

## TYPE 60EQR SUMMARY OF DATA

### PURPOSE

A low power (25 watts) L.F., M.F. and H.F. transmitter for emergency use. It is fitted in all classes of ships.

### TYPE OF TRANSMISSION

C.W. and M.C.W. (100 kc/s - 17 Mc/s)

Voice (400 kc/s - 17 Mc/s)

### FREQUENCY RANGE

100 kc/s - 17 Mc/s

### MAJOR UNITS

Type 60EQR comprises the following units:-

Patt. No.	Description	Physical Data		
		Height	Width	Depth
4807L/M	Transmitter 4T	} Fitted in patt. W431 Framework	1' 7"	1' 4½"
53369	Control Unit, Des. 9 for Transmitter 4T			
W431	Support for Transmitter 4T and Control Unit	4' 4½"	1' 7"	1' 4½"
W8262	Relay Unit, Design 4	7½"	4½"	3½"
56191	Relay Unit, Design 16	7½"	4½"	3½"
W1453	Condenser unit with Switch for Transmitter 4T	7½"	4½"	3½"
W3768	Condenser unit with Switch Des. B.	5½"	4½"	3½"
W147/A	Motor Generator 150 watts, 900 volts, 22/26V. supply	10½"	1' 2"	5½"

The complete equipment weighs 4½ cwt.

### BRIEF DESCRIPTION

#### Transmitter 4T - Patt. 4807L/M

Frequency - 100 kc/s - 17 Mc/s

Frequency Control - Variable Frequency Control over whole frequency range  
Fundamental crystal frequency control between 1930 and 7000 kc/s.  
Doubling or trebling (up to 17000 kc/s), the frequency of a crystal having a fundamental frequency between 2400 and 7000 kc/s.

Output - 25 watts (approx.)

Keying - Maximum of 150 words per minute.

Ten plug-in range units are used to cover the frequency range.

### POWER REQUIREMENTS AND CONSUMPTION

220 volts, D.C. 5 kW or 110 volts, D.C. 2½ kW

This power is fed to Battery Outfit BBZ which gives a supply of 24V. to the Motor Generator, Patt. W147/A and 4V. for supplying the filaments.



GENERAL VIEW

HEAT DISSIPATION IN OFFICE 250 watts.

### AERIAL SYSTEM

Single wire (Unipole).

### REMARKS

Type 60EQR can be operated with any of standard Voice and Wireless Control Outfits.

The associated wavemeter for calibrating is G61/G62.

HANDBOOK B.R. 1461

ESTABLISHMENT LIST E.971

INSTALLATION SPECIFICATION B.495

## THE 60 SERIES TRANSMITTER

The 60 series came in one size with many variants and was widely fitted throughout the Fleet and also ashore.

The series ran from the basic Type 60D {in ships with CWS – Central Wireless System} to the 60E {fed from batteries and available when mains power fails}, 60ER {fed from batteries and available when mains power fails + has R/T fitted}, 60FV {fed from standard AC supply + fitted in Leaders and small ships 500 to 3000 tons displacement} and 60EQR {E and R as above, the Q standing for the third modification}. Often, the only difference between a heavy ship's fit and that say of a Fleet Destroyer, was in the number of sets fitted, usually 4 in heavy ships etc.

So ubiquitous was the fit that it is worth listing the ships that were fitted or earmarked to be fitted when the equipment was first available, although this proverbial set was fitted into every new-built ship of Sloop size and above built for WW2 and subsequent to that event also. If they too were included in this list [there were 25-odd Castle Class Frigates alone and they were just one of several classes built] the list would be far too long for this subject. Actual numbers fitted per ship is not included here.

VARIANT	SHIP	VARIANT	SHIP	VARIANT	SHIP
60D	Adamant	60E	Achilles	60EM	Abdiel
	Beatty	&	Adamant	&	Broke
	Ceylon	60ER	Adventure	60EMR	Cloud
	Charybdis		Ajax	&	Codrington
	Cleopatra		Amphion	60FV	Coldsnap
	Duke of York		Arethusa		Crescent Moon
	Formidable		Argos		Duncan
	Gambia		Ark Royal		Ebbtime
	Hecla		Aurora		Eddy
	Hood		Australia		Exmouth
	Illustrious		Barham		Faulknor
	Implacable		Beatty		Fumarole
	Indomitable		Belfast		Grenville
	Jamaica		Berwick		Halo
	Jellicoe		Birmingham		Hardy
	King George V		Bonaventure		Harmattan
	Lion		Broke		Horizon
	Nelson		Cairo		Impetus
	Prince of Wales		Calcutta		Indian Summer
	Rodney		Caledon		Inglefield
	Signal School		Calypso		Jarvis
	Portsmouth		Canberra		Keith
	Scylla		Capetown		Kelly
	Temeraire		Caradoc		Kempenfelt
	Tyne		Cardiff		Keppel

<p><b>60D Column</b></p>	<p><b>Uganda Unicorn Victorious</b></p>	<p><b>60E &amp; 60ER Column</b></p>	<p><b>Carlisle Ceres Ceylon Charybdis Cleopatra Colombo Cornwall Courageous Coventry Cumberland Curacao Curlew Danae Dauntless Delhi Despatch Devonshire Dido Diomedede Dragon Duke of York Dunedin Durban Eagle Edinburgh Effingham Emerald Enterprise Euryalus Exeter Fiji Formidable Forth Furious Galatea Gambia Glasgow Glorious Gloucester Greenwich Hawkins Hecla Hermes Hermione Hobart Hood</b></p>	<p><b>60EM &amp; 60EMR &amp; 60FV Column</b></p>	<p><b>Laforey Lance Landfall Larne Latona Leeward Legion Lightning Lively Lookout Loyal Lunar Bow Magician Manxman Mist Seabreeze Sheen Shower Sundown Sunset Vansittart Venomous Verity Veteran Volunteer Wanderer Whirlpool Whitehall Whitshed Wild Swan Wishart Witch Witherington Wivern Wolverine Worcester Wren</b></p>
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			<b>Illustrious</b> <b>Implacable</b> <b>Indomitable</b> <b>Jamaica</b> <b>Jellicoe</b> <b>Kent</b> <b>Kenya</b> <b>Keppel</b> <b>Kilmun</b> <b>King George V</b> <b>Leander</b> <b>Lion</b> <b>Liverpool</b> <b>London</b> <b>Maidstone</b> <b>Malaya</b> <b>Manchester</b> <b>Mauritius</b> <b>Medway</b> <b>Naiad</b> <b>Nelson</b> <b>Neptune</b> <b>Newcastle</b> <b>Nevassa</b> <b>Nigeria</b> <b>Orion</b> <b>Penelope</b> <b>Phoebe</b> <b>Prince of Wales</b> <b>Queen Elizabeth</b> <b>Ramillies</b> <b>Renown</b> <b>Repulse</b> <b>Resolution</b> <b>Resource</b> <b>Revenge</b> <b>Rodney</b> <b>Royal Oak</b> <b>Royal Sovereign</b> <b>Scylla</b> <b>Sheffield</b> <b>Shropshire</b> <b>Sirius</b> <b>Southampton</b> <b>Suffolk</b> <b>Sussex</b>	
		<b>60E &amp;  60ER  Column</b>		

		<b>60E &amp; 60ER Column</b>	<b>Sydney Temeraire Trinidad Tyne Uganda Unicorn Valiant Victorious Warspite Woolwich York</b>		
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# TYPE 60 EU/ERU

DIAGRAMMATIC VIEW SHOWING INSTALLATION

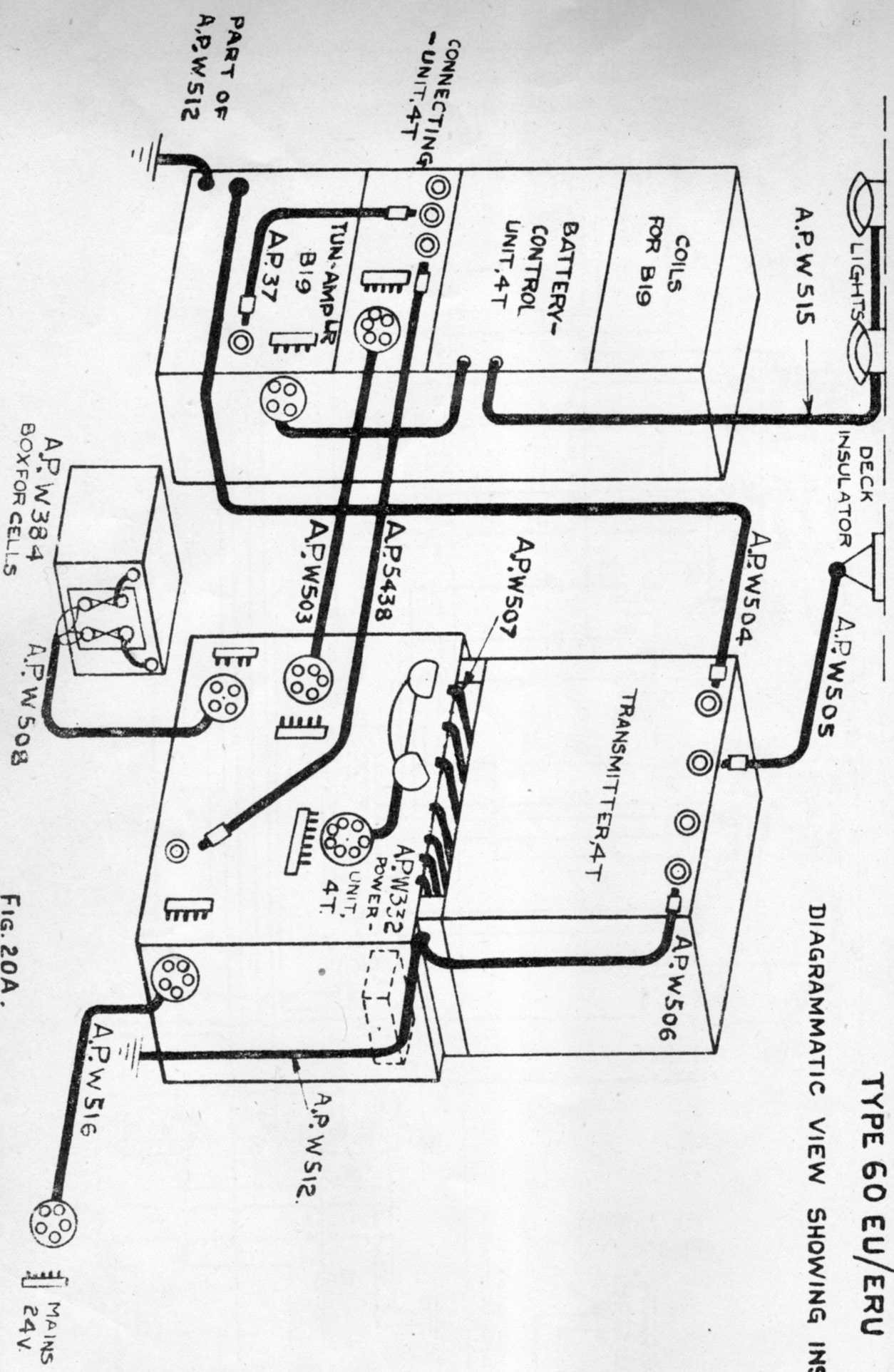


FIG. 20A.