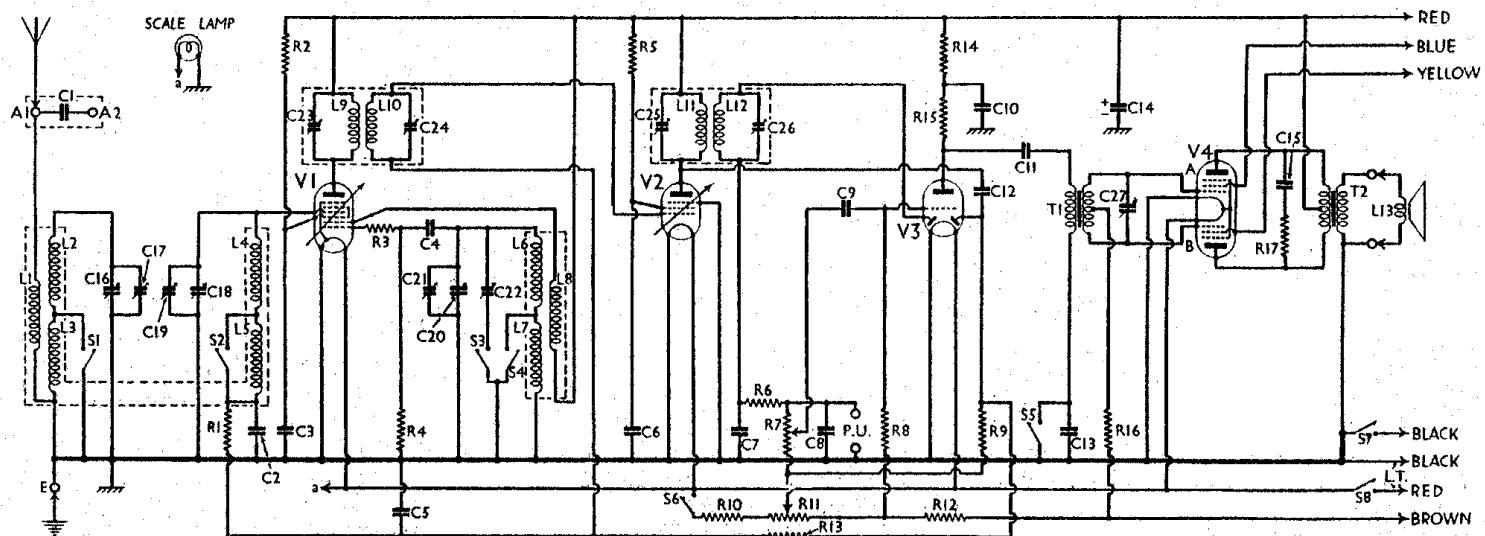


EVER READY - 5007



Circuit diagram of the Ever Ready Model 5007 battery superhet. V4 is a double-pentode, fitted with a 9-pin base. Note that L1-L5 are all contained in a single screening can, indicated by the dotted line.

COMPONENTS AND VALUES

Resistances		Values (ohms)
R1	V1 pent. cont. grid decoupling	11,000
R2	V1 S.G.'s H.T. feed	160,000
R3	V1 osc. grid series resistance	1,100
R4	V1 osc. grid resistance	110,000
R5	V2 S.G. H.T. feed	110,000
R6	I.F. stopper	110,000
R7	Volume control and diode load	500,000
R8	V3 triode grid resistance	1,100,000
R9	V3 A.V.C. diode load	1,100,000
R10	G.B. potential divider, including sensitivity control (R11)	100 280 800
R11	A.V.C. circuit decoupling	1,100,000
R12	V3 triode anode decoupling	11,000
R13	V3 triode anode resistance	31,000
R15	V4 grid circuit stabiliser	66,000
R16	Part of tone comp. filter	16,000

Other Components		Values (ohms)
L1	Aerial coupling coil	24.0
L2	{ Band-pass primary coils	2.3
L3		15.0
L4	{ Band-pass secondary coils	2.3
L5		15.0
L6	{ Oscillator tuning coil	2.9
L7		3.3
L8	{ Oscillator anode coil	45.0
L9		93.0
L10	{ 1st I.F. trans. { Pri.	93.0
	Sec.	93.0
L11	{ 2nd I.F. trans. { Pri.	42.0
L12	Sec.	42.0
L13	Speaker speech coil	1.2
T1	Intervalve trans. { Pri.	1,000.0
	Sec. total.	8,500.0
T2	Output trans. { Pri. total.	700.0
S1-S4	Waveband switches	0.2
S5	Bass attenuator switch	—
S6	G.B. pot. divider switch	—
S7	H.T. switch	—
S8	L.T. switch	—

Valve	Anode Volts	Anode Current (mA)	Screen Volts	Screen Current (mA)
V1 K80A*	136.5	0.3	60	1.1
V2 K50M	136.5	0.9	100	0.3
V3 K23B	100.0	0.7	—	—
V4 K77A	136.5†	2.0†	111†	0.4†

* Osc. anode (G2) 136.5 V, 1.1 mA.
† Each section. † In our chassis.

Condensers		Values (μ F)
C1	Aerial series condenser	0.000015
C2	V1 pent. cont. grid decoupling	0.1
C3	V1 S.G.'s by-pass	0.1
C4	V1 osc. grid condenser	0.0001
C5	A.V.C. circuit decoupling	0.1
C6	V2 S.G. by-pass	0.0001
C7	{ I.F. by-passes	0.0001
C8	L.F. coupling to V3 triode	0.0001
C9	V3 anode decoupling	0.01
C10	L.F. coupling to T1	0.5
C11	Coupling to V3 A.V.C. diode	0.1
C12	Bass attenuator	0.0001
C13	H.T. reservoir	0.01
C14*	Part of tone comp. filter	0.0001
C15	Band-pass primary tuning	0.0001
C16	Band-pass primary trimmer	0.0001
C17†	Band-pass secondary tuning	—
C18	Band-pass secondary trimmer	—
C19†	Oscillator tuning	—
C20	Oscillator main trimmer	—
C21†	Oscillator L.W. trimmer	—
C22†	1st I.F. trans. pri. tuning	—
C23†	1st I.F. trans. sec. tuning	—
C24†	2nd I.F. trans. pri. tuning	—
C25†	2nd I.F. trans. sec. tuning	—
C26†	Variable tone control	—
C27		—

* Electrolytic. † Pre-set condenser.

VALVE ANALYSIS

Readings given in the following table of valve voltages and currents are those supplied by Ever Ready. They were taken with no signal input, and with new batteries. Voltage readings are with chassis as negative, using a high resistance voltmeter.

In the case of V4, the screen voltage for each section of the valve depends on the letters marked on the base and bulb. These letters, P, Q, R, S or T, correspond with similarly marked sockets on the special H.T. battery. The blue H.T. lead corresponds to the "A" section of the valve, and the yellow to the "B" section. In the case of our chassis, both "A" and "B" sections required the Q tapping (111V).