

TECHNICAL MANUAL

OPERATOR'S AND ORGANIZATIONAL  
MAINTENANCE MANUAL

VOLTMETER, ELECTRONIC

ME-202C / U

(NSN 6625-00-972-4046)

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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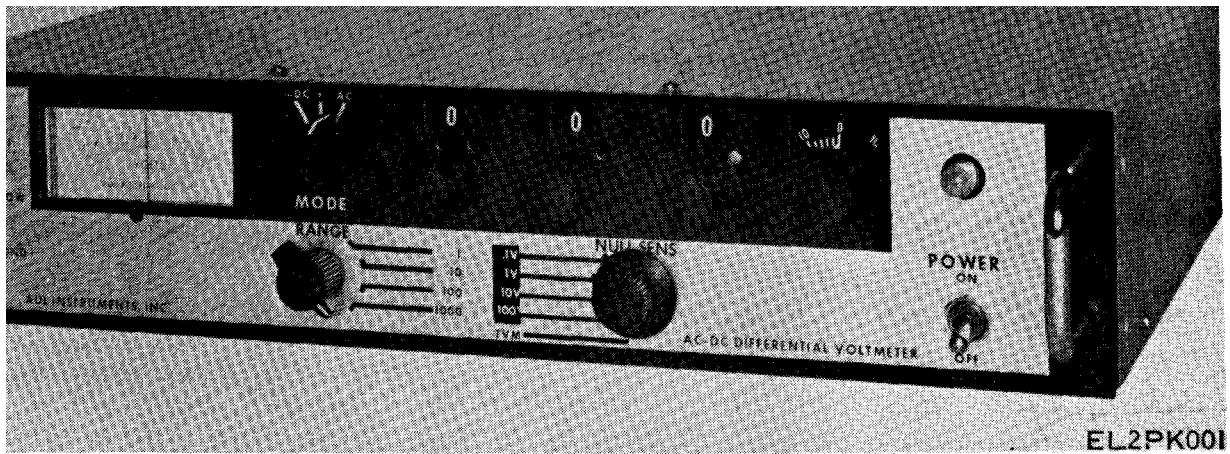


Figure 1-1. Voltmeter, Electronic ME-202C/U.

# CHAPTER 1

## INTRODUCTION

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### Section I. GENERAL

#### 1-1. Scope

This manual describes Voltmeter, Electronic ME-202C/U (voltmeter) and covers its installation, operation, and maintenance. It includes instructions for operation, cleaning, and inspection of the equipment. As an aid to the operator and organizational maintenance personnel, a limited discussion on the functioning of the equipment is given in chapter 5. Maintenance tasks are not authorized at the direct support or general support levels. All repair is authorized at the depot level only.

#### 1-2. Indexes of Publications

*a. DA Pam 310-4.* Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

*b. DA Pam 310-7.* Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

#### 1-3. Forms and Records

*a. Reports of Maintenance and Unsatisfactory*

*Equipment.* Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

*b. Report of Packaging and Handling Deficiencies.* Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A and DSAR 4145.8.

*c. Discrepancy in Shipment Record (DISREP) (SF 361).* Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33A/ARC 75-18/MCO P4610.19B and DSAR 4500.15.

#### 1-4. Administrative Storage

For procedures, forms and records, and inspections required during administrative storage of this equipment, refer to TM 740-90-1.

#### 1-5. Destruction of Army Electronics Materiel

Destruction of Army electronics materiel to prevent enemy use shall be as prescribed in TM 750-244-2.

### Section II. DESCRIPTION AND DATA

#### 1-6. Purpose and Use

(fig. 1-1)

The voltmeter is used for accurately measuring direct current (dc) and alternating current (ac) voltage levels. The dials of the instrument permit measurements to be resolved to 5 digits. The voltmeter is equipped with a recorder (dc) output which may be connected to auxiliary meters or strip-chart recorders.

#### 1-7. Description

The voltmeter is a solid state type with the ac voltage readout calibrated in terms of the root-mean-square (rms) voltage of a sine wave. The instrument is capable of measuring + or - dc and ac voltages from 1 volt full scale to 1,000 volts full scale through

a frequency range of 5 Hertz (Hz) to 100 Kilohertz (kHz).

#### 1-8. Tabulated Data

Technical data for Electronic Voltmeter ME-202C/U is as follows:

##### NOTE

All specifications apply to differential mode of operation unless otherwise specified.

*a. Input:*

(1) *Ranges.* 1, 10, 100, 1000 VAC and  $\pm$ DC, each with 10% overranging capability.

(2) *Dc resistance.* Infinite at null from 0 to 1100 vdc.

(3) *Ac impedance.* 1 megohm, 20 picofarads (pf).