



**VIDOR
CN430**

VALVE ANALYSIS

Valve	Anode		Screen	
	V	mA	V	mA
V1 DK96	90	0.7	71	0.2
	Oscillator			
	35	1.6		
V2 DF96	90	1.7	68	0.6
V3 DAF96	*	0.06	*	0.02
V4 DL96	88.5	4.0	90	0.8

*Very low reading.

Intermediate frequency 470 kc/s.

CAPACITORS		Values	Locations
C1	L.W. aerial trim ...	100pF	B1
C2	V1 C.G. ...	100pF	E3
C3	V1 S.G. decoupling ...	0.01μF	F3
C4	1st I.F.T. tuning ...	65pF	B1
C5		65pF	B1
C6	V1 osc. C.G. ...	100pF	E3
C7	M.W. osc. tracker ...	567pF	B1
C8	L.W. osc. trim. ...	160pF	C1
C9	L.W. osc. tracker ...	280pF	B1
C10	Osc. anode decoup. ...	0.01μF	F3
C11	V2 S.G. decoupling ...	0.01μF	E3
C12	V2 neutralizing ...	3.3pF	D3
C13	2nd I.F.T. tuning ...	65pF	C1
C14		65pF	C1
C15	I.F. by-pass ...	100pF	D3
C16		100pF	D3
C17	A.F. coupling ...	100pF	D3
C18	V3 S.G. decoupling ...	0.01μF	D3
C19	Alarm osc. coupling ...	0.005μF	D3
C20	A.F. coupling ...	470pF	D3
C21	I.F. by-pass ...	100pF	D3
C22*	H.T. reservoir ...	32μF	A2
C23	A.G.C. decoupling ...	0.01μF	E3
C24	Filament by-passes ...	0.1μF	F3
C25		0.1μF	C1
C26*	Filament smoothing ...	100μF	C1
C27*		50μF	C1
C28*	H.T. smoothing ...	32μF	A2
C29†	L.W. aerial trim. ...	40pF	B1
C30†	M.W. aerial trim. ...	40pF	B1
C31†	Aerial tuning ...	523pF	B1
C32†	M.W. osc. trim. ...	40pF	B1
C33†	Oscillator tuning ...	523pF	B1
C34†	L.W. osc. trim. ...	40pF	C1

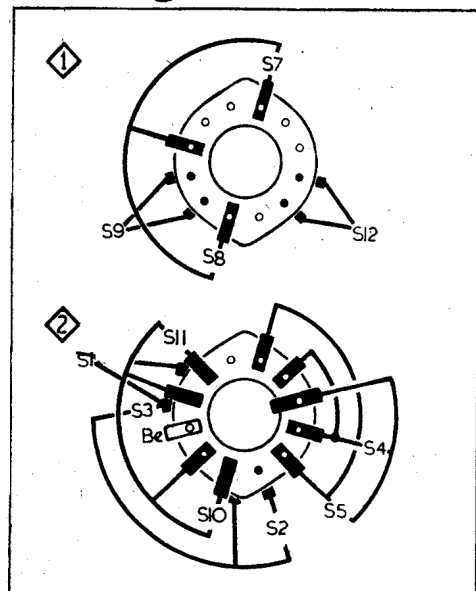
*Electrolytic. †Variable. ‡Pre-set.

RESISTORS

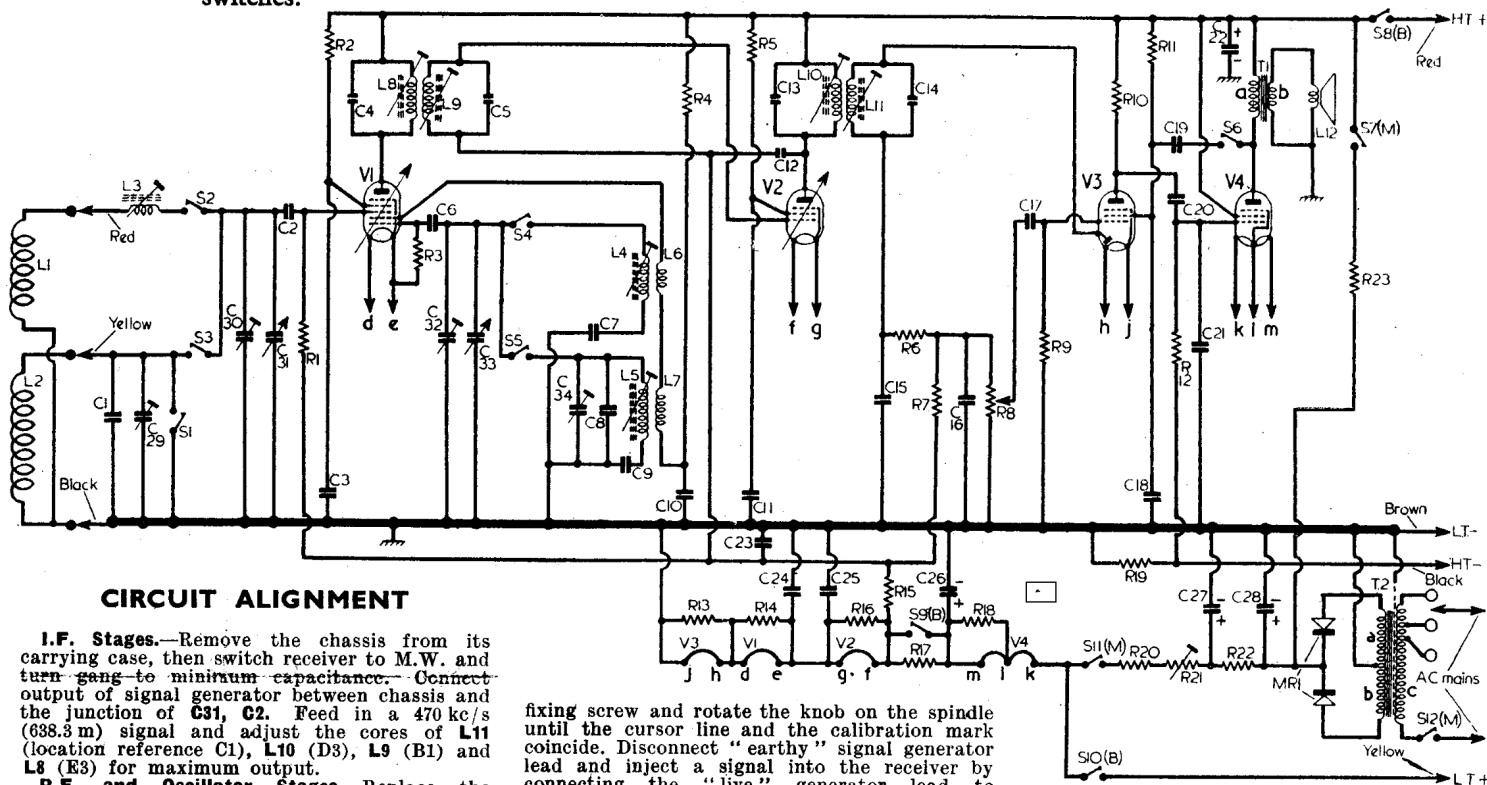
		Values	Locations
R1	V1 C.G. ...	470kΩ	E3
R2	V1 S.G. feed ...	120kΩ	F3
R3	V1 osc. C.G. ...	27kΩ	F3
R4	Osc. anode feed ...	33kΩ	F3
R5	V2 S.G. feed ...	39kΩ	E3
R6	I.F. stopper ...	47kΩ	D3
R7	A.G.C. decoupling ...	2.2MΩ	D3
R8	Volume control ...	500kΩ	C1
R9	V3 C.G. ...	10MΩ	D3
R10	V3 anode load ...	1MΩ	D3
R11	V3 S.G. feed ...	2.7MΩ	D3
R12	V4 C.G. ...	1.8MΩ	D3
R13	Filament H.T. by-passes ...	150Ω	F3
R14		180Ω	F3
R15	A.G.C. delay ...	1.8MΩ	E3
R16	Filament H.T. by-pass ...	270Ω	D3
R17	V4 extra G.B. ...	75Ω	A1
R18	Filament H.T. by-pass ...	620Ω	D3
R19		120Ω	E3
R20	Filament ballast ...	68Ω	A1
R21	Filament adj. ...	1kΩ	A1
R22	Filament smoothing ...	3kΩ	A1
R23		2.2kΩ	A1

OTHER COMPONENTS

		Approx. Values (ohms)	Locations
L1	M.W. frame aerial	1.7	—
L2	L.W. frame aerial ...	14.0	—
L3	M.W. loading coil	1.8	A1
L4	Oscillator tuning coils	2.3	A1
L5		5.1	A1
L6	Oscillator reaction coils	1.5	A1
L7		2.3	A1
L8	1st I.F.T. { Pri. ...	13.5	B1
L9		13.5	B1
L10	2nd I.F.T. { Pri. ...	13.5	C1
L11		13.5	C1
L12	Speech coil	2.5	—
T1	O.P. trans. { a ...	570.0*	B2
		235.0	
		250.0	
T2	Mains trans. { a ...	434.0	A2
	{ b ...	235.0	
		250.0	
MR1	Metal rectifier	—	A1
S1-S5	Waveband switches	—	A1
S6	Alarm switch	—	—
S7	Mains/battery sw.	—	A1
S12		—	A1



Diagrams of waveband and mains/battery switches.



CIRCUIT ALIGNMENT

I.F. Stages.—Remove the chassis from its carrying case, then switch receiver to M.W. and turn gang to minimum capacitance. Connect output of signal generator between chassis and the junction of C31, C2. Feed in a 470 kc/s (638.3 m) signal and adjust the cores of L11 (location reference C1), L10 (D3), L9 (B1) and L8 (E3) for maximum output.

R.F. and Oscillator Stages.—Replace the chassis in its carrying case and raise the front panel just sufficiently to make the adjustments accessible. Check that with the gang at maximum capacitance, the cursor line on the panel coincides with the calibration mark at the 540 m end of the M.W. tuning scale. If adjustment is necessary, slacken the tuning control knob

fixing screw and rotate the knob on the spindle until the cursor line and the calibration mark coincide. Disconnect "earthy" signal generator lead and inject a signal into the receiver by connecting the "live" generator lead to chassis.

M.W.—Switch receiver to M.W. and tune to 500 m. Feed in a 500 m (600 kc/s) signal and adjust the cores of L4 (A1) and L3 (A1) for maximum output. Tune receiver to 200 m, feed in a 200 m (1,500 kc/s) signal and adjust C32 (B1) and C30 (B1) for maximum output.

L.W.—Switch receiver to L.W., and tune to 1,900 m. Feed in a 1,900 m (158 kc/s) signal and adjust the core of L5 (A1) for maximum output. Tune receiver to 1,100 m, feed in a 1,100 m (273 kc/s) signal and adjust C34 (C1) and C29 (B1) for maximum output.