

Qservice - DM501 Sample - Qservice

**TEKTRONIX®**



**INSTRUCTION MANUAL**

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Serial Number \_\_\_\_\_

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# OPERATING INSTRUCTIONS

## INTRODUCTION

### Instrument Description

The DM 501 Digital Multimeter measures DC and AC voltage and current, resistance and temperature. The AC functions respond to average values, and display RMS values. A single front-panel control selects all functions and ranges. A push button selects front panel input or rear interface connector input. Temperature measurements are made using a TEKTRONIX P6058 Probe (Part No. 010-0260-00) or other suitable sensing devices. Option 1 instruments are shipped without the P6058 probe. Front-panel pin jacks provide external temperature readout, independent of the function being displayed. An internal switch selects degrees calibration in either Centigrade or Fahrenheit. Option 2 instruments delete the temperature measuring capability.

The readout is a 4 1/2-digit stored display using seven-segment LED's. The decimal point is automatically positioned by the RANGE/FUNCTION switch and leading zeros (those to the left of the decimal point or most significant digit) are blanked. Polarity indication is auto-

matic. A blinking display indicates overrange. Serial BCD output is available at the rear interface connector.

### Installation and Removal

The DM 501 is calibrated and ready for use when received. It operates in any compartment of a TM 500 Series Power Module. See the Power Module instruction manual for line voltage requirements and Power Module operation. Fig. 1-1 shows the DM 501 installation and removal procedure.

#### CAUTION

*Turn the Power Module off before inserting the plug-in, otherwise, damage may occur to the plug-in circuitry. Check that the DM 501 is fully inserted in the Power Module. Pull the PWR switch on the Power Module. One or more characters in the LED display should now be visible.*

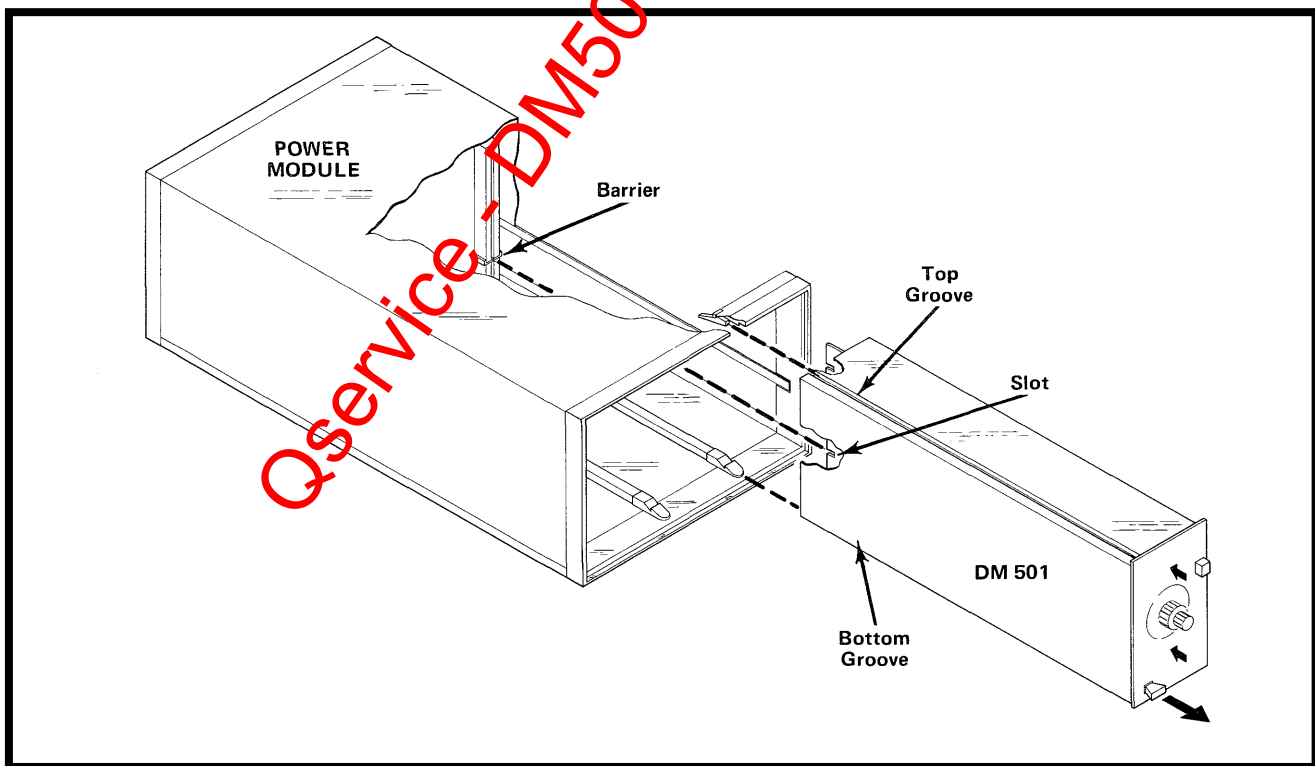


Fig. 1-1. DM 501 Installation and Removal.



# SERVICE INFORMATION

## SYMBOLS AND REFERENCE DESIGNATORS

### Symbols and Reference Designators

Electrical components shown on the diagrams are in the following units unless noted otherwise:

- Capacitors = Values one or greater are in picofarads (pF).  
 Values less than one are in microfarads ( $\mu$ F).
- Resistors = Ohms ( $\Omega$ )

Symbols used on the diagrams are based on ANSI Y32.2 – 1970.

Logic symbology is based on MIL-STD-806B in terms of positive logic. Logic symbols depict the logic function performed and may differ from the manufacturer's data.

The following special symbols are used on the diagrams:

