

MARCONIPHONE

911

Four - valve, plus rectifier, three-waveband table model super-het in a moulded cabinet. For 195-255 v. 50-100 cycle A.C. Made by the Marconiphone Co., Ltd., Hayes, Middlesex.

Circuit.—Transformer coils with iron-dust cores on medium and long waves couple the aerial to V1 on all three bands. V1 is the frequency-changer, and the oscillator section is

tuned grid with separate anode reaction coils on S. and M. bands.

Air-core I.F. transformers link up V2, the I.F. amplifier, and V3, the double diode triode. The diodes are strapped together, the A.V.C. as well as the demodulated L.F. being taken from VR1, the combined diode load and volume control.

The triode section of V3 is resistance-capacity coupled to V4, the output tetrode. This has a feed-back tone condenser between anode and grid, and a parasitic oscillation stopper in R14.

V5, a full-wave rectifier, provides H.T., smoothed by the speaker field and C18, C19.

Notes.—Wavebands are 16.5-50, 195-560, and 950-2,000 m. Mains consumption, 50 watts. Connections are provided for a pick-up (a 7,500 ohm. parallel resistance is recommended) and a 4-5 ohm. extension speaker.

GANGING

I.F. Circuits.—Set receiver to M.W. maximum and volume control to maxi-

mum. Inject 465 kcs. to V1 grid and adjust I.F. trimmers for maximum.

M.W. Band.—Tune receiver to 210 m., inject this wavelength (1,428 kcs.) and adjust T1 and T2.

Tune to and inject 510 m. (588.2 kcs.) and adjust L4 core and L9 core. Repeat T1 and T2 adjustment at 210 m.

L.W. Band.—Tune to 1,000 m., inject 300 kcs. and adjust T3.

Tune to 1,850 m., inject 162.3 kcs. and adjust L11 core. Readjust T3 at 1,000 m.

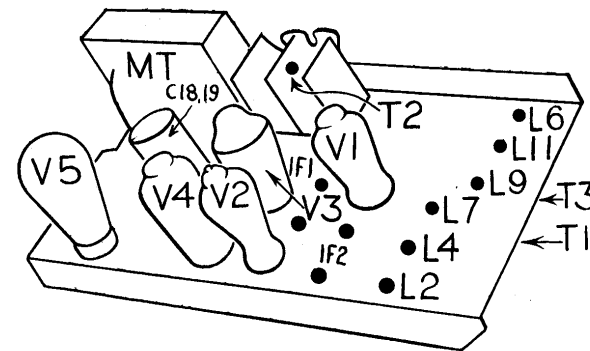
Tune to 1,400 m., inject 214.3 kcs. and adjust L6 core.

S.W. Band.—Tune to 50 m., inject 6,000 kcs. and adjust loop L7. While rocking gang slightly, adjust loop L2. Repeat both these operations.

WINDINGS

L		L	
L	Ohms.	L	Ohms.
1	.. .25	9	.. 3
2	.. V. low	10	.. 2
3	.. 24	11	.. 7.5
4	.. 2.5	12	.. 9
5	.. 70	13	.. 7
6	.. 19	14	.. 4.5
7	.. V. low	15	.. 4.5
8	.. 4	CK1	.. 950

The 911 is a simple set of special "war-time" design. All trimmers are accessible from above or the side.



CONDENSERS

C	Mfds.	C	Mfds.
1	.. 35 mmfds.	12	.. .0001
2	.. .0005	13	.. .05
3	.. .1	14	.. .001
4, 11	.. .05	15	.. 230 mmfds.
5	.. 75 mmfds.	16	.. .005
6	.. .005	17	.. 23 mmfds.
7	.. 430 mmfds.	18	.. .16
8	.. .0002	19	.. 8
9	.. 150 mmfds.	20	.. 5 mmfds.
10	.. 50 mmfds.	21	.. 35 mmfds.

VALVE READINGS

V	Type	Electrode	Volts	Ma.
1	X63M	Anode ..	260	2.5
		Screen ..	80	3
		Osc. anode ..	150	4.5
2	KTW61M	Cathode ..	3.5	10
		Anode ..	260	6
3	DH63M	Screen ..	80	2
		Cathode ..	2.8	8
4	KT61	Anode ..	65	.4
		Cathode ..	—	.4
5	U10	Anode ..	245	38
		Screen ..	260	7
		Cathode ..	4.5	45
		Heater ..	345 A.C.	55
			335	—

Pilot lamp, 6v. .25 amp.

RESISTANCES

R	Ohms.	R	Ohms.
3	.. 350	10	.. 10 meg.
4	.. 50,000	11	.. .5 meg.
5	.. 23,000	12	.. .5 meg.
6	.. 35,000	13	.. 100
7	.. 350	14	.. 50,000
8	.. 2.3 meg.	VR1	.. .5 meg.
9	.. 50,000		

Continued from opposite page

the dial is "square" in its mounting and that the pointer registers with its correct mark with the gang at minimum or maximum. During adjustments on each band the trimmers and padder should be adjusted alternately three or four times until no further improvement is obtained.

The oscillator trimmers are adjusted first, injecting a modulated I.F. signal to the frequency-changer grid. The oscillator section of the gang may be shorted. The second transformer's trimmers are adjusted first.

It does not matter in what order the wavebands are adjusted unless some trimmers are in circuit on more than one band.

