

EKCO

Models ARG255, TRG252

General Description : Seven-valve (including rectifier and tuning indicator), three-waveband (including V.H.F.), combined A.M./F.M. receiver, with internal V.H.F. dipole and ferrite-rod aerial for A.M., plus provision for external aerials. Model ARG255 is a console auto-radio-gramophone with a 10-in. loudspeaker: Model TRG252 is a table auto-radiogramophone with an elliptical loudspeaker. The record unit on both models is a Garrard RC110 with turnover pick-up.

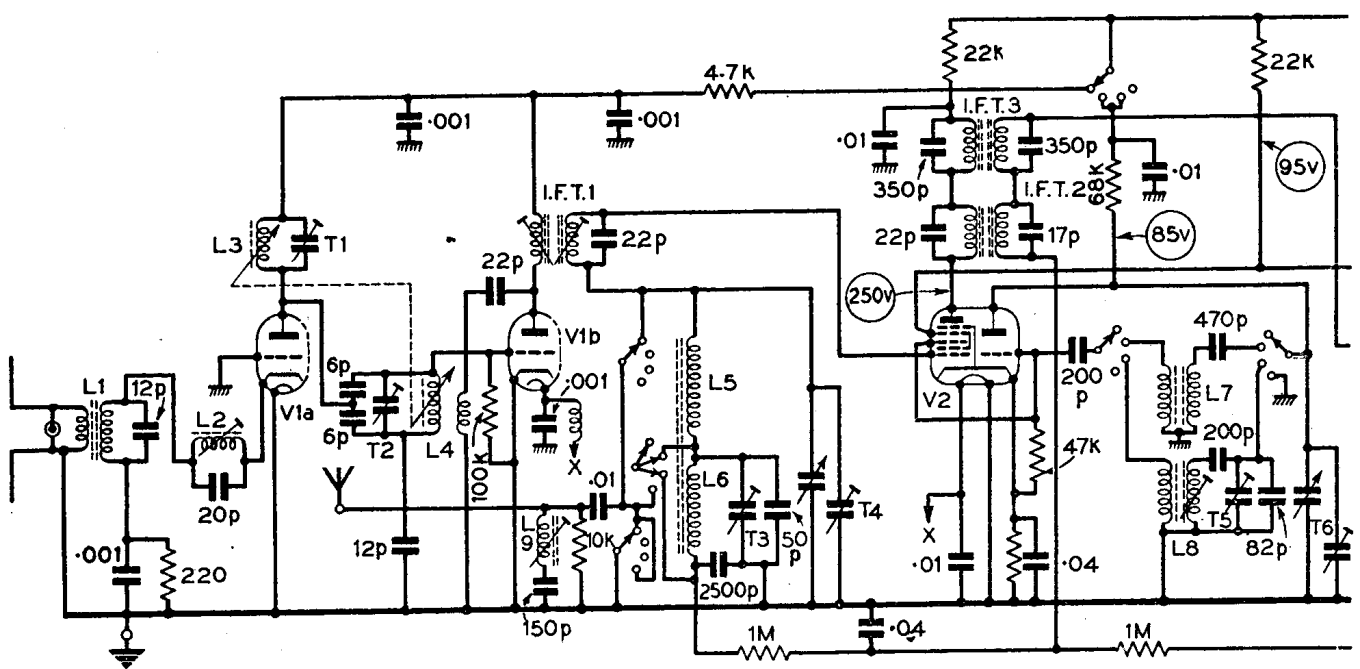
Power Supply : A.C. mains, 200–250 volts, 50 c/s. Consumption, radio 50 watts, gramophone 62 watts total.

Wavebands : L.W. 984–2027 m.; M.W. 192–550 m.; V.H.F. 87–100 Mc/s.

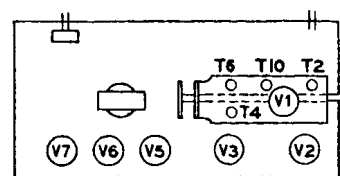
Valve Functions : (V1) ECC85 (F.M. only, grounded-grid R.F. amplifier and self-oscillating mixer); (V2) ECH81 (A.M. frequency changer, F.M. heptode section as I.F. amplifier); (V3) EF85 (dual I.F. amplifier); (V4) EABC80 (A.M. diode as signal detector/A.G.C. rectifier, F.M. two diodes as ratio detector, triode section as common A.F. amplifier); (V5) DM70 (tuning indicator); (V6) EL84 (output); (V7) EZ80 (rectifier).

Intermediate Frequencies : A.M. 470 kc/s.; F.M. 10.7 Mc/s.

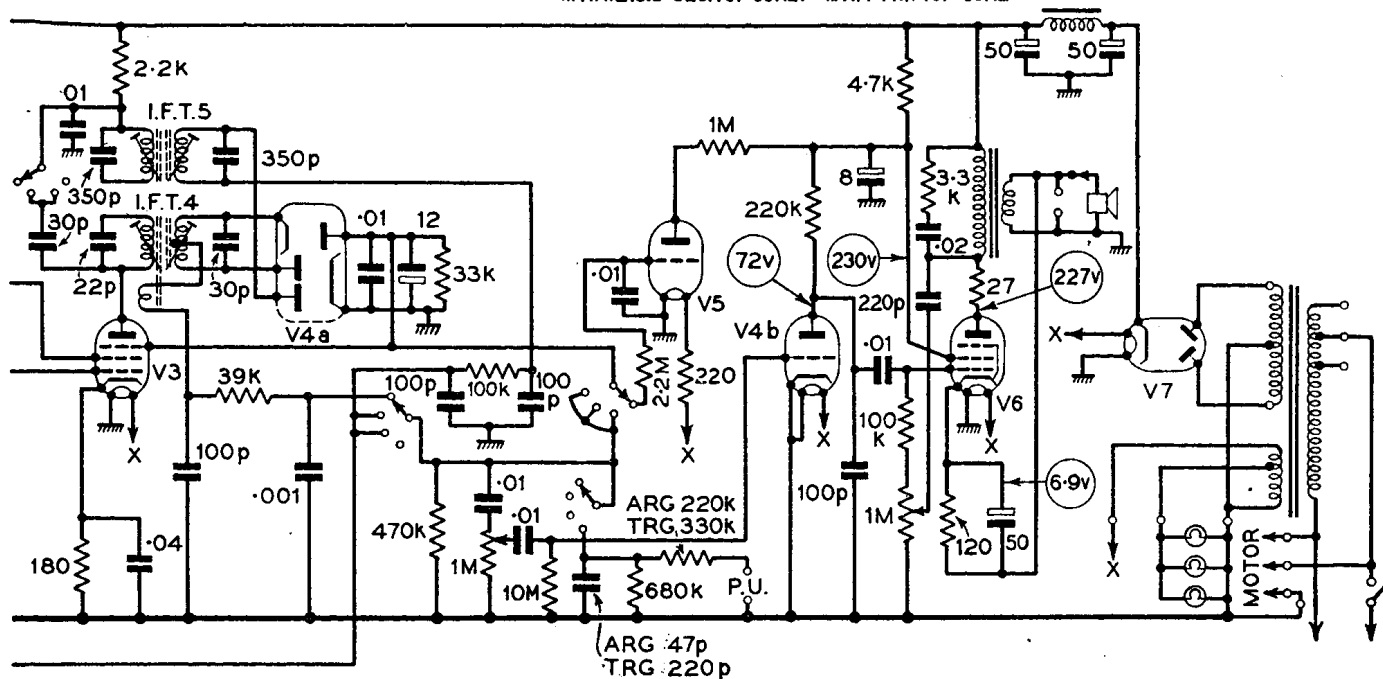
Circuit Notes : L2 forms part of an F.M. I.F. rejector trap and is tuned to 10.7 Mc/s.; L9 is part of a series tuned A.M. I.F. rejector trap tuned to 470 kc/s. The F.M. front end is permeability tuned by ganged cores to L3 and L4. On F.M. A.G.C. action and partial limiting is obtained by feeding back the negative potential developed across the ratio-detector load to the suppressor grid of V3. It should be noted that the wave-change switching has been drawn to indicate the functioning of the switches rather than the composition of the wafers. An alternative method of energising the filament of the DM70 tuning indicator is by tapping across part of the cathode bias for V6.



CIRCUIT DIAGRAM—EKCO



I.F.T.1.2.3.5 SEC.TOP CORE. I.F.T.4 PRI. TOP CORE



MODELS ARG₂₅₅, TRG₂₅₂