

EDDYSTONE**Model 870**

General Description: Five-valve (including rectifier), four-waveband receiver for ship-borne and domestic use.

Power Supplies: A.C./D.C. mains, 110 and 200–250 volts. Consumption at 240 volts A.C. is 190 mA.

Wavebands: (1) 5.9–18 Mc/s. (16.6–50.7 m.); (2) 1.95–6.3 Mc/s. (47.6–153.8 m.); (3) 540–1500 kc/s. (200–556 m.); (4) 150–380 kc/s. (789–2000 m.).

Valve Analysis: Measurements taken on 20,000-ohms/volt testmeter, with 240-volt A.C. input. Tolerance 5 per cent.

<i>Valve</i>		<i>Anode, volts</i>	<i>Screen, volts</i>	<i>Cathode, volts</i>
V1	12BE6	100	101	—
V2	12BA6	100	101	0.65
V3	12AT6	43	—	—
V4	19AQ5	98	101	4
V5	35W4	115 A.C.	—	105

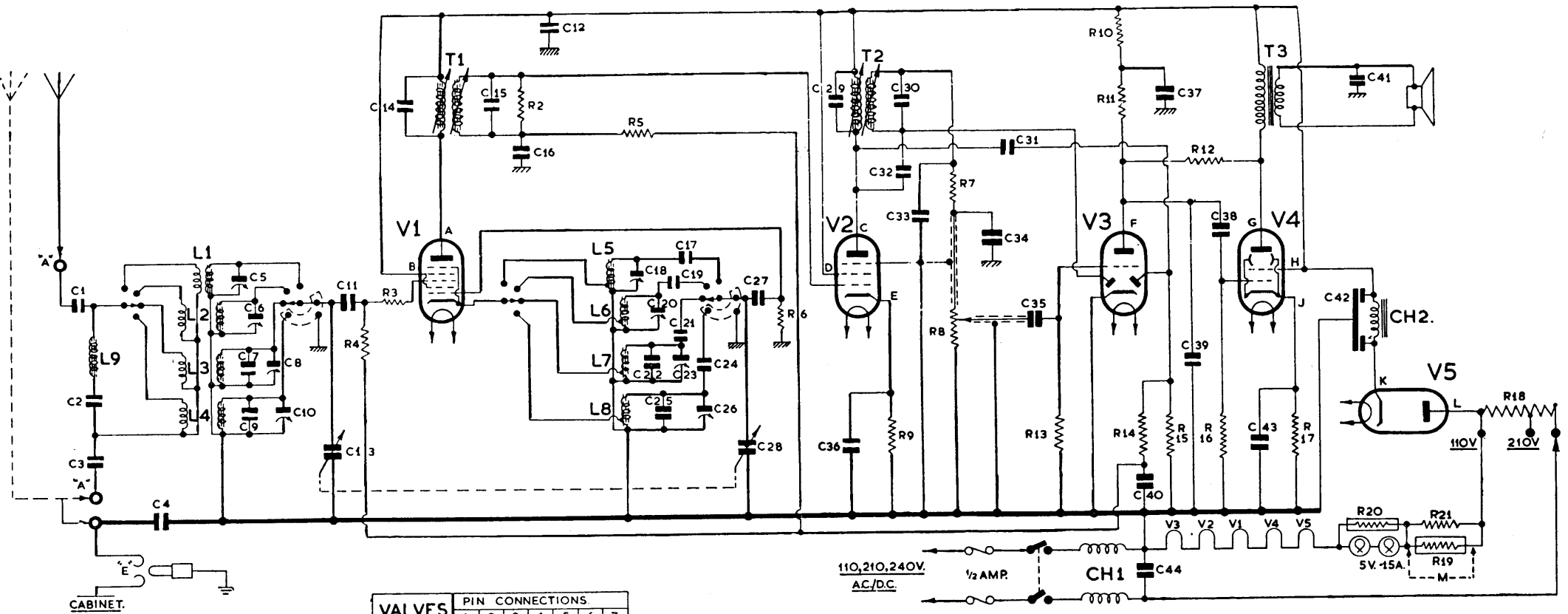
Dial Lamps: 5 volts, 0.15 amp.

Alignment Summary: I.F. 465 kc/s. The R.F. trimmers are mounted alongside the corresponding cores, see diagram. Alignment frequencies for each band are given below:

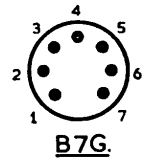
	<i>Band</i>	<i>Frequency</i>	<i>Oscillator</i>	<i>Aerial</i>
Cores	1	6.5 Mc/s.	L5	L1
	2	2 Mc/s.	L6	L2
	3	600 kc/s.	L7	L3
	4	160 kc/s.	L8	L4
Trimmers	1	17 Mc/s.	“L5” (C18)	“L1” (C5)
	2	6 Mc/s.	“L6” (C20)	“L2” (C6)
	3	1400 kc/s.	“L7” (C23)	“L3” (C8)
	4	350 kc/s.	“L8” (C26)	“L4” (C10)

I.F. Rejector: L9 is adjusted for minimum output while injecting a 465-kc/s. signal to aerial and earth sockets.

Note: Chassis may be “live”.



VALVES	PIN CONNECTIONS						
	1	2	3	4	5	6	7
V1	12BE6	G1	K	H	H	A	G2 G4 G3
V2	12BA6	G1	G3	H	H	A	G2 K
V3	12AT6	G	K	H	H	A1 D	A
V4	19AQ5	G1	K	H	H	A	G2 G4
V5	35W4	-	-	H	H	A	H TAP K



CIRCUIT DIAGRAM—EDDYSTONE MODEL 870

- Capacitors.**
- | | | |
|----------------|--------------|--------------------|
| C1 1800 pF. | C14 100 pF. | C27 100 pF. |
| C2 200 pF. | C15 100 pF. | C28 13-446 pF. |
| C3 1800 pF. | C16 0.05 | C29 100 pF. |
| C4 0.01 | C17 4400 pF. | C30 100 pF. |
| C5 3-33 pF. | C18 3-33 pF. | C31 20 pF. |
| C6 3-33 pF. | C19 1600 pF. | C32 6 pF. |
| C7 20 pF. | C20 3-33 pF. | C33 100 pF. |
| C8 3-33 pF. | C21 540 pF. | C34 100 pF. |
| C9 10 pF. | C22 20 pF. | C35 0.05 |
| C10 3-33 pF. | C23 3-33 pF. | C36 0.05 |
| C11 200 pF. | C24 200 pF. | C37 4 (El. 350 v.) |
| C12 0.01 | C25 50 pF. | C38 0.05 |
| C13 13-446 pF. | C26 3-33 pF. | C39 200 pF. |
- Resistors.**
- | | |
|----------|-----------------|
| R2 0.18M | R9 68 |
| R3 47 | R10 22k |
| R4 0.47M | R11 0.47M |
| R5 0.47M | R12 2 or 2.2M |
| | R13 8.2M |
| | R14 0.47M |
| | R15 0.47M |
| | R16 0.47M |
| | R17 270 |
| | R18 640 (W.W.) |
| | R19 Thermistor |
| | R20 Thermistor |
| | R21 1500 (W.W.) |

- R6 22k
 R7 22k
 R8 0.5M (pot.)
 R9 68
 R10 22k
 R11 0.47M
 R12 2 or 2.2M
 R13 8.2M
 R14 0.47M
 R15 0.47M
 R16 0.47M
 R17 270
 R18 640 (W.W.)
 R19 Thermistor
 R20 Thermistor
 R21 1500 (W.W.)

