

TECHNICAL INFORMATION
AND
SERVICE DATA

AWA **RADIOLA**

MODEL 524-M

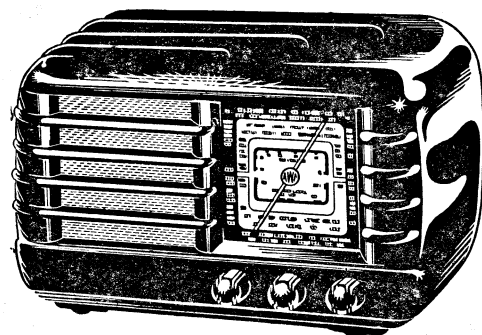
FIVE VALVE, BROADCAST, A.C. OPERATED.
SUPERHETERODYNE

AND

MODEL 525-M

FIVE VALVE, TWO BAND, A.C. OPERATED
SUPERHETERODYNE

ISSUED BY
AMALGAMATED WIRELESS (A/SIA) LTD.



ELECTRICAL SPECIFICATIONS.

FREQUENCY RANGE: Model 524-M 540-1600 Kc/s
(555-187.5M)

Model 525-M 540-1600 Kc/s
(555-187.5M)
6-18 Mc/s
(50-16M)

INTERMEDIATE FREQUENCY 455 Kc/s

POWER SUPPLY RATING 200-260 volts,
50-60 C.P.S.

(Models are produced with other voltage and
frequency ratings.)

POWER CONSUMPTION 60 watts

VALVE COMPLEMENT

Model 524-M (1) 6A8G Converter
(2) 6SK7GT I.F. Amplifier
(3) 6SQ7GT Det., A.V.C. A.F. Amp.
(4) 6V6GT/G Output
(5) 6X5GT Rectifier

Model 525-M (1) 6J8GA Converter
(2) 6SK7GT I.F. Amplifier
(3) 6SQ7GT Det., A.V.C. A.F. Amp.
(4) 6V6GT/G Output
(5) 6X5GT Rectifier

LOUDSPEAKER:

5 inch—Code No. AA16
Transformer XA2
V.C. Impedance—3 ohms at 400 C.P.S.
Field—1000 ohms.

UNDISTORTED POWER OUTPUT: 3 watts

GENERAL DESCRIPTION.

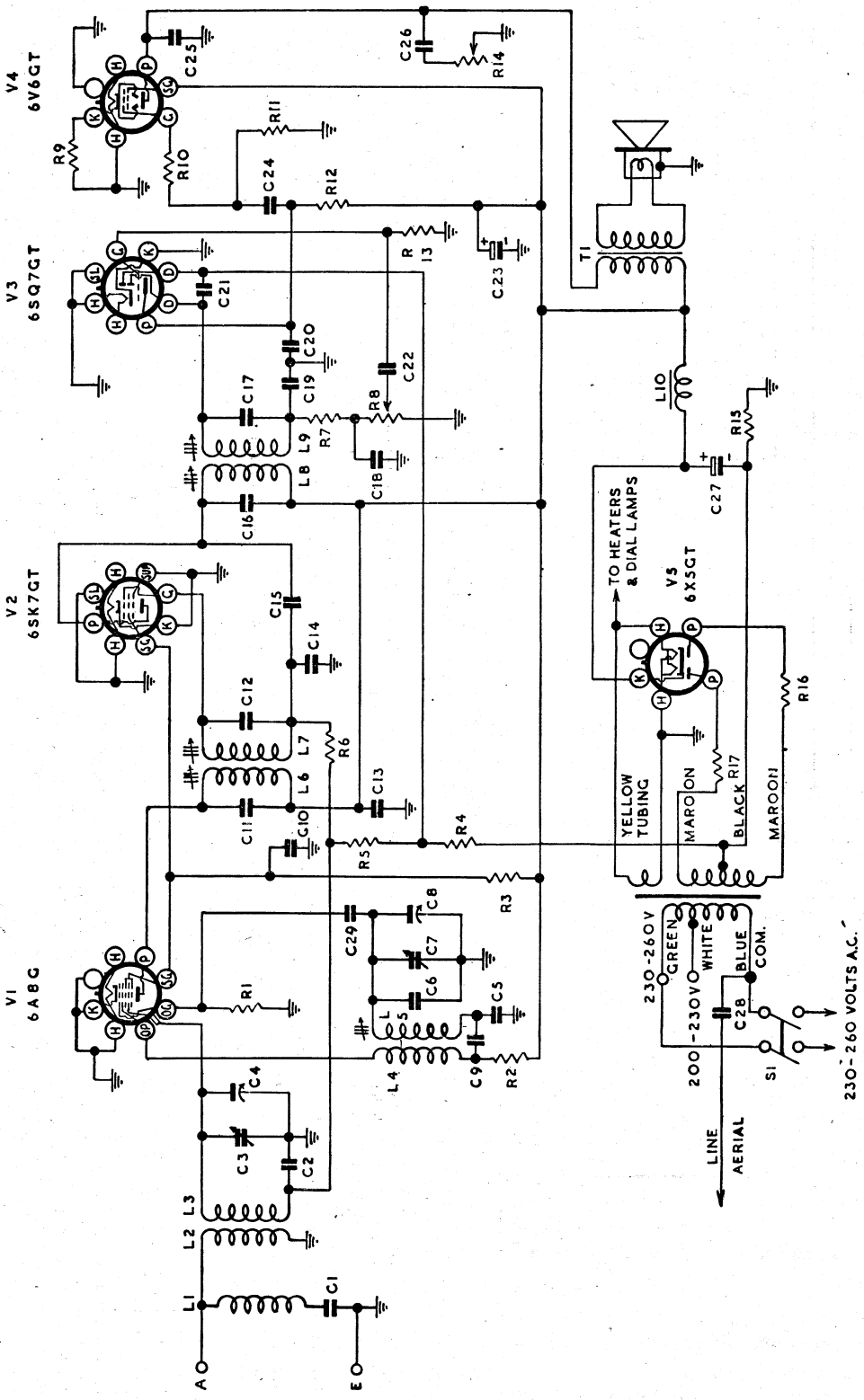
The models 524-M and 525-M are mantel models housed in attractively designed moulded cabinets, which are produced in three colours: Ivory, Walnut and Burgundy.

Features of design include: Tropic-proof construction, automatic volume control, magnetite cores in I.F. transformers and broadcast oscillator coils, air-dielectric trimming capacitors.

Electrically, model 524-M closely resembles the models

512-M/519-M, differences being in the addition of a power switch on the volume control (R8) and a capacity to mains aerial. (See circuit diagram and code.) For all other information, refer to the 512-M/519-M Service Manual.

Model 525-M is the same as model 518-M, except that the power switch is situated on the volume control (R10). Refer to the model 510-M Service Manual for all other information.



CIRCUIT CODE — RADIOLA 524-M.

Part No.	Description	Code No.	Part No.	Description	Code No.	Part No.	Description	Code No.
L1	I.F. Filter (including C1)	9382	R9	325 ohms, 3 watt	325	V1	6AB6	6AB6
L2, L3	Aerial Coil, 540-1600 Kc/s.	15454	R10	50,000 ohms, 1/2 watt	50000	V2	6SK7GT	6SK7GT
L4, L5	Oscillator Coil, 540-1600 Kc/s	7638A	R11	0.5 megohm, 1/2 watt	500000	V3	6SQ7GT	6SQ7GT
L6, L7	1st I.F. Transformer	22700	R12	0.25 megohm, 1 watt	250000	V4	6V6GT	6V6GT
L8, L9	2nd I.F. Transformer	22703	R13	10 megohms, 1 watt	10000000	V5	6X5GT	6X5GT
L10	Speaker Field, 1000 ohms		R14	0.1 megohm—Tone Control	21917	T1		
R1	50,000 ohms, 1/2 watt	50000	R15	50 ohms, 3 watt	50	T2		
R2	20,000 ohms, 1 watt	20000	R16	100 ohms, 1/2 watt	100	T2		
R3	25,000 ohms, 2 watt	25000	R17	100 ohms, 1/2 watt	100	S1		
R4	2.5 megohms, 1/2 watt	2500000	C1	50 uF Silvered Mica	50			
R5	1.6 megohms, 1/2 watt	1600000	C2	.05 uF Paper, 200 v. working	50			
R6	0.1 megohm, 1/2 watt	100000	C3	3-25 uF Air Trimmer	19659			
R7	50,000 ohms, 1/2 watt	50000	C4	12-430 uF Tuning	18201			
R8	0.5 megohm—Volume Control (including S1)	23480	C5	420 uF Mica ±2% padder	420			
			C6	9 uF Mica	9			
			C7	3-25 uF Air Trimmer	19659			
			C8	12-430 uF Tuning	18201			
			C9	.05 uF Paper, 400 v. working	50			
			C10	0.1 uF Paper, 400 v. working	100			
			C11	70 uF Mica	70			
			C12	70 uF Mica	70			
			C13	0.1 uF Paper, 400 v. working	50			
			C14	.05 uF Paper, 200 v. working	50			
			C15	9 uF Mica	9			
			C16	70 uF Mica	70			
			C17	70 uF Mica	70			
			C18	100 uF Mica	100			
			C19	100 uF Mica	100			
			C20	200 uF Mica	200			
			C21	50 uF Mica	50			
			C22	.01 uF Paper, 600 v. working	16			
			C23	.02 uF Paper, 600 v. working	23			
			C24	.01 uF Paper, 400 v. working	50			
			C25	.01 uF Paper, 600 v. working	50			
			C26	.03 uF Paper, 600 v. working	30			
			C27	8 uF 525 P.V. Electrolytic	8			
			C28	500X uF Mica (2000 v. test)	500X			
			C29	70 uF Mica	70			
			C30	70 uF Mica	70			
			C31	70 uF Mica	70			
			C32	70 uF Mica	70			
			C33	70 uF Mica	70			
			C34	70 uF Mica	70			
			C35	70 uF Mica	70			
			C36	70 uF Mica	70			
			C37	70 uF Mica	70			
			C38	70 uF Mica	70			
			C39	70 uF Mica	70			
			C40	70 uF Mica	70			
			C41	70 uF Mica	70			
			C42	70 uF Mica	70			
			C43	70 uF Mica	70			
			C44	70 uF Mica	70			
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			C159	70 uF Mica	70			
			C160	70 uF Mica	70			
			C161	70 uF Mica	70			
			C162	70 uF Mica	70			
			C163	70 uF Mica	70			
			C164	70 uF Mica	70			
			C165	70 uF Mica	70			
			C166	70 uF Mica	70			

SOCKET VOLTAGES — MODEL 524-M.

Valve	Cathode to Chassis Volts	Screen Grid to Chassis Volts	Anode to Chassis Volts	Anode Current mA	Heater Volts
6A8G Converter	0	90	240	5.0	6.3
Oscillator	—	—	170	3.5	—
6SK7GT I.F. Amp.	0	90	240	8.0	6.3
6SQ7GT Det., A.V.C. A.F. Amp.	0	—	90*	0.6	6.3
6V6GT/G Output	13	240	225	35.0	6.3
6X5GT Rectifier	300	—	280 (A.C.)	—	6.3

Total H.T. Current—60 mA.

Volts across back-bias resistor R15—3.0

Measured at 240 volts A.C. supply. No signal input.

Volume/Power Control maximum clockwise. Voltmeter 1000 ohms per volt; measurements taken on highest scale giving accurate readable deflection.

*This reading may vary depending on the resistance of the voltmeter used.

SOCKET VOLTAGES — MODEL 525-M.

Valve	Cathode to Chassis Volts	Screen Grid to Chassis Volts	Anode to Chassis Volts	Anode Current mA	Heater Volts
6J8GA Converter M.W.	1.5	80	240	1.0	6.3
S.W.	2.0	80	240	1.3	—
Oscillator M.W.	—	—	115	5.0	—
S.W.	—	—	115	5.0	—
6SK7GT I.F. Amp.	0	80	240	6.0	6.3
6SQ7GT Det., A.V.C. A.F. Amp.	0	—	90*	0.6	6.3
6V6GT/G Output	13	240	225	35.0	6.3
6X5GT Rectifier	300	—	280 (A.C.)	—	6.3

Volts across back-bias resistor R16—3.0

Total H.T. Current—60 mA.

Measured at 240 volts A.C. supply. No signal input.

Volume/Power Control maximum clockwise. Voltmeter 1000 ohms per volt; measurements taken on highest scale giving accurate readable deflection.

*This reading may vary depending on the resistance of the voltmeter used.