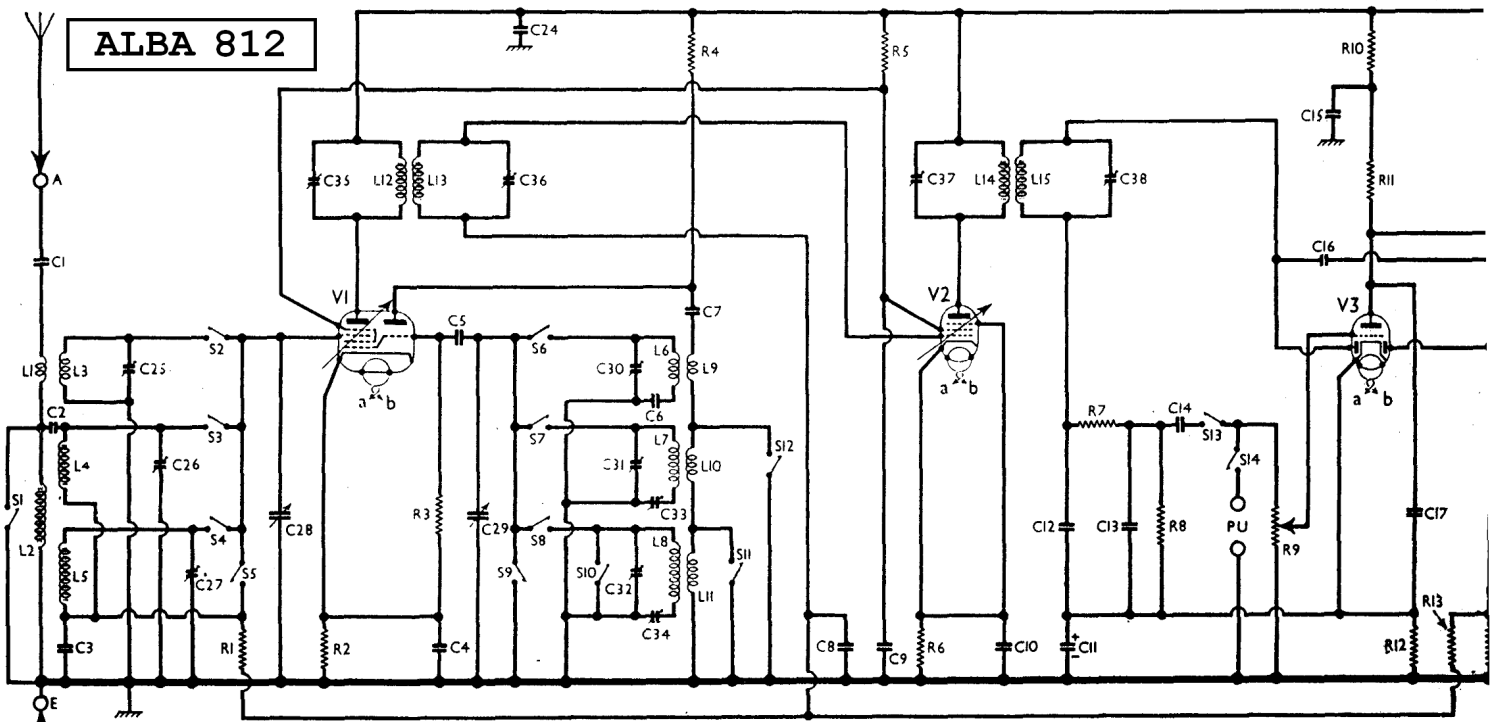


ALBA 812



RESISTANCES	Values (ohms)
R1	V1 hexode CG decoupling ... 200,000
R2	V1 fixed GB resistance ... 300
R3	V1 osc. CG resistance ... 50,000
R4	V1 osc. anode IIT feed ... 40,000
R5	V1 V2 SGT's IIT feed ... 20,000
R6	V2 fixed GB resistance ... 220
R7	IF stopper ... 50,000
R8	V3 signal diode load ... 500,000
R9	Manual volume control ... 500,000
R10	V3 triode anode decoupling ... 100,000
R11	V3 triode anode load ... 150,000
R12	V3 GB triode GB, AVC delay ... 2,500
R13	AVC line decoupling ... 1,000,000
R14	V3 AVC diode load ... 1,000,000
R15	V4 CG resistance ... 200,000
R16	V4 grid stopper ... 50,000
R17	Variable tone control ... 50,000
R18	V4 GB resistance ... 400

OTHER COMPONENTS	Approx. Values (ohms)
L1	Aerial SW coupling ... 0-6
L2	Aerial MW and LW coupling coil ... 35-0
L3	Aerial SW tuning coil ... 0-05
L4	Aerial MW tuning coil ... 1-7
L5	Aerial LW tuning coil ... 13-0
L6	Osc. circ. SW tuning coil ... 0-05
L7	Osc. circ. MW tuning coil ... 3-0
L8	Osc. circ. LW tuning coil ... 0-0
L9	Oscillator SW reaction ... 21-0
L10	Oscillator MW reaction ... 33-0
L11	Oscillator LW reaction ... 70-0
L12	1st IF trans. Pri. ... 4-25
L13	2nd IF trans. Pri. ... 4-25
L14	2nd IF trans. Sec. ... 4-25
L15	Speaker speech coil ... 1-5
L16	Hum neutralising coil ... 0-25
L17	Speaker field coil ... 1,000-0
L18	Speaker in / Pri. ... 450-0
T1	put trans. Sec. ... 0-2
T2	Mains transformer ... 0-1
S1-S12	Waveband switches ... 0-15
S13, S14	Radio/gram change switches ... 500-0
S15	Mains switch, gauged R17

CONDENSERS	Values (pF)
C1	Aerial series condenser ... 0-0002
C2	Aerial MW coupling ... 0-000005
C3	V1 hexode CG decoupling ... 0-05
C4	V1 cathode by-pass ... 0-1
C5	V1 osc. CG condenser ... 0-0001
C6	Osc. circuit SW tracker ... 0-004
C7	V1 osc. anode coupling ... 0-0005
C8	V2 CG decoupling ... 0-05
C9	V1, V2 SGT's decoupling ... 0-1
C10	V2 cathode by-pass ... 0-1
C11*	V3 cathode by-pass ... 25-0
C12	IF by-pass condensers ... 0-0001
C13	IF by-pass condensers ... 0-0001
C14	AP coupling to V3 triode ... 0-005
C15	V3 triode anode decoupling ... 0-25
C16	Coupling to V3 AVC diode ... 0-000075
C17	IF by-pass ... 0-0001
C18	V3 triode to V4 AP coupling ... 0-01
C19	Part of variable tone control ... 0-05
C20	Fixed tone corrector ... 0-005
C21*	V4 cathode by-pass ... 25-0
C22*	IIT smoothing condensers ... 8-0
C23*	IIT smoothing condensers ... 0-1
C24	IIT circuit RF by-pass ...
C25	Aerial circuit SW trimmer ...
C26	Aerial circuit MW trimmer ...
C27	Aerial circuit LW trimmer ...
C28	Aerial circuit tuning ...
C29	Oscillator circuit tuning ...
C30	Osc. circuit SW trimmer ...
C31	Osc. circuit MW trimmer ...
C32	Osc. circuit LW trimmer ...
C33	Osc. circuit MW tracker ...
C34	Osc. circuit LW tracker ...
C35	1st IF trans. pri. tuning ...
C36	1st IF trans. sec. tuning ...
C37	2nd IF trans. pri. tuning ...
C38	2nd IF trans. sec. tuning ...

VALVE ANALYSIS

Valve voltages and currents given in the table below are those measured in our receiver when it was operating on mains of 228 V, using the 230 V tapping on the mains transformer.

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 6K8G	238	1-7	94	0-2
V2 6K7G	85	3-9	94	1-5
V3 6Q7G	76	0-5	238	5-1
V4 6P6G	223	32-0	238	5-1
V5 5Y3G	328*			

* Each anode, AC.

The receiver was tuned to the lowest wavelength on the MW band and the volume control was at maximum, but there was no signal input.

Voltages were measured on the 400 V scale of a model 7 Universal Avometer, chassis being negative.

If valve adaptors are used to make current measurements, the metal screen should be left on V2, and earthed while the readings are being taken, as otherwise instability may occur and influence the reading.

Switch Table

Switch	SW	MW	LW	Gram
S1	o	o	o	o
S2	o	o	o	o
S3	o	o	o	o
S4	o	o	o	o
S5	o	o	o	o
S6	o	o	o	o
S7	o	o	o	o
S8	o	o	o	o
S9	o	o	o	o
S10	o	o	o	o
S11	o	o	o	o
S12	o	o	o	o
S13	o	o	o	o
S14	o	o	o	o

CIRCUIT ALIGNMENT

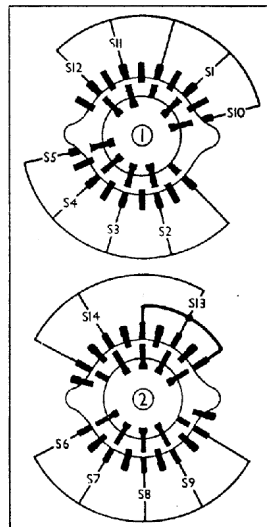
IF Stages.—Connect signal generator lead to control grid (top cap) of V1 and chassis. Short-circuit C29, switch receiver to MW, and turn volume control to maximum. Feed in a 470 KC/S (638.3 m) signal, and adjust C38, C37, C36 and C35 for maximum output. Repeat these adjustments until no further improvement results. Remove short-circuit from C29.

RF and Oscillator Circuits.—With the gang at minimum, the pointer should be horizontal. Transfer signal generator lead to aerial and earth sockets, and insert a suitable dummy aerial.

SW.—Switch set to SW, tune to 31 m on scale, feed in a 31 m (9.68 MC/S) signal and adjust C30, then C25, for maximum output. There is no variable tracker, but the calibration should be checked at each end of the band.

MW.—Switch set to MW, tune to 250 m on scale, feed in a 250 m (1,200 KC/S) signal, and adjust C31, then C26, for maximum output. Feed in a 500 m (600 KC/S) signal, tune it in, and adjust C33 for maximum output, while rocking the gang for optimum results. Repeat the 250 m adjustments.

LW.—Switch set to LW, tune to 1,300 m on scale, feed in a 1,300 m (235 KC/S) signal, and adjust C32, then C27, for maximum output. Feed in a 1,900 m (158 KC/S) signal, tune it in, and adjust C34 for maximum output, while rocking the gang for optimum results. Repeat the 1,300 m adjustments.



Diagrams of the two sides of the switch unit, as seen when viewed in the directions of the arrows in the under-chassis view.

