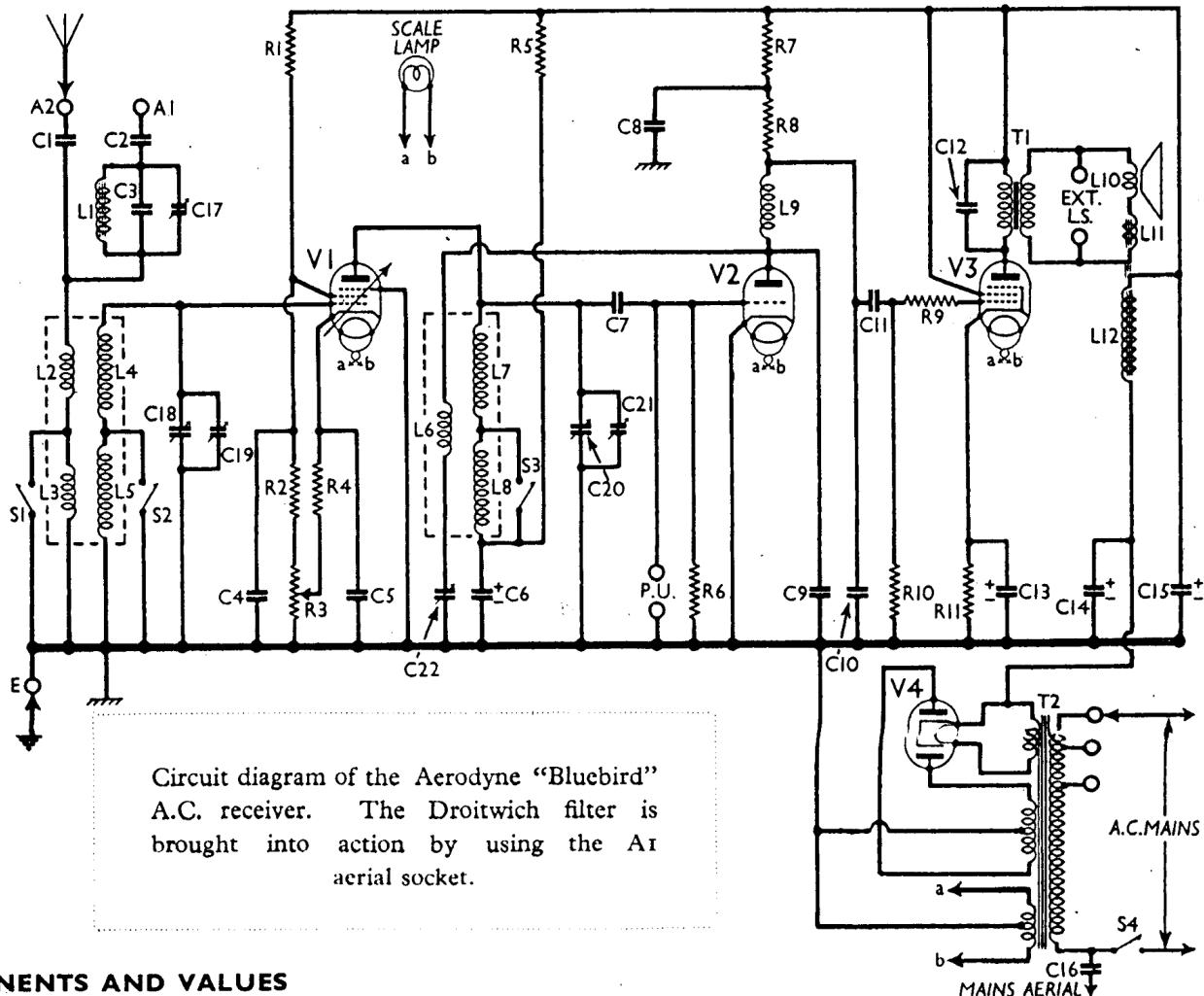


AERODYNE - BLUEBIRD



COMPONENTS AND VALUES

Condensers		Values (μ F)
C ₁		0.0001
C ₂	Aerial series condensers	0.0005
C ₃		0.003
C ₄	Droitwich wave-trap tuning	0.1
C ₅	V ₁ S.G. by-pass	0.1
C ₆ *	V ₁ cathode by-pass	0.1
C ₇	V ₁ anode decoupling	1.0
C ₈	V ₂ grid condenser	0.00005
C ₉	V ₂ anode decoupling	1.0
C ₁₀	V ₂ anode H.F. by-passes	0.0005
C ₁₁	L.F. coupling to V ₃	0.01
C ₁₂	Tone corrector	0.01
C ₁₃ *	V ₃ cathode by-pass	25.0
C ₁₄ *	H.T. smoothing	8.0
C ₁₅ *		8.0
C ₁₆	Mains aerial coupling	0.0002
C ₁₇ ‡	Droitwich wave-trap tuning	0.002
C ₁₈ ‡	Aerial circuit tuning	0.0005
C ₁₉ ‡	Aerial circuit trimmer	—
C ₂₀ ‡	V ₁ anode circuit tuning	0.0005
C ₂₁ ‡	V ₁ anode circuit trimmer	—
C ₂₂ ‡	Reaction control	0.0003

* Electrolytic † Variable ‡ Pre-set

Resistances		Values (ohms)
R ₁	V ₁ S.G. H.T. potential divider	15,000
R ₂		20,000
R ₃	V ₁ gain control	8,000
R ₄	V ₁ fixed G.B. resistance	100
R ₅	V ₁ anode decoupling	3,000
R ₆	V ₂ grid leak	1,000,000
R ₇	V ₂ anode decoupling	20,000
R ₈	V ₂ anode load	50,000
R ₉	V ₃ grid H.F. stopper	50,000
R ₁₀	V ₃ grid resistance	500,000
R ₁₁	V ₃ G.B. resistance	140

Other Components		Values (ohms)
L ₁	Droitwich wave-trap coil	2.2
L ₂	Aerial coupling coils	0.75
L ₃		14.25
L ₄	Aerial tuning coils	3.5
L ₅		13.0
L ₆	Reaction coil	6.5
L ₇	V ₁ anode tuning coils	3.5
L ₈		14.5
L ₉	V ₂ anode H.F. choke	200.0
L ₁₀	Speaker speech coil	1.75
L ₁₁	Hum neutralising coil	0.05
L ₁₂	Speaker field coil	1,500.0
T ₁	Speaker input trans.	{ Pri. 750.0 Sec. 0.3
		{ Pri. total 26.0 H.T. sec. 0.05
T ₂	Mains trans.	{ Rect. heat. sec. 0.05 H.T. sec. 440.0
S ₁ -S ₃	Waveband switches	—
S ₄	Mains switch, ganged R ₃	—

VALVE ANALYSIS

Readings of valve voltages and currents given in the table below were taken with the receiver operating on 220V A.C. mains, with the transformer on the 230 V tap. The volume control was at maximum, while reaction was at minimum, and 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)
V ₁ VP4B	210	7.4	135	2.7
V ₂ 354V	85	2.8	—	—
V ₃ Pen4VB	210	30.0	230	3.4
V ₄ R3	263†	—	—	—

†Each anode, A.C.

GENERAL NOTES

Switches.—S₁-S₃ are the waveband switches, in a single unit, and they are all closed on the M.W. band and open on the L.W. band. Note that S₁ and S₂ each have one common contact.

S₄ is the Q.M.B. mains switch, ganged with the volume control R₃.

Coils.—L₁ is the Droitwich wave-trap coil, mounted beneath the chassis. L₂-L₈ are in two screened units on the chassis deck, and L₉ is an H.F. choke, beneath the chassis.

Scale Lamp.—This is an Osram M.E.S. type, rated at 6.2 V, 0.3 A.