

EVER READY 5117 LISSEN 8417

Four-valve, plus rectifier, three-waveband table model superhet for 200-250 volt, 40-60 cycle A.C. supplies. Made by Ever Ready Radio, Ltd., Eley's Estate, Edmonton, London, N.18, and Lissen, Ltd., Angel Road, Edmonton, London, N.18.

Circuit.—Band-pass tuning on medium and long waves and a single-tuned circuit on short waves couple the aerial to V1, the frequency-changer. Each of all these circuits has its own trimmer,

and A.V.C. is applied on M. and L.W. via the V1 grid coils.

V1 oscillator coils are perfectly orthodox, the arrangement being tuned grid with separate anode reaction coils on each band. These reaction coils are parallel-fed in the usual way via C15.

The I.F. transformers linking V2, the I.F. amplifier, and V3, the double-diode triode, are trimmer tuned air-core types. A tapped diode load, R14, R15, feeds the volume control, R18, via C30. Across R18 are pick-up sockets, a variable-tone control, C31, R17, and a shunt tone condenser, C41.

The grid circuit of V4, the output pentode, contains a parasitic-oscillation stopper, R25, and R24 provides negative feed-back from the anode.

H.T. is provided by a full-wave rectifier, V5, with the usual smoothing circuit.

A high-resistance extension speaker connection is provided.

GANGING

I.F. Circuits.—Short oscillator gang section, tune to M.W., and inject 452 kc. to V1 grid. Adjust I.F. trimmers, reducing input to keep below A.V.C. point.

VALVE READINGS

V	Type	Electrode	Volts	Ma.
1	A36B	Anode	273	3.5
		Screen	107	7.1
		Osc. anode	106	6.8
2	A50P	Cathode	2.6	17.4
		Anode	273	8.1
		Screen	101	2.9
3	A23A	Cathode	2.3	11
		Anode	128	2.6
		Cathode	2.7	2.6
4	A70D	Anode	246	36
		Screen	273	5
		Cathode	6.6	41
5	A11D	Cathode	292	73

Pilot lamps, 5.5. v., .3 amp., 12 mm.

S.W. Band.—See that pointer is on 180 deg. line with gang at maximum.

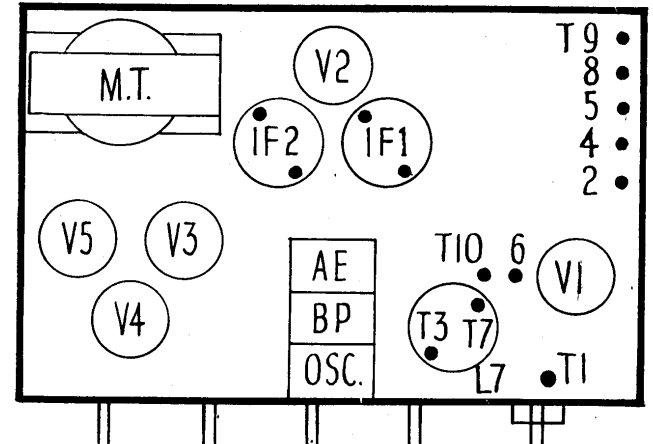
Tune to 15 mc., inject this frequency, adjust T1 to the first peak heard from tight (higher capacity). Adjust T2 for maximum.

Adjust top turn of L7, while rocking gang slightly, for correct calibration and maximum output at 7.5 mc. Readjust T1 and T2 at 15 mc.

M.W. Band.—Set T6 two-thirds in, inject and tune to 214 and adjust T3, T4, T5.

Adjust T6, rocking gang, at 500 m.

Repeat both trimming and padding operations till no further improvement is obtained.



The Ever Ready chassis is logically arranged with the trimmers accessibly placed for adjustment from above.

Band-pass input on medium and long waves, a pick-up connection and high-impedance extra-speaker connection are features of the circuit.

L.W. Band.—Set T10 two-thirds in, inject and tune to 1,200 m. and adjust T7, T8, T9.

Adjust T10, rocking gang, at 1,700 m. Repeat trimming and padding operations.

WINDINGS

L	Ohms.	L	Ohms.
1	11.4	11	6.1
2	2.5	12	8.4
3	11.1	13-16	6.7
4	V. low	17	650
5	2.5	18	V. low
6	11	19	230
7	V. low	20	V. low
8	1.8	21	255
9	5	22	V. low
10	V. low	23	19

CONDENSERS

C	Mfds.	C	Mfds.
1	10 mfd.	30	.05
7	.01	31	.002
8	.1	32	50
12	.1	33	10 mfd.
13	.1	34	2
14	100 mfd.	35	.05
15	300 mfd.	36	50
19	500 mfd.	37	16
26	.1	38	8
27	.1	39	.005
28	.1	40	500 mfd.
29	100 mfd.	41	100 mfd.

RESISTANCES

R	Ohms	R	Ohms
2	11,000	15	260,000
3	110,000	16	110,000
4	110,000	17	2 meg.
5	110,000	18	500,000
6	20,000	19	1,000
7	20,000	20	1.1 meg.
8	51,000	21	260,000
9	150	22	40,000
10	200	23	11,000
11	1,100	24	250,000
12	2,100	25	110,000
13	250	26	510,000
14	25,000	27	150
	510,000	28	75

