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AN/ARA-3

Modulator Assembly AN/ARA-3 is an airborne noise source used to convert Radio Set SCR-287-() into a spot jammer for use against enemy communications.

The noise source consists of a two-tube unit operated directly from a 24 volt d.c. source without the use of a dynamotor or other form of high voltage supply. Tubes are one 2050 gas tube and one 12SN7GT. The maximum noise output, measured with the unit connected to the microphone input of Radio Transmitter BC-375, is approximately 1.4 volts. About 0.2 volt is required for 100 percent modulation.

A four-position selector switch, operable from any one of four positions, is provided and functions as follows: (1) Normal operation of Radio Set SCR-287-(); (2) Search for enemy signals with noise source energized but not connected; (3) Transmitter on CW so that oscillator can be tuned to zero beat on receiver BFO; (4) Transmitter on with noise modulation for spot jamming of enemy signal.

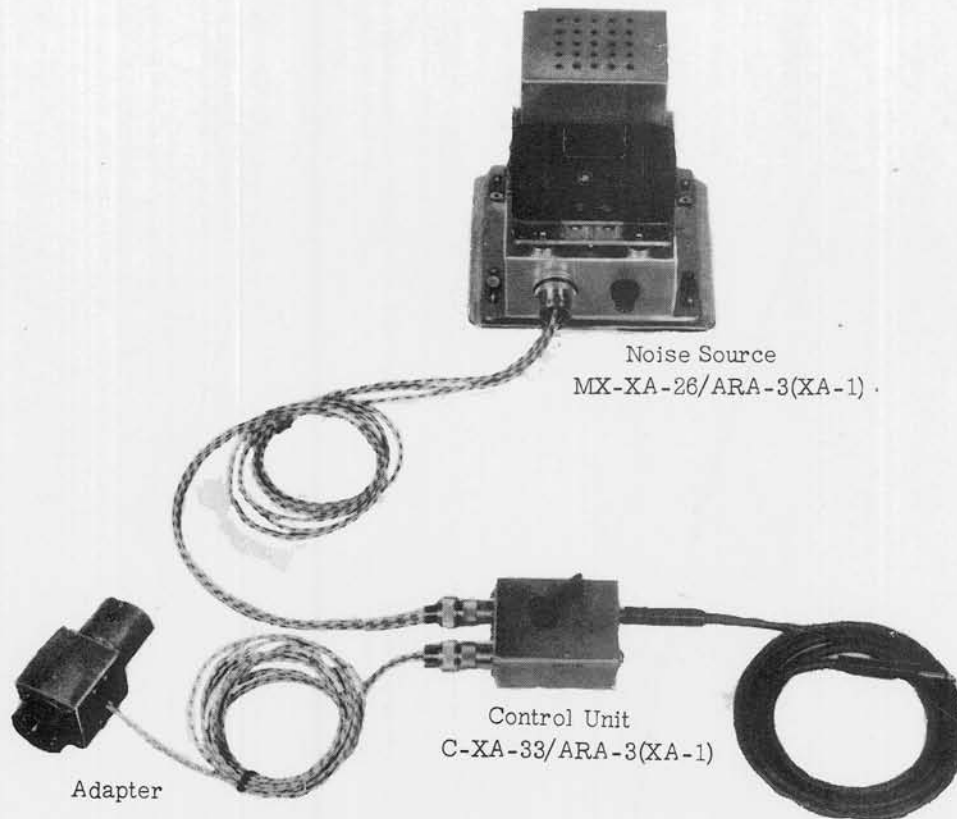
The noise source and four-position control switch are packaged in the same case used for Microphone Amplifier BC-216-A.

Installation of Modulator Assembly AN/ARA-3 in aircraft requires only the placement of Mounting FT-144 in a location convenient to the radio operator, the attachment of the noise source, and the insertion of a plug in the microphone input of Radio Transmitter BC-375, and the connection of the plug adaptor to the 24 volt d.c. source.

No test equipment is required for maintenance. Army Supply Program requirements as of 1 September 1944 were 100.

POWER INPUT	20 WATTS
POWER OUTPUT	150 MILLIWATTS
FREQUENCY RANGE	AUDIO FREQUENCIES
TYPE OF SIGNAL	RANDOM NOISE

TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
1	2050	1	6SN7GT



MODULATOR ASSEMBLY AN/ARA-3

TOTAL WEIGHT 11 LBS

Component	Nomenclature	Size	Weight
Noise Source	MX-XA-26/ARA-3(XA-1)	7 1/4" x 6 3/4" x 7 1/4"	7 1/2 Lb.
Control Unit	C-XA-33/ARA-3(XA-1)	4" x 4 1/2" x 1"	1 Lb.
Adapter			1/2 Lb.
Mounting	MT-XA-76/ARA-3(XA-1C)	7 1/4" x 6 1/2" x 7 1/4"	1/2 Lb.
Mounting Plate	MT-XA-78/ARA-3(XA-1C)	2 1/4" x 3 3/4" x 2 3/4"	1/4 Lb.
Cord	CX-XA-9/ARA-3(XA-1C)	Length 10'	1/2 Lb.
Cord	CS-XA-10/ARA-3(XA-1C)	Length 15'	1/2 Lb.
Cord	CX-XA-11/ARA-3(XA-1C)	Length 15'	3/4 Lb.

and includes plugs and adapter.

1 Dec. 1944

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