

EN English

Introduction

Blood pressure measurements determined with X1 are equivalent to those obtained by a trained observer using cuff/ethoscope auscultation method, within the limits prescribed by the American National Standard, Electronic or Automated Sphygmomaneters. This unit is to be used by adult consumers in a home environment. Do not use this device on infants or neonates. X1 is protected against manufacturing defects by an established International Warranty Program. For warranty information, you can contact the manufacturer, Rossmax International Ltd.

Attention: Consult the accompanying documents. Please read this manual carefully before use. For specific information on your own blood pressure, consult your physician. Please be sure to keep this manual.

Real Fuzzy Measuring Technology

This unit uses the oscillometric method to detect your blood pressure. Before the cuff starts inflating, the device will establish a baseline cuff pressure equivalent to the air pressure. This unit will determine the appropriate inflation level based on pressure oscillations, followed by cuff deflation. During the deflation, the device will detect the amplitude and slope of the pressure oscillations and thereby determine for you the systolic blood pressure, diastolic blood pressure, and pulse.

Preliminary Remarks

This Blood Pressure Monitor complies with the European regulations and bears the CE mark "CE 0120". The quality of the device has been verified and conforms to the provisions of the EC Council directive 93/42/EEC (Medical Device Directive). ANSI A2009 essential requirements and applied harmonized standards. EN 1060-1: 1995/A2: 2009 Non-invasive sphygmomanometers - Part 1 - General requirements

EN 1060-3: 1997/A2: 2009 Non-invasive sphygmomanometers - Part 3 - Supplementary requirements for electro-mechanical blood pressure measuring systems

EN 1060-4: 2004 Non-invasive sphygmomanometers - Part 4 - Test Procedures to determine the overall system accuracy of automated non-invasive sphygmomanometers.

This blood pressure monitor was designed for long service time. To ensure accurate measurements, this monitor is recommended to be re-calibrated every two years.

Blood Pressure Standard

Refer to the definitions of the World Health Organization, the blood pressure ranges can be classified into 6 grades. (Ref. 1999 WHO-International Society of Hypertension Guidelines for the management of Hypertension). This blood pressure classification are based on historical data, and may not be directly applicable to your situation. It is important that you consult with your physician regularly. Your physician will tell you your normal blood pressure range as well as the point at which you will be considered at risk. For reliable monitoring and reference of blood pressure, keeping long-term records is recommended. Display the blood pressure log at our website www.rossmax.com.

Display Explanations

EE / Measurement Error: Make sure the L-Plug is securely connected to the air socket and the cuff correctly and keep arm steady during measurement. If the error keeps occurring, return the device to your local distributor or service center.



E1 / Air Circuit Abnormality: Make sure the L-Plug is securely connected to the air socket on the side of the unit and measure again quietly. If the error still occurs, return the device to your local distributor or service center for help.

E2 / Pressure Exceeding 300 mmHg: Switch the unit off and measure again quietly. If the error keeps occurring, return the device to your local distributor or service center.

E3 / Data Error: Remove the batteries, wait for 60 seconds, and reload. If the error keeps occurring, return the device to your local distributor or service center.

Er / Exceeding Measurement Range: Measure again quietly. If the error keeps occurring, return the device to your local distributor or service center.

Cuff Wrap Detection

If the cuff is wrapped too loosely, it may cause unreliable measurement results. The "Cuff Wrap Detection" can help to determine if the cuff is wrapped snugly enough. The specified icon  appears once a "loosen cuff" has been detected during measurement. Otherwise the specified icon  appears if the cuff is wrapped correctly during measurement.

Movement Detection


The "Movement Detection" helps reminding the user to remain still and is indicated during the measurement. The specified icon appears once a "body movement" has been detected during and after each measurement.

Note: It's highly recommended that you measure again if the icon  appears.

Hypertension Risk Indication (HRI)

The World Health Organization, classifying blood pressure ranges into 6 grades. This unit is equipped with innovative blood pressure / high-normal / grade1 visually indicates the assumed risk level (optimal / normal / high-normal / grade1 / hypertension / grade 2 hypertension / grade 3 hypertension) of the result after each measurement.

Irregular Heartbeat (IHB) Detection

This unit is equipped with an Irregular Heartbeat (IHB) Detection which allows those who have an irregular heartbeat to obtain accurate measurements alerting you of the presence of an irregular heart beat during the measurement. Note: It is strongly recommended that you consult your physician if the IHB icon  appears.

Installing Batteries

1. Press down and lift the battery cover in the direction of the arrow to open the battery compartment.

2. Install or replace 4 "AAA" sized batteries in the battery compartment according to the indications inside the compartment.

3. Replace the battery cover by clicking in the bottom hooks first, then push in the top of the battery cover.

4. Replace the batteries in pairs. Remove batteries when unit is not in use for extended periods of time.

20. Do not use the cuff on people who have undergone a mastectomy.

21. Do not place the cuff on your wounds as this may cause further injury.

22. Only use over the cuffs provided with the monitor or original replace-meant cuffs. Otherwise errors will be recorded.

23. Batteries can be fatal if swallowed. You should therefore store the batteries and products where they are inaccessible to small children. If a battery has been swallowed, call a doctor immediately.

24. Cautions are hazardous waste. Do not dispose them together with the household garbage.

25. There are no user serviceable parts inside. Batteries or damage from old batteries are not covered by warranty.

26. Use exclusively brand batteries. Always replace with new batteries together. Use batteries of the same brand and same type.

Applying the Cuff

1. Unwrap the arm cuff, leaving the end of the cuff through the D-ring of the cuff.

2. Put your left arm through the cuff loop. The color strip indicator should be positioned closer to you with the tubing in the direction of your arm (Fig. 0).

3. Turn your left to palm upward and place the edge of the arm cuff at approximately 1.5 to 2.5 cm above the inner side of the elbow joint (Fig. 0).

4. Secure the cuff by the end of the cuff.

5. Center the tube over the middle of the arm. Press the hook and loop material together securely. Allow room for 2 fingers to fit between the cuff and your arm. Position the artery mark (O) over the brachial artery (on the inside of your arm) (Fig. 0).

Note: Locate the main artery by pressing with 2 fingers approximately 2 cm above the bend of your elbow on the inside of your left arm. Identify where the pulse can be felt the strongest. This is your main artery.

6. Plug in the cuff connecting tube into the unit (Fig. 0).

5. Lay your arm on a table (palm upward) so the cuff is at the same height as your heart. Make sure the tube is not kinked (Fig. 0).

6. This cuff is suitable for you use if the arrow falls within the solid color line as shown on the right (Fig. 0). If the arrow falls outside the solid color line, you will need a cuff of another circumference. Contact your local dealer for additional size cuff.

Measurement Procedures

Here are a few helpful tips to help you obtain more accurate readings:

• Blood pressure changes with every heartbeat and is in constant fluctuation



ES Español

1. Brazalete
2. Pantalla LCD
3. Tubo de aire y conector
4. Botón de ENCEN- DIDO/PAGADO/ INICIO
5. Bateriefachdeckel / TAPA de pilas

throughout the day.

• Blood pressure recording can be affected by the position of the user, his or her physiological condition and other factors. For greatest accuracy, wait one hour after exercising, bathing, eating, drinking beverages with alcohol or caffeine, or tobacco to measure blood pressure.

• Before measuring, it's suggested that you sit quietly for at least 5 minutes as measurement taken during a relaxed state will have greater accuracy.

• Do not take measurements if you are under stress or tension.

• During measurement, do not talk or move your arm or hand muscles.

• Take your blood pressure in normal body temperature. If you are feeling cold or hot, wait a while before taking a measurement.

• If the monitor is stored at very low temperature (near freezing), have it placed at a warm location for at least one hour before using it.

• Wait 5 minutes before taking the next measurement.

1. Press the ON/OFF/START key. All displays will appear for approximately one second, and then the last measurement memory will appear for 3 seconds before returning to "0".

2. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

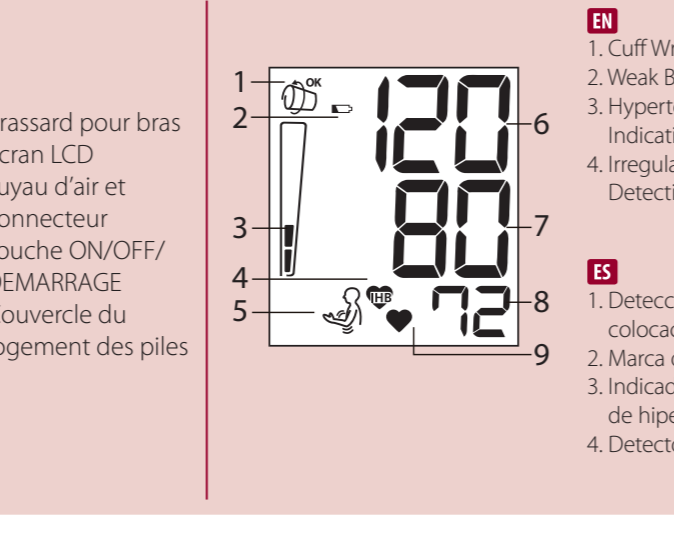
3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.



FR Français

1. Brassard pour bras
2. Ecran LCD
3. Tuyau d'air et connecteur
4. Touche ON/OFF/DEMARRAGE
5. Couvercle du logement des piles

throughout the day.

• Blood pressure recording can be affected by the position of the user, his or her physiological condition and other factors. For greatest accuracy, wait one hour after exercising, bathing, eating, drinking beverages with alcohol or caffeine, or tobacco to measure blood pressure.

• Before measuring, it's suggested that you sit quietly for at least 5 minutes as measurement taken during a relaxed state will have greater accuracy.

• Do not take measurements if you are under stress or tension.

• During measurement, do not talk or move your arm or hand muscles.

• Take your blood pressure in normal body temperature. If you are feeling cold or hot, wait a while before taking a measurement.

• If the monitor is stored at very low temperature (near freezing), have it placed at a warm location for at least one hour before using it.

• Wait 5 minutes before taking the next measurement.

1. Press the ON/OFF/START key. All displays will appear for approximately one second, and then the last measurement memory will appear for 3 seconds before returning to "0".

2. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

Note: 1. This monitor automatically switches off approximately 1 minute after last key operation.

2. To interrupt the measurement, simply press the Memory or ON/OFF/START key to deflate immediately.

3. During the measurement, do not talk or move your arm or hand muscles.

4. When the measurement is completed, the cuff will exhaust the pressure inside. Systolic pressure, diastolic pressure and pulse will be shown simultaneously on the LCD screen. The measurement is then automatically stored into the pre-designated memory zone.

This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.