POPOMAN MTM120B

POPOMAN Laser Measure MTM120B User Manual

Model: MTM120B

1. Introduction

Thank you for choosing the POPOMAN Laser Measure MTM120B. This device is designed for precise distance, area, and volume measurements, featuring an electronic angle sensor and a mute function. Please read this manual carefully before using the device to ensure safe and correct operation.

2. Safety Information

This device emits a Class 2 laser. Observe the following safety precautions:

- Do not stare directly into the laser beam.
- Do not aim the laser beam at people or animals.
- Do not modify the laser device.
- Keep the device out of reach of children.
- Use only as described in this manual.

The device is rated IP54 for international protection, meaning it is protected against dust ingress and splashing water from any direction. However, it is not fully waterproof and should not be submerged.

3. Package Contents

Verify that all items are present in the package:

- 1x POPOMAN Laser Measure MTM120B
- 1x USB Charging Cable
- 1x User Manual
- 1x Storage Bag
- 1x Portable Bracelet
- 1x Reflection Plate



Image: The POPOMAN Laser Measure MTM120B shown with its accessories, including the USB charging cable, user manual, storage bag, portable bracelet, and reflection plate.

4. Product Overview and Components

Familiarize yourself with the main components and buttons of your POPOMAN Laser Measure MTM120B.



Image: A detailed diagram of the POPOMAN Laser Measure MTM120B, highlighting its display, laser output, power supply indicator, angle sensor, and various function buttons such as Turn On/Measuring (READ), Addition (+), Subtraction/Sound, Reference Point/Unit Switch, Area/Volume/Pythagorean Measuring (FUNC), Turn Off/Remove (OFF CLEAR), and Save.

- **Display:** Shows measurement results, mode, battery status, and angle.
- **READ Button:** Powers on the device and initiates measurements.
- **+ Button:** Adds measurements.
- **- Button (Subtraction/Sound):** Subtracts measurements and toggles mute function.
- **FUNC Button:** Cycles through measurement modes (Area, Volume, Pythagoras).
- **Reference Point / Unit Switch Button:** Changes measurement reference point and units (m/in/ft/ft+in).
- **OFF CLEAR Button:** Turns off the device or clears the current measurement.
- **Save Button:** Saves measurement data.

5. Setup

5.1 Charging the Battery

The device is equipped with a built-in 850mAh lithium battery. Before first use, fully charge the device.

1. Connect the provided USB charging cable to the device's USB-C port.
2. Connect the other end of the USB cable to a compatible USB power source (e.g., laptop, power bank, wall adapter, car charger).
3. The battery indicator on the display will show charging status. A full charge takes approximately 30 minutes and provides up to 8000 measurements.



Image: Illustrations demonstrating different charging methods for the POPOMAN Laser Measure MTM120B, including connecting to a laptop, power bank, wall adapter, and car charger.

5.2 Powering On/Off

- **To Power On:** Press the **READ** button. The laser will activate.
- **To Power Off:** Press and hold the **OFF CLEAR** button for a few seconds. The device will also automatically power off after a period of inactivity.

6. Operating Instructions

6.1 Basic Distance Measurement

1. Press the **READ** button once to turn on the laser.
2. Aim the laser dot at the target point.
3. Press the **READ** button again to take a measurement. The result will be displayed on the screen.

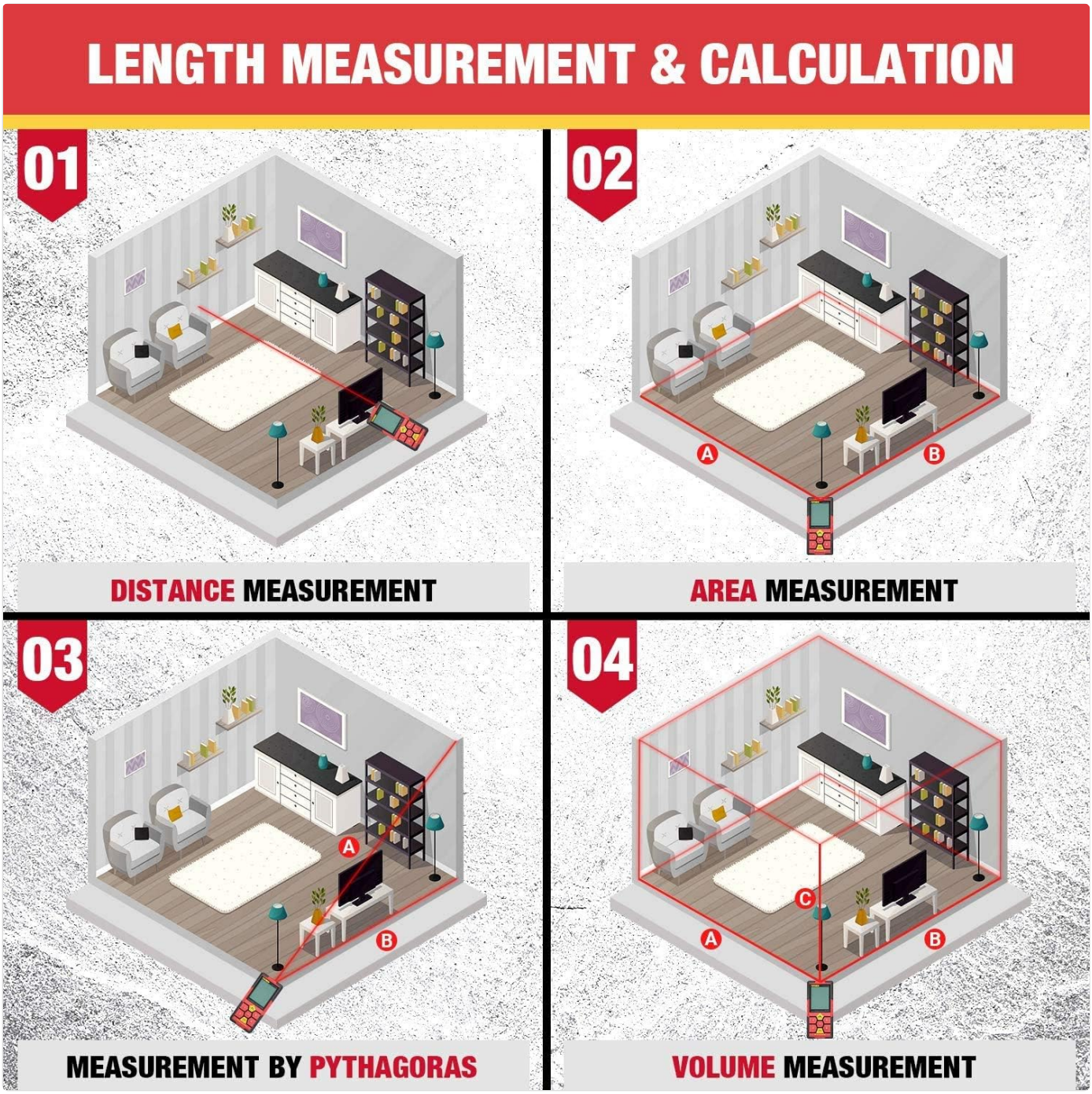


Image: An illustration depicting the process of taking a distance measurement using the laser measure, showing the device aiming at a wall.

6.2 Changing Measurement Units

Press the **Reference Point / Unit Switch** button repeatedly to cycle through available units: meters (m), inches (in), feet (ft), and feet + inches (ft+in).

6.3 Adjusting Reference Point

The device can measure from three different reference points: front, center (for tripod use), and rear of the device. Press and hold the **Reference Point / Unit Switch** button to change the reference point. An icon on the display will indicate the current reference point.

6.4 Area Measurement

1. Press the **FUNC** button once to enter Area measurement mode. A square icon will appear on the display.
2. Take the first length measurement (e.g., length).
3. Take the second length measurement (e.g., width).
4. The device will automatically calculate and display the area.

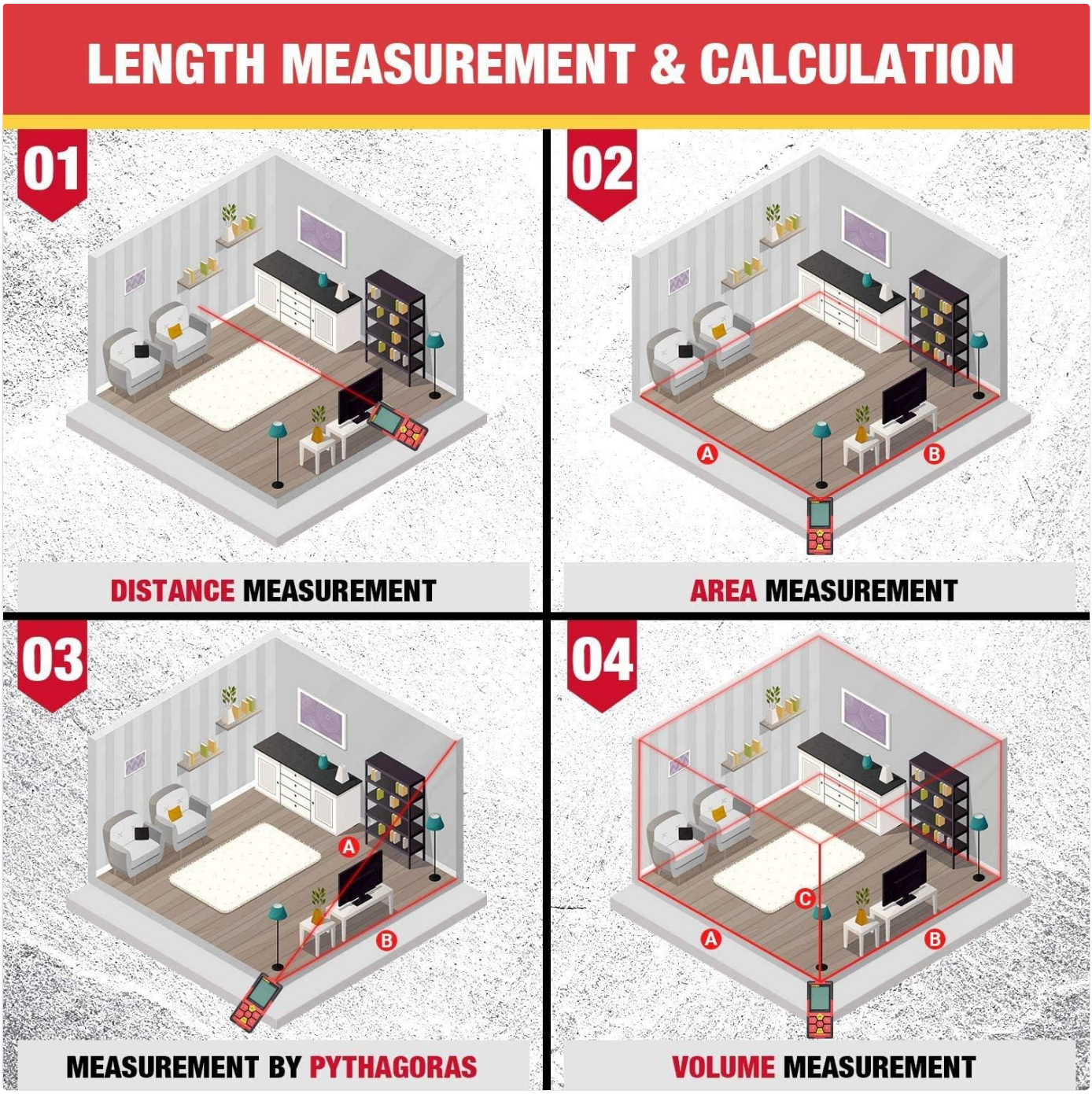


Image: An illustration demonstrating how to perform an area measurement by taking two perpendicular distance measurements.

6.5 Volume Measurement

1. Press the **FUNC** button twice to enter Volume measurement mode. A cube icon will appear.
2. Take the first length measurement (e.g., length).
3. Take the second length measurement (e.g., width).
4. Take the third length measurement (e.g., height).
5. The device will automatically calculate and display the volume.

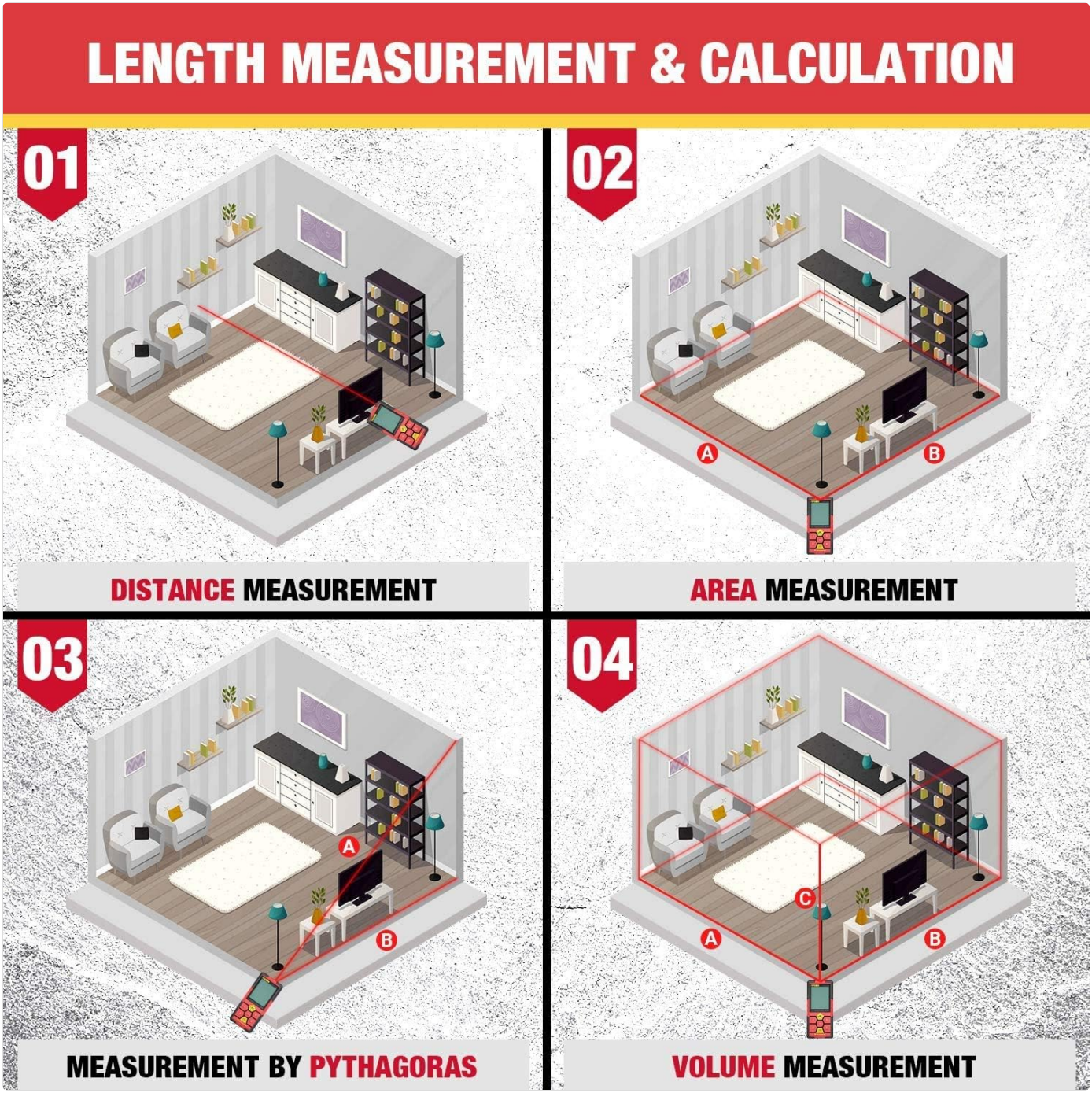


Image: An illustration demonstrating how to perform a volume measurement by taking three perpendicular distance measurements for length, width, and height.

6.6 Pythagorean Measurement

This mode allows indirect measurement of heights or distances using the Pythagorean theorem.

1. Press the **FUNC** button three or four times to select the desired Pythagorean mode (e.g., two-point or three-point).
2. Follow the on-screen prompts to take the required measurements (e.g., hypotenuse and one leg for two-point Pythagoras).
3. The device will calculate and display the unknown side.

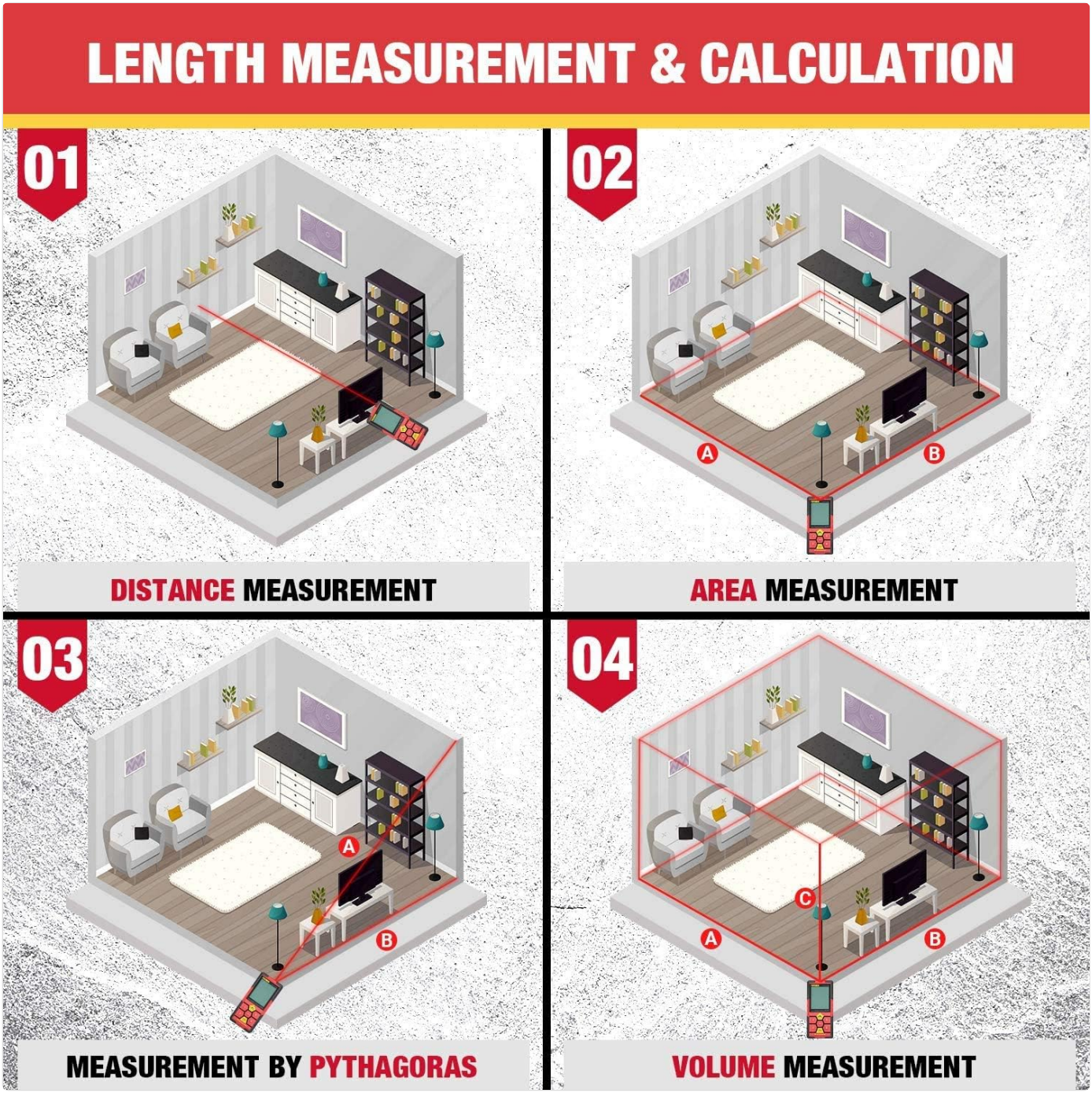


Image: An illustration demonstrating how to perform an indirect measurement using the Pythagorean theorem, typically for height, by measuring the hypotenuse and base.

6.7 Electronic Angle Sensor

The built-in electronic angle sensor provides real-time angle measurements with an accuracy of ±0.3°. The angle is displayed on the screen, assisting in precise positioning and leveling tasks.



Image: The POPOMAN Laser Measure MTM120B's display showing a real-time angle measurement of 23.9 degrees, indicating the functionality of the electronic angle sensor.

6.8 Mute Function

To toggle the sound (mute/unmute), briefly press the **- (Subtraction/Sound)** button. This is useful for operating in quiet environments.

6.9 Data Storage and Recall

The device can store up to 99 groups of measurement data.

- **To Save:** After a measurement, press the **Save** button to store the result.
- **To Recall:** Press and hold the **Save** button to enter data recall mode. Use the **+, -** buttons to navigate through stored measurements.



Image: The POPOMAN Laser Measure MTM120B's display showing multiple lines of measurement data, illustrating its capability to store and recall up to 99 sets of measurements.

6.10 Addition and Subtraction

You can add or subtract measurements directly on the device.

- Take the first measurement.
- Press the **+** button for addition or **-** button for subtraction.
- Take the second measurement. The device will display the calculated sum or difference.

6.11 Maximum/Minimum Measurement

This mode continuously measures and displays the maximum and minimum distances, useful for diagonal measurements or determining clearances.

1. Press and hold the **READ** button to enter continuous measurement mode.
2. The display will show the current, maximum, and minimum measurements.
3. Press **READ** again to stop continuous measurement.

6.12 Self-Calibration

The device features automatic calibration. If you suspect an accuracy issue, refer to the full user manual for specific self-calibration steps, which typically involve measuring a known distance and adjusting the offset.

7. Maintenance

- **Cleaning:** Use a soft, damp cloth to clean the device. Do not use abrasive cleaners or solvents. Clean the laser lens carefully with a soft cloth, similar to cleaning camera lenses.
- **Storage:** Store the device in its storage bag in a cool, dry place when not in use. Avoid extreme temperatures and direct sunlight.
- **Battery:** For long-term storage, charge the battery to approximately 50% every few months to maintain battery health.

8. Troubleshooting

Problem	Possible Cause	Solution
Device does not turn on	Low battery	Charge the battery using the provided USB cable.
Laser beam is not visible	Bright ambient light; dirty lens	Use in lower light conditions; clean the laser lens. Use the reflection plate for better visibility on distant or dark targets.
Inaccurate measurements	Incorrect reference point; dirty lens; device not stable; self-calibration needed	Verify the reference point setting; clean the lens; ensure device stability; perform self-calibration if necessary.
Display shows "Error"	Measurement out of range; strong interference	Ensure target is within 0.16ft - 196ft range; avoid strong light sources or reflective surfaces.

9. Specifications

Feature	Specification
Model	MTM120B
Measuring Accuracy	±1/16 inch (±2mm)
Measuring Range	0.05m - 60m (0.16ft - 196ft)
Measuring Units	Ft / Ft+In / M / In
Laser Class	Class 2
Laser Type	630-670nm, <1mW
Angle Sensor Accuracy	±0.3°
Battery Type	850mAh Lithium-Ion (rechargeable)
Charging Port	USB-C
Data Storage	99 Groups
Operation Temperature	0°C - 40°C (32°F - 104°F)
Dimensions	116 x 52 x 26 mm (4.57 x 2.05 x 1.02 inches)

Feature	Specification
Weight	180g (0.4 lbs)
Material	Plastic + Soft Rubber + Electronic Components
International Protection Rating	IP54

10. Warranty and Support

POPOMAN offers a **24-Month Quality Promise** for this product. For warranty claims, technical support, or any questions regarding the operation of your device, please contact POPOMAN customer service through their official website or the retailer where the product was purchased.
Please retain your proof of purchase for warranty purposes.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question