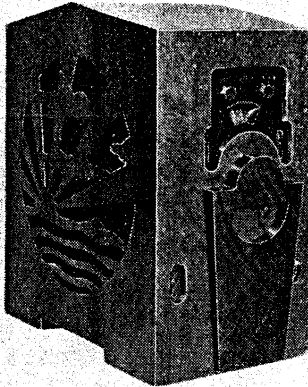


"TRADER" SERVICE SHEET

745

PYE MM TRANSPORTABLE AC SUPERHET



between V1 and triode detector valve (V2, Mazda metallised AC2/HL), which operates on grid leak system with C4, R4. Reaction coupling from anode by L4 and differential capacitor C20. RF filtering in anode circuit by C5, L7, C6. Provision for gramophone pick-up in CG circuit, GB being adjusted by opening switch S3, which short-circuits R5 on radio.

Parallel-fed transformer AF coupling by R7, C9 and T1 between V2 and pentode output valve (V3, Mazda AC/Pen). Tone correction by C10 across T1 secondary and C11, R8 in anode circuit.

HT current is supplied by Westinghouse metal rectifier MR1, which operates as voltage doubler with C16, C17. Smoothing by speaker field L10 and capacitors C14 (electrolytic) and C15. Gain control for V1 is obtained from drop along R11 and variable potentiometer R10 in negative HT lead to chassis. C20 is ganged with R10, but comes into operation only after R10 has reached maximum gain.

SEPARATE receiver and power unit chassis are used in the Pye MM, a 3-valve (plus metal rectifier) 2-band transportable TRF receiver designed for AC mains of 200-250 V, 40-100 c/s.

There are several versions of the chassis, and the salient differences between our sample and others are described overleaf.

Release date and original price: 1932; £17 17s.

CIRCUIT DESCRIPTION

Tuned frame aerial input L2, L3, C18 precedes tetrode RF amplifying valve (V1, Mazda clear AC/SG). "Fine" tuning by manual trimmer C19. Provision for connection of external aerial via coupling winding L1.

Tuned-anode coupling by L5, L6, C21

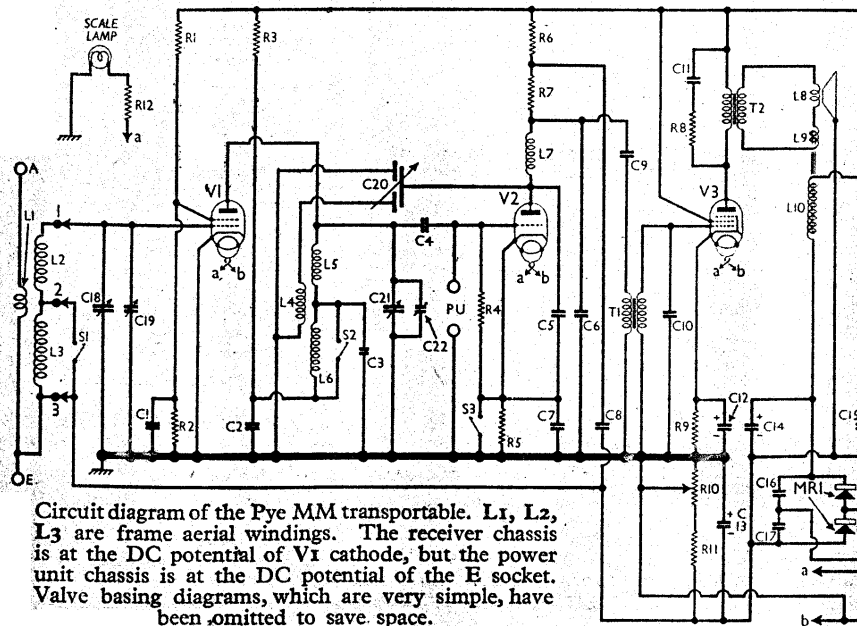
COMPONENTS AND VALUES

RESISTORS		Values (ohms)
R1	V1 SG HT feed pot.	25,000
R2	divider	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

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	0.001
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		0.01
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†	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.

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	10,000.0
	{ Sec. ...	
T2	Speaker input { Pri. ... 650.0	0.2
	{ Sec. ...	
T3	Mains trans. { Pri., total ... 70.0	0.1
	{ Heater, sec. ...	
	{ HT sec. ... 50.0	
S1, S2	Waveband switches	—
S3	PU GB switch	—
S4, S5	Mains switches	—



Circuit diagram of the Pye MM transportable. L1, L2, L3 are frame aerial windings. The receiver chassis is at the DC potential of V1 cathode, but the power unit chassis is at the DC potential of the E socket. Valve basing diagrams, which are very simple, have been omitted to save space.

DISMANTLING THE SET

**Removing Chassis.**—Unsolder from the two left hand tags on connecting panel projecting downwards from rear of chassis the two flexible red (heater) leads from the power unit; remove the four 2BA bolts (with two clamp plates) holding power unit to bottom of cabinet, and withdraw power unit; unsolder the three leads (four in early version), emerging from multiple cable, from capacitor block on power unit, first coding them. Unsolder speaker leads from power unit and connecting panel on chassis, freeing power unit; unsolder from tags on frame aerial the three leads from chassis; remove one round-head wood screw holding the chassis superstructure to top of cabinet, and another from right-hand end of chassis; remove two 2BA nuts from the mounting bracket just below the control panel, and the upper door-fastening screw lug, when chassis may be withdrawn right-hand end foremost.

(Continued overleaf)

