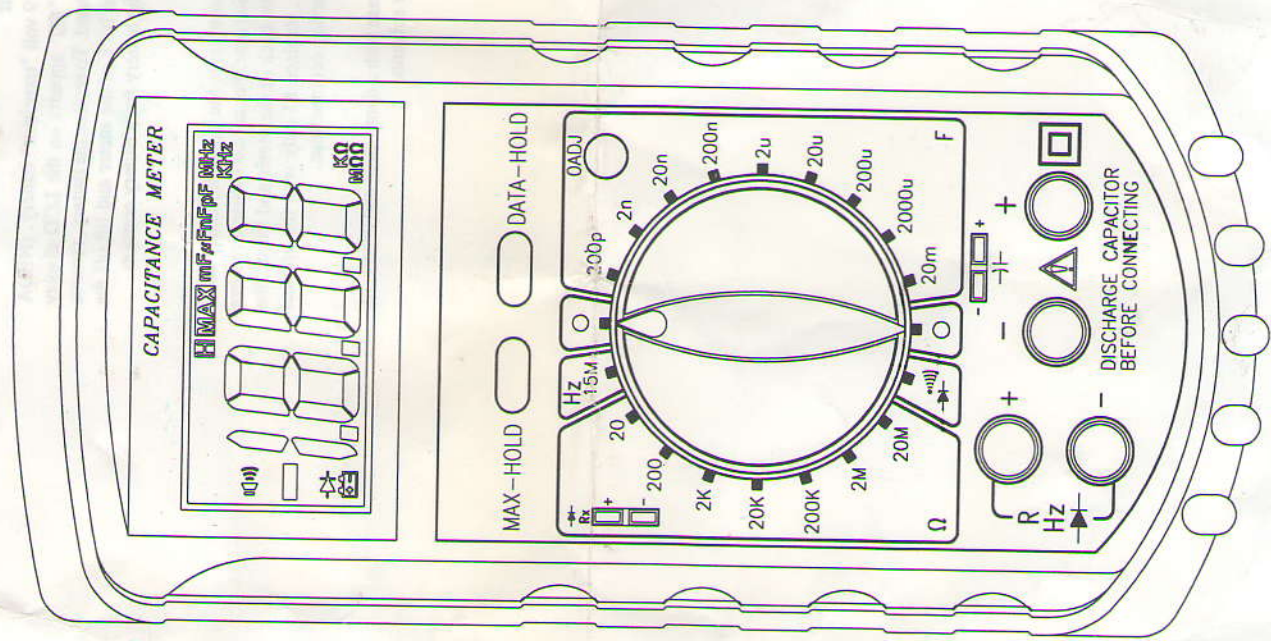


OPERATING INSTRUCTIONS MODEL 45 **CE** CAPACITANCE METER



SPECIFICATIONS

Display: 3½ digit liquid crystal display (LCD) with a maximum reading of 1999.

Polarity: Automatic, positive implied, negative polarity indication.

Overrange: (OL) or (-OL) is displayed.

Zero: Automatic.

Low battery indication: the " " is displayed when the battery voltage drops below the operating level.

Measurement rate: 2.5 times per second, nominal.

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.

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: 365g including battery.

Accessories: One pair test leads, 9V battery (installed), one spare fuse (installed) and Operating Instructions.

CONTINUITY

Audible indication: less than 30Ω.

Overload protection: 24VDC or AC rms.

DIODE TEST

Test current: 1.0mA ± 0.6mA.

Accuracy: ±(10.0% rdg + 3dgt).

Open circuit volts: 3.0Vdc typical.

Overload protection: 24VDC or AC rms.

RESISTANCE

Ranges: 20Ω, 200Ω, 2KΩ, 20KΩ, 200KΩ, 2MΩ, 20MΩ

Accuracy: ±(0.3% rdg + 10dgt) on 20Ω range.
±(0.3% rdg + 1dgt) on 200Ω to 2MΩ ranges.
±(3.0% rdg + 4dgt) on 20MΩ range.

Open circuit volts: 0.3Vdc (3.0Vdc on 20Ω and 200Ω ranges).

Overload protection: 24VDC or AC rms.

FREQUENCY (Autorange)

Ranges: 2KHz, 20KHz, 200KHz, 2000KHz, 15MHz

Accuracy: ±(0.1% rdg + 1dgt).

Sensitivity: 1.0V rms min.

Overload protection: 24VDC or AC rms.

Effect Reading: 10 - 1999.

CAPACITANCE

Range	Resolution	Accuracy	Test Frequency
200pF	0.1pF	$\pm(0.5\%rdg+1dgt+1pF)$	820Hz
2nF	1pF	$\pm(0.5\%rdg+1dgt)$	
20nF	10pF		
200nF	100pF		
2μF	1nF	$\pm(2.0\%rdg+1dgt)$	82Hz
20μF	10nF		
200μF	100nF		
2000μF	1μF	$\pm(4.0\%rdg+1dgt)$	8.2Hz
20mF	10μF		

Test voltage: <3.5V

Input protection: 0.1A/250V fast acting fuse

Zero adjust limited: ±20pF approx

OPERATION

MAX-HOLD Feature

Press "MAX-HOLD" to toggle in and out of the Maximum Hold mode (holding the highest reading.) In the MAX mode, the MAX annunciator is displayed and maximum readings are stored in display register, if the new reading is higher than the reading being displayed, the higher reading is transferred to the display register. A "higher" reading is defined as the reading with the higher absolute value.

The MAX hold function is disable in the frequency count mode, but the MAX annunciator is still displayed.

DATA-Button:

Press " DATA-HOLD" button to toggle in and out of DATA Hold mode. In the DATA Hold mode, the " " annunciator is displayed. (The DATA Hold mode may be exited when changing function.)