

SECTION  
D  
RECEIVER OUTFITS

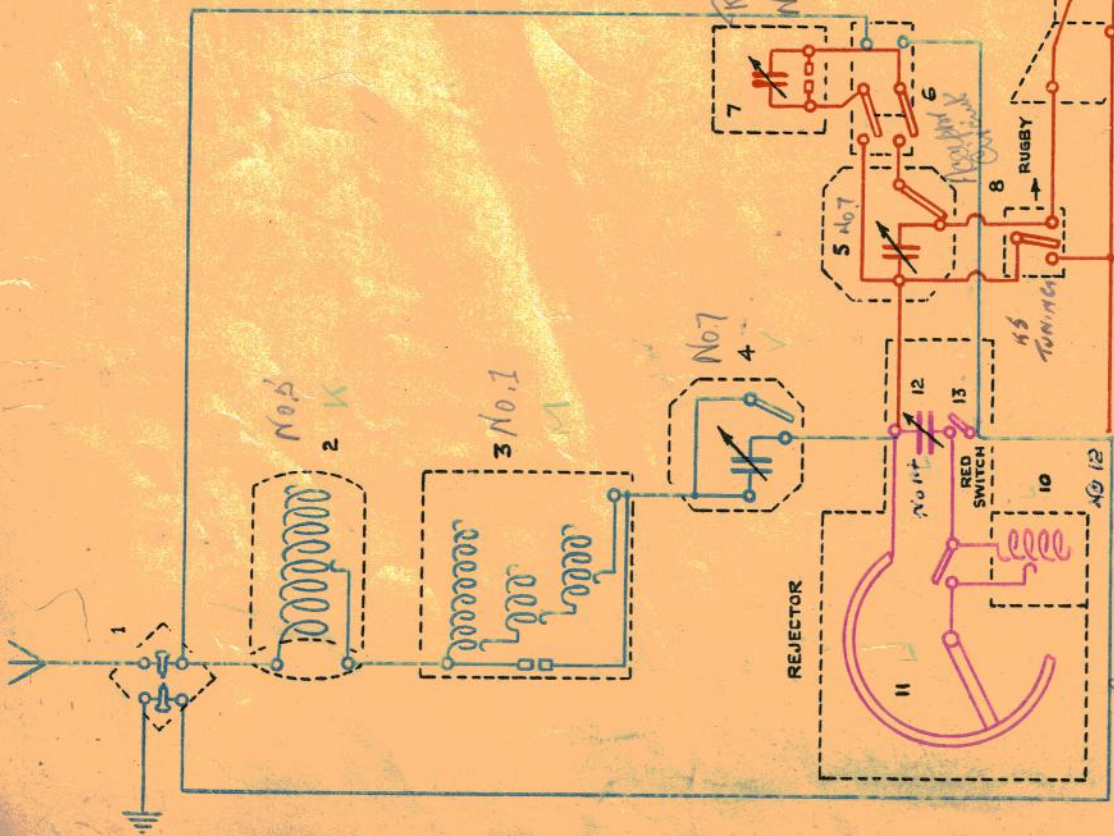
RECEIVER OUTFIT C

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LIST OF RECEIVER OUTFITS, PAGE D4



# RECEIVER OUTFIT C



## EQUIVALENT CIRCUITS

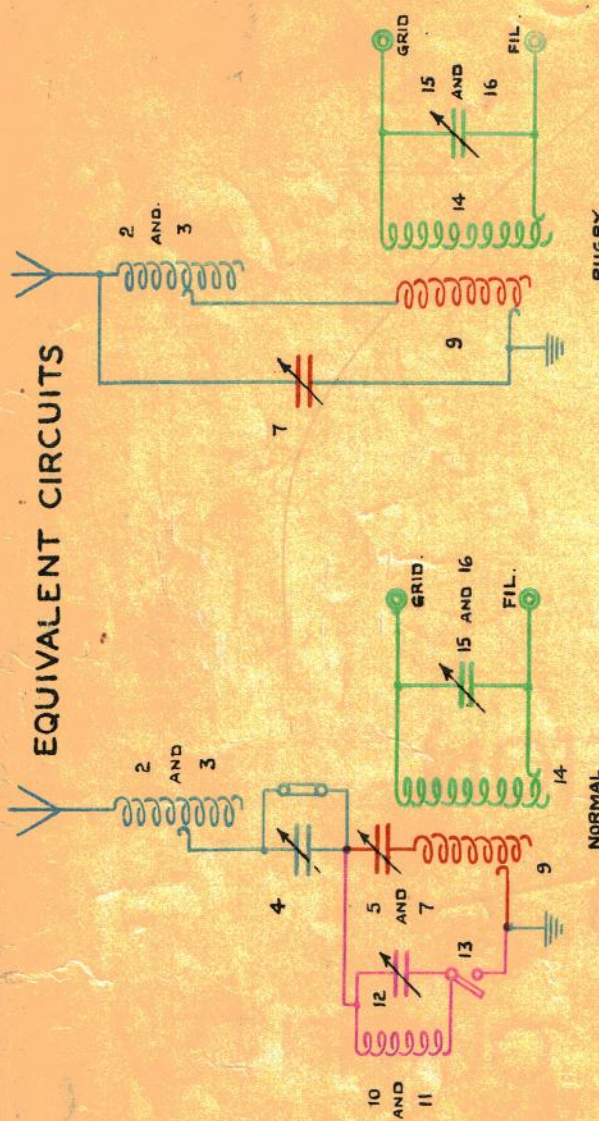


Fig. 6.

Fig. 7.

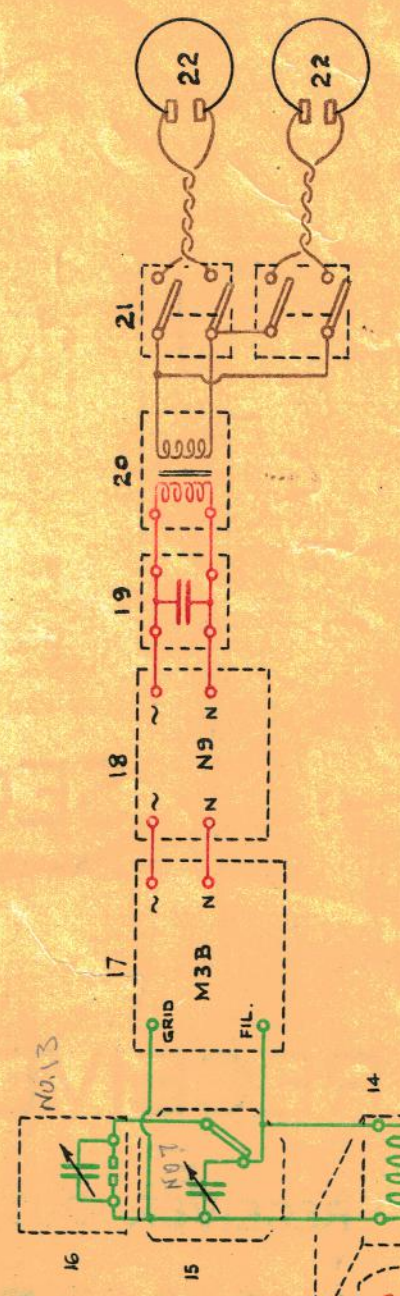


Fig. 8.

Small inductance large capacitance

Primary Inductor

Secondary Inductor





***PAGES***  
***3 & 4***  
***MISSING***



# RECEIVER OUTFITS

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Receiver Outfit	Component Units	Frequency range kc/s	Valves	Page No. of Notes on separate units.	Where fitted.
+ CN	$\left\{ \begin{array}{l} \delta \left\{ \begin{array}{l} A11 \\ M11 \\ N9 \\ K5 \end{array} \right. \\ \begin{array}{l} A19 \\ M19 \\ N19 \end{array} \end{array} \right.$	25 - 550	- 4 NR17 3 NR14 1 NR14	$\left. \begin{array}{l} BA10 \\ H14 \\ I2 \\ GE2 \end{array} \right\}$	No not allowed to destroyers. Supersedes CJ.
		15 - 550	- 2 NR22 1 NR15A 1 NR16A 1 NR22 2 NR15A		
CO	B12	150 - 1500	1 NR22 8 NR15A	C14	Supersedes CH, CL.
CP	B11	1500 - 23000	2 NR22 3 NR15A	C10	Supersedes CE and replaces CG in existing ships fitted with Type 43, if and when new receiving instruments are fitted without racks.
+ CQ	B11	1500 - 23000	2 NR22 3 NR15A	C10	Replaces CG in ships fitted with racks.
+ CR	$\left\{ \begin{array}{l} B11 \\ -G31 \end{array} \right.$	1500 - 23000	2 NR22 3 NR15A 1 NR15A	$\left. \begin{array}{l} C10 \\ GC2 \end{array} \right\}$	Supersedes QK in ships fitted with racks.
EE	Board for valve detector.	All Frequencies	1 NR14	EA2	Types 2, 4 (9 if not fitted with CG).
LB	LB	530 - 860	2 NR14	H2	Type 31. Obsolescent.
ME	$\left\{ \begin{array}{l} ME \\ \text{or} \\ MBA \end{array} \right.$	100 - 1430 and less sensitive below	2 NR4C	-	Type 2*, 4 - 15 & 13 ship's second and sloops main office. Obsolescent.
		150 - 500 and less sensitive above and below	6 NR14 & 1 NR18	H4	
MD	MD	150 - 500 and less sensitive above and below	6 NR14 & 1 NR18	H4	Types 1 - 16, 2 - 16, 2 - 18, 35, 36, 38, D/F outfit SD. Obsolete.
MH	M3B	30 - <del>2500</del> 1800	3 NR14	H6	Types 1, 1 - 16, 2, 2 - 16, 2 - 18, 2* - 34, 12, 13 - 34, 35, 36, 37, 38. Ships & Flotilla Leaders and. Office.
NR	$\left\{ \begin{array}{l} N9 \\ \text{or} \\ N2 \end{array} \right.$	-	3 NR14	I2	Types 1 - 16, 2 - 16, 2 - 18, 2* - 34, 9, 9 - 33, 12, 15 - 34, 31, 33, 35 and 36. General Service Note Magnifier.
			2 NR14	-	
QE	$\left\{ \begin{array}{l} Q4 \\ P2 \end{array} \right.$	18500 - 29000	1 NR16A 1 NR16A	$\left. \begin{array}{l} K6 \\ K6 \end{array} \right\}$	Type 71.
QC	Q7	17500 - 30000	2 NR16A	K9	Type 46X, 46Y, 46Z, 47 and 71.
QK	$\left\{ \begin{array}{l} B6 \\ G31 \\ N9 \end{array} \right.$	<del>6000</del> 3500 - 20000	1 NR22 1 NR15A	C4	Types 35S, 36S, 38S & 48X. G31 only to sea-going flagship.
			1 NR15A 3 NR14	GC2 I2	
QL	$\left\{ \begin{array}{l} B7 \\ B8 \\ B9 \end{array} \right.$	3000 - 10000	2 NR12A	-	Types 37S, 39X, 46X, 46Y, 46Z, 47, 50, and where specially approved.
		<del>6000</del> 3000 - 25000 3000	3 NR15A 3 NR15A	- C7	
RA	B3	70 - 1500	5 NR7	C2	Type 81.

$\delta$  Earlier type.

$\neq$  Later type.



## RECEIVER OUTFITS

Receiver Outfit	Component Units	Frequency range kc/s	Valves	Page No. of Notes on separate units	Where fitted.
SA	Ind. No. 41 Ind. No. 1 N9 M9 EE M3B Radiogonio S23 or S25 Inductance 8000 mics for D/F. N2 or N9 K5	60 - 670	- - 5 NR15 1 NR14 3 NR14 - - 2 NR14 3 NR14 1 NR14	Section L I2 GE2	Set includes frame coils. Types 10 - 14. M3B only supplied if set is arranged for 2 simultaneous lines of reception. Obsolescent.
SBX	Special gonio A41 M9 N9 K5	60 - 670	- 5 NR15 3 NR14 1 NR14	BB2 H12 I2 GE2	Can be used for D/F.
SEX	M9 M13 S61 K5 N9 S12 A7 A8 A42 F24	15 - 670	5 NR15 5 NR15 - 1 NR14 3 NR14 - - - 2 NR17	H12 H16 L GE2 I2 L BA5 BA6 BB4	To replace SA. Can be used for D/F.
SF	A42 M9 A7 N9 A8 M13 K5 F21	15 - 670	2 NR17 5 NR15 - 3 NR14 - 5 NR15 1 NR14 -	EE4 H12 BA5 I2 BA6 H16 GE2 F2	Types 39X, 47, 46Y. Set includes frame coils and vertical loops. Can be used for D/F.
<u>D/F Outfit</u>					
SD	A41 M9 N2 or N9 E.R.B. K5	60 - 670	- 5 NR15 2 NR14 3 NR14 1 NR14	BB2 H12 I2 L GE2	Bellini - Tosi. Heavy ships and cruisers.
SCX	A43 A44 M9 M5 N9 K5 E26 F23	60 - 25000	2 NR17 2 NR17 5 NR15 7 NR17 3 NR14 1 NR14 1 NR16 2 NR15 -	BB6 BB9 H12 H11 I2 GE2 EB4 F2	Heavy ships and cruisers. Hand rotated frame coil.
SHX <sup>N9</sup>	Panel Receiver M9 F51	60 - 500	5 NR15	H12	Remote controlled frame coil.
SJX					Bellini - Tosi. To replace SD.
<u>Receiver Outfit</u>					
UA	N7	540 cycles/sec	6 NR14	X	Types 102, 104, 105A and 106.
UC	Model UC	1080		X	Type 706.
UD	-	40 - 5000		X	S/T Receiver & Hydrophones. Type 707.
VA	Frame coil Model VA. N12	500	3 NR12	-	Leader Cable receiving set.
VB	Frame coil Model VA. 2 - N12 Note Selector (Tuned Reed)	700 - 1400	3 NR12 each.	-	Obsolescent. Type 151.



# RECEIVING & D/F OUTFITS IN MODERN SHIPS D7

Receiver Outfit	Component Units	Frequency Range	Remarks	Page in B. R. 222	Where fitted.
CMA	A19 } M19 } N19 } B12 }	15 - 550 150 - 1500	Replacing CI	BA12 H25 I6 C14	C.R.R. Main bay. Second offices with Type 37. Aircraft carriers 2nd office with Type 50.
CMB	A19 } M19 } N19 } B12 } * B13 }	15 - 550 150 - 1500 15 - 20000	Replacing CI  * Stand-by receiver.	BA12 H25 I6 C14 C18	Flotilla Leaders. Sloops. Gunboats.
CMc	See CMB				Divisional Leaders. Destroyers.
CN	A19 } M19 } N19 }	15 - 550	Replacing CJ	BA12 H25 I6	C.R.R. 3rd & 4th bays.
CO	B12	150 - 1500	Replacing CL & CH.	C14	3rd Office. 2nd Office - Flotilla Leader.
CP	B11	1500 - 23000	Replacing CE	C10	Destroyers. Divisional Leaders. Flotilla Leaders. Submarines with Type 47. Cruisers on China Station C.R.R.
CQ	B11 or B11 * } B13 * }	1500 - 23000 { 1500 - 23000 15 - 20000	Replacing CG	C10 C10 C18	2nd Office. 3rd Office (stand-by). * 2nd Office with Type 49 or 50.
CR	B11 } G31 }	1500 - 23000	Replacing QK	C10 GC3	C.R.R. 2nd bay. Flotilla Leaders. Aircraft carriers 2nd Office fitted with Type 50.
CS	B13	15 - 20000		C18	Tugs etc. fitted with Type 51 or 51L.
SC	A8 } M13 } K5 } N9 }	15 - 60		BA7 H17 GE2 I2	Submarines and with D/F Outfits:- SB SEX SEY SF
SBX	A41 } M9 } S26 } S42 } S61 }	60 - 600	Cross frame coils submarine D/F outfit.	BB2 H12 LB2 LB3 LD2	Submarines.
SD	A41 } M9 } K5 } N9 } S25 } S41 }	60 - 670		BB3 H12 GE2 I2 LB2 LC2	Cruisers. Battleships. Aircraft carriers.
SEX	A7 } A41 } S42 } S61 } M9 }	60 - 600	R/C Rotating coil submarine D/F outfit.	BA5 BB2 LC3 LD2 H12	Submarines.
SEY	F25 } A46 } M9 }	60 - 600	R/C Rotating coil submarine D/F outfit.	BB11 H12	Submarines.
SF	F21 } A7 } A42 } M9 } S42 } S61 }	60 - 600	Mechanically driven rotating coil A7 will be removed with horizontal coil when rod aerial is fitted.	F2 BA5 BB4 H12 LC3 LD2	Submarines.



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Receiver Outfit	Component Units	Frequency Range	Remarks	Page in B.R. 222	Where fitted
SG	A46 } M9 } E27 } K7 } N20 }	60 - 20000	Mechanically driven rotating coil.	BB11 H12  GE5 I10	Battleships.
SGX	F23 } A43 } E26 } M9 } K5 } N9 }	60 - 20000	Mechanically driven rotating coil. E26 fitted with special coil 600 - 1500 kc/s.	F2 BB6 EB4 H12 GE2 I2	Battleships.
SHX <sup>2</sup>	F51 } A46 } E27 } N20 } M9 } K7 }	60 - 20000	R/C Rotating coil	BB11  I10 H12 GE5	Cruiser. Battleships (proposed).
SJ	S26 } A47 } M9 } K7 } N20 }	60 - 600	Bellini-Tosi loops.	LB2  H12 GE5 I10	Cruisers.

RECEIVING VALVES USED.

A7	Nil		A42	2 NR17	
A18	Nil		A43	2 NR17	
A19	Nil		A46	1 NR15 or 15A	2 NR16A
A41	Nil		A47	1 NR15 or 15A	2 NR16A
B11	2 NR22	3 NR15A	B13	3 NR15A	
B12	1 NR22	8 NR15A			
E26X	4 NR15A	1 NR16A	E27		
E26					
G31	1 NR15A		G57		
G56					
K5	1 NR14		K7	1 NR15	
M0	5 NR15 or 15A				
M13	5 NR15 or 15A				
M19	{ 1 NR26, 1 NR27, 2 MS4 (A.C.)				
M30	{ 1 NR15 or 15A, 1 NR16 or NR16A, 2 NR22 or NR23 (D.C.)				
N9	3 NR14		N20	2 NR15 or 15A	
N19	{ 2 NR27, 1 VSM4 (A.C.)				
	{ 2 NR15 or 15A, 1 NR22 or NR23 (D.C.)				
S25	Nil		S42	1 NR15 or 15A	
S26	Nil		S61	Nil	
S41	1 NR15 or 15A				