

Intermediate frequency 470 kc/s.

RESISTORS	Values	Locations
R1	V1 C.G. ...	1MΩ B1
R2	V1 osc. C.G. ...	27kΩ C1
R3	Osc. anode H.T. feed ...	47kΩ C1
R4	S.G. H.T. feed ...	27kΩ B1
R5	I.F. stopper ...	100kΩ A1
R6	A.G.C. decoupling ...	4.7MΩ A1
R7	Volume control ...	1MΩ A1
R8	V3 C.G. ...	10MΩ A1
R9	V3 S.G. H.T. feed ...	10MΩ A1
R10	V3 anode load ...	2.2MΩ A1
R11	V4 C.G. ...	4.7MΩ A1
R12	V4 G.B. ...	470Ω A1

OTHER COMPONENTS	Approx. Values (ohms)	Locations
L1	M.W. and L.W. ... {	C1
L2	internal aerials ... {	C1
L3	Osc. tuning coil ...	2.0 C1
L4	Osc. reaction coil ...	— C1
L5	1st I.F. { Pri. ...	10.0 C1
L6	trans. { Sec. ...	10.8 C1
L7	2nd I.F. { Pri. ...	10.0 A1
L8	trans. { Sec. ...	10.8 A1
L9	Speech coil ...	2.5 —
T1	O.P. trans. { Pri. ...	870.0 —
S1-S3	Waveband switches ...	C1
S4, S5	Battery sw., g'd R7	A1

CAPACITORS	Values	Locations
C1	V1 C.G. ...	100pF B1
C2\$	1st I.F. trans. ... {	100pF C1
C3\$	tuning ... {	100pF C1
C4	V1 osc. C.G. ...	100pF C1
C5	A.G.C. decoupling ...	0.01μF B1
C6	Osc. tracker ...	560pF C1
C7	L.W. osc. trim ...	470pF C1
C8	Osc. anode coupling ...	100pF C1
C9	S.G. decoupling ...	0.01μF B1
C10\$	2nd I.F. trans. ... {	100pF A1
C11\$	tuning ... {	100pF A1
C12	I.F. by-passes ... {	100pF A1
C13	A.F. coupling ...	0.002μF A1
C14	V3 S.G. decoupling ...	0.01μF A1
C15	A.F. coupling ...	0.01μF A1
C16	H.T. reservoir ...	8μF B1
C17*	Tone corrector ...	0.002μF A1
C18	L.W. aerial trim ...	200pF C1
C19†	M.W. aerial trim ...	60pF C1
C20†	Aerial tuning ...	528pF B1
C21†	Oscillator tuning ...	528pF B1
C22†	M.W. osc. trim ...	50pF C1

*Electrolytic. †Variable. ‡Pre-set. §Integral part of I.F. transformer. ¶Swing value

CIRCUIT ALIGNMENT

I.F. Stages.—Switch receiver to M.W. and turn gang to maximum capacitance. Connect output of signal generator, via an $0.1 \mu\text{F}$ capacitor in the "live" lead, to control grid (pin 6) of **V1** and chassis (frame of tuning gang). Feed in a 470 kc/s signal and adjust the cores of **L8** (location reference A1), **L7** (G2), **L6** (C1) and **L5** (E2) for maximum output.

R.F. and Oscillator Stages.—Replace chassis in carrying case and place the batteries in their normal operating positions. Check that with the gang at maximum capacitance, the cursor coincides with the high wavelength ends of the tuning scales. The cursor position can be corrected if necessary by turning the cursor disc (behind the tuning scale) on the gang spindle.

M.W.—Switch receiver to M.W. and transfer signal generator leads to a loop of wire placed round, or near, the internal ferrite rod aerial **L1**, **L2** (C1). Tune receiver to 500 m, feed in a 500 m (600 kc/s) signal and adjust the core of **L3** (C1) for maximum output. Tune receiver to 200 m, feed in a 200 m (1,500 kc/s) signal and adjust **C23** (C1) and **C20** (C1) for maximum output.

L.W.—Switch receiver to L.W. and tune it to 1,400 m. Feed in a 1,400 m (214 kc/s) signal and adjust **C19** (C1) for max.

Valve	Anode		Screen	
	V	mA	V	mA
V1 DK96	85.5	*	70	0.6†
	30.0	1.05		
V2 DF96	85.5	*	70	0.6†
	38.0	0.027	15	0.007
V3 DAF96	80.0	5.2	85.5	*
V4 DL96				

*Not measurable owing to printed circuit connections. †Total current to screens of **V1** and **V2**.

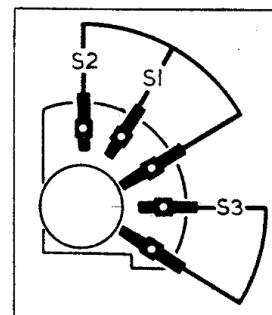


Diagram of the waveband switch unit as viewed in position on the circuit plate.