LC100-A Digital L/C Meter

Inductance Capacitance Meter

User Manual

Features:

Based on the L/C resonance principle
High speed microcontroller's precision computation
Measuring range below 1uH and 1pF
Especially qualify in microwave manufacture and measuring switching power supply transformer, filter inductance and so on.

LC100-A has four measuring range position:

1. C range .....Capacitance (0.01pF-10uF)
2. L range .....Inductance (0.001uH-100mH)
3. Hi.L range .....Big inductance (0.001mH-100H)
4. Hi.C range .....Big capacitance range (1uF-100mF)

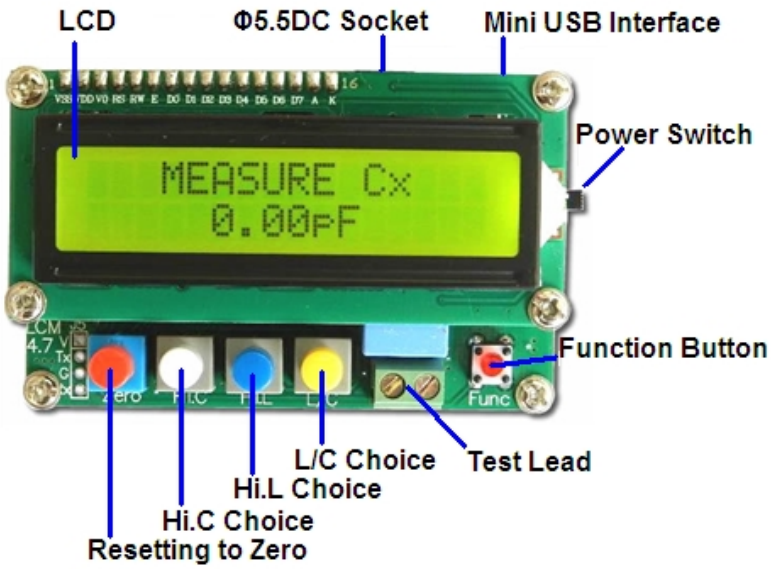
All files position are automatic measuring ranges, it is easy to operate. Specification is as follows:

1. Technique 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**
Big Inductance Accuracy	**100mH-1H**	**1%**
	1H-100H	**5%**

Min Resolution of Big Inductance （HL Files）		**0.001mH**
Big Capacitance Accuracy	**1uF-100mF**	**5%**
Min Resolution of Big 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**
Interface		**Mini USB & Φ5.5DC Socket**
Supply Voltage		**5V**

2. Picture



Function of five buttons:

Red: Reset

Write: Big Capacitance Hi.C Choice (With self-locking)

Blue: Big Inductance Hi.L Choice (with self-locking)

Yellow: L/C(with self-locking)

Black: 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**	Big Inductance (HL)
0	**1**	**0**	Error，please modify
1	**X**	**X**	Big Capacitance (HC)

Interface: Mini USB & 5.5DC Socket (inner: positive pole, outer: negative pole)

3. Direction for use

(1). Switch on the L/C Meter

(2). Chose the corresponding files, inductance: Lx, capacitance: Cx, big inductance: Hi.L, big capacitance: Hi.C. Display as follows (testing terminal open loop) ：

Inductance：MEASURE Lx OVER RANGE

Capacitance：MEASURE Cx 0.00pF

Big inductance：MEASURE Hi.L OVER RANGE

Big capacitance：MEASURE Hi.C 0.00pF

Display as follows(testing terminal short circuit):

Big inductance：MEASURE Hi.L 0.000mH

Inductance：MEASURE Lx 0.000uH

Capacitance：MEASURE Cx OVER RANGE

(3). When testing terminal open loop the measured value of capacitance is not “0”, or witch of the inductance is not “0” as the testing terminal short circuit, you can reset to “0” by ways of capacitance model and inductance model, as follows:

(a) Capacitance model

Press red button as testing terminal open loop, it displays “CALCULATING…”, keep pressing for one second, when “CALCULATING…OK” displayed,release the red button,resetting to “0” is finished, and “0.00pF” is displayed, then capacitances can be measured.

(b) Inductance model

Press red button as testing terminal shirt circuit, it displays “0.000uH” or “0.000mH”, and then inductances can be measured.

(4). Please press black function button as results displayed, and

corresponding frequency will be displayed.

4. Note:

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” appeared, please keep pressing for 2 to 3 seconds, and the parameter written to “<DATA SAVED>” will be prompted, then release.
3. Resetting to “0” is forbidden as components are being measured. If you do it, please shut down immediately and restart, then reset to “0”.
4. The time of measuring a big capacitance (above 10mF) may be more than one second, and it needs seven to eight seconds to get the measured value of the capacitance (100mF).
5. Forbid to measure a capacitance which is not discharged, otherwise it may damage the mainframe.

5. Package content

1. LC100-A L/C Meter……1
2. mini USB cable ……1