PYE - P123BQ

Transistor	Emitter	Base	Collector	
	V	V	V	mA
TR1 V6/R4M[1] ..	0·5	0·6	2·4	0·5
TR2 V6/R4[2] ..	0·7	0·8	6·0	0·7
TR3 V6/R2[3] ..	1·2	1·28	5·3	0·45
TR4 V1o/50B[4] ..	0·42	0·58	5·3	1·9
TR5 V10/30A[5] ..	0·024	0·2	5·95	1·2
TR6 V10/30A[5] ..	0·024	0·2	5·95	1·2

[1] *V6/R8M*
[2] *V6/R8*
[3] *V6/R4*
[4] *OC71*
[5] *V10/50B or OC72*

Alternative types.

Capacitors

C1	3,300pF	D1
C2	35pF	A1
C3	523pF[5]	A1
C4	0·01μF	A2
C5	25μF	A2
C6	0·01μF	A2
C7	790μF	A2
C8	523pF[5]	A2
C9	35pF	A2
C10	895pF	B2
C11	50pF	B2
C12	1,200pF	B2
C13	15pF	B2
C14	1,200pF	B2
C15	0·25μF	A2
C16[1]	—	F4
C17	0·1μF	B1
C18	0·002μF	B2
C19	0·1μF	C2
C20[1]	—	F4
C21	0·1μF	C1
C22	3,900pF	C2
C23	2,200pF	C2
C24	1μF	C2
C25	0·1μF	D2
C26	50μF	D1
C27	0·1μF	D1
C28	5μF	D2
C29	50μF	D2
C30	0·5μF	D2
C31	50μF	A1

Resistors

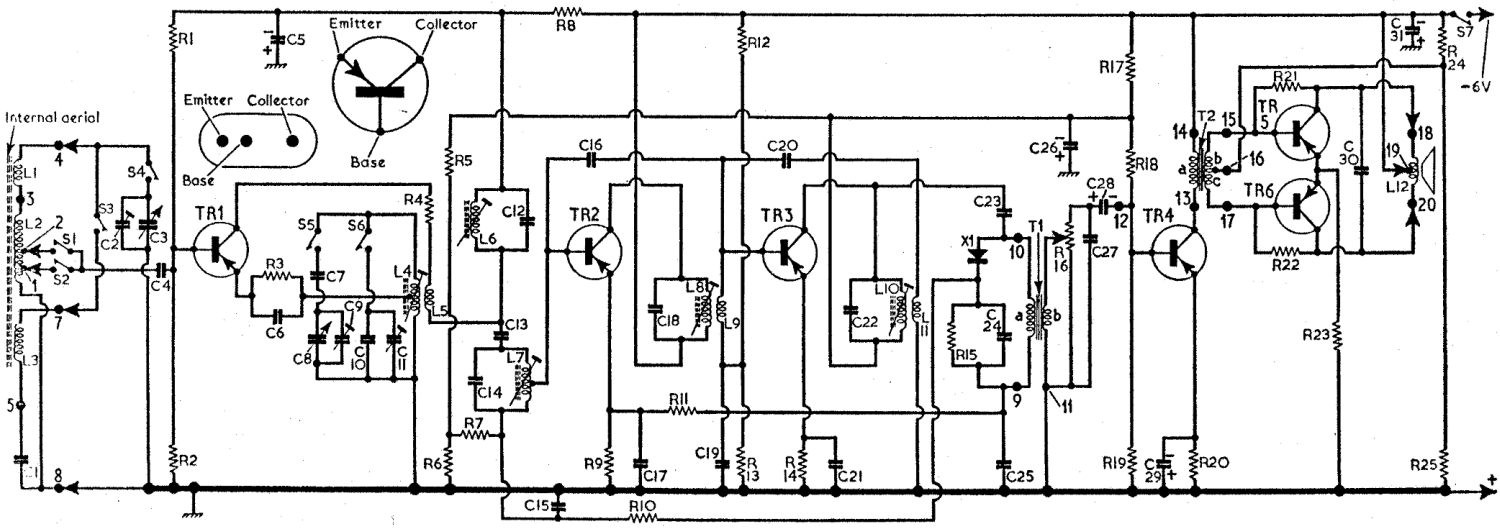
R1[2]	47kΩ	A2
R2[3]	15kΩ	E4
R3	1kΩ	A2
R4	100Ω	B2
R5	56kΩ	A2
R6	22kΩ	A2
R7	15kΩ	A2
R8	6·8kΩ	A2
R9	1kΩ	B1
R10	15kΩ	C2
R11	330Ω	C2
R12	68kΩ	C2
R13	22kΩ	C2
R14	2·7kΩ	C1
R15	15kΩ	C2
R16	3kΩ	D1
R17	1kΩ	C1
R18	47kΩ	D2
R19	10kΩ	D2
R20	220Ω	D2
R21	15kΩ	D2
R22	15kΩ	D2
R23	10Ω	D2
R24	8·2kΩ	D2
R25	120Ω	D2

Other Components[4]

L1	—	B1
L2	—	C1
L3	—	D1
L4	(total) 2·5	B2
L5	—	B2
L6	3·0	B2
L7	(total) 1·4	B2
L8	1·2	B2
L9	0·2	B2
L10	0·6	C2
L11	0·1	C2
L12	110·0	(total)
T1 a	872·0	D2
T1 b	145·0	D2
T2 a	298·0	C1
T2 b, c	77·0 total	C1
S1-S6	—	B1
S7	—	D1

[1] See " Neutralizing Procedure " above. [2] May be 150kΩ. [3] Omitted when R1 is 150kΩ.
[4] Approximate D.C. resistance in ohms; a dash indicates very low resistance. [5] Swing value, min. to max

Intermediate frequency 315kc/s.



CIRCUIT ALIGNMENT

1.—Remove chassis from carrying case, leaving the battery and frame aerial leads connected.

2.—Connect output of signal generator between chassis and junction of **S2, C4.**

3.—Switch receiver to M.W. and turn gang to maximum capacitance.

4.—Feed in a 315kc/s signal and adjust the cores of **L10** (C2), **L8** (B2), **L7** (B2) and **L6** (B2) for maximum output. Repeat these adjustments until no further improvement results.

5.—Tune receiver to 500m, feed in a 600kc/s signal and adjust the core of **L4** (B2) for maximum output.

6.—Tune receiver to 200m, feed in a 1,500kc/s signal and adjust **C9** (A2) for maximum output. Repeat this adjustment and step 5 until calibration is correct.

7.—Switch receiver to L.W., feed in a 200kc/s signal and adjust **C11** (B2) for maximum output.

8.—Replace receiver in carrying case. Connect output of signal generator to a loop of wire and place the loop about 12in from the **L1** end of the ferrite rod aerial.

9.—Tune receiver to 500m, feed in a 600kc/s signal and adjust the position of **L1** on the ferrite rod for maximum sound output.

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

11.—Repeat the adjustments in steps 8 and 9 until calibration is correct and then seal **L1** in position with polystyrene cement. Disconnect signal generator.

12.—Connect 10,000 ohms-per-volt meter, switched to 2.5V range, between **TR2** emitter and chassis.

13.—While receiving L.W. Light programme, adjust the position of **L3** on the ferrite rod for minimum reading on meter. Finally seal **L3** in position with polystyrene cement. A deflection down to 0.1V should be obtainable.