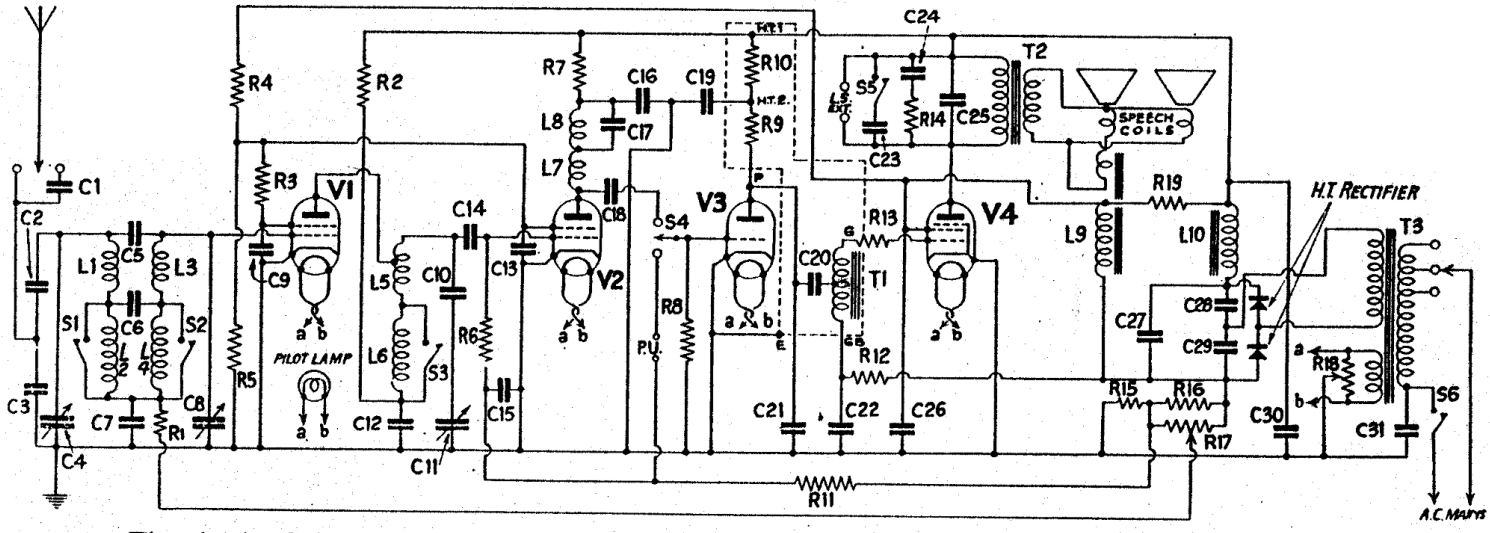
MCMICHAEL - Twin Supervox



The circuit of the "Twin Supervox." The trimmers of the tuning condensers are not shown. The components in the dotted enclosure form the L.F. coupling unit, shown in Fig. 2.

COMPONENTS AND VALUES

	Condensers	Value (μF)
C1	Series aerial condenser	—
C2	Capacity potential divider	0·000011
C3	Capacity potential divider	0·00003
C4	Band-pass primary tuning	—
C5	Band-pass coupling condensers	0·0000006
C6	Band-pass coupling condensers	0·000011
C7	V1 grid decoupling	0·1
C8	Band-pass secondary tuning	—
C9	V1 S.G. by-pass	0·1
C10	Safety blocking condenser	0·1
C11	V1 anode tuning	—
C12	V1 anode decoupling	1·0

	Condensers (*cont.*)	Value (μF)
C13	V2 S.G. by-pass	1·0
C14	Coupling to V2	0·0002
C15	V2 grid decoupling	1·0
C16	V2 anode decoupling	1·0
C17	Part of filter in V2 anode circuit	0·0002
C18	V3 grid condenser	0·00005
C19	V3 anode decoupling	1·0
C20	Parallel feed condenser to T1	0·5
C21	V3 anode by-pass	0·002
C22	V4 grid decoupling	1·0
C23	Tone-control condenser	0·01
C24	Part of voltage-limiting circuit	0·01
C25	Tone-control condenser	0·002
C26	V4 aux. grid by-pass	0·1
C27	H.T. smoothing (electrolytic)	8·0
C28	Voltage-doubler condensers	4·0
C29	Voltage-doubler condensers	4·0
C30	H.T. smoothing (electrolytic)	8·0
C31	Mains disturbance by-pass	0·01

	Resistances	Value (Ohms)
R1	V1 grid decoupling	500,000
R2	V1 anode decoupling	10,000
R3	V1 S.G. decoupling	500
R4	V1 and V2 S.G. potential divider	20,000
R5	V1 and V2 S.G. potential divider	20,000
R6	V2 grid resistance	2,000,000
R7	V2 anode decoupling	10,000
R8	V3 grid-leak	500,000
R9	V3 anode resistance	30,000
R10	V3 anode decoupling	20,000
R11	V2 grid decoupling	500,000
R12	V4 grid decoupling	100,000
R13	V4 H.F. stopper	500,000
R14	Part of voltage-limiting circuit	20,000
R15	Tapped G.B. resistance	30
R16	Tapped G.B. resistance	300
R17	Variable potentiometer volume control	5,000
R18	Centre-tapped potentiometer across heaters	50
R19	Part of V4 aux. grid pot. divider	1,500

	Components		Value (ohms) (approx.)
L1	Pri. band-pass coils		1·4
L2	Pri. band-pass coils		14·0
L3	Sec. band-pass coils		1·4
L4	Sec. band-pass coils		14·0
L5	Tuned-anode coils		1·4
L6	Tuned-anode coils		14·0
L7	Aperiodic coupling H.F. choke		18·0
L8	Part of filter circuit		30·0
L9	Speaker field		7,500
L10	Speaker field		1,500
T1	Intervalve auto-transformer, total winding		3,000
T2	Speakers input transformer.	Pri.	390
		Sec.	0·1
T3	Mains transformer	Pri. (total)	36·0
		Heater sec.	·05
		H.T. sec.	74·0
S1-S3	Waveband ganged switches		—
S4	Radio-gramophone switch		—
S5	Tone-control switch		—
S6	Mains switch (with R17)		—

Valve	Anode Volts	Anode Current (mA)	Screen Volts	Screen Current (mA)
V1 MS4B	220	4·5	112	1·25
V2 MS4B	215	4·5	112	1·25
V3 MH4	90	3·5	—	—
*V4 AC/Pen	240	24·0	205	4·0

*In some sets a Catkin MPT4 is used.

Position	S1	S2	S3	S4	S5
Pick-up	Open	Open	Open	Pick-up	Open
MW (normal)	Closed	Closed	Closed	Radio	Open
MW (controlled)	Closed	Closed	Closed	Radio	Closed
LW (normal)	Open	Open	Open	Radio	Open
LW (controlled)	Open	Open	Open	Radio	Closed