血壓重新進入心臟時的血壓值。

• 血壓的測量值以毫米汞柱 (mmHg) 的形式表示。

為了改進對結果的評估，健康提示燈系統位於直接結果指示器 Veroyal® BPU 22 的左側，便於對測量值進行分類。世界衛生組織 (WHO) 和歐洲心臟病學會 (ESC) 以及歐洲高血壓學會 (ESH) 確定了以下血壓值的分類：

結果指示	評估	收縮壓	舒張壓
紅色	3 級高血壓	高於 179 mmHg	和/或 高於 109 mmHg
橙色	2 級高血壓	160 – 179 mmHg	和/或 100 – 109 mmHg
黃色	1 級高血壓	140 – 159 mmHg	和/或 90 – 99 mmHg
綠色	正常偏高	130 – 139 mmHg	和/或 85 – 89 mmHg
綠色	正常	120 – 129 mmHg	和/或 80 – 84 mmHg
綠色	最佳	直到 119 mmHg	和 直到 79 mmHg

在實踐上血壓分類和高血壓分級的定義(來源: 2018年ESC/ESH指南)

• 確定的高血壓(高血壓)定義為收縮壓至少 140 毫米汞柱和/或舒張壓至少 90 毫米汞柱。

• 一般來說，低血壓(低血壓)定義為收縮壓低於 105 毫米汞柱，舒張壓低於 60 毫米汞柱。然而，正常和低血壓之間的數值並不像高血壓的數值那樣準確。低血壓可能與頭暈、疲勞、昏厥、視力障礙或脈搏加快等症狀有關。為確保低血壓或相應症狀不是嚴重疾病的伴隨症狀，如有疑問應諮詢醫生。

持續升高的血壓會有明顯增加患其他疾病的風險。高血壓形成的心理後果，例如心臟病發作、中風和器官損傷是全世界最常見的死亡原因。因此，每日血壓監測是一項重要措施，且有助於確保您免受這些風險。您應該與您的醫生討論這個問題，特別是如果您的血壓值經常升高或處於臨界值(參見第 3 章“關於知識的知識”)。您的醫生將採取適當的措施。

4. 測量準備

置入/更換電池

打開血壓計底部的電池蓋。將電池放入(參看第 11 章“技術數據”)。放入時請注意正確的極性(“+”和“-”)。重新關閉電池蓋。LCD 和 LCD 將顯示在顯示屏上閃爍。按照下面的方式設置日期和時間。

• 如果更換電池標誌☺出現，則無法再進行測量，必須更換所有電池。

設定日期、時間

正確設定日期和時間是非常重要的。只有這樣才能將您的測量值正確的連同日期和時間儲存於日後測量。這對於正確使用所有存內和分析功能也很重要。

• 如剛進入設置模式，請重新裝入電池或按住開始/停止鍵☺ 5 秒。然後，請按以下方式操作：

小時格式

顯示屏中，小時格式將閃爍。

請通過記憶鍵Ⓜ/Ⓝ選擇您所需的小時格式並使用開始/停止鍵確認☺

日期

顯示屏中先後閃爍年份(a)、月份(b)和日期(c)並使用開始/停止鍵確認。

請根據顯示內容通過記憶鍵Ⓜ/Ⓝ選擇年份、月份、日期並使用開始/停止鍵確認☺。

時間

顯示屏中先後閃爍小時(d)和分鐘(e)。

請根據顯示內容通過記憶鍵Ⓜ/Ⓝ選擇當前小時和分鐘並使用開始/停止鍵☺確認。

設置完所有數據後，設備會自動關閉。

更換電池後，測量值將保留在記憶體中。日期和時間設置也將被保存。

5. 測量您的血壓

10個關於測量血壓的黃金準則

許多因素在血壓測量中造成影響。這十個通用規則可幫助您正確進行測量。

1. 在測量開始前休息 5 分鐘。即使在辦公桌前工作也會使血壓平均增加約 6 mmHg 收縮壓和 5 mmHg 舒張壓。

2. 測量前一小時內不要攝入任何尼古丁或咖啡。

3. 不要在有強烈原意的情况下測量。充滿尿液的膀胱會導致血壓升高約 10 mmHg。

4. 在完全裸露的上臂和舒適的直立姿勢上測量您的血壓。例如，不要把袖子捲起來以限制血液循環。

5. 如果您使用腕式血壓計，請在測量期間將臂帶保持在心臟高度。上臂式血壓計的臂帶自然位於正確的高度。

6. 在測量過程中不要說話或活動。說話會導致血壓升高約 6–7 mmHg。

7. 在二次測量之間，要至少等待一分鐘。

8. 使用 Veroyal® med.connect 應用程序可以方便、輕鬆地記錄日期、時間、測量值以及您使用的任何藥物。

9. 請定期的測量。即使您的測量值有所改善，您也應該繼續檢查它們以進行監察。

10. 請永遠在固定時間測量血壓。因為一個人每天大約 100,000 個不同的血壓值，所以單獨測量沒有意義。只有在較長的時間內在一天內固定時間進行測量，才可以對測量值做出有價值的分析。

使用血壓計

在戴上臂帶前，將臂帶的插頭連通儀器左側內的臂帶插頭。

請不要束縛、擠壓或扭折臂帶軟管。

測量應該在沒有被衣服遮蓋的上臂進行。如果您的臂帶是完全敞開的，請將臂帶尾端穿過金屬環，以形成一個環。臂帶放置在左臂上時確保下邊位於肘部和動脈上 2-3 公分的位置。軟管指向手掌中央。

將臂帶繃縛在上臂上，接著將臂帶端繞在手臂下方並緊，然後合上手指扣。

臂帶應該繃緊，但不要太緊。手臂和臂帶之間應該還可以進入 2 個手指。請注意不要彎折或損壞軟管。

重要：正確戴上手臂帶是確保正確測量血壓的前提條件。臂帶僅適用於上臂臂圍在 22 至 42 公分之間的通用臂帶。白色箭頭必須在標記之內。如果在標記之外，則無法確保正確的測量結果。

這種採用舒適空氣技術的創新 Veroyal® 設備可確保舒適的測量。測量血壓的充氣壓力在每次測量中視相應的收縮壓的不同而定。這樣可以實現舒適的上臂式測量。

實際測量

測量應選擇一個安靜的地方，保持放鬆和舒適的坐姿。

測量既可以選擇左臂，也可以選擇右臂。我們建議在左上臂進行測量。長期而言，應選擇測量結果較高的手臂進行測量。如果雙臂的測量值之間的差值差別不大，請聯絡您的醫生，確定應選擇哪個上臂進行測量。

總是選擇相同的手臂測量。將下身放鬆地躺在底座上。

我們建議您坐著測量。背部要緊靠椅背的靠背。將雙腿攤開將雙腳平放在地面上。不要交叉雙腿。手掌自然地把手臂輕鬆地擺在一個底墊上，並注意臂帶應與心臟齊高。

在洗澡或從事體育活動之後不要測量血壓。

在測量之前至少 30 分鐘不要進食、喝水或進行身體運動。

在兩次測量之間，要至少等待一分鐘。

設定測量

僅在套上臂帶後開始測量，否則臂帶可能會因產生的過壓而損壞。按開始/停止鍵☺。

儀器首先顯示時間和日期所有顯示屏標出，表示儀器已完成自檢，可以進行測量。

請檢查顯示屏的完整性(參見第 1 章)。

約 0.5 秒後，臂帶會自動充氣加壓。如果該充氣壓力不足或測量受到干擾，儀器會以 40 毫米汞柱為單位逐步加壓至合適的較高壓力值。在充氣加壓時，顯示屏中左側的結果數字也會隨之增加。

如果臂帶繃的夠緊，顯示屏內將會出現臂帶標誌☺。如果臂帶標誌未出現在顯示屏上，說明臂帶位置不夠牢固，錯誤顯示 E3 在幾秒鐘後出現在顯示屏上。

在測量時請勿說話及活動。

當臂帶壓力回落時，心臟符號♥和降低的臂帶壓力會顯示出來。

測量結束後，顯示屏上會同時顯示收縮壓和舒張壓。

顯示屏中左側的結果指示器對測量結果進行分類(參見第 3 章“血壓信息”中的表格)。

不要關閉儀器時，請按開始/停止鍵☺。不然儀器會在 1 分鐘後自動關閉。

您只要按下開始/停止鍵即可無論原因中斷測量。☺ 充氣或測量過程中斷，臂帶氣壓會自動回落。

如果在顯示屏上出現此符號，則表示儀器在測量期間發現了心律不整。☺。然而，測量可能由於身體活動或說話時而受到干擾。最好重新測量。如果在您測量血壓時總是顯示該標誌，我們建議您諮詢醫生檢查您的心跳。

6. 記憶功能

用戶記錄

Veroyal® BPU 22 可為每個使用者最多可儲存 100 個測量值。最近的測量值始終與日期和時間一起保存在內存插槽中 1 號和所有較舊的測量值都向上移動到一個內存插槽。當所有儲存位置被佔用，最舊的測量值則會被刪除。

本儀器有二個記憶鍵，Ⓜ和Ⓝ用於記錄二個不同用戶的測量值。Ⓜ用於第一使用者的測量值。Ⓝ用於第二使用者的測量值。測量完成後，您可以通過按Ⓜ和Ⓝ將測量值傳送到相應的用戶。此值僅可在 10 秒內進行。如果您不傳送它，測量值會自動存儲在當前顯示的用戶記錄中。

測量時間以及每個血壓值也會被保存，以便確定早上和晚上的平均值。因此，必須將設備中記錄的時間正確設置為實際時間(參見第 4 章，“設置日期和時間”部分)。

Veroyal® BPU 22 具有以下測量數據存儲功能(對應歐洲高血壓學會(ESH)的指南)：

• 單獨的測量值記錄

• 每個用戶的所有測量血壓值的平均值

• 早上測量值的平均值

• 晚上測量值的平均值

Veroyal® BPU 22 遵循歐洲高血壓協會(ESH)的建議，區分早上和晚上進行的測量。這區別在醫學上是重要的，因為血壓在一天中會發生變化。有了這些信息，您的醫生更可以為您提供確定正確的治療方案。如果您需要藥物治療高血壓。

在設備關閉的情況下按Ⓜ或Ⓝ按鈕激活記錄調用。對於保存在第一個用戶記錄中的值，按下該按鈕Ⓜ，對於第二用戶記錄，按下存儲器按鈕Ⓝ。

平均

選擇相應的用戶記錄後，顯示屏上會出現相應的符號Ⓜ或Ⓝ和“P”。顯示為特定用戶記錄的所有數據的平均值。

重複按下按鈕Ⓜ(如果是用戶記錄 2，則按下按鈕Ⓝ)，顯示的是最近 7 天(包括當天)所有早上測量值“P” (00:00 至 11:59) 的平均值。

重複按下按鈕Ⓜ(如果是用戶記錄 2，則按下按鈕Ⓝ)，顯示的是最近 7 天(包括當天)所有晚上測量值“P” (12:00 至 23:59) 的平均值。

如果在存中沒有過去 7 天的早晚值，顯示屏上將顯示破折號，而不是早晚平均值。如果在存中根本沒有儲存任何值，則連將顯示破折號而不是總體平均值。

個別測量值

通過再次按下按鈕Ⓜ(或按鈕Ⓝ，如果是用戶記錄 2)，可以從最近測量的值開始依次搜索所有儲存值。

如果在測量時發現心跳不齊，該信息♥將被儲存並在查詢測量時同收縮壓和舒張壓、脈搏、時間、日期和年份一起顯示。

您可以隨時按開始/停止鍵☺取消儲存功能。

否則，設備將在幾秒鐘後自動關閉。

即使電源中斷，例如更換電池時，存儲的值仍然可用。

刪除儲存值

為每個用戶保存的所有數據可以分別刪除用於用戶內存Ⓜ和用戶內存Ⓝ。為此，請按下相應用戶存儲器的按鈕(Ⓜ或Ⓝ)。平均“P”值將出現在顯示屏上。

按住用戶記憶按鈕 5 秒鐘。“L000”出現在顯示屏上。現在已刪除所選用戶存儲器中的所有數據。如果您提前釋放按鈕，則不會刪除任何數據。

7. 錯誤顯示的說明

錯誤	可能的原因	解決辦法
儀器無法啟動	沒有裝妥電池，電池安裝錯誤或電池用完。	檢查電池。必要時裝入四個同樣型號的新電池。
臂帶無法充氣。	臂帶的連接插頭未能正確插在儀器上。	檢查臂帶連接插頭和連接孔之間的連接。
	連接的臂帶型號錯誤。	檢查所用的臂帶是否為允許的 Veroyal® 臂帶及所屬的插頭。
E1	無法正確獲得脈搏信息。	檢查臂帶的固定是否正確。在測量的過程中不要講話，身體也不要活動。
E2	無法檢測到收縮壓或舒張壓。	檢查臂帶的固定是否正確。在測量的過程中不要講話，身體也不要活動。
E3	臂帶固定過緊或過鬆。	臂帶的固定應確保在臂帶和上臂之間有可以連入約兩個手指的空間。

Signs and symbols · İşaretler ve semboller · شرح الرموز · 符號說明

	Follow instructions for use · Kullanım talimatlarını uygulayın · يرجى اتباع تعليمات الاستخدام · 遵照使用說明
	Medical Device · Tıbbi Cihaz · جهاز طبي · 醫療器材
	European conformity · Avrupa normlarına uygunluk · المطابقة الأوروبية · 符合歐洲標準
	Manufacturer · Üretici · الشركة المصنعة · 製造商
	Date of manufacture · Üretim tarihi · تاريخ التصنيع · 製造日期
	Batch code · Parti kodu · رمز الدفعة · 批號
	Catalogue number · Katalog numarası · رقم دليل المواصفات · 目錄編號
	Serial number · Seri numarası · الرقم التسلسلي · 序號
	Type number · Model numarası · رقم الصف · 型號
	Caution: Safety note indicating possible damage to the device/accessory or a risk of injury or damage to health · Dikkat: Cihazda/aksesuarda olası hasar tehlikesine veya yaralanma/sağlık sorunu riskine ilişkin güvenlik uyarısı تنبيه: ملاحظة أمان تشير إلى ضرر محتمل في الجهاز/الملحق أو خطر الإصابة أو الضرر بالصحة 注意: 指示可能對儀器/附件造成損壞或傷害及損害健康的風險的安全說明
	Temperature limit · Sıcaklık sınırlaması · حدود درجة الحرارة · 溫度限制
	Humidity limitation · Nem sınırlaması · حدود الرطوبة · 濕度限制
	Protection against electric shock (type BF) · Elektrik çarpmasına karşı koruma (BF tipi) (إف.ب) الحماية من الصدمات الكهربائية (النوع بي، إف) · 防電擊保護 (BF型)
	Unique Device Identifier · Benzersiz cihaz kimliği · الرمز المميز للجهاز · 醫療器材單一識別碼
	Distributor · Distribütör · الموزع · 經銷商
	Authorised representative in the European Community (EC) · Avrupa Topluluğu (AT) yetkili temsilcisi الممثل المعتمد في الاتحاد الأوروبي · 歐盟授權代表
	Importer · İthalatçı · المستورد · 進口商
	Direct current · Doğru akım · التيار المباشر · 直流電
	Protected against solid objects with a diameter of ≥ 12.5 mm and against vertically falling drops of water · Çapı $\geq 12,5$ mm olan katı cisimlere ve dikey olarak düşen su damllarına karşı koruma محمي من الأجسام الصلبة التي لا يقل قطرها عن 12.5 ملمر ومن قطرات الماء المتساقطة عمودياً 有防止直徑 ≥ 12.5 毫米固體顆粒以及垂直滴落水滴的保護。
	Symbol for the marking of electrical and electronic equipment · Elektrikli ve elektronik cihazların işaretlenmesinde kullanılan sembol · رمز لعلامة الأجهزة الكهربائية والإلكترونية 電氣和電子設備的標識標誌
	Cardboard recycling code · Karton geri dönüşümü kodu · رمز إعادة تدوير الورق المقوى · 紙板回收利用代碼
	
	Dispose of packaging in an environmentally responsible way · Ambalajı çevreye zarar vermeden bertaraf edin · تخلص من العبوة بطريقة تحمي البيئة · 以對環境負責的方式棄置本產品包裝