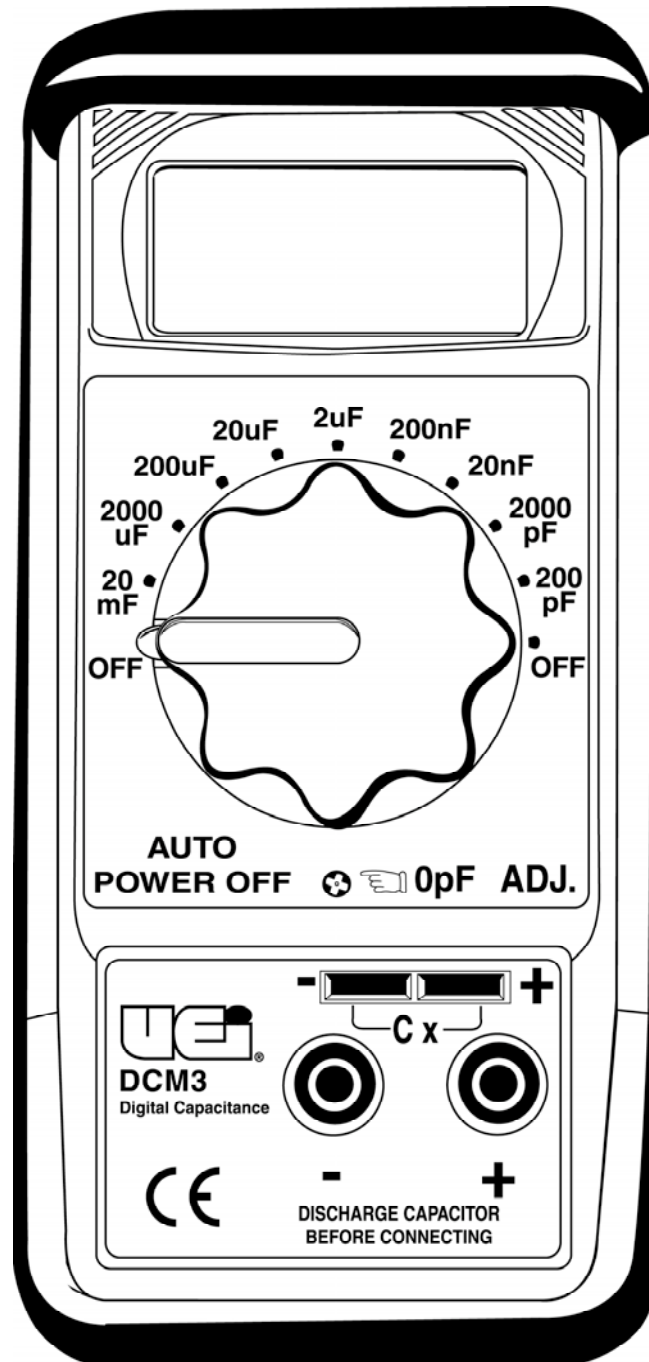




Introduction

The DCM3 Digital Capacitance Meter offers solid value in an industrial quality meter. The wide range of inputs allows testing from the smallest electronic components to large run/start capacitors. The rugged design with protective boot and auto power off function keep your meter working.

Features include

- 0.1% to 20 mF (20,000 μ F)
- Zero adjustment (± 20 pF for compensation of the measuring leads)
- Fuse protected input

Specifications

Auto power off:	After meter operation approx. 10 minutes, auto power off circuit.
Test Voltage:	<3.5 V
Input protection:	0.25 A/250 V fast action fuse.
Zero adjust limited:	± 20 pF approx.
Shock proof:	New structure, shock proof from 3 meter drop.
Display:	3 1/2 digit liquid crystal display (LCD) with maximum reading of 1999.
Polarity:	Automatic, positive implied, negative polarity indication.
Overrange:	[1] or [-1] is displayed.
Zero:	Automatic.
Low battery indication:	The "  " is displayed when the battery voltage drops below the operating level.
Measurement rate:	2.5 times per second.
Operation environment:	0°C ~ 60°C at 70% relative humidity.
Storage temperature:	-20°C ~ 60°C, 0 to 80% R.H. with battery removed.
Accuracy:	Stated accuracy at 23°C $\pm 5^\circ$ C, < 75% relative humidity.
Power:	Single standard 9 volt battery (NEDA 1604 pr JIS 006P).
Battery life:	200 hours typical with carbon-zinc.
Dimension:	150 mm (H) x 70 mm (W) x 38 mm (D).
Weight:	Approx. 170g including battery.
Accessories:	One pair test leads, 9V battery, operating instructions.

Characteristics

Range	Resolution	Accuracy	Test Frequency
200pF	0.1 pF	$\pm 1\% \text{rdg} + 3 \text{dgt}$	820Hz
2000pF	1 pF		
20nF	10 pF		
200nF	100 pF		
2 μ F	1 nF		
20 μ F	10 nF		
200 μ F	100 nF	$2\% \text{rdg} + 3 \text{dgt}$	8.2Hz
2000 μ F	1 μ F		
20mF	10 μ F		
		$4\% \text{rdg} + 9 \text{dgt}$	

Operating Instructions



WARNING!

To avoid electrical hazards, discharge the capacitor before measuring.

1. For capacitance measurement less than 200nF, it should make "0-ADJ" for subtract the stray capacitance.
2. Set the range switch to the desired range.
3. Never apply an external voltage to the input terminals. Damage to the meter may result.
4. Observe polarity when measuring polarized capacitors.
5. Insert the capacitor leads into the receptacle socket or directly connect the test clip to the capacitor leads as required.
6. Read the capacitance direct from the display

Battery Replacement

Power is supplied by a 9 volt transistor battery. (NEDA 1604, IEC6F22). The "  " appears on the LCD display when replacement is needed. To replace the battery, remove the two screws from the back of the meter and lift off the front case. Remove the battery from battery contacts.

Fuse Replacement

If no current measurements are possible, check for a blown overload protection fuse. There is a fuse; F1 for the "Cx +" jack. For access to fuses, remove the two screws from the back of the meter and lift off the front case. Replace F1 only with the original type 0.25A/250V fuse.



Capacitance Meter

Limited Warranty

The DCM3 is warranted to be free from defects in materials and workmanship for a period of one year from the date of purchase. If within the warranty period your instrument should become inoperative from such defects, the unit will be repaired or replaced at UEi's option. This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, tampering, accident, misuse, abuse, neglect or improper maintenance. Batteries and consequential damage resulting from failed batteries are not covered by warranty.

Any implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the express warranty. UEi shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses or economic loss. A purchase receipt or other proof of original purchase date will be required before warranty repairs will be rendered. Instruments out of warranty will be repaired (when repairable) for a service charge. Return the unit postage paid and insured to:

1-800-547-5740 • FAX: (503) 643-6322

Service: (800) 308-7709

www.ueitest.com • Email: info@ueitest.com

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.