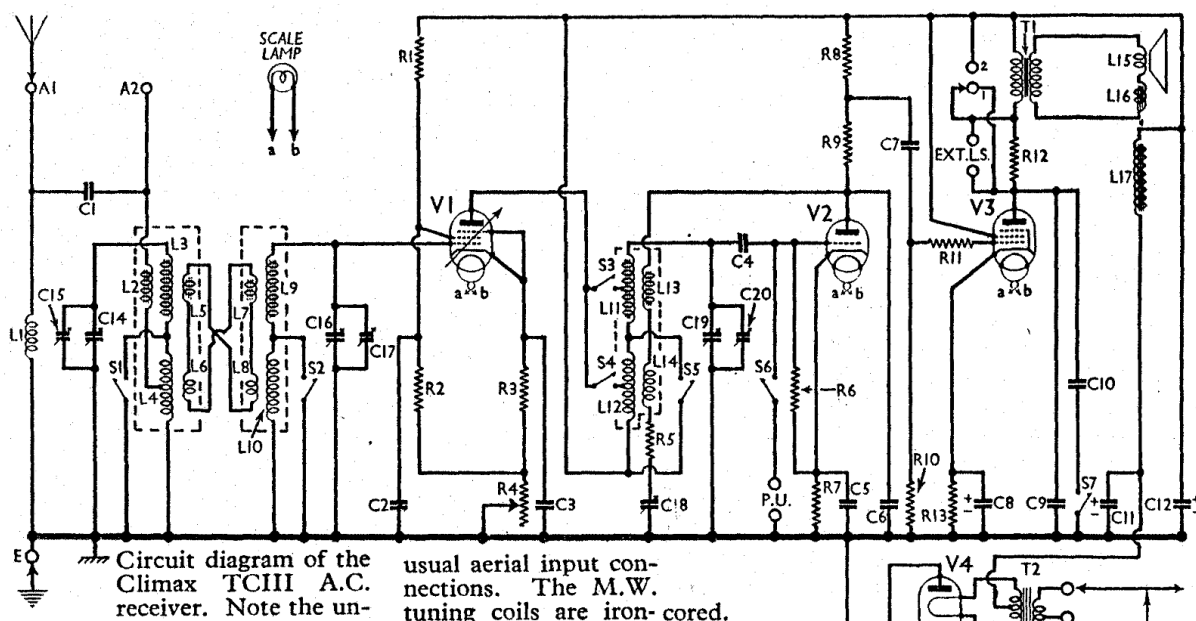


CLIMAX - TC III



COMPONENTS AND VALUES

Condensers	Values (μF)
C1 Aerial (A1) coupling ..	0.0003
C2 V1 S.G. by-pass ..	0.1
C3 V1 cathode by-pass ..	0.1
C4 V2 grid condenser ..	0.00005
C5 V2 cathode by-pass ..	0.1
C6 V2 anode H.F. by-pass ..	0.002
C7 L.F. coupling V2 to V3 ..	0.1
C8* V3 cathode by-pass ..	50.0
C9 Tone correctors ..	0.006
C10 —	0.006
C11* H.T. smoothing ..	16.0
C12* —	8.0
C13 Mains aerial coupling ..	0.001
C14 Band-pass primary tuning ..	—
C15 Band-pass primary trimmer ..	—
C16 Band-pass secondary tuning ..	—
C17 Band-pass secondary trimmer ..	—
C18 Reaction control ..	0.0003
C19† V1 anode circuit tuning ..	—
C20† V1 anode circuit trimmer ..	—

* Electrolytic † Variable ‡ Pre-set.

Resistances	Values (ohms)
R1 V1 S.G. potential divider	20,000
R2 V1 fixed G.B. resistance	30,000
R3 V1 gain control	250
R4 Reaction circuit stabiliser	5,000
R5 V2 grid leak	200
R6 V2 G.B. resistance (gram.)	500,000
R7 V2 anode load	500
R8 V2 anode H.F. stopper	40,000
R9 V3 C.G. resistance	6,000
R10 V3 C.G. H.F. stopper	500,000
R11 Ext. speaker shunt	250,000
R12 V3 G.B. resistance	50,000
R13 —	140

Other Components	Approx. Values (ohms)
L1 Aerial filter coil	12.0
L2 Aerial coupling coil (M.W.)	2.0
L3 Band-pass primary coils	1.5
L4 —	18.5
L5 Band-pass coupling coils	0.05
L6 —	3.0
L7 —	0.05
L8 —	3.0
L9 Band-pass secondary coils	1.5
L10 —	18.5
L11 V1 anode circuit tuning coils	1.5
L12 —	18.5
L13 Reaction coils	1.8
L14 —	5.0
L15 Speaker speech coil	2.1
L16 Hum neutralising coil	0.1
L17 Speaker field coil	2,000.0
T1 Speaker input trans. { Pri. 250.0	
Sec. 0.25	
Pri. total 38.0	
T2 Mains trans. { Heater sec. 0.05	
Rect. fil. sec. 0.1	
H.T. sec. total 420.0	
S1-S5 Waveband switches	—
S6 Gram. pick-up switch	—
S7 Tone control switch	—
S8 Mains switch	—

VALVE ANALYSIS

Valve voltages and currents given in the table below are those measured in our receiver when it was operating on mains of 225 V, using the 220-230 V tapping on the mains transformer. The volume control was at maximum and the reaction control was at minimum, but 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 6X4A	263	4.0	125	1.9
V2 354V	80	4.0	—	—
V3 6AV6	251	40.0	263	4.2
V4 6X4	340†	—	—	—

† Each anode, A.C.

GENERAL NOTES

Switches.—S1-S5 are the waveband switches, and S6 the pick-up switch, ganged together in a single unit beneath the chassis, and seen in our under-chassis view. The table (col. 2) gives the switch positions for the various control settings, O indicating open, and C, closed.

Switch	M.W.	L.W.	Gram.
S1	C	O	C
S2	C	O	C
S3	C	O	C
S4	O	C	C
S5	C	O	C
S6	O	O	C

S7 is the Q.M.B. tone control switch, at the rear of the chassis. When the knob of this is down, C10 is switched in circuit.

S8 is the Q.M.B. mains switch, ganged with the volume control R4.

Coils.—L1 is unscreened, and is beneath the chassis, at the rear. L2-L6, L7-L10 and L11-L14 are in three screened units on the chassis deck.

Scale Lamp.—This is an Osram M.E.S. type, rated at 6.5 V, 0.3 A.