

BURNDIPT 318

Five-valve, plus rectifier and tuning indicator, three waveband superhet for 200-260 v., 50-100 cycles.

Circuit.—Transformer coils on each band couple an EF8 R.F. amplifier to an ECH3 frequency changer. Permeability tuned I.F. transformers form the couplings to an EF9 I.F. amplifier and an EB4 double-diode double-cathode valve for detection and A.V.C. This stage feeds an EM1 tuning indicator.

The output is an EL3 and the full-wave rectifier an AZ3. A separate smoothing choke, L1, is used, the speaker being a P.M. Wavebands: 13.5-50, 180-580, 800-2,000 metres.

Provision is made for P.U. and low-impedance extension speaker.

GANGING
Turn VR1 to maximum and see that pointer registers with end of scale.
I.F. CIRCUITS: Inject 473 kc. and adjust secondary and primary cores of IF2 and IF1.
S.W. BAND: Inject 13.5 m. and adjust VC13, VC8 and VC5. Padding is fixed.
M.W. BAND: Inject 200 m. and adjust VC11, VC7 and VC4. Pad with VC12 at 500 m., rocking gang.
L.W. BAND: Inject 1,000 m. and adjust VC9, VC6 and VC3. Pad with VC10 at 2,000 m., rocking gang.

RESISTANCES

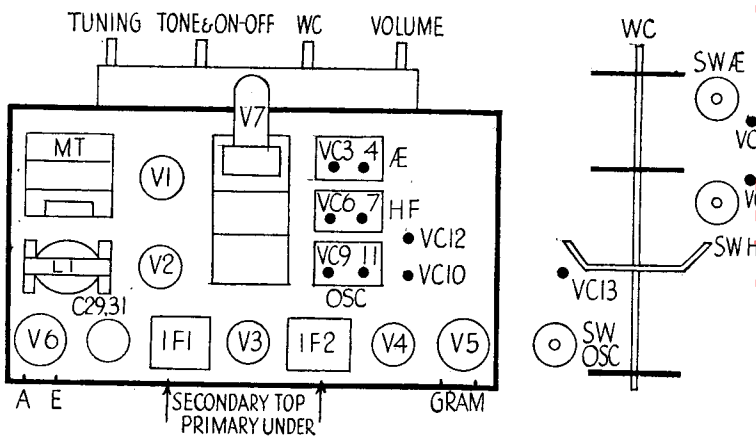
R	Ohms	R	Ohms
1	.5 meg.	15	.1 meg.
2	200	16	.1 meg.
3	1,000	17	.5 meg.
4	30,000	18	.5 meg.
5	20,000	19	.5 meg.
6	.5 meg.	20	.5 meg.
7	150	21	50,000
8	50,000	22	5,000
9	100	23	100,000
10	20,000	24	150
11	250	25	5 meg.
12	.5 meg.	VR1	1 meg.
13	.1 meg.	VR2	50,000
14	.25 meg.		

VALVE VOLTAGES

Valve	Type	Anode	Screen	Cathode
1	EF8	260	270	2
2	ECH3	270	140	3
		100(OSC.)		
3	EF9	270	90	1.9
4	EB4	— A.V.C. Cathode		11
5	EL3	255	270	6
6	AZ3	260 A.C.	—	—
7	EM1	—	—	285 D.C.

CONDENSERS

C	Mfds.	C	Mfds.
1	100 mmfds.	17	.1
2	.1	18	.1
3	.1	19	100 mmfds.
4	.1	20	170 mmfds.
5	100 mmfds.	21	.1
6	150 mmfds.	22	200 mmfds.
7	150 mmfds.	23	.1
8	.1	24	200 mmfds.
9	.1	25	.05
10	100 mmfds.	26	.01
11	100 mmfds.	27	100 mmfds.
12	50 mmfds.	28	.05
13	150 mmfds.	29	.25
14	500 mmfds.	30	.25
15	.005	31	.16
16	150 mmfds.	32	.01



The 318 is a straightforward superhet with a signal-frequency amplifier and a tuning indicator. The diode valve has two cathodes, the signal diode without bias, the A.V.C. section having a delay voltage. Note—the four safety bolts should be fitted for transport and removed before switching on.

