TECHNICAL MANUAL

OPERATOR'S AND ORGANIZATIONAL
MAINTENANCE MANUAL

VOLTMETER, ELECTRONIC

ME-202C / U

(NSN 6625-00-972-4046)

HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1976
REPORTING OF ERRORS

You can improve this manual by recommending improvements using DA Form 2028-2 (Test) located in the back of the manual. Simply tear out the self-addressed form, fill it out as shown on the sample, fold it where shown, and drop it in the mail.

If there are no blank DA Form 2028-2 (Test) in the back of your manual, use the standard DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward to the Commander, US Army Electronics Command, ATTN: DRSEL-MA-Q, Fort Monmouth, New Jersey 07703.

In either case a reply will be furnished direct to you.
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CHAPTER 1
INTRODUCTION

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.

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
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:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input:</td>
<td></td>
</tr>
<tr>
<td>(1) Ranges</td>
<td>1, 10, 100, 1000 VAC and ±DC, each with 10% overranging capability.</td>
</tr>
<tr>
<td>(2) Dc resistance</td>
<td>Infinite at null from 0 to 1100 vdc.</td>
</tr>
<tr>
<td>(3) Ac impedance</td>
<td>1 megohm, 20 picofarads (pf).</td>
</tr>
</tbody>
</table>