

# ALBA 730, 745, 830, 845 A.C.-D.C.

Four-valve, plus rectifier and tuning indicator, four waveband superhet for A.C. or D.C. mains operation. Models 830 and 845 are table types; the 730 and 745 are radiograms. The 745 and 845 have mechanical Presto-Tune tuning. Made by A. J. Balcombe, Ltd., 52-58, Tabernacle Street, London, E.C.2.

**Circuit.**—Transformer coils, with a common primary on M. and L.W., couple the aerial to V1, the frequency-changer. Tuned grid coils, with separate anode reaction coils, are used for each band in the oscillator section. A section of the

aerial switch is used, in the medium wave position, to short the long-wave oscillator circuit. This is to prevent absorption effects.

Iron-core I.F. transformers, with trimmer tuning, couple V1 to V2, the I.F. amplifier, and V2 to V3, the double-diode triode.

The A.V.C. diode is fed from V2 anode, and the demodulation diode circuit contains a switched pick-up connection. Resistance-capacity coupling leads to V4, the output pentode. This has an anode tone-control circuit and a fixed tone shunt condenser.

Smoothing is by choke and electrolytics. H.T. is obtained through a full-wave rectifier, V5, utilised in the usual half-wave circuit. The heaters are run in series through a barretter, R24 (a type C1).

V6 is a "magic eye" tuning indicator and is controlled in the usual way from the A.V.C. line.

**Notes.**—Wavebands are 12-35, 30-90, 200-560, and 800-2,000 metres. Speaker leads: red and white are speech, black is earth.

Models 745 and 845 incorporate the Alba Presto-Tune automatic tuning system. This is a mechanical system, now very familiar, and is easily changed from the front. Adjustment instructions are not necessary.

## GANGING

**I.F. Circuits.**—Inject 470 kcs. to V1 grid, short oscillator section of gang, and peak both I.F. transformers.

**M.W. Band.**—Tune to 250 m., inject 250 m. to aerial, and adjust T1 and T2. Tune set and generator to 500 m. and pad with T3.

**L.W. Band.**—Tune to 1,300 m., inject 1,300 m., and adjust T4 and T5. Tune set and generator to 1,900 m. and pad with T6.

**S.W.1 Band.**—Tune set and generator to 25 m. and adjust T7 and T8. Padding is fixed.

**S.W.2 Band.**—Tune set and generator to 50 m. and adjust T9 and T10. Padding is fixed.

## CONDENSERS

C	Mfd.s.	C	Mfd.s.
1	.. 200 mmfds.	16	.. 75 mmfds.
2	.. 5 mmfds.	17	.. 100 mmfds.
3	.. .05	18	.. 100 mmfds.
4	.. .1	19	.. .005
5	.. .1	20	.. .1
6	.. 500 mmfds.	21	.. .01
7	.. 100 mmfds.	22	.. 2
8	.. .02	23	.. .02
9	.. .01	24	.. .005
10	.. .0036	25	.. 25
13	.. .05	26	.. 16+16+8
14	.. .1	27	.. .02
15	.. .1		

## VALVE READINGS

V	Type	Electrode	Volts	Ma.
1	6CH3	Anode	.. 265	5.5
		Screen	.. 140	.7
		Osc. anode	130	5.5
2	6F9	Anode	.. 265	5
		Screen	.. 130	1.5
3	6BC3	Anode	.. 200	4
4	6CL6	Anode	.. 230	55
		Screen	.. 120	7
5	6V2	—	—	—
6	6EM4 or 6G5	Anode	.. 265	—
		—	—	—

Pilot lamps, 4.5 v., .3 amp.

## RESISTANCES

R	Ohms.	R	Ohms.
1	.. 1 meg.	15	.. 2,500
2	.. 25,000	16	.. 15,000
3	.. 40,000	17	.. 1,500
4	.. 25,000	18	.. .5 meg.
5	.. 50,000	19	.. 25,000
6	.. 200	20	.. 50,000
7	.. .25 meg.	21	.. 50,000
8	.. 40	22	.. .25 meg.
9	.. 200	23	.. 200
10	.. .09 meg.	24	.. Barretter, C1
11	.. 300	25	.. 75
12	.. .05 meg.	26	.. 75
13	.. .5 meg.	27	.. .5 meg.
14	.. .5 meg.		

## WINDINGS

L	Ohms.	J	Ohms.
1	.. 40	8	.. 15
2	.. 15	9	.. 4
3	.. 15	10	.. 4
4	.. 30	11	.. 300
5	.. 50	12	.. 3
6	.. 3	13	.. 3
7	.. 9		

Valves and coils are logically situated on the top of the Alba chassis. Trimmers are accessible from the top and the sides.

