

CIRCUIT ALIGNMENT

With the gang at maximum, the pointer should coincide with the division, at the LW ends, between the two scale plates. At this position, the receiver is switched to gram.

MW.—Connect signal generator leads to A and E sockets via a dummy aerial, tune to 200 m on scale, feed in a 200 m (1,500 kc/s) signal, and adjust C25, C28 and C23 for maximum output. Turn the volume control to maximum, reducing input as required, and adjust C31 to a point short of oscillation. Check that oscillation occurs nowhere over the MW band, then return to 200 m and readjust C25 and C28. Finally, check again for oscillation.

LW.—Tune to 1,000 m on scale, feed in a 1,000 m (300 kc/s) signal, and adjust C26 and C29 for maximum output; then check that oscillation does not occur anywhere in the band with the gang at maximum.

If modern valves are fitted it may be necessary to disconnect C31 to secure stability with the volume control advanced.

EKCO - RS3

VALVE ANALYSIS

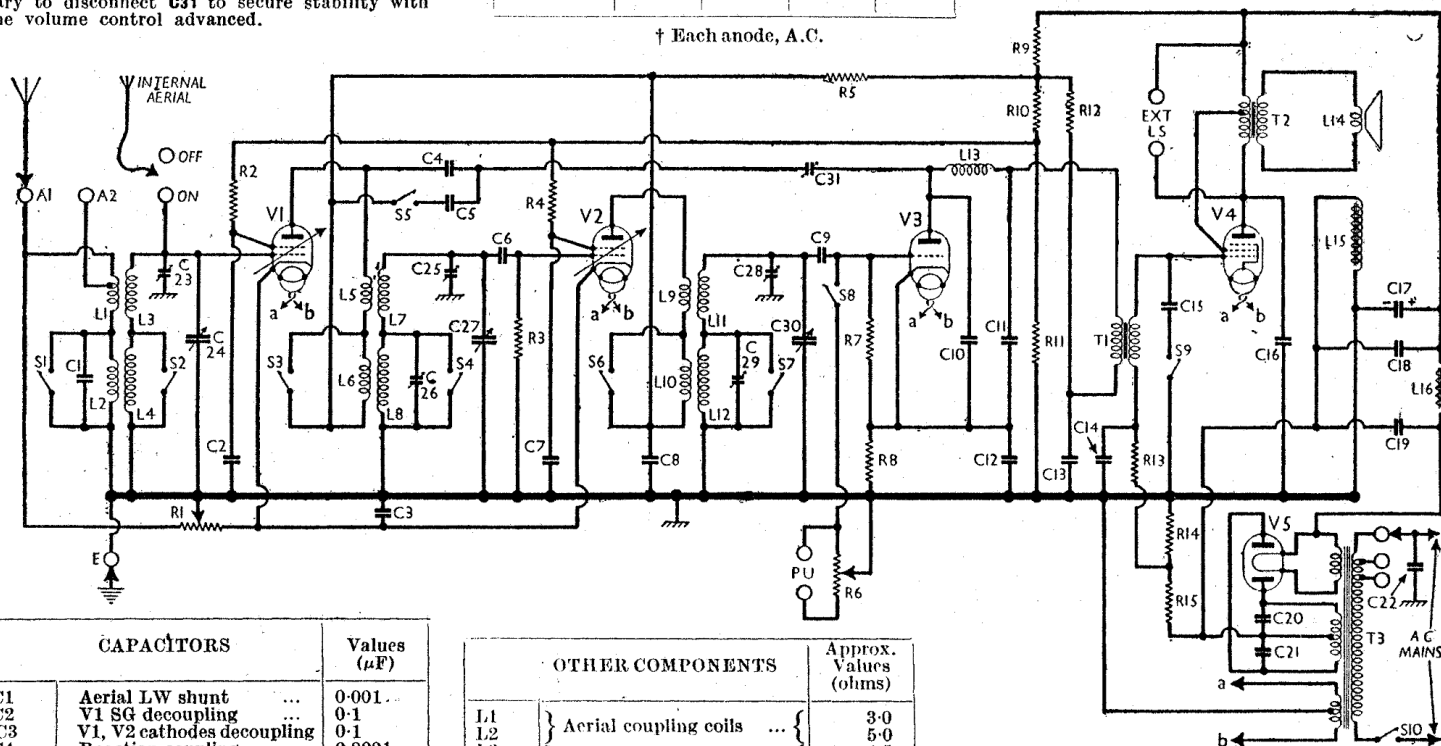
Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 S4VA	175	4.0	85	} Very low
V2 S4VB	175	4.0	85	
V3 354V	90	2.0	—	} 7.0
V4 PM24B	240	38.0	245	
V5 DW3	270†	—	—	

† Each anode, A.C.

RESISTORS

		Values (ohms)
R1	Gain control ...	5,000
R2	V1 SG HT feed ...	2,800
R3	V2 CG resistor ...	2,000,000
R4	V2 SG HT feed ...	2,800
R5	V1, V2 anodes HT feed ...	1,000
R6	PU input control ...	10,000
R7	V3 CG resistor ...	1,000,000
R8	V3 gram GB resistor ...	250
R9	} HT circuit potential divider ...	2,000
R10		5,000
R11	V3 anode HT feed ...	5,000
R12	V4 CG decoupling ...	9,000
R13	V4 GB potential divider {	100,000*
R14	} V4 GB potential divider {	40,000*
R15		60,000*

* Parts of a single 100,000 Ω tapped resistor.



CAPACITORS		Values (μ F)
C1	Aerial LW shunt ...	0.001
C2	V1 SG decoupling ...	0.1
C3	V1, V2 cathodes decoupling ...	0.1
C4	Reaction coupling ...	0.0001
C5	Reaction LW muter ...	0.0001
C6	V2 CG capacitor ...	0.0001
C7	V2 SG decoupling ...	0.1
C8	V1, V2 anodes decoupling ...	0.1
C9	V3 CG capacitor ...	0.0003
C10	} RF by-pass capacitors ... {	0.0005
C11		0.0005
C12	V3 cathode by-pass ...	0.1
C13	V3 anode decoupling ...	1.0
C14	V4 CG decoupling ...	1.0
C15	Tone control capacitor ...	0.0003
C16	Fixed tone corrector ...	0.004
C17*	} HT smoothing capacitors {	8.0
C18		1.0
C19		3.0
C20	} RF by-pass capacitors {	0.05§
C21		0.05§
C22		0.001§
C23†	Aerial MW trimmer ...	—
C24†	Aerial circuit tuning ...	—
C25†	1st RF trans. MW trimmer ...	—
C26†	1st RF trans. LW trimmer ...	—
C27†	1st RF trans. tuning ...	—
C28†	2nd RF trans. MW trimmer ...	—
C29†	2nd RF trans. LW trimmer ...	—
C30†	2nd RF trans. tuning ...	—
C31†	Reaction control ...	—

OTHER COMPONENTS		Approx. Values (ohms)
L1	} Aerial coupling coils ...	3.0
L2		5.0
L3	} Aerial tuning coils ...	4.5
L4		16.0
L5	} 1st RF trans. pri. coils	5.5
L6		8.5
L7	} 1st RF trans. sec. tuning coils ...	4.5
L8		16.0
L9	} 2nd RF trans. pri. coils	5.5
L10		8.5
L11	} 2nd RF trans. sec. tuning coils ...	4.5
L12		16.0
L13	RF filter choke ...	100.0
L14	Speaker speech coil ...	0.5
L15	Speaker field coil ...	2,000.0
L16	HT smoothing choke ...	500.0
T1	Intervalve trans. { Pri....	650.0
T2	} Speaker input { Pri., total trans.	10,000.0
		800.0
		0.1
		40.0
T3	} HT sec., total	0.1
		1,000.0

S1—S7	Waveband switches ...	---
S8	Pick-up switch ...	---
S9	Tone control switch ...	---
S10	Mains switch ...	---

* Electrolytic. † Variable. ‡ Pre-set.
§ Two in series: see "General Notes."