

DIGITAL AUTOMATIC BLOOD PRESSURE MONITOR



MD3600 / MD3610

Instructions for use

Blood pressure monitor

1. IMPORTANT SAFETY NOTES

Signs and symbols

Whenever used, the following signs identify safety and property damage messages and designate a level of hazard or seriousness.

READ THIS ENTIRE MANUAL, THE SAFETY SECTION AND ALL INSTRUCTIONS AND WARNINGS COMPLETELY AND CAREFULLY BEFORE USING THIS PRODUCT. FOLLOW ALL SAFETY INSTRUCTIONS AND WARNINGS TO AVOID HAZARDOUS

SITUATIONS AND TO MAKE CORRECT USE OF THIS PRODUCT.



This is the safety alert symbol. It alerts you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



WARNING WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION CAUTION indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE NOTICE addresses practices not related to personal injury, such as product and/or property damage.



WARNING:

- Consult your physician or pharmacist before starting to measure your blood pressure.
- Read and understand all instructions and warnings before using this device.
- Like any oscillometric blood pressure measurement devices, certain medical conditions can affect the measurement accuracy, among others:
 - disorder of the cardiac rhythm
 - very low blood pressure
 - patients in shock
 - patients with very low blood perfusion
 - diabetes

- people with electrical implants, such as a cardiac pacemaker
- people with renal diseases
- women who are pregnant
- patient motion during measurement
- pre-eclamptic people.

- Due to their condition the oscillometric measurement method can produce incorrect readings. This represents a risk for your health, since values may be interpreted incorrectly. Always consult your physician to determine what will be suitable for you.
- This product does not and is not intended to provide a medical diagnosis. Measurements results are for reference only. Self-diagnosis and treatment, e.g. regarding medication, using measured results represent a risk for your health. Always consult with a licensed physician for determination of appropriate medication and dosage thereof. Follow the instructions of your physician or licensed health-care provider. If you have or suspect that you have a medical problem, promptly consult your physician. If you have an emergency please call 911 immediately.

- Only a physician or a trained health care professional who is familiar with your medical history is able to accurately interpret your blood pressure measurements. Consult your physician before starting blood pressure monitoring.
- This product is not intended to serve as a substitute for the advice of a physician or medical professional. This product is not intended to substitute for regular medical checkups. Contact your physician for specific information about your blood pressure.
- Please note that technically related measuring tolerances are possible. Please see section '12. Specifications' for details. NOTE: A single measurement does not provide an accurate indication of your true blood pressure. You need to take and record several readings over a period of time. Try to measure your blood pressure at the same time each day for consistency.
- Any cuff related blood pressure measurement in high repetition rates, can lead to severe measurement side effects, e.g.
 - any nerve compression with temporary arm/hand paralysis
 - the release of an arterial or venous thrombus, which can cause a life threatening situation.
- Please contact your physician about the specific risks of cuff pressure in your specific case.
- The 'irregular heartbeat' function does not replace a cardiac examination, but may help to detect potential pulse irregularities at an early stage. Always consult your physician to determine what will be suitable for you.
- The 'irregular heartbeat' function is not designed for diagnosing or treating an arrhythmic disorder. Arrhythmia can only be ascertained by a licensed physician.
- The WHO chart is not intended to replace a medical diagnosis. This chart is only a reference for different classifications of blood pressure.
- If you notice abnormal or suspicious variations in blood pressure measurements, consult your physician immediately.
- Women who underwent a breast or axillar lymph node removal operation should consult a physician or licensed healthcare provider before starting blood pressure measurements.

- Prior to use, you have to ensure that the blood pressure monitor is free of damage. If in doubt, do not use the unit and contact customer service at 1-800-536-0366.
- This device is intended only for personal, non-commercial, adult use in measuring blood pressure and pulse rate. Do not use the product for any other purpose. This product is not intended for use in a hospital, physician's office, or any other health care facility.
- The unit must be used in accordance to the specified ambient conditions, otherwise the accuracy of readings might be affected. See section '10. Care and Maintenance' and section '12. Specifications' for details.
- Do not wrap the cuff around body parts other than your arm. Misuse represents a risk to your health.
- Please do not share the cuff with other persons, to avoid cross infection.
- Use this monitor only on humans.
- This product is not intended for use by or on children, toddlers and infants or on persons who cannot express their consent, e.g. persons with mental disorders or the like. Consult your physician for alternative methods of measuring a child's blood pressure.
- This product is not a toy. Keep it out of reach of children, toddlers, and infants.
- Keep the product out of the reach of pets.
- Packaging materials are a deadly hazard for children and can cause suffocation. Remove all packaging materials immediately and keep them away from children at all times.
- This product contains small parts that may present a choking hazard to children. Keep the unit and all parts out of reach of children. NEVER LEAVE CHILDREN OR THOSE WHO REQUIRE CLOSE SUPERVISION UNATTENDED WITH THIS DEVICE.
- The tubing presents a strangulation hazard. Keep this product away from children and those who require close supervision, e.g. people with mental disorders. NEVER LEAVE CHILDREN OR THOSE WHO REQUIRE CLOSE SUPERVISION UNATTENDED WITH THIS DEVICE.
- Do not drape tube around neck. This presents a strangulation hazard.

- People with disabilities, activity limitations, or who are physically frail, should be assisted by another person when using this unit.
- Proper cuff size is important for accurate measurements. Only use the device on adults who have the right upper arm circumference for this instrument. See section '12. Specifications' for suitable upper arm circumferences.
- Do not use any cuffs, tubes, parts and accessories other than those explicitly recommended by the manufacturer for use with this product. Parts and accessories not approved for use with the device may cause damage to your health and to the product.
- Electromagnetic interference: Avoid strong electrical or electromagnetic fields in the direct vicinity of the device (e.g. mobile telephones, microwave ovens) while it is in operation, as inaccurate measurements may result. To prevent such interference, use the unit at a sufficient distance from such devices or turn the devices off.
- The blood pressure monitor must not be used in connection with a high-frequency surgical unit.
- Do not measure your blood pressure while operating a vehicle or in any situation which requires your full attention.
- During the blood pressure measurement, blood circulation must not be stopped for an unnecessarily long time. If the device malfunctions, remove the cuff from the arm.
- Avoid any mechanical restriction, compression or bending of the cuff line.
- Do not allow sustained pressure in the cuff or frequent measurements. The resulting restriction of the blood flow may cause injury.
- Ensure that the cuff is not placed on an arm in which the arteries or veins are undergoing medical treatment, e.g. intravascular access or therapy, or an arteriovenous (AV) shunt.
- Do not use the cuff on people who have undergone a mastectomy.



CAUTION:

- The device should not be used when your arm has been wounded/injured or when a catheter has been inserted. Such use may result in injury.

- Remove any kind of arm jewelry or the like before taking a measurement. This could cause bruises.
- Do not place the cuff over heavy clothing (e.g. a jacket or sweater sleeve) as the blood pressure monitor will not be able to take a proper measurement and there is an elevated danger of acquiring hematoma or skin marks during the course of the measurement.
- In case the cuff does not stop inflating, interrupt the measurement by pressing the start/stop button and open the cuff at once.
- Do not disassemble the unit, it may result in injuries.
- When applying the cuff, make sure there are no wrinkles in the cuff. This could cause bruises.
- Do not exert any kind of pressure on the hose during measurement, e.g. laying your arms or any other object on the hose. This could cause incorrect measurements.
- Blood pressure measurements can lead to temporary marks on the skin at the site of the cuff placement. This is especially the case in high repetition rates, in hypertonic patients and in patients with weak pulses. In rare cases a mark may persist for a couple of days. Please contact your physician about these specific risks of cuff pressure in your specific case.
- For hygienic reasons the cuff is intended only for the use by one person.
- Prolonged over-inflation (cuff pressure exceeds 300 mmHg or maintained above 15 mmHg for longer than 3 minutes) of the bladder may cause ecchymoma of your arm.
- Please note that when inflating, the functions of the limb in question may be impaired.
- Do not place the cuff over wounds as this may cause further injury.
- The accuracy of any blood pressure measurement with this device can be affected by a multitude of causes. Some can be avoided some have to be accepted at the time of measurement. Speak with your physician about possible causes affecting your blood pressure.
- Do not inflate the cuff unless wrapped around arm.
- Do not touch the unit, the tube and cuff and/or press any buttons when measurement is in progress.

ress, except for stopping the measurement. Doing so may cause incorrect readings.

NOTICE:

- The blood pressure monitor is made up of precision electronic components. Accuracy of readings and the instrument's service life depend on careful handling. Protect the unit against hard knocks (e.g. dropping the unit), moisture, water, dirt, dust, chemicals, extreme hot or cold temperatures, major temperature fluctuations, direct exposure to sunlight and heat sources which are too close (e.g. stoves, heating radiators). This may damage the unit. The device must be stored in the specified ambient conditions. Please see section '10. Care and Maintenance' and section '12. Specifications' for details.
- Do not use any aggressive solvents, cleaning agents, detergents or any other strong chemicals to clean the device.
- Never immerse and or spill water or any other liquid onto the monitor or any components, otherwise liquid will enter it and cause damage.
- Do not wash the unit in a washing machine, dish washer or tumble dryer.
- Observe the local regulations for material disposal. Dispose of the device, components and optional accessories according to applicable local regulations. Unlawful disposal may cause environmental pollution.
- Never attempt to repair, open and/or disassemble the unit (including cuff and optional accessory) or adjust it yourself. This may damage the unit and impair the functions. If you need to have the unit repaired, please contact our customer service. Please see warranty for service contact. Before submitting any complaint, first check the batteries and replace them if necessary.
- Changes or modifications to the device will nullify the user warranty.
- Do not drop or insert any object into any opening or hose. This may damage the unit.
- Do not press the buttons with excessive force or with pointed objects.

- To conserve the batteries, the monitor switches off automatically if no buttons are pressed for one minute.
- The device is only intended for the purpose described in these instructions for use. The manufacturer is not liable for damage resulting from improper or careless use.
- If you are using the unit for the first time, please remove the protective film from the display.
- The monitor can maintain the safety and performance characteristics for a minimum of 10.000 measurements or 3 years.
- Further documents which include information for the Calibration of the device can be asked at the service address.
- The device can be tested in case of supposed inaccuracy every two years. Please contact the nearest service address.
- Clean your device and cuff carefully only with a slightly moistened soft cloth and dry it immediately with a soft dry cloth. Do not press.
- When storing the device, make sure that no heavy objects are placed on top of it.
- Do not fold the cuff and tubing tightly. The cuff tube should not have any sharp kinks and keep it away from sharp edges.
- If the unit is stored near freezing, allow it to acclimate to room temperature before use.
- Always store the unit in its storage pouch after use.
- This unit may not meet its performance specifications if stored or used outside of the temperature and humidity ranges (see section '12. Specifications').
- Use the unit consistent with the instruction provided in this manual.

Cleaning and storing the device and cuff

To keep your digital blood pressure monitor in the best condition and protect the unit from damage follow the directions listed below:

Advice on use

- For consistency, always measure your blood pressure at the same time each day.
- Always wait at least 5 minutes between measurements to allow the blood circulation in your arm to return to normal. You may need to increase the wait

time depending on your individual physiological characteristics. Because of normal physiologic changes and the many external factors influencing blood pressure, it is unusual to obtain identical blood pressure measurements, even when taken a few minutes apart. Speak with your physician to determine what is affecting your blood pressure and which variation may be seen as normal in your case.

- When performing multiple measurements on an individual, wait five minutes between each measurement.
- Do not take a measurement within 30 minutes of eating, drinking, smoking or exercising. You should not be physically tired or exhausted while taking measurement.
- Repeat the measurement if you are unsure of the results.
- Measurements are for your information only – they are no substitute for a medical examination. Discuss the measurements with your doctor and never base any medical decisions on them (e.g. medicines and their administration).

- Do not use the blood pressure monitor on newborns, pregnant women or patients with pre-eclampsia. Consult your doctor before using the blood pressure monitor during pregnancy.
- Cardiovascular diseases may lead to incorrect measurements or have a detrimental effect on measurement accuracy. The same also applies to very low blood pressure, diabetes, circulatory disorders and arrhythmias as well as chills or shaking.
- For reliable monitoring and reference of blood pressure, keeping long-term records is recommended.
- To minimize measurement variations due to physical activity, rest at least 5 minutes before measuring your blood pressure (or 15 minutes after strenuous activity).
- Stress raises blood pressure.
- Perform measurements in a quiet and relaxed environment at room temperature.

Battery Handling Safety Precautions

- Use only the size and type of batteries specified.
- Be sure to follow the correct polarity when installing the batteries. Reversed batteries may cause damage to the device.
- Do not mix different types of batteries together (e.g. Alkaline and Carbon-zinc or rechargeable batteries) or old batteries with fresh ones. Always replace batteries as a simultaneous set.
- If the batteries in the device are depleted or the device will not be used for a long period of time, remove the batteries to prevent damage or injury from possible battery leakage.
- Do not try to recharge batteries not intended to be recharged; they can overheat and rupture (follow battery manufacturer's directions).
- Do not dispose of batteries in fire, batteries may explode or leak.
- Clean the battery contacts and also those of the device prior to battery installation.
- Remove discharged batteries from the product and dispose/recycle in compliance with all applicable laws.
- Keep batteries away from children and pets. Batteries may be harmful if swallowed. Should a child or pet swallow a battery, seek medical assistance immediately.

SAFETY INSTRUCTIONS

- Keep the charger in a dry place (indoor use only). In order to avoid the risk of fire and/or electric shock, the charger must be protected against high humidity and water.
- Do not connect/disconnect or touch the mains part with wet hands.
- Only connect the power supply to a mains supply.
- **Do not attempt to open the charger.** In case of a defect please return to an authorised servicecentre.
- Do not use the power supply in a potentially explosive atmosphere.
- Do not cover the power supply risk of overheating.
- Prevent contact with oil, grease etc.
- Only clean with a dry cloth.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

If the instruction manual is damaged or if you no longer have the instruction manual in your possession, please contact customer service at 1-800-536-0366 or at info@beurer.com.

Dear Customer,

Congratulations on your purchase of this Beurer Blood Pressure Monitor.

Please read and understand these instructions completely and carefully before using this product and keep them for later reference. Be sure to make them accessible to other users and observe the information they contain.

2. Indication for use

The upper arm blood pressure monitor is used to carry out non-invasive measurement and monitoring of the arterial blood pressure values in adults. This allows you to quickly and easily measure your blood pressure, save the measured values and display the development and average values of the measured values taken.

3. Important Information

Signs and Symbols

The following symbols are used in these instructions for use, on the packaging and on the type plate for the device and accessories:

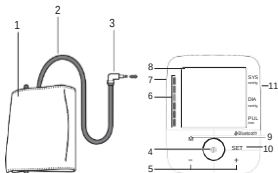
	Attention
	Note Note on important information
	Observe the instructions for use
	Application part, type BF

	Direct current
Storage 	Permissible storage temperature and humidity
Operating 	Permissible operating temperature and humidity
	Protect from moisture
	Serial number

4. Package Contents

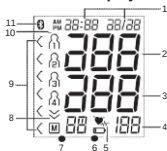
- 1 x Blood pressure monitor
- 1 x Standard cuff (22-36cm)
- 1 x Storage pouch
- 4 x 1.5V AA alkaline batteries
- 1 x Instruction manual
- 1 x Quickstart guide

5. Device description



1. Arm Cuff
2. Air Tube
3. Air Tube Connector
4. Start/Stop Button ①
5. +/- Buttons
6. Blood Pressure Classification Scale
7. Air Tube Socket (onside)
8. LCD Display
9. Memory Button
10. **SET** Button
11. Connection for mains part (model: 3610)

Icons in the display:



1. Time and Date
2. Systolic Pressure
3. Diastolic Pressure
4. Pulse Rate
5. Irregular Heartbeat Indicator
6. Battery Level Indicator
7. Memory Space Number/Average (R)/
Morning Reading (Rn)/ Evening Reading (Pn)
8. Deflation Icon
9. Blood Pressure Classification Indicator
10. User memories
11. Bluetooth® transfer indicator

System requirements for the 'beurer HealthCoach' app

Bluetooth® 4.0, iOS from version 8.0, Android™ from version 4.4.

List of compatible devices:



6. Preparing for Measurement

Installing/Replacing Batteries:

If the batteries are depleted and you cannot power the blood pressure monitor on, you will need to reset the date, time and Bluetooth® settings after replacing the batteries. All stored measurements will still be saved.

Slide the battery compartment cover in the direction of its arrow to remove. Insert four AA alkaline batteries according to the polarity markings inside the compartment. Reattach battery compartment cover.

Operation with the mains part

You can also operate this device with a mains part. When doing so, there must not be any batteries in the battery compartment. The mains part can be obtained from specialist retailers or from the service address using order number 071.60.

- To prevent possible damage to the device, the blood pressure monitor must only be used with the mains part described here.
- Insert the mains part into the connection provided for this purpose on the right-hand side of the blood pressure monitor. The mains part must only be connected to the mains voltage that is specified on the type plate.
- Then insert the mains plug of the mains part into the mains socket.
- After using the blood pressure monitor, unplug the mains part from the mains socket first and then disconnect it from the blood pressure monitor. As soon as you unplug the mains part, the blood pressure monitor loses the date and time setting but the saved measurements are retained.

Setting the hour format, date, time and Bluetooth® settings:

If date and time are not set, stored measurements will not have a valid timestamp associated with them.

NOTE: Press and hold the +/- Buttons to advance values rapidly.

1. If '12h' is not flashing in the LCD Display, press and hold the **SET** Button for five seconds.
2. Select an hour format (12 or 24 hour display) with the +/- Buttons and press the **SET** Button to confirm.
3. The year flashes on the LCD Display. Set the year with the +/- Buttons and press the **SET** Button to confirm.
4. The month flashes on the LCD Display. Set the month with the +/- Buttons and press the **SET** Button to confirm.
5. The day flashes on the LCD Display. Set the day with the +/- Buttons and press the **SET** Button to confirm.
NOTE: If the hour format is set to 24h, the day/month display sequence is reversed.
6. The hour flashes on the LCD Display. Set the hour with the +/- Buttons and press the **SET** Button to confirm.
7. The minutes flash on the LCD Display. Set the minutes with the +/- Buttons and press the **SET** Button to confirm.
8. 'On' will flash in the LCD Display. Use the +/- Buttons to select whether to activate ('On') or deactivate ('Of') automatic Bluetooth® data transfer to a mobile device. Press the **SET** Button to confirm and exit. Note that keeping Bluetooth® activated will increase battery drain.

7. Measuring Blood Pressure

The blood pressure monitor needs to be at room temperature when measuring. Measurements can be performed on either arm.

Positioning the Cuff:

Place the cuff on to the bare left upper arm. The circulation of the arm must not be hindered by tight clothing or similar.



The cuff must be placed on the upper arm so that the bottom edge is positioned 0.8 - 1.2 in (2-3 cm) above the elbow and over the artery.



The line should point to the centre of the palm.

Now tighten the free end of the cuff, but make sure that it is not too tight around the arm and close the



hook-and-loop fastener. The cuff should be fastened so that two fingers fit under the cuff. Now insert the cuff line into the connection for the cuff connector.



Blood pressure can vary between the right and left arm, which may mean that the measured blood pressure values are different. Always perform the measurement on the same arm.

If the values between the two arms are significantly different, please consult your doctor to determine which arm should be used for the measurement.



CAUTION:

Only use original Beurer cuffs with this device. The included cuff is suitable for an arm circumference of (22–36 cm). For larger arm circumferences, contact customer service to order a larger cuff.

Correct Posture:



- Rest for at least five minutes before each measurement.
- Perform the measurement either sitting or lying down. Always make sure that the cuff is level with your heart.

- To perform a measurement, sit comfortably with your arms and back supported. Do not cross your legs and place your feet flat on the floor.
- Keep still during the measurement and do not talk.
- Relax your arm and the palm of your hand.

Select a User Memory

This unit has four user numbers, each with 30 storage slots each.

1. Press the **SET** Button and select a user memory from 1 to 4 using the **+/-** Buttons.
2. Confirm by pressing the Start/Stop Button or just wait for three seconds to set the user number.

Performing a Measurement

1. With the cuff attached properly and in a correct posture, press the Start/Stop button ①. All LCD Display elements will briefly display and measurement will begin after about three seconds. To cancel a measurement at any time, press the Start/ Stop Button ①.

2. As a measurement concludes, air pressure in the Cuff will release. The pulse symbol ♥ will display, along with systolic and diastolic pressure. The measurement data will be stored into the selected user memory.
3. Er and a number from 1 to 7 will appear if the measurement was not performed properly. Refer to the 'Troubleshooting Guide' section for details about specific error message numbers and repeat the measurement.
4. Press the Start/Stop button ① to shut off the blood pressure monitor. The device will also shut off by itself after about one minute.
5. Wait at least five minutes before taking another measurement.

Bluetooth® data transfer

If the Bluetooth® function is activated on the unit, measurement data is transferred to your paired mobile device after measurement. The blood pressure monitor will display the Bluetooth® symbol ② during data transfer. Press the Start/Stop button ① again to shut off the blood pressure monitor.



8. Evaluating Results

Irregular Heartbeat:

This device can detect irregular heartbeat patterns during measurement and will indicate them by displaying the irregular heartbeat indicator .

This may be an indicator for arrhythmia, which is a condition where the heart rhythm is abnormal. These symptoms (omitted or premature heartbeats, slow or excessively fast heart rate) may be caused, among other things, by heart disease, age, physical predisposition, excessive use of stimulants, stress, or lack of sleep. Arrhythmia can only be ascertained through examination by your doctor.

Repeat the measurement if the Irregular Heartbeat Indicator displays after a measurement. Rest for at least five minutes between measurements and do not talk or move during measurement. If the icon appears often, contact your doctor, since self-diagnosis and

treatment based solely on the test results may be dangerous. It is vital to follow your doctor's instructions

Blood Pressure Classifications

Measurements can be classified and assessed by the table below. However, these standard values are only a general guideline, since individual blood pressure varies in different people and different age groups, etc.

Blood pressure value category	Systole (in mmHg)	Diastole (in mmHg)	Action
Setting 3: severe hypertension	≥180	≥110	seek medical attention
Setting 2: moderate hypertension	160–179	100–109	seek medical attention
Setting 1: mild hypertension	140–159	90–99	regular monitoring by doctor

Blood pressure value category	Systole (in mmHg)	Diastole (in mmHg)	Action
High normal	130–139	85–89	regular monitoring by doctor
Normal	120–129	80–84	self-monitoring
Optimal	<120	<80	self-monitoring

Source: WHO, 1999

It is important to consult your doctor regularly for advice. Your doctor will tell you your individual values for normal blood pressure as well as the value above which your blood pressure is classified as dangerous.

The classification on the display and the scale on the unit show which category the recorded blood pressure values fall into. If the systolic and diastolic values fall into two different categories, the classification indicator on the device always shows the higher category.

9. Displaying and Deleting Measurements

User Memory:

Every successful measurement is stored along with its date and time. If there are more than 30 measurements, the oldest measurement is deleted.

To select a user memory, press the **SET** button and then press the **+/-** buttons until the desired user number appears on the LCD Display.

Average values

- Press the **M** button. 'M' flashes on the display. The average of all saved measurements in the selected user memory is displayed.
- Press the **M** button again. 'M' flashes on the display. The average value of the morning measurements for the last seven days is displayed (morning: 5:00 AM – 9:00 AM).



- Press the **M** button a third time. **Pn'** flashes on the display. The average value of the evening measurements for the last seven days is displayed (evening: 6:00 PM – 8:00 PM).



Individual Measured Values:

- Press the **M** button again and the last individual measurement is displayed.
- To shut the device off, press the Start/Stop button ①.



You can exit the menu at any time by pressing the Start/Stop button ①.

Clearing Memory:

- When an individual stored measurement is displayed, press and hold both the **+** and **-** buttons for five seconds. All values in the selected user memory will be deleted.

Copying Stored Measurements using Bluetooth®

1. Download and install the HealthCoach' app from your device's app store.
2. Ensure Bluetooth® is activated on your device and on the blood pressure monitor.
3. Access stored measurements on the unit as described in the section 'Displaying and deleting measurements'. Bluetooth® data transfer should begin automatically if the two devices are paired properly.

The HealthCoach' app must be active to allow data transfer.

If your smartphone has a protective cover, remove this to ensure that there is no interference during the transfer.

We would explicitly draw attention to the fact that the software to hand is not a medical product in accordance with EU Directive 93/42/EEC. The values displayed are purely for visualisation purposes and must

not be used as a basis for therapeutic treatments. The software is not part of a diagnostic-medical system.

10. Care and Maintenance

- Clean the device and cuff with a slightly moistened cloth.
- Do not use detergents or solvents.
- Never immerse the device in water or other liquids.
- When storing the device, make sure no heavy objects are placed on top of it. Remove the batteries. Ensure the Air Tube does not have any sharp kinks.

11. Troubleshooting Guide

In the event of errors, the error message E_r appears on the screen.

Error messages may appear if:

- It was not possible to correctly record the pulse: E_{r1} ;
- You speak or move during the measurement: E_{r2} ;
- The cuff is fastened too tightly or loosely: E_{r3} ;
- Errors occur during the measurement: E_{r4} ;
- The pump pressure is higher than 300 mmHg: E_{r5} ;
- The batteries are almost empty: E_{r6} ;

- The data could not be sent via Bluetooth®: E_{r7} .
In such cases, repeat the measurement. Do not move or speak. If necessary, replace the batteries.

In such cases, repeat the measurement, do not move or speak, and if necessary, replace the batteries.

12. Specifications

Model	MD3600 /MD3610 (Mains Part)
Measurement Method	Oscillometric, non-invasive blood pressure measurement on the upper arm
Measurement Range	Cuff pressure 0-300 mmHg, Systolic 50-250 mmHg, Diastolic 30-200 mmHg, Pulse 40-180 beats/minute
Display Accuracy	Systolic ± 3 mmHg, Diastolic ± 3 mmHg, Pulse $\pm 5\%$ of the value shown

Measurement inaccuracy	Max. permissible standard deviation according to clinical testing: Systolic 8 mmHg / Diastolic 8 mmHg
Memory	4 x 30 memory spaces
Dimensions	5.5 in L x 4.0 in W x 2.1 in H (139 mm L x 103 mm W x 54 mm H)
Weight	9.4 oz (267 g) without cuff
Cuff Size	22.0 - 36.0 cm
Operating Range	41°F–104°F (5°C–40°C), 15-93% relative humidity (non-condensing)
Storage Range	-13°F–158°F (-25°C–70°C), < 93% relative humidity
Power Supply	4 x 1.5V <u>AA</u> batteries

Battery Life	Approx. 200 measurements (depending on levels of blood pressure and pump pressure/ Bluetooth® transfer)
Accessories	Instructions for use, 4 x 1.5V AA batteries, storage pouch
Classification	Internal supply, IPX0, no AP or APG, continuous operation, application part type BF
Data transfer via Bluetooth®	The blood pressure monitor uses Bluetooth® low energy technology, 2.4 GHz frequency band

The serial number can be found on the unit itself or in the battery compartment.

Technical information is subject to change without notification to allow for updates.

- This device complies with European Standard EN60601-1-2 and is subject to particular precautions

with regard to electromagnetic compatibility. Please note that portable and mobile HF communication systems may interfere with this unit. More details can be requested from the stated Customer Services address or found at the end of the instructions for use.

- The device complies with the EU Medical Devices Directive 93/42/EEC, the German Medical Devices Act (Medizinproduktegesetz) and the standards EN1060-3 (non-invasive sphygmomanometers – Part 3: Supplementary requirements for electro-mechanical blood pressure measuring systems) and IEC80601-2-30 (Medical electrical equipment – Part 2 – 30: Particular requirements for the basic safety and essential performance of automated non-invasive sphygmomanometers).
- The accuracy of this blood pressure monitor has been carefully checked and developed with regard to a long useful life. If using the device for commercial medical purposes, it must be regularly tested for accuracy by appropriate means. Precise instructions for checking accuracy may be requested from the service address.

13. Mains part

Model no.	LXCP12-006060BEH
Input	100–240V, 50–60 Hz
Output	6V DC, 600 mA
Supplier	SHEN ZHEN Longxc Power supply co.Ltd
Protection	This device is double insulated and protected against short circuit and overload by a primary
	Polarity of the the DC voltage connection
	Double insulated/equipment class 2
Enclosures and Protective Covers	Equipment enclosed to protect against contact with live parts, and with parts which can become live (inger, pin, hook test). The operator shall not contact the patient and the output plug of AC mains part simultaneously.

14. FCC Statement

Changes or modifications to the product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IC Regulations/Réglementations de l'IC :

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- 1 This device may not cause interference.
- 2 This device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.

The Country Code Selection feature is disabled for products marketed in the US/Canada.

cet appareil contient un ou plusieurs émetteurs/récepteur exempts de licence conformes aux normes CNR d'Innovation, Sciences et Développement économique Canada applicables

aux appareils radio exempts de licence. Son exploitation est soumise aux deux conditions suivantes :

1. Cet appareil ne doit pas produire d'interférences.
2. Cet appareil doit accepter toutes les interférences

qu'il reçoit, y compris celles susceptibles de perturber son fonctionnement.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

La fonction Sélection du code pays est désactivée pour les produits disponibles sur les marchés américain/canadien.

Appendix I

Guidance and manufacture's declaration – electromagnetic emission

The *Sphygmomanometer (MD3600/ MD3610)* is intended for use in the electromagnetic environment specified below. The customer or the user of the *Sphygmomanometer (MD3600/ MD3610)* should assure that it is used in such an environment.

Conducted and radiated RF EMISSIONS	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The <i>Sphygmomanometer (MD3600/ MD3610)</i> uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emission CISPR 11	Class B	The <i>Sphygmomanometer (MD3600/ MD3610)</i> is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.

Guidance and manufacture's declaration – electromagnetic immunity

The *Sphygmomanometer (MD3600/ MD3610)* is intended for use in the electromagnetic environment specified below. The customer or the user of *Sphygmomanometer (MD3600/ MD3610)* should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge IEC 61000-4-2	± 8 kV contact ± 15 kV air	± 8 kV contact ± 15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Rated power frequency magnetic fields IEC 61000-4-8	50 Hz: 30 A/m 60 Hz: 30 A/m	50 Hz: 30 A/m 60 Hz: 30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Appendix II

Guidance and manufacture's declaration – electromagnetic immunity

The *Sphygmomanometer* (MD3600/ MD3610) is intended for use in the electromagnetic environment specified below. The customer of the user of *Sphygmomanometer* (MD3600/ MD3610) should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted disturbances induced by RF fields IEC 61000-4-6	3 V_{rms}^a 0.15 MHz - 80 MHz 6 V_{rms}^a in ISM and amateur radio bands between 0.15 MHz and 80 MHz^b 80% AM at 1 kHz	3 V_{rms}^a 0.15 MHz - 80 MHz 6 V_{rms}^a in ISM and amateur radio bands between 0.15 MHz and 80 MHz^b 80% AM at 1 kHz	Portable and mobile RF communications equipment should be used no closer to any part of the <i>Sphygmomanometer</i> (MD3600/ MD3610), including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = \left[\frac{6}{E} \right] \sqrt{P}$ where P is the maximum output power rating of the transmitter in Watts (W), d is the minimum recommended separation distance in meters (m), and E is the immunity test level in V/m. Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,^a should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated RF EM fields IEC 61000-4-3	10 V/m^c 80 MHz - 2.7 GHz 80% AM at 1 kHz	10 V/m^c 80 MHz - 2.7 GHz 80% AM at 1 kHz	

NOTE These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

- ^a r.m.s., before modulation is applied.
- ^b The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.
- ^c Before modulation is applied.

Appendix III

Recommended separation distances between portable and mobile RF communications equipment and the *Sphygmomanometer* (MD3600/ MD3610)

The *Sphygmomanometer* (MD3600/ 3610) is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the *Sphygmomanometer* (MD3600/ MD3610) can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the *Sphygmomanometer* (MD3600/ 3610) as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)	
	3 V _{rms}	10 V/m
0.01	0.200	0.060
0.1	0.632	0.190
1	2.000	0.600
10	6.33	1.90
100	20.0	6.00

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.



Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC.
The device, accessories and the packaging have to be disposed of waste correctly at the end of the usage.
Please follow Local Ordinances or Regulations for disposal.



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