

Huepar TL60

Huepar Digital Torpedo Level and Protractor TL60 User Manual

Model: TL60 | Brand: Huepar

1. INTRODUCTION

This manual provides instructions for the safe and effective use of your Huepar Digital Torpedo Level and Protractor, model TL60. This tool is designed for precise measurement of levels, tilts, angles, slopes, and bevels in various construction, installation, and DIY projects. Please read this manual thoroughly before operating the device.

2. KIT CONTENTS

Verify that all items listed below are included in your package:

- 1 x TL60 Digital Torpedo Level
- 1 x Carrying Bag
- 1 x User Manual
- 1 x Screwdriver
- 2 x AAA Batteries



Figure 2.1: The image displays the Huepar TL60 Digital Torpedo Level kit contents, including the level, carrying bag, user manual, screwdriver, and two AAA batteries.

3. FEATURES

- **High Accuracy & LCD Display:** The level provides an accuracy of $\pm 0.05^\circ$ at 0° and 90° , and $\pm 0.2^\circ$ at other angles. It features dual high-accuracy bubble vials and a large, bright LCD display with backlight for clear reading from any perspective. The backlight can be toggled ON/OFF.
- **Multiple Functions:** Offers five measuring modes: degree ($^\circ$), percentage (%), mm/m, in/ft (fraction), and in/ft (decimal). Includes HOLD, Zero (relative angle), and Memory (stores last 10 measurements) functions.
- **Buzzer Prompt:** Provides four distinct sound levels to assist in achieving precise 0° and 90° angles without needing to view the display.
- **Measuring Ruler & Magnetic Base:** Equipped with metric and inch scales on the bottom for progressive measurements. A magnetic base allows for secure attachment to metal surfaces.
- **Automatic Inversion:** The digital display automatically inverts when the tool is used upside down for continuous readability.
- **Portability & Durability:** Features a soft rubber handle for comfortable grip and two soft rubber hooks for belt attachment. Comes with a portable carrying bag. IP54 rated for dust and water resistance.

- **Auto-Off:** The device automatically turns off after 3 minutes of inactivity to conserve battery life.

HOLD function can keep the screen reading



Figure 3.1: The image illustrates the HOLD function, which freezes the screen reading, and demonstrates the five available display methods: degrees, percentage, mm/m, fractional in/ft, and decimal in/ft.

Bubble Vial Accuracy



Vertical Bubble Vial $\leq 0.75\text{mm/m} = 0.0375^\circ$



Horizontal Bubble Vial
 $\leq 0.5\text{mm/m} = 0.025^\circ$

Figure 3.2: This image highlights the accuracy of the vertical and horizontal bubble vials, showing $\leq 0.75\text{mm/m}$ (0.037°) for vertical and $\leq 0.5\text{mm/m}$ (0.025°) for horizontal.



Figure 3.3: The image demonstrates the magnetic base for convenient measurement on metal surfaces and the integrated 23-inch (58.5 cm) measuring ruler at the bottom of the tool.

4. SETUP

4.1 Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Use the provided screwdriver to open the battery compartment.
3. Insert two AAA batteries, ensuring correct polarity (+/-).
4. Replace the battery compartment cover and secure it with the screw.

5. OPERATING INSTRUCTIONS



Figure 5.1: This diagram labels the control buttons and display indicators on the Huepar TL60 Digital Level, including ON/OFF, RES, MODE, REF, HOLD, SOUND, LIGHT, and CAL.

5.1 Power ON/OFF

- Press the **ON/OFF** button to turn the device on.
- Press and hold the **ON/OFF** button to turn the device off.
- The device will automatically power off after 3 minutes of inactivity.

5.2 Measurement Modes

- Press the **MODE** button to cycle through the five measurement units: degrees (°), percentage (%), mm/m, in/ft (fraction), and in/ft (decimal).

5.3 HOLD Function

- Short press the **HOLD** button to freeze the current measurement on the display.
- Press **HOLD** again to release the reading and resume live measurement.

5.4 Zero (Relative Angle) Function

- To set a relative zero angle, place the level on your desired reference surface.
- Press the **REF** button. The display will show 0.00°, and subsequent measurements will be relative to this new zero point.

- Press **REF** again to return to absolute measurement mode.



Figure 5.2: This image illustrates the difference between Absolute Measurements (using a level surface as reference) and Relative Measurements (setting a new reference angle by pressing the REF button).

5.5 Memory Function

- The device can store the last 10 angle measurements. Consult the full user manual for specific instructions on how to recall these measurements.

5.6 Buzzer Prompt

- Press the **SOUND** button to toggle the audio indicator ON/OFF.
- When active, the buzzer provides different sound levels to indicate 0° and 90° angles.

Audio Indicator

helps us always find 0° and 90°, even your eyes can't see the display



Figure 5.3: The image shows the digital level in use, with an icon indicating the audio indicator feature, which helps users find 0° and 90° even without direct display visibility.

5.7 LCD Backlight

- Press the **LIGHT** button to turn the LCD backlight ON or OFF.

5.8 Digital Display Resolution Adjustment

- Press the **RES** button to adjust the digital display resolution.

6. CALIBRATION

For optimal accuracy, periodic calibration may be required. The TL60 features a calibration mode:

1. Place the level on a flat, stable surface.
2. Press the **CAL** button to enter calibration mode.
3. Follow the on-screen prompts or refer to the detailed instructions in the full user manual for the specific calibration procedure.

7. APPLICATIONS

The Huepar TL60 Digital Torpedo Level is suitable for a wide range of applications, including but not limited to:

- Construction and repair sites
- Equipment installations
- Welding fabrication jobs
- Leveling shelves and table tops
- DIY projects
- Roofing, framing, and alignment work
- Any task requiring precision leveling and angle finding



Figure 7.1: This image displays the Huepar TL60 Digital Level being used for various tasks, including checking a 90° angle, leveling floors, leveling work surfaces, and aligning structural elements.

8. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your digital level.

- **Cleaning:** Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the level in its carrying bag in a dry, cool place when not in use. Remove batteries if storing for extended periods to prevent leakage.

- **Protection:** The device is IP54 rated, offering protection against dust and splashing water. Avoid submerging it in water or exposing it to heavy rain.



Convenient for storage and carrying of the level and measuring

Figure 8.1: The image shows the Huepar TL60 Digital Level being carried in its soft rubber handle and stored in its portable carrying bag, emphasizing its convenience for transport and protection.

9. TROUBLESHOOTING

If you encounter issues with your Huepar TL60, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Device does not turn on.	Low or dead batteries; incorrect battery installation.	Replace batteries with new AAA batteries, ensuring correct polarity.
Inaccurate readings.	Device requires calibration; external interference.	Perform a calibration as described in Section 6. Ensure the measurement surface is stable.
LCD display is dim or flickering.	Low battery power.	Replace batteries.

Problem	Possible Cause	Solution
Buzzer not working.	Buzzer is turned off.	Press the SOUND button to activate the buzzer.

10. SPECIFICATIONS

Specification	Value
Brand	Huepar
Model	TL60
Material	Aluminum Alloy (Metal)
Accuracy (0°, 90°)	±0.05°
Accuracy (Other Angles)	±0.2°
Measuring Range	4*90° (0~360°)
Display	LCD with Backlight
Power Source	2 x AAA Batteries
Auto-Off	3 minutes of inactivity
IP Rating	IP54 (Dustproof, Waterproof)
Magnetic Base	Yes
Measuring Ruler	Metric and Inch scales

11. SAFETY INFORMATION

Please observe the following safety precautions:

- Do not attempt to disassemble or modify the device. This may void the warranty and cause damage.
- Keep the device away from strong magnetic fields, which can affect its accuracy.
- Avoid dropping the device or subjecting it to strong impacts.
- Dispose of batteries according to local regulations. Do not mix old and new batteries.
- Keep out of reach of children.

12. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the contact details provided with your purchase or visit the official Huepar website. Ensure you have your model number (TL60) and purchase details available when contacting support.

