

**TECHNICAL MANUAL**

**OPERATOR'S, ORGANIZATIONAL, AND GENERAL SUPPORT**

**MAINTENANCE MANUAL**

**INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS**

**FOR**

**ELECTRONIC MARKER GENERATOR AN/USM-108B**

**(NSN 6625-00-038-7371)**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

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DEPARTMENT OF THE ARMY  
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FOR  
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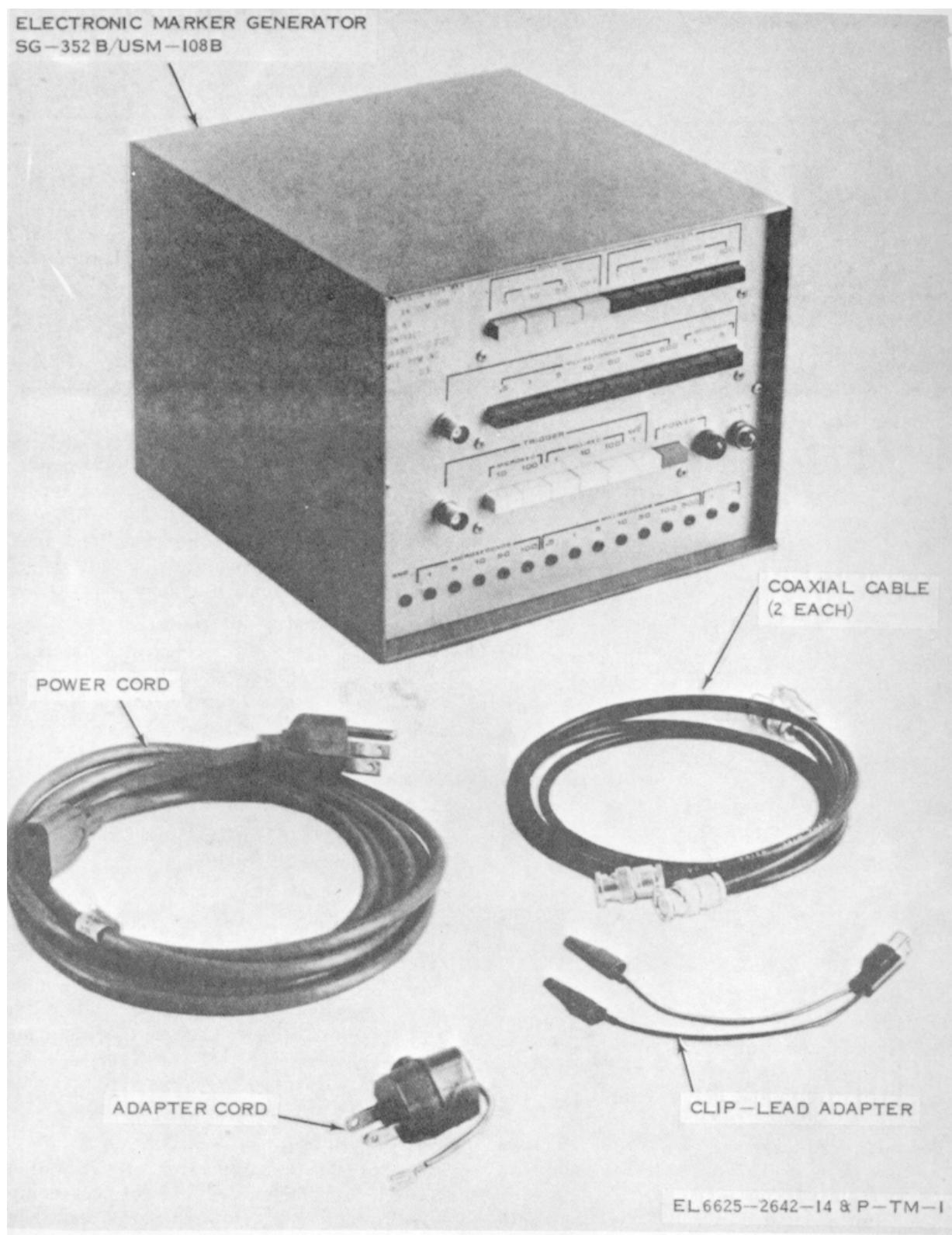


Figure 1-1. Electronic Marker Generator AN/USM-108B.

## CHAPTER 1

### INTRODUCTION

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#### Section I. GENERAL

##### **1-1. Scope**

This manual describes Electronic Marker Generator AN/USM-108B (fig. 1-1) and provides instructions for operation and maintenance of the equipment. It also includes a repair parts and special tools list. There is no direct support maintenance authorized for the equipment.

##### **1-2. Indexes of Publications**

a. *DA Pam 310-4*. 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.

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 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 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/NAVSUPINST 4610.33A/AFR 75-18/MCO P4610.19B, and DSAR 4500.15.

##### **1-4. Reporting of Equipment Publication Improvements**

The reporting of errors, omissions and recommendations for improving this publication by the individual user is encouraged. Submit reports on DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-Q, Fort Monmouth, NJ 07703.

##### **1-5. Administrative Storage**

The procedures for administrative storage are outlined in TM 740-90-1; however, the exact procedure in repackaging for limited storage depends on the materials available and the conditions under which the equipment is to be stored.

##### **1-6. Destruction to Prevent Enemy Use**

Refer to TM 750-244-2 for demolition procedures for electronic equipment.

#### Section II. DESCRIPTION AND DATA

##### **1-7. Purpose and Use**

a. Electronic Marker Generator AN/USM-108B is capable of generating precision time-mark pulses, trigger pulses and sine wave outputs. It is used to superimpose time markers onto an oscilloscope display to test the time base calibration, or wherever evaluation of time intervals is required.

b. The unit is capable of delivering time-mark pulses at 14 pulse intervals from one microsecond to five seconds; trigger pulses at six repetition rates from one to 100,000 pulses per second; and three sine wave outputs at frequencies of five, ten and fifty megahertz. Time-

mark pulses may be selected so any or all are available at the MARKER output. Only one sine wave can be selected at one time.

##### **1-8. Description**

Electronic Marker Generator AN/USM-108B is a portable, transistorized unit of test equipment which comes complete with power cord, adapters and cables. All operating controls, indicators and output jacks are mounted on the front panel. The power fuse and input voltage switch is located on the rear of the unit.