

VALVE ANALYSIS

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 8215VM	138	1.4	60	0.2
V2 H12	80	1.6	—	—
V3 Pen220	149	1.8	—	—
V4 Pen220	149	1.8	—	—

PYE - G/B

Switch	LW	Gram	MW
S1	—	—	C
S2	C	—	—
S3	—	—	C
S4	C	—	—
S5	—	—	C
S6	C	—	—
S7	—	C	—
S8	—	—	C
S9	—	C	—

CIRCUIT ALIGNMENT

With the gang at maximum, the horizontal line at the high wavelength end of the scale should correspond with the pointers on the escutcheon. Connect signal generator to A and E sockets via a suitable dummy aerial, turn the volume control to maximum and the reaction control to minimum.

MW.—Switch set to MW, tune to 200 m. on scale, feed in a 200 m (1,500 kc/s) signal, and adjust C17 and the reaction control for maximum output. Tune to 250 m on scale, feed in a 250 m (1,200 kc/s) signal, and adjust C12 and C15 for maximum output, resetting the reaction control if necessary. Check performance at 500 m (600 kc/s).

LW.—Switch set to LW, tune to 1,000 m on scale, feed in a 1,000 m. (300 kc/s) signal, and adjust C17 and C10 for maximum output. Check calibration over the scale and, if necessary, reset the L7 adjustment, but this should be avoided if possible. With each readjustment of L7, the reaction condenser should be reset and then, when the adjustment is at maximum, C17 must be readjusted at 200 m, then L8 at 1,000 m until no improvement can be obtained.

CONDENSERS		Values (μF)
C1	V1 SG decoupling ...	0.25
C2	V1 anode decoupling ...	1.0
C3	V1 CG decoupling ...	0.25
C4	V2 CG condenser ...	0.0002
C5	V2 anode decoupling ...	0.5
C6	RF by-pass condensers ...	0.0001
C7		0.001
C8		0.5
C9	AF coupling to T1 ...	0.0025
C10	B-P pri. LW trimmer ...	—
C11	Band-pass pri. tuning ...	—
C12	B-P pri. MW trimmer ...	—
C13	B-P sec. LW trimmer ...	—
C14	Band-pass sec. tuning ...	—
C15	B-P sec. MW trimmer ...	—
C16	V1 anode tuning ...	—
C17	V1 anode MW trimmer ...	—
C18	Differential reaction control ...	—

† Variable. ‡ Pre-set.

RESISTORS		Values (ohms)
R1	Aerial gain control ...	25,000
R2	V1 anode HT feed ...	10,000
R3	V2 grid leak ...	2,000,000
R4	V2 anode decoupling ...	10,000
R5	V2 anode load ...	40,000
R6	V3, V4 CG's decoupling ...	150,000
R7	Part tone corrector ...	25,000
R8	V2 GB resistor ...	150
R9	V1 gain control ...	800

OTHER COMPONENTS		Approx. Values (ohms)
L1	Band-pass primary coils ...	3.75
L2		17.5
L3	Band-pass secondary coils ...	3.75
L4		17.5
L5	Reaction coupling coil ...	8.5
L6	V1 anode tuning coils ...	4.0
L7		42.0
L8	V2 anode RF choke ...	230.0
L9	Speaker speech coil ...	1.23
T1	Interval { Pri. ...	400.0
	trans. { Sec., total ...	12,000.0
T2	Output { Pri., total ...	800.0
	trans. { Sec. ...	0.75
S1-S6	Waveband switches ...	—
S7		—
S8	Radio muting switch ...	—
S9	Gram. PU switch ...	—
S10	Internal speaker switch ...	—
S11	LT circuit switch ...	—
S12	GB circuit switch ...	—

