

# Mini-Pro® Multimeters

The Mini-Pro® multimeters are a professional quality multimeter at low cost. Three new meters with a price point that will put them in every toolbox and field service kit. The unique design fits easily in the palm of your hand and CE approval ensures safe operation. Manual and autoranging models offer the basic functionality needed to do 90% of most required testing.

These meters are the best value for any hobbies. No home should be without one!



2405A



2407A

## Common Features:

- DC/AC voltage to 600V
- DC current to 10A
- Resistance to 20MΩ (model 2407A 31MΩ)
- Diode test
- Low battery indicator
- CE approved

Features	models		
	2405A	2407A	2408
Basic Functions			
Display Counts	2000	3200	2000
Basic DC Accuracy	2.0%	1.2%	1.2%
Ranging	Manual	Auto	Manual
Current	10A DC	10A AC/DC	10A AC/DC
1.5V & 9V Battery Test	√		
Auto Zeroing	√		√
Bar Graph		√	
Auto Power Off		√	
Continuity		√	√
Data Hold		√	√
Max. Hold			√
Non-contact Voltage Indicator			√

The Model 2408 features a unique non-contact voltage indicator. Light and sound denote the presence of AC voltage from 70V to 480VAC @50 - 60Hz. This eliminates the need for an extra tool to carry in your tool box.



2408

## Model HV-44A

The HV-44A is a self-contained instrument that measures high DC voltages up to +40KV. This probe is typically used to measure high voltages in TV sets, power supplies, laboratories and for general high voltage commercial applications.



HV-44A

Specifications	model
	HV-44A
Voltage range	0 to +40KV DC
Input Impedance	600MΩ, nominal
Accuracy	± 3% of full scale.
Calibration	Internal, factory calibrated at 25KV
Size	16.5 x 2.125 x 2" with a 34" long ground cord (419 x 54 x 50mm with a 86.4cm long ground cord)
Probe Tips	Two interchangeable tips; one round needle type, one special flat spring type for easy access to CRT anode.

**One Year Warranty**

# Specifications

models

	2405A	2408	2407A
DC VOLTS	Manual Ranging		Auto/Manual ranging
Ranges	2V, 20V, 200V, 600V	200mV, 2V, 20V, 600V	320mV, 3.2V, 32V, 320V, 600V
Resolutions	1mV, 10mV, 100mV, 1V	100µV, 1mV, 10mV, 1V	100µV, 1mV, 10mV, 100mV, 1V
Basic Accuracy	±(2%rdg+1dgt)	±(1.2%rdg+1dgt)	±(1.2%rdg+1dgt)
Overvoltage Protection	600V, DC + AC Peak	600V, DC + AC Peak	600V, DC + AC Peak
Input Impedance	10MΩ	10MΩ	10MΩ, 1GΩ (320mV range only)
AC VOLTS	Manual ranging, average responding, rms reading		Auto/Manual ranging, average responding, rms reading
Ranges	200V, 600V	200mV, 2V, 20V, 600V	3.2V, 32V, 320V, 600V
Resolutions	100mV, 1V	100µV, 1mV, 10mV, 1V	1mV, 10mV, 100mV, 1V
Basic Accuracy	±(2.9%rdg+4dgt), 50Hz-500Hz	±(2%rdg+1dgt), 50Hz-500Hz	±(1.5%rdg+4dgt), 50/60Hz
Input Impedance	10MΩ	10MΩ	10MΩ
DC CURRENT	Manual ranging		Auto/Manual ranging
Ranges	200µA, 2mA, 20mA, 200mA, 10A*	2mA, 20mA, 200mA, 10A*	320µA, 3200µA, 32mA, 320mA, 10A*
Resolutions	0.1µA, 10µA, 100µA, 10mA	0.1µA, 10µA, 100µA, 10mA	0.1µA, 1µA, 10µA, 100µA, 10mA
Basic Accuracy	±(3.0%rdg+ dgt)	±(1.5%rdg+1dgt), ±(3.0%rdg+1dgt) for 20A	±(2.0%rdg+4dgt), ±3.0%rdg+1dgt) fro 20A
Overload protection	0.8A, 250V fuse; 10A, 600V fused	0.8A, 250V fuse; 10A, 600V fused	0.5A, 250V fuse; 10A, 600V fused
*10A on for 30 seconds maximum, off for 3 minutes minimum.			
AC CURRENT	Manual ranging		Auto/Manual ranging
Ranges	Does not apply	200µA, 20mA, 200mA, 10A	320µA, 3200µA, 32mA, 320mA, 10A*
Resolutions		0.1µA, 10µA, 100µA, 10mA	0.1µA, 1µA, 10µA, 100µA, 10mA
Accuracy		±(2.0%rdg+4dgt) for 10A	±(2.5%rdg+4dgt) 50/60Hz
		±(3.5%rdg+4dgt)	±(3.5%rdg+1dgt) 50.60Hz for 20A
Overload protection			0.5A, 250V fuse, 10A, 600V
*10A on for 30 seconds maximum, off for 3 minutes minimum.			
RESISTANCE	Manual ranging		Auto/Manual ranging
Ranges	200Ω, 2kΩ, 20kΩ, 200kΩ, 20MΩ	200Ω, 20kΩ, 200kΩ, 20MΩ	320Ω, 3.2kΩ, 31kΩ, 310kΩ, 3.1MΩ, 31MΩ
Resolutions	100mΩ, 1Ω, 10Ω, 100Ω, 1kΩ	100mΩ, 10Ω, 100Ω, 10kΩ	100mΩ, 1Ω, 10Ω, 100Ω, 1kΩ, 10kΩ
Accuracy	±(2%rdg+3dgt)	±(1.5%rdg+4dgt), ±(3.0%rdg+4dgt) for 20MΩ	±(1.0%rdg+3dgt), ±(1.5%rdg+2dgt) for 3.1MΩ
		±(5.0%rdg+5dgt) for 31MΩ	
Open circuit voltage	approx. 0.3VDC	approx. 0.3VDC	approx. 1.5VDC
Overload protection	500V DC + AC Peak	500V DC + AC Peak	500V DC + AC Peak
DIODE CHECK			
Resolution	1mV	1mV	1mV
Accuracy	±(3%rdg+3dgt)	±(2.0%rdg+1dgt)	±(10%rdg+3dgt)
Open Circuit Voltage	3VDC Typ.	3VDC Typ.	<3.5VDC
Test Current (approximate)	1.0mA ±0.6mA	1.0mA	1.0mA ±0.6mA
Overload protection	500V DC + AC Peak	500V DC + AC Peak	500V DC + AC Peak
Measures forward voltage drop of diode or semiconductor junction in mV.			
CONTINUITY CHECK			
Buzzer Threshold	Does not apply	< 100Ω	< 320Ω
Overload protection		500V DC + AC Peak	500V DC+AC Peak
Battery Test	1.5V, 9V	Does not apply	Does not apply
Non-Contact Voltage Indicator	Does not apply	Detect voltages from 70V to 480VAC	Does not apply
		50Hz - 60Hz	
Display	2000 count, 3 1/2 digit 0.53" LCD	2000 count, 3 1/2 digit 0.53" LCD	3200 count, 3 1/2 digit 0.4" LCD
		with 32 segment analog bargraph	
Polarity	Automatic, (-) negative polarity indication		
Overrange Indication	"OL" or "-OL" is displayed		
Measurement Rate	2.5 samples per second	2.5 samples per second	2 samples per second
Low Battery Indication	Symbol Displayed		
Operating Temperature	32° to 122°F(0° to + 50°C), <70% R.H		
Storage Temperature	-4° to 140°F(-20° to + 60°C), <70% R.H, battery removed		
Power	Single standard 9V battery, NEDA 1604 or equivalent		
Battery Life	200 hours typical (alkaline)		
Dimensions (HxWxD)	5.63 x 2.25 x 1.375" (143 x 68 x 47mm)		
Weight	7.27 oz. (206g)		

## Accessories

One Year Warranty

SUPPLIED: Battery, Test Leads, Instruction Manual  
 OPTIONAL: TL-2A Deluxe Test Leads, TL-3 Accessory Tip Kit (for TL-2A)  
 TL-130A General Purpose DMM Kit  
 Carrying Case (not included): LC-24