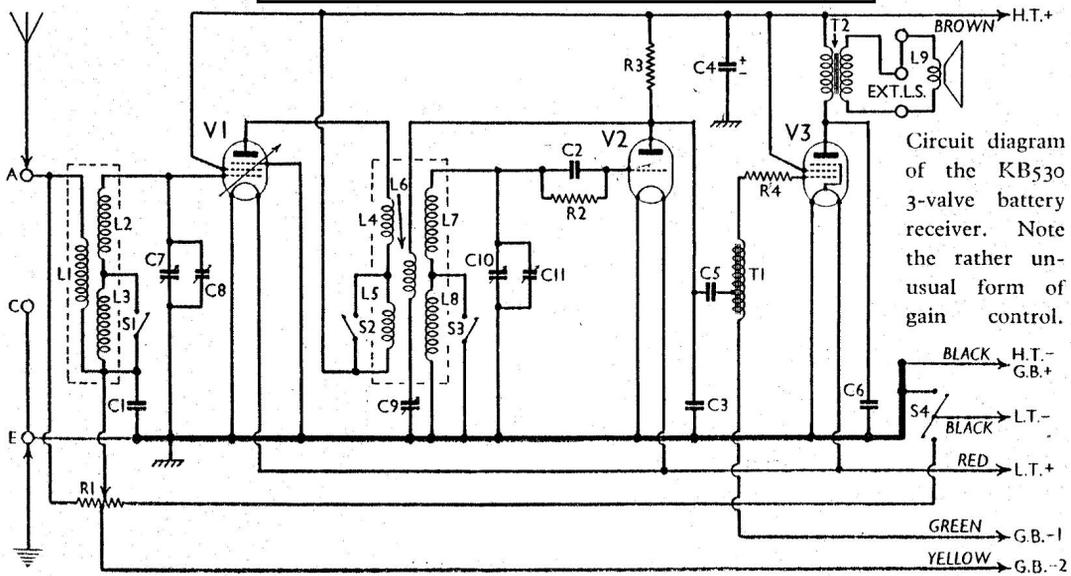


KOLSTER-BRANDES - 530



Circuit diagram of the KB530 3-valve battery receiver. Note the rather unusual form of gain control.

COMPONENTS AND VALUES

RESISTANCES		Values (ohms)
R1	V1 gain control	50,000*
R2	V2 grid leak	2,000,000
R3	V2 anode load	25,000
R4	V3 C.G. H.F. stopper	100,000

* Tapped.

CONDENSERS		values (μF)
C1	V1 C.G. decoupling	0.01
C2	V2 C.G. condenser	0.0001
C3	V2 anode H.F. by-pass	0.001
C4*	H.T. supply reservoir	2.0
C5	L.F. coupling to T1	0.1
C6	Tone corrector	0.0005
C7†	Aerial circuit tuning	0.0005
C8‡	Aerial circuit trimmer	—
C9†	Reaction control	0.0005
C10†	H.F. trans. sec. tuning	0.0005
C11‡	H.F. trans. sec. trimmer	—

* Electrolytic. † Variable. ‡ Pre-set.

OTHER COMPONENTS		Approx. Values (ohms)
L1	Aerial coupling coil	10.8
L2	Aerial tuning coils	4.5
L3		10.0
L4		7.0
L5	H.F. transformer primary	16.5
L6	Reaction coil	4.0
L7	H.F. transformer secondary	4.0
L8		10.0
L9	Speaker speech coil	4.0
T1	Intervalve auto-trans., total winding	9,000.0
T2	Speaker input trans. { Pri.	850.0
	{ Sec.	0.9
S1-S3	Waveband switches	—
S4	L.T. and G.B. switch	—

VALVE ANALYSIS

Valve voltages and currents given in the table below are those measured in our receiver when it was operating from an H.T. battery reading 120 V. The volume control was at maximum but the reaction control was at minimum. There was no signal input.

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

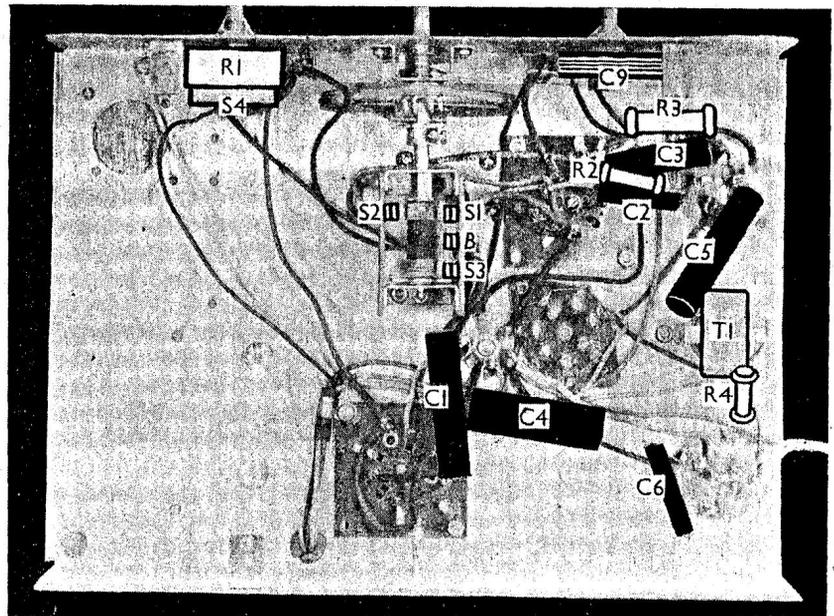
Valve	Anode Volts	Anode Current (mA)	Screen Volts	Screen Current (mA)
V1 VP2	120	1.7	120	0.4
V2 PM1HL	80	1.7	—	—
V3 PM22A	118	2.9	120	0.6

GENERAL NOTES

Switches.—S1-S3 are the waveband switches in one ganged unit beneath the chassis, seen in our under-chassis view. The switch marked B is blank, its contacts being short-circuited and earthed. All switches are open on L.W. and closed on M.W.

S4 is a three-point switch ganged with the gain control **R1**. It controls filament and G.B. circuits.

Coils.—These are in two screened units on the chassis deck.



Under-chassis view. Only three of the four switches are used, the remaining one being blank. T1 is the intervalve auto-transformer.