



4 1/2 DIGITS 19999 COUNTS DIGITAL MULTIMETER

FEATURES :

- DMM-90 has a unique feature wherein the LCD display shows the terminals where the test leads are to be inserted to avoid wrong connection & damage to the meter.
- Low Power Consumption CMOS double integration A / D transform integrated circuit

- Auto Zero Calibration
- Auto Polarity display
- Selected Range displayed on LCD
- Instant Continuity Buzzer.
- "DATA - HOLD" switch freezes reading.
- Low Battery & Over range indication.

13 FUNCTIONS 29 RANGES

Model- DMM 90



GENERAL SPECIFICATIONS:

- * Sensing : Average Sensing.
- * Display: 4 1/2 digit (19999 Counts) LCD. With display height 53mm and digit height 20mm and function / units sign annunciators.
- * Over range indication: Highest digit of (1) or (-1) is displayed.
- * Low battery: The "EOL" sign is displayed when the battery voltage drops below the operating Voltage.
- * Polarity: Automatic (-) negative polarity indication,
- * Measurement rate: 2.5 measurements per second,
- * Operating Temperature : 0°C to 50°C, <70% R.H.
- * Storage Temperature : -20°C to 60°C, <80% R.H. (With battery removed).
- * Accuracy : Accuracy specifications at 23 ± 5°C; <75% RH.
- * Auto Power Off : The meter will shut off automatically about 15 minutes after power is ON if the meter is not in use.
- * Power: Single 9 V Battery.
- * Dimension : 179(L) x 88(W) x 39(H)mm.
- * Weight : Approx. 380 gms. (including battery)

ACCESSORIES :

Test leads, User Manual, Batteries Installed, Carrying Case, Protective Holster, Thermocouple Plug Test Clip. & K - Type Thermocouple

OPTIONAL ACCESSORIES :

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

SAFETY :

- LCD display shows the terminals where the test leads are to be inserted to avoid wrong connection and damage to the meter.
- Overload Protection in all Ranges.
- Recessed Safety Designed Input Jacks
- Alarm Buzzer Sounds when the lead is connected to the wrong input terminals.
- CE approved IEC-1010 overload CAT II

ELECTRICAL SPECIFICATIONS : DMM 90

Accuracy specification at 23°C±5°C less than 75% R.H.

DC VOLTAGE

Range	Resolution	Accuracy
200 mV	10 V	±(0.05%rdg+3dgts)
2 V	100 V	±(0.1%rdg+3dgts)
20 V	1 mV	
200 V	10 mV	
1000 V	100 mV	±(0.15%rdg+5dgts)

Input impedance : 10M

Overload protection: 200mV range -250V AC/DC
1000V range -1000Vrms

AC CURRENT

Range	Resolution	Accuracy
20 mA	1 A	±(0.8%rdg+10dgts)
200 mA	10 A	±(1.2%rdg+10dgts)
20 A	1 mA	±(2.5%rdg+10dgts)

Overload protection: 0.5A/250V fuse for 200mA range
20A unfused max. 10sec.

FREQUENCY

Range	Resolution	Accuracy
20kHz	1Hz	±(1.5%rdg+3dgts)

Overload protection : 250V rms

TRANSISTOR TEST

Range	Test Voltage	Basic DC Current
0 to 1000	2.8 V	10 A

Overload protection : 250V rms

AC VOLTAGE

Range	Resolution	Accuracy
2 V	100 V	±(0.5%rdg+10dgts)
20 V	1 mV	
200 V	10 mV	
1000 V	100 mV	±(1%rdg +10dgts)

Input impedance : 2M

Overload protection : 200mV range -250V AC/DC;
1000V range - 1000Vrms

DC CURRENT

Range	Resolution	Accuracy
2 mA	0.1 A	±(0.5%rdg+5dgts)
200 mA	10 A	±(0.8%rdg+5dgts)
20 A	1 mA	±(2%rdg+10dgts)

Overload protection: 0.5A/250V fuse for 200mA range
20A unfused max. 10sec.

DIODE TEST

Test Current	Open Circuit Volts
1.0mA	3.3V DC Typical

Overload Protection : 250V DC or AC rms

CONTINUITY TEST

AUDIBLE BUZZER	Less than 100
----------------	---------------

Overload Protection : 250V DC or AC rms

RESISTANCE

Range	Resolution	Accuracy
200	10 m	±(0.5%rdg+10dgts)
2 k	0.1	±(0.3%rdg +10dgts)
20 k	1	
2 M	100	
200 M	10 k	±(5% rdg +10dgts)

Overload protection : 250V rms

CAPACITANCE

Range	Resolution	Accuracy
2 nF	0.1 pF	±(3%rdg+40dgts)
20 nF	1 pF	±(4%rdg+10dgts)
2 F	100 pF	
20 F	1 nF	

Overload protection : 250V rms

Test Frequency : 400Hz / 40mV rms

TEMPERATURE(K-Type Thermocouple)

Range	Resolution	Accuracy
-40°C-0°C	0.1°C	±(3%rdg+40dgts)
0°C-400°C		±(1%rdg+30dgts)
400°C-1000°C		±(2%rdg+50dgts)

Overload protection : 250V rms

Thermocouple accuracy not included
Supplied Thermocouple suitable for measurement upto 250°C

All Specifications are subject to change without prior notice



An ISO 9001:2008 Company

Authorized Distributor



Signal Hawk Electronics Pvt. Ltd

3rd Floor, M.B.-1, Shakarpur, Delhi-110092, Phones: +91-11-30189528, 27, 26, 25
Web: www.signalhawk.in , E-Mail: info@signalhawk.in