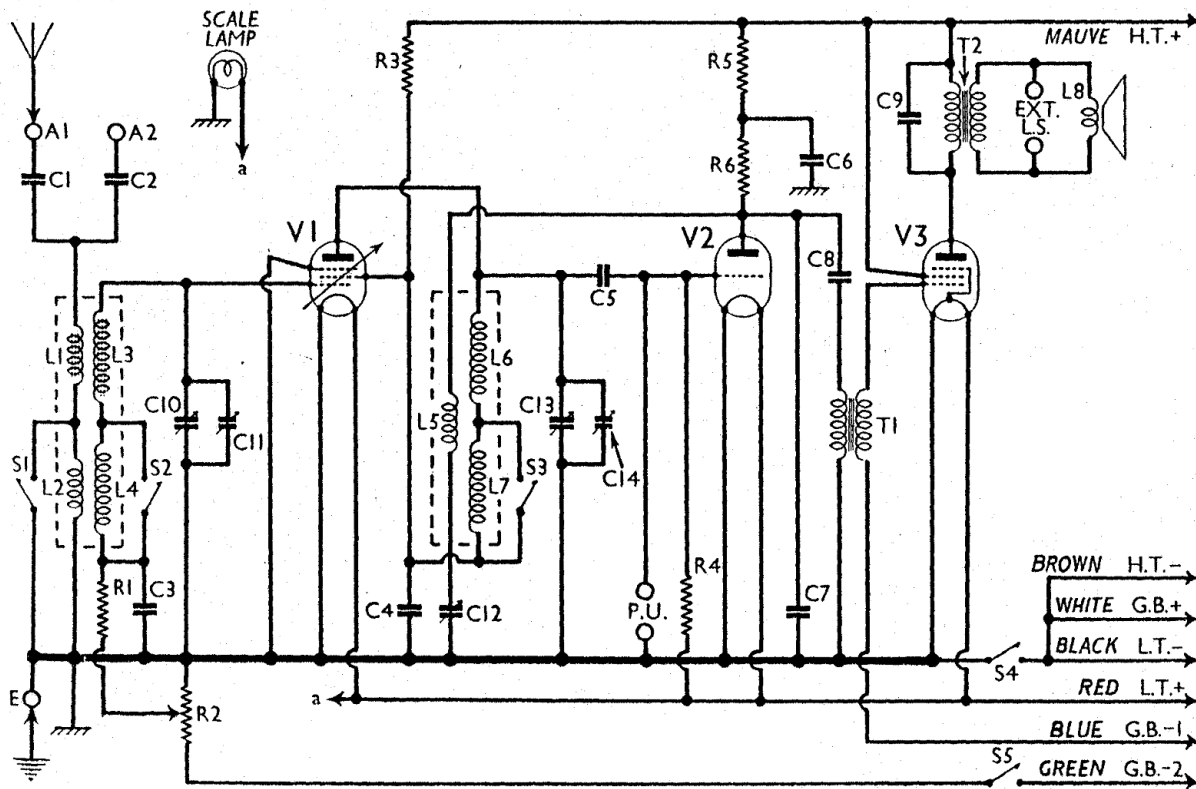


# AERODYNE - THRUSH



Circuit diagram of the Aerodyne "Thrush" receiver. Note that S5 disconnects the potentiometer R2 when the set is not in use, preventing leakage of the G.B. battery. The colours of the various battery leads are indicated.

## COMPONENTS AND VALUES

Resistances		Values (ohms)
R1	V1 C.G. decoupling .. ..	50,000
R2	V1 gain control .. ..	8,000
R3	V1 S.G. and anode decoupling	3,000
R4	V2 grid leak .. ..	1,000,000
R5	V2 anode decoupling .. ..	20,000
R6	V2 anode load .. ..	30,000

Condensers		Values (μF)
C1	Aerial series condensers {	0.0002
C2		0.00005
C3	V1 C.G. decoupling .. ..	0.1
C4	V1 S.G. and anode decoupling	1.0
C5	V2 grid condenser .. ..	0.0001
C6	V2 anode decoupling .. ..	1.0
C7	V2 anode H.F. by-pass .. ..	0.0003
C8	L.F. coupling to T1 .. ..	0.1
C9	Tone corrector .. ..	0.01
C10†	Aerial circuit tuning .. ..	0.0005
C11†	Aerial circuit trimmer .. ..	—
C12†	Reaction control .. ..	0.0005
C13†	V1 anode circuit tuning .. ..	0.0005
C14†	V1 anode circuit trimmer .. ..	—

† Variable ‡ Pre-set.

Other Components		Approx. Values (ohms)
L1	Aerial coupling coils ..	0.25
L2		38.0
L3		1.2
L4		13.0
L5	Reaction coil .. ..	6.5
L6	V1 anode tuning coils ..	3.5
L7		14.5
L8	Speaker speech coil .. ..	2.2
T1	Intervalve trans. { Pri. ..	1,200.0
	Sec. ..	3,800.0
T2	Speaker input trans. { Pri. ..	650.0
	Sec. ..	0.3
Sr-S3	Waveband switches .. ..	—
S4	L.T. switch .. ..	—
S5	G.B. switch .. ..	—

## GENERAL NOTES

**Switches.**—S1-S5 are the waveband and battery switches, ganged in a single unit, and seen in the under-chassis view. S1-S3, the waveband switches, are all *closed* on the M.W. band and *open* on the L.W. band. S4 and S5, the battery switches, are *open* in the "off" position,

and *closed* in the M.W. and L.W. positions.

**Coils.**—L1-L4 and L5-L7 are in two screened units on the chassis deck, and are indicated in the plan chassis view.

**Scale Lamp.**—This is an Osram M.E.S. type, rated at 3.5 V, 0.15 A.

## VALVE ANALYSIS

Valve voltages and currents given in the table below are those measured in our receiver when it was operating from a new H.T. battery reading 128 V on load. The volume control was at maximum but the reaction control 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)
V1 VP2	118	2.0	118	0.7
V2 PM1HL	56	1.3	—	—
V3 PM22A	122	5.8	128	1.5