

33374-TE

LC100-A Digital L/C Meter

Inductance Capacitance Meter

User Manual

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Rev. 4.8



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Features:

Based on the L/C resonance principle

High speed microcontroller's precision computation

Measuring range below 1uH and 1pF

Ideal for measuring switching power supply transformers, R/C-L/C filters, chokes and so on.

LC100-A has four measuring range position:

1. C rangeCapacitance (0.01pF-10uF)

2. L rangeInductance (0.001uH-100mH)

3. Hi.L rangeHigh inductance (0.001mH-100H)

4. Hi.C rangeHigh capacitance range (1uF-100mF)

Automatic measuring ranges, it is easy to operate.

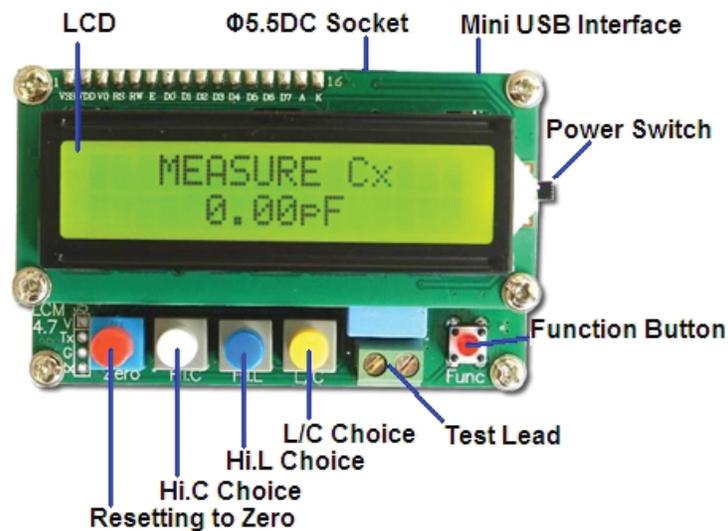
Specifications are as follows:

1. Technical data: :

	Item	Parameter
Capacitance Accuracy	0.01pF-1pF	5%
	1pF-1uF	1%
	1uF-10uF	5%
Min Capacitance Resolution (C Files)		0.01pF
Inductance Accuracy	0.001uH-1uH	5%
	1uH-100mH	1%
Min Inductance Resolution (L Files)		0.001uH
High Inductance Accuracy	100mH-1H	1%
	1H-100H	5%

Min Resolution of High Inductance (HL Files)		0.001mH
High Capacitance Accuracy	1uF-100mF	5%
Min Resolution of High Capacitance (HC Files)		0.01uF
Frequency	L Files、 C Files	Abt. 500kHz
	HL Files	Abt. 500Hz
Measuring mode		LC Resonance
Display mode		1602 LCD
Display digit		4
Power Connections		Mini USB & Φ5.5DC Socket
Supply Voltage		5V

2. Picture



Function of five buttons:

Red: Reset (Momentary Push Button)

White: High Capacitance Hi.C Choice (Alternate Action)

Blue: High Inductance Hi.L Choice (Alternate Action)

Yellow: L/C (Alternate Action)

Red Mini: Function button

Details as follows (Press "1", Release "0", "X" random)

LC100-A Function table

Hi.C	Hi.L	L/C	Corresponding function
0	0	0	Small Capacitance(C)
0	0	1	Small Inductance(L)
0	1	1	High Inductance (HL)
0	1	0	Invalid
1	X	X	High Capacitance (HC)

3. Direction for use

(1). Switch on the L/C Meter

(2). Choose the corresponding Switch configuration,
inductance: Lx, capacitance: Cx, High inductance: Hi.L,
High capacitance: Hi.C.

A: Display shows as follows (testing terminal open)

Inductance: "MEASURE Lx" " " "OVER RANGE"

Capacitance: "MEASURE Cx"	0.00pF
High inductance: "MEASURE Hi.L "	OVER RANGE
High capacitance: "MEASURE Hi.C"	0.00pF

Display as follows (testing terminal shorted):

High inductance: "MEASURE Hi.L"	0.000mH
Inductance: "MEASURE Lx"	0.000uH
Capacitance: "MEASURE Cx"	OVER RANGE

(3). If the measured value of capacitance is not be "0" with the test terminals open;
or when the inductance is not "0" with the test terminals are shorted,
You can reset to "0" as follows

(a) Capacitance mode

Press red button with the test terminals open, it displays "CALCULATING...", keep pressing for one second, when "CALCULATING...OK" is displayed, release the red button, Resetting to "0" is finished, and "0.00pF" is displayed, Capacitances can now be measured.

(b) Inductance mode

Press red button with test terminals shorted, it displays "0.000uH" or "0.000mH", Inductance can now be measured.

(4). Press the Mini Red function button as results are displayed, and corresponding frequency will be displayed.

4. Notes:

1. Please reset to “0” before testing a capacitance or an inductance, or errors may be appeared. Even if “0” displayed before measuring, resetting to “0” is needed.
2. At the time of resetting to “0”, when “CALCULATING...OK” appears, please keep holding button for 2 to 3 seconds, and “<DATA SAVED>” will be displayed. Now release button.
3. DO NOT Reset to “0” while components are being measured. If you do it, please shut down immediately and restart, then reset to “0”.
4. The test time of a large capacitance (above 10mF) may be as long as seven to eight seconds (100mF).
5. DO NOT measure a capacitance which is not discharged, otherwise it may damage the meter.
6. DO NOT Use different (Longer) test leads other than those supplied
Longer Leads can affect the accuracy of the meter

5. Package content

1. LC100-A L/C Meter.....1
2. Test Leads.....1
3. USB Cable Type A Male to mini B Male.....1