

Nov. 27th 2017
Version 1.8

Bill of Material
NorCal 40 a – grp-tech Build 2017

by DM5TU & K7QO

Pos.	Checked	Ref.	Description	P/N	Possible Source	Checked	QTY
1	OK	C4, C31, C37	CAP, DISC or MONO, 5pF, 5%, 50V	490-8706-ND	Digikey	OK	3
2	OK	C6, C14, C49	CAP, DISC or MONO, 47pF, 5%, 100V	490-9110-1-ND	Digikey	OK	3
3	OK	C49 alternativ	CAP, NP0 or C0G 47pF 5%, 100V	490-9110-1-ND	Digikey	OK	1
4	OK	C38	CAP, DISC or MONO, 100pF, 5%, 50V	490-8960-1-ND	Digikey	OK	1
5	OK	C32	CAP, DISC or MONO, 150pF 5%, 50V	490-8646-ND	Digikey	OK	1
6	OK	C9 - C13, C18, C35	CAP, DISC or MONO, 270pF, 5%, 50V	490-8672-ND	Digikey	OK	7
7	OK	C45, C47	CAP, DISC or MONO, 330pF, 5% 50V	490-8680-ND	Digikey	OK	2
8	OK	C46	CAP, DISC or MONO, 820pF, 5% 100V	490-9132-1-ND	Digikey	OK	1
9	OK	C5, C7, C19, C22, C48, C55	CAP, DISC or MONO, 0.01µF = 10nF, 5%, 50V	490-8634-ND	Digikey	OK	6
10	OK	C3, C8, C33, C36, C43, C44, C54, C57	CAP, DISC or MONO 0.047µF = 47nF, 10%, 100V	445-173397-1-ND	Digikey	OK	8
11	OK	Cz – Zobel filter (Add On)	CAP, DISC or MONO 0.1µF, 100nF, 10%, 100V	445-173396-1-ND	Digikey	OK	1
12	OK	C51	CAP, POLYSTYRENE, 390pF, 5%	390pF 5% 50 WV Polystyrene Caps	kitsandparts.com	OK	1
13	OK	C52, C53	CAP, POLYSTYRENE, 1200pF, 5%	1200pF 5% 50 WV Polystyrene Caps	kitsandparts.com	OK	2
14	OK	C20, C21, C28	CAP, MYLAR or MONO, 0.1µF, 100nF	495-5055-1-ND	Digikey	OK	3
15	OK	C15, C23, C30	CAP, ELEC, 2.2µF, 50V	P15834CT-ND	Digikey	OK	3
16	OK	C26, C29, C42, C56	CAP, ELEC, 10µF, 50V	P19590CT-ND	Digikey	OK	4
17	OK	C27, C41	CAP, ELEC, 100µF, 50V	P19608CT-ND	Digikey	OK	2
18	OK	C50	CAP, VAR, 2-24pF, AIR		tbd		1
19	OK	C1, C2, C17, C34, C39	CAP, VAR, 8-50pF (may be MuRata cap 9-60pF)		tbd		5
20	OK	D1, D2, D3, D4, D9, D11	DIODE, SWITCHING 1N914 or 1N4148	1N914FS-ND	Digikey	OK	6
21	OK	D12	DIODE, ZENER, 1N4755A 43V 1W	1N4755A-ND	Digikey	OK	1
22	OK	D5 – D7, D10	DIODE, SCHOTTKY, 1N5817	1N5817-TPCT-ND	Digikey	OK	4
23	OK	D8	DIODE, VARACTOR, MVAM109	MVAM109 Varactor Diode	kitsandparts.com	OK	1
24	OK	U3	IC, AF AMP, LM386N	LM-386N-4 Audio Amps	Kitsandparts.com	OK	1
25	OK	U6	IC, COMPARATOR, LM393N	LM393NFS-ND	Digikey	OK	1
26	OK	U1, U2, U4	IC, MIXER/OSC NE602N	NE602AN Mixer	Kitsandparts.com	OK	3
27	OK	U5	IC, VOLTAGE REG,N78L08, 8V, TO-92	497-10099-1-ND	Digikey	OK	1
28	OK	L1	IND, CHOKE, 15µH	M8183-ND	Digikey	OK	1
29	OK	L4, L5, RFC1	IND, CHOKE, 18µH	M8184-ND	Digikey	OK	3
30	OK	RFC2	IND, CHOKE, 1mH	M8205-ND	Digikey	OK	1
31	OK	L6	IND, TOROID, 28turns 2,5 uH #28 T-37-2	T37-2 powdered iron toroid	kitsandparts.com	OK	1
32	OK	L7, L8	IND, TOROID, 18 turns 1,3uH #26 T-37-2	T37-2 powdered iron toroid	kitsandparts.com	OK	2
33	OK	L9	IND, TOROID, 60 turns 21uH #28 T-68-7	T68-7 powdered iron toroid	kitsandparts.com	OK	1
34	OK	T1	IND, TOROID, 14 turns PRI, 4 turns SEC, #26, FT-37-43	FT 37-43 ferrite toroid	kitsandparts.com	OK	1
35	OK	T2	IND, TOROID, 20 turns SEC, 1 turn PRI, #26, FT-37-61	FT37-61 ferrite toroid	kitsandparts.com	OK	1
36	OK	T3	IND, TOROID, 23 turns PRI, 6 turns SEC, #26, FT-37-61	FT37-61 ferrite toroid	kitsandparts.com	OK	1
37	OK	J3, J4	JACK, 3.5mm Stereo		Junkbox		2
38	OK	J1	JACK, BNC		Junkbox		1

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39	OK	J2	JACK, RCA		Junkbox		1
40	OK	Rz – Zobel filter (Add On)	RES 10R, 1/4W, 5%	CF14JT10R0CT-ND	Digikey	OK	1
41	OK	R12	RES, 20R, 1/4W, 5%	20QBK-ND	Digikey	OK	1
42	OK	R14, R25	RES, 100R, 1/4W, 5%	CF14JT100RCT-ND	Digikey	OK	1
43	OK	R10, R11, R15	RES, 510R, 1/4W, 5%	510QBK-ND	Digikey	OK	3
44	OK	R7, R9, R19, R21	RES, 47K, 1/4W, 5%	CF14JT47K0CT-ND	Digikey	OK	4
45	OK	R4	RES, 8M2, 1/4W, 5%	CF14JT8M20CT-ND	Digikey	OK	1
46	OK	R4 Alternativ	RES 15M, 1/4W, 5%	RNV14FAL15M0CT-ND	Digikey	OK	1
47	OK	R8, R13	RES, Trimmer, 500R	CT6EP501-ND	Digikey	OK	2
48	OK	R2, R16	RES, POT, 1K – Front panel	987-1309-ND	Digikey	OK	2
49	OK	R6	RES, Trimmer, 10k	CT6EP103-ND	Digikey	OK	1
50	OK	R17	RES, POT, 10k – Front panel	987-1308-ND	Digikey	OK	1
51	OK	R17a (extra for better tuning)	RES, POT, 10k, 10 Turns – Front panel	3590S-2-103L-ND	Digikey	OK	1
52	OK	R18	RES 1K, 1/4W, 5%	CF14JT1K00CT-ND	Digikey	OK	1
53	OK	R1, R22, R23	RES 1k8, 1/4W, 5%	CF14JT1K80CT-ND	Digikey	OK	3
54	OK	R20	RES 4k7, 1/4W, 5%	CF14JT4K70CT-ND	Digikey	OK	1
55	OK	R3, R24	RES 150k, 1/4W, 5%	CF14JT150KCT-ND	Digikey	OK	2
56	OK	R5	8-PIN Network SIP 2.2M		tbd		1
57	OK	R5a	4 x 2.2M 1/4W matched resistors vertically mounted	CF14JT2M20CT-ND	Digikey	OK	4
58	OK	S1, S2	SWITCH, SPDT, PC-MT, Right Angle		Junkbox		2
59	OK	Q1	TRANS, 2N4124 or 2N3904, NPN transistor	2N4124-ND	Digikey	OK	1
60	OK	Q6	TRANS, 2N2222A plastic TO-92, not metal wid diff. Pin out	PN2222A NPN HF Amp	kitsandparts.com	OK	1
61	OK	Q7	TRANS, 2SC799 (MRF607,MRF237, 2N3553, D882 or 2N3866)	2N3866 RF Amp	kitsandparts.com	OK	1
62	OK	Q2, Q3, Q5, Q8	TRANS, J310	J310 FET RF Osc/Amp	kitsandparts.com	OK	4
63	OK	Q4	TRANS, 2N3906, TO-92	2N3906CS-ND	Digikey	OK	1
64	OK	X1-6	XTAL, 4.915Mhz, HC-49. MATCHED, +/- 20Hz		tbd		6

When checking your parts, use a highlighter pen to mark the OK in the check columns when you got them

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Revision:

Ver.1.7 Pos. 40 RZ - DigiKey part number changed

Ver.1.8 Pos. 45 R6 - 4M7 deleted