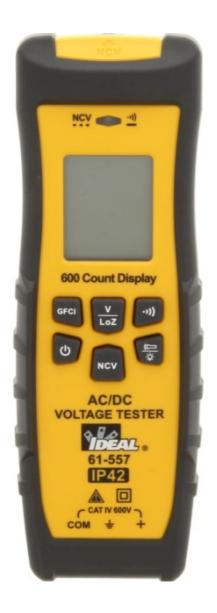


# **IDEAL #61-080 Series Continuity Tester Instruction Manual**

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**IDEAL #61-080 Series Continuity Tester** 



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# **Important Information**

Register your product and access more information at www.idealindustries.com

Read First: Safety Information Understand and follow operating instructions carefully. Use the tester and test leads only as specified in this manual; otherwise, the protection provided by the tester can be impaired.



To avoid possible electric shock, personal injury or death, follow these guidelines:

- Do not use if tester appears damaged. Visually inspect the tester to ensure case and is not cracked.
- Inspect and replace test leads if insulation is damaged, metal is exposed, or probes are cracked. Pay particular attention to the insulation surrounding the connectors.
- Always ensure the tester, test leads and all accessories meet or exceed the measurement category required in the working environment. (i.e. CAT rating)
- Note that the measurement category and voltage rating of combinations of the tester, the test leads, and the accessories is the lowest of the individual components.
- Do not use tester if it operates abnormally as protection maybe impaired.
- Do not use during electrical storms or in wet weather.
- Do not use around explosive gas, dust, vapor, amperage or in damp or wet environments.
- Do not apply more than the rated voltage to the tester.
- Remove the test leads from the input jacks before measuring current.
- Remove the test leads from the meter prior to removing battery cover. (61-076, 61-080)
- Do not use without the battery and battery cover properly installed. (61-076, 61-080)
- Do not attempt to repair this unit as it has no user-serviceable parts.
- Never ground yourself when taking electrical measurements.
- Connect the black common lead to ground or neutral before applying the red test lead to potential voltage.

  Disconnect the red test lead from the voltage first.
- Keep fingers behind the guard rings of the probe tips.
- Voltages exceeding 30VAC or 60VDC pose a shock hazard so use caution.

### **CAUTION**

# To protect yourself, think "Safety First":

- Comply with local and national safety codes.
- Use appropriate personal protective equipment such as face shields, insulating gloves, insulating boots, and/or
  insulating mats.
- · Before each use:
  - Perform a continuity test by touching the test leads together to verify the functionality of the battery and test leads.
  - Use the 3 Point Safety Method. (1) Verify meter operation by measuring a known voltage. (2) Apply meter to circuit under test. (3) Return to the known live voltage again to ensure proper operation.
- · Always work with a partner.

#### **Features**

- Vibration Mode with indicator movement
- Auto-Switching Voltage/Continuity Technology (61-076, 61-080)
- Independent solenoid and electronic circuitry design provides back-up voltage indication for added safety
- Low Impedance

- Replaceable Test Leads
- · Shielded probe tips
- · Ultrasonically welded and o-ring sealed for added durability
- Indicates:
- 100-600V AC/DC (61-065, 61-067)
- 5-600V AC/DC (61-076, 61-080)

# To Measure AC/DC Voltage

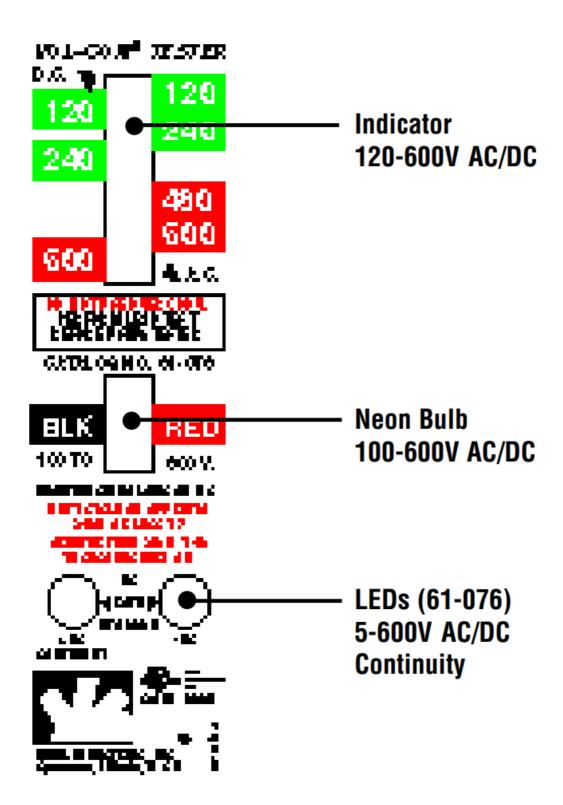
- Ensure that the plug for the test leads is fully seated into the banana jacks.
- Connect the tester in parallel with the load or circuit.
- The tester indicates the voltage type, DC polarity, and the voltage level.

# **!** Warning

Do not exceed duty cycle specified on tester.

# To Test for Continuity (61-080, 61-076):

- Ensure that the plug for the test leads is fully seated into the banana jacks.
- Test for continuity by connecting the tester to the de-energized circuit.
- If circuit has  $<500k\Omega$ , the Continuity LED lights.
- Reversing prods on the circuit under test verifies continuity versus low voltage +DC.

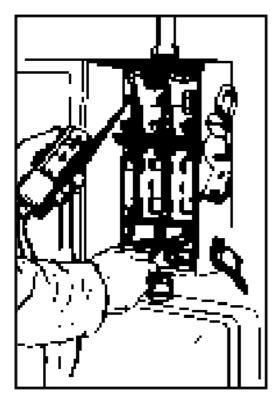


# **Applications**

• Locating Blown Fuses With power off (61-076, 61-080):

Place tester across the suspected fuse to perform continuity check. If continuity LED lights, the fuse is good. If not, the fuse is defective.

With power on: Place tester across the "source" side of one fuse and the load side of an adjoining fuse. If no or low voltage is indicated, the fuse next to the load side prod is blown. If line voltage is indicated, the fuse next to the load side prod is OK. Repeat the same test with the prods on the opposite side of the same two fuses to check the other fuse.



Finding Grounded Side of Line (neutral)

Hold one test prod to the ground and touch the other test prod to each of the line terminals until one is found that does not give a voltage indication. This is the grounded side of the line.

The continuity LED should also light. (61-080, 61-076)

- Checking Continuity of Cords, Motors, Appliances, etc. (61-080, 61-076)
   Remove power source and place tester across circuit to be tested. Continuity LED lights if resistance is less than 500kΩ.
- Locating Excessive Leakage to Ground (61-080, 61-076)
   Place tester across the neutral terminal and the ground. The single continuity LED should indicate neutral and ground are connected. If both LEDs light, there is > 5VAC (N-G) indicating a high resistance leakage to ground.

#### Battery Replacement (61-080, 61-076):

- Replace batteries when touching the leads together no longer lights the continuity LED.
- · Remove test leads from tester.
- Carefully, pry the two battery caps from the bottom of the case using a screwdriver.
- Replace the batteries.
- Snap the battery caps back in place ensuring the cap is flush with the bottom of the case.

#### **Accessories**

- 61-070 Standard test leads (61-076, 61-065)
- 61-072 Resistor-fused test leads (61-080, 61-067)
- · C-90 Soft-sided carrying case
- 61-010 Leather case

#### **Maintenance**

• Clean the case with a damp cloth and mild detergent. Do not use abrasives or solvents.

#### Service, and Replacement Parts:

For replacement parts or to inquire about service information contact Technical Support: 1-877-201-9005 or visit our website <a href="https://www.idealindustries.com">www.idealindustries.com</a>.

# **Specifications**

VAC Ranges: 120V, 240V, 480V, 600V AC. VDC Ranges: 120V, 240V, 600V DC Volts Accuracy: Relative indication only

**Continuity**: LED lights at  $<500k\Omega$  Response time of 100ms.

Frequency: Operates at 25-60 Hz Overload 1000VDC/750VAC rms.

**protection**: Operating 32°F to 122°F **Environment:** (0 to 50°C)(<70% humidity)

**Storage Temp.:** -4°F to 140°F (-20 to 60°C) (<80% humidity)

**Batteries:** Models 61-080 & 61-076 only (4) 1.5V (61-201, IEC LR44)

Battery Life: 200 hours typical. Accessories Test Leads, (4) Batteries, included: Operating Manual

**Dimensions:** 7.2"H x 2.4"W x 1.5"D [183H x 61W x 38D]mm

Weight: 8.0 oz (227g)

Safety: UL 61010B-1, CAT III-600V



# Double Insulation

Instrument has been evaluated and complies with insulation category III (overvoltage category III). Pollution degree 2 in accordance with IEC-644. Indoor use.

# **Warranty Statement**

This tester is warranted to the original purchaser against defects in material and workmanship for two years from the date of purchase. During this warranty period, IDEAL INDUSTRIES, INC. will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction.

This warranty does not cover fuses, batteries or damage from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument.

Any implied warranties arising out of the sale of an IDEAL product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. The manufacturer shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses or economic loss. State laws vary, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

# **Customer Support**

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Sycamore, IL 60178, U.S.A.

800-435-0705 • www.idealindustries.com

Made in U.S.A. of US and global components

ND 3522-9



# **Documents / Resources**



<u>IDEAL #61-080 Series Continuity Tester</u> [pdf] Instruction Manual 61-080 Series Continuity Tester, 61-080, Series Continuity Tester, Continuity Tester, Tester

# References

# User Manual

#### Manuals+, Privacy Policy

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