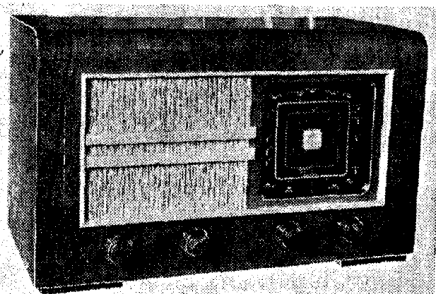


OTHER COMPONENTS		Approx. Values (ohms)
L1	Aerial I.F. filter coil ...	35.0
L2	Aerial S.W. coupling coil...	1.8
L3	Aerial M.W. coupling coil	10.0
L4	Aerial L.W. coupling coil	35.0
L5	Aerial S.W. tuning coil ...	0.05
L6	Aerial M.W. tuning coil...	3.0
L7	Aerial L.W. tuning coil...	23.0
L8	Osc. S.W. tuning coil ...	0.05
L9	Osc. M.W. tuning coil ...	3.0
L10	Osc. L.W. tuning coil ...	7.0
L11	Osc. S.W. reaction coil ...	0.3
L12	1st I.F. trans. { Pri. ...	3.5
L13		3.5
L14	2nd I.F. trans. { Pri. ...	5.0
L15		5.0
L16	Speaker speech coil ...	2.4
L17	Hum neutralising coil ...	0.2
L18	Speaker field coil ...	2,000.0
T1	Output trans. { Pri. ...	220.0
	Sec. ...	0.25
T2	Mains { Pri., total ...	30.0
	Heater, sec. ...	0.05
	trans. { Rect. heat. sec. ...	0.1
	H.T. sec., total ...	400.0
S1-S14	Waveband switches	—
S15	Mains switch, ganged R17	—

Intermediate frequency 465 kc/s.

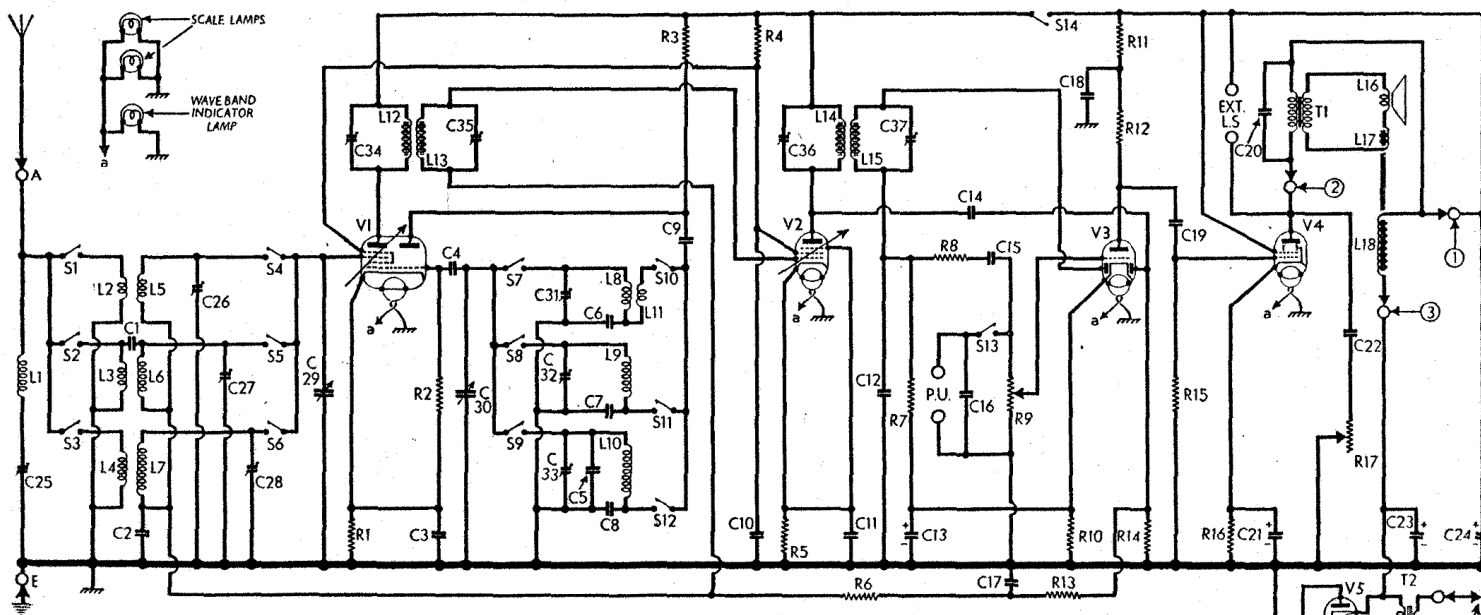


ACE - 450

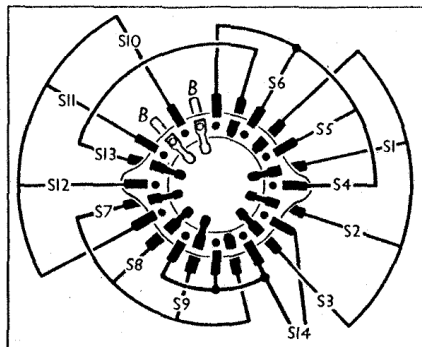
RESISTORS		Values (ohms)
R1	V1 fixed G.B. resistor ...	300
R2	V1 osc. C.G. resistor ...	50,000
R3	V1 osc. anode H.T. feed ...	50,000
R4	V1, V2 S.G.'s H.T. feed ...	50,000
R5	V2 fixed G.B. resistor ...	300
R6	A.V.C. line decoupling ...	220,000
R7	V3 signal diode load ...	1,000,000
R8	I.F. stopper ...	100,000
R9	Manual volume control ...	500,000
R10	V3 fixed G.B. resistor ...	3,000
R11	V3 anode decoupling ...	50,000
R12	V3 triode anode load ...	220,000
R13	A.V.C. line decoupling ...	1,000,000
R14	V3 A.V.C. diode load ...	1,000,000
R15	V4 C.G. resistor ...	220,000
R16	V4 fixed G.B. resistor ...	330
R17	Variable tone control ...	50,000

CAPACITORS		Values (μF)
C1	Aerial M.W. "top" coupling ...	Very low
C2	V1 hex. C.G. decoupling ...	0.1
C3	V1 cathode by-pass ...	0.1
C4	V1 osc. C.G. capacitor ...	0.0002
C5	Osc. L.W. fixed trimmer ...	0.00005
C6	Osc. circ. S.W. tracker ...	0.004
C7	Osc. circ. M.W. tracker ...	0.00045
C8	Osc. circ. L.W. tracker ...	0.000205
C9	V1 osc. anode coupling ...	0.0005
C10	V1, V2 S.G.'s decoupling ...	0.1
C11	V2 cathode by-pass ...	0.1
C12	I.F. by-pass ...	0.0001
C13*	V3 cathode by-pass ...	25.0
C14	V3 A.V.C. diode coupling ...	0.0001
C15	A.F. coupling to V3 triode ...	0.01
C16	Pick-up tone corrector ...	0.0001
C17	A.V.C. line decoupling ...	0.1
C18	V3 triode anode decoupling ...	0.1
C19	A.F. coupling to V4 ...	0.01
C20	Fixed tone corrector ...	0.005
C21*	V4 cathode by-pass ...	25.0
C22	Part variable tone control ...	0.05
C23*	H.T. smoothing capacitor ...	8.0
C24*	Aerial I.F. filter tuning ...	—
C25†	Aerial circ. S.W. trimmer ...	—
C26†	Aerial circ. M.W. trimmer ...	—
C27†	Aerial circ. L.W. trimmer ...	—
C28†	Aerial circuit tuning ...	—
C29†	Oscillator circuit tuning ...	—
C30†	Osc. circ. S.W. trimmer ...	—
C31†	Osc. circ. M.W. trimmer ...	—
C32†	Osc. circ. L.W. trimmer ...	—
C33†	1st I.F. trans. pri. tuning ...	—
C34†	1st I.F. trans. sec. tuning ...	—
C35†	2nd I.F. trans. pri. tuning ...	—
C36†	2nd I.F. trans. sec. tuning ...	—
C37†	—	—

* Electrolytic. † Variable. ‡ Pre-set.



Switch Diagram and Table



Switch	S.W.	M.W.	L.W.	Gram.
S1	○	—	—	—
S2	—	○	—	—
S3	—	—	○	—
S4	○	—	—	—
S5	—	○	—	—
S6	—	—	○	—
S7	○	—	—	—
S8	—	○	—	—
S9	—	—	○	—
S10	○	—	—	—
S11	—	○	—	—
S12	—	—	○	—
S13	—	—	—	○
S14	○	—	—	—

CIRCUIT ALIGNMENT

I.F. Stages.—Switch set to S.W. and turn volume control to maximum. Connect signal generator to control grid (top cap) of V2 and chassis, feed in a 465 kc/s (645.16 m) signal, and adjust C36 and C37 for maximum output. Transfer generator lead to control grid (top cap) of V1, and adjust C34 and C35 for maximum output. Check settings of C36, C37.

R.F. and Oscillator Stages.—With the gang at maximum, the pointer should be vertical. Transfer signal generator leads to A and E sockets, via a suitable dummy aerial.

S.W.—With set switched to S.W., tune to 17.6 m on scale, feed in a 17.6 m (17 Mc/s) signal and adjust C31 for maximum output, selecting the peak involving the lesser trimmer capacitance. Then adjust C26, and check sensitivity and calibration at 50 m (6 Mc/s).

M.W.—Switch set to M.W., tune to 250 m on scale, feed in a 250 m (1,200 kc/s) signal, and adjust C32, then C27, for maximum output. Check sensitivity and calibration at 500 m (600 kc/s).

L.W.—Switch set to L.W., tune in a 1,200 m on scale, feed in a 1,200 m (250 kc/s) signal, and adjust C33 and C28 for maximum output. Check sensitivity and calibration at 1,800 m (166.6 kc/s).

