

# PYE - MM

## VALVE ANALYSIS

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 AC/SG	172	2.1	50	0.66
V2 AC2/HL	100	5.0	—	—
V3 AC/Pen	190	26.5	205	5.3

Across rectifier MR1 ... .. 315V, DC.  
 Across HT secondary winding ... .. 194V, AC.  
 Total HT current ... .. 46 mA.

## CIRCUIT ALIGNMENT

Since the inductance and trimmer adjustments in the L4-L6 unit are unlikely to get out of adjustment, and can in any case be reset correctly only at the factory, and G19 is a manual control, there is virtually no alignment needed beyond the adjustment of C22 as required.

CAPACITORS		Values (μF)
C1	V1 SG decoupling ...	0.5
C2	V1 anode decoupling ...	0.75
C3	V1 anode LW trimmer ...	0.00001
C4	V2 CG capacitor ...	0.0001
C5	RF by-pass capacitors ...	0.001
C6		0.002
C7	V2 cathode by-pass ...	1.0
C8	V2 anode decoupling ...	3.0
C9	AF coupling to T1 ...	0.5
C10	Fixed tone correctors ...	0.0001
C11		0.015
C12*	V3 cathode by-pass ...	25.0
C13*	GB circuit by-pass ...	25.0
C14*	HT smoothing capacitors ...	7.0
C15		3.0
C16	Rectifier doubler capacitors ...	3.0
C17		3.0
C18†	Frame aerial tuning ...	—
C19†	Manual trimmer ...	—
C20†	Differential reaction control ...	—
C21†		—
C22†	V1 anode tuning ...	—
C22‡	V1 anode MW trimmer ...	—

\* Electrolytic. † Variable. ‡ Pre-set.  
 § Two 0.005 μF capacitors in parallel.  
 ¶ 1 μF and 2 μF in parallel.

RESISTORS		Values (ohms)
R1	V1 SG HT feed pot. ...	25,000
R2		10,000
R3	V1 anode HT feed ...	10,000
R4	V2 grid leak ...	250,000
R5	V1 (gram) GB resistor ...	500
R6	V2 anode decoupling ...	10,000
R7	V2 anode load ...	10,000
R8	Part tone corrector ...	8,500
R9	V3 GB resistor ...	250
R10	V1 gain control ...	350
R11	V1 fixed GB resistor ...	40
R12	Scale lamp ballast ...	6

OTHER COMPONENTS		Approx. Values (ohms)
L1	Ext. aerial coupling ...	0.15
L2	Frame aerial windings ...	2.0
L3		24.0
L4	Reaction coil ...	9.5
L5	V1 anode tuning coils ...	4.0
L6		37.0
L7	V2 anode RF choke ...	300.0
L8	Speaker speech coil ...	1.23
L9	Hum neutralising coil ...	Very low
L10	Speaker field coil ...	2,500.0
T1	Intervalve trans. { Pri. ...	1,000.0
	{ Sec. ...	10,000.0
T2	Speaker input { Pri. ...	650.0
	{ Sec. ...	0.2
T3	Mains trans. { Pri., total ...	70.0
	{ Heater, sec. ...	0.1
	{ HT sec. ...	50.0
S1,S2	Waveband switches ...	—
S3	PU GB switch ...	—
S4,S5	Mains switches ...	—

