

**TM 11-6625-524-14-4**

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**TECHNICAL MANUAL**

**OPERATOR'S, ORGANIZATIONAL,  
DIRECT SUPPORT AND GENERAL SUPPORT  
MAINTENANCE MANUAL**

**FOR**

**VOLTMETER, ELECTRONIC AN/URM-145D  
(MILLIVAC INSTRUMENTS MODEL MV-828A)  
(NSN 6625-01-119-7271)**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

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OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,  
 AND GENERAL SUPPORT MAINTENANCE MANUAL  
 FOR  
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 (MILLIVAC INSTRUMENTS MODEL MV-828A)  
 (NSN 6625-01-119-7271)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications or Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Communications - Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703.

In either case, a reply will be furnished direct to you.

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This manual is an authentication of the manufacturer's commercial literature which, through usage, has been found to cover the data required to operate and maintain this equipment. Since the manual was not prepared in accordance with military specifications and AR-310-1, the format has not been structured to consider levels of maintenance.

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## CHAPTER 1 INTRODUCTION

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### Section I. GENERAL

#### 1-1 SCOPE

This manual describes Voltmeter, Electronic AN/URM-145D and provides operator and maintenance instructions, testing procedures and schematic diagrams.

#### 1-2 CONSOLIDATED INDEX OF ARMY PUBLICATIONS AND BLANK FORMS

Refer to the latest issue of DA Pam 310-1 to determine whether there are new editions, changes, or additional publications pertaining to this equipment.

#### 1-3 MAINTENANCE FORMS, RECORDS, AND REPORTS

a. Reports of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those described by TM 38-750, The Army Maintenance System.

b. Report of Packaging and Handling Deficiencies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73A/AFR 400-54/MCO 4430.3F.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF361) as prescribed in AR 55-38/NAVSUPINST 4610.33C/AFR 75-18/MCO P4610.19D/DLAR 4500.15.

#### 1-4 REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your AN/URM-145D needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368(Quality Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth NJ 07703. We'll send you a reply.

#### 1-5 ADMINISTRATIVE STORAGE

Administrative storage of equipment issued to and used by Army activities shall be in accordance with TM 740-90-1.

#### 1-6 DESTRUCTION OF ARMY ELECTRONICS MATERIEL

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

### Section II. Description and Data

#### 1-7 DESCRIPTION AND USE

a. Voltmeter, Electronic AN/URM-145D is a sensitive, wide band instrument for the measurements of voltages from 100 microvolt ( $\mu\text{V}$ ) to 3 volts (V) spanning a frequency range of 20 kilohertz (KHz) to 600 megahertz (MHz).

b. The general purpose probe supplied employs a fullwave germanium diode detecting circuit. In the square-law region(100 $\mu\text{V}$  to 30mV) the voltmeter is true RMS responding. In the transition region(30mV to 1V)the characteristics of the probe's detecting circuit changes gradually from RMS to peak. In the linear region (1V to 3V) the voltmeter is peak responding.