

SUMMARY OF DATA

PURPOSE

Medium power UHF multi-channel transmitter primarily for ship-air communication.

TYPE OF TRANSMISSION

Amplitude modulated cw.

FREQUENCY RANGE

225.0 to 399.9 MHz.

BRIEF DESCRIPTION

The transmitter consists of seven stages; a drive unit, doubler with oscillator, amplifier, a trebler and final amplifier followed by a power amplifier consisting of a tuned r.f. push-pull buffer stage driving the final r.f. push-pull power amplifier. The frequency range of 225.0 to 399.9 MHz is divided into 1750 channels each separated by 100 kHz. Ten of these channels can be preset to the required frequencies and any one of these ten channels can be automatically selected by either remote or local switching. The frequency of the master oscillator is controlled by a system which incorporates 33 built-in crystals. These crystals provide the necessary combinations to embrace all of the 1750 channels. When two or more Type 693's are working into a single aerial, aerial resonators are fitted; Outfits EAN, EAP and EAQ when hand tuning is used; Outfits EAG, EAH and EAJ when auto tuning is used.

ELECTRICAL CHARACTERISTICS

R.F. Power Output	100 watts
Output Impedance	75 ohms
Modulation	Up to 100%
Duty Cycle	Normally five minutes on transmit and ten minutes on stand by over the temperature range of -40° to 55° C.

CONTROL CIRCUITS

Normal link-up with Control Outfits of the KH series.

POWER REQUIREMENTS

Main Supply 115 V or 230 V 50/60 Hz 1600 W

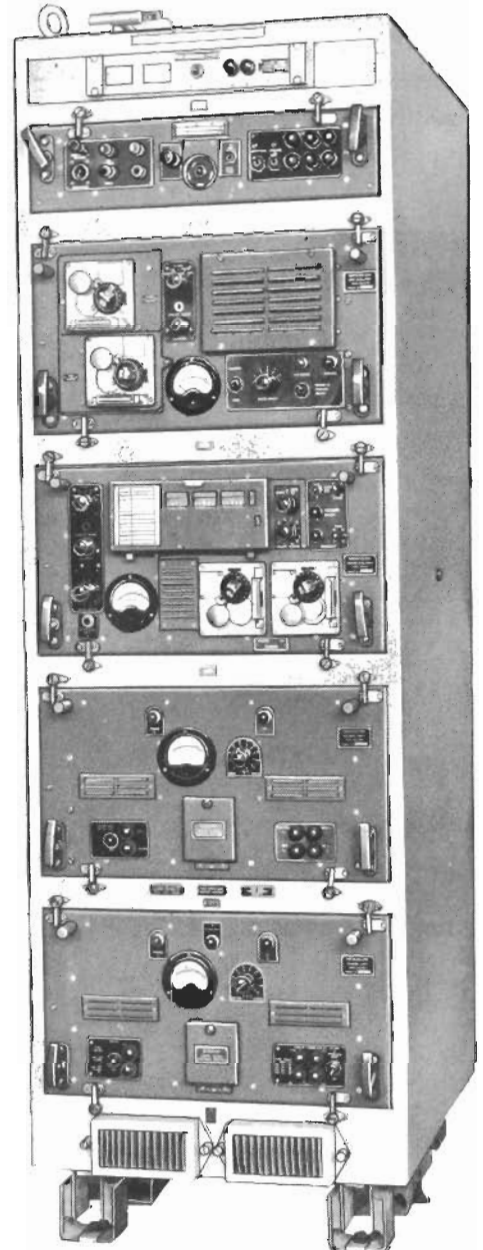
Anti-condensation heaters 115/230 V 50/60 Hz or 220 V d.c. 100 W
(only required when main equipment is OFF)

HEAT DISSIPATION

Type 693 (including auto tune resonators) 1600 W

AERIAL OUTFIT

AJE(1)



TYPE 693

MAJOR UNITS

PATT. NO.	DESCRIPTION	PHYSICAL DATA			
		WIDTH	DEPTH	HEIGHT	WEIGHT
64816	Cabinet Design 121	24 in.	24½ in.	64 in.	} 900 lb
64820	Control Drawer Design 2	21 in.	17 in.	5 in.	
64681	Relay Unit Design 90 (fitted in Control Drawer if required)				
932-5704	Transmitter Unit Type 7703	23½ in.	24 in.	13½ in.	
932-5705	Power Unit Type 7097	23½ in.	24 in.	13½ in.	
932-5708	Amplifier Unit Type 9201	23½ in.	24 in.	13½ in.	
932-5707	Power Unit Type 9202	23½ in.	24 in.	13½ in.	

HANDBOOK

BR 1492A

ESTABLISHMENT LIST

E1162

INSTALLATION SPECIFICATION

B877