

# 3<sup>3</sup>/<sub>4</sub> DIGIT 3999 COUNTS DIGITAL MULTIMETER



**11 FUNCTIONS 36 RANGES**  
**Model 801-L**



**SPECIAL FEATURES :**

- Industrial Grade Rugged Digital Multimeter
- Sensing : Average
- Automatic Zero adjustment.
- Peak Hold facility
- OverLoad Protection 500V DC or AC rms
- Auto range on Frequency range & measurement upto 2 MHz.
- Logic Test, Diode & Continuity Test & Transistor hFE Test.
- Low battery indication

**ACCESSORIES :**

Test Leads, Carrying Case, User's Manual & Battery.

**OPTIONAL ACCESSORIES:**

Current Clamp CA 300, Current Clamp Adaptor CA500, CA1000, CA2000, High Voltage Probe PD-28.

**GENERAL SPECIFICATIONS :**

- \* Sensing : Average Sensing.
- \* Basic Accuracy :  $\pm(0.5\%rdg + 1dgt)$
- \* Display : 3<sup>3</sup>/<sub>4</sub> digit Max. 3999 Counts  
Large LCD display
- \* Display Size : 17.5 mm
- \* Polarity : Automatic, positive implied, (-) negative polarity indication
- \* Measurement Rate : 2.5 measurements / sec.
- \* Over range Indication : 'OL' is displayed.
- \* Low battery : The "E" sign is displayed when the battery voltage drops below the operating Voltage.
- \* Operating Temperature : 0°C to 45°C; < 70%R.H.
- \* Storage Temperature : -20°C to 60°C; < 80%R.H. (With Battery Removed)
- \* Power : Single, Standard 9V battery.
- \* Dimension : 170(L) x 80(W) x 40(H)mm
- \* Weight : Approx. 250g (including battery)

## ELECTRICAL SPECIFICATIONS- 801-L

Accuracy :  $\pm$  (% reading + digit) at 23  $\pm$  5°C less than 75% RH.

**AC VOLTAGE (50Hz~500Hz)**

Range	Resolution	Accuracy
400 mV	100 $\mu$ V	$\pm(1.0\%rdg + 4dpts)$
4 V	1 mV	
40 V	10 mV	$\pm(1.5\%rdg + 4dpts)$
400 V	100 mV	
750 V	1 V	

Input Impedance : 20M $\Omega$

Overload Protection: 500V DC or AC rms on 400mV range, 1000V DC or 750V AC rms on all other ranges

**DC VOLTAGE**

Range	Resolution	Accuracy
400 mV	100 $\mu$ V	$\pm(0.5\%rdg + 1dgt)$
4 V	1 mV	
40 V	10 mV	$\pm(0.5\%rdg + 1dgt)$
400 V	100 mV	
1000 V	1 V	

Input Impedance : 20M $\Omega$

Overload Protection: 500V DC or AC rms on 400mV range, 1000V DC or 750V AC rms on all other ranges

**RESISTANCE**

Range	Resolution	Accuracy
400 $\Omega$	0.1 $\Omega$	$\pm(0.8\%rdg + 4dpts)$
4 K $\Omega$	1 $\Omega$	
40 K $\Omega$	10 $\Omega$	$\pm(0.8\%rdg + 2dpts)$
400 K $\Omega$	100 $\Omega$	
4 M $\Omega$	1 K $\Omega$	
40 M $\Omega$	10 K $\Omega$	$\pm(3.0\%rdg + 4dpts)$
400 M $\Omega$	100 K $\Omega$	$\pm(10\%rdg - 10dpts)$

Overload Protection : 500V DC or AC rms

Open Circuit Voltage : 0.6V DC  
(3.0V DC on 400 $\Omega$  and 400M $\Omega$  ranges)

**DIODE TEST**

Test Current	Open Circuit Voltage	Accuracy
1.0 $\pm$ 0.6mA	3.0V MAX	$\pm(3.0\%rdg + 3dpts)$

Overload protection : 500V DC/AC rms

**CONTINUITY TEST**

Audible Sound Buzzer	Less than 100 $\Omega$
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Overload Protection : 500V DC/AC rms

**AC CURRENT[(Avg. Sine Wave)(50Hz~500Hz)]**

Range	Resolution	Accuracy
40 mA	10 $\mu$ A	$\pm(1.5\%rdg + 4dpts)$
400 mA	100 $\mu$ A	
10 A	10 mA	$\pm(3.5\%rdg + 4dpts)$

Overload Protection : 0.8A/250V fuse, 10A/60 sec. Input "unfused".

**DC CURRENT**

Range	Resolution	Accuracy
40 mA	10 $\mu$ A	$\pm(1.0\%rdg + 1dgt)$
400 mA	100 mA	
10 A	10 mA	$\pm(3.0\%rdg + 1dgt)$

Overload Protection : 0.8A/250V fuse, 10A/60 sec. Input "unfused".

**CAPACITANCE**

Range	Resolution	Accuracy
4 nF	1 pF	$\pm(5.0\%rdg + 10dpts)$
40 nF	10 pF	
400 nF	100 pF	
4 $\mu$ F	1 nF	$\pm(5.0\%rdg + 10dpts)$
40 $\mu$ F	10 nF	

Test Frequency : @ 400Hz  
Voltage Measurement : Approx. 40mV

**TRANSISTOR hFE TEST**

Range	Vce	Basic DC Current
0 to 1000	<3.5V	10 $\mu$ A

**FREQUENCY**

Range	Resolution	Accuracy
2 MHz	1 Hz	$\pm(0.1\%rdg + 1dgt)$

Overload Protection : 500V DC or AC rms  
Input Sensitivity : 50mV on 10Hz-1MHz, 2V on 1MHz-4MHz  
Effective reading : 10 - 3999

**LOGIC TEST**

Threshold	
Logic Hi(▲)	Logic Lo(▼)
2.8V $\pm$ 0.8V	0.8V $\pm$ 0.5V

Overload protection : 500V DC/AC rms  
Detectable pulse width : 25nS  
Pulse Limits : >30% & < 70% duty Cycle  
Indication : 40msec beeper at logic low  
Frequency Response : 20MHz

All Specifications are subject to change without prior notice