

3 1/2 AUTO RANGE & AUTO POWER OFF DIGITAL MULTIMETER OPERATION MANUAL

This LCD Auto Range & Auto Power off digital multimeter is a portable, compact, 3 1/2 digits multimeter. It is ideally suited for field, lab, shop, car, and home applications.

1. SPECIFICATIONS

1.1 GENERAL SPECIFICATIONS

Display	: 3 1/2 digits LCD with a max. reading of 4000.
Range control	: Auto range control
Polarity	: Automatic negative polarity indication.
Zero adjustment	: Automatic.
Overrange indication	: The "OL" display.
Lowbattery	: The "E3" is display when the battery voltage is below 2.4V.
Auto Power Off	: 30 minutes after stopping the switch or no key-input past, the meter automatically enter to power off mode.
Safety standards	: (CE EMC/LVD). The meter is up to the standards of IEC1010 Pollution Degree 2, Overvoltage Category II.
Operating environment	: Temperature 32 to 104°F (0°C to 40°C), humidity < 85% RH
Storage environment	: Temperature -4 to 140°F (-20°C to 60°C), humidity < 95% RH.
Power	: 2 x 1.5V LR-44 or SR-44 batteries.
Dimension	: 115(H) x 70(W) x 20(D) mm
Weight	: Approx. 90g

1.2 ELECTRICAL SPECIFICATIONS

Accuracy are \pm (% of reading + number in last digit)
at 23 \pm 5°C, <75% RH.

DC Voltage	
400mV, 4V, 40V, 400V	: \pm (0.5% + 3)
1000V	: \pm (0.8% + 3)
Impedance	: 10M Ω

AC Voltage	
4V, 40V, 400V	: \pm (0.8% + 3)
400mV, 700V	: \pm (1.2% + 3)
Impedance	: 10M Ω
Frequency response	: 40—400Hz

Resistance	
400 Ω , 4k Ω , 40k Ω , 400k Ω , 4M Ω	: \pm (1% + 3)
40M Ω	: \pm (2% + 3)

Overload protection : 250V DC/AC RMS.

DC Current	
40mA, 400mA	: \pm (1.5% + 4)
10A	: \pm (2% + 5)
Overload protection	: Fast 0.5A/250V, 10A/250V fuse.

AC Current	
40mA, 400mA	: \pm (2% + 5)
10A	: \pm (2.5% + 5)
Overload protection	: Fast 0.5A/250V, 10A/250V fuse.
Frequency response	: 40—400Hz

Capacitance	
40nF	: \pm (5% + 10)
400nF, 4 μ F, 40 μ F	: \pm (2% + 5)
100 μ F	: \pm (3% + 5)
Overload protection	: 250V DC/AC RMS.

Frequency and Duty cycle	
Frequency 10Hz-10MHz	: \pm (0.02% + 1)
Duty cycle 0.1%-99.9%	: \pm (0.02% + 2)
Sensitivity	: Sine wave 0.6V RMS.
Overload protection	: 250V DC/AC RMS.

Diode Test	
Test current : 1 \pm 0.6mA	Test voltage : Approx. 1.5V
Overload protection	: 250V DC/AC RMS

Continuity Test	
Audible indication: less than 60 Ω Approx.	
Overload protection	: 250V DC/AC RMS.