

Tolsen 38109

Tolsen 38109 Digital Voltage Tester User Manual

Model: 38109

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your Tolsen 38109 Digital Voltage Tester. Please read this manual thoroughly before operating the device and retain it for future reference.

Product Overview

The Tolsen 38109 Digital Voltage Tester is a compact and ergonomic tool designed for quickly and accurately measuring voltage levels. It features a clear LCD display for precise readings and is suitable for various electrical projects. Its robust construction ensures reliable performance for both professional and personal use.



Figure 1: Tolsen 38109 Digital Voltage Tester. This image shows the overall design of the voltage tester, featuring its black and yellow casing, digital display, and metal probe tip.

2. SAFETY INFORMATION

Always exercise extreme caution when working with electrical equipment. Failure to follow safety guidelines can result in electric shock, injury, or damage to the device.

- Do not use the tester if it appears damaged or is not functioning correctly.
- Ensure your hands are dry and you are standing on a non-conductive surface when testing.
- Do not exceed the maximum operating voltage of 1000 Volts.
- Always assume a circuit is live until proven otherwise.
- Keep the device away from children.
- This device is designed for voltage measurement only. Do not use it for other purposes.

3. PRODUCT FEATURES

- **Compact Design:** Sleek and ergonomic shape for easy handling and operation.

- **Precise Measurements:** Digital display provides accurate voltage readings.
- **Versatile Application:** Suitable for testing various AC/DC electrical components, circuits, and systems (12-250V range).
- **Durable Construction:** Built with high-quality materials for long-lasting performance.
- **User-Friendly Interface:** Straightforward operation for quick and effortless readings.
- **Highlight Neon Bulb:** Provides visual indication of live circuits.



Figure 2: Features and Usage Diagram. This image illustrates key features such as AC/DC 12-250V capability, the neon bulb highlight, and the LCD display. It also provides a visual guide on how to use the tester for circuit testing and identifying ground lines.

4. SETUP

Battery Installation

The Tolsen 38109 Digital Voltage Tester is battery-powered. Ensure batteries are correctly installed before use. Typically, these testers use small button-cell batteries, accessible by unscrewing or sliding open a compartment on the handle. Refer to the markings inside the compartment for correct polarity (+/-).

Initial Inspection

Before each use, visually inspect the tester for any signs of damage, such as cracks in the casing, frayed wires, or a bent probe tip. Do not use the device if any damage is observed.

5. OPERATING INSTRUCTIONS

The Tolsen 38109 Digital Voltage Tester is designed for simple operation. Follow these steps for accurate voltage measurement:

1. **Prepare for Testing:** Ensure the area is clear and you have a stable, non-conductive footing.

2. **Hold the Tester:** Grip the tester firmly by its insulated handle. Avoid touching the metal probe tip or any exposed conductive parts.
3. **Contact the Circuit:** Carefully touch the metal probe tip of the tester to the conductor or terminal you wish to test for voltage.
4. **Observe the Display:** The LCD display will show the detected voltage level (within the 12-250V AC/DC range). If a voltage is present, the neon bulb highlight may also illuminate, providing an additional visual indicator.
5. **Ground Line Testing:** For certain applications, you may need to touch the metal cap on the top of the tester while the probe is in contact with the circuit to complete the circuit for testing. Refer to Figure 2 for visual guidance.
6. **Remove Tester:** Once the reading is taken, carefully remove the tester from the circuit.

Always ensure the tester is rated for the voltage you are measuring. This model is suitable for AC/DC voltages between 12V and 250V.

6. MAINTENANCE

- **Cleaning:** Wipe the tester with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the tester in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Battery Replacement:** Replace batteries promptly when the display becomes dim or the tester fails to operate. Dispose of old batteries according to local regulations.
- **Inspection:** Regularly inspect the tester for any physical damage or wear.

7. TROUBLESHOOTING

- **No Display/Dim Display:** Check battery installation. Replace batteries if necessary.
- **Inaccurate Readings:** Ensure proper contact with the circuit. Verify the circuit is within the tester's specified voltage range (12-250V).
- **Tester Not Responding:** Check for physical damage. Ensure batteries are functional. If issues persist, discontinue use and consider replacement.

8. SPECIFICATIONS

Model Number	38109
Brand	Tolsen
Measurement Type	Voltage
Operating Voltage Range	AC/DC 12V - 250V
Maximum Operating Voltage	1000 Volts (Absolute Max)
Power Source	Battery Powered
Display	Digital LCD
Additional Features	Neon Bulb Highlight

Product Dimensions	18 x 3 x 2.5 cm
Item Weight	25 Grams
Color	Black and Yellow
Certification	CE

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the product packaging or contact the retailer or manufacturer directly. Keep your purchase receipt as proof of purchase.