

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT:Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 9 May 52

**AN/UGA-TYPE**

SERVICE TYPE NUMBER:

FRA

FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT



Frequency Shift Receiver Converter Equipment FRA is a single channel, i-f type set for translating radiotelegraph characters and furnishing d-c mark-and-space pulses for operation of a teletypewriter when used in conjunction with Radio Receiving Equipments RBB and RBC.

By means of Panoramic Coupling Kit 10563, signal voltage is coupled from the last i-f tube of the receiver equipment. It is used with associated receiver equipment to provide ship-to-shore and point-to-point radiotelegraph or radioteletype reception.

This converter unit is designed to operate on any magnitude of shifts from  $100 \pm 50$  cyc to  $1,000 \pm 500$  cyc. The mark-and-space carrier frequency most commonly received is, respectively, 425 cps above and 425 cps below the assigned frequency of the transmitter.

A mark-return circuit is embodied in the unit to prevent the output from remaining on space for a period longer than 200 milliseconds.

The equipment is designed for polar or neutral operation of the teletypewriter.

<b>AN/UGA-TYPE</b>		INSTRUCTION LITERATURE: NavShips 900,613
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**MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Receiver Converter CRY-35122	11-3/4 x 19-3/4 x 18-1/4	98
1	Panoramic Coupling Kit, CN-10563	4 x 3 x 2	Not Available

**OPERATIONAL CHARACTERISTICS**

**TACTICAL USE:** Shipboard, shore stations.

**INSTALLATION:** Shipborne, ground.

**CAN COMMUNICATE WITH:** This is signal-modifying equipment used in conjunction with primary communication apparatus.

**TECHNICAL CHARACTERISTICS**

**FREQUENCY RANGE IN MEGACYCLES:** 0.4.

**TYPE MODULATION:** Fm.

**TYPE OF SIGNAL:** Frequency-shift keying.

**POWER OUTPUT:** 60 ma dc for neutral or 25 ma dc for polar; into load impedance of 130 to 1,800 ohms.

**POWER REQUIREMENTS:** 135 w, 110 - 120 v, 60 cyc, 1 phase ac.

**PHYSICAL CHARACTERISTICS**

Frequency Shift Receiver Converter Equipment FRA measures 11-3/4 x 19-3/4 x 18-1/4 inches, net weight 175 pounds, volume 2.44 cu ft. Packed for domestic shipment: total weight 335 pounds.