

TEST & MEASUREMENT

PRODUCT LINE FOR THE PROFESSIONAL ELECTRICIAN

For over 80 years, IDEAL has been dedicated to providing the professional electrician with the tool and support required to safely and efficiently verify and analyse electrical systems and equipment.



THE ELECTRICIAN'S
CHAMPION™



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TEST & MEASUREMENT

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TEST & MEASUREMENT

CIRCUIT TRACERS

SureTrace™ Circuit Tracers

IDEAL, a leader in Circuit Tracing technology, has released the latest generation of circuit tracers with refinements in performance, ease-of-use and safety.

Performance

- Four defined ranges let you quickly select the proper sensitivity for your job
- Easy-to-replace AA batteries

Ease-of-Use

- Super-bright OLED display (61-957 and 61-959) indicates a numeric value between 0 and 99, providing a quick and easy way to determine received signal strength
- Audible indication with variable tone assists in locating signal source
- Peak detection provides instantaneous signal strength feedback
- SureTrace™ Circuit Tracers feature the only rotating display in the industry. Regardless of the receiver orientation, the display automatically adjusts itself to a vertical position for easy reading.

Safety

- Designed for durability and safety
- CAT III 600V
- High energy fuse

Features

- Can be used on circuits 0-600V AC/DC
- Identifies breakers and fuses
- Pinpoints opens and shorts
- Traces wires behind walls

⚡ CertainCircuit™

After the correct breaker has been identified and tripped, the transmitter senses the loss of power and sends a different signal back to the receiver at the panel to give the user confidence that the right circuit has been de-energised.



Energised



De-energised



Exclusive Rotating Display



CIRCUIT TRACERS

Pinpoints Opens & Shorts



Traces behind walls



Traces on de-energised circuits



Inductive Clamp



TEST & MEASUREMENT

CIRCUIT TRACERS

SureTrace™ Circuit Tracers

- Receiver display rotates automatically for easy viewing
- Identifies breakers and fuses with CertainCircuit™ detection
- Pinpoints opens and shorts
- Traces wires
- "0-99" display of signal strength
- Audible indication intensifies in tone/pitch with signal strength
- Works on energised or de-energised circuits (0 - 600V AC/DC)
- Four sensitivity levels
- Peak reading bar graph
- 2-year warranty



61-957



61-959



61-955

Description	Part No.
Receiver with super-bright OLED Rotating Display (in 90° increments) - Kit includes Transmitter TR-955, Receiver RC-959, Lead Set TL-956, Inductive Clamp IC-958, Battery Pack BP-958 & Strap 61-565, Hard Carrying Case C-959, Batteries and Instruction Manual	61-959
Receiver with super-bright OLED Rotating Display (in 90° increments) - Kit includes Transmitter TR-955, Receiver RC-959, Lead Set TL-956, Hard Carrying Case C-957, Batteries and Instruction Manual	61-957
Receiver with Rotating LED Display (in 180° increments) - Kit includes Transmitter TR-955, Receiver RC-955, Lead Set TL-956, Hard Carrying Case C-955, Batteries and Instruction Manual	61-955

Kit Components	61-959	61-957	61-955
Transmitter	TR-955	TR-955	TR-955
Receiver	RC-959	RC-959	RC-955
Tracer Test Lead Set	TL-956	TL-956	TL-956
Inductive Clamp	IC-958	—	—
Battery Pack & Strap (61-565)	BP-958	—	—
Hard Carrying Case	C-959	C-957	C-955
Batteries	•	•	•
Instruction Manual	•	•	•
Battery Pack Strap	61-565	—	—

Notes:

- Circuit breaker identification is not possible using the inductive clamp. Connect directly to the H-N for breaker or fuse identification.
- The inductive clamp is intended for use on de-energised closed loop circuits, low voltage conductors, or live circuits up to 120V AC with less than 5 Amps of current flowing.
- All instruction manuals are included and are available on-line.



TEST & MEASUREMENT

CIRCUIT TRACERS

RC-959 Receiver

- Super-bright OLED display
- Rotating display (in 90° increments)
- Displays 0-99 numeric signal strength
- Four sensitivity levels
- CertainCircuit™ detection
- Peak reading bar graph
- Audible indication (variable pitch/tone)
- Displays battery life remaining
- Supplied with 3 AA batteries



Description	Part No.
Receiver	RC-959

RC-955 Receiver

- Red LED display (suitable for indoor lighting conditions)
- Rotating display (in 180° increments)
- Displays 0-99 numeric signal strength
- Four sensitivity levels
- CertainCircuit™ detection
- Peak reading bar graph
- Audible indication (variable pitch/tone)
- Displays battery life remaining
- Supplied with 3 AA batteries



Description	Part No.
Receiver	RC-955

TR-955 Transmitter

- Rated for use on circuits from 0 to 600V AC/DC
- Works on de-energised circuits
- Can be used on GFCI protected circuits
- Indicates presence of AC/DC voltage
- Low battery indicator
- Supplied with 4 AA batteries



Description	Part No.
Transmitter	TR-955

Inductive Clamp & Battery Pack

- Induces a signal in a conductor
- 1 in. jaw opening/6 ft. cord
- Works on de-energised circuits and energised circuits up to 5A, also low voltage wiring and metal conduit
- Powered solely by a separate battery pack (supplied with 8 C-cell batteries)
- Battery pack has magnetic strap for hanging in panels



Description	Part No.
Inductive Clamp	IC-958
Battery Pack	BP-958

Included in 61-659 kit only.

Accessories

TL-956 Lead Adapter Kit



CR-959 Cradle for Circuit Tracer Receiver



CIRCUIT TRACERS

TEST & MEASUREMENT

CLAMP METERS

TightSight™ Clamp Meters

Problem: Have you ever had to measure the circuit current in a confined, dimly lit and hard to reach location?

Solution: IDEAL TightSight™ Clamp Meter! This meter allows the user to safely and easily view current measurements with the exclusive second TightSight® display.



Safety

- Patented TightSight™ display lets you easily view readings while keeping your head at a safe distance from the panel – no more need to twist the meter or risk pulling on an energised conductor
- Easy-to-read backlit display with large numbers and icons so you can always see the correct reading
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Electronic overload protection on all ranges
- Supplied with test leads complying with UL 61010-031

Productivity

- Read instantaneous values while clamped instead of holding the reading, unclamping, moving and then viewing
- Hook tip for easy wire separation and tapered jaws for reaching into tight spaces
- Help troubleshoot with min and max value readings over a period, i.e. nuisance tripping and power supply fluctuations
- True RMS provides accurate readings of non-sinusoidal voltages and currents
- Broad current range from 0 to 1000 amps (61-770 series) covers multiple applications
- Large jaw diameter for cables up to 2" (51mm) in diameter (770 series only)

Value

- Includes carrying case and test leads with alligator clips
- Full AC/DC capabilities: the TightSight™ is equally adaptable for both AC and DC current measurement requirements – such as solar, public transportation, and battery backup applications (Models 61-765 & 61-775)
- Calibration services available
- 2-year warranty



Visit clamp-meter.com for more information.



TEST & MEASUREMENT

CLAMP METERS

TightSight™ 1000A Clamp Meters

- TightSight™ second display
- Tapered jaws with hook tip
- True RMS current and voltage
- AC/DC Voltage
- Audible continuity
- High frequency rejection*
- Peak hold
- Max/min hold
- Data hold
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Selectable auto power off
- Backlit display
- Low battery indicator



* Reads accurately on noisy electrical circuits.

Description	Part No.
1000A AC Clamp Meter	61-773
1000A AC/DC Clamp Meter	61-775

Includes: Carrying Case and Test Leads w/Alligator Clip.

TightSight™ 660A Clamp Meters

- TightSight™ bottom display
- Tapered jaws with hook tip
- True RMS current and voltage
- AC/DC Voltage
- Audible continuity
- High frequency rejection*
- Peak hold
- Max/min hold
- Data hold
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Selectable auto power off
- Backlit display
- Low battery indicator



* Reads accurately on noisy electrical circuits.

Description	Part No.
660A AC Clamp Meter	61-763
660A AC/DC Clamp Meter	61-765

Includes: Carrying Case and Test Leads w/Alligator Clip.

Specifications	Range & Resolution				Accuracy
	61-773	61-775	61-763	61-765	
AC Current	0.0-999.9A		0.0-660.0A		2.0%
DC Current	—	0.0-999.9A	—	0.0-660.0A	2.0%
AC Voltage	0.0-750.0V				1.0%
DC Voltage	0.0-999.9V				1.0%
Resistance	0.0-999.9Ω				1.5%
Capacitance	0.0-999.9μF				5.0%
Continuity	0.0-999.9Ω				Audible @ <30Ω
Frequency (clamp head or test leads)	20.0-400.0Hz				0.5%
Jaw Size	2" (51mm)		1.42" (36mm)		—

Accessories	Part No.
Test Leads w/Large Alligator Clips	TL-770
Nylon Carrying Case (for 61-763 & 61-765)	C-760
Nylon Carrying Case (for 61-773 & 61-775)	C-770



CLAMP METERS

TEST & MEASUREMENT

CLAMP METERS

Clamp-Pro™ Clamp Meters 600 Amp (740 Series)



- Measures up to 600A AC
- Non-contact voltage indicator (70V-600VAC)
- Audible continuity
- Tapered jaws with hook tip
- Auto/manual ranging
- Data hold
- Auto power off
- Low battery indicator



Description	Part No.
600A AC Clamp Meter	61-744
600A AC Clamp Meter w/TRMS	61-746

Includes: Carrying Case and Test Leads.

Specifications	Range & Resolution	Accuracy
AC Current	40.00/400.0/600A	1.7%
AC Voltage	400.0/600 V	1.2%
DC Voltage	400.0/600 V	0.5%
Resistance	400.0/4.000k/ 40.00k 400.0k/4.000M/40.00M Ω	1.0%

Jaw opening is 1.25" (32mm).

4-in-1 Test Tool



- 200AAC current capability
- Non-contact voltage (40-600VAC)
- Visual, audible and tactile (shaker) indication of high AC/DC voltage at terminals
- Clean voltage indicator
- Max hold
- Audible continuity
- Low battery indication
- Integral lead storage
- Auto power off
- Ergonomic hourglass shape
- Compact clamp head



Description	Part No.
4-in-1 Test Tool w/TRMS, Backlight	61-704

Includes: Carrying Case and Silicone Test Leads.

Specifications	Range & Resolution	Accuracy
AC Voltage	2000m/200.0/750 V	1.2%
DC Voltage	2000m/200.0/1000 V	0.5%
AC Current	200A	3.0%
Resistance	200.0/200.0k Ω	1.0%
Capacitance	200.0μ F	3.0%

Jaw opening is 1.3" (33mm).

TEST & MEASUREMENT

CLAMP METERS

Clamp Meter Selection Guide

CLAMP METER SELECTION GUIDE	700			740 Series		760 Series		770 Series	
	61-704	61-744	61-746	61-763	61-765	61-773	61-775		
MEASUREMENT FUNCTIONS									
AC Voltage	.	.	.	.	.	.	.	.	.
DC Voltage	.	.	.	.	.	.	.	.	.
AC Current	.	.	.	.	.	.	.	.	.
DC Current					.				.
Resistance	.	.	.	.	.	.	.	.	.
Audible Continuity	.	.	.	.	.	.	.	.	.
Diode Test	.								
Capacitance	.			.	.	.	.	.	.
Frequency				.	.	.	.	.	.
FEATURES									
Display Type (Digital)	D	D	D	D	D	D	D	D	D
AC Current Capacity - Amps	200	600	600	660	660	1000	1000		
DC Current Capacity - Amps					660		1000		
True RMS	.		.	.	.	.	.	.	.
Auto Ranging	.								
Auto/Manual Ranging		.	.	.	.	.	.	.	.
Data Hold		.	.	.	.	.	.	.	.
Max Hold	.								
Peak Hold				.	.	.	.	.	.
Min/Max				.	.	.	.	.	.
DCA Zero					.		.		.
Auto Power Off	.	.	.	.	.	.	.	.	.
Non-Contact Voltage Indication	.	.	.						
Harmonics Indicator	.								
Vibration Mode	.								
Backlight	.			.	.	.	.	.	.
Low Battery Indication	.	.	.	.	.	.	.	.	.
High Voltage Warning	.			.	.	.	.	.	.
Overload Protection on all Ranges	.	.	.	.	.	.	.	.	.
Conductor Size - Inches (mm)	1.3" (33)	1.5" (38)	1.5" (38)	1.4" (36)	1.4" (36)	2.0" (51)	2.0" (51)		
Warranty (years)	2	2	2	2	2	2	2	2	2
CERTIFICATIONS									
UL 61010 Listed	.	.	.	.	.	.	.	.	.
Category Safety Rating	III	III	III	IV	IV	IV	IV	IV	IV

CLAMP METERS

TEST & MEASUREMENT

SPECIALTY TESTERS

Split-Jaw™ Smart Meter

- Measures
 - 0.9-200AAC
 - 1.3-750VAC
 - 2.1-1000VDC
 - 0.0-9999Ω
- Audible continuity
- Data hold
- Integral lead storage
- Replaceable test leads
- Auto power off
- Low battery indication
- Test leads UL 61010-031 compliant
- 2-year warranty

Description	Part No.
Split-Jaw™ Smart Meter	61-096

Includes: Test Leads.

Specifications	Range & Resolution	Accuracy
AC Voltage	1.3 - 750 V	1.5%
DC Voltage	1.8 - 1000 V 0.6 - 1000 V	1.0%
AC Current	0.6 - 200.0A	3.0%
Resistance	0 - 2000 Ω	1.0%

*Note: Jaw opening is 0.6 in. (16mm) - up to 1/0 copper cable.



Insulation Testers

- Checks new installations for damaged insulation
- Checks existing installations and motor windings for breakdowns in insulation
- 2-year warranty

Description	Part No.
Insulation Meter w/PI, DAR, Remote Probe - Includes Test Lead and Carrying Case	61-797
Remote Probe Test Leads (61-797)	TL-797RP
Insulation Tester - Includes Test Leads and Carrying Case	61-795
Test Leads w/Alligator Clips, Premium (for 61-795 & 61-797)	TL-795
Test Leads w/Alligator Clips, Standard (for 61-795 & 61-797)	TL-495

Specifications	Range & Resolution	
	61-797	61-795
Test Voltage	50/100/250/500/1000 VDC	250/500/1000 VDC
Voltage AC/DC	0.1-600.0 V	0.1-600.0 V
Continuity	—	0.01-20.0 Ω
Resistance	—	0-200.0Ω
Insulation Resistance	Up to 20G Ω	Up to 4000M Ω
Earth-Bond Resistance	0.01 Ω to 40.00k Ω	0.01 Ω to 19.99 Ω



61-797

61-795



TEST & MEASUREMENT

SPECIALTY TESTERS

486 Commercial-Grade Multimeter

- Voltage
- Current
- Resistance
- Audible continuity
- Capacitance
- Frequency
- Temperature
- Data hold
- Min/max/relative modes
- Backlight
- True RMS
- Auto AC/DC voltage detect w/low impedance (Auto - VLoZ)
- Analog bar graph
- Non-contact voltage detection
- Peak hold
- Low battery indication
- Auto power off
- Limited 2-year warranty



Description	Part No.
Digital Multimeter w/peak hold, temperature, includes thermocouple	61-486

Includes: Test Leads & Carrying Case.

Specifications	Range & Resolution	Accuracy
AC Voltage	6.000/60.00/600.0/1000.0 V	0.80%
AC mV	600.0 mV	1.2%
DC Voltage	6.000/60.00/600.0/1000.0 V	0.08%
DC mV	60.00/600.0 mV	
AC Current	60.00m/600.0m/6.000/10.00A	1.2%
DC Current	60.00m/600.0m/6.000/10.00A	0.80%
Resistance	600.0/6.000k/60.00k/600.0k/6.000M/40.00M Ω	0.80%
Capacitance	1nF to 10mF	0.1%
Frequency	99.9 to 100.0k Hz	0.1%
Temperature	-40°F to 752°F (-40°C to 400°C)	1.0%

Accessories	For Use with	Part No.
Nylon Carrying Case	61-340, 61-342	C-290
Test Leads w/Alligator Clips, Standard	61-340, 61-342, 61-486	TL-495
Test Leads w/Larger Alligator Clip	61-340, 61-342, 61-486	TL-770
Test Leads with Alligator Clips, Premium	61-340, 61-342, 61-486	TL-795
Beaded K-type Thermocouple*	61-340, 61-342, 61-486	61-461
Thermocouple Adapter*	61-340, 61-342, 61-486	61-465
Replacement Thermocouple	61-486	TC-486

*Note: K-type thermocouple plugs into digital multimeter voltage jacks with 61-465 voltage.

340 Series Test-Pro® Multimeters

- Voltage
- Current
- Resistance
- Audible continuity
- Capacitance
- Frequency
- Temperature
- Data hold
- Min/max/relative modes
- Backlight
- Low battery indication
- Auto power off
- Limited 2-year warranty



61-342



Description	Part No.
Test-Pro® Multimeter w/TRMS	61-342
Test-Pro® Multimeter	61-340

Includes: Test Leads and Thermocouple.

Specifications	Range & Resolution	Accuracy
AC Voltage	4.000/40.00/400.0/600 V	1.5%
DC Voltage	400.0m/4.000/40.00/400.0/600 V	0.5%
Current	400.0μ/4000μ/40.00m/400.0m/4.000/10.00A AC/DC	1.5%
Resistance	400.0/4.000k/40.00k/400.0k/4.000M/40.00M Ω	1.0%
Capacitance	40.00n/400.0n/4.000μ/40.00μ/400.0μ F	3.0%
Frequency	10.000/100.00/1.000k/10.00k/100.0k/1.000M/4.000M Hz	0.3%
Temperature	-4° F to 1382° F (-20° C to 750° C)	3.0%

MULTIMETERS

TEST & MEASUREMENT

SPECIALTY TESTERS

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



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

Includes: Standard 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

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.

Digital Light Meter

- Responds to all visible light sources
- Measures in four ranges up to 20,000 Foot Candles or 200,000 Lux
- +/- 3% basic accuracy
- Data hold mode
- Max reading mode
- Auto zero adjustment
- Low battery indication
- Auto power off
- Remote sensor with 59 in. (1.5m) cable
- 2-year warranty



Description	Part No.
Digital Light Meter	61-686

Includes Carrying Case.



SPECIALTY TESTERS

Safety in the Field

IEC (International Electrotechnical Commission) Category Ratings

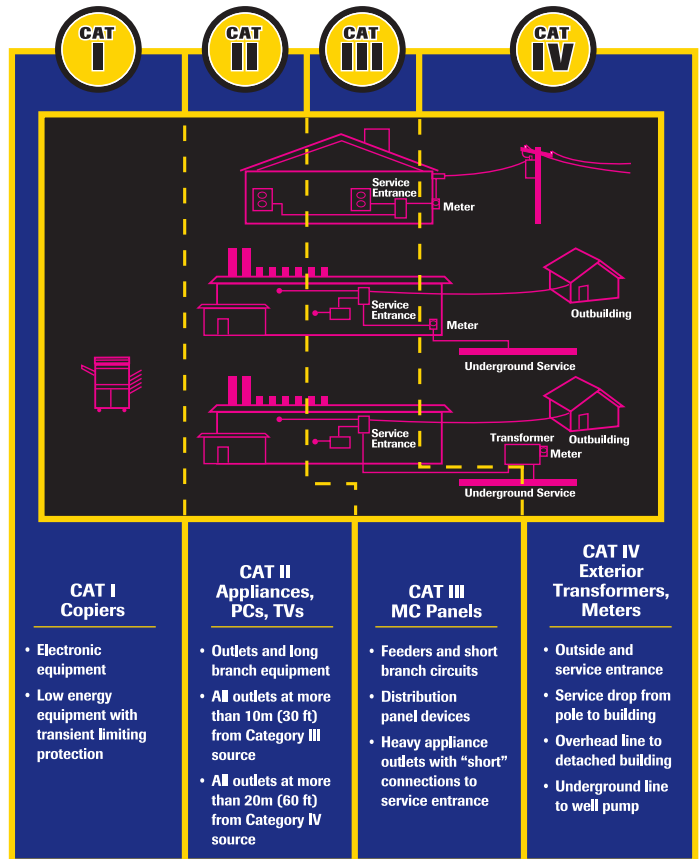
Category I - The signal level for telecommunications, electronic and other low-energy equipment with transient limiting protection. Peak impulse transient range is 600-4,000 volts with 30 ohm source.

Category II - The local level for fixed and non-fixed powered devices including appliances, lighting and portable equipment. Outlets located more than 30 feet from CAT III sources and 60 feet from CAT IV sources. Peak impulse transient range is from 600-6,000 volts with a 12 ohm source.

Category III - The distribution level for fixed primary feeders or branch circuits. Circuits that are separated from CAT IV sources by at least one level of transformer isolation. Peak impulse transient range is 600-8,000 volts with a 2 ohm source.

Category IV - The primary supply level for the highest levels of transient over voltage. Includes the utility service both outside and at the service entrance, service drop from the pole to the building, overhead line to remote buildings, and underground line to a well pump. Peak impulse transient range is 600-12,000 volts with less than a 1 ohm source.

Visit www.idealind.com for more technical product details, application support, white papers, videos and software.





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