

## 3½ DIGIT 1999 COUNTS DIGITAL MULTIMETER + LCR METER

13 FUNCTIONS 43 RANGES

Model 306

### SPECIAL FEATURES :

- Professional Grade Rugged DMM + LCR Meter
- MAX HOLD facility
- Auto range on Frequency Range
- Transistor hFE test
- Most rugged, Easy to use hand held meter.
- Auto Zero Mode
- Low battery indication
- Diode Test, Continuity Test & Duty Cycle

### GENERAL SPECIFICATIONS :

- \* Sensing : Average Sensing
- \* Basic Accuracy :  $\pm 0.5\%$
- \* Display : 3½ digit LCD display (1999 Counts)
- \* Digit Size : 18mm(H)
- \* Low Battery Indication : The "E" is displayed when the battery voltage drops below the operating level.
- \* Over range Indication : 'OL' or '-OL' is displayed.
- \* Measurement rate : 2.5 times per second, nominal
- \* Operating Temperature : 0°C ~ 40°C at < 70% R.H.
- \* Storage Temperature : -20°C to 60°C, 0 ~ 80% R.H. With battery removed from meter.
- \* Power : Single, Standard 9V battery.
- \* Dimension : 200(H) x 90(W) x 40(D)
- \* Weight : Approx. 400g. (Including battery)

### SAFETY :

- Safety : EN61010-1 Approval Protection Class II over voltage category (CAT II 1000V, CAT III 600V), Pollution Degree 2.

### ACCESSORIES :

Test leads pair, Carrying Case, Battery installed, User's Manual & One Spare fuse installed.



### ELECTRICAL SPECIFICATIONS - 306

Accuracy is  $\pm$  (% reading digits + number of digits) or otherwise specified, at 23°C  $\pm$  5°C

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

Range	Resolution	Accuracy
200 mV	100 V	$\pm(1.0\%rdg + 4dpts)$
2 V	1 mV	
20 V	10 mV	
200 V	100 mV	$\pm(2.0\%rdg + 4dpts)$
750 V	1 V	

Input Impedance : 10M

Overload Protection : 500V DC or AC rms on 200mV range, 1000V DC or 750V AC rms on all other range

#### DC VOLTAGE

Range	Resolution	Accuracy
200 mV	100 V	$\pm(0.5\%rdg + 1dgt)$
2 V	1 mV	
20 V	10 mV	
200 V	100 mV	$\pm(0.5\%rdg + 1dgt)$
1000 V	1 V	

Input Impedance : 10M

Overload Protection : 500V DC or AC rms on 200mV range, 1000V DC or 750V AC rms on all other ranges

#### AC CURRENT(50Hz~500Hz)

Range	Resolution	Accuracy
20 mA	10 A	$\pm(1.5\%rdg + 4dpts)$
200 mA	100 A	
10 A	10 mA	$\pm(3.5\%rdg + 4dpts)$

Input Protection : 0.5A/250V fast blow fuse, 10A/600V fast blow ceramic fuse

#### DC CURRENT

Range	Resolution	Accuracy
20 mA	10 A	$\pm(1.0\%rdg + 1dgt)$
200 mA	100 A	
10 A	10 mA	$\pm(3.0\%rdg + 1dgt)$

Input Protection : 0.5A/250V fast blow fuse, 10A/600V fast blow ceramic fuse

#### CAPACITANCE

Range	Resolution	Accuracy
2 nF	1 pF	$\pm(5.0\%rdg + 10dpts)$
20 nF	10 pF	
200 nF	100 pF	
2 F	1 nF	$\pm(8.0\%rdg + 10dpts)$ above 100 F
200 F	100 nF	

Test Frequency : 2nF, 20nF ranges 1KHz, 200nF, 2 F ranges 270Hz, 200 F range 27Hz

#### INDUCTANCE

Range	Resolution	Accuracy
2 mH	1 H	$\pm(5.0\%rdg + 20dpts)$
20 mH	10 H	
200 mH	100 H	$\pm(5.0\%rdg + 10dpts)$
2 H	1 mH	
20 H	10 mH	

Test Frequency : 2mH, 20mH ranges 1KHz, 200mH, 2H ranges 270Hz & 20H range 27Hz  
Test Condition : quality factor >5 in 270Hz

#### RESISTANCE

Range	Resolution	Accuracy
200	0.1	$\pm(0.8\%rdg + 4dpts)$
2 K	1	
20 K	10	$\pm(0.8\%rdg + 2dpts)$
200 K	100	
2000 K	1 K	
20 M	10 K	$\pm(3.0\%rdg + 4dpts)$
2000 M	1 M	$\pm[(5.0\%rdg-10dpts) + 10dpts]$

Overload Protection : 500V DC or AC rms  
Open Circuit Voltage : 0.3V DC (3.0V DC on 200 and 2000M ranges)

#### DUTY CYCLE

Range	Resolution	Accuracy
10.0%-90.0%	0.1%	$\pm(1.0\%rdg + 10dpts)$

Pulse Width : >10Hz, <20KHz, TTL signal  
Overload Protection : 500V DC or AC rms

#### FREQUENCY (AUTO RANGING)

Range	Resolution	Accuracy
2 KHz	1 Hz	$\pm(0.1\%rdg + 1dgt)$
20 KHz	10 Hz	
200 KHz	100 Hz	
2000 KHz	1 KHz	
15 MHz	10 KHz	

Sensitivity : 1.0V rms min  
Overload Protection : 500V DC or AC rms  
Effect Reading : 20-1999

#### CONTINUITY TEST

Audible Sound Buzzer	Less than 40	$\pm 20$
Overload Protection	500V DC or AC rms	

#### DIODE TEST

Test Current	Test Voltage
1.0mA $\pm$ 0.6mA	3.0V MAX.

Overload Protection : 500V DC or AC rms  
Accuracy :  $\pm(3.0\%rdg + 3dpts)$

#### TRANSISTOR hFE TEST

Range	Vce	Basic DC Current
0 to 1000	<3.0V DC	Approx. 10 A DC

All Specifications are subject to change without prior notice