

TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT  
MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS  
(INCLUDING DEPOT REPAIR PARTS AND SPECIAL TOOLS LIST)

GENERATOR,  
SIGNAL  
AN/GRM-50C

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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**OPERATOR'S, ORGANIZATIONAL DIRECT SUPPORT,  
 AND GENERAL SUPPORT MAINTENANCE MANUAL  
 GENERATOR, SIGNAL AN/GRM-50C  
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# CHAPTER I INTRODUCTION

## Section I. GENERAL

### 1-1. Scope

This manual contains instructions for operator, organizational, direct support, and general support maintenance of Generator, Signal AN/GRM-50C. Also included is a discussion of the functioning of the signal generator.

### 1-2. Indexes of Publications

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

b. 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 DLAR 4145.8.

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 4610.33B/AFR 75-18/MCO P4610.19C and DLAR 4500.15.

#### 1-3.1. Reporting of Errors

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MA-Q, Fort Monmouth, New Jersey 07703. A reply will be furnished direct to you.

#### 1-3.2. Reporting Equipment Improvement Recommendations (EIR)

EIR's will be prepared using DA Form 2407, Maintenance Request. Instructions for preparing EIR's are provided in TM 38-750, the Army Maintenance Management System. EIR's should be mailed direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MA-Q, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

## Section II. DESCRIPTION AND DATA

### 1-4. Purpose and Use

(fig 1-1)

Generator, Signal AN/GRM-50C is a portable signal generator that consists of Generator, Signal SG479C/GRM-50 and Dummy Load, Electrical DA-296A/GRM-50. It is used to generate radio frequency signals from 50 kHz to 65 MHz. The radio frequency output is continuously adjustable from 0.1 microvolt (-127 dBm) to 3 VOLTS rms (+23 dBm) into a 50-ohm load. The radio frequency output can be amplitude-modulated internally up to 95% at either 400 Hz or 1 kHz, and externally from dc to 20 kHz.

### 1-5. Technical Characteristics

a. *Generator, Signal SG-479C/GRM-50.*  
 Frequency rang . . . . . Continuously tunable from 50 kHz to 65 MHz in 7 overlapping bands, use-

	able to 80 MHz.
Frequency accuracy . . . . .	1% accuracy over entire range with 0.01% accuracy at check points at 100-kHz intervals up to 6 MHz, and 1-MHz intervals up to the full range of the generator.
Frequency readout . . . . .	3-digit "NIXIE" *display plus overrange CAL X100 switch provides increased resolution.
Frequency stability . . . . .	At 1 volt or less output: 50 ppm or 5 Hz whichever is greater during a 10-minute period after a 2-hour warmup. Not more than 10

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