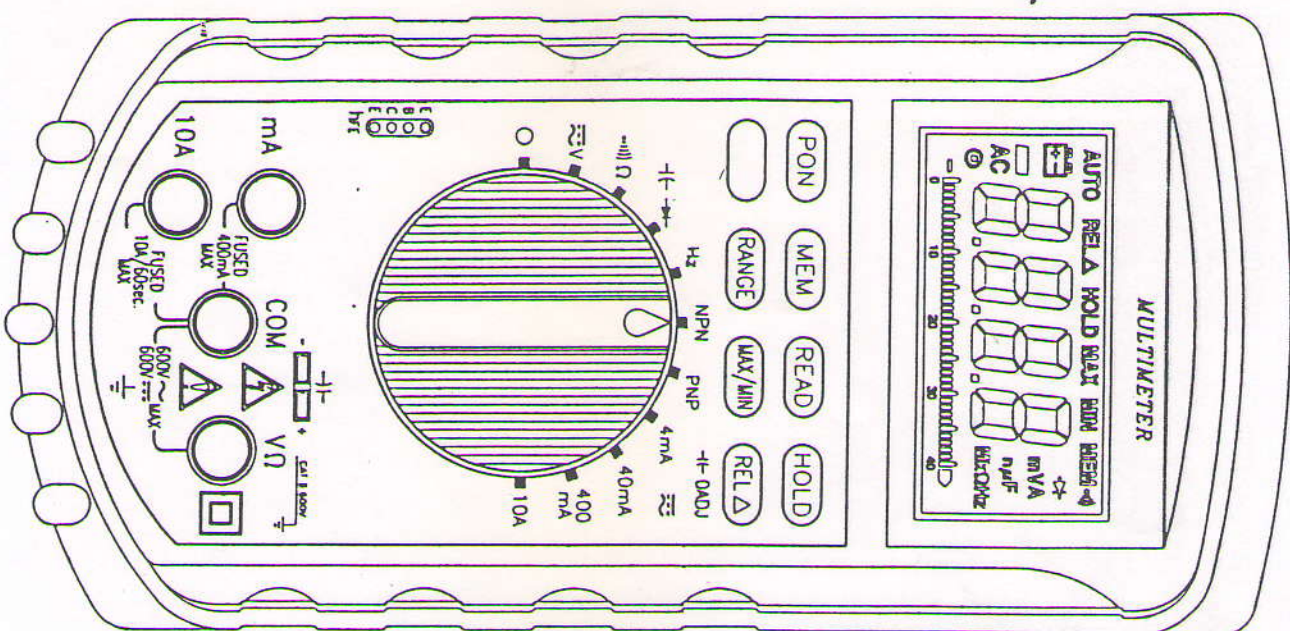


OPERATING INSTRUCTIONS MODEL 42 CE DIGITAL MULTIMETER



DIODE TEST

Test current: 1.0mA ± 0.6mA.
Accuracy: ±(3.0% rdg + 3dgt).
Open circuit volts: 3.0Vdc typical.
Overload protection: 500VDC or AC rms.

CAPACITANCE

Ranges: 4nF, 40nF, 400nF, 4μF, 40μF
Accuracy: ±(2.0% rdg + 20dgt) on 4nF to 40μF ranges.
±(2.0% rdg + 4dgt) on 40nF to 40μF ranges.
±(5.0% rdg + 4dgt) above 40μF.
Overload protection: 500VDC or AC rms.

FREQUENCY (Autorange)

Ranges: 100Hz, 1KHz, 10KHz, 100KHz, 700KHz
Resolution: 0.01Hz.
Accuracy: ±(0.05% rdg + 2dgt).
Sensitivity: 1.0V rms min.
Overload protection: 500VDC or AC rms.

TRANSISTOR hFE

Ranges: 0 - 1000.
Base current: 10μAdc approx. (Vce = 3.0Vdc).

DC VOLTS

Ranges: 400mV, 4V, 40V, 400V, 600V
Resolution: 100μV.
Accuracy: ±(0.25% rdg + 1dgt) on 400mV to 400V ranges.
±(0.25% rdg + 3dgt) on 600V range.
Input impedance: >10MΩ.
Overload protection: 600VDC or AC rms.

AC VOLTS

Ranges: 400mV, 4V, 40V, 400V, 600V, (400mV only Manual @ 50Hz-1000Hz)
Resolution: 100μV.
Accuracy: ±(1% of reading + no. of digits).

Range	100Hz	1KHz	10KHz	20KHz
400mV	1.5% + 4dgt	N/A		
4V	0.75% + 5dgt		2.0% + 30dgt	
40V				
400V	0.75% + 5dgt		N/A	
600V				

Input impedance: >10MΩ.

Overload protection: 600VDC or AC rms.

SPECIFICATIONS

Display: 3 1/2 digit (400 counts), 9999 counts (Frequency mode), 40 segments analog bar graph and function units sign annunciators.
Polarity: Automatic, positive implied, negative polarity indication.
Overrange: "4000" or "4000" Most Significant Digit blinks. Low battery indication: the "E" is displayed when the battery voltage drops below the operating level.
Measurement rate: 2/sec. nominal. 1/sec. Capacitance and Frequency mode. 20/sec. Analog display.
Operating Environment: 0°C to 40°C at < 70% relative humidity.
Storage Temperature: 20°C to 60°C, 0 to 80% R.H. with battery removed from meter.
Accuracy: Stated accuracy at 23°C ± 5°C, < 75% relative humidity.
Safety: According to IEC 1010-1 protection class II over-voltage category (CAT II 600V) pollution degree 2.
Auto Power off: 30 minutes after rotary switch or mode changes.
Power: single standard 9-volt battery, NEDA 1604, JIS 006P, IEC 6F22.
Battery life: 200 hours typical with carbon-zinc.
Dimensions: 192mm (H) x 91mm (W) x 52.5mm (D).
Weight: Approx. 365g including battery.
Accessories: One pair test leads, One spare fuse installed, 9V battery (installed) and Operating Instructions.

DC CURRENT

Ranges: 4mA, 40mA, 400mA, 10A
Accuracy: ±(0.5% rdg ± 1dgt) on mA ranges.
±(2.0% rdg + 1dgt) on 10A range.
Input protection: 0.5A F250V fast blow ceramic fuse, 10A /600V fast blow ceramic fuse.

AC CURRENT (50Hz - 500Hz)

Ranges: 4mA, 40mA, 400mA, 10A
Accuracy: ±(1.0% rdg ± 4dgt) on mA ranges.
±(3.0% rdg + 4dgt) on 10A range.
Input protection: 0.5A F250V fast blow ceramic fuse, 10A /600V fast blow ceramic fuse.

RESISTANCE

Ranges: 400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ
Accuracy: ±(0.3% rdg + 4dgt) on 400Ω range.
±(0.3% rdg + 1dgt) on 4KΩ to 4MΩ ranges.
±(1.0% rdg + 4dgt) on 40MΩ range.
Open circuit volts: 0.4Vdc.
Overload protection: 50VDC or AC rms.

CONTINUITY

Audible indication: less than 40Ω ± 20Ω.
Overload protection: 50VDC or AC rms.