

TECHNICAL MANUAL

**OPERATOR'S AND ORGANIZATIONAL
MAINTENANCE MANUAL
FOR
SIGNAL GENERATORS
AN/URM-52
(NSN 6625-0-556-8107)
AN/URM-52A
(NSN 6625-00-592-5742)
AN/URM-52B
(NSN 6625-00-965-1501)**

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HEADQUARTERS, DEPARTMENT OF THE ARMY

JANUARY 1977



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FOR
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AN/URM-52
(NSN 66250-568107)
AN/URM-52A
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AN/URM-52B
(NSN 662-0965-1501)**

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 Forms 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, ATIN: DRSEL-MA-Fort Monmouth, New Jersey 0770&

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

			Paragraph	Page
CHAPTER	1.	INTRODUCTION		
Section	I.	General		
		Scope-----	1-1	1-1
		Indexes of publication-----	1-2	1-1
		Form and records-----	1-3	1-1
		Administrative storage-----	1-4	1-1
		Destruction of Army electronics materiel-----	1-5	1-1
		Reporting equipment improvement recommendation (EIR)	1-6	1-1
	II.	DESCRIPTION AND DATA		
		Purpose and use-----	1-7	1-1
		Description-----	1-8	1-1
		Differences between models-----	1-9	1-2
		Tabulated data-----	1-10	1-2
		Item comprising an operable equipment-----	1-11	1-3
Chapter	2.	SERVICE UPON RECEIPT AND INSTALLATION		
		Unpacking Signal Generator AN/URM62-----	2-1	2-1
		Initial inspection-----	2-2	2-1
		Preparation for use-----	2-3	2-1
Chapter	3.	OPERATING INSTRUCTIONS		
Section	I.	Controls, indicators, and connectors		
		Scope of procedures-----	3-1	3-1
		Adjusting output level of Signal Generator AN/URM2-----	3-2	3-6
Section	II.	Operation under usual conditions		

* This manual supersedes TM 11-6625-214-10, 13 October 1960, includes all changes, and organizational portions of TM 11-6625-214-24 14 October 1960, including all changes.

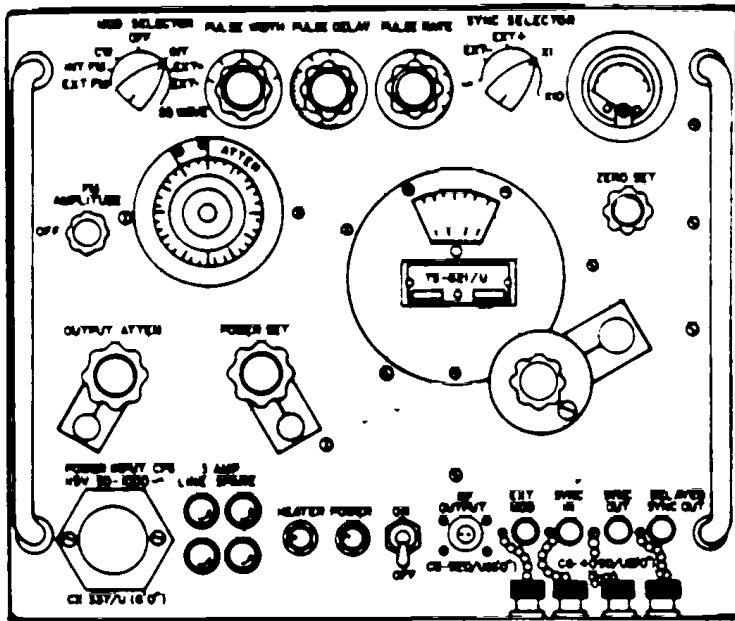
			Paragraph	Page
		Preliminary starting procedure-----	3-3	3-6
		Initial adjustments-----	3-4	3-6
		Operation procedure -----	3-5	3-6
		Turnoff procedure-----	3-6	3-8
Section	III.	Operation under unusual conditions		
		Operation in arctic climates-----	3-7	3-8
		Operation in desert climates -----	3-8	3-8
		Operation in tropical climates -----	3-9	3-8
Chapter	4.	OPERATOR'S AND ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
Section	I.	Tools and equipment		
		Special tools and test equipment-----	4-1	4-1
		Material required -----	4-2	4-1
	II.	Preventive maintenance checks and services		
		General-----	4-3	4-1
		Defect-----	4-4	4-1
		Operational checks -----	4-5	4-1
	III.	Troubleshooting		
		Visual inspection -----	4-6	4-3
		Troubleshooting AN/URM)-----	4-7	4-3
	IV.	Maintenance of ANIURYM)		
		Cleaning -----	4-8	4-4
		Touchup painting instructions -----	4-9	4-4
		Replacement of indicator lamps-----	4-10	4-4
		Replacement of fuses-----	4-11	4-4
		Repair of defective cable and cords -----	4-12	4-4
APPENDIX	A.	REFERENCES -----		A-1
APPENDIX	B.	BASIC ISSUES ITEMS LIST (BIIL) AND ITEMS TROOP INSTALLED OR AUTHORIZED LIST (ITIAL) (Not applicable)		
APPENDIX	C.	MAINTENANCE ALLOCATION		
Section	I.	Introduction-----		C-1
	II.	Maintenance -allocation chart-----		C-3

List of Illustrations

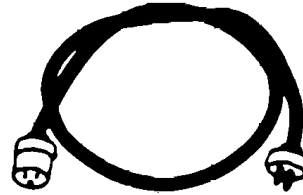
Number	Title	Page
1-1	Signal Generator AN/URM-52 -----	iii
1-2	Signal Generator AN/URM-52A with TS-21A/U or TS621B/U -----	iv
1-3	Signal Generator AN/URM-52A with TS-21CU -----	v
1-4	Signal Generator AN/URM-52 B-----	vi
3-1	Signal Generator AN/URM-52 (TS-62U), Operating Control and Indicators-----	3-1
3-2	Signal Generator AN/URM-52A (TS621A/U or TS-21B/U), Operating Control and Indicator-----	3-2
3-3	Signal Generator AN/URM-52A (TS621CIU), Operating Controls and Indicators-----	3-3
3-4	Signal Generator AN/URM-52B (SC567/U), Operating Controls and Indicators-----	3-4

List of Table

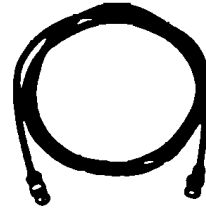
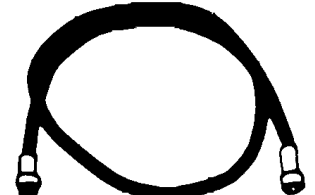
Table Number	Title	Page
1-1	Item Comprising an Operable Signal Generator AN/URM-52-----	1-3
1-2	Item Comprising an Operable Signal Generator AN/URM-52 A -----	1-3
1-3	Item Comprising an Operable Signal Generator AN/URM-52 B -----	1-3
3-1	Operating Control and Indicators for AN/UR-52-) -----	3-5
4-1	Operational Check Procedures-----	4-1
4-2	Operation's Daily Preventive Maintenance Checks and Services for AN/URM-52(*)-----	4-2
4-3	Operation's Weeks Preventive Maintenance Checks and Services for AN/URNM52(*)-----	4-2
4-4	Organizational Preventive Maintenance Checks and Services for AN/URNM52(*)-----	4-3
4-5	Troubleshooting AN/URM-52) -----	4-4



POWER CABLE
CX-337/U(6'0")

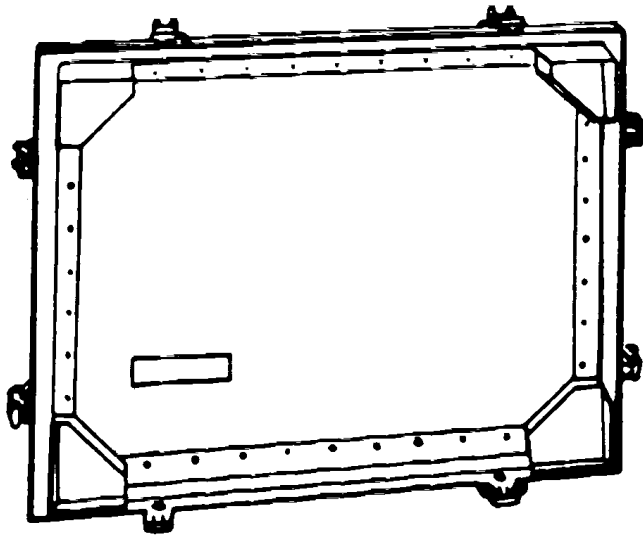


RF CABLE
CG-92D/U(6'0")

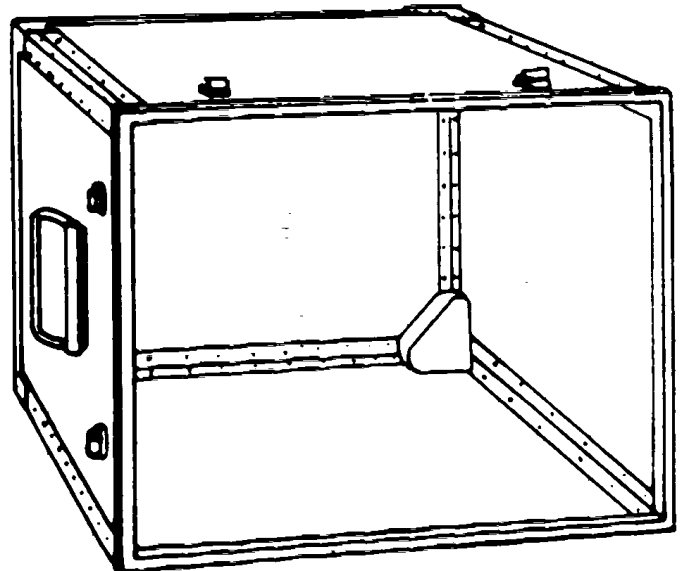


VIDEO CORDS CG-409/U(6'0")

SIGNAL GENERATOR TS-621/U

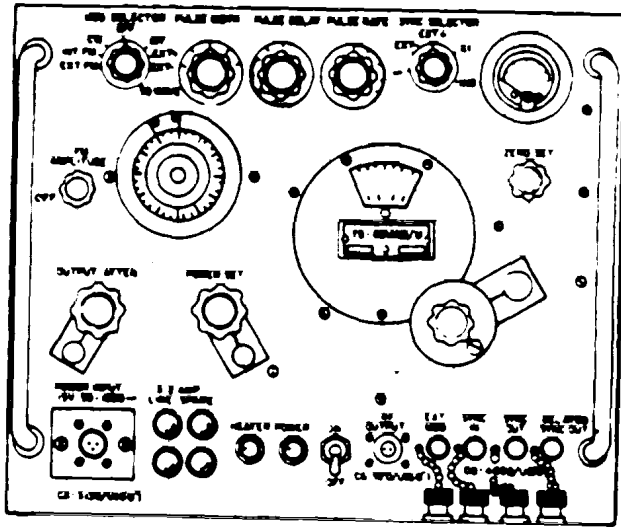


TRANSIT CASE CY-1294/U



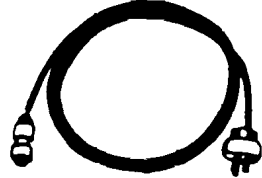
EL2CA001

Figure 1-1. Signal Generator AN/URM-52.

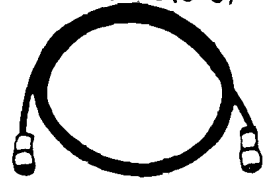


SIGNAL GENERATOR TS-621A/U
OR TS-621B/U

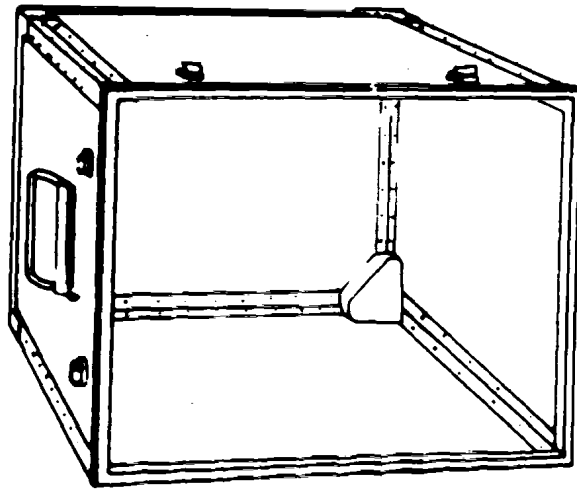
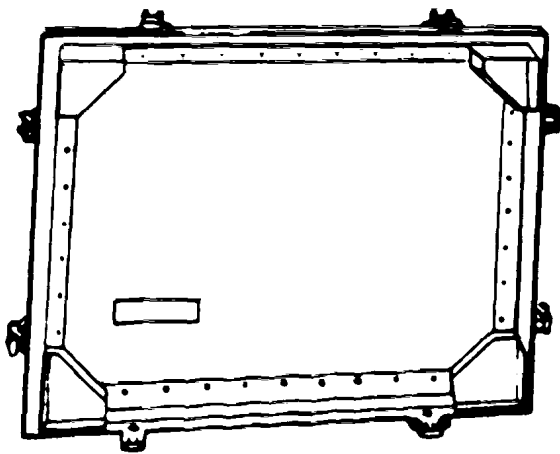
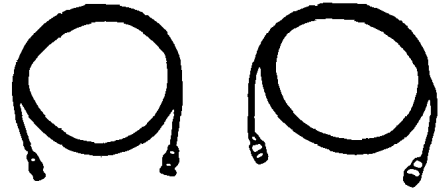
POWER CABLE
CX-3135/U(6'-0")



RF CABLE
CG-92D/U(6'-0")



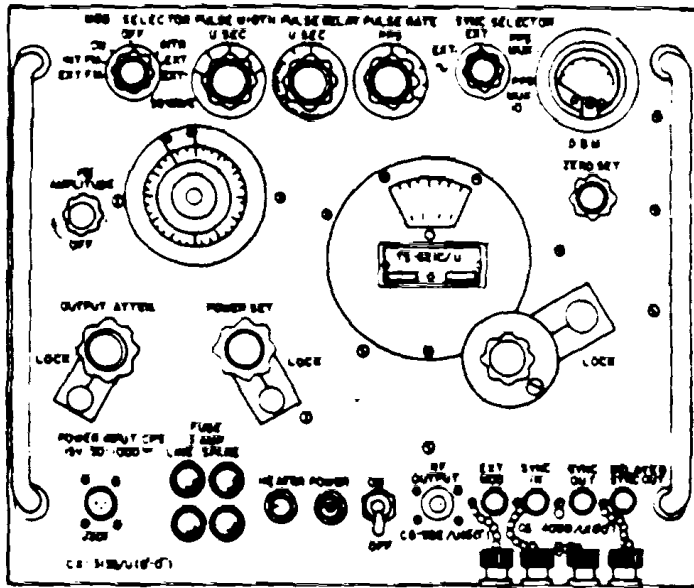
VIDEO CORDS CG-409/U(8'-0")



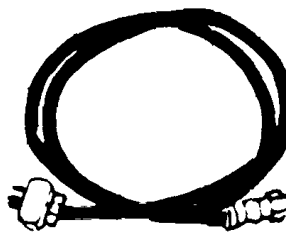
TRANSIT CASE CY-2109/URM-52A

EL2CA002

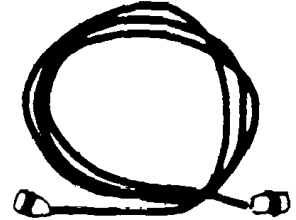
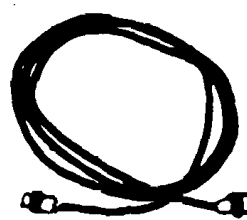
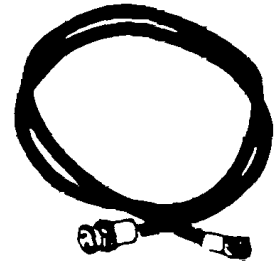
Figure 1-2. Signal Generator AN/URM-52A with TS-621A/U or TS-621B/U.



POWER CABLE
CX-3135/U(8'-0")

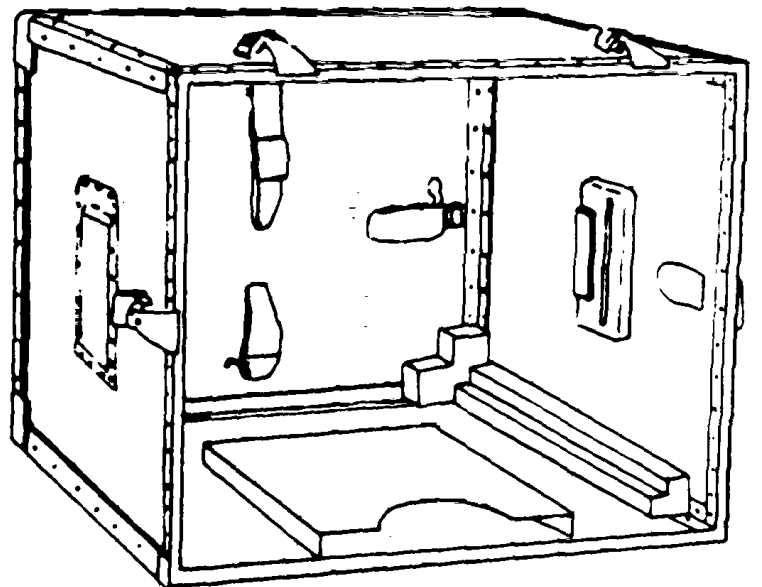
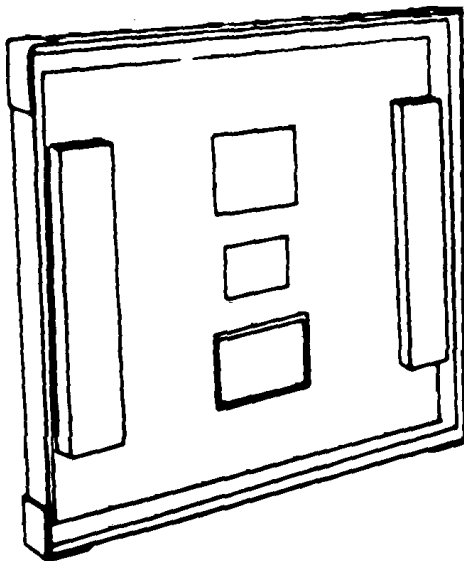


RF CABLE
CG-92E/U(6'-0")



SIGNAL GENERATOR TS-621C/U

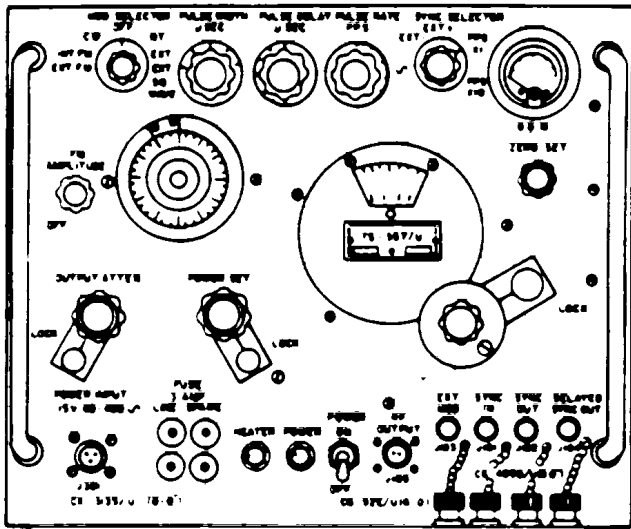
VIDEO CORDS CG-4090/U(8'-0")



TRANSIT CASE

EL2CA003

Figure 1-3. Signal Generator AN/URM-52A with TS-621A/U



SIGNAL GENERATOR SG - 537/U

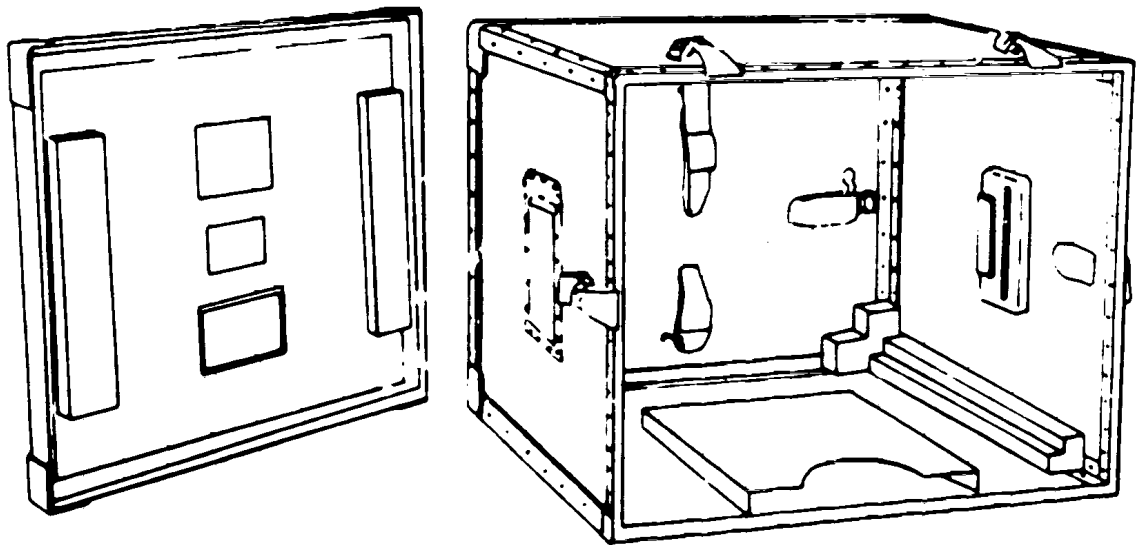
CABLE POWER
CX - 3135/U (8'-0")



RF CABLE
CORD
CG - 92E/U (6'-0")



VIDEO CORDS CG - 409D/U (8'-0")



TRANSIT CASE CY-4305/URM - 52B

EL2CA004

Figure 1-4. Signal Generator AN/URM-52B.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual describes Signal Generators AN/URM- 52, AN/URM-52A, and AN/URM-52B. It covers standard features, operation, applications, and organizational maintenance. Official nomenclature followed by (*) is used to indicate all models of the equipment. Therefore, the signal generators will hereinafter be referred to as AN/URM52(*), except where model differences dictate.

1-2. Indexes of Publications

a. *DA Pam 310-4.* Refer to 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 of Unsatisfactory Equipment.* Maintenance forms, records, and reports which are to be used by maintenance personnel at a, 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 Im-

provement Report) as prescribed in AR 700-58/ NAVSUPINST4030.29/AFR 71-13/MCO P4030.29A, and DSAR 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/NAVSUPINST4610.33A/AFR75-18/MCO P4610-19B, and DSAR 4500-15.

1-4. Administrative Storage

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

1-5. 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. 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 directly to Commander, US Army Electronics Command, ATTN: DRSELMA-Q, Fort Monmouth, NJ 07703.

Section II. DESCRIPTION AND DATA

1-7. Purpose and Use

The AN/URM-52.(*) are precision instruments capable of testing and calibrating various types of electronic equipment. Other types of applications, requiring a low level of power, include measuring standing waves, antenna and transmission line characteristics, conversion gain, etc, within their frequency range. In addition, to providing various types of radiofrequency outputs, the signal generators also make available at designated connectors, two synchronizing voltages, occurring at two different controllable instants in time, which may be used when synchronizing external equipment.

1-8. Description

a. Signal Generators AN/URM-2, AN/URM-52A, and AN/URM-52B are complete, self-contained equipments.

(1) The main component of the AN/URM-52 is Signal Generator TS-f2/U.

(2) The main component of the AN/URM-52A is Signal Generator TS-621A/U, TS-621B/U, or TS-621C/U.

(3) The main component of the AN/URM-52B is Signal Generator SCG-7/U. These components are listed in table 1-1. Table 1-1 also lists the accessories applicable to each model of equipment.