

Intermediate frequency 470kc/s.

CIRCUIT ALIGNMENT

Check that with the gang at maximum capacitance, the cursor coincides with the un-numbered calibration dots located at the top and bottom of the tuning panel. When making the R.F. and oscillator adjustments, the receiver panel should be open just sufficiently to allow access to the trimmers.

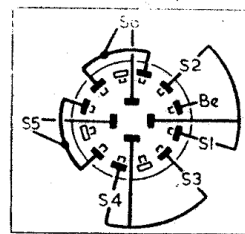
- 1.—Switch receiver to M.W. and turn gang to maximum capacitance. Connect sound output meter across speaker tags.
- 2.—Connect output of signal generator between chassis and control grid (pin 6) of V1.
- 3.—Feed in a 470kc/s signal and adjust the cores of L8 (location reference A1), L7 (D2), L4 (C1) and L3 (F2) for maximum output, reducing the output of the signal generator as the circuits come into line to prevent A.G.C. operation. All cores should be adjusted to the peak nearer the adjusting end of the coil former.
- 4.—Disconnect signal generator leads and re-connect them to a 4in diameter loop consisting of 20 turns of 20-24 s.w.g. insulated wire. Place this loop about 24in away from the ferrite rod internal aerial.
- 5.—With receiver switched to M.W., tune it to 500m. Feed in a 600kc/s signal and adjust the core of L5 (C1) for maximum output.
- 6.—Tune receiver to unidentified calibration dot at 214m on tuning scale. Feed in a 1,400kc/s signal and adjust C10 (C1) and C2 (C1) for maximum output.
- 7.—Retune receiver to 500m, feed in a 600 kc/s signal and re-adjust the core of L5 for maximum output while rocking the gang for optimum results.
- 8.—Repeat the adjustments in step 6.
- 9.—Switch receiver to L.W. and tune it to unidentified calibration dot at 1,050m on tuning scale. Feed in a 290kc/s signal and adjust C11 (location C1) for maximum output.
- 10.—Tune receiver to unidentified calibration dot at 1,400m on tuning scale. Feed in a 214kc/s signal and adjust C1 (location C1) for maximum output.

Valve	Anode		Screen	
	V	mA	V	mA
V1 DK96	84 32.5*	0.38 1.4	68*	0.1
V2 DF96	84	1.45	67*	0.52
V3 DAF96	42*	0.04	28*	0.01
V4 DL96	82	5.3	84	1.0

*Measured with electronic voltmeter.

Switches.—S1-S6 are the waveband/battery switches ganged in a single rotary unit on the control panel. The switch contacts are shown in detail in the diagram in column 3. With the control set fully anti-clockwise for M.W. operation, switches S1, S4, S5, S6 close. With the control set fully clockwise for L.W. operation, switches S2, S3, S5, S6 close. In the "off" position of the control all switches open.

Diagram of the waveband/battery switches drawn as viewed in the plan illustration of the chassis (location reference C1).



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RESISTORS		Values	Locations
R1	V1 S.G. feed	150kΩ	F2
R2	V1 osc. C.G.	27kΩ	F2
R3	Osc. stabilizer	47kΩ	C1
R4	Osc. H.T. feed	33kΩ	E3
R5	V2 S.G. feed	39kΩ	E3
R6	I.F. stopper	47kΩ	D2
R7	A.G.C. decoupling	2.2MΩ	E2
R8	Volume control	500kΩ	A1
R9	V3 C.G.	10MΩ	E3
R10	V3 anode load	1.2MΩ	E2
R11	V3 S.G. feed	5.6MΩ	E2
R12	V4 C.G.	2.2MΩ	D2
R13	V4 G.B.	560Ω	D2

CAPACITORS		Values	Locations
C1	L.W. aerial trim.	200pF	F3
C2	M.W. aerial trim.	60pF	F2
C3	Aerial tuning	440pF*	B1
C4	V1 S.G. decoupling	0.04μF	F2
C5	A.G.C. decoupling	0.04μF	E2
C6	1st I.F.T. tuning	80pF	C1
C7		80pF	C1
C8	V1 osc. C.G.	80pF	F2
C9	Osc. tuning	440pF*	B1
C10	M.W. osc. trim.	60pF	F2
C11	L.W. osc. trimmers	200pF	F2
C12		300pF	F2
C13	Osc. tracker	550pF	F3
C14	H.T. decoupling	0.04μF	F3
C15	V2 S.G. decoupling	0.04μF	E3
C16	2nd I.F.T. tuning	80pF	A1
C17		80pF	A1
C18	I.F. filtering	100pF	D2
C19	I.F. filtering	100pF	A1
C20	A.F. coupling	0.01μF	D3
C21	V3 S.G. decoupling	0.04μF	E2
C22	I.F. by-pass	100pF	E3
C23	A.F. coupling	0.01μF	D2
C24	Battery by-pass	8μF	D3

* "Swing" value, min. to max.

OTHER COMPONENTS		Approx. Values (ohms)	Locations
L1	L.W. aerial coil	5.5	C1
L2	M.W. aerial coil	0.6	B1
L3	1st I.F.T. {Pri.	17.0	C1
L4		17.0	C1
L5	Osc. tuning coil	4.2	F2
L6	Osc. reaction coil	2.0	F2
L7	2nd I.F.T. {Pri.	17.0	A1
L8		17.0	A1
L9	Speech coil	3.0	D3
T1	O.P. trans. {Pri.	600.0	A1
S1-S6	Waveband/batt. sw.	—	C1