

VIDOR - CN429

OTHER COMPONENTS		Approx. Values	Locations
L1	M.W. frame aerial	2.0	—
L2	L.W. frame aerial	15.0	—
L3	Osc. tuning coil ...	1.4	G3
L4	Osc. reaction coll. ...	1.0	G3
L5	1st I.F. trans. {	22.0	B2
L6		22.0	B2
L7	2nd I.F. trans. {	22.0	C2
L8		22.0	C2
L9	Speech coil ...	3.0	E3
T1	O.P. trans. {	420.0	—
S1-S3	Waveband switches	—	H3
S4, S5	Battery switches ...	—	—

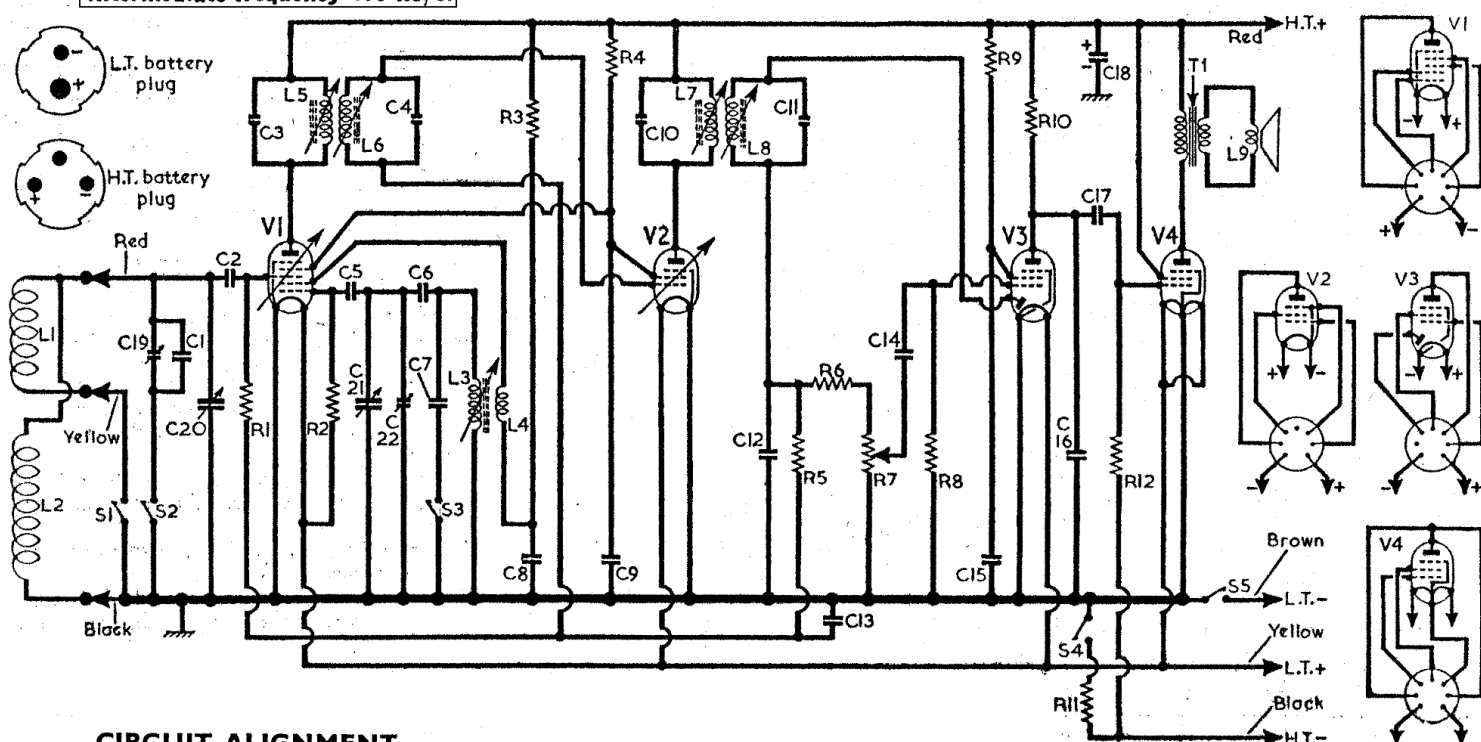
Valves	Anode		Screen	
	V	mA	V	mA
V1 DK96 ...	86	0.35	67	0.1
V2 DF96 ...	35	1.6	67	0.5
V3 DAF96 ...	86	1.4	36	0.01
V4 DL96 ...	25	0.06	86	0.75
	83	4.0		

RESISTORS		Values	Locations
R1	V1 C.G. ...	470kΩ	G4
R2	V1 osc. C.G. ...	27kΩ	G4
R3	Osc. anode feed ...	33kΩ	F4
R4	S.G. feed ...	33kΩ	G4
R5	A.G.C. decoupling	2.2MΩ	F4
R6	I.F. stopper	100kΩ	F4
R7	Volume control	500kΩ	H3
R8	V3 C.G. ...	10MΩ	F3
R9	V3 S.G. feed	2.7MΩ	E3
R10	V3 anode load	1MΩ	E4
R11	V4 G.B. ...	680Ω	F4
R12	V4 C.G. ...	1.8MΩ	F4

CAPACITORS		Values	Locations
C1	L.W. aerial trim. ...	150pF	A1
C2	V1 C.G. ...	100pF	H4
C3	1st I.F. trans. {	65pF	B2
C4		65pF	B2
C5	tuning ...	100pF	H4
C6	V1 osc. C.G. ...	532pF	H4
C7	Osc. tracker	470pF	H4
C8	L.W. osc. trim. ...	0.05μF	C1
C9	Osc. decoupling ...	0.05μF	C1
C10	S.G. decoupling ...	65pF	C2
C11	2nd I.F. trans. {	65pF	C2
C12		65pF	C2
C13	tuning ...	100pF	F4
C14	I.F. by-pass ...	0.05μF	G4
C15	A.G.C. decoupling	0.001μF	F3
C16	A.F. coupling	0.05μF	F4
C17	V3 S.G. decoupling	200pF	F3
C18	I.F. by-pass ...	0.01μF	E4
C18*	A.F. coupling	2μF	B2
C19†	H.T. decoupling ...	50pF	B1
C20†	L.W. aerial trim ...	523pF	A2
C21†	Aerial tuning ...	523pF	A1
C22†	Oscillator tuning ...	50pF	A1

* Electrolytic. † Variable. ‡ Pre-set.

Intermediate frequency 470 kc/s.



CIRCUIT ALIGNMENT

All the core and trimmer adjustments are made accessible by unscrewing the captive bolt in the front edge of the receiver escutcheon and raising the escutcheon. The chassis need not be removed.

I.F. Stages.—Switch receiver to M.W., tune to 200 m and turn volume control to maximum. Connect signal generator leads to junction of C19 and C2, and to chassis, feed in a 470 kc/s (638.3 m) signal and adjust the cores of L8 (location reference C2), L7 (F4), L6 (B2) and L5 (G4) for maximum output, reducing the input as the circuits come into line to avoid A.G.C. action. Repeat these adjustments.

R.F. and Oscillator Stages.—Check that with the gang at maximum capacitance, the fixed cursor marks on the escutcheon coincide with the lines dividing the M.W. and L.W. scales. The signal generator should be coupled to the frame aerials by

laying the leads near the lid of the receiver. If insufficient coupling is obtained in this way, the "live" signal generator lead may be connected to the chassis frame.

M.W.—Switch receiver to M.W., tune to 200m, feed in a 200m (1,500 kc/s) signal and adjust C22 (A1) for maximum output. Tune receiver to 500m, feed in a 500m (600 kc/s) signal and adjust the core of L3 (G4) for maximum output, rocking the gang slightly to obtain maximum output. Repeat these adjustments until the calibration is correct at both ends of the band.

L.W.—Switch receiver to L.W., tune to 1,200m, feed in a 1,200m (250 kc/s) signal and adjust C19 (B1) for maximum output. If the calibration at the high wavelength end of the band is badly out, C6 should be checked and replaced if its value is outside the stated ± 1 per cent tolerance.

Switches.—S1-S3 are the waveband switches, ganged in a simple slide-type unit. In the M.W. position (slider towards the tuning spindle) S1 closes; on L.W., S2 and S3 close.

S4 and S5 are the battery circuit switches, mounted in a special spring-loaded unit on the side of the carrying case. It is so positioned that the lid-stay depresses the spring-loaded bar when the lid is closed, switching off the receiver. When the lid is raised, the spring brings the bar into contact with the two isolated tags, closing the switches.