

# CM9601A Digital Capacitance Meter

## INSTRUCTION MANUAL





### 1. GENERAL SPECIFICATIONS

Measuring Method: Dual-Slope integration A/D converter system Display Method: LCD Maximum Display: 1999 counts (3 1/2 digits) with automatic polarity indication Over-range Indication: "1" figure only in the display Low-Battery Indication: Automatic low-battery detection IIII Measurement Rate: updates 2~3 sec Zero Adjust: manual-zeroing, about ± 20pF. Operating Temperature: 0°C^~40C / 0~80% R.H. Storage temperature: -10°C' ~ +50°C /0~70% R.H. Power Supply: 9V battery (IEC 6F22, NEDA 1604, JIS 006p) Dimensions: 191L X 89W X 35H mm

Accessories: Test leads (pair) Crocodile style clips

Range	Resolution	Accuracy	Test Frequency
200pF	0.1pF	±(0.5%+7dgt)	
2nF	1pF		
20nF	10pF		800Hz
200nF	100pF	±(0.5%+5dqt)	
2uF	1nF	±(0.070100gt)	
20uF	10nF		80Hz
200uF	100nF		
2000uF	1uF	±(2%+5dgt)	8Hz
20mF	10uF	±(3%+10dgt)	

#### 2. SAFE USE WARNING

2.1 Be sure that the battery and fuse are correctly placed.

2.2 The tested capacitor should be discharged before the testing procedure.

2.3 The polarity of the tested capacitor must be the same as the input terminal.

2.4 Never apply voltage to the input terminal, serious damage may result.

2.5 Don't short-circuit two input terminals or the unit will lose power energy and over-range.

2.6 If the value of the tested capacitor is unknown before the test, set the Function-range switch to the lowest range and work up.

#### 3. OPERATION INSTRUCTIONS

3.1 Set the function range to the proper range.

3.2 Measuring the low capacitor, please adjust "ZERO ADJ" for reading accuracy.

3.3 Connect the test capacitor to the input socket or the test leads.

3.4 When only figure "1" is displayed, over the range is indicated and the Function-range switch has to be set to a higher range. When the figure "0" is displayed at seniority, set the function range to a lower range for higher resolution and accuracy. NOTE:

 If the test capacitor is short, it will be over-range, and only figure "1" is displayed; for soaking-out capacitor, the reading will high its value; the open-circuit capacitor, will display "0". (maybe±10pF at the 200pF range)

2) Display value will fluctuate if a soaking-out capacitor is connected.

3) If using other leads measure capacitor, leads will appear as a value, please keep in mind before measuring; that it would be substrate from the displayed value.

#### 4. BATTERY REPLACEMENT

If the sign " $\begin{bmatrix} n \\ + \\ - \end{bmatrix}$ " appear on the display, it indicates battery should be replaced. Remove screws and open the back case, replace the exhausted battery with new batteries (NEDA 1604, 6F22 or equivalent).

#### 5. FUSE REPLACEMENT

The unit uses a self-restoring fuse, after a fault the fuse will correct itself and return to normal use. If the fuse needs to be replaced only use fuse:  $200\text{mA} 250V \ \varphi 5^{*}20$ .

# WARRANTY

This Instrument is warranted to be free from defects in material and workmanship for a period of one year. Any instrument found defective within one year from the delivery date and returned to the factory with transportation charges prepaid, will be repaired, adjusted, or replaced at no charge to the original purchaser. This warranty does not cover expandable items such as batteries & fuses. If the defect has been caused by a misuse or abnormal operating conditions, the repair will be billed at a nominal cost.

### www.everwellparts.com 10914 NW 33rd St, Miami, FL 33172

Phone: +1 (305) 406-2331 Fax: +1 (305) 406-2338 Email: info@everwellparts.com