

Economical + DCV

LCR METER

Model : LCR-9172

ISO-9001, CE, IEC1010

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- * Compact size, easy to carry.
- * 6000 counts ADC resolution.
- * Built-in DCV measurement function
- * Test ranges :
L : 600.0 uH to 200.0 H. C : 600.0 pF to 10.00 mF. R : 60.0 to 20.00 M ohm.
DCV : 600.0 mV to 20.00 V.
- * Series/Parallel modes are selectable.
- * DCR mode 60.0 to 20.00 M ohm.
- * Four test frequencies are available : 100 Hz/120 Hz/1 KHz/10 KHz
- * Ls/Lp/Cs/Cp with D/Q/θ /ESR Parameter.
- * Data hold.
- * Size : 151 x 78 x 43 mm.
- * Power : DC 9V battery or DC 9V adapter i
- * Optional SMD test clips, SMDC-21.
- * Optional SMD tester, SMDC-22.
- * Optional soft carrying case, CA-05A.



Lutron

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The Art of Measurement

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LCR METER

Model : LCR-9172

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FEATURE

* 6000 counts ADC resolution.
* Dual power supply , Battery or AC/DC Adapter.
* High performance analog front end for impedance (Z) measurement.
* Support Z / DCR measurement for LCR mode.
* Four different test frequency are available : 100 Hz/120 Hz/1 KHz/10 KHz for L/C/R measurement.
* Built-in simple DMM front end circuit to support DCV mode.
* Test range : (ex. F = 1 KHz) L : 600.0 uH to 60.00 H C : 600.0 pF to 600.0 uF R : 60.00Ω to 20.00 MΩ
* Low battery voltage detector.
* Min. source resistance : 120Ω typical.
* 6 ratio resistor range used for LCR mode.
* Support buzzer sound driver with driving pattern & frequency selectable.

GENERAL SPECIFICATION

Resistance (DCR)

Range	Accuracy	Remark
60 Ω	± (1.5% + 5d)	
600 Ω	± (1.0% + 5d)	
6000Ω	± (1.0% + 5d)	
60 KΩ	± (1.0% + 5d)	
600 KΩ	± (1.0% + 5d)	
6000 kΩ	± (1.0% + 5d)	
20 MΩ	± (1.5% + 5d)	

Resistance (Z) (SER/PAL)

Range	Accuracy 100 Hz/120 Hz	Accuracy 1 KHz	Remark
60 Ω	± (1.5%+5d)	± (1.5%+5d)	
600 Ω	± (1.2%+5d)	± (1.2%+5d)	
6000Ω	± (1.2%+5d)	± (1.2%+5d)	
60 KΩ	± (1.2%+5d)	± (1.2%+5d)	
600 KΩ	± (1.2%+5d)	± (1.2%+5d)	
6000 kΩ	± (1.2%+5d)	± (1.2%+5d)	
20 MΩ	± (2.0%+5d)	± (2.0%+5d)	

Range	Accuracy 10 kHz	Remark
60 Ω	± (1.5%+5d)	After calibration
600 Ω	± (1.2%+5d)	
6000Ω	± (1.2%+5d)	
60 KΩ	± (1.2%+5d)	
600 KΩ	± (1.2%+5d)	
6000 kΩ	± (1.2%+5d)	
20 MΩ	± (3.0%+5d)	After calibration

Remark :

- * All specifications are under in battery operation.
- * Don't apply voltage larger than 30 V to input terminals.

Capacitance (SER/PAL) : D ≤ 0.1

Range	Accuracy 100 Hz	Accuracy 120 Hz	Remark
600 pF	± (3.5%+5d)	± (3.5%+5d)	After calibration
6000 pF	± (2.5%+5d)	± (2.5%+5d)	After calibration
60 nF	± (2.0%+5d)	± (2.0%+5d)	
600 nF	± (2.0%+5d)	± (2.0%+5d)	
6000 nF	± (1.5%+5d)	± (1.5%+5d)	
60 uF	± (1.5%+5d)	± (1.5%+5d)	
600 uF	± (1.5%+5d)	± (1.5%+5d)	
6000 uF	± (2.5%+5d)	± (2.5%+5d)	After calibration
10 mF	± (3.5%+5d)	± (3.5%+5d)	After calibration

Range	Accuracy 1 KHz	Accuracy 10 KHz	Remark
600 pF	± (2.5%+5d)	± (2.0%+5d)	After calibration
6000 pF	± (2.0%+5d)	± (1.5%+5d)	After calibration
60 nF	± (2.0%+5d)	± (1.5%+5d)	
600 nF	± (1.5%+5d)	± (1.5%+5d)	
6000 nF	± (1.5%+5d)	± (1.5%+5d)	
60 uF	± (1.5%+5d)	± (2.5%+5d)	
600 uF	± (2.5%+5d)	-----	
6000 uF	-----	-----	
10 mF	-----	-----	

DC Voltage

Range	Accuracy
0V ~ 20V	± (0.5% +2d)

SCALE RANGE CONFIGURATION

LCR mode			
Function mode	Frequency	Meas. Range	Min. resolution
Inductance (SER/PAL)	100/120Hz	60.00mH~200.0H	0.01mH
	1kHz	600.0uH~60.00H	0.1uH
	10kHz	600.0uH~6000mH	0.1uH
Capacitance (SER/PAL)	100/120Hz	600.0pF~10.00mF	1pF
	1kHz	600.0pF~600.0uF	0.1pF
	10kHz	600.0pF~60.00uF	0.1pF
Resistance (SER/PAL)	100/120Hz	60.00Ω ~20.00MΩ	0.01Ω
	1kHz	60.00Ω ~20.00MΩ	0.01Ω
	10kHz	60.00Ω ~20.00MΩ	0.01Ω
DC resistance	N/A	60.00Ω ~20.00MΩ	0.01Ω

DMM mode		
Function mode	Meas. Range	Min. resolution
DCV	600.0mV~20.00V	0.1mV

Remark :

- * All specifications are under in battery operation.
- * Don't apply voltage larger than 30 V to input terminals.
- * Discharge capacitor before measurement.

* If intend to obtain the accurate value, please test the component into the " Pin terminals " (3-6, Fig. 1) or tested via optional.

SMD tester, SMDA-22 or SMD test clip, SMDC-21.

* Appearance and specifications listed in this brochure are subject to change without notice.

LCR-9172+1503

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