

# EKCO - AD37

## CIRCUIT ALIGNMENT

First see that when the gang condenser is at maximum, the pointer covers the green horizontal line corresponding to about 570 m. If it does not, remove tuning knob, and loosen screw in the slot in the flat end of the indicator arm. Adjust pointer, and re-tighten screw. The chassis must, of course, be in the cabinet during this operation.

Now connect a signal generator to the aerial and earth sockets, screw **C15** (rear of chassis) hard in, then slack it off one and a quarter turns. Connect a suitable output meter, and set receiver to 250 m on the scale. Feed in a 250 m (1,200 kc/s) signal and adjust **C21** for maximum output, then adjust **C18** similarly.

Switch set to LW, feed in a 1,500 m (200 kc/s) signal, and tune the set to this signal. Adjust **C16** (through hole in side of the **L1-L3** screen) for maximum output, rocking the gang condenser to obtain an optimum setting.

**Adjusting C15.**—To adjust the aerial equalising condenser, tune the receiver to a weak station around 220 m. Keep the gain control low, and adjust **C15** slightly if necessary.

**Adjusting C19.**—To adjust the pre-set reaction condenser, tune receiver to a station at the lower end of the MW band which necessitates advancing the gain control to maximum. Screw up **C19** until receiver is just short of oscillation, meanwhile rocking the gang condenser slightly.

OTHER COMPONENTS			Approx. Values (ohms)
L1	Aerial LW coupling coil ...		200.0
L2	Aerial tuning coils ...		2.5
L3			15.0
L4	RF transformer primary		1.0
L5			11.5
L6	RF transformer secondary		2.5
L7			15.0
L8	V2 anode RF choke ...		280.0
L9	Speaker speech coil ...		2.5
L10	HT smoothing choke ...		365.0
L11	Mains RF filter chokes		2.5
L12			2.5
T1	Output trans. { Pri. ...		650.0
		{ Sec. ...	0.2
S1-S5	Waveband switches		—
S6	Internal speaker switch		—
S7, S8	Mains switches, ganged R4		—

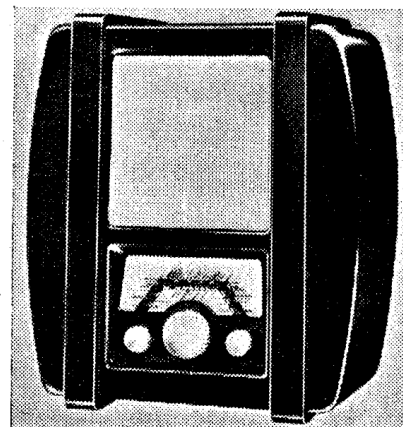
## VALVE ANALYSIS

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 VP13C	130	5.7	130	2.1
V2 SP13C	70	0.8	50	0.3
V3 Pen36C	175	45.0	205	5.8
V4 UR1C†	—	—	—	—

† Cathode to chassis, 230 V, DC.

RESISTORS		Values (ohms)
R1	Part HT pot. divider ...	30,000
R2	V1 HT feed ...	10,000
R3	V1 fixed GB resistor ...	140
R4	V1 gain control ...	10,000
R5	V2 grid leak ...	2,000,000
R6	V2 SG HT feed ...	500,000
R7	V2 anode decoupling ...	25,000
R8	V2 anode load ...	100,000
R9	V3 CG resistor ...	500,000
R10	V3 GB resistor ...	165
R11	V4 surge limiter ...	50
R12	Heater circuit ballast ...	700*

\* Tapped at 500  $\Omega$  + 100  $\Omega$  + 100  $\Omega$  from V3 heater.



The appearance of the Ekco AD37 in the black and ivory finish.

CONDENSERS		Values ( $\mu$ F)
C1	Earth blocking condenser	0.1
C2	V1 cathode by-pass ...	0.25
C3	V1 HT feed decoupling ...	0.15
C4	V2 CG condenser ...	0.000015
C5	V2 SG decoupling ...	0.1
C6*	V2 anode decoupling ...	2.0
C7	V2 anode RF by-pass con-	0.0003
C8	densers	0.0008
C9	V2 to V3 AF coupling ...	0.1
C10	Fixed tone corrector ...	0.004
C11*	V3 cathode by-pass ...	50.0
C12*	HT smoothing condensers {	8.0
C13*		24.0
C14	Mains RF by-pass ...	0.1
C15†	Aerial series condenser ...	—
C16†	Aerial LW trimmer ...	—
C17†	Aerial circuit tuning ...	—
C18†	Aerial MW trimmer ...	—
C19†	Pre-set reaction control ...	—
C20†	RF trans. sec. tuning ...	—
C21†	RF trans. MW trimmer ...	—

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

