

Item	Quantity	Reference	Part
1	2	C1,C2	22pf/200V KEMET C315C220J5G5TA
2	24	C3,C12,C13,C15,C16,C18,C20,C21,C22,C23,C24,C25,C26,C27,C28,C29,C30,C31,C32,C33,C34,C37,C39,C49	0.1uf/50V KEMET C315C104M5U5TA
3	9	C4,C41,C42,C43,C44,C45,C46,C47,C48	0.68uf/25V KEMET C315C684K5R5TA
4	3	C5,C6,C10	0.01uf/63V AVX BF014D0103J
5	1	C7	0.001uf/50V KEMET C320C102J5G5TA
6	5	C8,C35,C36,C38,C40	10uf/25V Cornell Dubilier SK100M025ST
7	1	C9	0.047uf/63V AVX BQ014D0473J
8	1	C11	0.0022uf/63V Vishay BFC237086333
9	1	C14	0.01uf/50V POLY XICON 23PS310 (Mouser)
10	1	C17	470pf/100V KEMET C315C471K1G5TA
11	1	C19	100pf/100V KEMET C315C101K1G5TA
12	22	D1,D2,D3,D4,D5,D6,D7,D8,D9,D14,D23,D24,D25,D26,D27,D28,D29,D30,D31,D32,D33,D34	Schottky diode Vishay BAT42-TR
13	12	D10,D11,D12,D13,D15,D16,D17,D18,D19,D20,D21,D22	1N4148 ON Semi. 1N4148
14	24	H1,H4,H6,H7,H9,H11,H13,H15,H18,H21,H22,H25,H26,H29,H30,H33,H34,H37,H38,H41,H42,H45,H46,H49	TE Connectivity AMP female 3-644540-8
15	24	H2,H3,H5,H8,H10,H12,H14,H16,H19,H20,H23,H24,H27,H28,H31,H32,H35,H36,H39,H40,H43,H44,H47,H48	TE Connectivity AMP male 640456-8
16	1	H17	TE Connectivity AMP MAT-156 640445-6
17	1	H50	ICD RJ 6 pins Amphenol ICC 90512-001LF
18	29	J1,J2,J3,J4,J5,J6,J7,J8,J9,J10,J11,J12,J13,J14,J15,J16,J17,J18,J19,J20,J21,J22,J23,J24,J25,J26,J27,J28,J29	SET IN,SET OUT,OSC OUT,CV IN,OSC ON,OSC OFF,EXT SHIFT,CV1 OUT,CV2 OUT,CV3 OUT Switchcraft 112AX 1/4" jacks (Synthcube SINGLPRTJCK2AXN)
19	10	LED1,LED2,LED3,LED4,LED5,LED6,LED7,LED8,LED9,LED10	5V Red LED Lumex SSL-LX5093ID-5V
20	2	L1,L2	FERRITE Laird-Signal Integrity Products 28L0138-80R-10
21	25	P1,P2,P3,P4,P5,P6,P7,P8,P9,P10,P11,P12,P13,P14,P15,P16,P17,P18,P19,P20,P21,P22,P23,P24,P25	10KB Alpha Pots (Available at www.smallbear.com item item: 1001 1157)
22	11	Q1,Q3,Q7,Q9,Q11,Q13,Q15,Q17,Q19,Q21,Q23	2N3904 Micro Commercial Co #2N3904-AP
23	10	Q2,Q6,Q8,Q10,Q12,Q14,Q16,Q18,Q20,Q22	2N3906 Micro Commercial Co #2N3906-AP
24	1	Q4	2N4856 InterFET 2N4856 (Mouser 106-2N4856)
25	1	Q5	2N3904 matched pair (hand made matched)
26	1	RES_PACK1	22K 5% Bourns 4609X-101-223LF
27	27	R1,R2,R3,R4,R7,R22,R24,R25,R27,R42,R43,R44,R48,R57,R58,R59,R61,R64,R96,R105,R114,R123,R132,R141,R150,R159,R166	10K 5% Yageo CFR-25JB-52-10K
28	14	R5,R26,R62,R81,R84,R93,R94,R103,R112,R121,R130,R139,R148,R157	1K0 5% Yageo CFR-25JB-52-1K
29	18	R6,R15,R37,R79,R80,R82,R83,R91,R92,R95,R104,R113,R122,R131,R140,R149,R158,R167	22K 5% Yageo CFR-25JB-52-22K
30	9	R8,R97,R106,R115,R124,R133,R142,R151,R160	560R 5% Yageo CFR-25JB-52-560R
31	9	R9,R98,R107,R116,R125,R134,R143,R152,R161	100R 5% Yageo CFR-25JB-52-100R
32	12	R10,R16,R19,R23,R99,R108,R117,R126,R135,R144,R153,R162	100K 5% Yageo CFR-25JB-52-100K
33	29	R11,R12,R13,R32,R36,R100,R101,R102,R109,R110,R111,R118,R119,R120,R127,R128,R129,R136,R137,R138,R145,R146,R147,R154,R155,R156,R163,R164,R165	100K 1% Yageo MFR-25F52-100K
34	2	R14,R66	10R 5% Yageo CFR-25JB-52-10R
35	3	R17,R18,R50	3K3 5% Yageo CFR-25JB-52-3K3
36	1	R20	1K1 5% Yageo CFR-25JB-52-1K1
37	1	R21	2K0 5% Yageo CFR-25JB-52-2K
38	1	R28	16K9 1% Yageo MFR-25F52-16K9
39	3	R69,R70,R86	25K5 1% Yageo MFR-25F52-25K5
40	1	R29	30K1 1% Yageo MFR-25F52-30K1
41	1	R30	69K8 1% Yageo MFR-25F52-69K8
42	1	R31	680R 5% Yageo CFR-25JB-52-680R
43	1	R33	150K 1% Yageo MFR-25F52-150K
44	1	R34	61K9 1% Yageo MFR-25F52-61K9
45	1	R35	44K2 1% Yageo MFR-25F52-44K2
46	1	R38	1K 3500ppm PT146-35 TEMP CO 1k +/-3500ppm/deg C. 1/4w (ELI MANIS INC.)
47	1	R39	15K 5% Yageo CFR-25JB-52-15K
48	1	R40	1M0 1% Yageo MFR-25F52-1M
49	11	R41,R49,R73,R74,R75,R76,R77,R78,R88,R89,R90	10K0 1% Yageo MFR-25F52-10K
50	1	R45	20K0 1% Yageo MFR-25F52-20K
51	1	R46	49K9 1% Yageo MFR-25F52-49K9
52	1	R47	2K2 5% Yageo CFR-25JB-52-2K2
53	5	R51,R52,R53,R54,R55	1K0 0.1% Vishay CMF551K0000BEEB
54	1	R56	390K 5% Yageo CFR-25JB-52-390K
55	1	R60	13K0 1% Yageo MFR-25F52-13K
56	1	R63	5K6 5% Yageo CFR-25JB-52-5K6
57	1	R65	5K23 1% Yageo MFR-25F52-5K23
58	3	R67,R68,R85	8K66 1% Yageo MFR-25F52-8K66
59	3	R71,R72,R87	59K0 1% Yageo MFR-25F52-59K

60	13	S1,S7,S8,S9,S10,S11,S13, S15,S17,S19,S21,S23,S25	12 POS ADJ ROTARY SWITCH Stomp Box Parts SKU:820-1P2-12T
61	9	S2,S12,S14,S16,S18,S20, S22,S24,S26	SET PUSH BUTTONS Switchcraft 101 SPST N.O. Red Pushbutton
62	2	S3,S6	OSC PUSH BUTTON OFF,PUSH SHIFT Switchcraft H203 SPDT Black Pushbutton (Marvac Electronics SKU: 97596)
63	1	S4	OSC PUSH BUTTON ON Switchcraft H103X SPDT Red Pushbutton (Mouser 502-H103X)
64	1	S5	3RD ROW DPDT MOOG ROCKER SWITCH BLACK
65	1	U1	PIC16F877 Microchip CPU
66	1	U2	74HC138 Texas SN74HC138N
67	5	U3,U4,U13,U14,U15	LF412 Texas LF412CP
68	1	U5	CA3140 Renesas CA3140AEZ
69	2	U6,U7	LM311 Texas LM311P
70	1	U8	TL072 Texas TL072IP
71	1	U9	REF02 Analog Devices REF02CPZ
72	1	U10	LM7812 Texas LM7812CT/NOPB
73	1	U11	74HC27 Texas SN74HC27N
74	1	U12	74HC02 Texas SN74HC02N
75	3	U16,U17,U18	74HC14 Texas SN74HC14N
76	1	VR1	20K 25T Bourns 3296W-1-203LF
77	1	VR2	25K 25T Bourns 3296W-1-253LF
78	1	VR3	1K 1T Bourns 3386P-1-102LF
79	1	Y1	20Mhz Low profile crystal ECS inc. ECS-200-20-4X

Hardware:

80	1	Aluminium 1/6" front panel (8U Moog style)
81	1	Silkscreened 5 mils thick Front panel PCB
82	6	Standoffs 4-40 1.5" high Keystone #1950 (Digikey 1950K-ND)
83	1	40 pins machined IC socket Mill-Max 110-44-640-41-001000
84	25	5/16" lock-washers Spaenaur #55-SN (pack of 100)
85	54	3/8" lock-washers Spaenaur #671-W12-1C (pack of 100)
86	92	Feet of hookup wire gauge#22
87	10	Red Front panel LED support lens. VCC #CLF_280_RTP
88	1	Cosmo 7602 round type 1.000" dia knobs www.smallbear.com SKU: 0808B BLK
89	24	Cosmo 7721 round type 0.812" dia knobs www.smallbear.com SKU: 0808E BLK
90	13	Cosmo 7607 pointer type 1.125" dia knobs www.smallbear.com SKU: 0808C