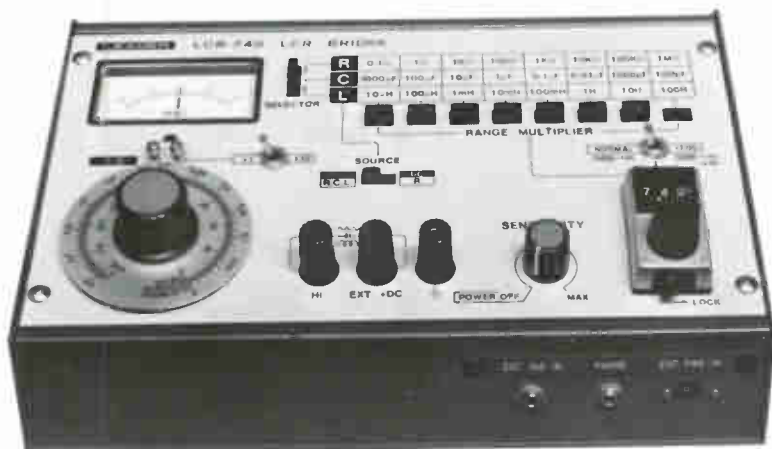


LCR-740 LCR Bridge

- 0.5% Basic Accuracy
- 0.1 μH , 1 pF, 0.001 Ω Resolutions



LCR-740

The LCR-740 is a versatile instrument for accurately measuring inductance, capacitance, resistance, and loss factor of electronic components. This compact unit provides a basic accuracy of 0.5% and resolutions of 0.1 μH , 1 pF or 0.001 Ω . Its broad measurement ranges make it ideal for use in component design, inspection and selection. It has also found wide use in educational institutions as an aid to teaching the characteristics of inductive, capacitive and resistive components.

SPECIFICATIONS

INDUCTANCE MEASUREMENTS

Range

0.1 μH to 1,100 H in 8 ranges with 10% overlap between ranges.

Resolution

0.1 μH .

Accuracy (15 to 25°C)

100 μH to 10 H: $\pm 0.5\%$ reading, $\pm 0.1\%$ full scale.

10 H to 100 H: $\pm 1\%$ reading, $\pm 0.1\%$ full scale.

0.1 μH to 10 μH : $\pm 3\%$ reading, $\pm 0.1\%$ full scale.

Residual Inductance

0.3 μH max.

CAPACITANCE MEASUREMENTS

Range

1 pF to 11,000 μF in 8 ranges with 10% overlap between ranges.

Resolution

1 pF.

Accuracy (15 to 25°C)

100 pF to 100 μF : $\pm 0.5\%$ reading, $\pm 0.1\%$ full scale.

10 pF to 100 pF: $\pm 1\%$ reading, $\pm 0.1\%$ full scale.

100 μF to 1,000 μF : $\pm 3\%$ reading, $\pm 0.1\%$ full scale.

Residual Capacitance

3 pF max.

DISSIPATION (D) AND QUALITY (Q) FACTOR MEASUREMENTS

Range

0.01 to 30 at 1 kHz in 2 ranges.

Accuracy

$\pm 10\% \pm 3$ scale divisions.

RESISTANCE MEASUREMENTS

Range

0.001 Ω to 11 M Ω in 8 ranges with 10% overlap between ranges

Resolution

0.001 Ω .

Accuracy 15 to 25°C

0.1 Ω to 100 k Ω : $\pm 0.5\%$ reading, $\pm 0.1\%$ full scale.

100 k Ω to 1 M Ω : $\pm 1\%$ reading, $\pm 0.1\%$ full scale.

0.001 to 0.1 Ω : $\pm 2\%$ reading, $\pm 0.1\%$ full scale.

Residual Resistance

0.003 Ω max.

MEASUREMENT SIGNAL SOURCES

dc

Internal or external for resistance measurements.

ac

Internal 1 kHz or external 50 Hz to 40 kHz for inductance and capacitance measurements.

POWER REQUIREMENTS

Internal 9 V battery (supplied).

Ac Adapter (optional).

PHYSICAL

Size (W x H x D)

9½ x 3¾ x 6½ in.

240 x 85 x 170 mm.

Weight

4.5 lbs, 2kg.

Accessories Supplied

Instruction Manual.

Cable for external input.

Miniature earphone (for null detecting).

9 V transistor battery.

Accessories Available

Type LPS-169A ac Adapter.