

# MULTIMETER *smart*

Model : DM-9950

ISO-9001, CE, IEC1010



## MULTIMETER, *smart*

Model : DM-9950

- \* Smart operation, 5 intelligent functions :
  - V : Smart ACV/DCV Automatically.
  - $\Omega$  : Resistance, Diode, Continuity, Capacitance. Automatically.
  - uA : Smart ACA/ DCA Automatically.
  - mA : Smart ACA/DCA Automatically.
  - 10A : Smart ACA/DCA.
- \* Function keys : Select, Hz, Max/Min, Range, Hold.
- \* Auto power off.
- \* CAT III 1000V, CAT IV 600V.
- \* Size :192 mm X 90 mm X 41 mm.
- \* Power : DC 9V battery ( 006 P ).
- \* Optional holster, HS-03.



**Lutron**

LUTRON ELECTRONIC

*The Art of Measurement*

# SMART MULTIMETER

Model : DM-9950

## FEATURES

* Digital multimeter with smart function.
* Hybrid power, meter also can supply by the battery.
* Meet CAT III-1000 V.
* 6000 counts A/D, high resolution.
* ACV, ACA, DCV, DCA, ohms, continuity, Hz, Capacitance, Diode, Data hold.
* Smart function, Auto range or manual range with hold.
* Smart operation, Build in 5 intelligent function : " V ", " Ω ", "uA", " mA ", " 10A ".
* " V " function can select ACV, DCV automatically with auto range.
* " Ω " function can select the Resistance , Diode, Continuity beeper, Capacitance automatically with auto range.
* " 10A " " mA " "uA" function can measure ACA, DCA with auto range.
* Data hold ( auto range ).
* Auto shut off is available to save battery life.
* Both 10 A, uA, mA current range are build fuses for safety consideration.
* 10 M ohm impedance for voltage circuit.
* Built-in overload protection for most ranges.
* LSI circuit provides high reliability and durability.
* Uses durable, long-lasting components, enclosed in strong, light weight ABS-plastic housing.
* Full line optional adapters : Clamp adapter, Flexiblecurrent probes, Tachometer adapter, Pressure adapter, Humidity Adapter, Sound level adapter, Anemometer adapter, Light adapter, EMF adapter.

## GENERAL SPECIFICATIONS

Display	64 mm x 47 mm large LCD display.
Measurement	ACV, ACA, DCV, DCA, ohms, continuity beeper, Hz, Capacitance, Diode, Data hold.
A/D counts no.	6000 counts.
Range selection	Smart function, auto range or manual range selecting.
Smart function	" V " function can select ACV, DCV automatically with auto range. " Ω " function can select the Resistance, Diode, Continuity beeper, Capacitance automatically with auto range. " 10A " " mA " "uA" function can measure ACA, DCA with auto range.
Data hold	To freeze the display reading on the LCD display. * Available for auto range only.
Power On/Off management	If meter is not operated within 10 minutes will auto power switch off.
Polarity	Automatic Switching, " - " indicates negative polarity.
Zero adjustment	Automatic.
Sampling time	Approx. 0.5 to 1 second.
Operating temperature	0 to 50 °C (32 to 122 °F).
Operating humidity	Less than 80% RH.
Power supply	006P DC 9V battery.
Power consumption	DC 3 mA approximately.
Weight	350 g/0.77 LB.
Dimension	185 x 88 x 40 mm ( 7.3 x 3.5 x 1.6 inch )
Accessories included	Red and Black Test Leads..... 1 Set Instruction Manual..... 1 PC

Optional accessories	Full line adapters : * ACA/DCA current adapter : CA-502, CA-203, CA-501 * ACA current adapter : CA-201 * Flexible current probes : CP-2011, CP-3001, CP-6001 * Pressure adapter : PS-403 * Light adapter : LX-02 * EMF adapter : EMF-824 * Sound level adapter : SL-406 * High voltage probe : HV-40
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## ELECTRICAL SPECIFICATIONS (23± 5°C )

DC/AC Voltage * auto range	
Range	6 V /60 V/600 V/1000V
Resolution	0.001 V /0.01 V/0.1 V/1 V
Accuracy	DCV : ± ( 1 % + 2d ) ACV : ± ( 1.2 % + 5d )
Input impedance	10 M ohm.
Over load protection	AC/DC 1000 V.
Remark	* The input impedance is 10 Mega ohm. * ACV specification be tested on sine wave 50/60 Hz. * For smart function ,the ACV start measurement voltage is larger than 400 mV ± 100 mV.

DC/AC Current * auto range		
Range	uA ,mA range	600uA/6000uA 600 mA/60 mA
	10 A range	10A
Resolution	uA ,mA range	0.1uA/1uA 0.1 mA/0.01 mA
	10 A range	0.01 A
Accuracy	uA/mA range	± ( 1.2% + 2d )
	10 A range	± ( 1.5% + 2d )
Over load protection	mA range	630 mA fuse
	10 A range	10 A fuse
Remark	* ACA specification be tested on sine wave 50/60 Hz. * For smart function ,the ACA start measurement is 10 A range : 1.50 A mA range : 1.50 mA	

OHMS * auto range	
Range	600/6 K/60 K/600 K/6 M ohm
Resolution	0.1/1/10/100/1 K ohm
Accuracy	± ( 1% + 3d )
Over load protection	± 350 DCV, 350 ACV

Capacitance * auto range	
Range	6 nF/60 nF/600 nF/6 uF/60 uF
Resolution	0.001 nF/0.01 nF/0.1 nF/0.001 uF/ 0.01 uF
Accuracy	± ( 3% + 5d )
Remark	: Discharge capacitor before testing.

Frequency	
Range	40 Hz to 1 KHz
Resolution	1 Hz.
Accuracy	± ( 0.3% + 2d )
Input impedance	10 M ohm.
Over load protection	AC/DC 600 V

Diode	
Short/non conductance, good/defect test.	

Continuity	
If measuring resistance is less than 10 ohm, the beeper will sound .	