

## Laserliner DigiLevel Laser G80

# Laserliner DigiLevel Laser G80 Digital Electronic Spirit Level 80cm Instruction Manual

## 1. INTRODUCTION

The Laserliner DigiLevel Laser G80 is a digital electronic spirit level designed for precise horizontal and vertical alignment, as well as accurate angle transfer. This device features an integrated green laser line for extending the measuring surface, a magnetic base for hands-free operation on metallic structures, and acoustic guidance for convenient use. Its 80 cm length makes it suitable for a wide range of applications in various trades.

## 2. SAFETY INSTRUCTIONS

Please read these safety instructions carefully before using the device. Failure to follow these instructions may result in injury or damage to the device.

- **Laser Radiation:** This device uses a Class 2 laser. Do not look directly into the laser beam or direct it towards other people. Eye protection is recommended when working with lasers.
- **Batteries:** Ensure correct battery polarity when inserting. Do not mix old and new batteries or different types of batteries. Remove batteries if the device will not be used for an extended period.
- **Maintenance:** Do not attempt to open or modify the device. Repairs should only be performed by authorized personnel.
- **Environment:** Use the device within the specified operating temperature range (0°C to 40°C). Avoid exposure to extreme temperatures, moisture, or strong vibrations.

## 3. PRODUCT OVERVIEW

### 3.1 Components

The DigiLevel Laser G80 consists of the following main components:

- Digital Display
- Control Buttons (UNIT, REF, CAL, HOLD, Power/Backlight)
- Horizontal and Vertical Vials
- Green Laser Output
- Magnetic Base
- Battery Compartment



Figure 1: Overview of the Laserliner DigiLevel Laser G80.



Figure 2: The DigiLevel Laser G80, its protective carrying bag, and AAA batteries.

### 3.2 Display and Buttons

The digital display provides clear readings and indicators. The buttons allow for various functions and settings.

# BACKLIGHT



Figure 3: Close-up of the backlit digital display, showing angle measurement and battery status.

## FLIP DISPLAY



Figure 4: The automatic 180° flip display feature for convenient overhead measurements.

- **UNIT Button:** Press to cycle through measurement units (degrees, %, mm/m).
- **REF Button:** Press to set the current angle as a reference (0°) for relative measurements.
- **CAL Button:** Press and hold to enter calibration mode for maintaining accuracy.
- **HOLD Button:** Press to freeze the current measurement on the display.
- **Power Button ( ):** Press to turn the device on/off. Short press to activate/deactivate backlight.

## 4. SETUP

### 4.1 Battery Installation

1. Locate the battery compartment cover on the device.
2. Open the cover.
3. Insert two (2) 1.5V LR03 (AAA) batteries, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.

## 5. OPERATING INSTRUCTIONS

### 5.1 Power On/Off

Press the Power button ( ) to turn the device on. Press and hold the Power button to turn it off.

## 5.2 Basic Measurement

Place the DigilLevel Laser G80 on the surface to be measured. The digital display will show the angle of inclination. The display automatically rotates 180° for overhead measurements.

## 5.3 Unit Selection

Press the **UNIT** button to switch between different measurement units: degrees (°), percentage (%), and mm/m.

## 5.4 Reference Function (REF)

To measure relative angles, place the device on a surface and press the **REF** button. The display will show 0.0°, and subsequent measurements will be relative to this set reference angle. Press **REF** again to return to absolute measurement.

## 5.5 Calibration (CAL)

For sustained accuracy, periodic calibration is recommended. Refer to the full user manual for detailed calibration steps. Generally, this involves placing the device on a level surface, initiating calibration, rotating 180°, and confirming.

## 5.6 Laser Function

The integrated green laser line extends the measuring surface, allowing for precise alignment over longer distances. Activate the laser by pressing the dedicated laser button (often integrated with the power button or a separate button). The laser module is located at one end of the level.



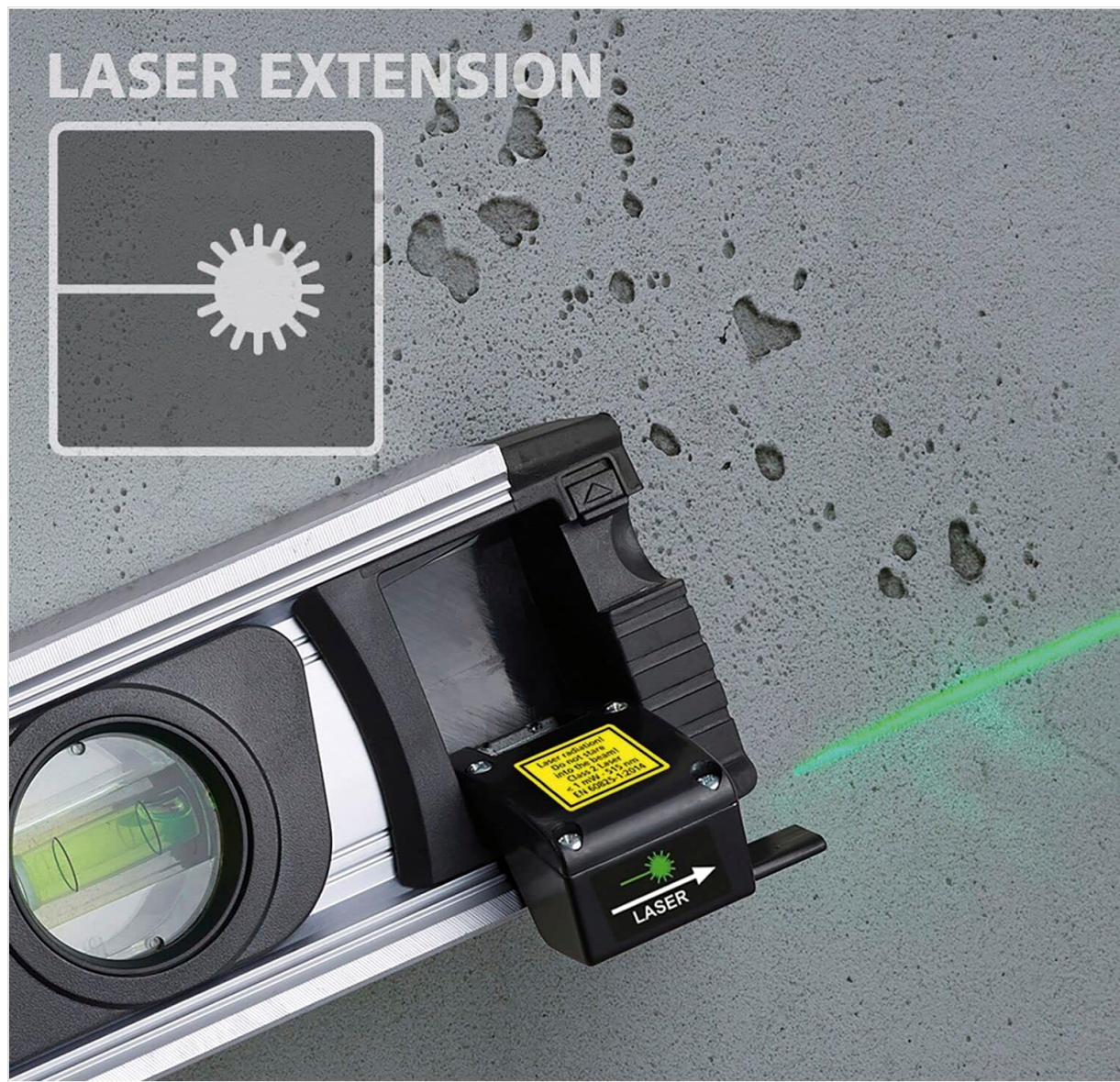


Figure 5: The green laser module projecting a line for extended measurement.



Figure 6: The DigiLevel Laser G80 in use, projecting a green laser line onto a wall for alignment.

## 5.7 Acoustic Guidance

The device provides acoustic signals to assist with alignment at specific angles ( $0^\circ$ ,  $45^\circ$ ,  $90^\circ$ ). Three different tones indicate these angles, allowing for hands-free alignment without constantly watching the display.



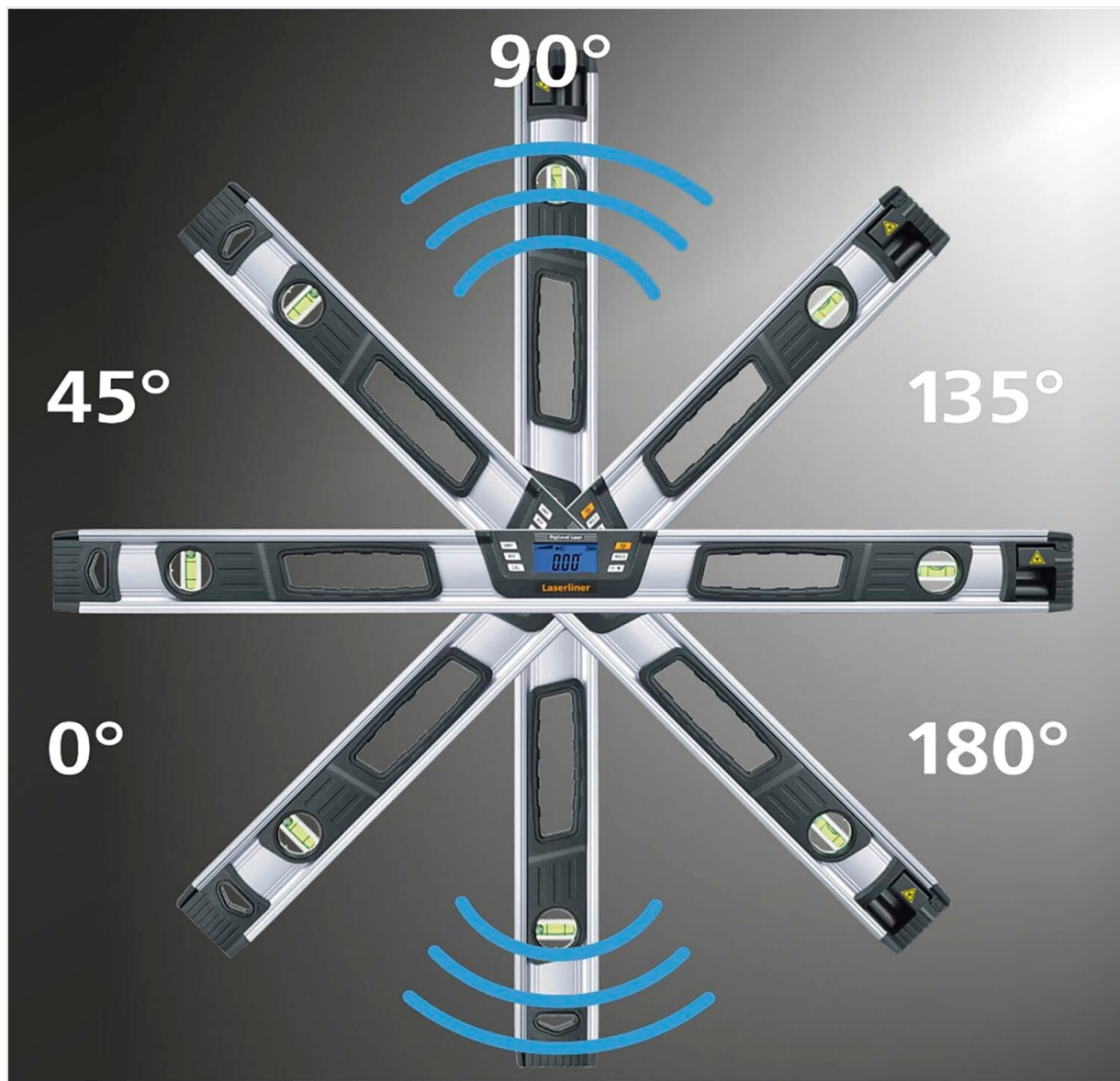


Figure 7: Illustration of 360° angle measurement and acoustic signals at key angles (0°, 45°, 90°, 135°, 180°).

### 5.8 Hold Function

Press the **HOLD** button to freeze the current measurement on the display. This is useful for taking readings in difficult-to-view positions. Press **HOLD** again to release the measurement.





Figure 8: The 'Hold Angle' function, allowing the current measurement to be frozen on the display.

### 5.9 Magnetic Base

The integrated magnetic base allows the device to be securely attached to metallic surfaces, enabling hands-free operation for increased convenience and precision.

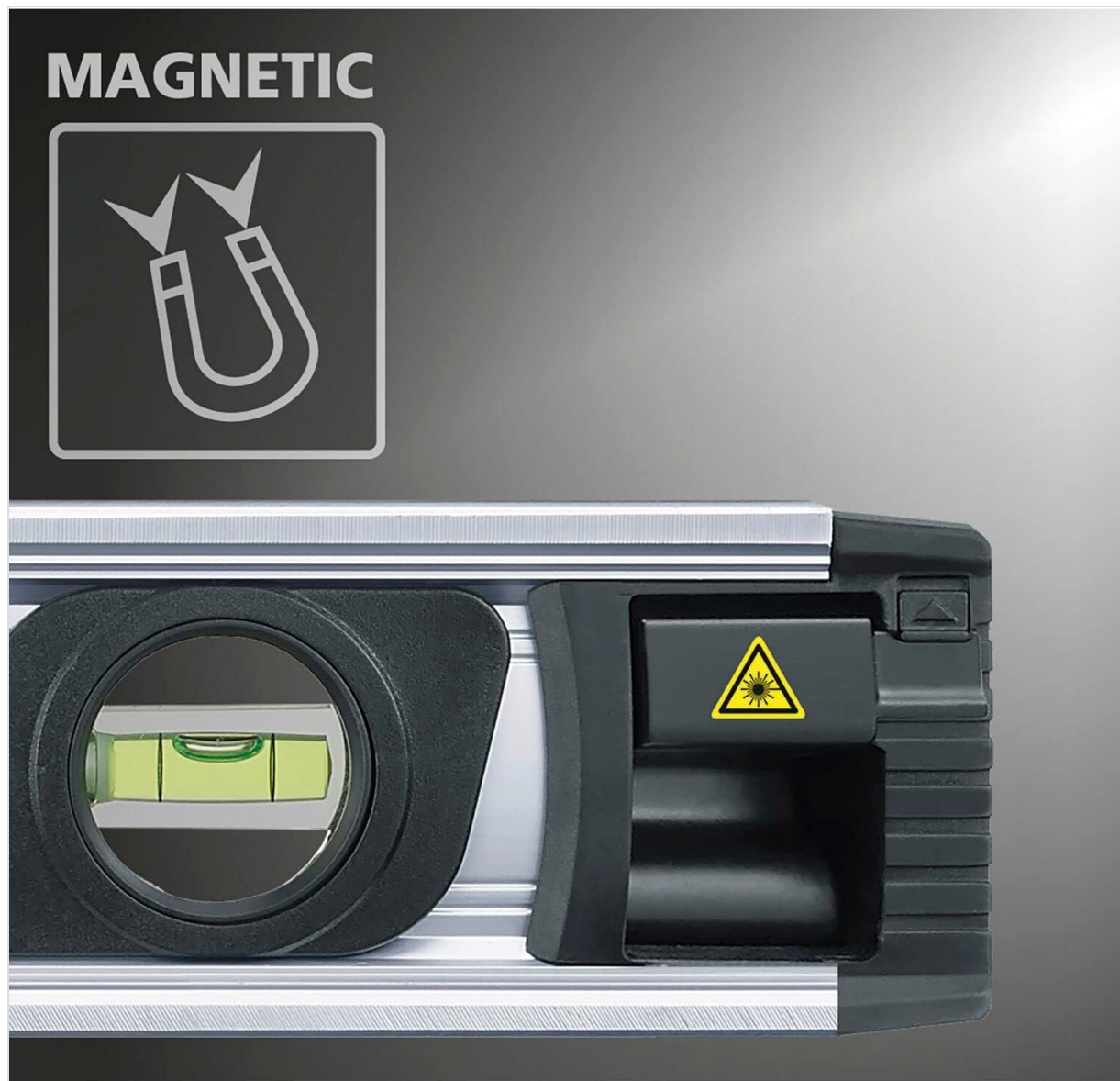


Figure 9: The magnetic base provides secure attachment to metal surfaces.

## 6. APPLICATIONS

The Laserliner DigiLevel Laser G80 is suitable for a variety of professional and DIY applications, including:

- **Carpentry and Joinery:** Precise alignment of wooden structures, frames, and furniture.
- **Drywall Installation:** Ensuring level and plumb surfaces for wall and ceiling panels.
- **Roofing:** Measuring and transferring roof pitches and angles.
- **Painting:** Establishing level lines for decorative elements or wall preparation.
- **General Construction:** Any task requiring accurate horizontal, vertical, or angle measurements.

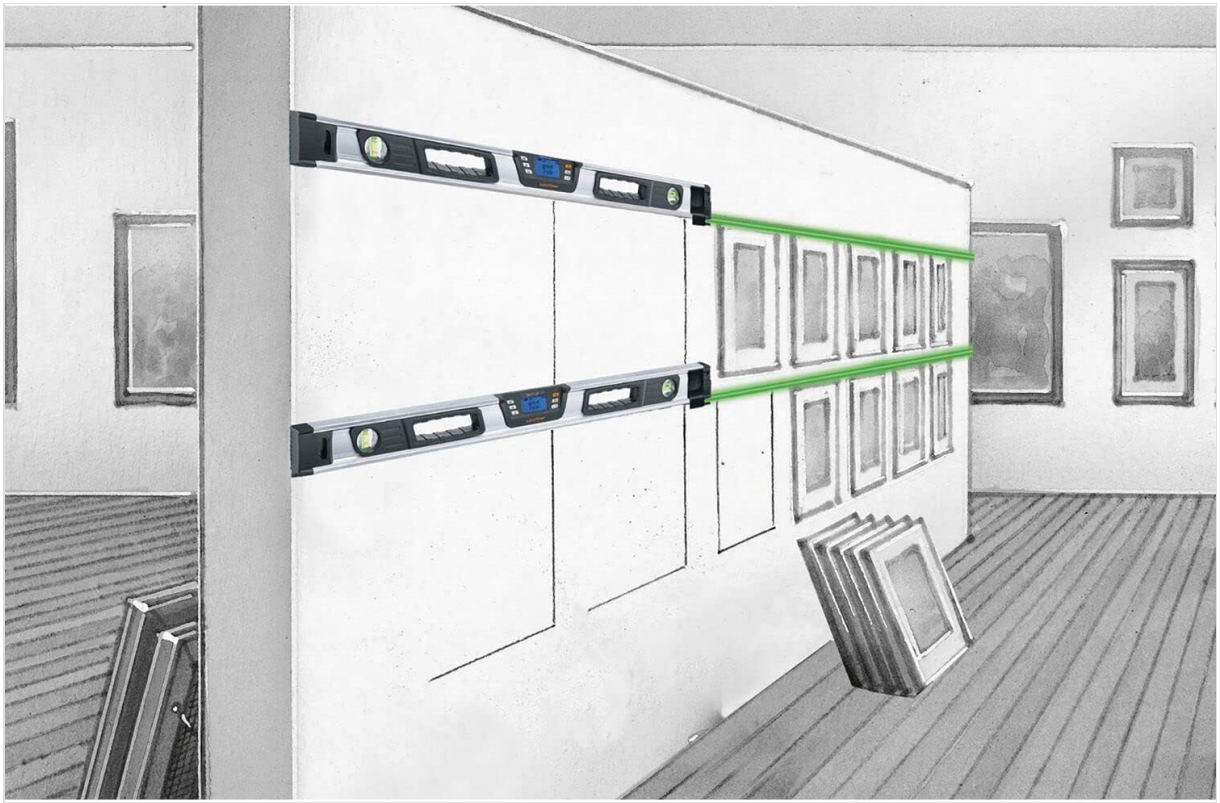


Figure 10: Using the laser line to align multiple picture frames on a wall.

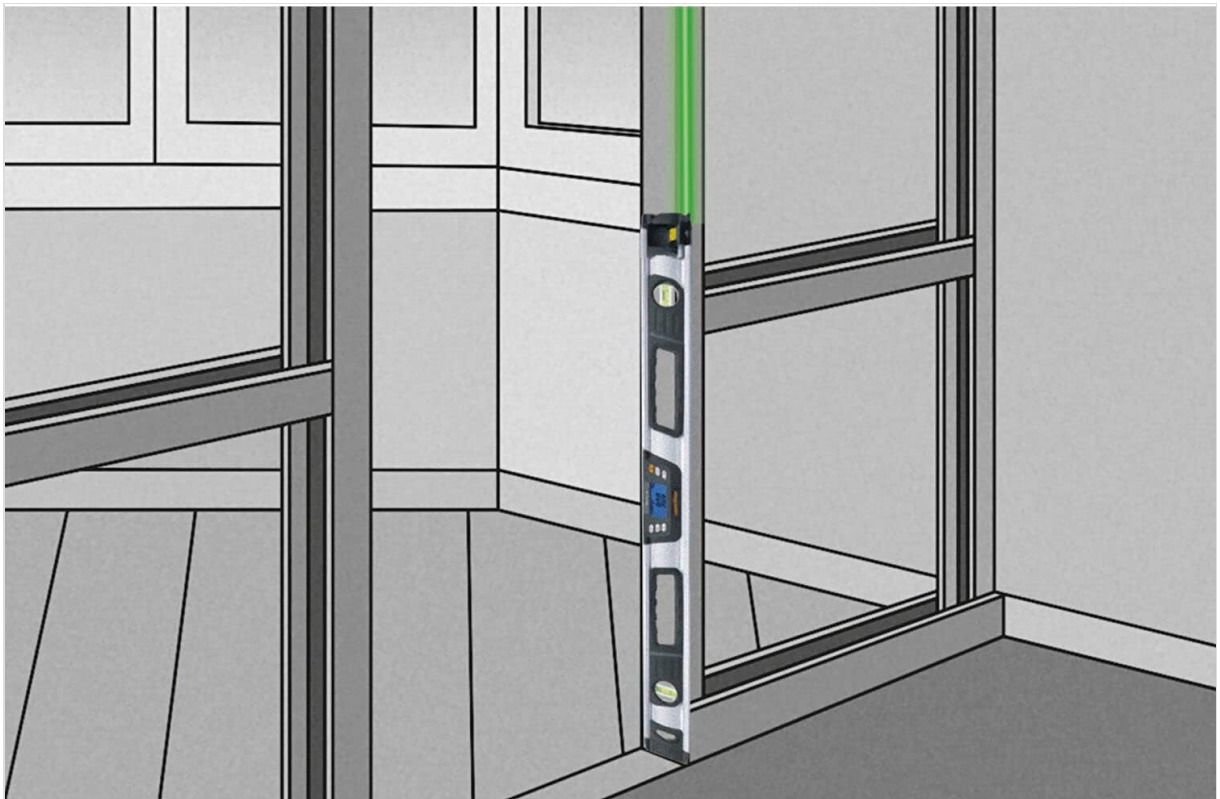


Figure 11: The spirit level used for vertical alignment, ensuring plumb surfaces.



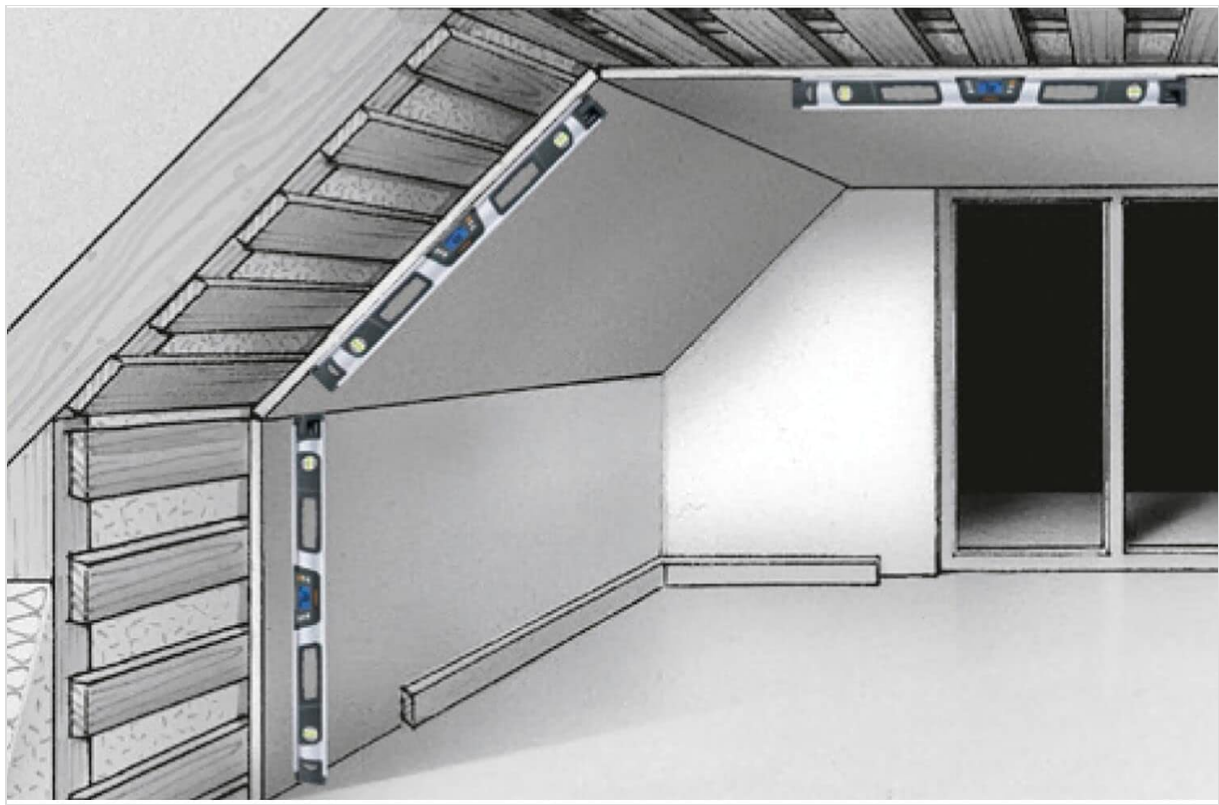


Figure 12: Measuring and aligning on an angled ceiling or sloped surface.

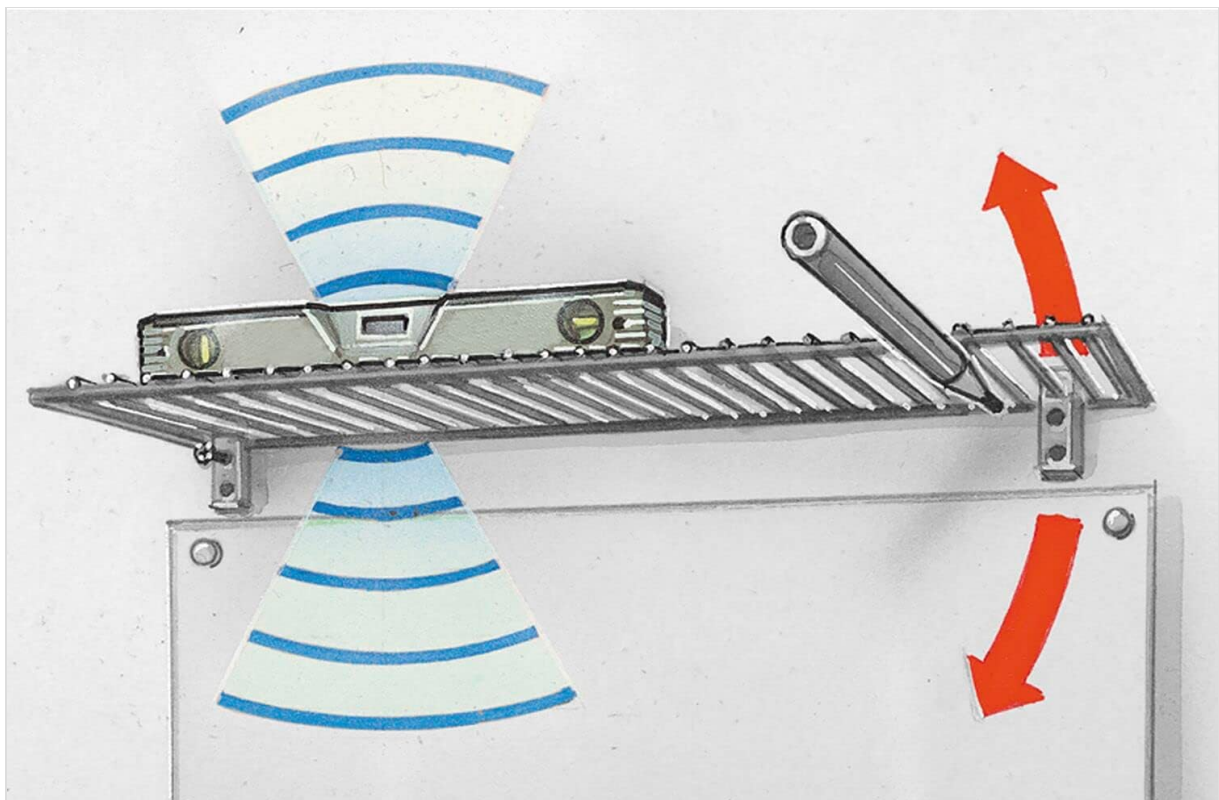


Figure 13: Acoustic guidance assists in leveling shelves, indicated by sound waves.

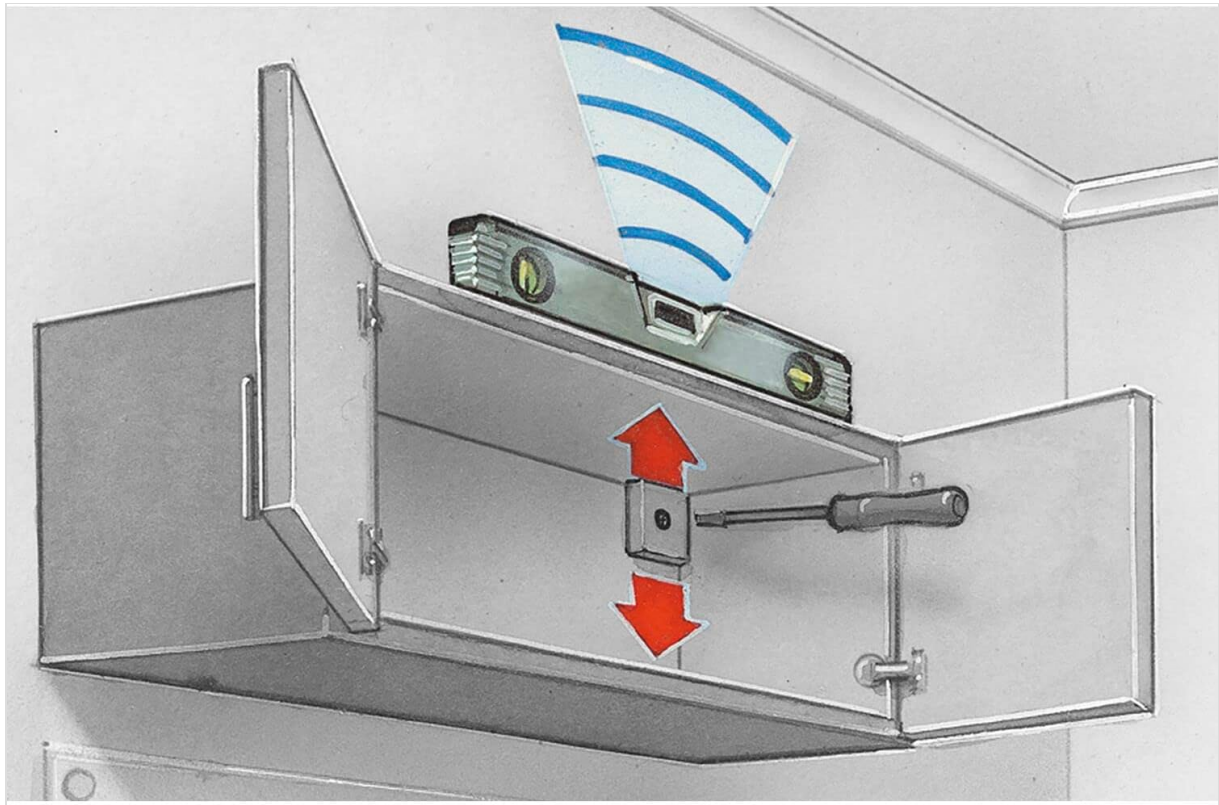


Figure 14: Acoustic feedback helps in precisely aligning cabinets during installation.

## 7. MAINTENANCE

- **Cleaning:** Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in its carrying bag in a dry, dust-free environment when not in use. Remove batteries if storing for extended periods.
- **Inspection:** Regularly check the device for any signs of damage.

## 8. TROUBLESHOOTING

- **Device does not turn on:** Check battery installation and ensure batteries are not depleted. Replace if necessary.
- **Inaccurate readings:** Perform a calibration as described in the full user manual. Ensure the device is placed on a stable surface.
- **Laser not visible:** Check battery level. Ensure the laser output is not obstructed.

## 9. SPECIFICATIONS

Model Number	081.257A
Length	80 cm
Laser Type	Green Line Laser, Class 2, <1 mW
Laser Wavelength	515 nm
Electronic Measurement Accuracy	$\pm 0.1^\circ$ at $0^\circ \dots 1^\circ$ and $89^\circ \dots 90^\circ$ , $\pm 0.2^\circ$ at $1^\circ \dots 89^\circ$
Vial Accuracy	$\pm 0.5$ mm/m

<b>Display Accuracy</b>	1 decimal place
<b>Power Supply</b>	2 x 1.5V LR03 (AAA) batteries
<b>Operating Temperature</b>	0°C to 40°C
<b>Material</b>	Aluminum
<b>Weight</b>	966 grams

## 10. PACKAGE CONTENTS

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The Laserliner DigiLevel Laser G80 package includes:

- DigiLevel Laser G80 Digital Electronic Spirit Level
- 2 x 1.5V LR03 (AAA) Batteries
- Carrying Bag

## 11. WARRANTY AND SUPPORT

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Warranty information for the Laserliner DigiLevel Laser G80 is typically provided with the product at the time of purchase or can be obtained directly from the manufacturer, Laserliner. For technical support, please refer to the contact information provided in your product packaging or visit the official Laserliner website.