



Made in America

## Soldering Tip Voltage Tester Operation Instructions



Figure 1. Soldering Tip Voltage Tester, Item No. 35110.

### Testing and Installation

The Soldering Tip Voltage Tester consists of the circuit board enclosed in a 2.4" (61mm) x 2.3" (58mm) x 1" (25mm) high enclosure, 2 AAA batteries (included), an attached sensor plate, a grounding wire with banana plug, and a pair of Velcro pieces.

Attach the grounding wire banana plug to electrical ground, such as a common ground point on the workbench or the center grounding screw of an AC power outlet socket, etc.

**Note:** Keep in mind that with typical use the Soldering Tip Voltage Tester will need to have the 2 AAA batteries replaced every 1 to 2 years. This requires opening up the enclosure by removing the 2 screws, separating the enclosure halves, replacing the batteries, and then reassembling the enclosure.

### Operation

Whenever the soldering iron tip contacts the cleaner or sponge (which is in contact with the sensor plate) one of the following conditions will occur:

Green light	Soldering Iron Tip grounded	OK
No lights	Soldering Iron Tip not grounded	Repair or replace Iron
	Sensor plate not installed or is not properly contacting the cleaner (sponge)	Correct the problem
	Soldering Tip Voltage Tester grounding wire not attached to a good ground.	Correct the problem
Red light	Soldering Tip Voltage Tester batteries need replacement (verify by testing as described above)	Correct the problem
	Soldering Iron Tip has greater than 1 Volt AC	Caution - do not use Iron on ESD sensitive hardware.
	Repair or replace Iron.	

### PASS Function Test

The MENDA Soldering Tip Voltage Tester's OK function may be tested by grounding the sensor plate causing the green LED to light if there is less than 1.25 Volts AC.

Place the sensor plate under the soldering iron cleaning sponge or metallic type cleaner pad.

If using a sponge, dampen the sponge as you normally would. Place the sponge in the holder, being sure it makes good contact with the sensor plate.

**Note:** For sponges, best results are with a clean plastic sponge holder. If the sponge holder is metal, it must not ground the sensor plate. For metallic cleaner pads, if the container is conductive it must be isolated from any grounded surface by rubber feet or other insulators. Find inappropriate location for the Soldering Tip Voltage Tester where the LED indicators are easily viewed and the sensor plate wire can be conveniently routed (be sure to avoid locations with excessive heat or solder splashes). Attach the Velcro pieces to hold the Soldering Tip Voltage Tester as desired.

### FAIL Function Test

Use a Function Generator.

Make the following settings to the Function Generator:

- Set for a SINE wave. (~)
- Set Frequency to about 1 Hz.
- Set Amplitude to 1 volt.

1. Short the spade contact with the plate. The green (lower) LED should light.
2. Connect the Soldering Tip Voltage Tester to the Function Generator's Main connector with the spade lug to the ground and the plate to the center conductor.
3. The red FAIL LED should light and an audible beep should sound if there is over 1.25 Volts AC. The alarm will sound at a rate of about once per second at a frequency of 1 Hz; the beep will increase in speed along with the frequency. At about 10 Hz, it will sound as a constant beep.

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**Limited Warranty**

Menda expressly warrants that for a period of one (1) year from the date of purchase, Soldering Tip Voltage Tester will be free of defects in material (parts) and workmanship (labor). Within the warranty period, the product will be tested, repaired, or replaced at Menda option, free of charge. Call our Customer Service Department at 909-627-2453 for a Return Material Authorization (RMA) and proper shipping instructions and address. Include a copy of your original packing slip, invoice, or other proof of purchase date. Any unit under warranty should be shipped prepaid to the Menda factory. Warranty repairs will take approximately two weeks.

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