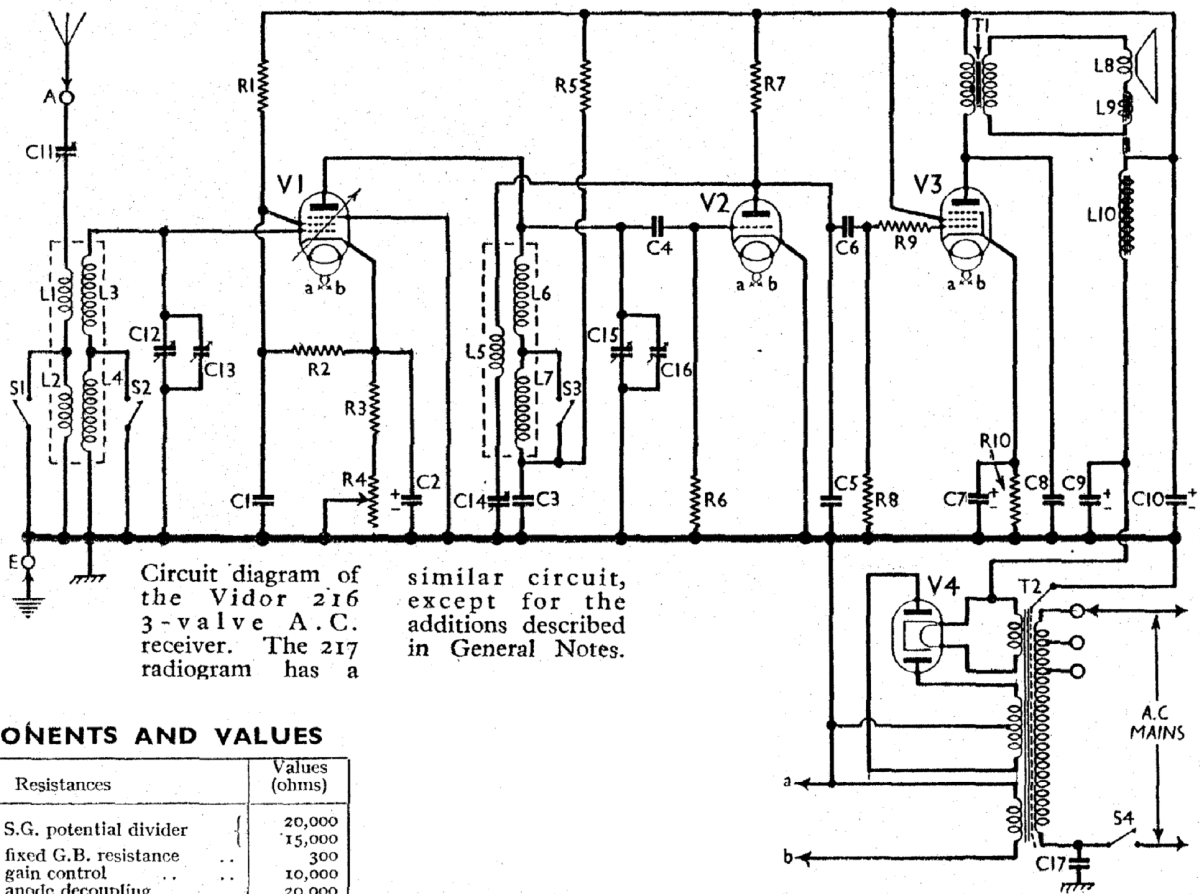


VIDOR - 216 & 217



Circuit diagram of the Vidor 216 3-valve A.C. receiver. The 217 radiogram has a similar circuit, except for the additions described in General Notes.

COMPONENTS AND VALUES

Resistances		Values (ohms)
R1	V1 S.G. potential divider	20,000
R2		15,000
R3	V1 fixed G.B. resistance	300
R4	V1 gain control	10,000
R5	V1 anode decoupling	20,000
R6	V2 grid leak	1,000,000
R7	V2 anode load	100,000
R8	V3 C.G. resistance	500,000
R9	V3 C.G. H.F. stopper	250,000
R10	V3 G.B. resistance	150

Condensers		Values (�F)
C1	V1 S.G. by-pass	0.05
C2*	V1 cathode by-pass	25.0
C3	V1 anode decoupling	0.1
C4	V2 grid condenser	0.0001
C5	V2 anode H.F. by-pass	0.0002
C6	V2 to V3 L.F. coupling	0.01
C7*	V3 cathode by-pass	25.0
C8	Tone corrector	0.001
C9*	H.T. smoothing	6.0
C10*		6.0
C11†	Selectivity control	0.000175
C12†	Aerial circuit tuning	0.0005
C13†	Aerial circuit trimmer	—
C14†	Reaction control	0.0005
C15†	V1 anode circuit tuning	0.0005
C16†	V1 anode circuit trimmer	—
C17	Mains H.F. by-pass	0.05

* Electrolytic. † Variable. ‡ Pre-set.

Other Components		Approx. Values (ohms)
L1	Aerial coupling coils	1.5
L2		3.25
L3	Aerial tuning coils	5.5
L4		9.5
L5	Reaction coil	3.0
L6	V1 anode tuning coils	5.75
L7		11.5
L8	Speaker speech coil	1.7
L9	Hum neutralising coil	0.1
L10	Speaker field coil	2,000.0
T1	Speaker input trans.	Pri. 730.0 Sec. 0.3
T2	Mains. trans.	Pri. total 38.0 Heater sec. 0.05 Rect. heat. sec. 0.1 H.T. sec. total 560.0
S1-S3	Waveband switches	—
S4	Mains switch, ganged R4	—

VALVE ANALYSIS

Valve voltages and currents given in the table on page III are those measured in our receiver when it was operating on mains of 225 V, using the 230 V tapping on the mains transformer. The volume control was at maximum but the reaction control was at minimum, and there was no signal input.

Voltages were measured on the 1,200 V scale of an Avometer, with chassis as negative.

Valve	Anode Volts	Anode Current (mA)	Screen Volts	Screen Current (mA)
V1 VP4A	205	2.0	110	1.0
V2 354V	67	2.1	—	—
V3 Pen4VB	232	34.0	260	4.2
V4 R3	318†	—	—	—

† Each anode, A.C.

GENERAL NOTES

Switches. — S1-S3, the waveband switches, are in a single unit, seen in the under-chassis view. All the switches are closed on the M.W. band and open on the L.W. band. In the radiogram model there is an extra switch in the unit, which then has three positions, M.W., L.W. and Gram. The extra switch is open on M.W. and L.W., and closed on gram.

S4 is the Q.M.B. mains switch, ganged with the gain control R4.

Coils. — The tuning coils are in two screened units on the chassis deck.