

MAGIC SMOKE ELECTRONICS

TH-201-03								
8/21/2007								
#	Designators	Description	Package	Source	Source #	Q'ty	Section	Comments
1	C1a, b, c	Cap, polyester, 0.22uF, 50WV	radial 5.0mm	Mouser	581-BQ014D0224J	3	VCF Core	input DC coupling
2	C2, 5, 8, 11, 14, 15	Cap, ceramic, 10pF	radial 5.0mm	Mouser	140-50N5-100J-RC	6	VCF Core	HF feedback suppress
3	C3, 6, 9, 12	Cap, polystyrene, 560pF	radial 5.0mm	Mouser	23PS156	4	VCF Core	Freq set. Polystyrene
4	C4, 7, 10, 13	Cap, polystyrene, 330pF	radial 5.0mm	Mouser	23PS133	4	VCF Core	Freq set. Polystyrene.
5	C15	Cap, 22pF	radial 5.0mm	Mouser		0	CV Sum	optional, can use 10pF
6	C16, 17	Cap, Electrolytic, 10uF, 35VDC	radial 2.0mm	Mouser	140-HTRL35V10-RC	2	DC IN	power filtering
7	C18 - 27	Cap, ceramic, 0.01uF	radial 5.0mm	Mouser	140-50Z5-103M-RC	10	VCF Core	power decoupling
8	D1	Diode, signal, 1N4148	DO-35	Mouser	1N4148-TR	1	CV Sum	Neg CV block
9	D2, 3	Diode, signal, 1N4001	DO-41	Mouser	512-1N4001	2	DC IN	Reverse polarity protection
10	IC2	SSM 2164 Quad VCA	16 DIP	AD	N/A	1	VCF Core	Purchase from Digi-Key or Analog Devices
11	IC1, 3	Op Amp, Quad, TL074BCN	14 DIP	Mouser	595-TL074BCN	2	VCF Core	Also for VCF Core
12	IC4, 5	Op Amp, Dual, TL072BCN	8 DIP	Mouser	595-TL072BCP	2	Sum	Audio and CV summers
13	R1a, b, c, 3, 7, 14, 22, 23, 29, 41, 47, 48	Res, 1/4W, 100K, 1%	radial .4"	Mouser	271-100K-RC	12		
14	R2	Res, 1/4W, 7.5K, 1%	radial .4"	Mouser	271-7.5K-RC	1		optional. Install for class A, leave off of AB
15	R4, 6, 11, 13, 19, 21, 26, 28	Res, 1/4W, 30K, 1%	radial .4"	Mouser	271-30K-RC	8		
16	R5, 12, 20, 27	Res, 1/4W, 510 Ohm, 1%	radial .4"	Mouser	271-510-RC	4		
17	R8	Res, 1/4W, 49.9K, 1%	radial .4"	Mouser	271-49.9K-RC	1		
18	R9, 10, 16, 17, 24, 25, 31, 32, 46	Res, 1/4W, 1K, 1%	radial .4"	Mouser	271-1K-RC	9		
19	R15	Res, 1/4W, 66.5K, 1%	radial .4"	Mouser	271-66.5K-RC	1		can substitute 68K
20	R44	Res, 1/4W, 2.7K, 1%	radial .4"	Mouser	271-2.7K-RC	1		
21	R18	Res, 1/4W, 2K, 1%	radial .4"	Mouser	271-2K-RC	1		
22	R30	Res, 1/4W, 137K, 1%	radial .4"	Mouser	271-137K-RC	1		
23	R42a, b, c	Res, 1/4W, 47K, 1%	radial .4"	Mouser	271-47K-RC	3		
24	R35	Res, 1/4W, 18K, 1%	radial .4"	Mouser	271-18K-RC	1		
25	R37	Res, 1/4W, 150K, 1%	radial .4"	Mouser	271-150K-RC	1		
26	R38, 42d	Res, 1/4W, 200K, 1%	radial .4"	Mouser	271-200K-RC	2		42d = 1V/Oct CV input
27	R39	Res, 1/4W, 3.3M, 5%	radial .4"	Mouser	291-3.3M-RC	1		
28	R45	Res, temco, 2K, +3500ppm/C	radial .4"			1	CV Sum	Temp compensation. Can substitute standard 2K 1% resistor
29	R1d, e, f, 34, 36, 40, 42e, f, g	Pot, Panel, 100K, Lin	12mm	Mouser	313-1210F-100K	9	Panel	Order 10 to get better price from Mouser
30	R33	Pot, Trim, 10K, multi-turn		Mouser	72-T93YB-10K	1	VCF Core	Oscillation trim, can use single turn trim, but setting is easier with multi
31	R43	Pot, Trim, 1K Ohm, multi-turn		Mouser	72-T93YB-1K	1	CV Sum	V/Oct Scale Trim
32	PT1, 2	PTC, 25V, 50Ohm, 60°C	radial .25"	Mouser	527-3006-25V50/60C	2	DC IN	power short circuit protection
33	J1 - J15	Jack, phone, 1/8"		Mouser	16PJ012	15	Panel	
34	S1 - 3	Switch, SPST		Mouser	108-0001-EVX	3	Panel	AC/DC coupling
35		Main PCB		MSE	TH-201-02	1		
36		Front Panel		MSE		1	Panel	
37		IC Socket, machine pin, 8 pin		Mouser	535-08-3518-10	2		optional
38		IC Socket, machine pin, 14 pin		Mouser	535-14-3518-10	2		optional
39		IC Socket, machine pin, 16 pin		Mouser	535-16-3518-10	1		optional
40		PCB Male conn, .100, friction lock, 2 pin		Mouser	571-6404562	17		PCB Mount connectors
41		PCB Male conn, .100, friction lock, 3 pin		Mouser	571-6404563	11		PCB Mount connectors
42	CN1	PCB Male conn, .100, friction lock, 6 pin		Mouser	571-6404566	1		DC input (Dot Com style) Can use .156" 4 pin MTA (Blacet/MOTM style) instead
43		Fem term housing, .100, w/tabs, 2 pin		Mouser	571-6445632	17		Panel component connector
44		Fem term housing, .100, w/tabs, 3 pin		Mouser	571-6445633	11		Panel component connector
45	CN1	Fem term housing, .100, w/tabs, 6 pin		Mouser	571-6445636	1		DC input (Dot Com style)