

ALBA - 202,303

Valve	Anode V	Screen V	Filament V
V1 DK96	90-0 Oscillator 30-0	25-0	2.5 ¹
V2 DF96			
V3 DAF96	90-0	53-0	3.6 ¹
V4 DL96	3.5	1.5	1.3 ¹
MR1	82-0	90-0	7.5 ¹
18RA1116 ²	235-0 ³	—	—

¹ Measured at pin 7 on valve holder with R21 adjusted to give a filament current of 22mA (measured with milliammeter connected in series with lead to pin 7 of V4).

² Westinghouse.

³ A.C. reading. Cathode 255V, 37mA.

Capacitors

C1	60pF	C2	480pF
C2	480pF	C2	480pF
C3	15pF	B1	15pF
C4	35pF	C1	35pF
C5	523pF	C1	523pF
C6	100pF	D4	100pF
C7	0.05μF	E3	0.05μF
C8	100pF	D3	100pF
C9	100pF	D3	100pF
C10 ²	190pF	D4	190pF
C11 ²	523pF	C2	523pF
C12	35pF	C2	35pF
C13	25pF	C2	25pF
C14	665pF	C2	665pF
C15	665pF	C2	665pF
C16	0.003μF	C2	0.003μF
C17	0.05μF	E4	0.05μF
C18	100pF	F3	100pF
C19	100pF	F3	100pF
C20	100pF	F4	100pF
C21	0.05μF	B2	0.05μF
C22	100pF	B2	100pF
C23	0.1μF	B2	0.1μF
C24	0.01μF	F3	0.01μF
C25	0.05μF	G4	0.05μF

Resistors

R1	1.5MΩ	D3	1.5MΩ
R2	120kΩ	D4	120kΩ
R3	27kΩ	D3	27kΩ
R4	33kΩ	D3	33kΩ
R5	33kΩ	F3	33kΩ
R6	100Ω	F3	100Ω
R7	22kΩ	B2	22kΩ
R8	1.5MΩ	B2	1.5MΩ
R9	2MΩ	A1	2MΩ
R10 ³	76-7Ω	D3	76-7Ω
R11	10MΩ	F4	10MΩ
R12	3.3MΩ	B2	3.3MΩ
R13	100Ω	E3	100Ω
R14	2.2MΩ	F4	2.2MΩ
R15	1MΩ	F4	1MΩ
R16	75Ω	A2	75Ω
R17	2.2MΩ	G3	2.2MΩ

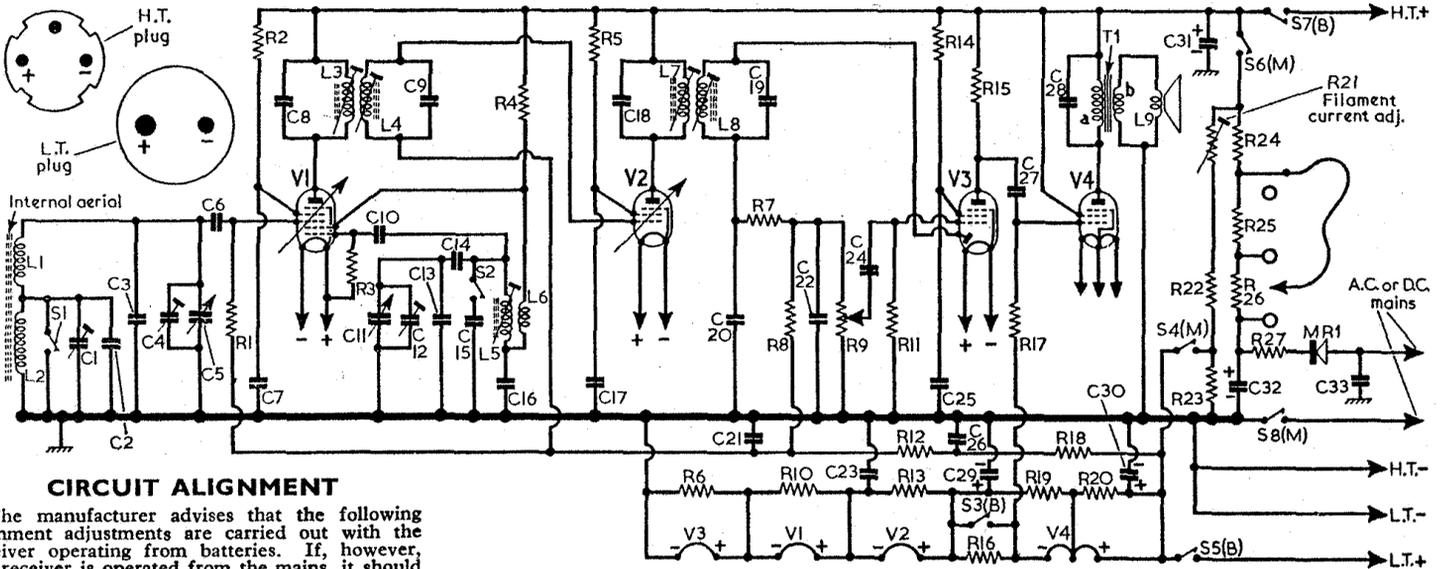
R18	1.5MΩ	B2	1.5MΩ
R19	100Ω	B2	100Ω
R20	560Ω	B2	560Ω
R21	1kΩ	A2	1kΩ
R22	3.5kΩ	A2	3.5kΩ
R23	10kΩ	A2	10kΩ
R24	3kΩ	E3	3kΩ
R25	715Ω	E3	715Ω
R26	715Ω	E3	715Ω
R27	145Ω	E3	145Ω

Other Components⁴

L1	1.0	C1	1.0
L2	3.0	A1	3.0
L3	10.0	D3	10.0
L4	10.0	D3	10.0
L5	4.0	C1	4.0
L6	2.0	C1	2.0
L7	10.0	F3	10.0
L8	10.0	F3	10.0
L9	3.0	F4	3.0
T1	{ ^a 600-0	A2	{ ^a 600-0
MR1 ⁵	—	C2	—
S1, S2	—	D4	—
S3(B)-S8(M)	—	G4	—

Intermediate frequency 470 kc/s.

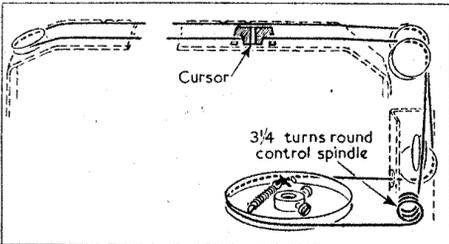
¹ Swing value, min. to max. ² May be 200pF. ³ Two resistors, 100Ω+330Ω, in parallel. May be single 100Ω resistor. ⁴ Approximate D.C. resistance in ohms. ⁵ Westinghouse 18RA11161.



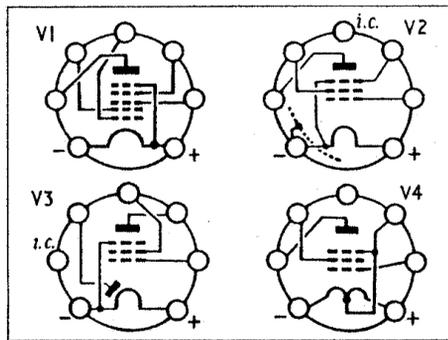
CIRCUIT ALIGNMENT

The manufacturer advises that the following alignment adjustments are carried out with the receiver operating from batteries. If, however, the receiver is operated from the mains, it should be connected so that the chassis is at mains earth potential, and isolating capacitors should be used in the signal generator output leads.

- 1.—Connect output of signal generator, via an 0.1μF capacitor in the live lead, between chassis and control grid (pin 6) of V1.
- 2.—Feed in a 470kc/s signal and adjust the cores of L8 (F3), L7 (F3), L4 (E3) and L3 (E3) for maximum output.
- 3.—Repeat the adjustments in step 2 until no further improvement results.
- 4.—Turn gang to minimum capacitance and check that the cursor coincides with the datum notch on the scale backing plate (location F3).



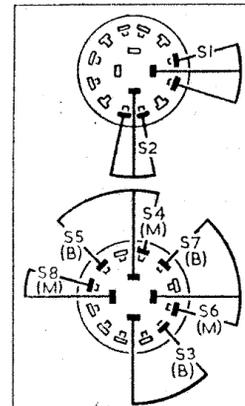
Sketch of the tuning drive system as seen from the front of an upright chassis.



Diagrams of the valve base connections.

- 5.—Connect output of signal generator to a single-turn loop of wire of about 6in diameter and place the loop near the internal aerial.
- 6.—Switch receiver to M.W. and tune it to 500m calibration notch on backing plate (location E3). Feed in a 600kc/s signal and adjust the core of L5 (C1) for maximum output. Adjust the inductance of L1 (B1) for maximum output by softening the wax which seals the coil former to the ferrite rod, and sliding the coil along the rod.

- 7.—Tune receiver to 200m notch on backing plate (location F3). Feed in a 1,500kc/s signal and adjust C12 (C1) and C4 (C1) for maximum output. Repeat these adjustments, and those in step 6, until no further improvement results.
- 8.—Switch receiver to L.W. and tune it to 1,700m notch on backing plate (location E3). Feed in a 176.4kc/s signal and adjust the inductance of L2 (A1) for maximum output by softening the wax which seals the coil former to the ferrite rod, and sliding the coil along the rod.
- 9.—Tune receiver to 1,300m notch on backing plate, feed in a 320kc/s signal and adjust C1 (C2) for maximum output. Repeat this adjustment, and those in step 8, until no further improvement results.



Diagrams of the waveband and mains/battery/off switch units as seen from the rear of an upright chassis.