

PYE**“SLIM SIX”****Model PI28B**

General Description: Six-transistor small table receiver with ferrite-rod aerial and printed wiring panel.

Power Supply: 6 volts (U11 Baby, V0011, T15, K763).

Wavebands: M.W. 183–555 m.; L.W. one pre-set channel (1500 m.).

Transistor Analysis: Measurements taken on M.W. band with no-signal input, gang fully meshed and using Avo Model 8 (20,000 ohms/volt). Chassis positive. Diode, D1, is OA70.

Transistor	Alternative	Collector, volts	Collector, mA.	Base, volts	Emitter, volts
V1 V6/R4M . . .	OC44	2.4	0.5	0.6	0.5
V2 V6/R2 . . .	OC45	5.7	1.2	0.66	0.58
V3 V6/R2 . . .	OC45	5.7	1.05	0.90	0.73
V4 V10/50B . . .	OC71	5.5	4.0	1.0	0.85
V5 V10/50B . . .	OC72	5.95	2.0	0.2	—
V6 V10/50B . . .	OC72	5.95	2.0	0.2	—

Later models used White Circle transistors (types 1–5) with C14, C19 0.1; R12 4.7k (10%); R19 (15-ohms) is inserted between V4 emitter and top of R15.

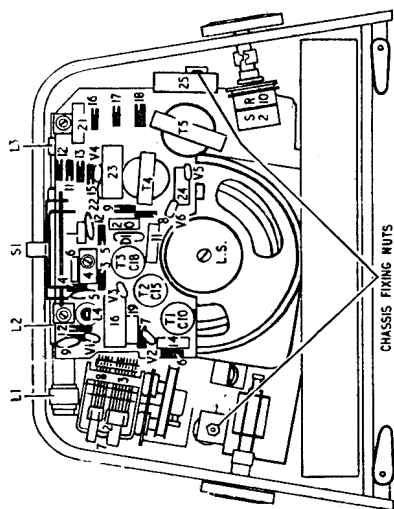
Neutralisation: The correct values of neutralising capacitor are 120 pF. for 1st I.F. amplifier and 47 pF. for the 2nd (these values should be halved if OC45 transistors are used). In extreme cases a variation of ± 20 per cent on the above values may improve stability.

Alignment Procedure:

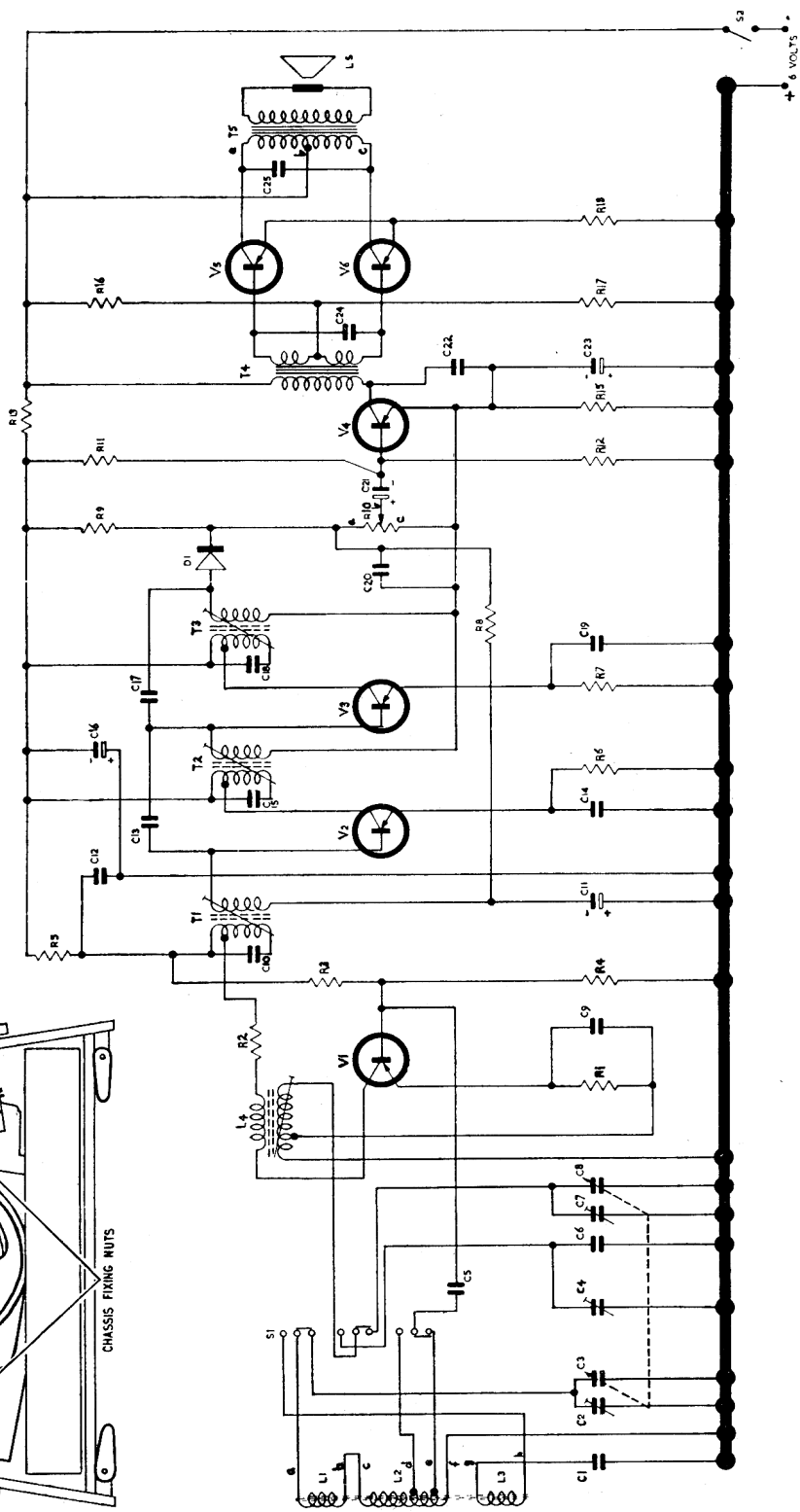
Apply Signal as Below	Set Controls to	Adjust in Order Stated
(1) 470 kc/s. between chassis and C5 with S1 disconnected from C5	L.F. end of M.W.	Cores T3, T2, T1
(2) As (1) but 600 kc/s.	M.W. 500 m.	Core L4
(3) As (1) but 1500 kc/s.	M.W. 200 m.	C7
(4) Repeat (2) and (3) until calibration is correct		
(5) As (1) but 200 kc/s.	L.W.	C4
(6) 600 kc/s. to rod aerial via loop 50 cm. from centre of rod with L1 nearest loop	M.W. 500 m.	Adjust position of L1 on rod aerial
(7) As (6) but 1500 kc/s.	M.W. 200 m.	C2
(8) Repeat (6) and (7) until tracking is correct.	Seal L1 with polystyrene dope.	
(9) L.W. Light Programme	L.W.	Adjust L3 on rod, afterwards sealing.*

* Made using a 1-v. meter with resistance of not less than 5000 ohms connected between V2 emitter and chassis, optimum tuning being indicated by a minimum reading (about 0.1 v. on tune).

CIRCUIT AND LAY-OUT DIAGRAMS—PYE "SLIM SIX" MODEL P128B



- Capacitors.**
 C1 1020 pF. (2%)
 C2 2-20 pF.
 C3 229 pF.
 C4 2-30 pF.
 C5 0-01
 C6 290 pF. (2%)
 C7 2-20 pF.
 C8 111 pF.
 C9 0-008
 C10 250 pF. (2%)
 C11 10 (El. 3 v.)
 C12 0-01
 C13 120 pF. (2%)
 C14 0-04
 C15 250 pF. (2%)
 C16 100 (El. 6 v.)
 C17 47 pF. (2%)
 C18 250 pF. (2%)
 C19 0-04
 C20 0-04
 C21 4 (El. 6 v.)
 C22 0-001
 C23 100 (El. 6 v.)
 C24 0-02
 C25 0-5
- Resistors.**
 R1 1k (20%)
 R2 470
 R3 47k
 R4 15k
 R5 6-8k
 R6 470 (20%)
 R7 680 (20%)
 R8 10k
 R9 68k
 R10 10k
 R11 18k
 R12 6-8k
 R13 100
 R15 220 (20%)
 R16 1-8k (5%)
 R17 68 (5%)
 R18 5
- D.C. Resistances (ohms).**
 T1-T3 (pri.) 3-5
 T4 (pri.) 121
 T4 (sec.) 105
 T5 (pri.) 14-93
- All resistors 10% unless otherwise indicated.



WAVE CHANGE SWITCH SHOWN IN MW POSITION.