

TRANSPORTABLE four-valve, two-wave-band receiver for operation on 200-250V AC-DC mains.

Date released. August, 1956.

Price at time of release £12 19s. 6d. inclusive.

Wavebands. MW 185-550 metres. LW 1200-2000 metres.

Intermediate frequency. 470kc/s.

Valves. V1 UCH81, V2 UBF80, V3 UCL82, V4 UY85.

Pilot lamp. 10V 0.2A MES fitting.

Aerial. Ferrite rod.

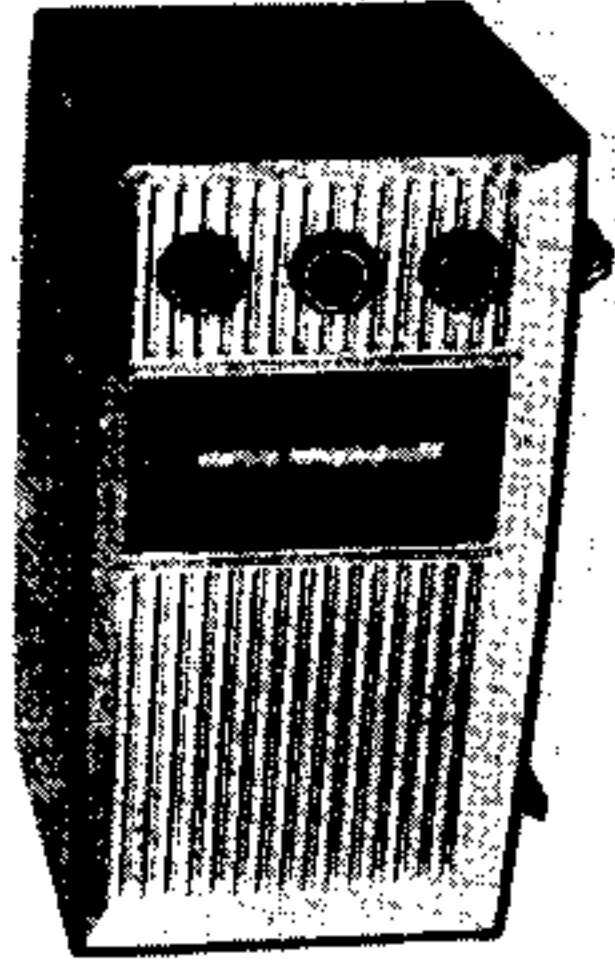
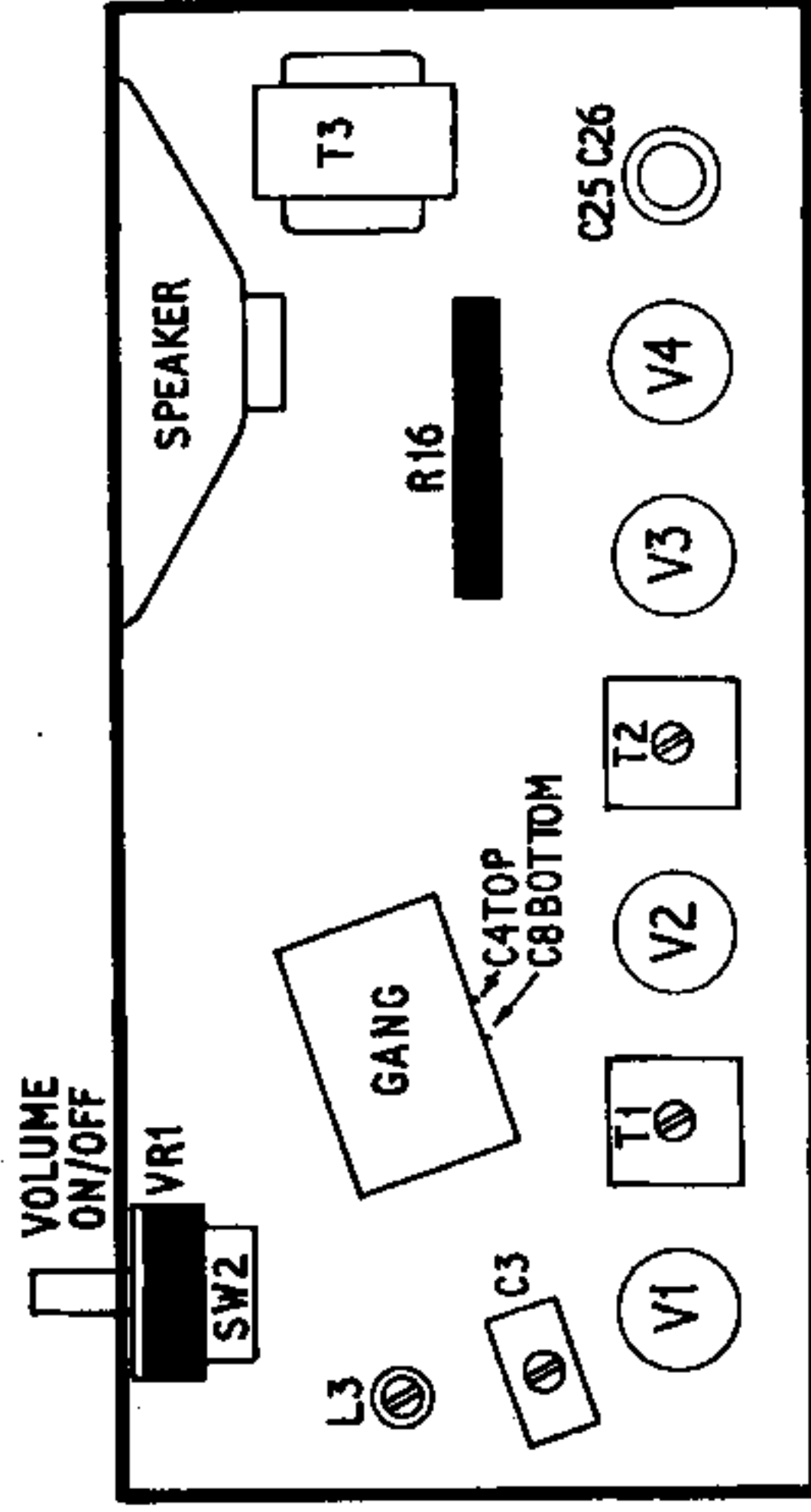
Speaker. 5in. round. 3 ohms.

Weight 5½ lb.

Manufacturer. Pilot Radio Ltd., Park Royal Road, London, NW10.

Service department. 154 Dukes Road, Western Avenue, London, W3.

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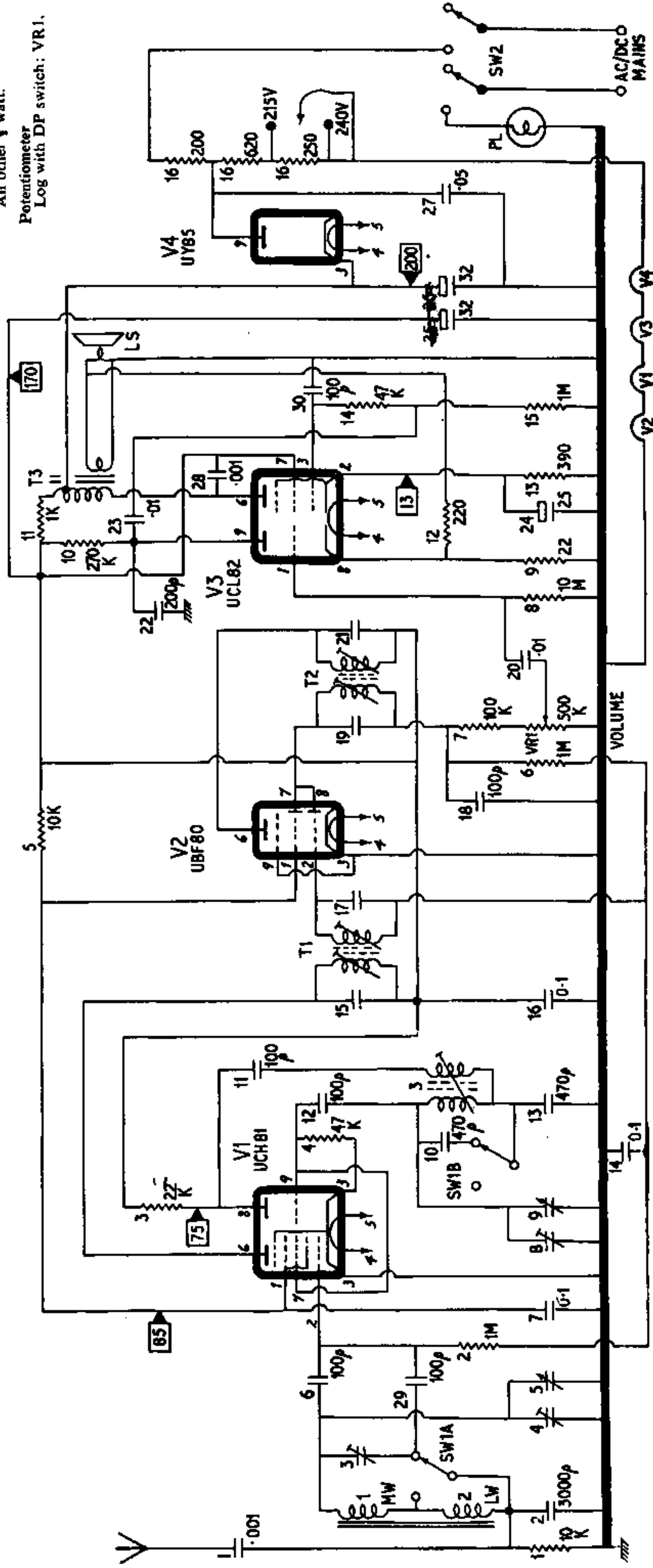


COMPONENT RATINGS

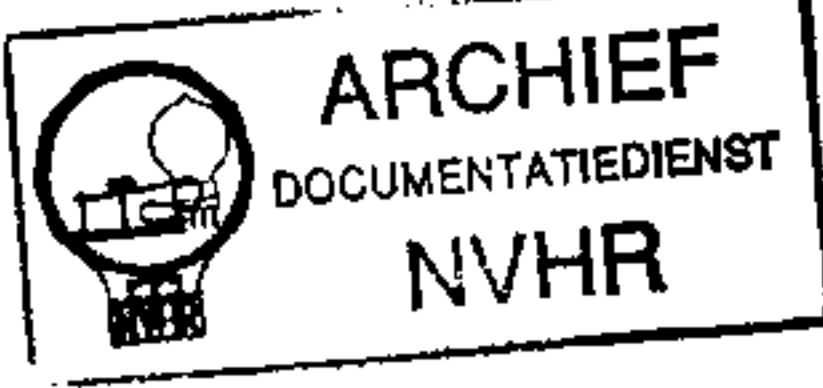
Capacitors
300V AC: C1 27 (paper tubular).
Silvered mica: C2 10 13 22
Ceramic: C6 11 12 18 29 30.
Paper tubular: C7 14 16 20 23 28 (350V).

Resistors
16 watt: R16.
1 watt: R11.
All other ½ watt.

Potentiometer
Log with DP switch: VR1.



Voltages at key points are indicated on this circuit of the latest "Little Maestro," which is a three-valve, plus rectifier, AC-DC receiver covering medium and long waves. Other voltage measurements are given overleaf together with some current readings



PILOT T105

Continued

CHASSIS REMOVAL

Remove control knobs and back from cabinet. Ferrite rod aerial is mounted on the back and secured by two 4BA brass screws, the aerial leads being attached to chassis. Therefore, after the back has been released, it is still attached to chassis by these leads. Withdraw the two 4BA fixing screws on back of chassis—one at each end, and also a third 4BA fixing screw which goes through a spare hole on speaker. When these three screws have been taken out the chassis, complete with speaker and cabinet back, can be removed from cabinet.

ALIGNMENT

IF Stages. Connect output meter across speaker, set volume control at maximum, fully mesh tuning gang. Switch to MW, inject 470kc/s.

Adjust secondary and then primary cores of T1 and T2 for maximum output on meter—reducing signal generator input as circuits are brought into alignment.

RF stages

MW. Switch receiver to MW, inject 1500kc/s signal and adjust C8, the oscillator trimmer on gang. Then adjust aerial trimmer C4 on gang.

Inject 600kc/s, slightly rock gang and adjust

VOLTAGE AND CURRENT CHECKS

Readings were taken on Avo model 7. The voltages given below are the only ones which can be taken with receiver operating without upsetting its performance.

Voltages

V1—pin 1 85V ; pin 8 75V.

V3—pin 2 13V.

V4—pin 3 200V ; pin 7 170V.

Junction of C25-R11 170V.

Currents

V1—pin 1 6.7mA; pin 6 2.4mA; pin 8 4.7mA.

V2—pin 1 2.8mA; pin 6 7.8mA.

V3—pin 6 29mA; pin 7 6mA; pin 9 0.4mA.

V4—pin 3 65mA.

core of oscillator coil L3 for maximum output with optimum calibration.

LW. Switch set to LW, inject 250kc/s and trim C3 for maximum output.

Important. Make no adjustments to the MW and LW aerial coils L1 and L2.