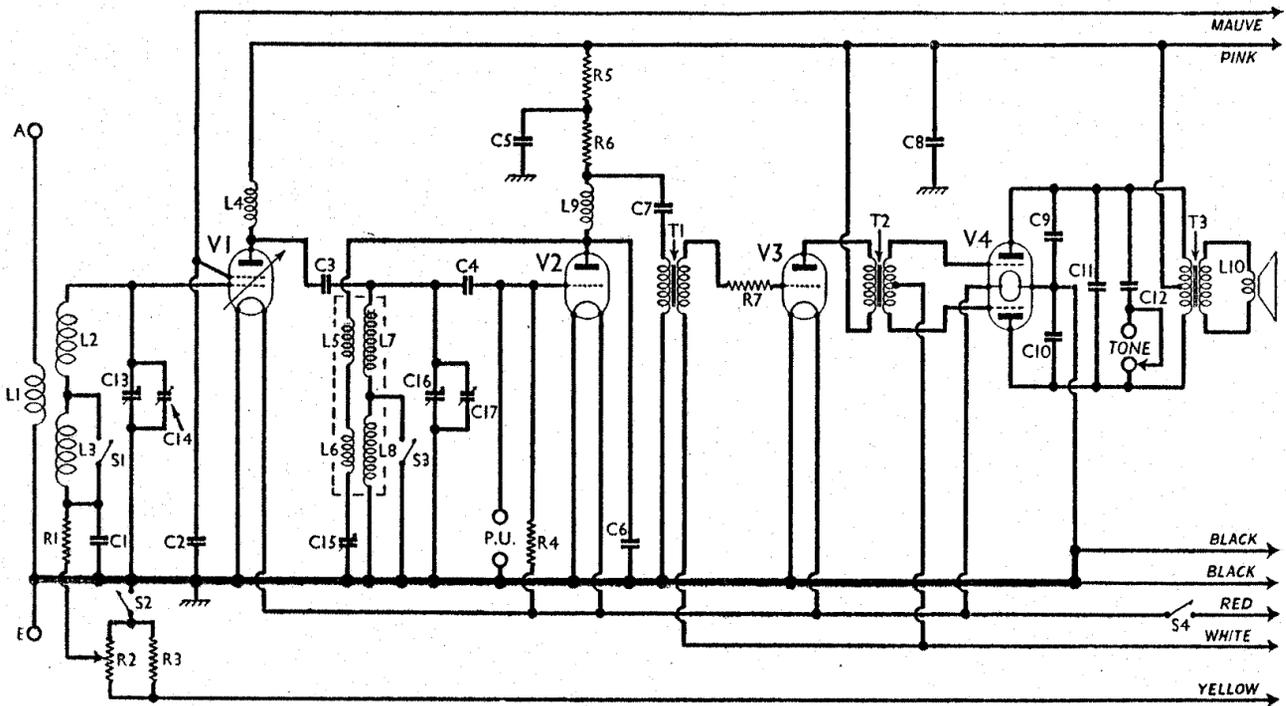


LISSEN - 8118



COMPONENTS AND VALUES

Resistances		Values (ohms)
R1	V1 cont. grid decoupling ..	100,000
R2	V1 gain control ..	5,000
R3	Part of G.B. battery load ..	2,000
R4	V2 grid leak ..	2,000,000
R5	V2 anode decoupling ..	20,000
R6	V2 anode load ..	30,000
R7	V3 grid H.F. stopper ..	100,000

Condensers		Values (μF)
C1	V1 cont. grid decoupling ..	0.1
C2	V1 S.G. by-pass ..	0.1
C3	H.F. coupling to L7, L8 ..	0.0001
C4	V2 grid condenser ..	0.00005
C5	V2 anode decoupling ..	0.5
C6	V2 anode H.F. by-pass ..	0.0003
C7	L.F. coupling to T1 ..	0.1
C8	H.T. reservoir ..	1.0
C9	Tone correctors	0.002
C10		0.002
C11		0.002
C12		0.005
C13†	Frame aerial tuning ..	—
C14†	Frame aerial trimmer ..	—
C15†	Reaction control ..	0.0005
C16†	H.F. circuit tuning ..	—
C17†	H.F. circuit trimmer ..	—

† Variable. ‡ Pre-set.

Other Components (contd.)		Approx. Values (ohms)
L10	Speaker speech coil ..	2.4
T1	Intervalve trans. { Pri ..	1,100.0
	{ Sec. ..	10,000.0
T2	Driver trans. { Pri. ..	480.0
	{ Sec. total ..	390.0
T3	Speaker input trans. { Pri total ..	550.0
	{ Sec. ..	0.6
S1, S3	Waveband switches ..	—
S2	G.B. switch ..	—
S4	L.T. switch ..	—

VALVE ANALYSIS

Valve voltages and currents given in the table below were measured with the receiver operating from new batteries.

Valve	Anode Volts	Anode Current (mA)	Screen Volts	Screen Current (mA)
V1 K40N	118	0.5	55	0.2
V2 K30C	55	1.1	—	—
V3 K30E	115	2.4	—	—
V4 K33B	115†	1.7†	—	—

† Each anode.

Other Components		Approx. Values (ohms)
L1	External aerial coupling ..	1.4
L2	Frame aerial windings	1.3
L3		12.4
L4	V1 anode H.F. choke ..	500.0
L5	Reaction coils ..	2.2
L6		4.6
L7	H.F. tuning coils ..	1.4
L8		19.6
L9	V2 anode H.F. choke ..	500.0

the H.T. reading 128 V. The volume control was turned so that the slider was at the end of the winding but the plates of the reaction condenser were not fully in mesh, that is the control was turned through an angle of about 125 degrees. There was no signal input, the frame aerial connections being shorted together.

Voltages were measured on the 1,200 V scale of an Avometer, chassis acting as negative.

GENERAL NOTES

Switches.—The two waveband and two battery switches are ganged in a single unit beneath the chassis. **S1** and **S3**, the waveband switches, are both *closed* on the M.W. band and *open* on the L.W. band. **S2** and **S4** are both *open* when the set is "Off," and *closed* on both the M.W. and L.W. positions.

Coils.—The frame aerial and aerial coupling coils **L1-L3**, are in the cabinet of the set. The remaining tuning and reaction coils, **L5-L8**, are in a single screwed unit on the chassis deck, **L5** and **L7** being iron cored.

L4 and **L9** are two flat H.F. chokes, mounted beneath the chassis.