

BEETHOVEN**Model B110**

General Description. Five-valve (including rectifier and tuning indicator), three-waveband (L.W., M.W. and S.W.), console auto-radio-gramophone.

Power Supply: A.C. mains, 200-250 volts.

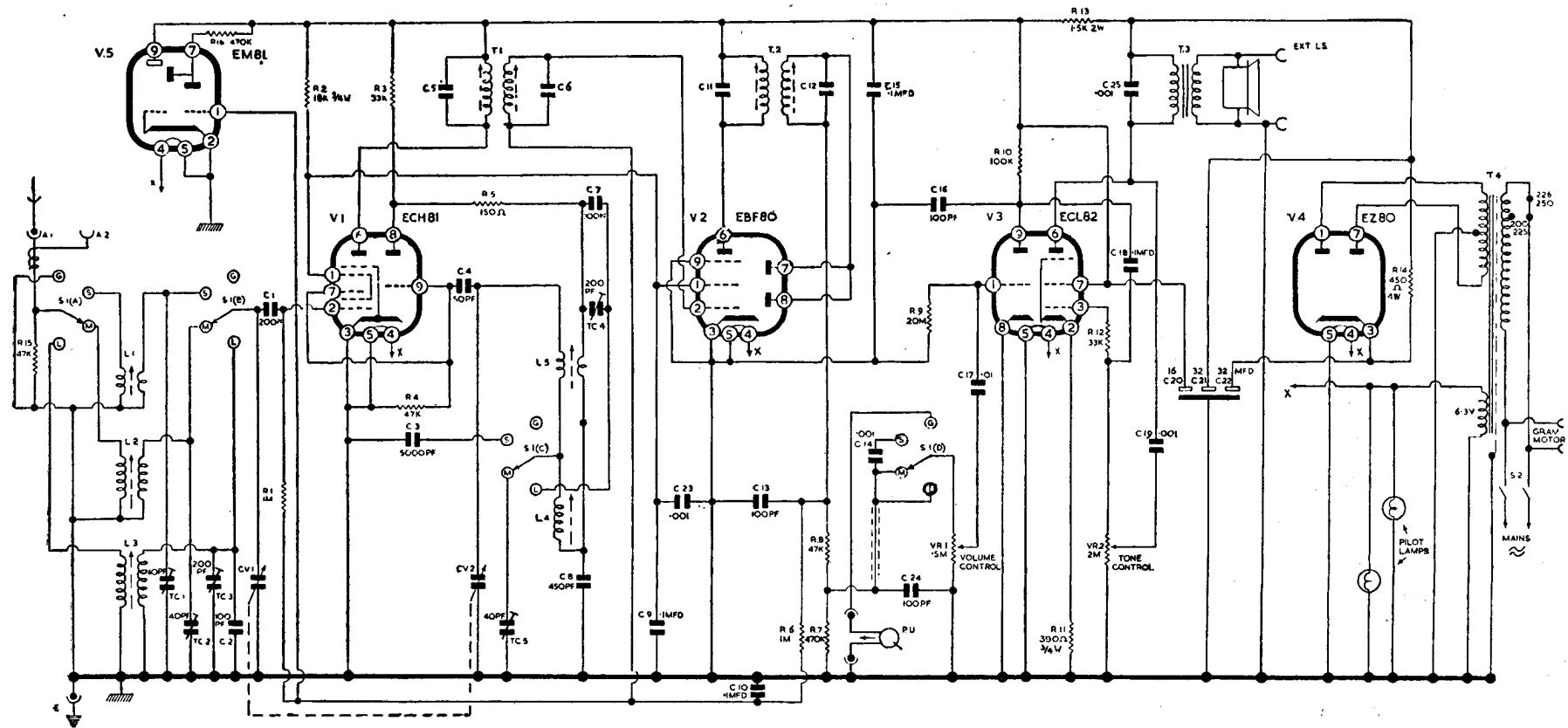
Valves: (V1) ECH81; (V2) EBF80; (V3) ECL82; (V4) EZ80; (V5) EM81.

Pilot Lamps: Two 8 volts, 0.3 amp.

Intermediate Frequency: 470 kc/s.

BEETHOVEN**Model B103**

General Description: The receiver chassis fitted to this console auto-radiogramophone is similar to that of Model B110 but omits the EM81 tuning indicator and the associated resistor R16.



CIRCUIT DIAGRAM—BETHOVEN MODEL B110

Capacitors.
 C1 200 pF.
 C2 100 pF.
 C3 5000 pF. (2%)
 C4 50 pF.
 C5 100 pF.
 C6 100 pF.
 C7 300 pF. (5%)
 C8 450 pF. (2%)
 C9 0.1
 C10 0.1
 C11 100 pF.

C12 100 pF.
 C13 100 pF.
 C14 0.001
 C15 0.1
 C16 100 pF.
 C17 0.01
 C18 0.1
 C19 0.001 (300 v. A.C.)
 C20 16 (350 v.)
 C21 32 (350 v.)
 C22 32 (350 v.)

C23 0.001
 C24 100 pF.
 C25 0.001
 TC1 4-40 pF.
 TC2 4-40 pF.
 TC3 200 pF.
 TC4 200 pF.
 TC5 4-40 pF.
 CV1 528 pF. (swing)
 CV2 528 pF. (swing)

Resistors.
 R1 1M
 R2 18k ($\frac{1}{2}$ W.)
 R3 33k
 R4 47k
 R5 150
 R6 1M
 R7 470k
 R8 47k
 R9 20M

R10 100k
 R11 390 ($\frac{1}{2}$ W. 10%)
 R12 33k
 R13 1.5k (2 W.)
 R14 450 (W.W. 4 W.)
 R15 47k
 R16 470k
 VR1 0.5M (log.)
 VR2 2M (log.)

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