MARCONIPHONE Model T24DAB

General Description : Four-valve, two-waveband transportable superheterodyne receiver for operation from batteries or supply mains. Weight 9½ lb. (with batteries).

Power Supplies : A.C./D.C. mains, 195–255 volts. Consumption: D.C., 14 watts; A.C., 19 watts. H.T. 90-volt Layer-Pack battery, consumption 11 mA.; L.T. Five Alpha Leak-proof 1·5-volt cells, series connected, consumption 52 mA.

Wavebands : M.W. 187–565 m.; L.W. 1000–2000 m.

Intermediate Frequency : 365 kc/s. (Early models, 360 kc/s.)

Valves : Marconi. (V1) X17; (V2) W17; (V3) ZD17; (V4) N18.

Audio Output : 250 mW. maximum.

Loudspeaker : 5-in. diameter, permanent-magnet moving-coil type. Speech coil D.C. resistance 2·5 ohms, impedance 3 ohms at 400 c/s.

Check Points :

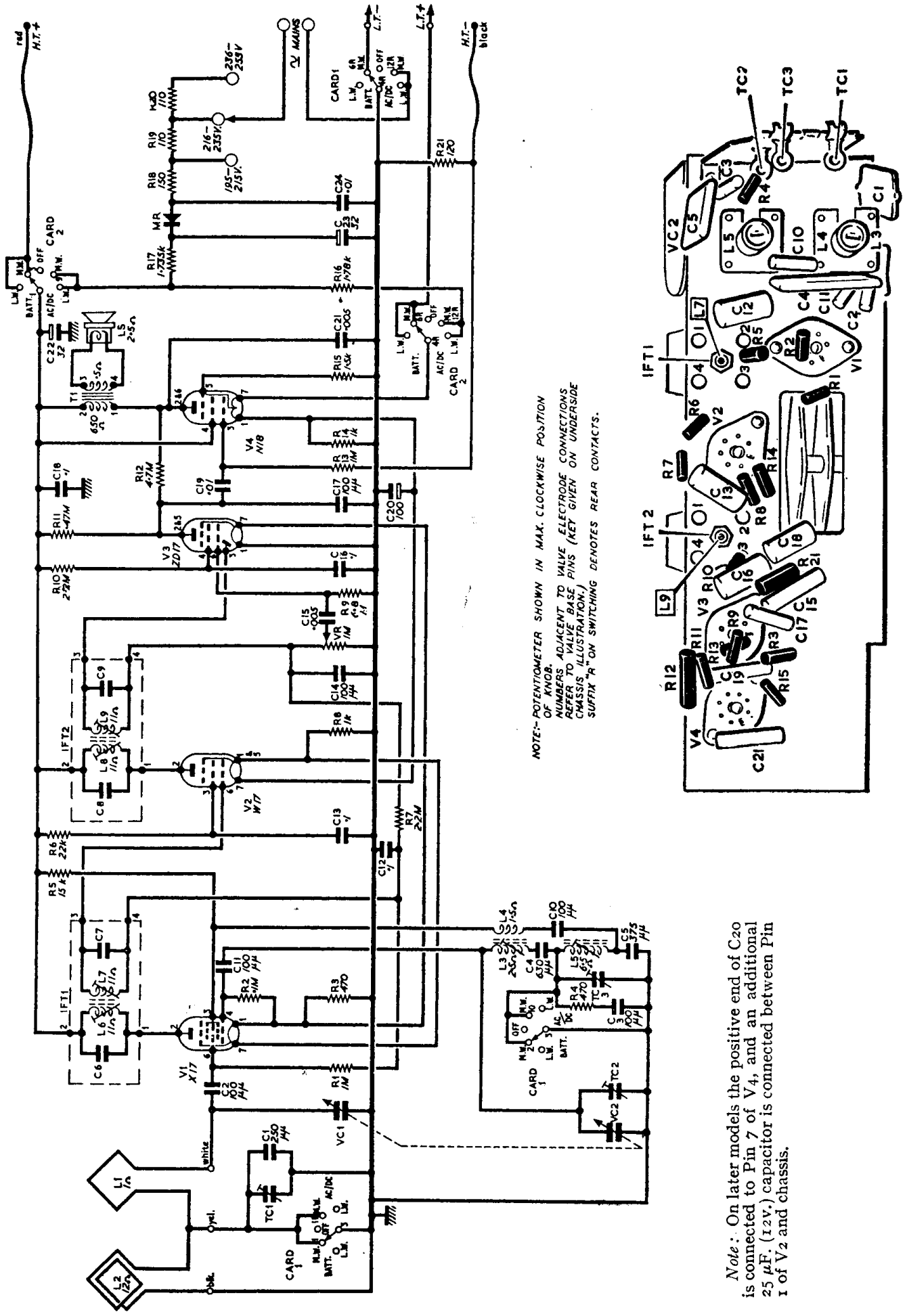
The following tables indicate approximate voltage and current readings obtained under battery operation and mains operation, with supply voltages as stated in second table. Receiver was tuned to a point of no reception on the medium waveband and volume control set to maximum in both instances.

Variations of ±15 per cent may be anticipated between models. Meter used had a resistance of 500 ohms/volt.

Valve	*Battery Operation*			*Mains Operation*		
	Anode Volts to Chassis	*Screen Volts to Chassis*	*Filament (Pin 7) Volts to Chassis*	*Anode Volts to Chassis*	*Screen Volts to Chassis*	*Filament (Pin 7) Volts to Chassis*
V1 (X17)	82	52	2·8	90	57	2·5
V2 (W17)	82	68	4·2	90	78	3·75
V3 (ZD17)	12	7	1·4	13	7	1·25
V4 (N18)	78	85	7·0	85	90	6·0

	Battery Operation		*Mains Operation*	
	Volts	*mA.*	*Volts*	*mA.*
Total H.T.	85	11	90	15
Total L.T.	7	52	6	47
Across R21	1	—	—	—
Across R17	—	—	108	—
Mains	—	—	* 225 (A.C.)	82 (A.C.)

* Mains voltage-adjustment plug fitted into " 216–235 " socket.



Note: On later models the positive end of C20 is connected to Pin 7 of V4, and an additional 25 μF. (12 v.) capacitor is connected between Pin 1 of V2 and chassis.

CIRCUIT AND UNDER-CHASSIS LAY-OUT DIAGRAMS—MARCONIPHONE MODEL T24DAB