



RESISTANCES		Values (ohms)
R1	V1 SG HT potential divider	30,000
R2	resistances	40,000
R3	V1 gain control	12,000
R4	V1 fixed GB	1,500
R5	V1 anode HT feed	10,000
R6	V2 reaction circuit stabilis-	300
R7	ing resistances	200
R8	V2 grid leak	1,000,000
R9	V2 SG HT feed	500,000
R10	V2 gram GB resistance	1,000
R11	V2 anode load	100,000
R12	V3 CG resistance	500,000
R13	V3 CG RF stopper	100,000
R14	V3 GB resistance	300

CONDENSERS		Values (μF)
C1	Aerial series condenser	0.0005
C2	Aerial MW coupling	0.000015
C3	V1 SG decoupling	0.1
C4	V1 cathode by-pass	0.1
C5	V1 anode decoupling	0.1
C6	V2 CG condenser	0.0001
C7	V2 SG decoupling	0.1
C8*	V2 cathode by-pass	50.0
C9	V2 anode RF by-pass	0.0002
C10	V2 to V3 AF coupling	0.01
C11	V3 CG RF by-pass	0.0002
C12	Fixed tone corrector	0.005
C13*	V3 cathode by-pass	50.0
C14*	HT smoothing	6.0
C15*		4.0
C16†		—
C17†	Aerial circuit tuning	—
C18†	Aerial manual trimmer	—
C19†	V1 anode circuit tuning	—
C20†	V1 anode MW trimmer	—
C21†	Reaction control	—

* Electrolytic. † Variable. ‡ Pre-set.

OTHER COMPONENTS		Approx. Values (ohms)
L1	Aerial coupling coil	10.0
L2	Aerial MW tuning coil	1.5
L3	Aerial LW tuning coil	11.0
L4	RF trans. pri. MW tuning	1.5
L5	RF trans. pri. LW tuning	11.0
L6	MW reaction coil	0.5
L7	LW reaction coil	3.5
L8	RF trans. MW sec. coil	1.5
L9	RF trans. LW sec. coil	11.0
L10	Speaker speech coil	2.0
L11	Hum neutralising coil	0.1
L12	Speaker field coil	2,500.0
T1	Speaker input	275.0
	trans. { Pri. ...	0.15
	trans. { Sec. ...	70.0
T2	Mains { Pri. total	0.15
	trans. { Heater sec.	0.2
	trans. { Rect. heat. sec.	1,500.0
	trans. { HT sec., total	—
S1-S5	Waveband switches	—
S6, S7	Gram and pick-up switches	—
S8, S9	Scale lamp switches	—
S10	Mains switch	—

VALVE ANALYSIS

Valve voltages and currents given in the table below are those quoted in the makers' manual. The measurements were made with the set connected to mains of 240 V; there was no signal input, and the volume control was at maximum.

Voltages were measured on the 600 V scale of a 1,000 ohms-per-volt meter, whose negative lead was connected to chassis.

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 MVS/Pen.	215	2.0	120	1.0
V2 MS/Pen.	55	1.8	35	0.4
V3 41MP	230	30.0	—	—
V4 442BU	350†	—	—	—

† Approximate voltage at each anode, AC.

Switch Table

Switch	Off	MW	LW	Gram.
S1	0	0	—	—
S2	0	0	—	—
S3	—	0	—	—
S4	—	0	—	—
S5	—	0	—	—
S6	—	0	—	—
S7	—	0	—	—
S8	—	0	—	—
S9	—	0	—	—
S10	—	0	—	—

CIRCUIT ALIGNMENT

Strictly speaking, there are no actual alignment operations applicable to this receiver. C19 is adjusted and sealed at the works, while C17 is adjusted by the user.

The makers' instructions are to tune in a station on the MW band below 250 m, and manipulate C17 and the reaction condenser C20 to obtain optimum results. After this, the knob of C17 should not need touching unless critical reaction is being used on a weak station.