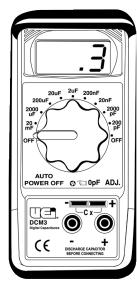


INSTRUCTION MANUAL



DCM3

eter

**Japacitance** 

1-800-547-5740 • Fax: (503) 643-6322 www.ueitest.com • email: info@ueitest.com

# 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

- 0.1 pF to 20 mF (20,000 μF)
- 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 crys- tal 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 " triangle for the second sec	
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 ±5°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	0.1pF		
2000pF	1pF		
20nF	10pF		
200nF	100pF	±1%rdg + 3dgt	820Hz
2uF	1nF		
20uF	10nF		82Hz
200uF	100nF		
2000uF	1uF	2%rdg + 3dgt	8.2Hz
20mF	10uF	4%rdg + 9dgt	

### Operation



To avoid electrical hazards, discharge the capacitor before measuring.

- 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.
- Never apply an external voltage to the input terminals. Damage to the meter may result.
- 4. Observe polarity when measuring polarized capacitors.



### **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 UE'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:

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

- 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 "p" 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 ia a fuse; F1 for the "Cx +" jack. For access to fuses, remove the two screws form the back of the meter and lift off the front case. Replace F1 only with the original type 0.25A/250V fuse.