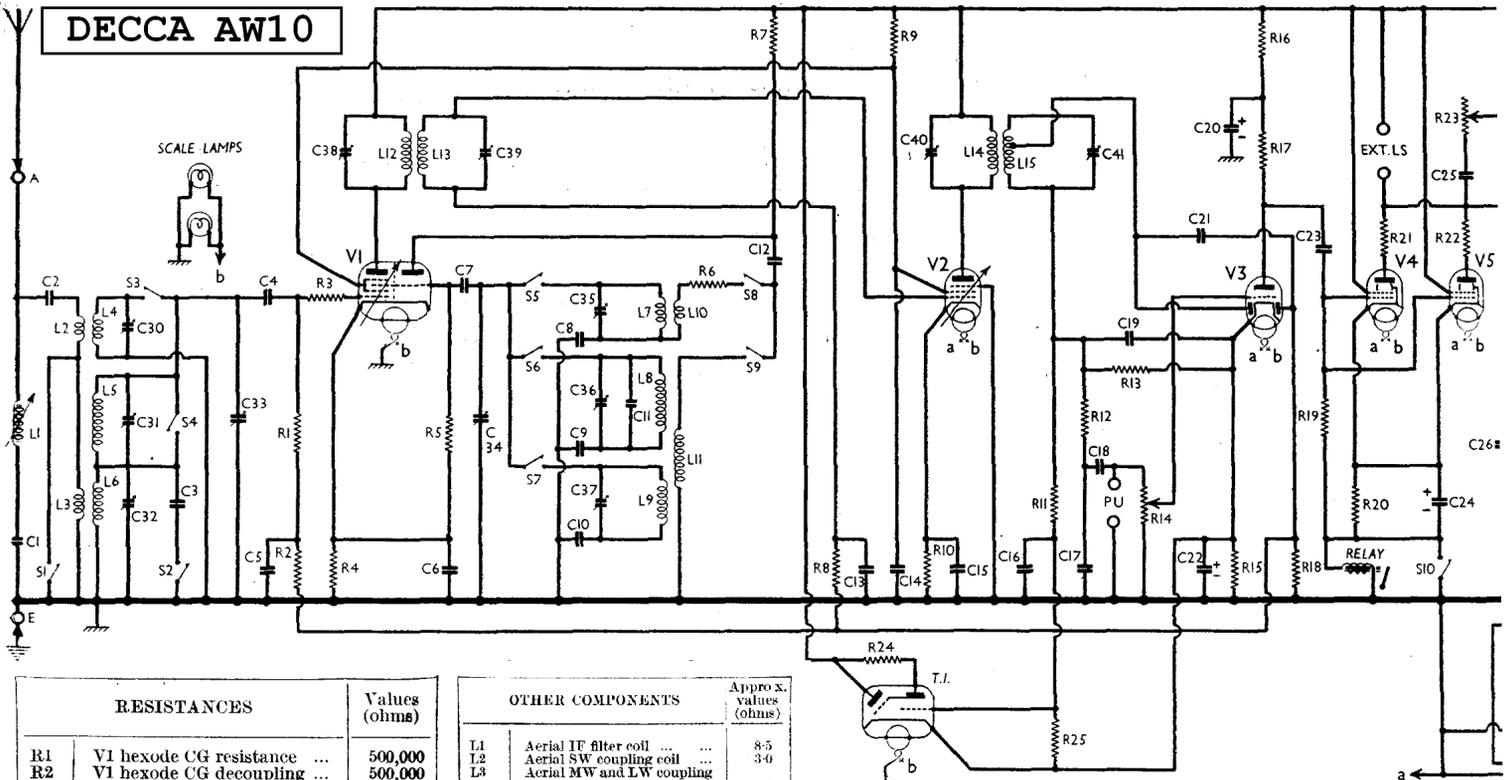


DECCA AW10



RESISTANCES		Values (ohms)
R1	V1 hexode CG resistance ...	500,000
R2	V1 hexode CG decoupling ...	500,000
R3	V1 hexode grid stopper ...	40
R4	V1 fixed GB resistance ...	250
R5	V1 osc. CG resistance ...	50,000
R6	Osc. reaction SW damping ...	70
R7	V1 osc. anode HT feed ...	35,000
R8	V2 CG decoupling ...	500,000
R9	V1, V2 SG's HT feed ...	35,000
R10	V2 fixed GB resistance ...	250
R11	T.I. CG decoupling ...	1,000,000
R12	IF stopper ...	70,000
R13	V3 signal diode load ...	300,000
R14	Manual volume control ...	500,000
R15	V3 triode GB and AVC delay resistance ...	3,000
R16	V3 triode anode decoupling ...	25,000
R17	V3 triode anode load ...	100,000
R18	V3 AVC diode load ...	500,000
R19	V4, V5 CG's resistance ...	250,000
R20	V4, V5 fixed GB resistance ...	140
R21	V4 anode stopper ...	100
R22	V5 anode stopper ...	100
R23	Variable tone control ...	50,000
R24	T.I. anode HT feed ...	2,000,000
R25	T.I. CG resistance ...	1,000,000

OTHER COMPONENTS		Approx. values (ohms)
L1	Aerial IF filter coil ...	8.5
L2	Aerial SW coupling coil ...	3.0
L3	Aerial MW and LW coupling coil ...	14.0
L4	Aerial SW tuning coil ...	Very low
L5	Aerial LW tuning coil ...	19.0
L6	Aerial MW tuning coil ...	3.5
L7	Osc. circuit SW tuning coil ...	Very low
L8	Osc. circuit LW tuning coil ...	3.5
L9	Osc. circuit MW tuning coil ...	2.5
L10	Oscillator SW reaction ...	1.0
L11	Oscillator MW and LW reaction coil ...	—
L12	1st IF trans. (Pri. ...)	28
L13	1st IF trans. (Sec. ...)	7.0
L14	2nd IF trans. (Pri. ...)	7.0
L15	2nd IF trans. (Sec., total ...)	7.0
L16	Speaker speech coils ...	3.0
L17	HT smoothing choke ...	400.0
L18	Speaker input trans. (Pri. ...)	300.0
T1	Speaker input trans. (Sec. ...)	0.2
	(Pri., total ...)	34.0
T2	Mains Rect. heat. sec. ...	0.2
	(HT sec., total ...)	3.2
	(HT sec., total ...)	370.0
F1	Mains circuit fuse ...	—
S1-S9	Waveband switches ...	—
S10	Relay shorting switch ...	—
S11	Speaker muting switch ...	—
S12	Mains switch, ganged R14 ...	—

CIRCUIT ALIGNMENT

IF Stages.—Switch set to LW, short-circuit **C34**, connect signal generator between control grid (top cap) of **V1** and chassis, leaving existing connection in place. Feed in a 465 KC/S signal, and adjust **C38**, **C39**, **C40** and **C41** for maximum output.

Transfer signal generator leads to **A** and **E** sockets via a suitable dummy aerial, feed in a strong 465 KC/S signal, and adjust the core of **L1** for minimum output.

RF and Oscillator Stages.—With the gang at either extremity of its travel, the pointer should be level with the top of the flange supporting the black scale background plate. Signal generator should be connected to **A** and **E** sockets via a suitable dummy aerial. It should be observed that, as the scale is fixed to the front of the cabinet, and not to the chassis, if the process is carried out with the chassis removed from the cabinet, the scale cannot be utilised during alignment. Adjustment is difficult when the chassis is in the cabinet. The procedure is as follows, and should be executed in that order:

MW.—Switch set to MW, adjust tuning control so that the end of the pointer is three-eighths of an inch from its position at minimum gang capacity, i.e.: from the top of the flange supporting the scale backing. Feed in a 200 m (1,500 KC/S) signal, and adjust **C37**, then **C32**, for maximum output. Check at 220 m, 350 m and 500 m (1,360, 858 and 600 KC/S).

LW.—With receiver still switched to MW, feed in a 296.2 m (1,013 KC/S) signal and tune it in accurately. Switch set to LW, feed in a 1,293 m (232 KC/S) signal and, without moving the gang, adjust **C36**, then **C31**, for maximum output. Check at 1,500 m (200 KC/S), and see that it coincides with the pointer setting for 342.1 m (877 KC/S) on the MW band.

is carried out with the chassis removed from the cabinet, the scale cannot be utilised during alignment. Adjustment is difficult when the chassis is in the cabinet. The procedure is as follows, and should be executed in that order:

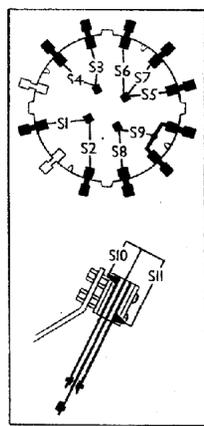
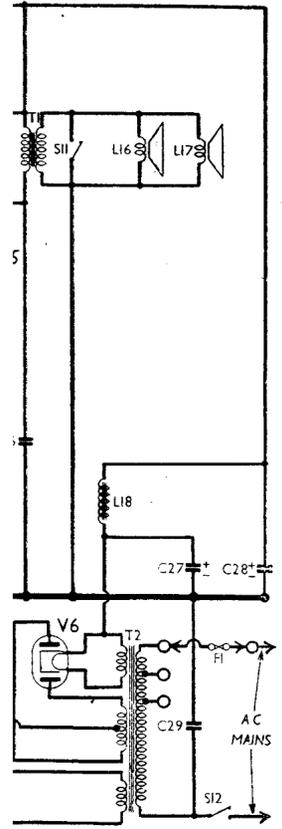
MW.—Switch set to MW, adjust tuning control so that the end of the pointer is three-eighths of an inch from its position at minimum gang capacity, i.e.: from the top of the flange supporting the scale backing. Feed in a 200 m (1,500 KC/S) signal, and adjust **C37**, then **C32**, for maximum output. Check at 220 m, 350 m and 500 m (1,360, 858 and 600 KC/S).

LW.—With receiver still switched to MW, feed in a 296.2 m (1,013 KC/S) signal and tune it in accurately. Switch set to LW, feed in a 1,293 m (232 KC/S) signal and, without moving the gang, adjust **C36**, then **C31**, for maximum output. Check at 1,500 m (200 KC/S), and see that it coincides with the pointer setting for 342.1 m (877 KC/S) on the MW band.

When the receiver was designed, this method of alignment was intended to ensure that the positions of Midland Regional and Luxembourg; and London Regional and Droitwich, coincided on the tuning scales, for the convenience of the press-button system.

SW.—Switch set to SW, turn pointer to three-eighths of an inch from minimum gang position (as for 200 m position on MW band above), feed in a 16.6 m (18 MC/S) signal, and adjust **C35**, then **C30**, for maximum output. Check at 50 m (6 MC/S), when the end of the pointer should be three-quarters of an inch (vertically) above the scale-backing flange, the top of which is level with the pointer when the gang is at maximum.

CONDENSERS		Values (µF)
C1	Aerial IF filter tuning ...	0.00006
C2	Aerial coupling condenser ...	0.0003
C3	Part aerial LW coupling ...	0.00125
C4	V1 hexode CG condenser ...	0.0001
C5	V1 hexode CG decoupling ...	0.02
C6	V1 cathode by-pass ...	0.1
C7	V1 osc. CG condenser ...	0.0001
C8	Osc. circuit SW tracker ...	0.003
C9	Osc. circuit LW tracker ...	0.000385
C10	Osc. circuit MW tracker ...	0.0001808
C11	Osc. circuit LW fixed trimmer ...	0.000045
C12	V1 osc. anode coupling condenser ...	0.0002
C13	V2 CG decoupling ...	0.02
C14	V1, V2 SG's decoupling ...	0.1
C15	V2 Cathode by-pass ...	0.1
C16	T.I. CG decoupling ...	0.01
C17	IF by-pass ...	0.0001
C18	AF coupling to V3 triode ...	0.02
C19	IF by-pass ...	0.0001
C20*	V3 triode anode decoupling ...	4.0
C21	Coupling to V3 AVC diode ...	0.0001
C22*	V3 cathode by-pass ...	50.0
C23	V3 triode to V4, V5 AF coupling ...	0.01
C24*	V4, V5 cathodes by-pass ...	50.0
C25	Part of variable tone control ...	0.05
C26	Fixed tone corrector ...	0.006
C27*	HT smoothing condensers ...	10.0
C28*	HT smoothing condensers ...	10.0
C29	Mains RF by-pass ...	0.006
C30†	Aerial circuit SW trimmer ...	—
C31†	Aerial circuit LW trimmer ...	—
C32†	Aerial circuit MW trimmer ...	—
C33†	Aerial circuit tuning ...	—
C34†	Oscillator circuit tuning ...	—
C35†	Osc. circuit SW trimmer ...	—
C36†	Osc. circuit LW trimmer ...	—
C37†	Osc. circuit MW trimmer ...	—
C38†	1st IF trans. pri. tuning ...	—
C39†	1st IF trans. sec. tuning ...	—
C40†	2nd IF trans. pri. tuning ...	—
C41†	2nd IF trans. sec. tuning ...	—



Switch	SW	MW	LW
S1			
S2			
S3			
S4			
S5			
S6			
S7			
S8			
S9			

The upper diagram shows the **SI-S9** unit, as seen from the rear of the underside of the chassis. Beneath it is a side view of the **SI0-S11** unit.

* Electrolytic. † Variable. ‡ Pre-set. § 0.00012 and 0.000168-8 in parallel.