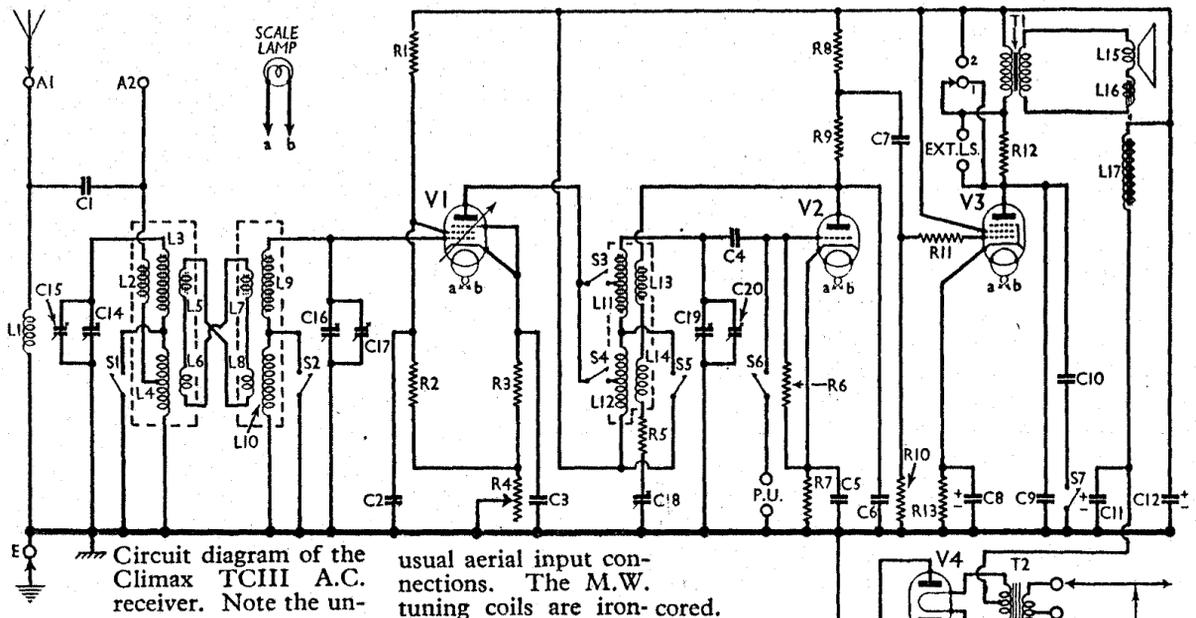


CLIMAX - TC III



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.

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	Band-pass secondary coils ..	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.

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

Valve	Anode Volts	Anode Current (mA)	Screen Volts	Screen Current (mA)
V1 VP4A	263	4.0	125	1.9
V2 354V	80	4.0	—	—
V3 Pen4VB	251	40.0	263	4.2
V4 IW3	340†	—	—	—

† Each anode, A.C.

GENERAL NOTES

Switches.—S1-S5 are the waveband switches, 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.