

DIGITAL L C METER 6243

1. GENERAL CHARACTERISTIC

- 3 1/2 LCD, with maximum display 1999, digit height 25mm;
- Over range indicate, only figure "1" display;
- Auto-zero, except 2000pF, type value is about 6pF;
- Operating temperature: 0°C ~ 40°C, R.H. <75%;
- Storage temperature: -10°C ~ 50°C;
- Low battery indication: symbol "⎓" is displayed;
- Power supply: one 9V battery, type 6F22, 1604;
- Dimension: 188×91×32mm;
- Weight: approx 300g.

2. SPECIFICATION

Accuracy is given as \pm (% of maximum reading + number of least significant digits) for one year, at 23°C \pm 5°C, R.H <75%

Zero adjust: capacitance at 2000pF range < 6pF
inductance at 2mH(input short circuit condition)< -10uH

If the value being measured exceeds the maximum value of the range selected, an over range indication "1" will be displayed and function range selector must be set to a higher range.

If display value has one or more zero at higher digit, please set the range selector to a lower range, for getting a more accurate value.

a) Inductance

Range	Resolution	Accurate
2mH	1uH	$\pm(2.0\%+5)$
20mH	10uH	
200mH	100uH	
2H	1mH	$\pm(2.5\% +5)$
20H	10mH	

uH= micro-Henry(10^{-6} H)

mH= milli-Henry(10^{-3} H)

b) Capacitance

Range	Resolution	Accurate
2000pF	1pF	$\pm(1.5\% +5)$
20nF	10pF	
200nF	100pF	
2uF	1nF	
20uF	10nF	$\pm(2.5\% +5)$
200uF	100nF	

pF= pico-Farad(10^{-12} F)

nF= nano-Farad(10^{-9} F)

uF= micro-Farad(10^{-6} F)

3. PRECAUTION & PREPARATION FOR MEASUREMENT

- This meter is design for measuring the value of

Inductance and Capacitance only, can not be used for measuring a Resistor's inductance value or capacitance value, or will get a wrong value.

- Please switch power off before measuring online parts, and clear away all self-oscillation before connecting test leads.

- All capacitance must be discharged before measuring.

4. METHOD OF MEASURE INDUCTANCE

- Set the range selector to proper range.
- Connect the Inductance to input socket or test leads.

- Read the digit from LCD and range unit(mH or H), it's the measurement value.

➤ If measure a unknown inductance, set range selector to 2mH range, and then change to a higher range, until display the value.

➤ Use a shortest test lead to measure a low value inductance, for getting more accurate value.

5. METHOD OF MEASURE CAPACITANCE

- Set the range selector to proper range.
- Connect the capacitance to input socket or test leads.

- Read the digit from LCD and range unit(pF. nF. uF). It's the measurement value.

➤ If measure a unknown capacitance, set range selector to 2000pF range, and than change to a higher range, until display the value.

➤ Use a shortest test lead to measure a low value capacitance, for getting more accurate value.

➤ When use a test lead, note it has an additional value to the measurement value, so please open the test lead, and measure the value of the test lead, write down this value and reduce this value at the result.

➤ All capacitance range will display zero, when the capacitance being measure is open circuit.

➤ All capacitance range will display over range, when the capacitance being measured is short circuit.

➤ When change the ranger, and the measurement value has no-linearity, the capacitance being measured is bad.

6. MAINTENANCE

- Set the range selector to OFF position, when meter not in use.

- Remove the battery when you don't plan to use it for a long time.

- When symbol "⎓" displays, please replace battery.