

PYE**Model P75**

General Description : Five-valve (including rectifier), three-waveband, table receiver. See note below for Chassis Nos. 971901-972200.

Power Supply : A.C. mains, 200-250 volts, 40-100 c/s., 35 watts.

Valves and Circuit Analysis : Measurements taken on Avometer Model 8 (voltages over 10 volts on 250-volt range) with receiver on 550 m. under no-signal conditions and mains input of 230 volts A.C. into 226-250-volt tap. Mullard valves are fitted.

Valve	Anode Volts	Anode Current, mA.	Screen Volts	Screen Current, mA.	Cathode Volts	Cathode Current, mA.
V ₁ ECH ₄₂ .	194	1.1	47	2.22	—	5.97
(osc.) .	73	2.65	—	—	—	—
V ₂ EF ₄₁ .	194	2.7	47	1.18	—	3.88
V ₃ EBC ₄₁ .	24	0.11	—	—	0.5	0.11
V ₄ EL ₄₁ .	205	23	194	3.2	5.7	26.2
V ₅ EZ ₄₁ .	Anode to anode 390-v. A.C.			—	216	36.16

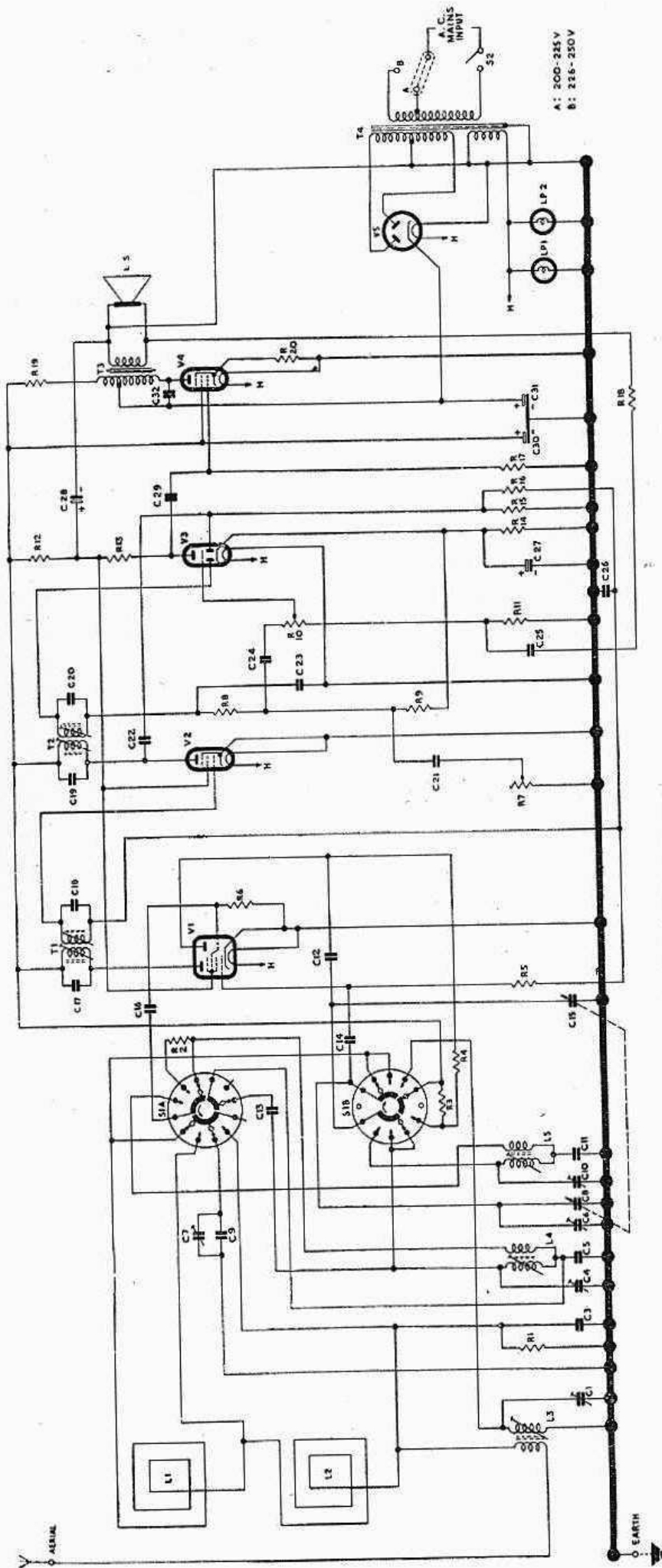
Alignment Procedure :

Apply Signal as Below	Set Receiver Controls to	Adjust in Order Stated for Maximum Output
(1) 470 kc/s. between chassis and control grid of V ₁ via a 0.1- μ F. capacitor	M.W. 566 m.	Iron-dust cores of T ₂ and T ₁
(2) 600 kc/s. between aerial and earth leads via standard dummy aerial	M.W. 500 m.	Iron-dust core of L ₄
(3) A ₂ (2) but 1500 kc/s.	M.W. 200 m.	Trimmers C ₄ and C ₆
(4) Repeat (2) and (3) until calibration and tracking are correct		
(5) A ₂ (2) but 214 kc/s. (1400 m.)	L.W. Tune to signal	Trimmer C ₇
(6) 6.1 Mc/s. between Ae. and earth via a 400-ohm dummy aerial	S.W. 49.15 m.	Cores of L ₅ and L ₃
(7) A ₂ (6) but 17.8 Mc/s.	S.W. 16.88 m.	Trimmers C ₁₀ and C ₁
(8) Repeat (6) and (7) until calibration and tracking are correct		

Modifications : A 1-M resistor has been added between the H.T. at the junction of R₁₉ and R₁₂ and the cathode of V₃. In this case the cathode voltage of V₃ becomes 1.1 volts.

On chassis Serial Nos. 971901-972200 only, the oscillator anode and grid sections on switch S_{1A} and B are interchanged. C₇ and C₉ should be joined to junction of L₁ and L₂ instead of to top of L₁.

Notes : Dial lamps 6.5 volts, 0.3 amp. Audio output 2 watts. To remove chassis : pull off knobs ; unclip speaker lead from side of cabinet ; remove four screws from base of cabinet ; withdraw cabinet. The tuning-drive bearings should be lubricated occasionally with a drop of oil, taking care not to allow the oil to touch the drive cord.



CIRCUIT AND LAY-OUT DIAGRAMS—PYE MODEL P75

NOTE: WAVECHANGE SWITCH SHOWN IN FULLY ANTI-CLOCKWISE POSITION I.E. L.W.

- Capacitors.**
 C1 3-50 pF.
 C3 2700 pF. (5%)
 C4 3-50 pF.
 C5 430 pF. (2%)
 C6 3-50 pF.
 C7 3-30 pF.
 C8 528 pF. (Swing)
 C9 120 pF. (2%)

- C10 3-50 pF.
 C11 4700 pF. (5%)
 C12 100 pF.
 C13 430 pF. (2%)
 C14 100 pF.
 C15 528 pF. (Swing)
 C16 100 pF.
 C17 100 pF. (2%)
 C18 100 pF. (2%)
 C19 100 pF. (2%)
 C20 100 pF. (2%)
 C21 0-002
 C22 15 pF.
 C23 100 pF.
 C24 0-005

- C25 0-1
 C26 0-02
 C27 25 (12 v.)
 C28 2 (150 v.)
 C29 0-005
 C30 16 (275 v.)
 C31 32 (275 v.)
 C32 0-005

- Resistors.**
 R1 22k
 R2 1-5k
 R3 33k
 R4 15k
 R5 1M
 R6 47k
 R7 1M (Pot.)
 R8 100k
 R9 470k
 R10 1M (Pot.)
 R11 390
 R12 47k (1/2 W.)
 R13 220k
 R14 4-7k
 R15 1M
 R16 1M
 R17 1M
 R18 3900
 R19 1600 (4 W. 5%)
 R20 220

- D.C. Resistances (ohms).**
 I.F.T. windings 11 70
 T4 (pri.) 230 + 245
 T4 (sec.) 230 + 245

