

DECCA - TP44

Intermediate frequency 472kc/s.

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 OC44 ..	1.4	+	8.0
TR2 OC45 ..	0.8	+	8.2
TR3 OC45 ..	1.2	+	8.6
TR4 OC81D ..	1.5	+	11.5*
TR5 OC81† ..	6.1	+	12.3*
TR6 OC81† ..	5	+	6.1

*Measured on 15V range.

†Matched pair.

§Very low reading.

‡No reading given.

Capacitors

C1	—	A1
C2	30pF	B1
C3	30pF	B1
C4	30pF	B1
C5	0.05μF	A1
C6	30pF	A1
C7	10μF	A1
C8	0.01μF	A1
C9	390pF	A2
C10	390pF	A2
C11	220pF	A1
C12	30pF	B1
C13	—	A1
C14	4pF	A2
C15	390pF	A2
C16	390pF	A2
C17	10μF	A2
C18	0.05μF	A2
C19	10μF	A2
C20	390pF	A2
C21	10μF	A2
C22	20pF	B2
C23	0.01μF	B2
C24	0.01μF	B2
C25	100μF	C1
C26	0.25μF	C1
C27	100μF	C1

Resistors

R1	47kΩ	A1
R2	10kΩ	A1
R3	3.3kΩ	A1
R4	390Ω	A2
R5	75kΩ	A2
R6	6.8kΩ	A2
R7	1kΩ	A2
R8	3.3kΩ	A2
R9	1.8kΩ	A2
R10	350Ω	B2
R11	12kΩ	A2
R12	5kΩ	C1
R13	470Ω	C1
R14	56kΩ	C1
R15	18kΩ	C1
R16	1.8kΩ	C1
R17	470Ω	C1
R18	2.2kΩ	C2
R19	68Ω	C1
R20	2.2kΩ	C1
R21	68Ω	C1
R22	2.2Ω	C1
R23	2.2Ω	C1
R24	330Ω	C1
R25	6.8Ω	C1

Coils*

L1	—	B1
L2	1.5	A1
L3	6.5	C1
L4	—	A1
L5	—	A1
L6	3.5	A1
L7	—	A2
L8	—	A2
L9	—	A2
L10	—	A2
L11	—	A2
L12	—	A2
L13	22.0	—

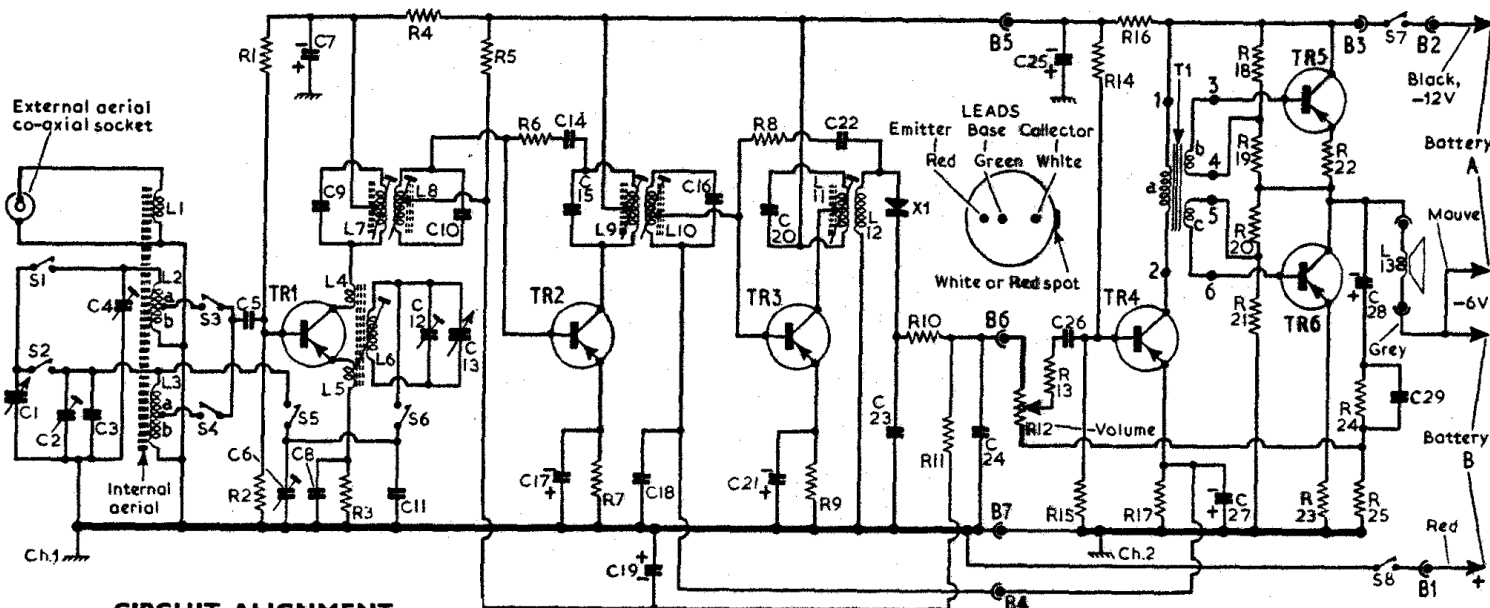
Miscellaneous*

T1	a 175.0	C2
	b 45.0	
	c 45.0	
X1	OA70	B2
S1-S8	—	A1

*Approximate D.C. resistance in ohms.

†On printed side of panel in C1.

‡On printed side of panel in C2.



CIRCUIT ALIGNMENT

- 1.—Remove the chassis from the cabinet as described under "Dismantling" in col. 3. Connect a signal generator across L2 (location reference A1), and an A.C. voltmeter across the speaker L13 for use as an output indicator. Switch the receiver to M.W. and turn the volume and tuning controls fully clockwise.
- 2.—Feed in a modulated 472kc/s signal and adjust the cores of L11, L10, L9, L8 and L7 (location reference A2) for maximum output, maintaining the generator output level as low as practicable to avoid A.G.C. action. Repeat these adjustments until optimum results are obtained.
- 3.—Transfer the signal generator output to the external aerial socket, connecting it via a 1kΩ resistor in its live output lead.
- 4.—Tune the receiver to 460m. Feed in a 652kc/s signal and adjust the core of L6 (A1) for maximum output. Then slide the former of L2 (A1) along the ferrite rod for maximum output.
- 5.—Tune the receiver to 230m. Feed in a 1,300kc/s signal and adjust C12 and C4

(location reference B1) for maximum output.

- 6.—Repeat operations 3, 4 and 5 until optimum sensitivity and calibration are obtained.
- 7.—Switch the receiver to L.W. and tune it to 1,750m. Feed in a 170kc/s signal and adjust C6 (A1) and L3 (C1) for maximum output. As there may be some oscillator pulling when adjusting C6, care should be taken to adjust C6 and L3 at the correct tracking point.
- 8.—Tune the receiver to 1,250m. Feed in a 240kc/s signal and adjust C2 (B1) for maximum output.
- 9.—Repeat operations 7 and 8. Finally, seal the formers of L2 and L3 to the ferrite rod with wax to prevent them from moving.

Switches.—The waveband and on/off switches S1-S8 are combined in a single 3-position rotary-type unit. The unit is indicated in our chassis illustration (location reference A1), and a detailed sketch showing the switch contacts is provided below. S1

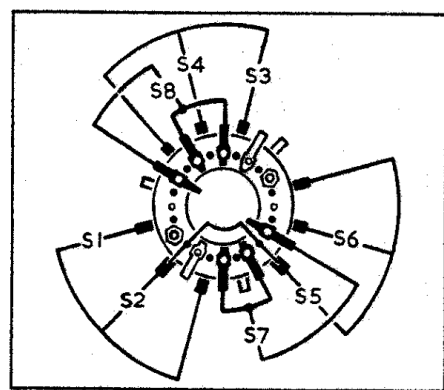


Diagram of the waveband and on/off switch unit S1-S8

S3 and S5 are closed on M.W.; S2, S4 and S6 are closed on L.W.

Batteries.—The batteries recommended by the manufacturer are two Ever Ready type PPF's, rated at 6V each.

TRANSISTORS

TR5, TR6.—In the event of the replacement of either of the output transistors TR5, TR6 (Mullard OC81's) being necessary, both transistors must be replaced with a matched pair.