

TM 11-6625-2948-14&P

TECHNICAL MANUAL

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

SIGNAL GENERATOR AN/URM-206

(NSN 6626-01-077-8503)

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**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND
 GENERAL SUPPORT MAINTENANCE MANUAL
 (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)
 FOR
 GENERATOR, SIGNAL AN/URM-206
 (NSN 6625-01 -077-8503)**

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 and Blank Forms), or DA Form 2028-2 located in back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703. A reply will be furnished direct to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1.1. SCOPE

This manual describes Signal Generator AN/URM-206 Serial Numbers 2-60A thru 2-117A (Fig. 1-1) and Signal Generator AN/URM-206 Serial Numbers 5-201B thru 5-511B and provides instructions for installation, operation and maintenance. It includes instructions for cleaning and inspection of the equipment and replacement of parts available to organizational repair personnel. It also includes instructions for troubleshooting, testing, and repairing the equipment, as well as tools, materials, and test equipment required by general support personnel.

Unless otherwise indicated, all information provided for Signal Generator AN/URM-206 Serial Numbers 2-60A thru 2-117A is also applicable to Signal Generator Serial Numbers 5-201B thru 5-511B.

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 (TAMMS).

b. Report Packaging and Handling Deficiencies.

Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.551/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 4610.33B/AFR 75-18/MCO P4610.19C/DLAR 4500.15.

1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

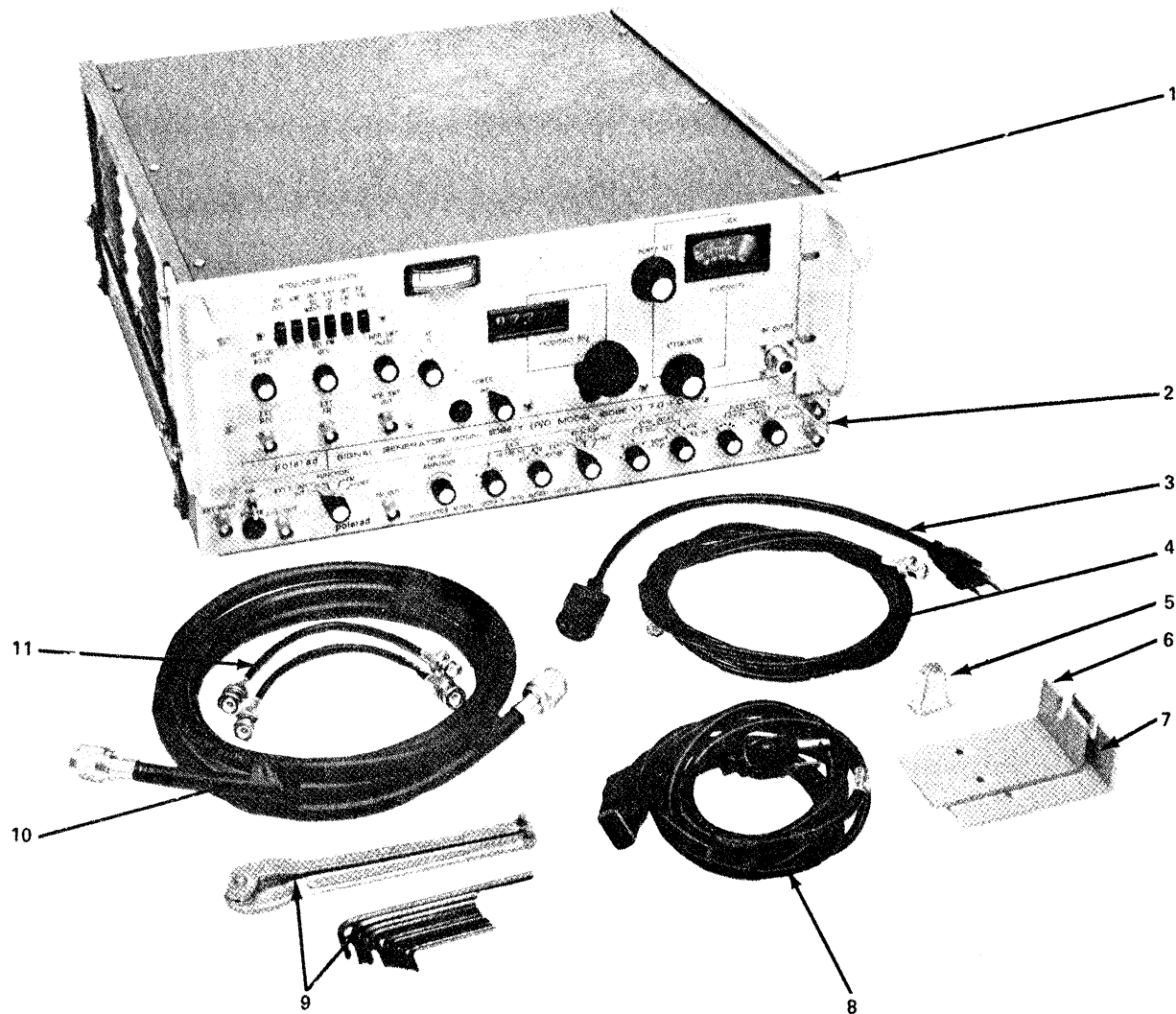
If your Signal Generator AN/URM-206 needs improvement, let us know. Send us on EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communication-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MQ, Fort Monmouth, New Jersey 07703. We will send you a reply.

1-5. ADMINISTRATIVE STORAGE

There is no special procedure for preparing this equipment for limited storage. Place all ancillary items in a bag and tie and tape the bag to the equipment. Place equipment in limited storage, i.e., organizational storage room. Protect equipment from dust, humidity, and extreme temperature changes.

1-6. DESTRUCTION OF ARMY ELECTRONICS MATERIEL

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



EL5YQ-1

Figure 1-1. Signal Generator AN/URM-206

Section II. DESCRIPTION AND DATA

1-7. PURPOSE AND USE

a. Purpose. Signal Generator AN/URM-206 (Fig. 1-1) is a general purpose broad band signal generator with a frequency range of 7.0 to 11.0 GHz. It provides spectrally pure CW signals and includes facilities for FM, square wave and widely adjustable pulsed outputs. The CW signals of the instrument are directly calibrated from -127 dBm to 0dBm.

b. Use. Typical uses of Signal Generator AN/URM-206 is as a reference signal generator to test broad- and/or narrow band microwave systems such as antennas, attenuators, beacons, crystal mounts, hybrid structures, preselectors, radars, receivers, and TWT amplifiers. The signal generator can be used to make specific measurements such as bandwidth insertion loss, frequency calibration, image reflection ratio, sensitivity, signal to noise ratio, VSWR, FM, square wave, and pulsed modulation tests. It incorporates phase lock provisions to increase frequency stability when used with an external frequency stabilizer. The signal generator also has a provision for external motor drive for tuning through the rear panel. The modulator outputs can be used to modulate other instruments simultaneously with their use in the AN/URM-206. The Modulator MD-1075/URM (Fig. 1-1) provides amplitude and FM for signal generators, signal sources, and oscillators. It provides pulse,

square wave and sawtooth outputs, and delayed or undelayed sync pulses for synchronization.

1-8. DESCRIPTION OF EQUIPMENT

The Signal Generator AN/URM-206 is suitable for bench or rack use. The Modulator MD-1075/URM and Signal Generator SG-1145/URM used in the AN/URM-206 are AC line powered. The AN/URM-206 is 7 in. high, 16-3/4 in. wide, and 17 in. deep. Operating controls, indicators and connectors are mounted on the front and rear panels. The handles at either end of the signal generator front panel are reversible for bench and rack use. The dust covers which are side, top, and bottom panels, enclose and protect the internal components.

1-9. ITEMS COMPRISING AN OPERABLE EQUIPMENT

The items that comprise the operable equipment of Signal Generator AN/URM-206 are listed in Table 1-1 and illustrated in Figure 1-1.

1-10. TECHNICAL CHARACTERISTICS

The technical characteristics of Signal Generator AN/URM-206 are listed in Table 1-2.