

26 August 1965

AMPLIFIER, RADIO FREQUENCY AM-3924(XN-1)/URT

Cog Service: USN FSN:

Functional Class:

USA

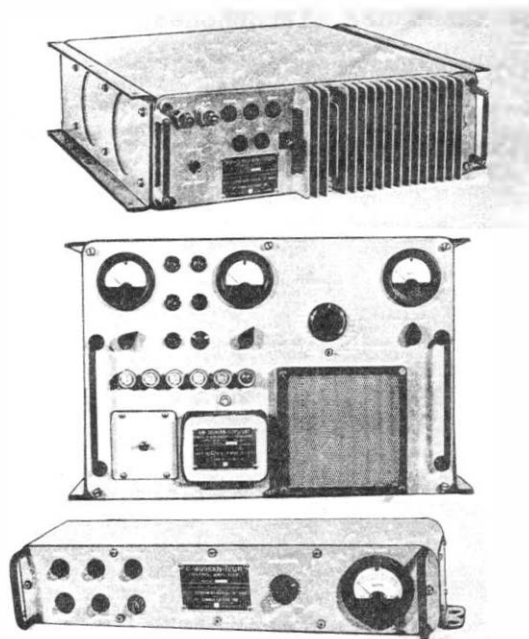
USN

USAF

TYPE CLASS:

Used by

MANUFACTURER'S NAME/CODE NUMBER: R. F. Communications Inc., (14304).



AMPLIFIER, RADIO FREQUENCY AM-3924(XN-1)/URT

#### FUNCTIONAL DESCRIPTION:

Amplifier, Radio Frequency AM-3924(XN-1)/URT is an automatically tuned radio frequency amplifier. It boosts the signal from a low power transmitter-exciter such as the T-827( )/URT to a level sufficient for useful communications. The equipment is primarily for shipboard or ground communications. The AM-3924(XN-1)/URT and its accessories can either be mounted in a standard 19 in. rack or stacked on a shock mount using brackets attached to each unit.

These units are components which, when used with Transmitter-Exciter T-827( )/URT comprise Radio Transmitter AN/URT-23(V) system.

Power Supply PP-3916(XN-1)/UR is used to convert 60 cycle power to 400 cycles in order to use the AM-3924(XN-1)/URT in installations where there is no source of 400 cycle power. This unit may also be useful in other general purpose applications as a 60 to 400 cycle frequency converter.

1.2 AM-3924(XN-1)/URT: 1

## AMPLIFIER, RADIO FREQUENCY AM-3924(XN-1)/URT

Amplifier Control C-4991(XN-1)/UR is used to allow monitoring of the vital functions and output power control of the AM-3924(XN-1)/URT at a remote location.

No field changes in effect at time of preparation (28 July 1965).

**RELATION TO OTHER EQUIPMENT:** None.

**EQUIPMENT REQUIRED BUT NOT SUPPLIED:** None.

### TECHNICAL CHARACTERISTICS:

FREQUENCY RANGE: 2 to 32 mc in 20 bands.

MODES OF OPERATION: AM, SSB, LSB, FSK, CW.

POWER OUTPUT: 1000 W avg of PEP max into 50 ohm load.

INTERMODULATION DISTORTION: - 45 db.

HARMONIC SUPPRESSION: - 50 db.

LOAD VSWR: 3 to 1 max.

HUM AND NOISE: - 50 db.

OUTPUT IMPEDANCE: 50 ohms, unbalanced.

TUNING TIME: 2 sec max for automatic operation.

HEAT DISSIPATION: 3000 w at full output.

POWER INPUT: 100 mw.

POWER REQUIREMENTS: 115/440 v, 400 cps, 3 ph, 3 wire or 208/440 v, 60 cps, 3 ph, 3 wire  
(w/PP-3916(XN-1)/URT Power Supply.

### MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Amplifier, Radio Frequency AM-3924(XN-1)/URT includes:		12-1/4 x 17-3/8 x 19	125
1	Power Supply PP-3916 (XN-1)/UR		5-1/4 x 17-3/8 x 19	86
1	Control, Amplifier C-4991 (XN-1)/UR		3-1/2 x 6-3/4 x 17-3/8	5
1	Shockmount		3-7/16 x 16-5/8 x 19-11/16	
2	Technical Manual NAVSHIPS 96026			
1	Set Cable Connectors			
1	Bag Hardware			

### REFERENCE DATA AND LITERATURE:

NAVSHIPS 96026: Technical Manual (Service Test Type) for R.F. Amplifier AM-3924(XN-1)/URT and Power Supply PP-3916(XN-1)/URT.

### TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: (2) CBZC-PL-8295A (2) CIM-4CX350A

1.2 AM-3924(XN-1)/URT: 2

---

AMPLIFIER, RADIO FREQUENCY AM-3924(XN-1)/URT

---

CRYSTALS: Not required.

SEMI-CONDUCTORS: (6) CCBS-78-4025 (2) 1N3040B (2) 2N398A (12) 1N3673A (35) 2N696  
(2) 1N30118 (5) 2N1305 (1) 2N1412 (1) 2N297A (1) 2N491 (22) 1N277  
(41) 1N547 (4) 1N914 (49) 1N4005 (1) 1N753A (8) 1N1614

SHIPPING DATA

PKGS VOLUME (CU FT) WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE: USN DESIGN COG: USN, BuShips  
SPEC &/OR DWG:

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
R. F. Communications, Inc.	Rochester, N.Y.	N0bsr 89069	