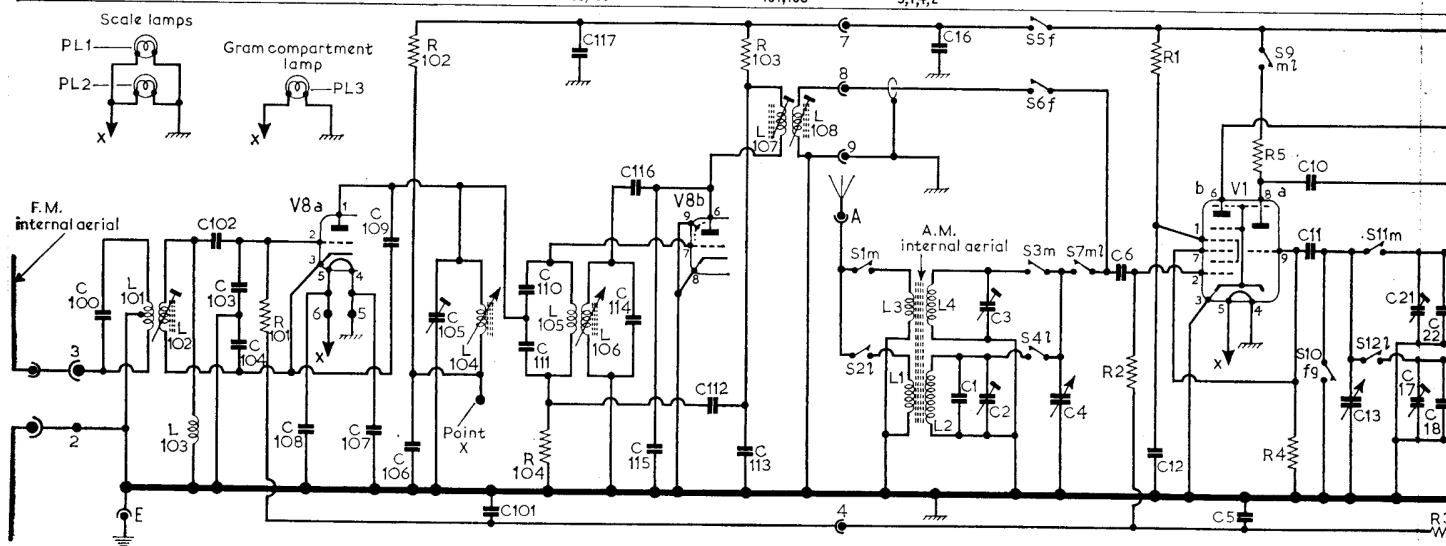
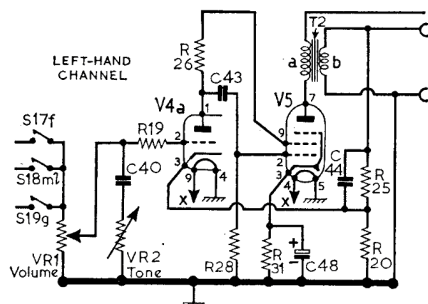


C	100	102,103,104	108	107,109,106,105	101	110,111	117	114,116,115	112	113	16	1	3,2	4	6	12	5	10,11	13	21,17,2
R		101		102		104			103							2	1	5	4	
L	101,102	103			104	105,106		107,108			3,1,4,2									

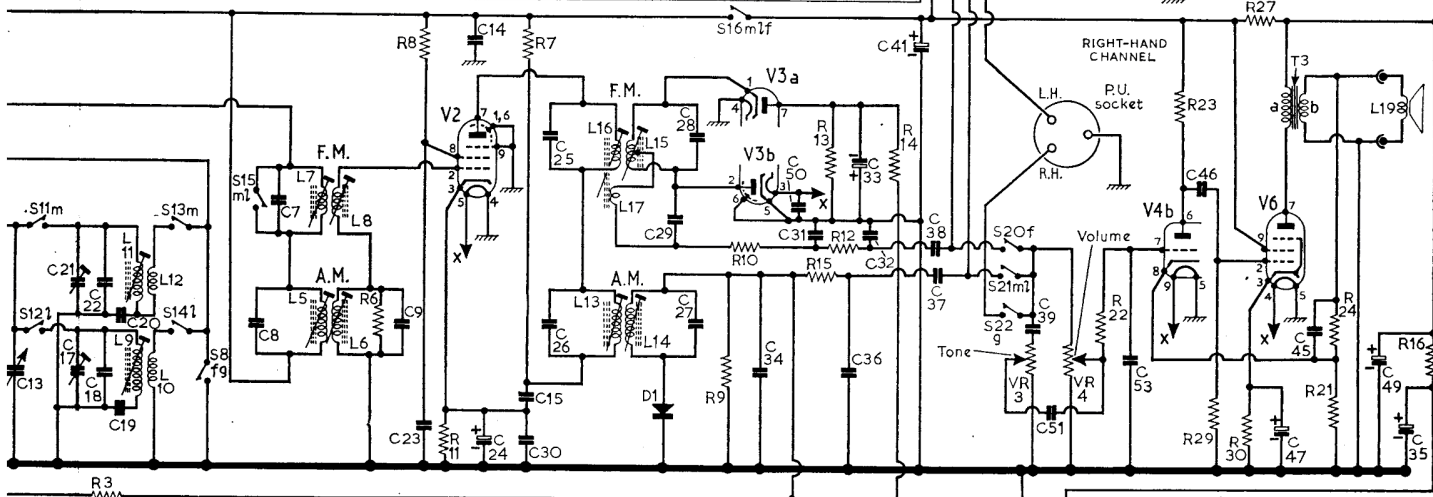


Circuit of audio channel
used in the SRG450 and SRG500

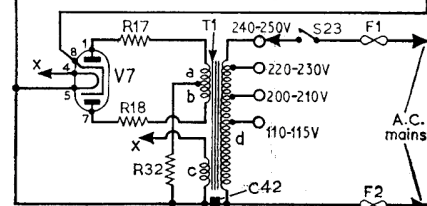


38,37	40,39,52,51	54,53	43,46,42	48,47	44,45	49,35	C
	VR2,VR3,VR1,VR4	19,22,17,18,26,23,32,28,29,31,30,27,25,20,24,21	16	R			
						18,19	L

13	21,17,22,18,20,19	8	7	9,23	14,24	15,30,25,26	29	28,27	34	50,31,36,33,32	41
3				6	8	11	7		910	15,13,12	14
	11,9,12,10			7,5,8,6				16,17,13,15,14			



DECCA- SRG450, SRG500, SRG550



DECCA SRG450 SRG500 SRG550

Resistors—continued

R30	150Ω	F6
R31	150Ω	E6
R32	100Ω	F6
R101	100kΩ	
R102	1.7kΩ	†
R103	1MΩ	
R104	22kΩ	
VR1	2MΩ	E5
VR2	1MΩ	C1
VR3	1MΩ	C1
VR4	2MΩ	E4

Capacitors

C1	85pF	A1
C2	30pF	A1
C3	30pF	A1
C4	—	B1
C5	0.02μF	G5
C6	100pF	H5
C7	12pF	A2
C8	100pF	A2
C9	100pF	A2
C10	300pF	H5

*Receiver switched to a.m.

†Receiver switched to f.m.

‡Receiver switched to gram.

§Measured at the junction R7/C15.

¶A.c. reading.

Valve Table

Valve	Anode (V)	Screen (V)	Cathode (V)
V1a ECH81	107	—	—
V1b ECH81	200	—	—
V2 EF89	220	—	—
V3 EB91	150‡	—	1.0
V4 ECC83	169‡	—	1.2
V5, V6 EL84	—	200	5.2
	—	220	5.9
V7 EZ81	335¶	247	6.8
V8 ECC85	—	—	340.0

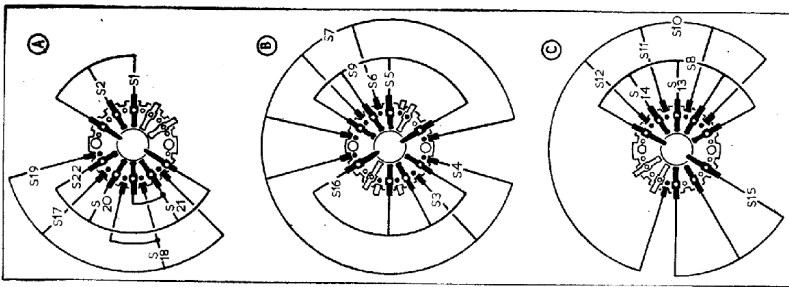
CIRCUIT ALIGNMENT

Equipment Required.—An f.m. signal generator; an a.m. signal generator; an audio output meter and a bladed type trimming tool.

F.M. Circuits

- 1.—Connect the audio output meter in place of one of the loudspeakers. Connect the f.m. signal generator output between V2 pin 2 and chassis. During alignment, adjust the input signal to maintain approximately 500mW output.
- 2.—Switch receiver to f.m. Rotate the tuning gang to the fully meshed position and check that the cursor coincides with the datum marks at the l.f. end of the scale and that the f.m. tuning drum is in the fully clockwise position.
- 3.—Feed in a 10.7Mc/s 60kc/s f.m. modulated signal and unscrew the core of L16 (location reference A3) away from resonance. Then adjust L15 (G6) for maximum audio output. (The second peak which occurs is maximum and once adjusted it should not be disturbed again.)
- 4.—Adjust L16 for maximum output.
- 5.—Transfer the signal generator to the junction C6, S6, S7, and adjust L7 and L8 (A2) for maximum output.
- 6.—Repeat operations 4 and 5 until there is no further improvement.
- 7.—Transfer the signal generator to the f.m. aerial sockets and feed in a 95Mc/s signal. Tune receiver to this signal. Adjust L107 (upper core) and L108 (lower core) for maximum output.

The waveband switch diagrams illustrate the three wafers as they appear from the same angle as the arrows A, B and C



C11	47pF	G5
C12	5,000pF	G5
C13	—	B2
C14	5,000pF	H5
C15	5,000pF	H5
C16	5,000pF	G6
C17	30pF	A1
C18	185pF	G5
C19	220pF	G5
C20	515pF	G5
C21	30pF	A2
C22	70pF	B1
C23	5,000pF	G5
C24	5μF	H5
C25	12pF	A3
C26	100pF	A3
C27	100pF	A3
C28	47pF	A3
C29	8pF	G6
C30	5,000pF	G5
C31	680pF	G6
C32	300pF	G5
C33	2μF	H6
C34	100pF	H6
C35	32μF	B1
C36	300pF	H6
C37	0.01μF	H5

C38	0.01μF	G5
C39	300pF	E4
C40	300pF	F5
C41	32μF	B2
C42	5,000pF	F6
C43	0.002μF	E5
C44	300pF	F5
C45	300pF	E5
C46	0.002μF	E5
C47	25μF	F6
C48	25μF	E6
C49	32μF	B2
C50	5,000pF	H6
C51	100pF	F5
C52	100pF	F5
C53	100pF	E5
C54	100pF	E5
C100	12pF	
C101	1,000pF	
C102	1,000pF	
C103	10pF	
C104	21pF	
C105	—	†
C106	1,000pF	
C107	1,000pF	
C108	1,000pF	
C109	5.6pF	

C110	10pF	
C111	10pF	
C112	15pF	
C113	120pF	
C114	30pF	†
C115	10pF	
C116	10pF	
C117	1,000pF	

Coils*

L1	—	A1
L2	—	A1
L3	—	C1
L4	—	H5
L5	—	A2
L6	—	A2
L7	—	H5
L8	—	A2
L9	—	H4
L10	—	H4
L11	—	H5
L12	—	H5
L13	—	H6
L14	—	A3
L15	—	G6
L16	—	A3
L17	—	A3

L18	3	—
L19	3	—
L101-L108	—	†

Transformers*

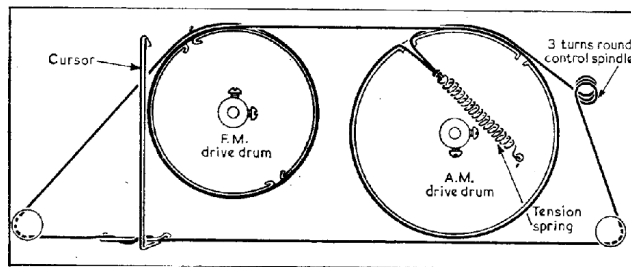
T1	a	210	
	b	210	B3
	c	—	
	d	20	
T2	a	520	C3
	b	—	
	c	520	
T3	a	—	C2
	b	—	

Miscellaneous

D1	OA81	H6
F1	750mA	—
F2	750mA	—
PL1	6.5V	—
PL2	0.3A	—
PL3	M.E.S.	F5
S1-S22	—	H5
S23	—	C1

*Approximate d.c. resistance in ohms.

†Located in f.m. tuner unit.



Drive cord assembly drawn as seen with the a.m. tuning gang fully meshed

- 8.—Tune receiver to 87Mc/s. Feed in an 87Mc/s signal and adjust C114a for maximum output. C114a (not shown on our circuit diagram) is an f.m. oscillator trimmer connected in parallel with C114 in the alternative type tuner unit. In receivers fitted with our specimen tuner unit i.e. C114a omitted, operation 8 should be ignored.
- 9.—Tune receiver to 95Mc/s. Feed in a 95Mc/s signal and adjust C105 (F5) for maximum output.

A.M. Circuits

- 1.—Switch receiver to m.w. and short-circuit C13 to chassis. Connect the a.m. signal generator output between V1 pin 2 and chassis.
- 2.—Feed in a 472kc/s 30 per cent modulated signal and adjust the cores of L5 (H5), L6 (A2), L13 (H6) and L14 (A3) for maximum output. Repeat until there is no further improvement. Remove short-circuit.
- 3.—Transfer the signal generator to the a.m. aerial sockets via a dummy aerial. Tune receiver to 500m.
- 4.—Feed in a 600kc/s signal and adjust L11

- (H5) and the ferrite aerial coil L4 for maximum output.
- 5.—Tune receiver to 250m. Feed in a 1,200kc/s signal and adjust C21 (A2) and C3 (A1) for maximum output.
- 6.—Repeat operations 1 to 5 and check for optimum output with correct calibration.
- 7.—Switch receiver to l.w. and tune to 2,000m. Feed in a 150kc/s signal and adjust L9 (H4) and the ferrite rod aerial coil L2 for maximum output.
- 8.—Tune receiver to 1,200m. Feed in a 250kc/s signal and adjust C17 and C2 (A1) for maximum output.
- 9.—Repeat operations 7 and 8 until there is no further improvement.