

**TECHNICAL MANUAL**

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

**SIGNAL GENERATOR  
AN/USM-205A**

**(NSN 6625-01-007-4796)**

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 MAINTENANCE MANUAL

SIGNAL GENERATOR AN/USM-205A

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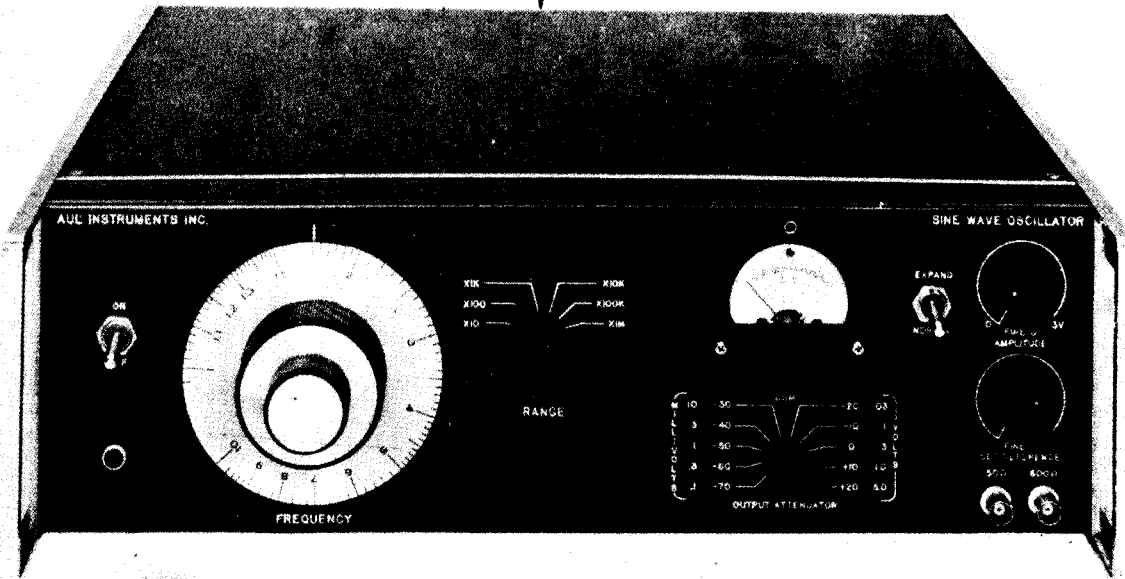
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SIGNAL GENERATOR SG-553A/U



RACK MOUNTING KIT

ELECTRICAL DUMMY LOAD  
DA-471/U

EL6625-2644-14-TM-1

Figure 1-1. Signal Generator AN/USM-205A.

# CHAPTER I INTRODUCTION

## Section I. GENERAL

### 1-1. Scope

This manual describes Signal Generator AN/USM-205A which is comprised of Signal Generator SG-553A/U and Dummy Load, Electrical DA-471/U (fig. 1-1) and covers the installation, operation, operator's organizational, and general support maintenance instructions for the equipment. Maintenance allocations, test equipment and repair parts and special tools are listed in the appendixes to this manual.

### 1-2. Index of Technical Publications

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.

### 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 prescribed by TM 38-750, The Army Maintenance Management 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 4355.73/AFR 400-54/MCO 4430.3E.

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

### 1-4. 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 or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. In either case, a reply will be furnished direct to you.

### 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.

### 1-6.1. Reporting Equipment Improvement Recommendations (EIR)

If your AN/USM 205A 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, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. We'll send you a reply.

## Section II. DESCRIPTION AND DATA

### 1-7. Purpose and Use

Signal Generator SG-533A/U (Signal Generator) part of AN/USM-205A is a general purpose generator used in electronics maintenance shops and laboratories. The unit can be used on a bench or may be rack mounted with the mounting kit provided. The unit is lightweight and may easily be transported if required. The SG-533A/U is used to provide sine wave test signals in the range of 10 hertz (Hz) to 10 megahertz (MHz) with an output level of up to 200 milliwatts into a 50-ohm load or 16 milliwatts into a 600-ohm load.

### 1-8. Description

The AN/USM-205A is a lightweight, compact unit, The power cord, line voltage selector switch and line

fuse are located on the back panel of the unit. All other operator controls, indicators, and connectors are located on the front panel. The items comprising an operable AN/USM-205A are listed in table 1-1.

### 1-9. Technical Characteristics

Frequency:

Range . . . . .	10 Hz to 10MHz, in 6 bands
Dial calibration. . . . .	.1.10
Dial accuracy. . . . .	.10 Hz to 100 Hz: ± 3%
	100 Hz to MHz: ± 2%
	1 MHz to 10 MHz: ± 3%
Distortion . . . . .	.10 Hz to 2 MHz: 1%
	2 MHz to 5 MHz: 2%
	5 MHz to 10 MHz: 4%