Mark Keppinger Tube Theremin Component List

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Component	Value	Specifications	
Tubes			
V1	6J5	Medium-Mu Triode	
V2	6H6	Twin Diode	
V3	6J5	Medium-Mu Triode	
V4	6SN7	Medium-Mu Twin Triode	
V5	6J5	Medium-Mu Triode	
V6	5Y3	Full-Wave Rectifier	
V7	OD3/VR150	Voltage Regulator	
V8	6SN7	Medium-Mu Twin Triode	
V9	6V6	Beam-Power Tetrode	
V10	6V6	Beam-Power Tetrode	
Resistors			
R1	100K Ω	1/2 WATT	
R2	10K Ω	2 WATT	
R3	100K Ω	1/2 WATT	
R4	10K Ω	2 WATT	
R5	220K Ω	1/2 WATT	
R6	100K Ω	1/2 WATT	
R7	10K Ω	2 WATT	
R8	220K Ω	1/2 WATT	
R9	1M Ω	1/2 WATT	
R10	10K Ω	1/2 WATT	
R11	39K Ω	2 WATT	
R12	1M Ω	1/2 WATT	
R13	1M Ω	1/2 WATT	
R14	100K Ω	1/2 WATT	
R15	15K Ω	2 WATT	
R16	1.5K Ω	1/2 WATT	
R17	39K Ω	2 WATT	
R18	1M Ω	1/2 WATT	
R19	1K Ω	1/2 WATT	
R20	39K Ω	2 WATT	
R21	10K Ω	1/2 WATT	
R22	1M Ω	1/2 WATT	
R23	10K Ω	1/2 WATT	
R24	100K Ω	1/2 WATT	
R25	100K Ω	2 WATT	
R26	220K Ω	1 WATT	
R27	220Κ Ω	1 WATT	
R28	270 Ω	5 WATT	
R29	3Κ Ω	10 WATT	
R30	100K Ω	1/4 WATT	

Component	Value	Specifications
Capacitors		
C1	0.1 µF	400V, High Quality
C2	200 pF	400V, High Quality
C3	9-50 pF	Trimmer, compression type
C4	0.001 µF	400V, High Quality
C5* **	750 pF	400V, High Quality
C6	9-50 pF	Trimmer, compression type
C7	0.001 µF	400V, High Quality
C8	0.047 µF	400V, High Quality
C9**	680 pF	400V, High Quality
C10	9-50 pF	Trimmer, compression type
C11		Variable, panel mount, 1/4" (6.35mm) shaft
C12	0.001 µF	400V, High Quality
C13	0.047 µF	400V, High Quality
C14	0.001 µF	400V, High Quality
C15	0.001 µF	400V, High Quality
C16	0.047 µF	400V, High Quality
C17	47 pF	400V, High Quality
C18	47 pF	400V, High Quality
C19	0.047 µF	400V, High Quality
C20	0.047 µF	400V, High Quality
C21	N/A	
C22	N/A	
C23	0.047 µF	400V, High Quality
C24	47 µF	100VDC, Polarized
C25	0.047 µF	400V, High Quality
C26	0.047 µF	400V, High Quality
C27	0.047 µF	400V, High Quality
C28	47 µF	100VDC, Polarized
C29	0.047 µF	400V, High Quality
C30	22 µF	450VDC, Polarized
C31	22 µF	450VDC, Polarized
C32	100 µF	50VDC, Polarized
C33	0.1 µF	50VDC, Polarized

*may need (2) caps in parallel to get this value

** substitute 430pF for "concert" tuning

Jacks		
J1	1/4" (6.35mm)	Phone Jack, Mono
J2	1/4" (6.35mm)	Phone Jack, Stereo
J3	1/4" (6.35mm)	Phone Jack, Mono

Data provided by:

Mark Keppinger Steven Hasten Howard Mossman Vincent Renauld Philip Neidlinger

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Component	Value	Specifications
Resistors		
R31	100 Ω	
R32	100 Ω	
VR1	5K Ω	1 WATT Potentiometer, Linear Taper
VR2	500K Ω	1 WATT Potentiometer, Audio Taper
Transformers		
T1	1608	Hammond Audio (Output) Transformer
T2	270EX	Hammond Power Transformer
Inductors		
L3	4.7 mH	Iron Core
L7	12 H	Choke (DC Filter), Iron Core Hammond 193B
Miscellaneous		
Tube Socket		(8) Octal
Fuse Holder		
Power Switch		SPST, rated for line voltage
Connectors		Male/Female, Hex or Octal
Terminal Strip		
Fuse		3A

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Air Coils							
L1	Volume Oscillator Coil	Wire	Windings	Turns	Winding Length	Form Diameter	Form Length
		#28 Enamel	1	150	2.20" (55.9mm)	1.60" (40.64mm)	3.30" (84mm)
	Notes:	Coil is close v	wound. Coi	l is tapp	ed at 50 turns. (see	schematic)	
L2	Volume Antenna Coil	Wire	Windinas	Turns	Winding Length	Form Diameter	Form Length
		#32 Enamel	1	600	5.65" (143.51mm)	3.10" (78.74mm)	10.25" (260.4mm)
						revised 01/18/10	(
	Notes:	Coil is close	wound.				
		1	1			I	
L4, L5	Pitch Oscillator Coil	Wire	Windings	Turns	Winding Length	Form Diameter	Form Length
		#28 Enamel	1	150	2.20" (55.9mm)	2.25" (57.15mm)	3.30" (84mm)
	Notes:	Notes: Coil is close wound. Coil is tapped at 50 turns. (see schematic)					
L6	Pitch Antenna Coil	Wire	Windings	Turns	Winding Length	Form Diameter	Form Length
		#32 Enamel	1	1200	11.30" (287mm)	3.10" (78.74mm)	12.50" (317.5mm)
	Notes:	revised 01/18/10 Coil is close wound.					
	General Coil Notes:	Coil forms are resin-impregnated phenolic. Coil forms are painted black with Krylon® spray paint. CAUTION: other types / brands of paint may be conductive/inductive! Use ONLY brass hardware to mount oscillator coils.					

Revision 2Form Diameter of coils L2 and L6 were 3.30"Revision 3Added R31 and R32 to list

Note: There is no information on page 4. There is no page 4.

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