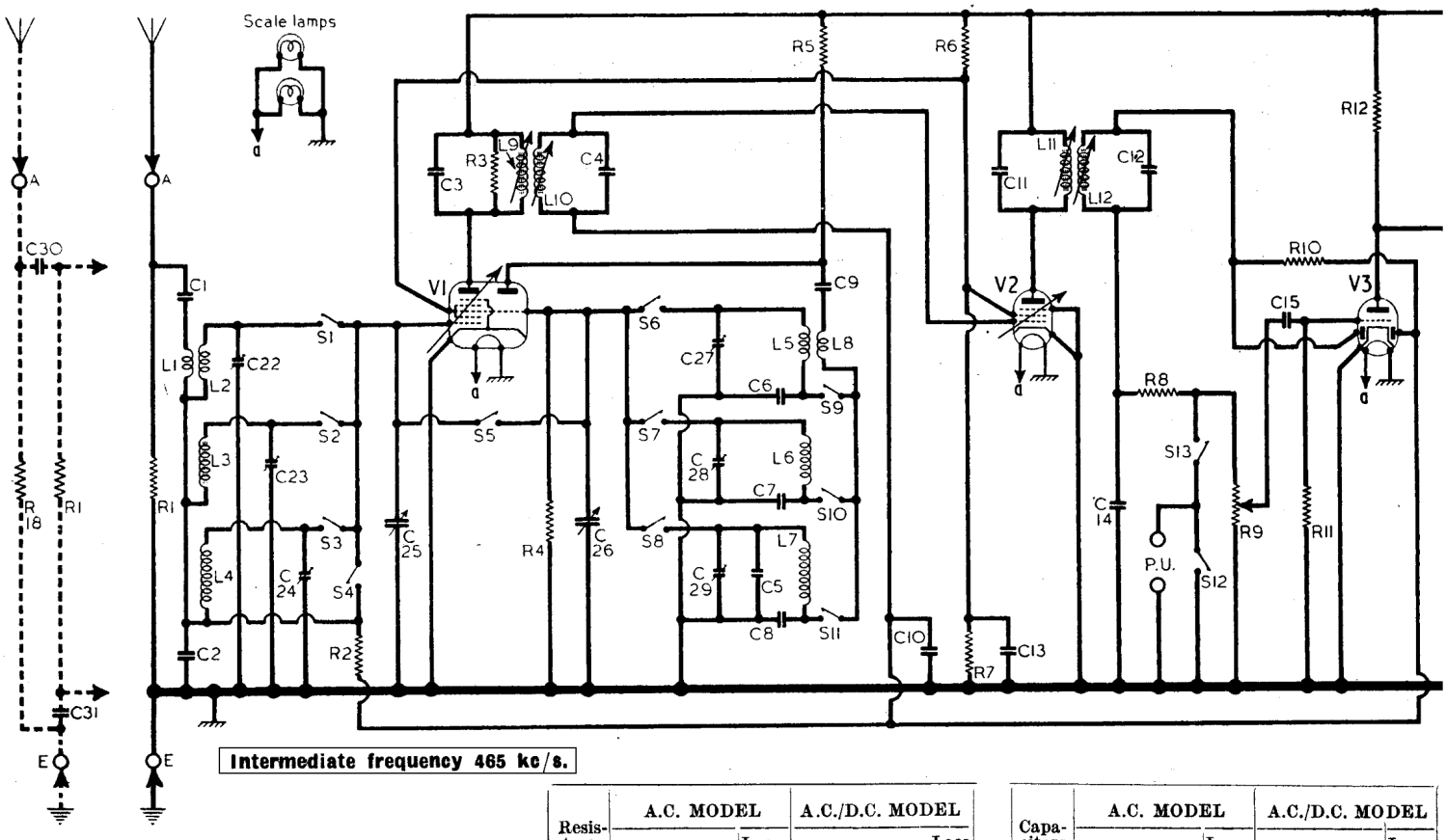
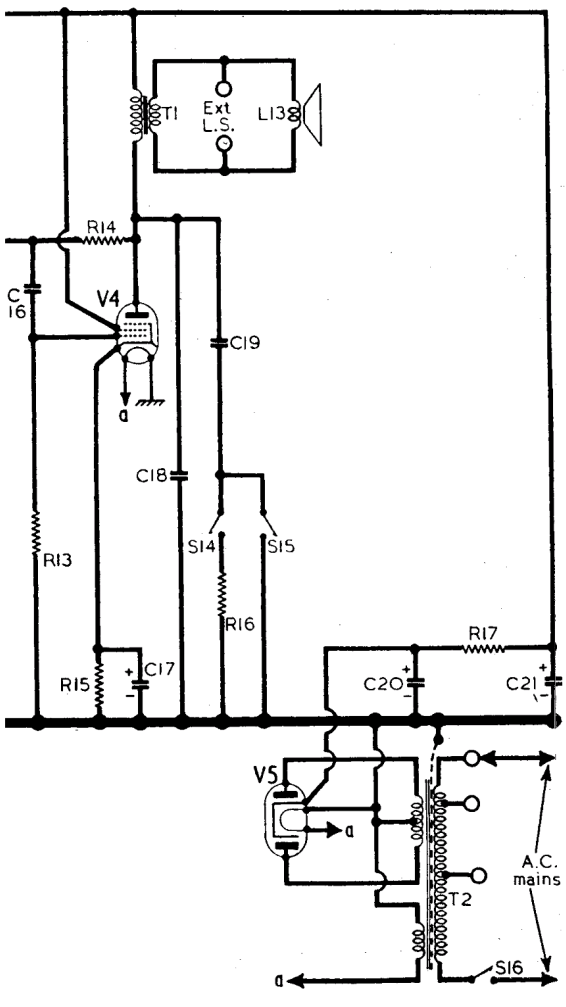


Intermediate frequency 465 kc/s.



Resistors	A.C. MODEL Values	A.C. MODEL Locations	A.C./D.C. MODEL Values	A.C./D.C. MODEL Locations
R1	4·7kΩ	G4	4·7kΩ	G4
R2	100kΩ	G4	100kΩ	G4
R3	100kΩ	G3	100kΩ	G3
R4	47kΩ	G4	47kΩ	G4
R5	47kΩ	G4	33kΩ	G4
R6	27kΩ	F4	—	—
R7	27kΩ	F3	—	—
R8	47kΩ	F4	47kΩ	F4
R9	250kΩ	D3	250kΩ	D3
R10	2·2MΩ	F4	2·2MΩ	F4
R11	8MΩ	F4	8MΩ	F4
R12	220kΩ	F3	100kΩ	F3
R13	470kΩ	E3	470kΩ	E3
R14	2·2MΩ	E3	2·2MΩ	E3
R15	270Ω	F3	180Ω	F3
R16	4·7kΩ	D4	4·7kΩ	D4
R17	1kΩ	F3	1kΩ	F3
R18	—	—	1MΩ	G4
R19	—	—	270kΩ	F4
R20	—	—	100kΩ	F3
R21	—	—	986Ω†	C2
R22	—	—	100Ω	E4
R23	—	—	10kΩ	E3
R24	—	—	60Ω	C2

† Tapped at 120Ω + 666Ω + 200Ω from V5 heater.

Capacitors	A.C. MODEL Values	A.C. MODEL Locations	A.C./D.C. MODEL Values	A.C./D.C. MODEL Locations
C1	0·01μF	G4	0·01μF	G4
C2	0·00375μF	H4	0·00375μF	H4
C3	100pF	A1	100pF	A1
C4	100pF	A1	100pF	A1
C5	30pF	H3	30pF	H3
C6	0·0027μF	G3	0·0027μF	G3
C7	410pF	H3	410pF	H3
C8	125pF	H3	125pF	H3
C9	100pF	G4	100pF	G4
C10	0·1μF	G3	0·1μF	G3
C11	100pF	B2	100pF	B2
C12	180pF	B2	180pF	B2
C13	0·1μF	G4	0·1μF	G4
C14	500pF	F4	500pF	F4
C15	0·01μF	F4	0·01μF	F4
C16	0·01μF	F3	0·01μF	F3
C17*	25μF	E4	25μF	E4
C18	0·01μF	E3	0·005μF	D4
C19	0·05μF	D4	0·05μF	D4
C20*	32μF	B1	32μF	B1
C21*	32μF	B1	32μF	B1
C22‡	—	A1	—	A1
C23‡	—	A1	—	A1
C24‡	—	A1	—	A1
C25†	—	A2	—	A2
C26†	—	A2	—	A2
C27‡	—	A2	—	A2
C28‡	—	A2	—	A2
C29‡	—	A2	—	A2
C30	—	—	0·01μF	G4
C31	—	—	0·01μF	G4
C32	—	—	0·1μF	G4
C33	—	—	0·1μF	F4
C34	—	—	0·005μF	F4
C35*	—	—	8μF	B1
C36	—	—	0·01μF	E4
C37	—	—	0·01μF	E4
C38*	—	—	8μF	E3

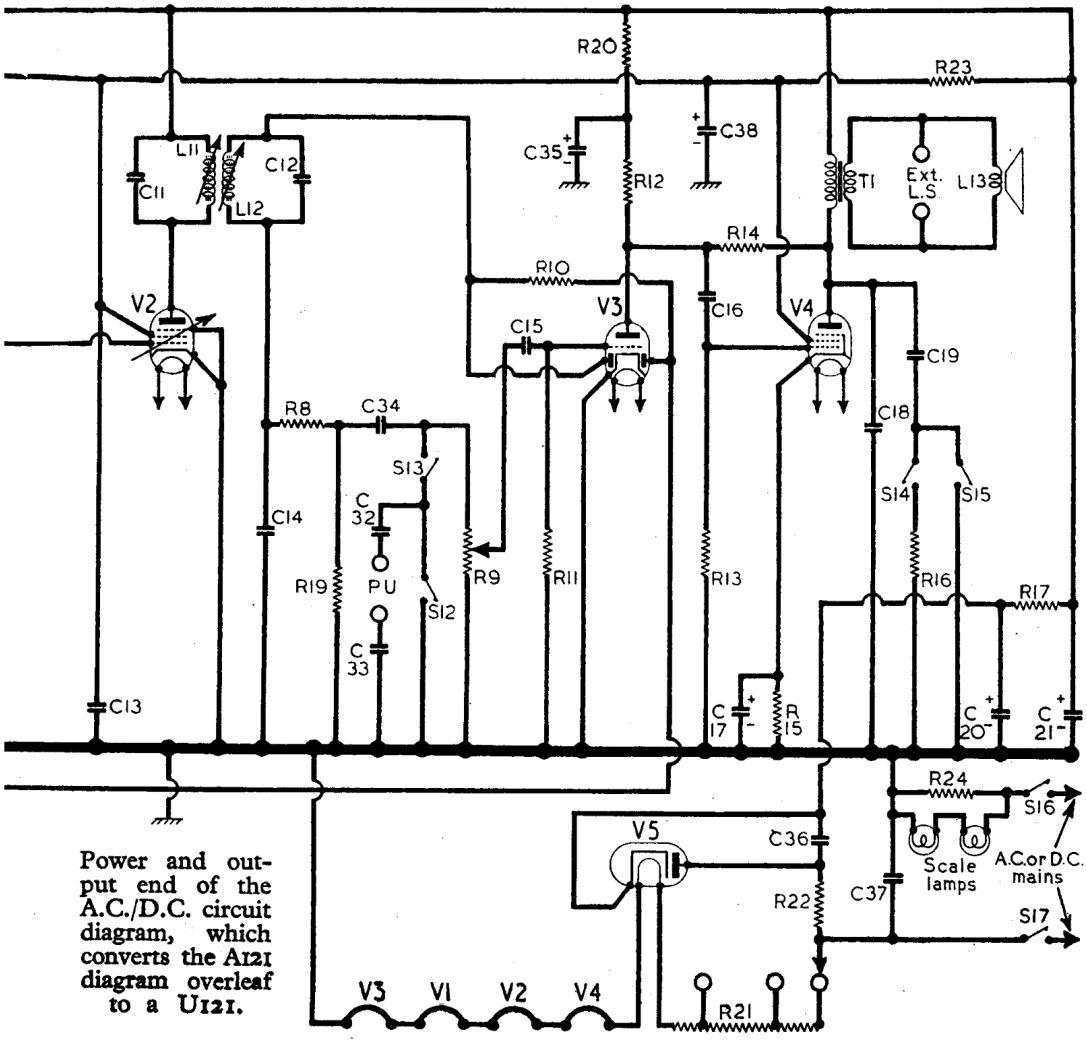
* Electrolytic. † Variable. ‡ Pre-Set.

OTHER COMPONENTS			Approx. Values (Ohms)	Locations
L1	S.W. coupling	...	0·3	G4
L2	Aerial tuning coils		0·05	G4
L3			2·8	G4
L4			37·0	G4
L5	Oscillator tuning coils		Very low	G3
L6			2·3	H3
L7			12·0	H3
L8	S.W. reaction	...	0·4	G3
L9	1st I.F. trans.	Pri.	7·5	A1
L10		Sec.	7·5	A1
L11	2nd I.F. trans.	Pri.	7·5	B2
L12		Sec.	5·0	B2
L13	Speech coil	...	2·5	—
T1	O/put trans.	Pri.	300·0	F3
		Sec.	0·5	E3
T2	Mains trans.	Pr., total	40·0	C1
		Heat. sec.	0·1	
		H.T. sec., total	500·0	
S1-S11	Waveband switches		—	H4
S12, S13	P.U. switches	...	—	
S14, S15	Tone control sw.		—	D4
S16, S17	Mains sw., g'd R9.		—	D3

Valve		Anode V	Anode mA	Screen V	Screen mA	Cath. V
		A.C. Model				
V1	7S7 ...	230	1·2	65	3·2	—
		Oscillator				
		95	2·7			
V2	7B7 ...	230	6·7	65	1·4	—
V3	7C6 ...	80	0·4	—	—	—
V4	7C5 ...	215	36·0	230	3·2	10·0
V5	7Y4 ...	270§	—	—	—	290·0
		A.C./D.C. Model				
V1	14S7 ...	175	2·4	100	5.3	—
		Oscillator				
		55	2·3			
V2	7B7 ...	175	12·0	100	2·4	—
V3	7C6 ...	80	0·3	—	—	—
V4	35A5	165	33·0	100	1·3	6·0
V5	35Z3 ...	223§	—	—	—	240·0

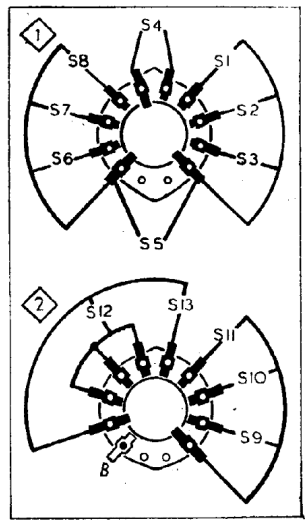
§ A.C.

REGENTONE A121, U121



Power and output end of the A.C./D.C. circuit diagram, which converts the A121 diagram overleaf to a U121.

SWITCHES	L.W.	M.W.	S.W.	Gram
S1	—	—	C	—
S2	—	C	—	—
S3	C	—	—	—
S4	—	—	—	C
S5	—	—	C	—
S6	—	C	—	—
S7	—	—	—	—
S8	C	—	C	—
S9	—	C	—	—
S10	—	C	—	—
S11	C	C	C	—
S12	C	C	C	C
S13	—	—	—	—



Diagrams of the two sides of the waveband switch unit. ***B*** is a blank tag. Above the diagrams is the associated switch table.

CIRCUIT ALIGNMENT

I.F. Stages.—Remove the chassis from the cabinet, switch the set to M.W., turn the gang to maximum and the volume control to maximum. Connect signal generator leads via a 0.1 μF capacitor (one in each lead in A.C./D.C. model) to control grid (pin 6) of **V1** and chassis, feed in a 465 kc/s (645.16 m) signal, and adjust the cores of **L12, L11, L10** and **L9** (location references F4, B2, G3, A1) in that order for maximum output, reducing the input as the circuits come into line to avoid A.G.C. action.

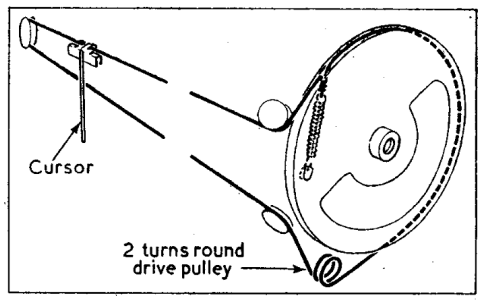
R.F. and Oscillator Stages.—It is preferable to carry out this part of the alignment with the receiver in its cabinet, as the scale is fitted to the cabinet. Transfer signal generator leads to **A** and **E** sockets, dispensing with the isolating capacitors but inserting a suitable dummy aerial in the "live" lead. This may consist of a 0.0002 μF (200 pF) capacitor for M.W. and L.W., and a 400 Ω resistor for S.W.

With the gang at minimum capacitance, the cursor should coincide with the two dots at the low wavelength ends of the scales. For adjustment, the cursor may be slid along the drive cord. Location references are A1, A2.

L.W.—Switch set to L.W., tune to 1,200 m on scale, feed in a 1,200 m (250 kc/s) signal, and adjust **C29,** then **C24,** for maximum output. Check calibration at 2,000 m (150 kc/s).

M.W.—Switch set to M.W., tune to 200 m on scale, feed in a 200 m (1,500 kc/s) signal, and adjust **C28,** then **C23,** for maximum output. Check calibration at 500 m (600 kc/s).

S.W.—Switch set to S.W., tune to 18 Mc/s on scale, feed in an 18 Mc/s (16.6 m) signal, and adjust **C27,** then **C22,** for maximum output. Check calibration at 6 Mc/s (50 m).



The tuning drive cord system, drawn as seen from the front right-hand corner of the chassis when the gang is at minimum capacitance.

DRIVE CORD REPLACEMENT

About 4ft 6in of high-quality plaited flax fishing line is required for a new drive cord, which should be run as shown in the sketch above, where the system is drawn as seen from the front right-hand corner with the gang at minimum capacitance.

After fitting the cord, the cursor may be slipped into position, when it should be adjusted as described under "Circuit Alignment."