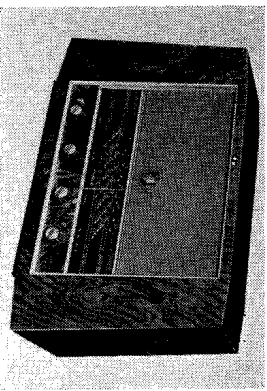


# FENMAN II RC

gram for A.M./F.M. Reception



Appearance of the Pye Fenman II

In the table model, speakers **L25**, **L26** cover the lower and middle audio frequencies, and speakers **L27**, **L28** are fed via bass cut capacitor **C82** to cover the higher frequencies. In the gram model a single speaker **L29** replaces **L25** and **L26**.

A proportion of the output in secondary winding **e** on output transformer **T1** is fed back to **V6** cathode circuit giving negative feedback tone correction, with slight feed-back correction by **R66**.

H.T. current is supplied by I.H.C. full-wave rectifying valve **V10**. H.T. smoothing by **R18**, **R57**, **R87** and electrolytic capacitors **C26**, **C34**, **C85**, **C86**.

### Operation on F.M.

F.M. aerial input is coupled via **L1** to aerial tuning coil **L2**, which precedes R.F. amplifier **V1**. **V1** output, as developed across R.F. tuning coil **L4**, is coupled via **C6** to section **b** of **V2**, which operates as mixer.

**V2a** operates as local oscillator with tuned oscillator circuit **L6**, **G9**, **G10**, **G11**,

**C12**. Its output is coupled via stray capacitances, and the proximity of **L4** and **L6**, to **V2b**. Tuning is by means of the cores of **L2**, **L4** and **L6**, which are ganged to the main tuning control.

Three-valve F.M. I.F. amplifier is formed by **V3b**, **V4** and **V5** with tuned transformers **L7**, **L8**; **L17**, **L18**; **L19**, **L20**; and **L23**, **L24**. **V5** also operates as limiter.

### F.M. Intermediate Frequency 10.7 Mc/s.

Diode sections **a** and **b** of **V7** are connected in a phase discriminator circuit whose A.F. output is developed across **C70** and passed via de-emphasis and tone correction circuits **R54**, **G72**, **G71**, **R53**, **R52**, **R51**, **C89** and **S9** back to **V3a**, which operates as A.F. amplifier, as it does for peak-up operation.

**V3a** output is coupled via **R32** and **S17** to the tone control circuits. Limiting is performed in **V5** control grid circuit by **R26**, **C48**, the limiting voltage developed across **R26** being fed back as A.G.C. bias to **V1** and, via **S15**, to **V3b** and **V4**.

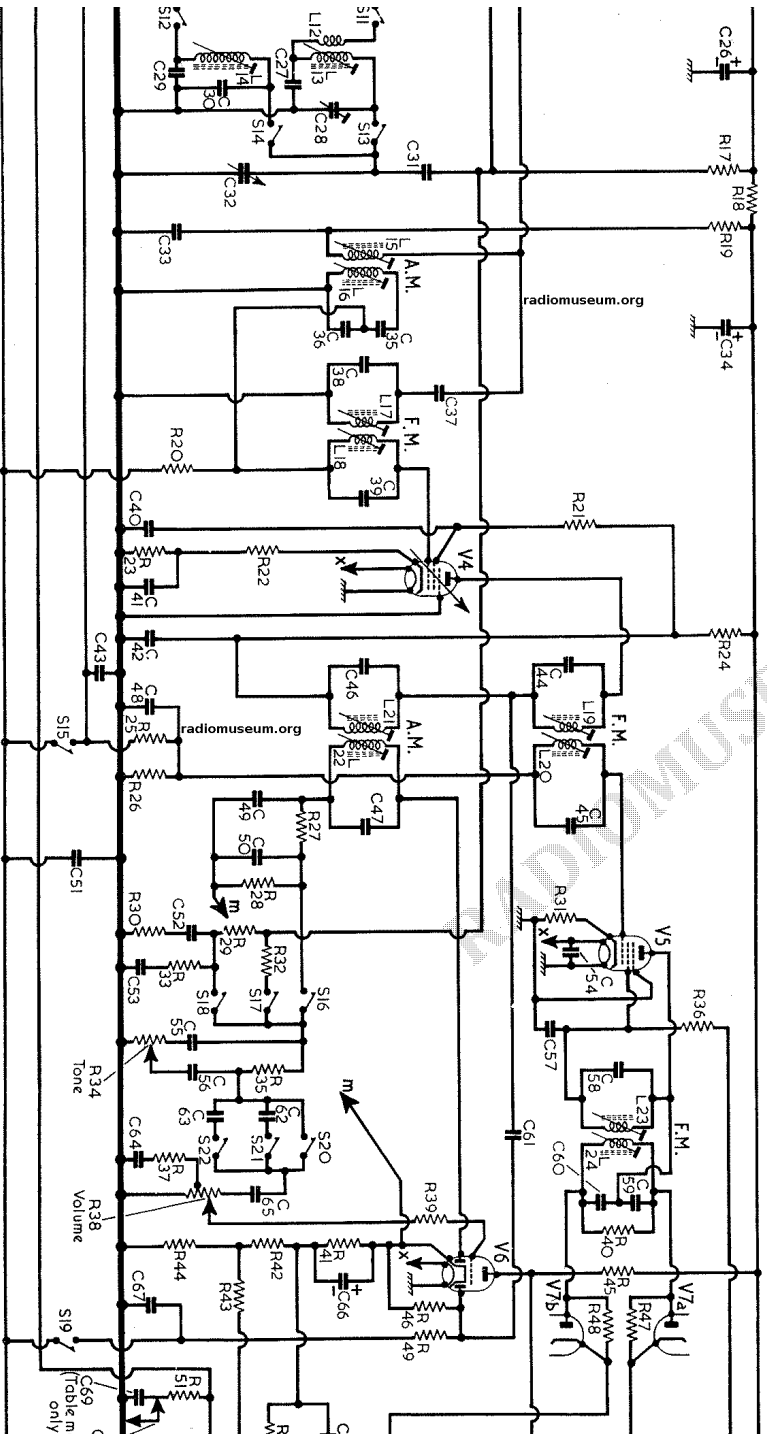
### GENERAL NOTES

**Switches.**—**S1-S19** are the band/gram switches ganged in two rotary units beneath the chassis. They are identified in the underside illustration of the chassis (location reference J4) by numbered arrows which show the direction in which they are viewed in the diagrams of the units in column 7 overlaid.

The associated switch table gives the switch operations in the four control settings, starting with the control in its fully anti-clockwise position. A dash indicates open, and **G**, closed.

**S20-S22** are the bass-cut tone control

(Continued col. 1 overlaid)



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