

BRANCH CIRCUIT ANALYSIS & TESTING

Proper wiring is crucial to ensure safety and performance of Branch circuits. From a safety perspective, shock hazards and fires are mainly due to poor installation or failure of protective devices, such as GFCIs. From a performance perspective, electrical equipment and high-tech devices are found everywhere in residential and commercial buildings. They require reliable power to operate and function properly and to ensure their longevity.

IDEAL has a long history of providing the professional electrician with the tools and knowledge required to safely and efficiently verify and analyze Branch Circuits. So, whether you are: conducting routine measurements, testing installed devices or the integrity of a Branch Circuit, locating a breaker, or tracing wires, IDEAL has the tools for the job.



TEST & MEASUREMENT



SureTest® Circuit Analyzer

Have wiring issues ever required you to remove multiple outlet covers and pull outlets out of their boxes to look for a problem? Have you ever suspected that wiring integrity is the issue but your meter shows 120 volts and your receptacle tester indicates wiring is correct?

The SureTest® Circuit Analyzer from IDEAL is a comprehensive branch circuit analyzer that allows you to “look behind the walls” to find wiring problems, saving you time and money while letting you get the job done with safety and confidence.

SureTest Circuit Analyzer finds many of the toughest problems:

Bootleg Grounds have been fooling inspectors for years when checking circuits for integrity. Receptacle (Plug) testers test for voltage and can't identify this improper wiring condition. Bootleg grounds set up the potential for dangerous undetected fault conditions.

Traditional receptacle test indicates circuit is good.



Solution: The SureTest® by IDEAL can't be fooled, its advanced processing software gives it the capability to quickly identify bootleg grounds within 15 ft. of the outlet being tested.

IDEAL SureTest™ clearly identifies a fault with the ground.



Improper Installations can result in electrical fire hazards, personal shock hazards, and premature equipment failure.



Improper solid wire connection. Improper stranded wire connection. Improperly torqued circuit breaker lugs.

Solution: The SureTest® measures and displays individual Line Impedance giving the electrician/inspector valuable insight as to whether a particular conductor is the problem due perhaps to faulty splicing, overly long conductor runs, or undersized wire gauge.



Excessive voltage drop in a circuit can cause lights to flicker or burn dimly, heaters to heat poorly, and motors to run hotter than normal and burn out. It also causes overheating of components, often resulting in expensive damage or fire.

- Measures voltage drop under load*
- Hot, neutral, and ground conductor impedances
- Estimates Load on Line (ELL) up to 15A
- Tests GFCIs and EPDs for proper operation
- Super-bright OLED display
- True RMS
- Identifies proper wiring in 3-wire receptacles
- Identifies false (bootleg) grounds
- Tests without disturbing sensitive loads
- Verifies isolated grounds (with 61-176 adapter)
- 2-year warranty

***12A, 15A, 20A load tests**

Solution: SureTest® measures the line voltage under simulated load conditions. Results are displayed for 12A, 15A, and 20A loads.



Description	Part No.
SureTest® Circuit Analyzer	61-164

Includes: Carrying Case and Extension Cord.

The SureTest® Circuit Analyzer is designed for use on 120 VAC clean power, (no dimmer switches), Hot to Neutral and ground only. Certain calculations are not possible when no ground is present. It is protected against inadvertent connection to 240 volts but should be unplugged IMMEDIATELY and no buttons should be pressed. It is not intended for use on split (balanced) 60-60 volts systems.

Specifications	Range & Resolution	Accuracy
AC Voltage	85.0 - 265.0 VAC	1.0%
Frequency	45.0 - 65.0 Hz	1.0%
Impedance	0.00 - 3.00 Ω	5.0%
Ground-Neutral Voltage	0.0 - 24.0 VAC	2.0%
% Voltage Drop 12A, 15A, 20A load tests	0.1% - 50.0%	5.0%
GFCI Test Current/Time	6.0 - 9.0 mA 0.0 - 6500 mS	2.0%

Accessories	Part No.
Ground Continuity Adapter	61-175
Isolated Ground Adapter	61-176
Alligator Clip Adapter	61-183
1' Extension Cord	61-182
Nylon Carrying Case	61-179

Solenoid Voltage Testers

- Extremely rugged and reliable
- Vibrates when AC voltage is present
- Indicates AC/DC voltage level
- Replaceable leads with shielded probe tips (UL 61010-031 compliant)
- Bright, long-life LED's and neon indicator lamp
- Dual voltage indication for backup safety
- 2-year warranty

61-076



Description	Part No.
Vol-Con® Voltage/Continuity Tester, 5-600V AC/DC	61-076
Vol-Test® Voltage Tester, 100-600V AC/DC	61-065
Nylon Carrying Case	C-90
Standard Test Leads (for use with 61-076 & 61-065)	61-070
Resistor Fused Leads (for use with 61-076 & 61-065)	61-072
Replacement 1.5V Batteries, 4/pack	61-201

Includes: Standard Test Leads.

E-Z Check® Circuit Tester

- Tests for correct wiring, open Ground, reverse polarity, open hot, open neutral, hot on neutral, hot and ground reversed with open hot in 3-wire, 120VAC circuits
- Simulates ground fault for testing GFCIs (61-051 only)
- No-slip ergonomic design maximizes comfort
- Premium neon lamps prevent false readings
- Tough, impact-resistant case
- 2-year warranty

61-051

61-035



Description	Part No.
E-Z Check® Plus GFCI Circuit Tester	61-051
E-Z Check® Circuit Tester	61-035



Receptacle Tester

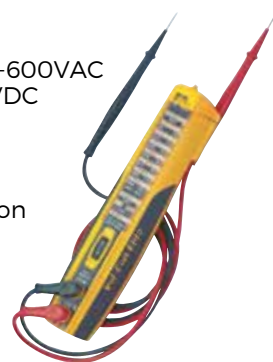
- Tests for correct wiring in 3-wire receptacles
- For use on 120VAC circuits
- 1-year warranty



Description	Part No.
GFCI Receptacle Tester	61-501

Vol-Con® Elite Digital Voltage Tester

- Tests for AC Voltage from 24-600VAC and DC Voltage from 6-220VDC
- Visual and audible warning
- Audible continuity
- Non-contact voltage indication (40-600VAC)
- Low impedance to eliminate ghost voltages
- Low battery indicator
- Replaceable silicone test leads (UL 61010-031 compliant)
- Integral lead storage
- 2-year warranty



Description	Part No.
Vol-Con® Elite Digital Voltage Tester w/vibration mode	61-092
Nylon Carrying Case	C-90
Silicone Test Leads	TL-102

Includes: Silicone Test Leads.

VoltAware™ Non-Contact Voltage Tester

- Indicates presence of voltage from 40-1000VAC
- Visual indication of voltage; green LED shows unit is active, flashing red live indicates voltage
- Selectable audible indication of voltage
- Sleek, compact design
- Auto shut-off to conserve battery life after 10 minutes
- Low battery detector and easy battery (2 AAA included) replacement
- 2-year warranty



Description	Part No.
VoltAware™ Non-Contact Voltage Tester	61-025