DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE MANUAL, VOLTMETER, ELECTRONIC AN/ USM-98A

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WARNING

DANGEROUS VOLTAGES EXIST IN THIS EQUIPMENT

Be careful when working on the 115-volt ac line connections. Serious injury or death may result from contact with these terminals.

DON'T TAKE CHANCES!

This copy is a reprint which includes current pages from Changes 1 through 4.

	Paragraph	Page
CHAPTER 1. INTRODUCTION		
Section I. General		
Scope	1-1	5
Index of equipment publications	1-2	5
Forms and records	1–3	5
II. Description and data		
Purpose and use	1-4	5
Technical characteristics	1-5	5
Components of Voltmeter, Electronic AN/USM-98A	1-6	6
CHAPTER 2. INSTALLATION AND OPERATING INSTRUCTIONS		
SECTION I. Service upon receipt of equipment		
Unpacking	2–1	9
Checking unpacked equipment	2-2	9
II. Operator's controls and indicators, and operation under usual conditions		
Voltmeter, Electronic AN/USM-98A operating controls and indicators	2–3	9
Types of operation	2–4	12
Starting procedure	2–5	12
Vacuum-tube voltmeter operation	2-6	13
Differential voltmeter operation	2–7	13
Observing voltage excursions	2–8	14
Recording voltage excursions	2–9	15
Measuring high resistance	10	15
CHAPTER 3. MAINTENANCE INSTRUCTIONS		
Scope of maintenance	3–1	17
Preventive maintenance	3–2	17
Preventive maintenance checks and services periods	3-3	17
Daily preventive maintenance checks and services chart	3-4	17
Weekly preventive maintenance checks and services chart	3-5	18
Monthly preventive maintenance checks and services chart	3-6	18
Quarterly preventivem maintenance checks and services chart	3-7	18
Cleaning	3–8	19
Touchup painting instructions	3–9	19
Visual inspection	8-10	19
Equipment performance checklist	3-11	20
Replacement of fuse	3-I2	20
Replacement of tubes	3-13	20
Replacement of decimal point indicator lamp	3–14	21
CHAPTER 4. SHIPMENT, LIMITED STORAGE, AND DEMOLITION TO PREVENT ENEMY USE		
Section I. Shipment and limited storage		
Disassembly of equipment	4-1	23
Repackaging for shipment or limited storage	4-2	23
Handling, storage, and disposal of radioactive material	4–3	23
II. Demolition of materiel to prevent enemy use		
Authority for demolition	4–4	23
Methods of destruction	4-5	23
APPENDIX I. REFERENCES		25
II. MAINTENANCE ALLOCATION		26
III. BASIC ISSUE ITEMS LIST		30
GLOSSARY		32

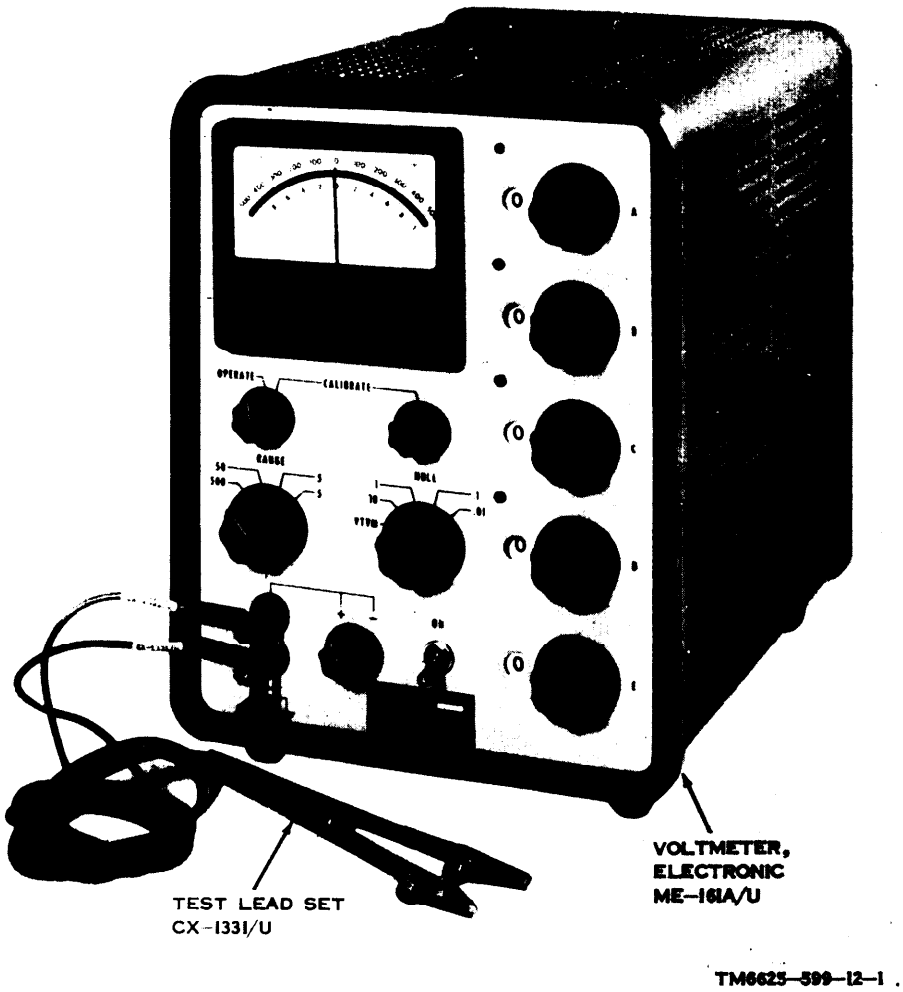

Figure 1. Voltmeter, Electronic AN/USM-98A, less tow-prong adapter and technical manuals.

CHAPTER 1
INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes Voltmeter, Electronic AN/USM–98A (fig. 1) and covers its operation, adjustment, and operator and organizational maintenance. It includes operation under usual conditions, cleaning and inspection of the equipment, and replacement of parts available to the operator and organizational repairman. Throughout this manual, Voltmeter, Electronic AN/USM–98A will be referred to as the vacuum-tube voltmeter (vtvm).

b. The organizational repair parts and special tools list will appear in TM 11-6625–599–20P.

1-2. Index of Equipment Publications

Refer to the latest issue of DA Pam 310–4 to determine whether there are new editions, changes, or additional publications pertaining to your equipment. Department of the Army Pamphlet No. 310–4 is an index of current technical manuals, technical bulletins, supply manuals (types 4, 6, 7, 8, and 9), supply catalogs (type CL), supply bulletins, lubrication orders, and modification work orders that are available through publications supply channels. The index lists the individual parts (-10, -20, -35P, etc) and the latest changes to and revisions of each equip-merit publication.

1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Use equipment forms and records in accordance with instructions in TM 38–750.

b. Report of Damaged or Improper Shipment. Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700-58 (Army), NAVSANDA Publication 378 (Navy), and AFR 71–4 (Air Force).

c. Reporting of Equipment Manual Improvements. The direct reporting, by the individual user, of errors, omissions, and recommendations for improving this equipment manual is authorized and encouraged. DA Form 2028 will be used for reporting these improvements. This form may be completed by use of pencil, pen, or typewriter. DA Form 2028 will be completed in triplicate and forwarded by the individual using the manual. The original and one copy will be forwarded direct to: Commanding General, U.S. Army Electronics Command, ATTN: AMSEL-MR-MA, Fort Monmouth, New Jersey 07703. One information copy will be furnished to the individual's immediate supervisor (officer, noncommissioned officer, supervisor, etc).

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

The vtvm is a portable, precision test equipment, used to measure voltages between 0 and 500 volts direct current (dc) and resistances between 1 and 500,000 megohms. Voltages may be measured by use of the vtvm either as *a.* vacuum-tube voltmeter 01. as a differential voltmeter.

1-5. Technical Characteristics

a. Specifications When Used as Vacumn Tube Voltmeter (NULL switch in VTVM position).