

OTHER COMPONENTS		Approx. Values (ohms)
L1	Aerial S.W. coupling coil...	0-2
L2	Aerial M.W. coupling coil...	0-8
L3	Aerial L.W. coupling coil...	62-0
L4	Aerial S.W. tuning coil ...	0-1
L5	Aerial M.W. tuning coil ...	3-0
L6	Aerial L.W. tuning coil ...	17-5
L7	Osc. S.W. tuning coil ...	0-2
L8	Osc. M.W. tuning coil ...	1-8
L9	Osc. L.W. tuning coil ...	4-8
L10	Osc. S.W. reaction coil ...	0-4
L11	Osc. M.W. reaction coil ...	1-1
L12	Osc. L.W. reaction coil ...	2-4
L13	1st I.F. trans. { Pri. ...	7-0
L14		7-0
L15	2nd I.F. trans. { Pri. ...	9-0
L16		9-0
L17	Speaker speech coil ...	1-75
T1	Output { Pri. ...	340-0
	trans. { Sec. ...	0-2
	Pri. total ...	20-0
T2	Mains { Heater sec. ...	0-1
	trans. { Rect. heat. sec. ...	0-2
	H.T. sec., total ...	460-0
S1-S14	Waveband switches ...	—
S15	Mains switch, ganged R17	—

CAPACITORS		Values (pF)
C1	Aerial series capacitor ...	0-0002
C2	V1 hex. C.G. decoupling ...	0-05
C3	Aerial L.W. fixed trimmer ...	0-000056
C4	A.V.C. line decoupling ...	0-05
C5	V1, V2 S.G.'s decoupling ...	0-1
C6	1st I.F. transformer fixed {	0-0001
C7		tuning capacitors ...
C8	V1 osc. C.G. capacitor ...	0-000047
C9	V1 cathode by-pass ...	0-1
C10	Osc. L.W. fixed trimmer ...	0-000056
C11	Osc. circ. S.W. tracker ...	0-0006
C12	Osc. circ. M.W. tracker ...	0-000575
C13	Osc. circ. L.W. tracker ...	0-0002
C14	V1 osc. anode coupling ...	0-0001
C15	2nd I.F. transformer fixed {	0-0001
C16		tuning capacitors ...
C17	I.F. by-pass ...	0-0001
C18	V1, V2, V3 cathode by-pass ...	0-5
C19	I.F. by-pass ...	0-0001
C20	H.T. circuit R.F. by-pass ...	0-1
C21	A.F. coupling to V3 C.G. ...	0-005
C22	V3 A.V.C. diode coupling ...	0-0002
C23	I.F. by-pass ...	0-0002
C24	A.F. coupling to V4 C.G. ...	0-01
C25*	H.T. smoothing capacitor ...	16-0
C26	Fixed tone corrector ...	0-005
C27	Part variable tone control ...	0-05
C28*	H.T. smoothing capacitors {	8-0
C29*		16-0
C30†	Aerial S.W. trimmer ...	0-00005
C31†	Aerial M.W. trimmer ...	0-00005
C32†	Aerial L.W. trimmer ...	0-00005
C33†	Aerial circuit tuning ...	0-0005
C34†	Oscillator circuit tuning ...	0-0005
C35†	Osc. circ. S.W. trimmer ...	0-00005
C36†	Osc. circ. M.W. trimmer ...	0-00005
C37†	Osc. circ. L.W. trimmer ...	0-00005

RESISTORS.		Values (ohms)
R1	V1 hex. C.G. decoupling...	250,000
R2	V1, V2 S.G.'s H.T. feed {	22,000
R3		potential divider ...
R4	V1 osc. C.G. resistor ...	33,000
R5	V1 osc. anode H.T. feed...	47,000
R6	I.F. stopper ...	27,000
R7	V3 signal diode load ...	47,000
R8	V1, V2, V3, fixed G.B. resistor ...	470,000
R9	Manual volume control ...	150
R10	V3 triode anode load ...	1,000,000
R11	A.V.C. line decoupling ...	47,000
R12	V3 A.V.C. diode load ...	1,000,000
R13	V4 C.G. resistor ...	50,000
R14	V4 grid stopper ...	47,000
R15	H.T. smoothing resistor...	2,200
R16	V4 G.B. resistor ...	150
R17	Variable tone control ...	50,000
R18	H.T. smoothing resistor...	1,000

## VALVE ANALYSIS

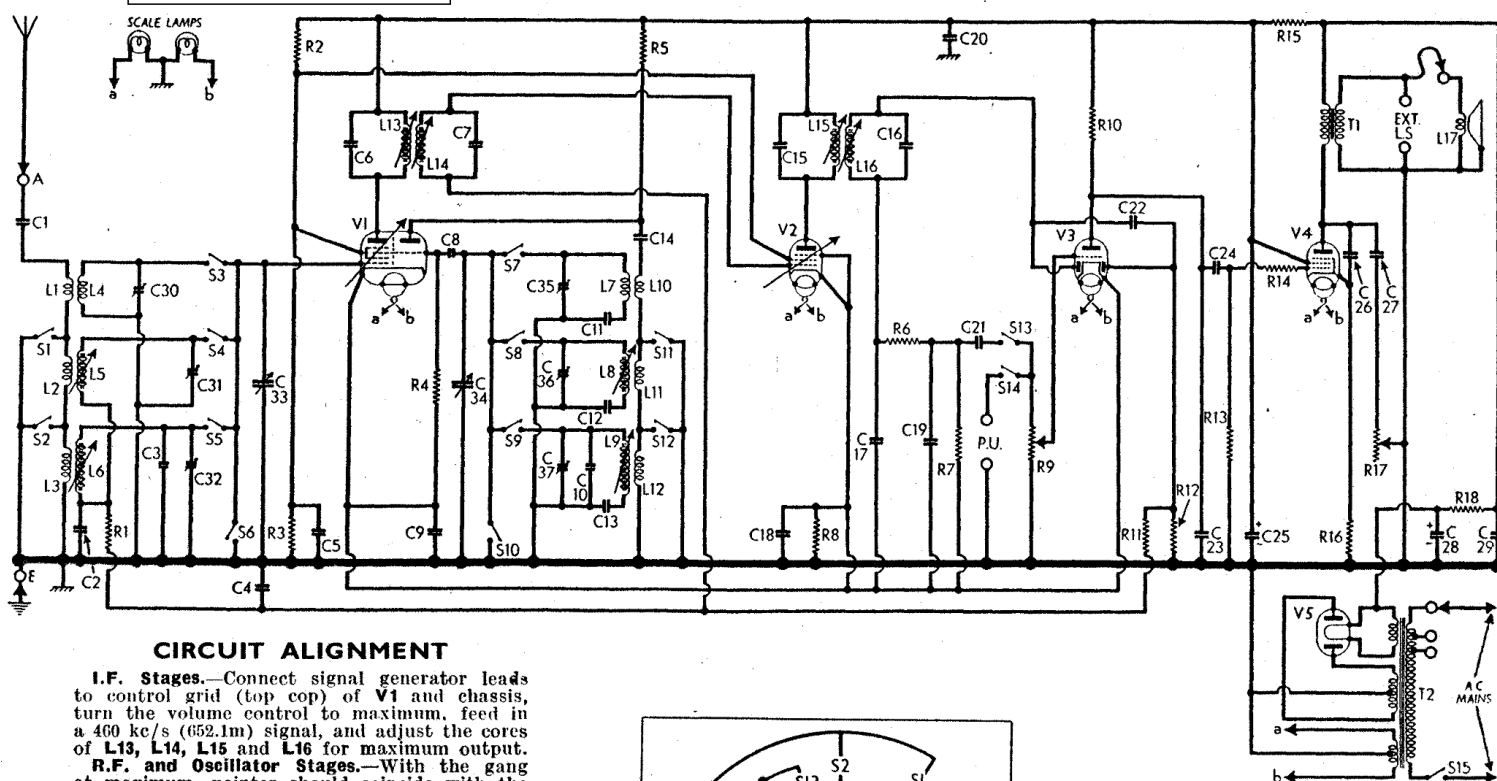
Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 ECH35	216 Oscillator 97	1-82 3-85	94	1-85
V2 EF39	216	4-4	94	1-22
V3 EBC33	104	2-1	—	—
V4 EL33	260	31-0	216	3-56
V5 AZ31	280†	—	—	—

† Each anode, A.C.

ALBA - 461

Intermediate frequency 460 kc/s.

\* Electrolytic. † Variable. ‡ Pre-set.



## CIRCUIT ALIGNMENT

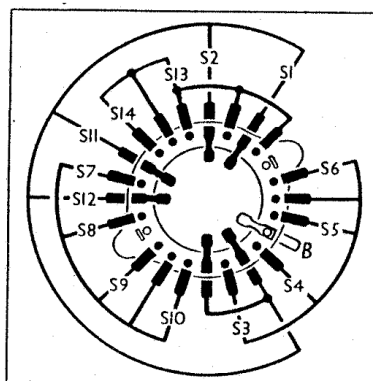
**I.F. Stages.**—Connect signal generator leads to control grid (top cop) of V1 and chassis, turn the volume control to maximum, feed in a 460 kc/s (652.1m) signal, and adjust the cores of L13, L14, L15 and L16 for maximum output.

**R.F. and Oscillator Stages.**—With the gang at maximum, pointer should coincide with the high wavelength ends of the scales. Transfer signal generator leads, via a suitable dummy aerial, to A and E sockets.

**M.W.**—Switch set to M.W., tune to 215m on scale, feed in a 215m (1,396 kc/s) signal, and adjust C36, then C31 for maximum output. Tune to 500 m on scale, feed in a 500m (600 kc/s) signal, and adjust the cores of L8 and L7 for maximum output. Check L8 at 350m (857 kc/s) for correct calibration, and repeat the C31, C36 adjustments if necessary.

**S.W.**—Switch set to S.W., tune to 18m on scale, feed in an 18m (16.67 Mc/s) signal, and adjust C35, then C30, for maximum output.

**L.W.**—Switch set to L.W., tune to 1,000m on scale, feed in a 1,000m (300kc/s) signal, and adjust C37, then C32, for maximum output. Tune to 1,900m on scale, feed in a 1,900m (157.9 kc/s) signal, and adjust the cores of L9 and L6 for maximum output. Check the settings of C32, C37.



The switch unit, seen from the rear.

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