ELKO EL-430

ELKO EL-430 Clock/Desk Type Aneroid Blood Pressure Sphygmomanometer

Instruction Manual

Introduction

This manual provides detailed instructions for the proper use, setup, and maintenance of your ELKO EL-430 Clock/Desk Type Aneroid Blood Pressure Sphygmomanometer. Please read this manual thoroughly before using the device to ensure accurate readings and safe operation. This device is designed for professional and home use to measure blood pressure non-invasively.

What's in the Box

Image showing the ELKO EL-430 Sphygmomanometer packaging and its main components: the high precision gauge, BP bulb with valve, and special design cotton cuff.

Upon opening the package, verify that all components are present and undamaged. The standard package for the ELKO EL-430 includes:

- ELKO EL-430 Clock/Desk Type Aneroid Sphygmomanometer unit (High Precision Gauge)
- Inflation Bulb with Air Release Valve
- Large Cotton Cuff with extra wide Velcro fasteners

Key Features

Image of the ELKO EL-430 Clock/Desk Type Aneroid Blood Pressure Sphygmomanometer, showing the large clock-face gauge, the black cotton cuff, and the inflation bulb.

- **High Precision Gauge:** Constructed with durable and lightweight ABS Plastic, pressure tested for maximum repeat accuracy. Features a clinical accuracy of +/- 3 mmHg with a 0-300 mmHg manometer. Includes a built-in basket for convenient storage of the cuff and bulb.
- **Inflation Bulb with Air Release Valve:** The inflation bulb is made of crack-resistant and non-sticking rubber. The air release valve is chrome-plated to prevent corrosion. The device incorporates a dual-tube bladder for efficient air release during measurement.
- **Cotton Cuff with Extra Wide Velcro Fasteners:** Designed with a special cotton cuff for patient comfort and pain-free use. Equipped with extra wide Velcro fasteners to ensure a firm grip and easy application across various arm sizes.

Setup

Before taking a measurement, ensure the device is properly assembled and positioned. The EL-430 is a clock/desk type unit, designed for stable placement during use.

1. **Unpack Components:** Carefully remove the sphygmomanometer, cuff, and inflation bulb from the packaging.
2. **Connect Cuff and Bulb:** Ensure the cuff and inflation bulb are securely connected to the gauge via their respective tubes. The dual-tube bladder should be correctly attached.
3. **Position the Device:** Place the main gauge unit on a stable, flat surface, such as a desk or table, at approximately heart level. The integrated basket can be used to keep the cuff and bulb organized.
4. **Patient Preparation:** The patient should be seated comfortably with their arm resting on a flat surface, palm facing upwards. Ensure the arm is relaxed and at heart level. Avoid talking or moving during the measurement.

Operating Instructions: Measurement Procedures

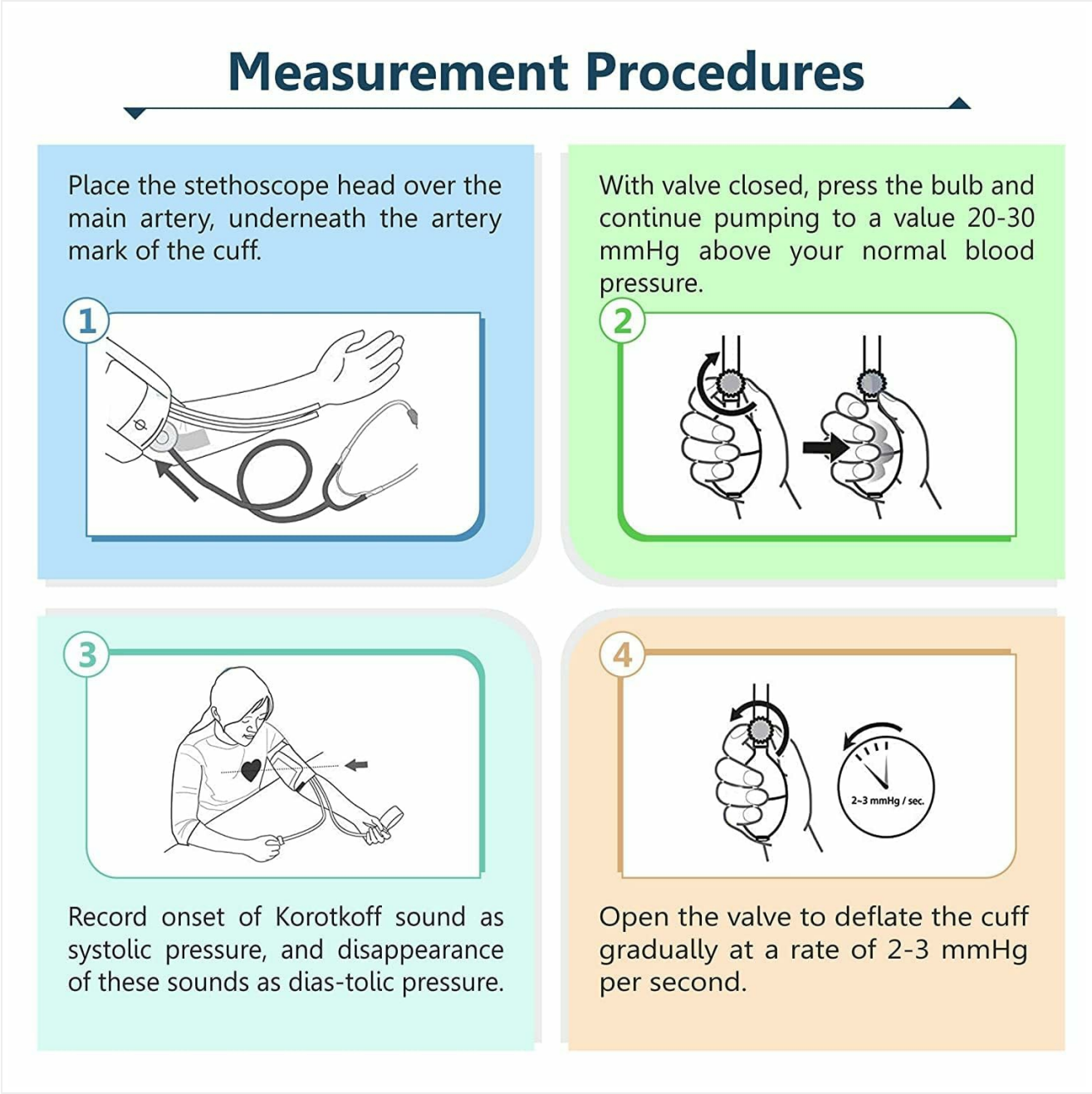


Image illustrating the four key steps for blood pressure measurement: stethoscope placement, cuff inflation, listening for Korotkoff sounds, and controlled deflation.

Follow these steps for accurate blood pressure measurement:

1. **Cuff Placement and Stethoscope Positioning:** Wrap the cuff firmly around the upper arm, ensuring it is snug but not too tight. The lower edge of the cuff should be about 1 inch (2-3 cm) above the elbow joint. Place

the stethoscope head over the main artery (brachial artery), which is typically found on the inner side of the arm, underneath the artery mark of the cuff.

2. **Inflation:** With the air release valve completely closed, press the inflation bulb repeatedly and continue pumping until the gauge reads a value 20-30 mmHg above your normal systolic blood pressure. If you do not know your normal systolic pressure, inflate to approximately 180-200 mmHg.
3. **Listening and Recording Systolic Pressure:** Slowly open the air release valve to deflate the cuff at a rate of 2-3 mmHg per second. Listen carefully through the stethoscope. The first distinct, rhythmic sound you hear (Korotkoff sound) indicates the **systolic pressure** (the upper number). Note the reading on the gauge at this exact moment.
4. **Listening and Recording Diastolic Pressure:** Continue to slowly deflate the cuff. The point at which the Korotkoff sounds completely disappear indicates the **diastolic pressure** (the lower number). Note this reading on the gauge. If the sounds become muffled but do not disappear, the muffled sound point can be considered the diastolic pressure.

Understanding Blood Pressure Readings

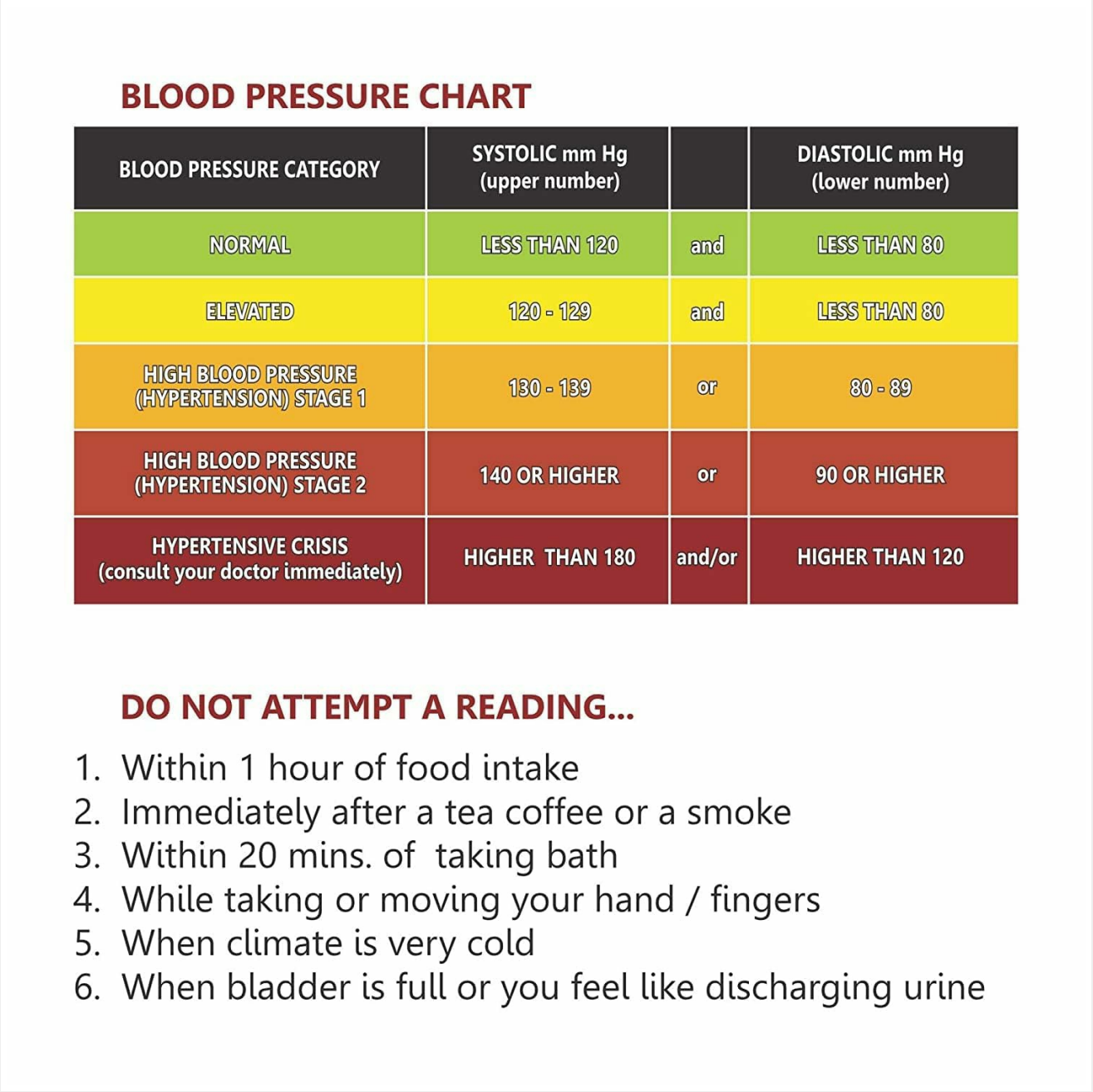


Image displaying a blood pressure chart categorizing readings (Normal, Elevated, High Blood Pressure Stages 1 & 2, Hypertensive Crisis) and a list of conditions under which a reading should not be attempted.

Refer to the chart below for general blood pressure categories. Consult a healthcare professional for interpretation of your readings and personalized advice.

Blood Pressure Chart (mmHg)

Blood Pressure Category	Systolic (upper number)	Diastolic (lower number)
Normal	Less Than 120	Less Than 80
Elevated	120 - 129	Less Than 80
High Blood Pressure (Hypertension) Stage 1	130 - 139	80 - 89
High Blood Pressure (Hypertension) Stage 2	140 or Higher	90 or Higher
Hypertensive Crisis (consult your doctor immediately)	**Higher Than 180**	**Higher Than 120**

DO NOT ATTEMPT A READING...

1. Within 1 hour of food intake.
2. Immediately after a tea, coffee, or a smoke.
3. Within 20 minutes of taking a bath.
4. While talking or moving your hand/fingers.
5. When climate is very cold.
6. When bladder is full or you feel like discharging urine.

Maintenance and Care

Proper maintenance ensures the longevity and accuracy of your sphygmomanometer.

- **Cleaning:** Wipe the gauge and inflation bulb with a soft, dry cloth. The cuff can be cleaned with a damp cloth and mild soap, then air-dried completely. Do not immerse the gauge or bulb in water.
- **Storage:** Store the device in a cool, dry place, away from direct sunlight, extreme temperatures, and humidity. Utilize the gauge's integrated basket for organized storage of the cuff and bulb.
- **Avoid Dropping:** The gauge is a precision instrument. Avoid dropping or subjecting it to strong impacts, as this can affect its calibration and accuracy.
- **Calibration:** Aneroid sphygmomanometers should be calibrated periodically (e.g., annually) by a qualified technician to ensure continued accuracy.

Troubleshooting

If you encounter issues with your ELKO EL-430, refer to the following common problems and solutions:

- **Cuff does not inflate or inflates slowly:**
  - Ensure the air release valve is fully closed before pumping.
  - Check all connections between the bulb, cuff, and gauge for leaks or loose fittings.
  - Inspect the cuff and tubing for any punctures or damage.
- **Gauge needle does not return to zero:**
  - This may indicate a need for recalibration. Contact customer support or a qualified technician.
  - Ensure no pressure remains in the cuff or tubing.

- **Inconsistent or inaccurate readings:**
  - Ensure proper cuff size and placement.
  - Verify the patient is relaxed, seated correctly, and not moving or talking during measurement.
  - Check for proper deflation rate (2-3 mmHg per second).
  - Consider professional calibration if issues persist.

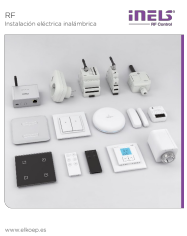
Specifications

Specification	Detail
Model Number	EL-430
Display Type	Analog
Measurement Range	0 - 300 mmHg
Accuracy	+/- 3 mmHg
Cuff Type	Large Cotton Cuff with Velcro Fasteners
Included Components	Cuff, Gauge, Inflation Bulb with Valve
Item Weight	600 g
Product Dimensions (L x W x H)	14L x 14W x 18Th Centimeters
Manufacturer	Anita Industries
Country of Origin	India
Date First Available	12 February 2024

Warranty and Support

For warranty information, technical support, or service inquiries regarding your ELKO EL-430 Sphygmomanometer, please contact the manufacturer directly.
Manufacturer Contact Information:
Anita Industries
New Delhi, India
Email: info@elkoindia.com
Phone: +91 9911129201
Please have your model number (EL-430) and date of purchase available when contacting support.

Related Documents - EL-430

	[iNELS RF Control: Soluciones de Instalación Eléctrica Inalámbrica] Explore la gama completa de productos iNELS RF Control de ELKO EP para domótica y automatización del hogar. Descubra controladores, conmutadores, reguladores, sensores y más para crear un hogar inteligente y eficiente.
	[Sloan Optima Flushometers Repair and Maintenance Guide] This guide provides detailed information on repair parts and maintenance for Sloan Optima Flushometers, covering models from Old Royal up to August 2009, and current Sloan/Regal models. It includes diagrams and a comprehensive list of solenoid/sensor parts and assemblies with corresponding part numbers and descriptions.
	[EasyLog EL-USB Data Logger Quick Start Guide | Lascar Electronics] A quick start guide for the Lascar Electronics EasyLog EL-USB series of data loggers, covering software installation, usage, battery replacement, and an overview of the EasyLog product range.
	[EL-50448 PLUS TPMS Relearning Tool User Guide] User guide for the EL-50448 PLUS TPMS relearning tool, covering operation for Ford and GM vehicles, relearning procedures, and FCC compliance. Includes detailed instructions and visual demonstrations.
	[Promed PBM-3.5 Oberarm-Blutdruckmessgerät – Bedienungsanleitung] Erfahren Sie mehr über das Promed PBM-3.5 Oberarm-Blutdruckmessgerät. Diese Anleitung bietet detaillierte Informationen zur Einrichtung, Bedienung und Wartung für genaue Blutdruckmessungen zu Hause.
	[ELKO One – Matter Thermostat 16 A: User Guide for Smart Heating Control] Comprehensive user guide for the ELKO One Matter Thermostat 16 A, detailing features, installation, setup, user settings, and troubleshooting for smart home heating systems.