

Wogglebug BOM
PCB rev 3 for +/-12V systems

Qty	Reference(s)	Value	Notes
RESISTORS			
1	R1	820Ω	
1	R2	2.2kΩ	
8	R3, R4, R5, R6, R7, R8, R9, R10	100kΩ	
5	R11, R13, R14, R15, R16	10kΩ	
1	R12	8.2kΩ	
1	R17	10MΩ	
1	R18	120kΩ	
1	R19	15kΩ	
8	R20, R21, R22, R23, R24, R25, R26, R27	1kΩ	
3	R28, R29, R30	1MΩ	
2	R31, R32	20kΩ	
1	R33	220kΩ	
1	R34	4.7kΩ	
1	R35	470Ω	
5	R36, R37, R38, R39, R40	51kΩ	
1	R41	68kΩ	
2	R42, R43	dealer's choice	Raise ohms to taste
2	L1, L2	bead	Or 10 ohm resistor
CAPACITORS			
13	C2 to C14	100n	SMD 1206
1	C1	100n	
1	C15	10n	
2	C16, C17	10uf	Electrolytic, >25V
1	C18	1n	
2	C19, C20	1uf	Electrolytic, >25V
1	C21	2.2uf	Electrolytic, >25V
1	C22	3.3uf NP	Non-polarized electrolytic, >25V
2	C23, C24	47n	
POTS			
3	V1, V5, V6	B100KΩ	
3	V2, V3, V4	A1MΩ	
TRANSISTORS AND DIODES			
2	Q1, Q2	BC550	Or equivalent NPN
1	Q3	BC560	Or equivalent PNP
4	D1, D2, D3, D4	1N4148	
ICs			
2	U1, U2	CD4046	16 pin DIP
1	U3	LF398	8 pin DIP
1	U4	LM555	8 pin DIP
2	U5, U6	TL072	8 pin DIP
1	U7	TL074	14 pin DIP

JACKS AND CONNECTORS

1	J1	Clock in	input
1	J2	LFO out	output
1	J3	Rate CV	input
1	J4	Ring tone	output
1	J5	Smooth CV	output
1	J6	Stepped CV	output
1	J7	Smooth tone	output
1	J8	Woggle CV	input
1	J9	Woggle tone	output
1	P1	4 pin power	MTA 156

VACTROLS

1	VC1A+B	VTL5C3	Or roll your own
1	VC2A+B	VTL5C3/2	