PYE - P114BQ

OTHER COMPONENTS		Approx. Values (ohms)	Locations
L1, L2	Frame aerials ...	2·0 / 13·0	—
L3	Osc. tuning coil ...	3·0	A1
L4	Osc. reaction coil ...	1·0	A1
L5, L6	1st I.F.T. Pri. ... / Sec. ...	10·5 / 10·5	B1
L7, L8	2nd I.F.T. Pri. ... / Sec. ...	10·5 / 10·5	B1
L9	Speech coil ...	2·5	—
T1	O.P. trans. Pri. / Sec.	570·0 / —	— / —
S1-S3	Band switches ...	—	B1
S4, S5	Battery sw. ...	—	C1

Intermediate frequency 470 kc/s.

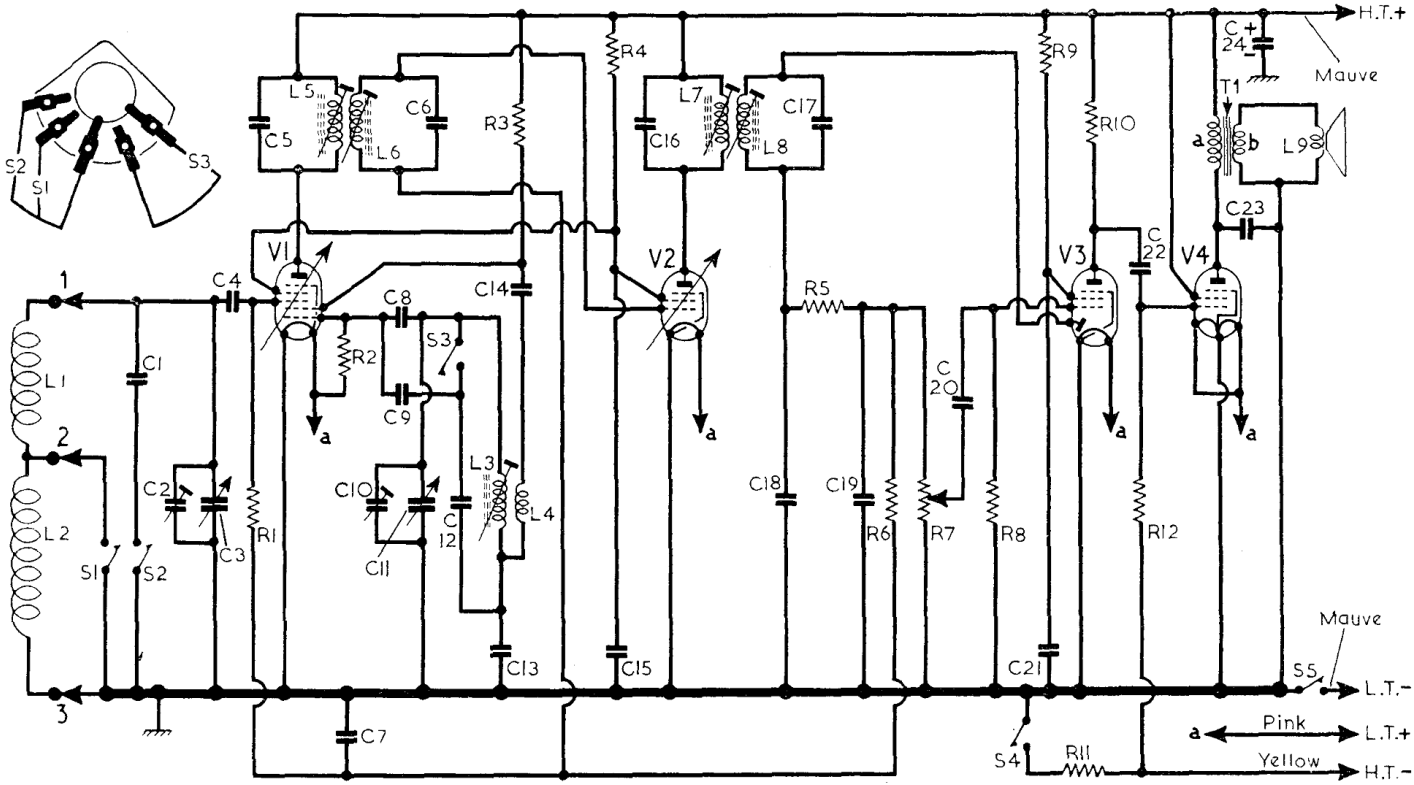
CAPACITORS		Values	Locations
C1	L.W. aerial trim ...	180pF	A1
C2	M.W. aerial trim	30pF	A1
C3	Aerial tuning ...	523pF	A1
C4	V1 C.G.	100pF	A1
C5, C6	1st I.F.T. tuning	100pF / 100pF	B1 / B1
C7	A.G.C. decoupling	0·01μF	B1
C8, C9	V1 osc. C.G. ...	100pF / 27pF	A1 / A1
C10	M.W. osc. trim ...	30pF	A1
C11	Oscillator tuning	523pF	A1
C12	L.W. osc. trim ...	530pF	A1
C13	Osc. tracker ...	580pF	B1
C14	Osc. reaction coup.	220pF	B1
C15	S.G. decoup. ...	0·01μF	B1
C16, C17	2nd I.F.T. tuning	100pF / 100pF	B1 / B1
C18, C19	I.F. by-passes ...	100pF / 100pF	B1 / B1
C20	A.F. coupling ...	0·002μF	C1
C21	V3 S.G. decoup. ...	0·01μF	C1
C22	A.F. coupling ...	0·01μF	C1
C23	Tone corrector ...	0·002μF	C1
C24	H.T. by-pass ...	8μF	C1

GENERAL NOTES

Switches.—S1-S3 are the band switches, ganged in a single rotary unit on the receiver panel. This unit is indicated in the three-quarter rear view of the chassis and is also shown in detail in the diagram

(*Continued col. 1 overleaf*)

RESISTORS		Values	Locations
R1	V1 C.G.	13MΩ	A1
R2	V1 osc. C.G. ...	27kΩ	B1
R3	V1 osc. H.T. feed	47kΩ	B1
R4	S.G. H.T. feed ...	27kΩ	B1
R5	I.F. stopper ...	100kΩ	C1
R6	A.G.C. decoupling	2·2MΩ	B1
R7	Volume control ...	1MΩ	C1
R8	V3 C.G.	10MΩ	C1
R9	V3 S.G. H.T. feed	10MΩ	C1
R10	V3 anode load ...	2·2MΩ	C1
R11	V4 G.B.	560Ω	C1
R12	V4 C.G.	4·7MΩ	C1



CIRCUIT ALIGNMENT

1.—Remove receiver from its carrying case, leaving the frame aerial connected.

2.—Connect output of signal generator, via 0.1 μF capacitor in "live" lead, to control grid (pin 6) of **V1** and chassis.

3.—Switch receiver to M.W. and tune to high wavelength end of band.

4.—Feed in a 470 kc/s signal and adjust the cores of **L8** (location reference C1), **L7** (C1), **L6** (B1) and **L5** (B1) for maximum output.

5.—Repeat operation 4 until no further improvement results.

6.—Switch receiver to M.W. and tune to 500 m. Feed in a 600 kc/s signal and adjust the core of **L3** (A1) for maximum.

7.—Tune receiver to 200 m. Feed in a 1,500 kc/s signal and adjust **C10** (A1) for maximum output.

8.—Repeat operations 6 and 7 until calibration is correct.

9.—Switch receiver to L.W. and tune to 1,400 m. Feed in a 214 kc/s signal and check calibration. If a large error exists, the capacitance of **C12** should be checked.

10.—Replace receiver in its carrying case and switch it to M.W.

11.—Transfer signal generator leads to 6in diameter coupling loop consisting of ten turns of insulated wire. Place this loop parallel to, and about 20in from, the receiver frame aerial windings.

12.—Tune receiver to 200 m. Feed in a 1,500 kc/s signal and adjust **C2** (A1) for maximum output.

Valve	Anode V	Anode mA	Screen V	Screen mA
V1 DK96 ...	84·5 / Oscillator / 30	0·37 / / 1·0	66	0·05
V2 DF96 ...	84·5	1·52	66	0·51
V3 DAF96 ...	20	0·025	16	0·005
V4 DL96 ...	82	4·9	84·5	0·93