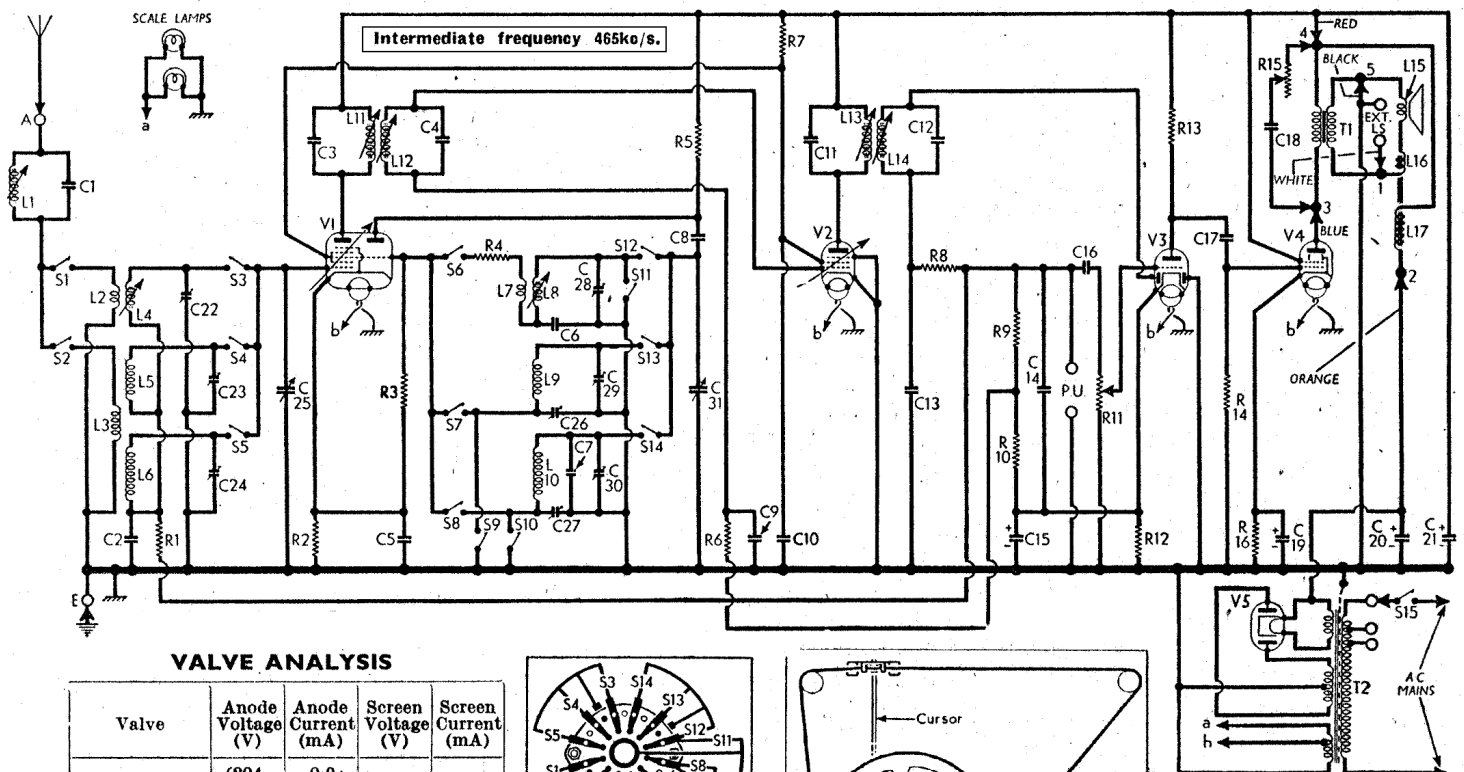


OTHER COMPONENTS		Approx. Values (ohms)
L1	I.F. rejector coil	3-5
L2	Aerial coupling coils	8-6
L3		14-0
L4	Aerial tuning coils	Very low
L5		3-5
L6	S.W. reaction coil	18-5
L7		8-5
L8	Oscillator tuning coils	Very low
L9		2-6
L10	1st I.F. trans. { Pri. Sec. }	6-5
L11		8-0
L12	2nd I.F. trans. { Pri. Sec. }	8-0
L13		8-0
L14	Speech coil	2-5
L15		Very low
L16	Hum neut. coil	1,500-0
L17	Field coil	—
S1-S15	W/band switches...	—
T1	Mains sw. g'd R11 Speaker trans. { Pri. Sec. }	200-0
	Heat sec., total	0-1
	Rect. heat sec., total	37-0
T2	Mains trans. { Rect. heat sec., H.T. sec., total }	Very low
		320-0

RESISTORS		Values (ohms)
R1	V1 A.G.C. decoup.	1,000,000
R2	V1 fixed G.B.	220
R3	V1 osc. C.G.	47,000
R4	S.W. stabilizer	100
R5	Osc. anode load	33,000
R6	V2 A.G.C. decoup.	2,200,000
R7	S.G.'s H.T. feed	33,000
R8	I.F. stopper	100,000
R9	A.G.C. potential divider network	220,000
R10	Volume control	220,000
R11	V3 G.B., A.G.C. delay	500,000
R12	V3 triode load	470
R13	V4 C.G. resistor	47,000
R14	Tone control	680,000
R15	V4 G.B. resistor	50,000
R16		180

CAPACITORS		Values (μF)
C1	I.F. rejector tune	0-00056
C2	V1 hex. C.G. decoup.	0-01
C3	1st I.F. trans. tun.	0-00015
C4		0-00015
C5	V1 cath. by-pass	0-01
C6	Osc. S.W. tracker	0-005
C7	Osc. L.W. trimmer	0-000347
C8	Osc. anode coup.	0-00047
C9	V2 C.G. decoup.	0-01
C10	S.G.'s decoupling	0-01
C11	2nd I.F. trans. tun	0-00015
C12		0-00015
C13	I.F. by-passes	0-0001
C14		0-0001
C15*	V3 cath. by-pass	30-0
C16	A.F. coupling	0-01
C17	A.F. coupling	0-01
C18	Part. tone control	0-05
C19*	V4 cath. by-pass	25-0
C20*	H.T. smoothing	16-0
C21*		16-0
C22†	Aerial S.W. trim.	0-000055
C23†	Aerial M.W. trim.	0-000055
C24†	Aerial L.W. trim.	0-000055
C25†	Aerial tuning	0-00045‡
C26†	Osc. M.W. tracker	0-00035
C27†	Osc. L.W. tracker	0-00015
C28†	Osc. S.W. trim.	0-000055
C29†	Osc. M.W. trim.	0-000055
C30†	Osc. L.W. trim.	0-000055
C31†	Oscillator tuning	0-00045‡

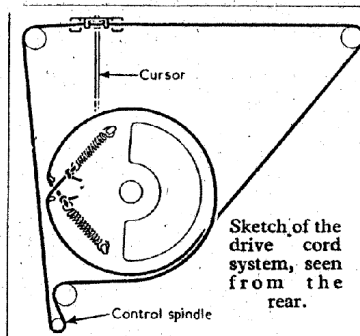
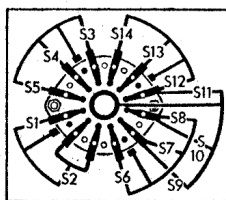
*Electrolytic, †Variable ‡Pre-set
§"Swing" value, min. to max.



VALVE ANALYSIS

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 TH41	204	0-9	53	3-85
V2 VP41	85	3-0	—	—
V3 HL42DD	204	2-4	53	0-55
V4 11N45	72	2-7	—	—
V5 U6	198	34-0	204	7-0
	254†	—	—	—

† Each anode, A.C.



Drive Cord Replacement.—Four feet of cord, which should be of superior quality fishing line, is sufficient for the drive, leaving ample for tying off. The cord should be run as shown in the sketch (next col.), where it is viewed from the rear. Considerable tension is necessary, and in our sample the 1-in tension springs were extended to between 2 and 3 inches.

M.W.—With set still switched to M.W., feed in a 500 m (600 kc/s) signal, tune it in and adjust C26 (B1), while rocking the gang, for maximum output. Slide the cursor carriage along the drive cord until the cursor coincides with the 500 m calibration point on the scale. Tune to 250 m on scale, feed in a 250 m (1,200 kc/s) signal, and adjust C29 (H3) and C23 (F3) for maximum output. Repeat these operations if necessary.

L.W.—Switch set to L.W., tune to 2,000 m on scale, feed in a 2,000 m (150 kc/s) signal, and adjust C27 (C1) for maximum output. Tune to 1,000 m on scale, feed in a 1,000 m (300 kc/s) signal, and adjust C30 (H3) and C24 (F3) for maximum output. Repeat these operations until no improvement results.

S.W.—Switch set to S.W., tune to 50 m on scale, feed in a 50 m (6 Mc/s) signal, and adjust the cores of L8 (J3) and L4 (E3) for maximum output. Tune to 20 m on scale, feed in a 20 m (15 Mc/s) signal, and adjust C28 (H3) and C22 (F3) for maximum output. Repeat these operations until no improvement results.

CIRCUIT ALIGNMENT

I.F. Stages.—Switch set to M.W., turn gang to minimum and volume control to maximum, connect signal generator, via an 0.01 μF capacitor in the "live" lead, to the control grid (top cap) of V1 and the E socket, after removing the original top cap connector and joining a 500,000 Ω resistor between the top cap of the valve and chassis, and short-circuit C31 (location reference B1).

Feed in a 465 kc/s (645 m) signal and adjust the cores of L14, L13, L12 and L11 (B2, J6, A2, K4) for maximum output. Finally, remove short-circuit from C31 and replace original top cap connector on V1.

I.F. Filter.—Transfer "live" signal generator lead to A socket, via a suitable dummy aerial, feed in a strong 465 kc/s signal, and adjust the core of L1 (G3) for minimum output.