

<i>Power supply</i>	<i>value</i>	<i>BAG LOCATION C/R</i>
C1,3,5,7,9,11	0.1 uF	PSB 2/3
L1,3,4	47 uH	PSB 1/1
D2,3	SS14 DIODE	PSB 2/1
C2,4,6,8,10	100uF 25V	PSB 1/3
U1	AANY	PSB 2/2
T1 - 2 ½ feet, #32	24T – CT - 27T	PSB 2/1
D1	1N4001 LEADED	LOOSE PARTS BAG

Notes: Rev A parts list, correcting typos

Sorry about putting this note after the power supply parts list, but I initial put it at the top of the page and can't move it now!

To insure you have located the proper parts listed in the bag location column of the table, its a good idea to print out the bag layout diagrams from the NC2030 manual to check against. Some bags have an "extra" blank row at the top which can be confusing as to which row is called for. In particular, the bag with most of the pfd value caps and the SOT-23 packages.

You can pretty much build up the board using only this table. However, you should look over the assembly instructions carefully to get an idea where each section is located on the board and look for any assembly cautions.

Often, you will only use a few parts from a particular bag location. To keep parts from getting mixed up, remove the parts by making a slit in the bag and replacing the remaining parts when your done.

SOT-23 packaged devices have a short code printed on them for identification. I have added these codes to the parts list like this: (code) This well help reassure you that you have the correct part.

At the end of most sections, there is a section test to see if that section is working. Thats not a bad idea, but can make building the board a little harder,as some of the early sections have you connecting pots and switches, which can get in the way and the connections eventually break moving the wires around.

I opted to build everything first, test later. For the most part, this worked out, but finding a few of my assembly errors, like finding an IC soldered in up side down, was a bit of trouble, since I knew something was dragging down a supply, but what?

If you have a laptop which you can keep near you on the bench as you build to refer to, thats a big help. I had to cross the room to look at my PC.

Good luck and have fun building this rig. I hope you find this parts list table helpful.

72,Steve KD1JV

MAIN BOARD TEMP		
D1	SL44	BAG 8 1/4
C4,5,6,135	0.1 uF	BAG 1 1/2
C136	100 uF	

LDO REGULATORS		BAG LOCATION C/R
U2,3 (LP2985-2.9)	(LAXB)	BAG 7 2/4
C9,10	.01 uF	BAG 1 1/1
C11,12	2.2 uF	BAG 5 1/4
C2,3	22 uF/16V	BAG 1 1/2
U11 (LP2985-2.9)	(LAXB)	BAG 7 2/4
U1,10 (LP2985-5)	(LOUB)	BAG 6 1/2
C7,99,101	.01 uF	BAG 1 1/1
C8,100,102	2.2 uF	BAG 5 1/4
C96,97	22 uF/16V	BAG 1 1/2
C1	22 uF 25V	BAG 6 2/3

AUDIO		
U14	TLV2464	BAG 7 2/5
U12 (P25S)	SN74CBTD1G125DVB	BAG 8 2/3
D8 (WV4)	BAT54S	BAG 8 1/5
D9 (KA2)	MMBD4148	BAG 7 1/6
R65,66,78,81,84	1 K (102)	BAG 2 1/5
R76	2.7 K (272)	BAG 4 1/1
R67,74	10 K (103)	BAG 8 1/6
R73	18 K (183)	BAG 3 2/4
R68,69,70	47 K (473)	BAG 2 2/5
R79	75 K (753)	BAG 3 1/2
R85	1 MEG (105)	BAG 3 1/4
R75,80	NOT USED	
C106,109,110,111,112, C118	.1 uF	BAG 1 1/2
C103,104,113,114,117	22 uF	BAG 1 1/2
C95,98,107	100 uF	

SCAF		
R72	1 K (102)	BAG 2 1/5

SCAF		
R71,86	10 K (103)	BAG 8 1/6
R82	47 K (473)	BAG 2 2/5
C119	47 p	BAG 5 1/6
C105,108,115,116,120	.1 uF	BAG 1 1/2
D10	MVAN109	BAG 4 1/4
U13	MAX7427CPA	BAG 9 2/2 (DIP-8)

CW KEYER		
R102	270 (271)	BAG 2 2/2
R87,89	1K (102)	BAG 2 1/5
R91,92	2.2K (222)	BAG 2 1/1
R90	10K (103)	BAG 8 1/6
R93	50K TRIMMER	BAG 5 2/3
C125,130,131,132	.01 uF	BAG 1 1/1
C126,127,129	.1 uF	BAG 1 1/2
IC2	12F629	DIP8

AFA		
U15	74ACT00	BAG 8 1/3
R94	1K (102)	BAG 2 1/5
Q18 (R22)	FJV3102R	BAG 7 2/3
C121,122	33 p	BAG 5 1/5
C123,124,128	.1uF	BAG 1 1/2
X2	4 MHZ CRYSTAL	BAG 8 2/5
IC1	12C508	DIP8

VXO T/R OFFSET		
U8	74HC4051	BAG 8 1/1
R46	47 K (473)	BAG 2 2/5
R51	100 K (104)	BAG 3 1/1
R47	1 MEG (105)	BAG 3 1/4
R53	50K TRIMMER	BAG 5 2/3
D2,3	DL4007	BAG 7 2/2
D4 (KA2)	MMBD4148	BAG 7 1/6
Q2 (GH)	MMBF5486	BAG 7 1/4
C63,65	47 p	BAG 5 1/6

VXO T/R OFFSET		
C50,51,66,C67	0.1uF	BAG 1 1/2
C62	1000 p	BAG 1 2/1
L8	47 uH	BAG 2 1/2
20 METERS PARTS		
R55	JUMPER	
C54	5 p	BAG 9 2/5
L5	10 uH	BAG 9 2/4
X1	11.059 MHz	BAG 9 1/2
30 METER PARTS		
R55	10 K (103)	BAG 8 1/6
C54	7.5 p	BAG 5 2/2
L5	6.8 uH	BAG 9 2/3
X1	13.07 MHz	BAG 9 2/5

AFA RF BUFFER		AND PHASE SPLITTER	
U9		74AHC00D	BAG 9 2/1
R56		390 (391)	BAG 4 2/1
R57		15 K (153)	BAG 2 1/3
R60		150 K (154)	BAG 3 2/1
D5,6	(KA2)	MMBD4148	BAG 7 1/6
Q8	(SA)	BS123	BAG 7 1/5
C69,71,72,94		.1uF	BAG 1 1/2
C70		1000 p	BAG 1 2/1
C80		30p trimmer (missing)	BAG 5 1/1
20m PARTS			
C78		27p below and right of L10	BAG 6 2/8
C79		Not used	
L10		4.7 uH	BAG 9 1/3
30M parts			
C78		39 p	BAG 6 2/2
C79		15 p	BAG 6 1/4
L10		6.8 uH	BAG 9 2/3

LO MIXER and PTO			
R62		390 (391)	BAG 4 2/1
R63		OPTIONAL	

LO MIXER and PTO		
R54,61	15 K (153)	BAG 2 1/3
R59	22 K (223)	BAG 3 2/3
R58	47 K (473)	BAG 2 2/5
R64	1 MEG (105)	BAG 3 1/4
D7 (KA2)	MMBD4148	BAG 7 1/6
Q7 (GH)	MMBF5486	BAG 7 1/4
Q4,5,6 (1P)	MMBTT2222	BAG 7 2/6
C81	5 p	BAG 5 2/5
C89	27 p	BAG 6 2/8
C91,92	100 p AVX	BAG 6 1/6
C74	470 p	BAG 5 1/3
C85,86	470 p AVX	BAG 5 1/3
C84,88	1000 p NPO	BAG 1 2/1
C68,75,82	.1 uF	BAG 1 1/2
C73/83/87/93	NOT USED	
L9	1.5 uH	BAG 9 1/4
L11,12	100 uH (101)	BAG 9 1/5
C90	100 p NPO DISK	IN LOOSE PARTS BAG
20 METER		
C52	5 p	BAG 5 2/5
C76	68 p	BAG 6 2/1
C77	NOT USED	
30 METER		
C52	7.5 p	BAG 5 2/2
C76	150 p	BAG 6 2/7
C77	NOT USED	

MAKE PTO COIL

LO FILTER / LO AMP		
R49	270 (271)	BAG 2 2/2
R50	OPTIONAL	
R44,48	10K (103)	BAG 8 1/6
R45	47K (473)	BAG 2 2/5
Q1 (1P)	MMBT2222	BAG 7 2/6
Q3 (GH)	MMBF5486	BAG 7 1/4

LO FILTER / LO AMP		
C55,56,61	.1 uF	BAG 1 1/2
L4	47 uH	BAG 2 1/2
C58,60	50 p TRIMMER	BAG 5 1/1
20 METERS		
C53	5 p	BAG 5 2/5
C59	150 p	BAG 6 2/7
C57	120 p	BAG 6 2/6
C64	.1 uF	BAG 1 1/2
L6,7	15T #26 T37-6 10"	BAG 9 1/6
30 METERS		
C53	7.5 p	BAG 5 2/2
C57,59	180 p	BAG 5 2/6
L6,7	19T #26, T37-6 11"	BAG 9 1/6

QUAD DET / F.E. FILTER		
U6	74CBTLV3253	BAG 7 1/1
R1,2	10K (103)	BAG 8 1/6
R26,27	NOT USED	
C13,15	0.1 uF	BAG 1 1/2
C22,27,29,32	0.82 uF	BAG 5 1/2
C33	NOT USED	
C14	22 uF	BAG 1 1/2
L1	100 uH (101)	BAG 9 1/5
C23,25	50p TRIMMER	BAG 5 1/1
20 METERS		
C20	5 p	BAG 5 2/5
C21	33 p	BAG 5 1/5
C24	120 p	BAG 6 2/6
C26	100 p	BAG 6 1/8
L2	15T T37-6 10"	BAG 9 1/6
T1	15T T37-6, 2T 10" #26, 4" #30	BAG 9 1/6
30 METERS		
C20	7.5 p	BAG 5 2/2
C21	47 p	BAG 5 1/6
C24	180 p	BAG 5 2/6

QUAD DET / F.E. FILTER		
C26	150 p	BAG 6 2/7
L2	18T (10")	
T1	19T/2T (5T pri works better)	

AUDIO PREAMP	AUDIO PHASING	
U4	LT6231	BAG 8 2/2
U5	TLV2464	BAG 7 2/5
R3,6,13,18	100 (101)	BAG 2 2/4
R14,R17	2 K (202)	BAG 2 1/4
R9,10,11,12,22,23,24,25	3.3 K (332)	BAG 8 2/6
R5	4.3 K (432)	BAG 4 1/3
R4	5.1K (512)	BAG 4 2/3
R7,19	7.5 K (752)	BAG 3 1/3
R20,21	10 K (102)	BAG 8 1/6
C28,30,34	0.01 u	BAG 1 1/1
C17	0.047 u	BAG 6 1/5
C19,31	0.1 u	BAG 1 1/2
C18	0.47 u	BAG 6 2/5
C16	100 uF 25V	
R8	5K TRIMMER	BAG 5 2/1
R15,16	50k TRIMMER	BAG 5 2/3

MAIN AUDIO FILTER		
U7	TLV2464	BAG 7 2/5
R29	1 K (102)	BAG 2 1/5
R30,32,37	1.5 K (152)	BAG 2 2/1 R30/37 ADJACENT
R33	1.8 K (182)	BAG 3 2/2
R31,34,36	2 K (202)	BAG 2 1/4
R35	2.2 K (222)	BAG 2 1/1
R38,R39,R40,41,42,43	3.3 K (332)	BAG 8 2/6
C39,45,46	0.1 u	BAG 1 1/2
C42,43,44	0.15 u	BAG 7 1/2
C38,40,41	0.22 u	BAG 6 1/7
C47,48,49	22 uF	BAG 1 1/2

Note: location of R98/R97/C143 can be confusing

TRANSMITTER			
U16		TS912	BAG 7 2/1
R107,108,109,110		1 OHM (1R0)	BAG 2 2/3
R111		1 K (102)	BAG 2 1/4
R98		7.5 K (752)	BAG 3 1/3
R100,101,104		10 K (103)	BAG 8 1/6
R105		15 K (153)	BAG 3 1/2
R97		18 K (183)	BAG 3 2/4
R95,106		22 K (223)	BAG 3 2/3
R112		39 K (393)	BAG 4 2/4
R96,99		47 K (473)	BAG 2 2/5
R103		75 K (753)	BAG 3 1/2
Q9,10,12	(SA)	BS123	BAG 7 1/5
Q11,15	(R22)	FJV3102R	BAG 7 2/3
Q17	(335)	FDN335	BAG 8 2/4
D11,12,13,13	(KA2)	MMBD4148	BAG 7 1/6
C143		5 p	BAG 5 2/5
C153		22 p	BAG 6 1/3
C134,155,157		1000 p	BAG 1 2/1
C158		0.01 uF	BAG 1 1/1
C133,154,156,159,160		0.1 uF	BAG 1 1/2
L19 (mounting confusing)		FT37-43 3T/7T #24	BAG 9 2/6
20 METERS			
C146,152		33 p	BAG 5 1/5
C140		47 p	BAG 5 1/6
C145,151		100 p	BAG 6 1/8
C141		180 p	BAG 5 2/6
C144,147,149		330 p	BAG 5 2/4
L15		13T 8" #24	BAG 9 1/6
L16		14T	BAG 9 1/6
L17		13T	BAG 9 1/6
L18		11T	BAG 9 1/6
30 METERS			
C140		47 p	BAG 5 1/6
C145,151		180 p	BAG 5 2/6
C141		330 p	BAG 5 2/4

TRANSMITTER		
C144,147,149	470 p	BAG 5 1/3
L15	16T	
L16	18T	
L17	17T	
L18	13T	
Q13,14,16	BS170	BAG 7 1/3

AFTER TRANSMITTER TESTS,
L14 FT37-43 10T #24 8"

