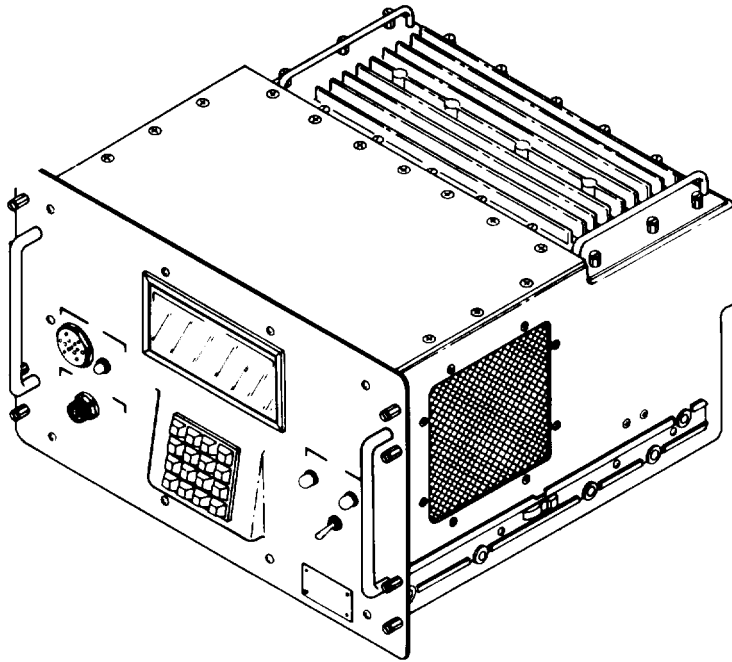


ARMY TM 11-7025-221-10
AIR FORCE T.O. 31S5-2G-251
MARINE CORPS TM-08467A-10/1

OPERATOR'S MANUAL



MULTIPLEXER, DIGITAL TD-1337(V)1/G
(NSN 7025-01-1 12-6311)

MULTIPLEXER, DIGITAL TD-1337(V)2/G
(NSN 7025-01-112-6310)

MULTIPLEXER, DIGITAL TD-1337(V)3/G
(NSN 7025-01-1 12-6312)

MULTIPLEXER, DIGITAL TD-1337(V)4/G
(NSN 7025-01-127-7020)

TABLE OF
CONTENTS
PAGE i

EQUIPMENT
DESCRIPTION
PAGE 1-5

PRINCIPLES OF
OPERATION
PAGE 1-10

CONTROLS AND
INDICATORS
PAGE 2-1

PREVENTIVE
MAINTENANCE
PAGE 2-27

OPERATING
ROUTINES
PAGE 2-29

CONFIGURATION
ROUTINES
PAGE 2-50

MAINTENANCE/
TROUBLESHOOTING
PAGE 3-1

DEPARTMENTS OF THE ARMY, THE AIR FORCE,
AND THE MARINE CORPS

20 AUGUST 1982

Operator's Manual

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(NSN 7025-01-112-6311)

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(NSN 7025-01-127-7020)

REPORTING OF 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.

For Air Force, submit AFTO Form 22 (Technical Order System Publication Improvement Report and Reply) in accordance with paragraph 6-5, Section VI, TO. 00-5-1. Forward direct to prime ALC/MST.

Marine Corps Units should submit NAVMC10772.

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

		Page
	HOW TO USE THIS MANUAL	iii
CHAPTER 1	INTRODUCTION	
Section I	General Information	1-1
II	<u>Equipment Description</u>	1-5
III	<u>Principles of Operation</u>	1-10
CHAPTER 2	OPERATING INSTRUCTIONS	
Section I	<u>Description and Use of Operator's Controls and Indicators</u>	2-1
II	<u>Preventive Maintenance Checks and Services</u>	2-27
III	<u>Operating Routines</u>	2-29
IV	<u>Configuration Routines</u>	2-50
V	Operation Under Unusual Conditions	2-106
CHAPTER 3	<u>MAINTENANCE INSTRUCTIONS</u>	3-1
APPENDIX A	REFERENCES	A-1
B	COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LIST	B-1
C	EXPENDABLE SUPPLIES AND MATERIALS LIST	C-1
I N D E X		Index 1

HOW TO USE THIS MANUAL

You can maintain and operate Digital Multiplexer TD-1337(V)/G more efficiently if you become familiar with the contents of this manual.

The table of contents, preceding this page, lists all the sections, chapters, and appendixes in the manual. There is an alphabetical index at the back of the manual. This index lists all the types of information in the manual in alphabetical order. For example, look under "C" if you want to locate which pages in the manual contain "Configuration Routines."

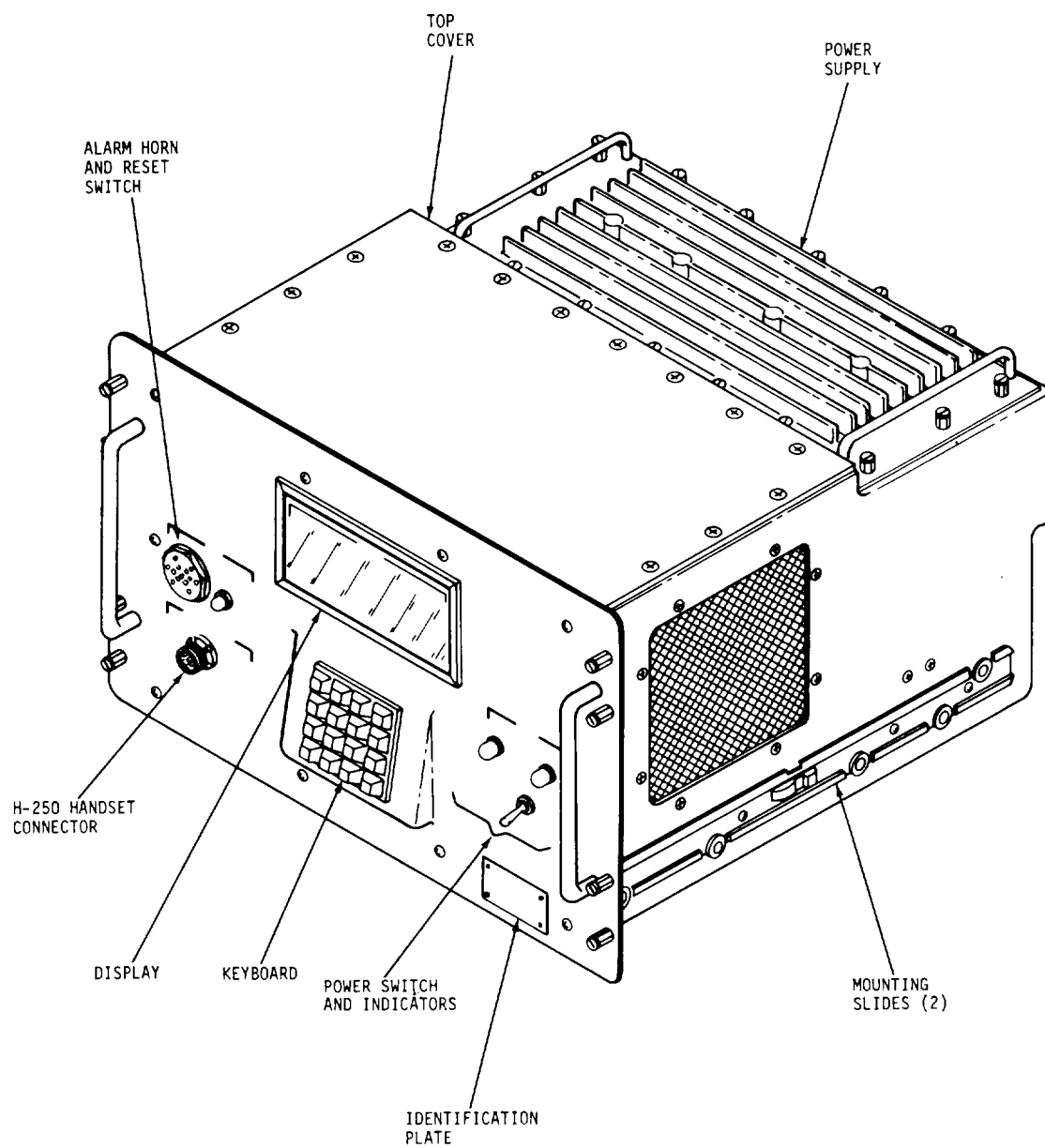
There is a quick-locate index on the front cover that shows the most used information in the manual. Each index entry shows the first page number of a section or chapter. In turn, there is an index of all the paragraphs in the section or chapter on the page listed. This type of indexing helps you to quickly locate operating routines, configuration routines, troubleshooting information, or other types of information described below.

- *Equipment Description* (page 1-5). Descriptions of the TD-1337(V)/G physical and electrical characteristics are in this section.
- *Principles of Operation* (page 1-1 O). This section describes the operation and use of the TD-1337(V)/G as part of a satellite earth terminal. As explained in this section, there is a visual display and a 16-key keyboard used by an operator to perform the routines necessary to operate the TD-1337(V)/G. These routines are divided into operating and configuration routines as described below.

NOTE

A routine is defined as a series of sequential steps an operator performs to accomplish a required task. (Answering an orderwire call or displaying equipment status information on the display are typical tasks.)

- *Operating Routines*. These are the routines used by an operator to maintain and check the operation of the TD-1337(V)/G while it is operating in a system configuration. The step-by-step procedures for these routines start on page 2-29.
- *Configuration Routines*. These are the routines that an operator uses to place a TD-1337(V)/G in a desired operating configuration. The step-by-step procedures for these routines start on page 2-50.
- *Description and Use of Operator's Controls and Indicators* (page 2-1). You need to be familiar with the information in this section to properly perform any of the operating or configuration routines.
- *Preventive Maintenance* (page 2-27). This section contains the information you need to know to keep the TD-1337(V)/G in an operating condition.
- *Maintenance* (page 3-1). There are no maintenance procedures that can be performed by an operator. This chapter contains one troubleshooting flow chart that you use when you have an indication that the TD-1337(V)/G may be faulty. No matter what the system fault may be, there is one entry point on the chart. You perform each sequential step as directed until an operator action is directed or the procedure terminates. There are no complex or special requirements to use this chart.



EL7KB001

Multiplexer, Digital TD-1337(V)/G.

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

<i>Subject</i>	<i>Para</i>	<i>Page</i>
Maintenance Forms, Records, and Reports	1-1	1-1
Hand Receipt (-HR) Manual	1-2	1-1
Reporting Equipment Improvement Recommendations (EIR's)	1-3	1-2
Nomenclature Cross-Reference List	1-4	1-2
List of Abbreviations	1-5	1-2
Glossary	1-6	1-2
	1-7	1-3

1-1. Scope.

a. *Type of Manual.* This manual contains operator procedures and maintenance instructions for the Digital Multiplexer TD-1337(V)/G family.

b. *Model Numbers and Equipment Name.* Digital Multiplexer TD-1337(V)/G (hereafter referred to as the TD-1337(V)/G) is the military nomenclature assigned to a family of digital multiplexer. There are four models in the TD-1337(V)/G family. Each model is assigned its own military nomenclature as listed below.

Digital Multiplexer TD-1337(V)1/G
 Digital Multiplexer TD-1337(V)2/G
 Digital Multiplexer TD-1337(V)3/G
 Digital Multiplexer TD-1337(V)4/G

This manual covers all four models. Differences between models are denoted throughout this manual by notes, exceptions, separate procedures, or other appropriate means. When the term TD-1337(V)/G is used in this manual, it means all four models.

c. *Purpose of Equipment.* The TD-1337(V)/G is a synchronous time division digital multiplexer used in a satellite earth terminal. The TD-1337(V)/G provides a full duplex capability in interfacing the modem in the terminal radio equipment with ground equipments. Inputs from synchronous data users are multiplexed (combined) into a single output supergroup (SG) and supplied to the modem in the terminal radio equipment for transmission. Similarly, received SG(s) are demultiplexed (recombined) into their composite parts and supplied to the respective data users.

1-2. 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 (Army). Air Force personnel will use AFR 66-1 for maintenance reporting and TO-00-35D54 for unsatisfactory equipment reporting. Marine Corps personnel will use forms and procedures prescribed by TM 4700-15-1/D.

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.