PeakTech P 2800A

PeakTech P 2800A Professional Laser Distance Meter User Manual

Model: P 2800A | Brand: PeakTech

1. INTRODUCTION

The PeakTech P 2800A is a professional laser distance meter designed for precise and reliable measurements in various applications, including construction, architecture, and landscaping. This device offers a measurement range from 0.05 meters to 40 meters with high accuracy. It features a multi-line backlit LCD display and quick selection keys for advanced functions such as area, volume, and Pythagorean calculations, as well as addition and subtraction. The internal memory can store up to 99 measurement values for convenient recall. An integrated 90° flip-out stop ensures accurate alignment from edges or corners, enhancing measurement precision.

2. SAFETY INSTRUCTIONS

Please read and understand all safety instructions before operating the device. Failure to follow these instructions may result in laser radiation exposure, electric shock, fire, or serious injury.

- **Laser Safety:** This device uses a Class 2 laser. Do not stare directly into the laser beam or direct it at other people or reflective surfaces. Laser radiation can cause eye injury.

- **Battery Safety:** Use only specified alkaline AAA batteries. 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 to prevent leakage.

- **Operating Environment:** Do not operate the device in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Keep the device away from water and high humidity.

- **Maintenance:** Do not attempt to modify or disassemble the device. Repairs should only be performed by qualified personnel.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- PeakTech P 2800A Laser Distance Meter

- Belt Pouch

- 2 x 1.5V AAA Alkaline Batteries

- User Manual (German and English)

- Calibration Confirmation

4. DEVICE OVERVIEW

Familiarize yourself with the components and controls of your PeakTech P 2800A Laser Distance Meter.

Figure 1: PeakTech P 2800A Laser Distance Meter front view, showing the multi-line LCD display and control buttons. This image provides a general overview of the device's layout.

Figure 2: PeakTech P 2800A Laser Distance Meter mounted on a mini tripod, demonstrating its tripod thread for stable and precise measurements, especially over longer distances.
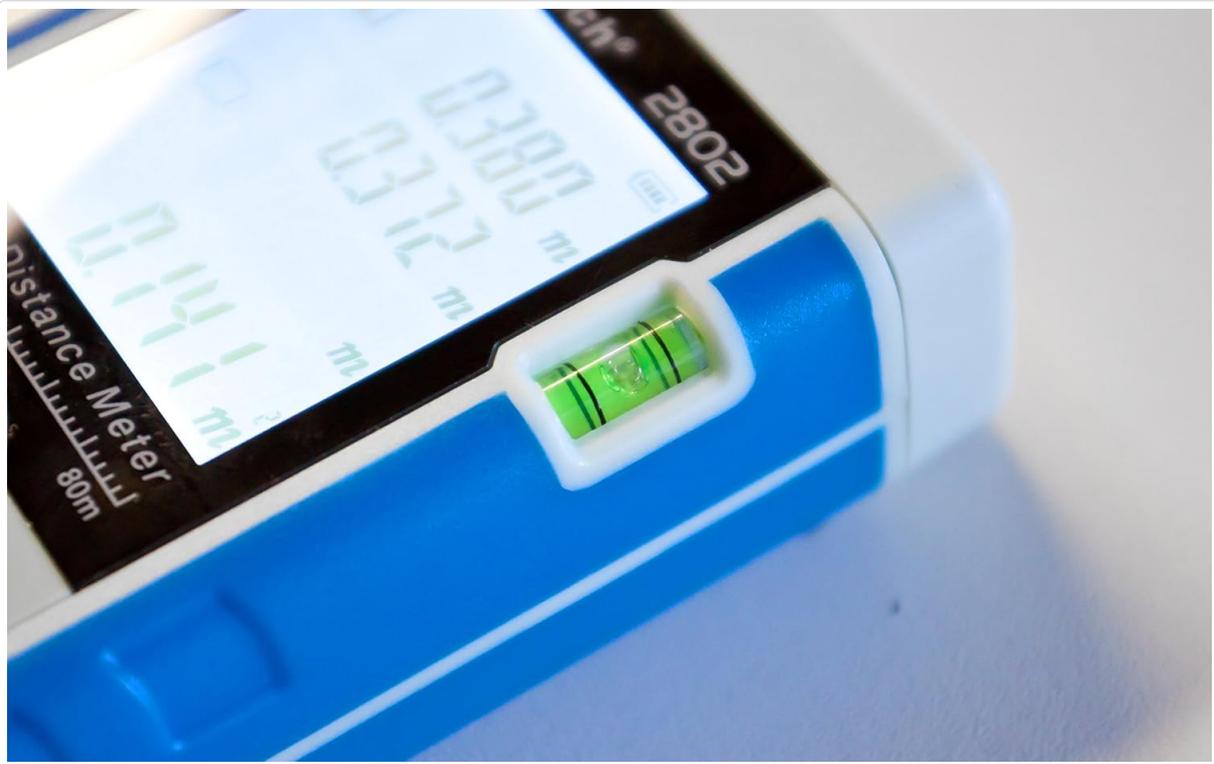
Figure 3: Close-up view of the integrated bubble level on the PeakTech P 2800A Laser Distance Meter, used to ensure the device is perfectly horizontal for accurate measurements.

Figure 4: PeakTech P 2800A Laser Distance Meter with its 90-degree flip-out stop extended, used for precise measurements from edges or corners, ensuring the measurement starts exactly from the reference point.

Key Buttons and Display Elements:

- **MEAS (Red Button):** Initiates measurement, confirms selections.
- **OFF/CLEAR (Red Button):** Powers off the device, clears current measurement/selection.
- **UNIT:** Changes measurement units (m, in, ft).

- **+:** Addition function, navigates menus.

- **-:** Subtraction function, navigates menus.

- **Area/Volume Button:** Toggles between area and volume measurement modes.

- **Pythagorean Button:** Activates indirect measurement modes.

- **Reference Point Button:** Changes the measurement reference point (front, rear, flip-out stop).

- **Memory Button:** Accesses stored measurements.

- **Backlight Button:** Toggles display backlight.

- **LCD Display:** Multi-line display showing current measurements, previous results, and function icons.

5. SETUP

5.1 Battery Installation

1. Locate the battery compartment cover on the rear of the device.

2. Slide or unclip the cover to open the compartment.

3. Insert two 1.5V AAA alkaline batteries, ensuring correct polarity (+/-).

4. Close the battery compartment cover securely.

The device will automatically power on or can be powered on by pressing the **MEAS** button.

6. OPERATING INSTRUCTIONS

6.1 Power On/Off

- **Power On:** Press the **MEAS** button.

- **Power Off:** Press and hold the **OFF/CLEAR** button for a few seconds, or the device will automatically power off after approximately 150 seconds of inactivity.

6.2 Changing Measurement Units

Press the **UNIT** button repeatedly to cycle through the available units: meters (m), inches (in), and feet (ft).

6.3 Setting the Reference Point

The device can measure from its front edge, rear edge, or the extended 90° flip-out stop. Press the **Reference Point** button to switch between these options. The current reference point is indicated on the display.

6.4 Single Distance Measurement

1. Point the laser at the target.

2. Press the **MEAS** button once to activate the laser.

3. Press the **MEAS** button again to take the measurement. The result will be displayed.

6.5 Continuous Measurement (Min/Max)

1. Press and hold the **MEAS** button for approximately 2 seconds. The device will enter continuous measurement mode.

2. Move the device slowly to measure different points. The display will show the current, minimum, and

maximum measured distances.

3. Press **MEAS** again to stop continuous measurement.

6.6 Area Measurement

1. Press the **Area**/**Volume** button once to enter area measurement mode. An icon for area will appear on the display.

2. Measure the first side (e.g., length) by pressing**MEAS**.

3. Measure the second side (e.g., width) by pressing**MEAS**.

4. The calculated area will be displayed.

6.7 Volume Measurement

1. Press the **Area**/**Volume** button twice to enter volume measurement mode. An icon for volume will appear.

2. Measure the length by pressing **MEAS**.

3. Measure the width by pressing**MEAS**.

4. Measure the height by pressing **MEAS**.

5. The calculated volume will be displayed.

6.8 Pythagorean Measurement (Indirect Measurement)

This function allows indirect measurement of heights or distances using the Pythagorean theorem. There are typically several modes (e.g., two-point, three-point). Refer to the on-screen icons for guidance.

1. Press the **Pythagorean** button to select the desired indirect measurement mode.

2. Follow the on-screen prompts to take the required measurements (e.g., hypotenuse, base).

3. The device will calculate and display the unknown height or distance.

6.9 Addition and Subtraction

After taking a measurement, you can add or subtract subsequent measurements:

1. Take a measurement.

2. Press the **+** button for addition or **-** button for subtraction.

3. Take the next measurement. The result will be added to or subtracted from the previous value.

4. Repeat as needed.

6.10 Memory Function

The device can store up to 99 measurement values.

- **Store:** Measurements are automatically stored.

- **Recall:** Press the **Memory** button to view stored values. Use the**+** and **-** buttons to scroll through the memory.

- **Clear Memory:** Refer to the detailed user manual for specific instructions on clearing memory, as this may vary.

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 belt pouch in a cool, dry place when not in use. Remove batteries if storing for extended periods.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not turn on	Dead or incorrectly inserted batteries	Check battery polarity, replace with new AAA batteries.
Inaccurate measurements	Unstable surface, dirty lens, incorrect reference point, strong light interference	Ensure stable measurement, clean lens, verify reference point, avoid direct sunlight.
Laser not visible	Strong ambient light, laser off	Move to a darker area, press MEAS to activate laser.
Error message on display	Measurement out of range, internal error	Ensure target is within 0.05m-40m. Restart device. If error persists, contact support.

9. SPECIFICATIONS

Feature	Specification
Measurement Range	0.05 m to 40 m
Measurement Accuracy	± 2 mm
Measurement Units	m (meters), in (inches), ft (feet)
Internal Memory	99 values
Laser Class	Class 2; <1 mW; 620 nm - 680 nm
Automatic Shut-off	Yes (after approx. 150 seconds of inactivity)
Power Supply	2 x 1.5V AAA Alkaline Batteries
Display Type	Multi-line, Backlit LCD
Material	Plastic
Color	Blue
Dimensions (L x W x H)	12 x 5.5 x 3 cm
Weight	250 grams
International Protection (IP) Rating	IP54 (Dust protected and splash-proof)
Tripod Thread	Yes

Feature	Specification
Integrated Bubble Level	Yes
90° Flip-out Stop	Yes

10. WARRANTY AND SUPPORT

PeakTech products are manufactured with high quality standards. For warranty information, please refer to the documentation provided with your purchase or contact your local PeakTech distributor. For technical support or service inquiries, please visit the official PeakTech website or contact their customer service department.