

PYE M.P./U.

Three-valve, plus rectifier, four waveband table model superhet, suitable for 200-250 volts A.C. or D.C. mains. Made by Pye, Ltd., Radio Works, Cambridge.

Circuit.—Transformer coils, with a common primary on M. and L. waves, feed V1, the frequency-changer. Separate reaction windings are provided for each oscillator coil but the tuned

coils are in the anode circuit instead of the grid.

Of the I.F. transformers linking V1 to V2 and V2 to V3, the first has permeability-adjusted cores and the second is adjusted by moving the two windings.

V3 is a double-diode output pentode with orthodox demodulation, A.V.C. and L.F. arrangements. The L.F. bias is made lower than the A.V.C. delay bias by returning the volume control to the junction of R13, R14.

V5 is a straightforward half-wave rectifier with L18, a smoothing choke, in the H.T. lead to the valves and L17, the speaker field coil, in shunt across the H.T.

Wavebands, 13.5-53, 50-200, 190-570 and 800-2,200 m. Provision for 2-4 ohm extension speaker. Mains consumption, 70 watts.

Fuses.—These are 1 amp. 1½ in. types.

Speaker Connections.—1 (top), black

rubber flex to speech coil; 2, black stiff to field; 3, red flex to hum coil; 4, red stiff to field; 5, hum coil and speech coil.

GANGING

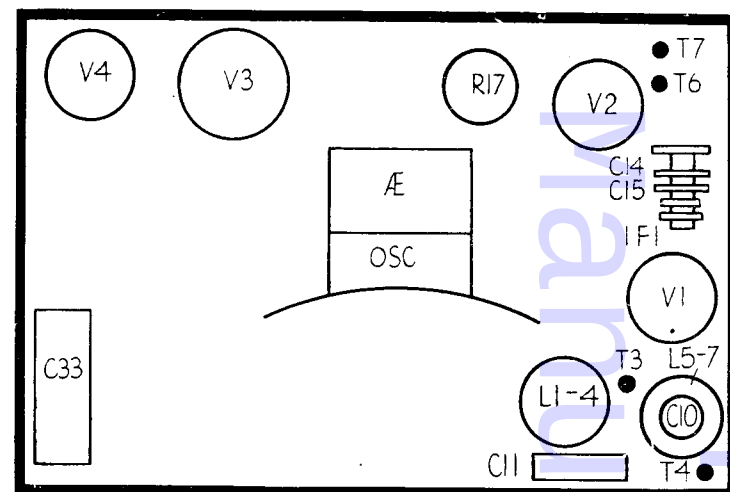
I.F. Circuits.—Adjust at 465 kc. Move outer coils only on second I.F. transformer and seal with coil dope. Adjust I.F.1 cores with non-metallic screw-driver.

M.W. Band.—Inject 210 m. and trim with T6 and T4. Check calibration at 520 m. There is no padding adjustment.

L.W. Band.—Adjust T7 at 1,300 m., slightly rocking gang.

There are no padding or aerial trimming adjustments.

S.W. Band.—Adjust T3 at 15 m., rocking gang. On both bands check tracking and adjust if necessary by spacing the S.W. aerial windings. Calibration can be adjusted by altering the spacing of the oscillator coil windings.



VALVE READINGS

V.	Type.	Electrode.	Volts.	Ma.
1	TH30C	Anode	164	1.8
		Screen	60	4.4
		Osc. anode	66	3.8
		Cathode	1.9	10
2	VP13C	Anode	164	5.8
		Screen	164	2.2
		Cathode	1.4	8
3	Pen40DD	Anode	156	27
		Screen	164	5.2
		Cathode	15	32.2
4	URIC	Anode	192A.C.	
		Cathode	194	80

Pilot lamps, 6.2v., .3 amps.

RESISTANCES

R	Ohms.	R	Ohms.
1	20,000	11	1 meg.
2	200	12	1 meg.
3	20,000	13	150
4	20,000	14	300
5	150	15	3,000
6	100,000	16	100
7	500,000	17	650 tappe1
8	60,000	18	100 and 200
9	1 meg.	18	50
10	100,000	17	6,500
		18	560

CONDENSERS

C	Mfds.	C	Mfds.
8	.0003	21	150 mmfds
9	.1	22	.1
10	.1	23	.1
11	6 mmfds.	24	190 mmfds.
12	.1	25	100 mmfds.
13	.1	26	150 mmfds.
14	.1	27	150 mmfds.
15	100 mmfds.	28	.005
16	100 mmfds.	29	150 mmfds.
17	150 mmfds.	30	.20
18	5,000 mmfds.	31	.05
19	1,300 mmfds.	32	8-8
20	260 mmfds.	33	.24
		34	.1

