

## OPERATING INSTRUCTIONS

### Before Use:

**⚠ READ ALL OPERATING INSTRUCTIONS BEFORE USE.** Use extreme caution when checking electrical circuits to avoid injury due to electric shock. Sperry Instruments assumes basic knowledge of electricity on the part of the user and is not responsible for any injury or damages due to improper use of this tester.

**OBSERVE AND FOLLOW** all standard industry safety rules and electrical codes. When necessary call a qualified electrician to troubleshoot and repair the defective electrical circuit.

### Specifications:

**Operating Range:** 115 - 125 VAC, 50-60 Hz (Circuit Tester)

50 - 600 VAC, 50-60 Hz (NCV Detection)

**Certifications and Compliance:** Conforms to UL 1436 (Circuit Tester) UL 61010-1 & 61010-2-030 (NCV Detection), CE, CAT III 1000V

**Indicators:** Visual Only (circuit tester) Audible and visual (Non-contact voltage detection)

**Battery:** One LR44

**Operating Environment:** 32° - 104° F (0 - 40° C) 80% RH max., 50% RH above 30° C, Altitude up to 2000 meters, Indoor use, Pollution degree 2, Accordance with IED-664.

**Cleaning:** Remove grease and grime with clean, dry cloth.

### Outlet Circuit Tester Operation:

1. Plug the tester into any 120 Volt standard or GFCI outlet.
2. Only a single LED should illuminate
3. The text adjacent to the lit LED will indicate the wiring condition.
4. If no LED illuminates then the hot is open
5. If the tester indicates a wiring problem then turn off all power to the outlet and repair wiring.
6. Restore power to the outlet and repeat steps.

#### NOTICE:

1. All appliances or equipment on the circuit being tested should be unplugged to help avoid erroneous readings.
2. Not a comprehensive diagnostic instrument but a simple instrument to detect nearly all probable common improper wiring conditions.
3. Refer all indicated problems to a qualified electrician.
4. Will not detect two hot wires in a circuit.
5. Will not detect a combination of defects.
6. Will not indicate a reversal of grounded and grounding conductors.

#### TO TEST GFCI PROTECTED OUTLETS:

1. To test GFCI (Ground Fault Circuit Interrupter) protected circuits plug tester into GFCI protected outlet. Verify the power is on and that the outlet is wired properly.
2. Press the GFCI test button.
3. If circuit is wired properly the main GFCI outlet should trip and power to the circuit will be cut off (this is indicated by the LED lights on the tester going off).
4. When checking circuits with a GFCI outlet on them, the tester may indicate hot/ground reversed when the actual wiring condition is open neutral.

#### NOTICE:

1. Consult the GFCI manufacturer's installation instructions to determine that the GFCI is installed in accordance with the manufacturer's specifications.
2. Check for correct wiring of receptacle and all remotely connected receptacles on the branch circuit.
3. Operate the test button on the GFCI installed in the circuit. The GFCI must trip. If it does not — do not use the circuit — consult an electrician. If the GFCI does trip, reset the GFCI. Then, insert the GFCI tester into the receptacle to be tested.
4. Activate the test button on the GFCI tester for a minimum of 6 seconds when testing the GFCI condition. Visible indication on the GFCI tester must cease when tripped.
5. If the tester fails to trip the GFCI, it suggests: a.) a wiring problem with a totally operable GFCI, or b.) proper wiring with a faulty GFCI. Consult with an electrician to check the condition of the wiring and GFCI.

**Caution:** GFCIs are sometimes installed in 2- wire systems (no ground wire available). This may or may not meet the local code. This tester will not trip GFCI outlets installed without a ground wire. On two wire systems use the test and reset buttons on the GFCI outlet to demonstrate proper operation. To detect which downstream outlets are protected by the GFCI place the tester in these outlets and use the test and reset buttons. Watch for the LEDs on the tester to turn off, this will indicate proper operation.

### Non-Contact Voltage Detection Operation:

1. **Before use test the battery** by pressing the black button at the NVC detection end. The LED will flash and the speaker will chirp momentarily if the battery is good. If the indicators do not function or the chirp continually cycles, then replace the battery.
2. To test for voltage press and hold the black button at the NVC detection end. Place the probe tip on or near the wire, device or circuit to be tested. If AC voltage greater than 50 VAC is present the LED will flash and the speaker will chirp continuously.

#### NOTICE:

1. Static Electricity – The tester is subject to electrical static interference. If the LED or tone activate momentarily it is detecting static electricity. When detecting voltage the LED and tone will cycle continuously.
2. NCV detection antennae interference – The presence of objects near the probe tip can decrease the sensitivity of the tester. Keep your finger away from the LED lens and probe tip to ensure adequate detection range.

**⚠ CAUTION – REFER TO THIS MANUAL BEFORE USING THIS TESTER**

**☐ Double Insulation:** The tester is protected throughout by double insulation or reinforced insulation.

**Warning –** This product does not sense DC voltage or potentially hazardous voltages below 50 volts.

**Warning –** To assure the unit is operating, always test on a known live circuit before use.

**Warning –** This tester will not detect voltages in wires that are electrically shielded by metal conduit or grounded electrical enclosures.