

TECHNICAL MANUAL

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

**CONVERTER, TELEPHONE SIGNAL
CV-1918/G
(NSN 5805-00-252-5767)**

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This technical manual is an authentication of the Instruction Manual literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

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CHAPTER 1 INTRODUCTION

1.0. Scope

This maintenance manual describes and covers operation, installation, theory of operation, and organizational maintenance of the Telephone Signal Converter CV-1918/G. The Telephone Signal Converter CV-1918/G, commonly referred to as the Converter within this manual, has been designed for use with the Seventh Army Tactical Switching System (SATSS).

2.0. Forms and Records

2.1. Indexes of Publications

a. 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. Refer to the latest issue of DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the system.

2.2. Reports

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 DSAR4145.8.

c. *Discrepancy in Shipment Report (DISREP) (SF361).* 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.

2.3. Reporting of Errors

Report of errors, omissions, and recommendations for improving this publication is authorized and encouraged. Report should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to Commander, US Army Electronics Command, ATTN: DRSEL-MA-Q Fort Monmouth, NJ 07703.

2.4. Administrative Storage

For procedures, forms and records, and inspections required during administrative storage of this equipment, refer to TM 740-90-1.

2.5. Destruction of Army Materiel.

Demolition and destruction of electronic equipment will be under the direction of the commander and in accordance with TM 750-244-2.

3.0. Purpose and Use

3.1. The Telephone Signal Converter CV-1918/G is an eight-channel transistorized, two-four wire telephone signal converter designed to function within, and in conjunction with, the Tactical Automatic Switching Network (TAS). The Converter is designed for use with the following listed equipments.

Central Office, Telephone, Automatic ANITTC-25137 (TAS).

Central Office, Telephone, Manual ANITTC-15 ().

Communications Center AN/TSC-41 ().

Switchboard, Manual ANITTC-7.

Cable, Telephone WF-16 ()/U.

Cable, Telephone WM- 130 ()/U.

3.2. The Converter interfaces telephone signals between the AN/TTC-25137 Central Office, Telephone, Automatic and the AN/TTC-7 Central Office, Telephone, Manual.

4.0. Technical Characteristics

Power Requirements.....	48 volts dc, (supplied from AN/TTC-7)	Hybrid Transhybrid Loss	Shall not exceed 30 db with two wire port terminated in a 600 ohm resistive load.
Number of Channels	8	Longitudinal Balance.....	40 db minimum
Frequency Range	300 to 3500 Hz	Digit Frequencies (Hz)	
Insertion Loss	Less than 5 db	1.....	.697/1209
Channel Crosstalk	-50db maximum	2.....	.697/1336
Four-Wire: Impedance	600 ohms $\pm$ 10%	3.....	.697/1477
Harmonic Distortion.....	Maximum of 30 db below a fundamental within the frequency range of 300 to 3500 Hz transmitted at zero dbm level	4.....	.770/1209
Noise Level.....	23 dba or less	5.....	.770/1336
Signaling Level	-14 dbm $\pm$ 2 db	6.....	.770/1477
Receiving Sensitivity	Down to - 25 dbm	7.....	.852/1209
		8.....	.852/1336
		9.....	.852/1477
		0.....	.941/1336
		C.....	.941/1477
		R.....	.941/1209