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NAVY NAVELEX 0967-466-1020

TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT

MAINTENANCE MANUAL

INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)
FOR

CONVERTER, TELEPHONE SIGNAL CV-1919A/G
(FSN 5805-229-5417)

DEPARTMENTS OF THE ARMY AND THE NAVY
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FOR**

**CONVERTER, TELEPHONE SIGNAL CV-1919A/G
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CHAPTER 1

INTRODUCTION

1-1. Scope

This technical manual covers direct support and general support maintenance procedures for Converter, Telephone Signal CV-1919A/G. It includes references and repair parts and special tools lists in the appendixes.

1-2. Maintenance Forms and Records

a. Report of Maintenance and Unsatisfactory Equipment. Use equipment forms and records in accordance with instructions given in TM 38-750.

b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (report of Packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army)/NAVSUP PUB 378 (Navy)/AFR 71-4 (Air Force) MCO P4030.29 (Marine Corps), 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 (Army)/NAVSUPINST 4610.33/AFM 75-18/MCO P4610.19A (Marine Corps), and DSAR 4500.15.

d. Reporting of Equipment Publication Improvements. The reporting of errors, omissions, and recommendations for improving this manual by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-C, Fort Monmouth, NJ 07703.

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

CHAPTER 2

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

Section 1. GENERAL

2-1. Scope

This chapter contains instructions for isolating troubles to a module, printed wiring board or part authorized for support at the direct support or general support. Instructions are provided for removal and replacement of parts where the procedure is not obvious. Direct support maintenance is performed on-site in the system configuration.

2-2. Voltage and Resistance Measurements

a. General Test points, on the rear panel of each module, are common to many of the printed wiring board terminals. Check the terminals at test points first; then, if additional checking is necessary, refer to paragraphs 2-8 through 2-13 for disassembly instructions for access to the other terminals on the printed wiring board. Module test points are listed as applicable to each printed wiring board.

b. Test Equipment. The maintenance allocation chart lists a 20,000 ohms-per-volt meter for dc measurements. Use Multimeter TS-352B/U or equivalent for dc voltage and resistance measurements. Use Oscilloscope AN/USM-281A or equivalent for ac voltage measurements and for checking waveforms. Refer to the repair parts and special tools list (RPSTL) in appendix B and to the maintenance allocation chart (MAC) in TM 11-5805-388-12.

c. Precautions.

(1) Observe multimeter battery polarity.

Polarity reversal may damage transistors or electrolytic capacitors.

(2) Make sure that shorts are not caused by exposed test equipment connections. Tape or sleeve (spaghetti) test prods or clips to leave exposed only the area needed to make contact with the circuit under test.

d. Resistance Measurements.

(1) Continuity (resistance) measurements are made with the negative probe grounded. Set the TS-352B/U to RX 100 unless otherwise specified. Refer to the footnotes at the end of the resistance chart for change of scale or special conditions.

(2) Refer to the wiring diagrams for point-to-point continuity measurements in order to isolate faults associated with wiring, receptacles, and the rear panel binding posts.

CAUTION

Be sure equipment power is off before removing or reinstalling any module or while taking resistance measurements in common module.

(3) Remove module from equipment for access to test points and to isolate the module from shunting resistances.

(4) Resistance measurements chart:

Term No.	Channel modules 1A1 through 1A3		Common module 1A4 common A2	
	Analog A1A1	Logic A1A12		
E1		(TP3)	570	5700
E2			INF	10K
E3			INF	5700
E4	(GND)	(GND)	0	5400
ES			250K ²	5K
E6	(TP2)		6100	5K
E7	(TP3)		240K ²	0
E8	(TP4)		5750	INF
E9	(TP5)		250K ²	INF
E10	(TP1)		2950	INF

See footnotes at end of chart.