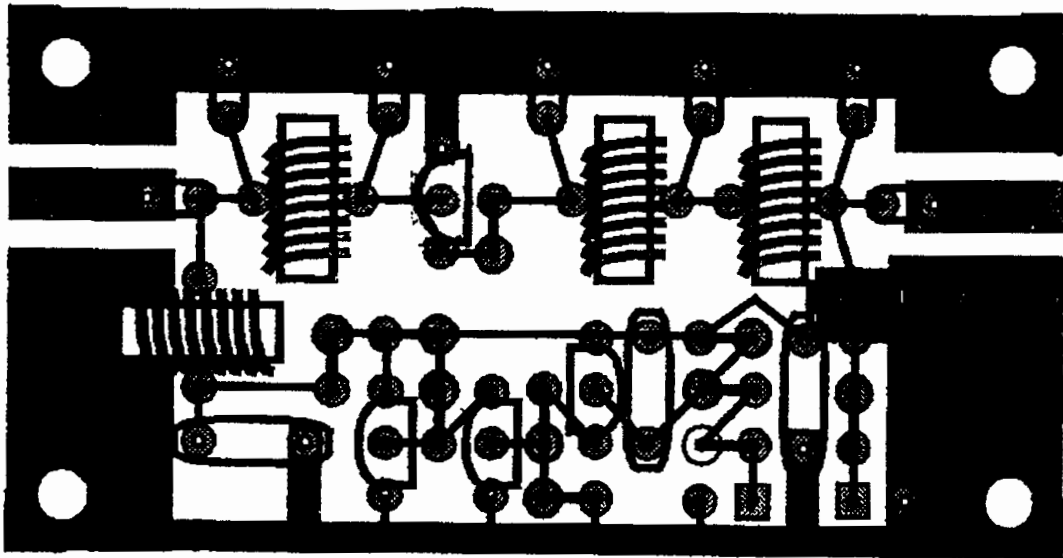
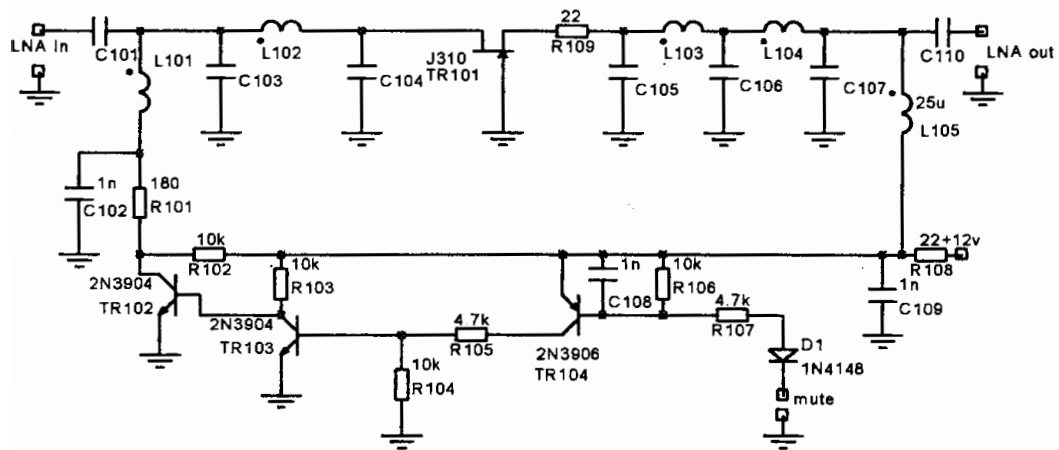
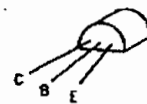


R2Pro - LNA

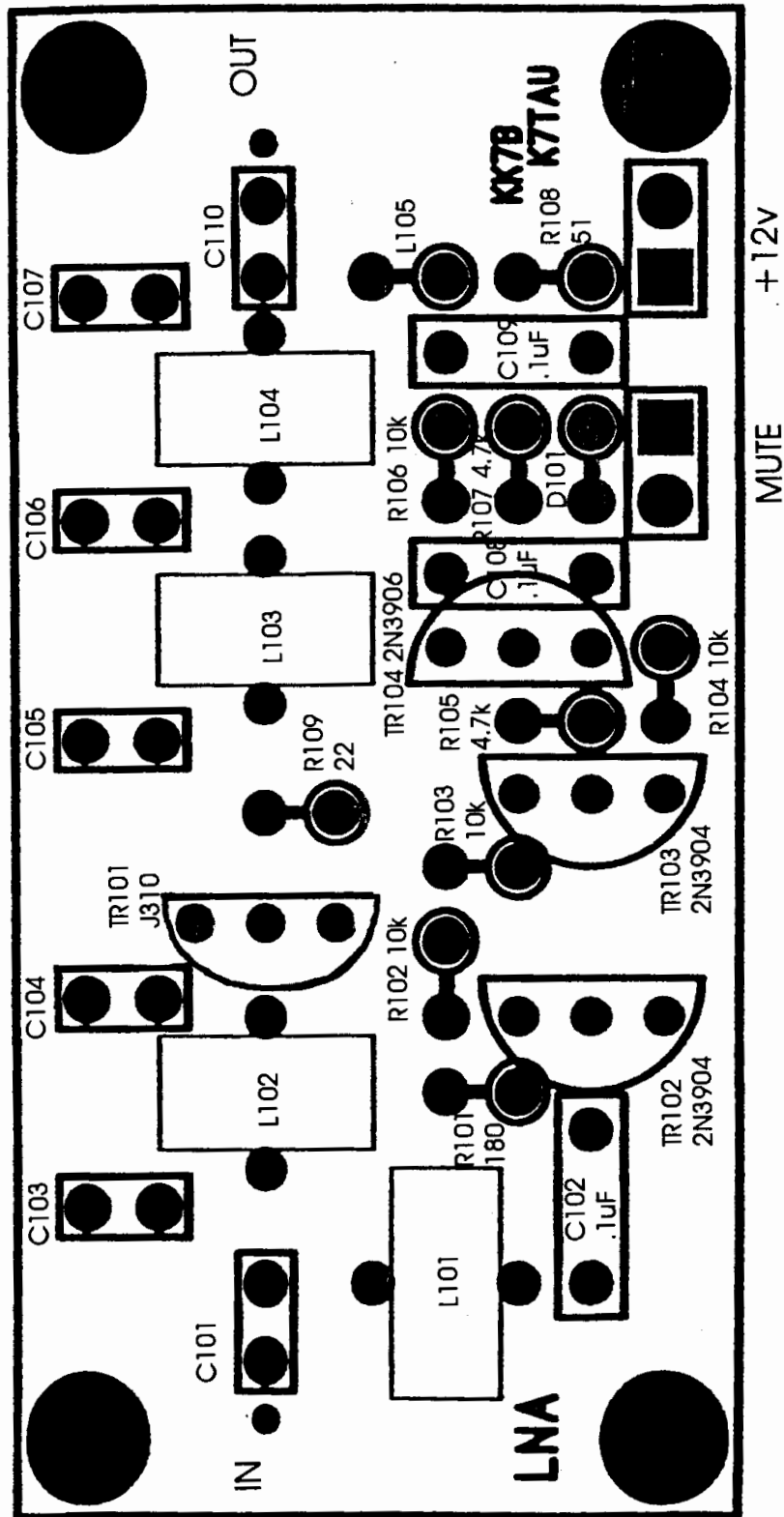


J310



2N3904 / 2N3906

LNA Parts Designators



LNA Parts List

Designator	Value	
R101	180	
R102	10K	
R103	10K	
R104	10K	
R105	4.7K	
R106	10K	
R107	4.7K	
R108	51	
R109	22	
C101	See Band Pack Table	
C102	.1 u	
C103	See Band Pack Table	
C104	See Band Pack Table	
C105	See Band Pack Table	
C106	See Band Pack Table	
C107	See Band Pack Table	
C108	.1 u	
C109	.1 u	
C110	See Band Pack Table	
TR101	J310	
TR102	2N3904	
TR103	2N3904	
TR104	2N3906	
D101	1N4148 or equiv	
L101	See Band Pack Table	
L102	See Band Pack Table	
L103	See Band Pack Table	
L104	See Band Pack Table	
L105	12T FT37-43 (50 uh)	

LNA L/C values

3 – 4 MHz values

Part	Pf
C101	820
C103	1800
C104	820
C105	100
C106	680
C107	470
C110	2200

Part	uh	Core	turns	Wire size
L101	1.3	T37-2	17	26
L102	4.0	T37-2	31	30
L103	20	T50-2	62	30
L104	3.8	T37-2	29	30

6 - 8 MHz values

Part	Pf
C101	470
C103	820
C104	470
C105	56
C106	390
C107	220
C110	1000

Part	uh	Core	turns	Wire size
L101	.68	T37-6	14	22
L102	2.0	T37-6	25	28
L103	10	T50-2	42	30
L104	1.9	T37-6	24	26

9 - 11 MHz values

Part	pf
C101	330
C103	680
C104	330
C105	39
C106	270
C107	180
C110	1000

Part	uh	Core	turns	Wire size
L101	.45	T37-6	11	22
L102	1.5	T37-6	21	26
L103	6.8	T50-6	41	26
L104	1.4	T37-6	20	26

13 – 15 MHz values

Part	pf
C101	220
C103	470
C104	220
C105	27
C106	180
C107	120
C110	1000

Part	uh	Core	turns	Wire size
L101	.33	T37-6	9	22
L102	1.0	T37-6	17	26
L103	4.7	T50-6	32	26
L104	1.0	T37-6	17	22

18 - 22 MHz values

Part	pf
C101	180
C103	270
C104	120
C105	18
C106	120
C107	100
C110	1000

Part	uh	Core	turns	Wire size
L101	.24	T37-6	8	22
L102	.76	T37-6	15	22
L103	3.5	T37-6	33	28
L104	.76	T37-6	15	22

24 - 30 MHz values

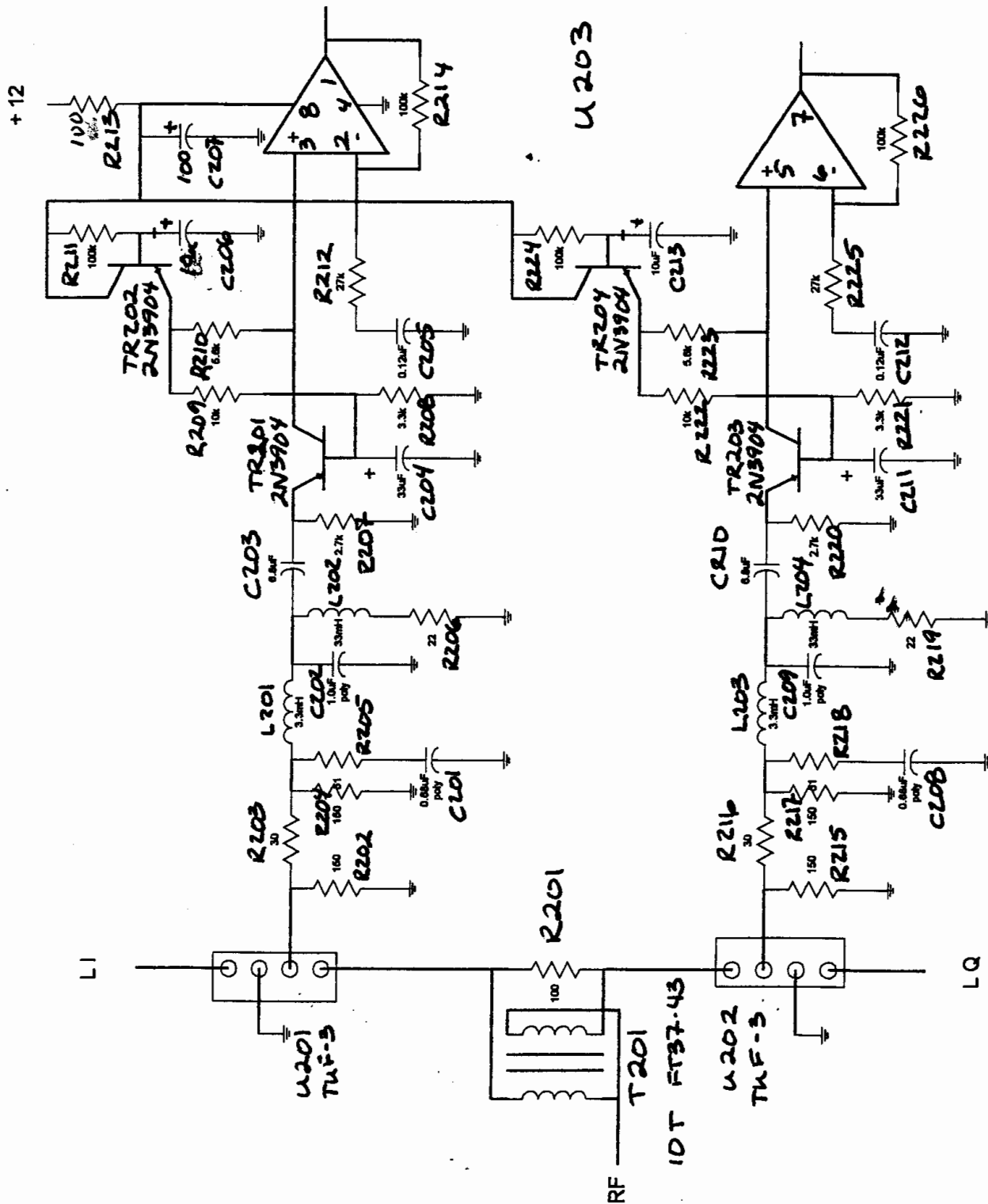
Part	pf
C101	150
C103	220
C104	100
C105	12
C106	82
C107	56
C110	680

Part	uh	Core	turns	Wire size
L101	.16	T37-6	6	22
L102	.56	T37-6	12	22
L103	2.7	T37-6	28	28
L104	.54	T37-6	12	22

6 Meter values

Part	Pf
C101	68
C103	120
C104	56
C105	2.2
C106	47
C107	33
C110	180

Part	Uh	Core	turns	Wire size
L101	.08	T30-12	5	26
L102	.25	T30-12	10	26
L103	1.1	T30-12	26	30
L104	.25	T30-12	11	26



Down converter / Front end

3/29/01 Copyright R. Campbell



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Down Converter / Front End Parts List

All resistors (except chip) are ¼ watt 1 %

Poly caps are matched to 1% extreme spread

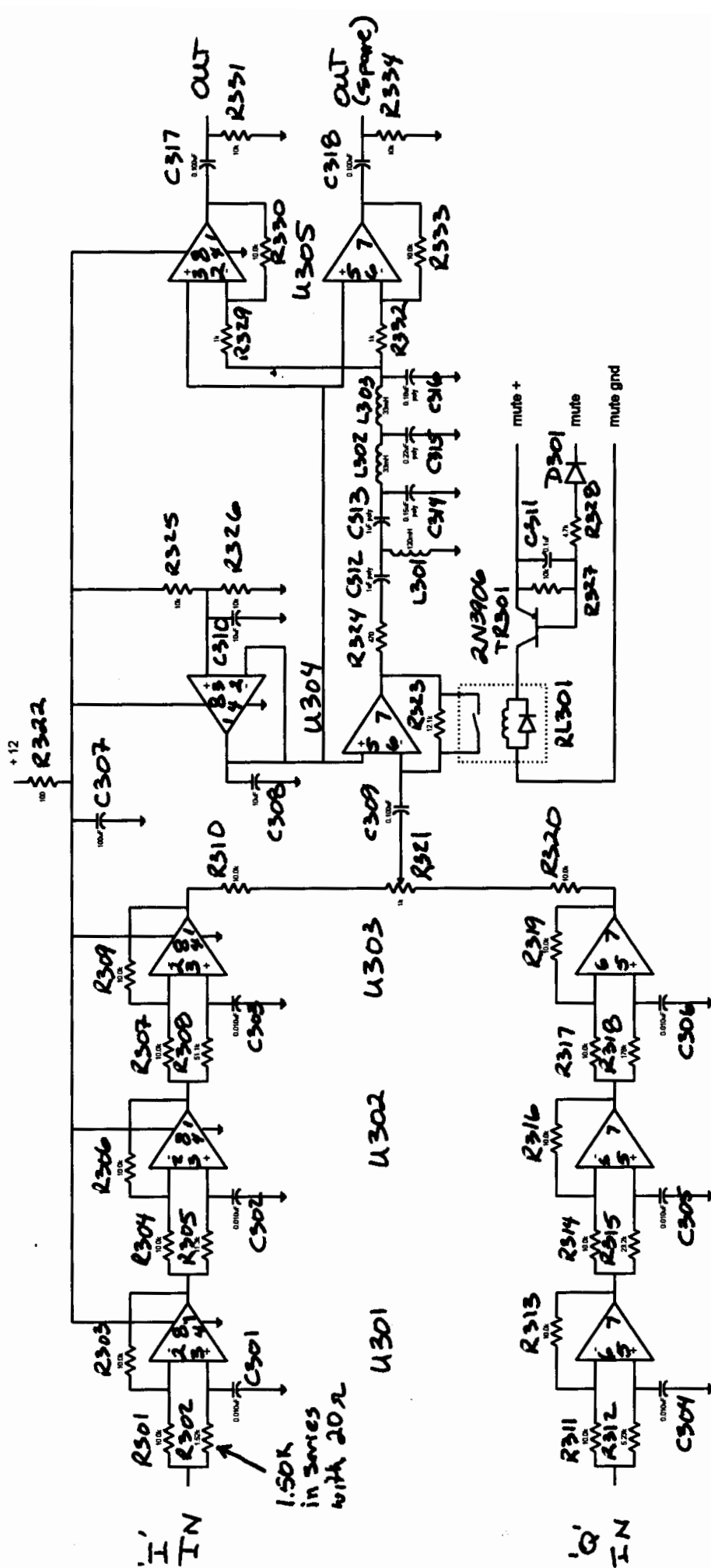
Designator	Value	
R201	100 chip	
R202	150	
R203	30.1	
R204	150	
R205	51.1	
R206	22.1	
R207	2.74k	
R208	3.32k	
R209	10.0k	
R210	5.62k	
R211	100k	
R212	27.4k	
R213	100	
R214	100k	
R215	150	
R216	30.1	
R217	150	
R218	51.1	
R219	22.1	
R220	2.74k	
R221	3.32k	
R222	10.0k	
R223	5.62k	
R224	100k	
R225	27.4k	
R226	100k	
C201	0.68 uF poly	
C202	1.0 uF poly	
C203	6.8 uF poly	
C204	33 uF	
C205	0.12 uF poly	
C206	10 uF	
C207	100 uF	
C208	0.68 uF poly	
C209	1.0 uF poly	
C210	6.8 uF poly	
C211	33 uF	

C212	0.12 uF poly	
C213	10 uF	
L201	3.3 mH	
L202	33 mH	
L203	3.3 mH	
L204	33 mH	
U201	TUF-3	
U202	TUF-3	
U203	NE5532	
TR201	2N3904	
TR202	2N3904	
TR203	2N3904	
TR204	2N3904	
T201	10 bifilar turns FT37-43	

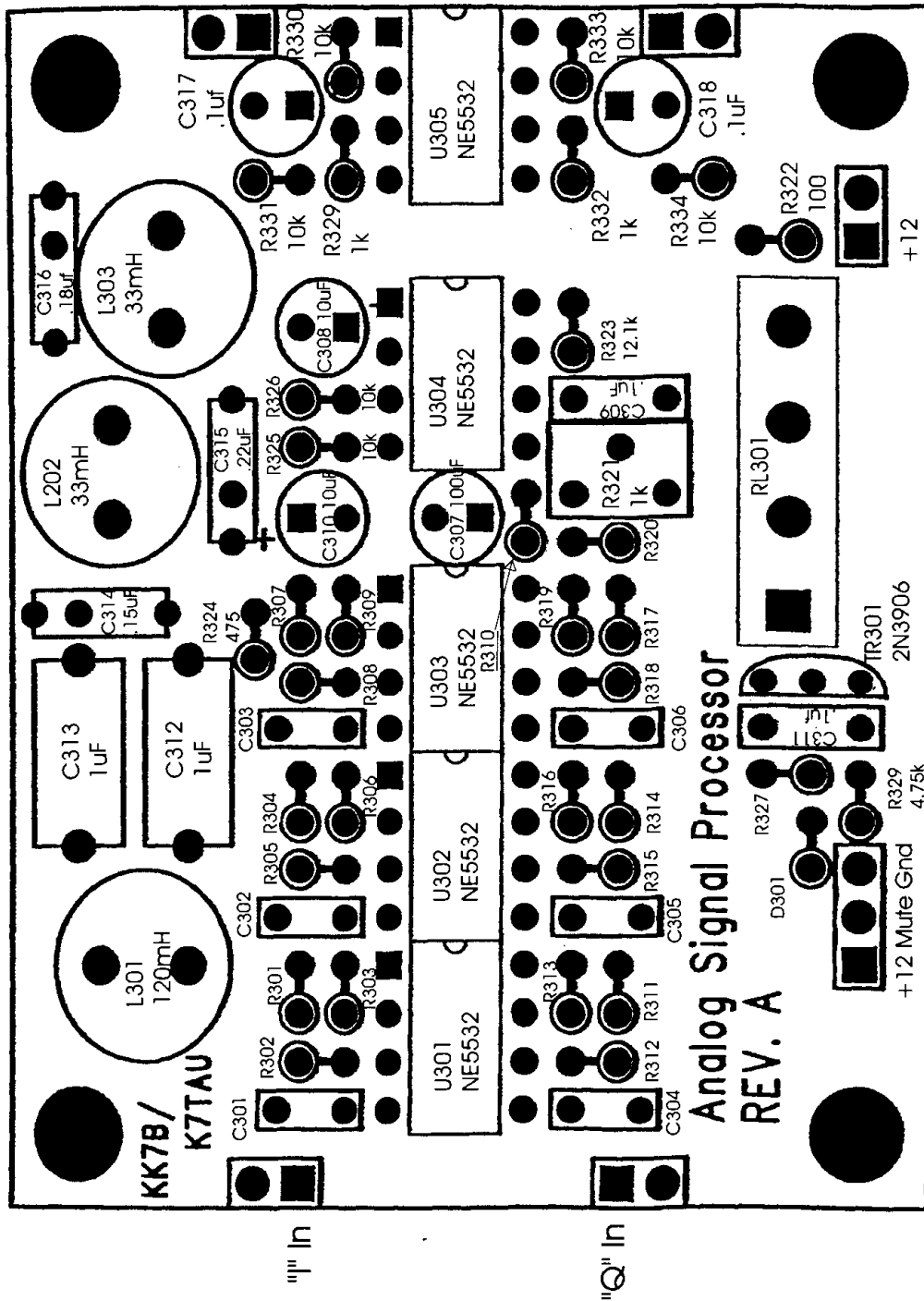
C212	0.12 uF poly	
C213	10 uF	
L201	3.3 mH	
L202	33 mH	
L203	3.3 mH	
L204	33 mH	
U201	TUF-3	
U202	TUF-3	
U203	NE5532	
TR201	2N3904	
TR202	2N3904	
TR203	2N3904	
TR204	2N3904	
T201	10 bifilar turns FT37-43	

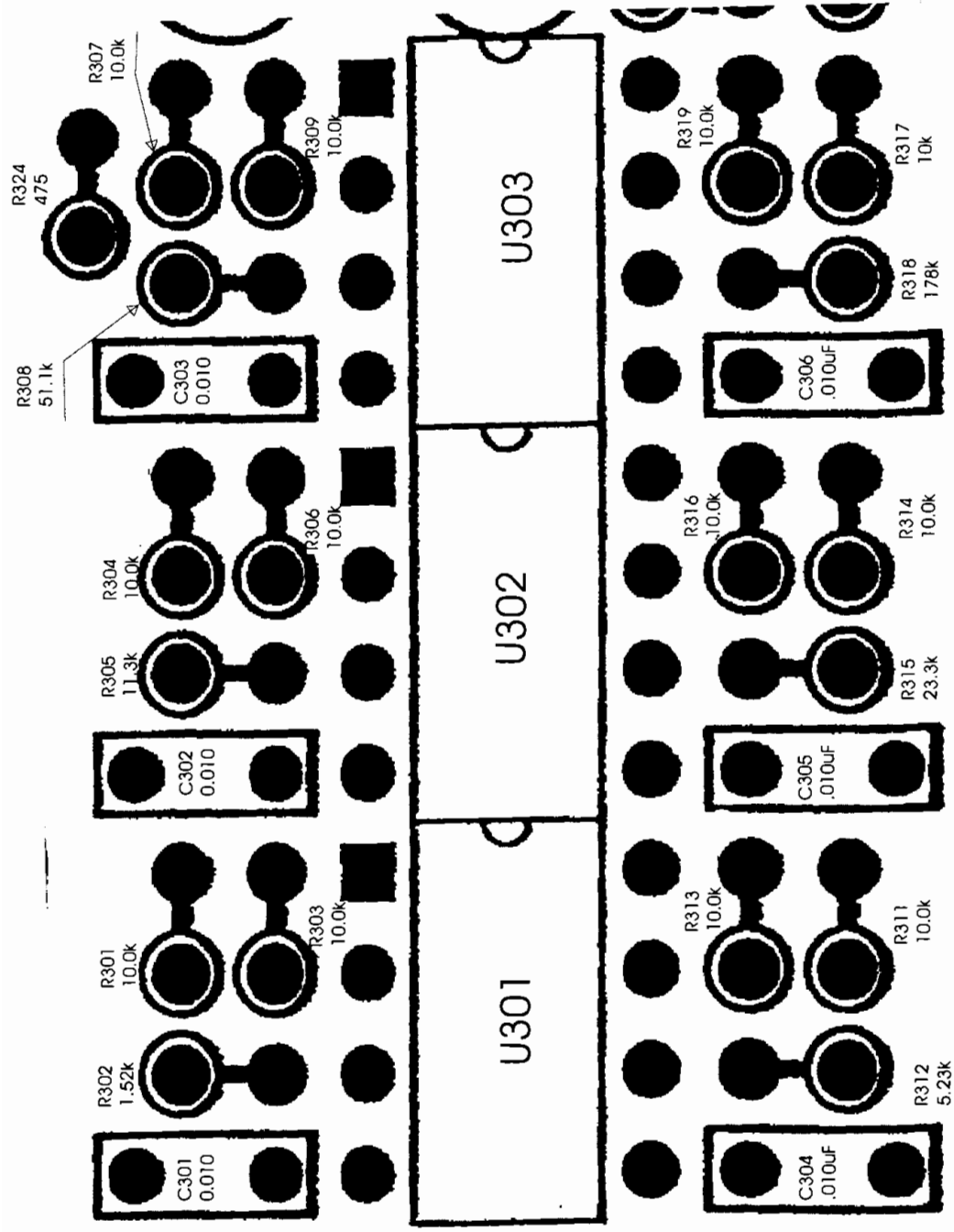
Analog Signal Processor

revised 8/31/00 RLC
revised 5/02/01 RLC



Analog Signal Processor Parts Designations





Component Placement
around U301, U302, U303

R2Pro

Analog Signal Processor Parts List

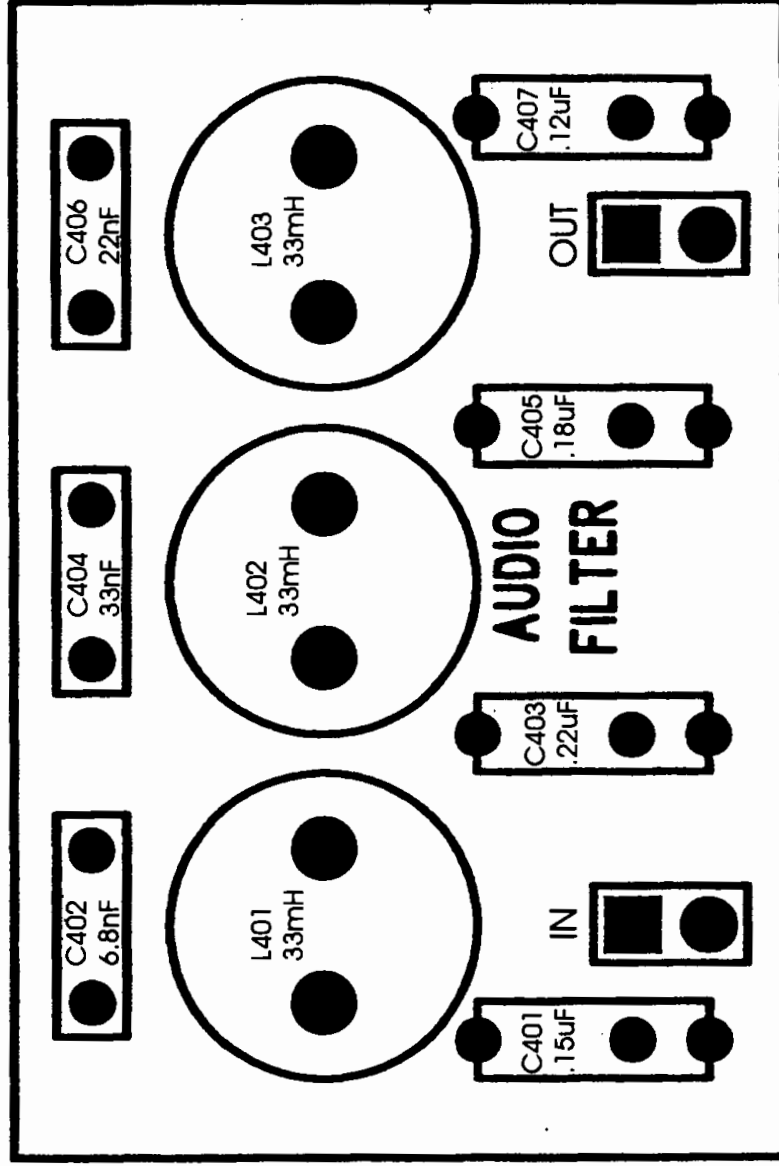
All resistors are ¼ watt, 1%

Capacitors indicated are matched to within 1% extreme spread

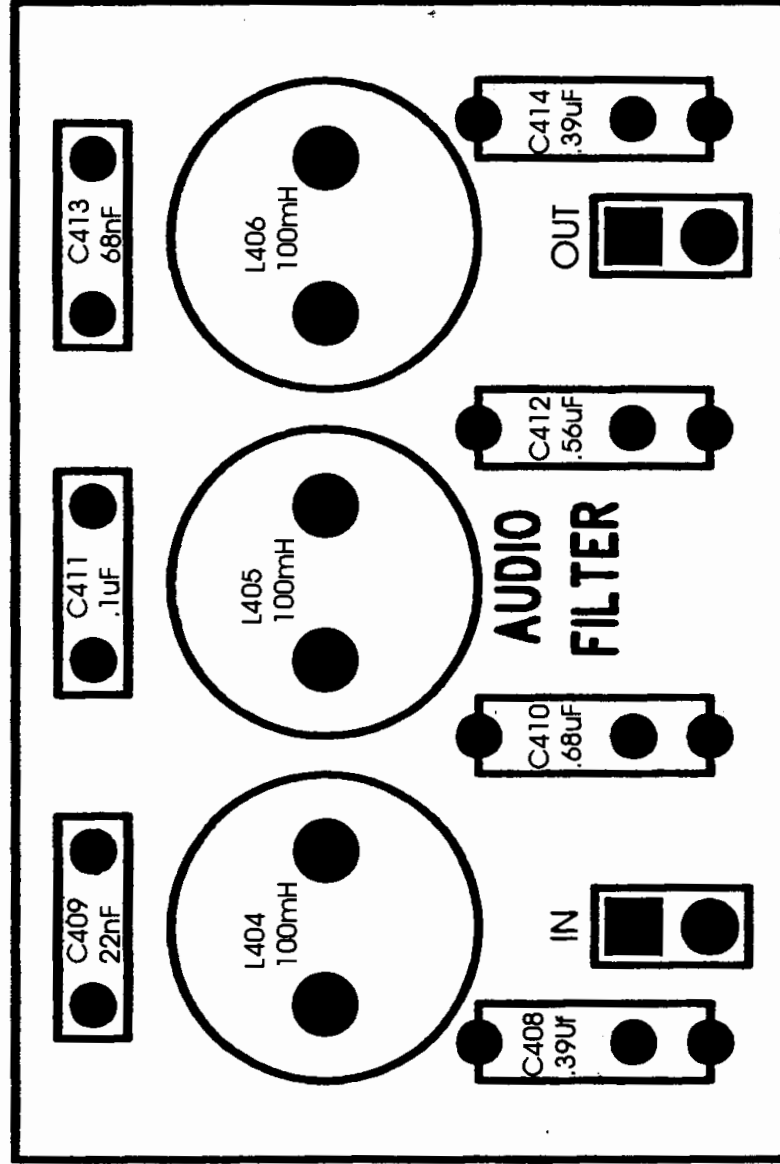
Designator	Value	
R301	10.0 K	
R302	1.52 K	1.50 K + 20 in series
R303	10.0 K	
R304	10.0 K	
R305	11.3 K	
R306	10.0 K	
R307	10.0 K	
R308	51.1 K	
R309	10.0 K	
R310	10.0 K	
R311	10.0 K	
R312	5.23 K	
R313	10.0 K	
R314	10.0 K	
R315	23.2 K	
R316	10.0 K	
R317	10.0 K	
R318	178 K	
R319	10.0 K	
R320	10.0 K	
R321	1 K Trim Pot	
R322	100	
R323	12.1 K	
R324	475	
R325	10.0 K	
R326	10.0 K	
R327	10.0 K	
R328	4.75 K	
R329	1.00 K	
R330	10.0 K	
R331	10.0 K	
R332	1.00 K	
R333	10.0 K	
R334	10.0 K	
C301	0.010 uF	Matched
C302	0.010 uF	Matched

C303	0.010 uF	Matched
C304	0.010 uF	Matched
C305	0.010 uF	Matched
C306	0.010 uF	Matched
C307	100 uF	
C308	10 uF	
C309	0.1 uF	
C310	10 uF	
C311	0.1 uF	
C312	1 uF poly	
C313	1 uF poly	
C314	0.15 uF poly	
C315	0.22 uF poly	
C316	0.18 uF poly	
C317	0.1 uF	
C318	0.1 uF	
L301	120 mH	
L302	33 mH	
L303	33 mH	
D301	1N4148 or equiv.	
TR301	2N3906	
U301	NE5532	
U302	NE5532	
U303	NE5532	
U304	NE5532	
U305	NE5532	
RL301	Hamlin HE3621A1210	

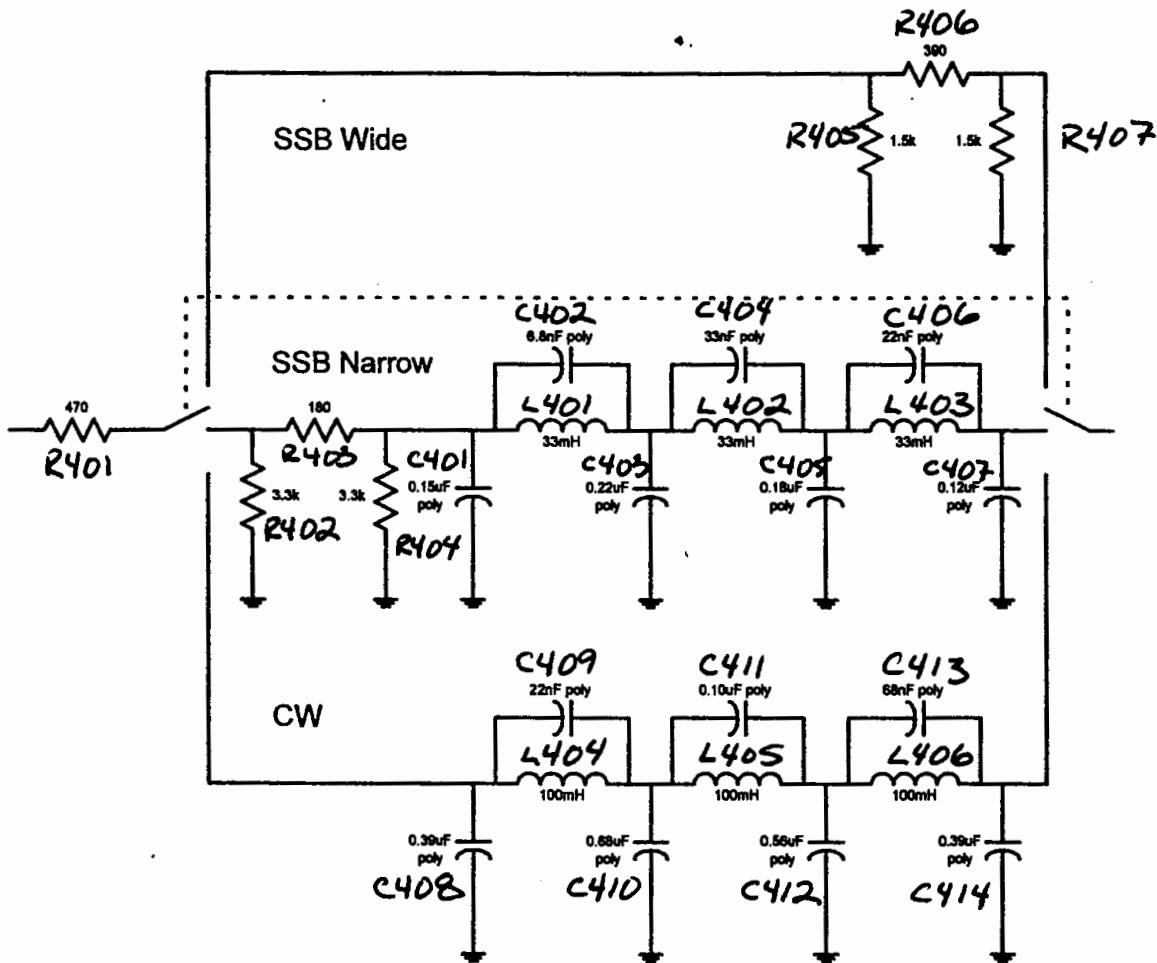
Parts Designations SSB Narrow Filter



Parts Designations CW Filter

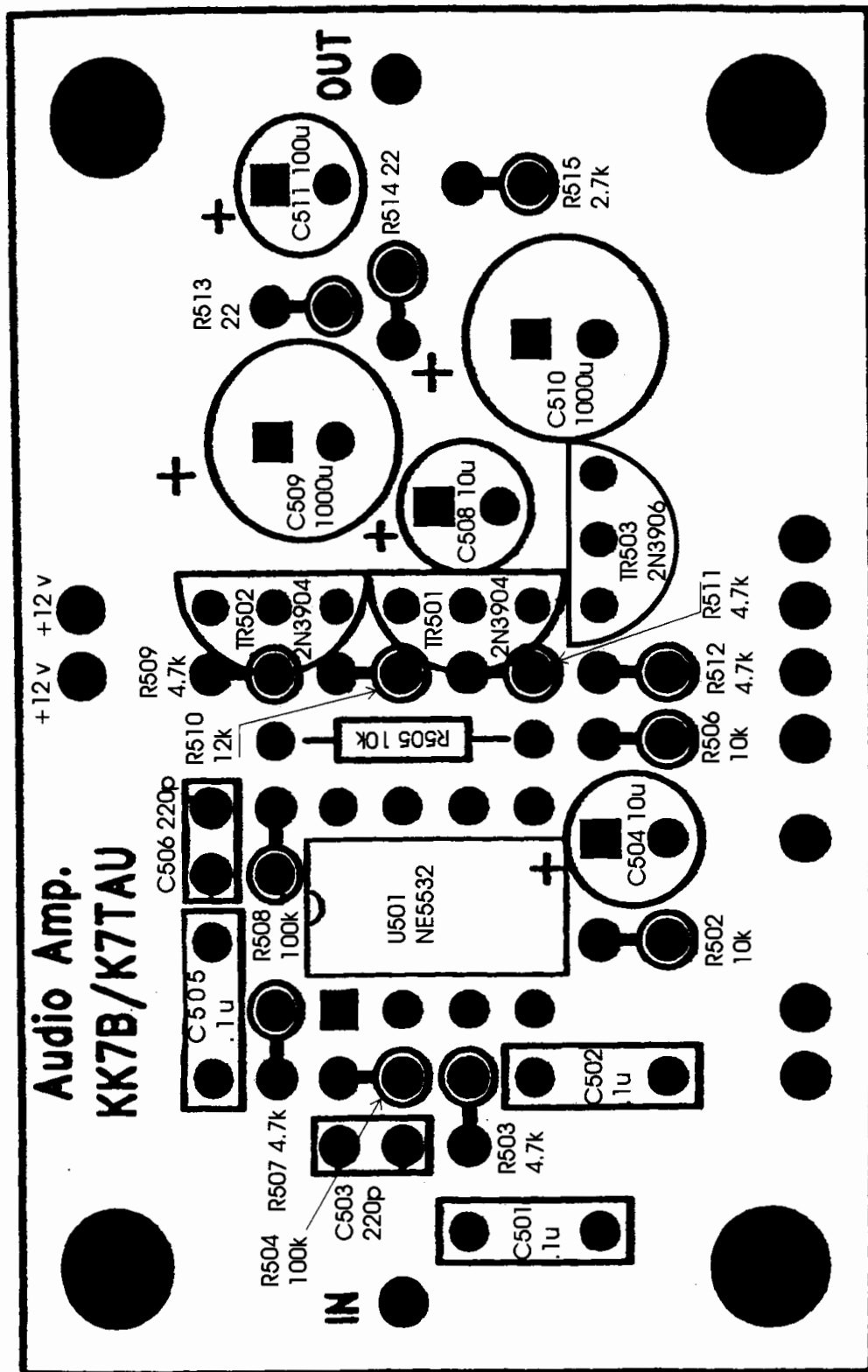


Accessory Filters
Figure 5



All resistors are mounted off the PC board.

Parts Designations - Parts Side of the PC Board

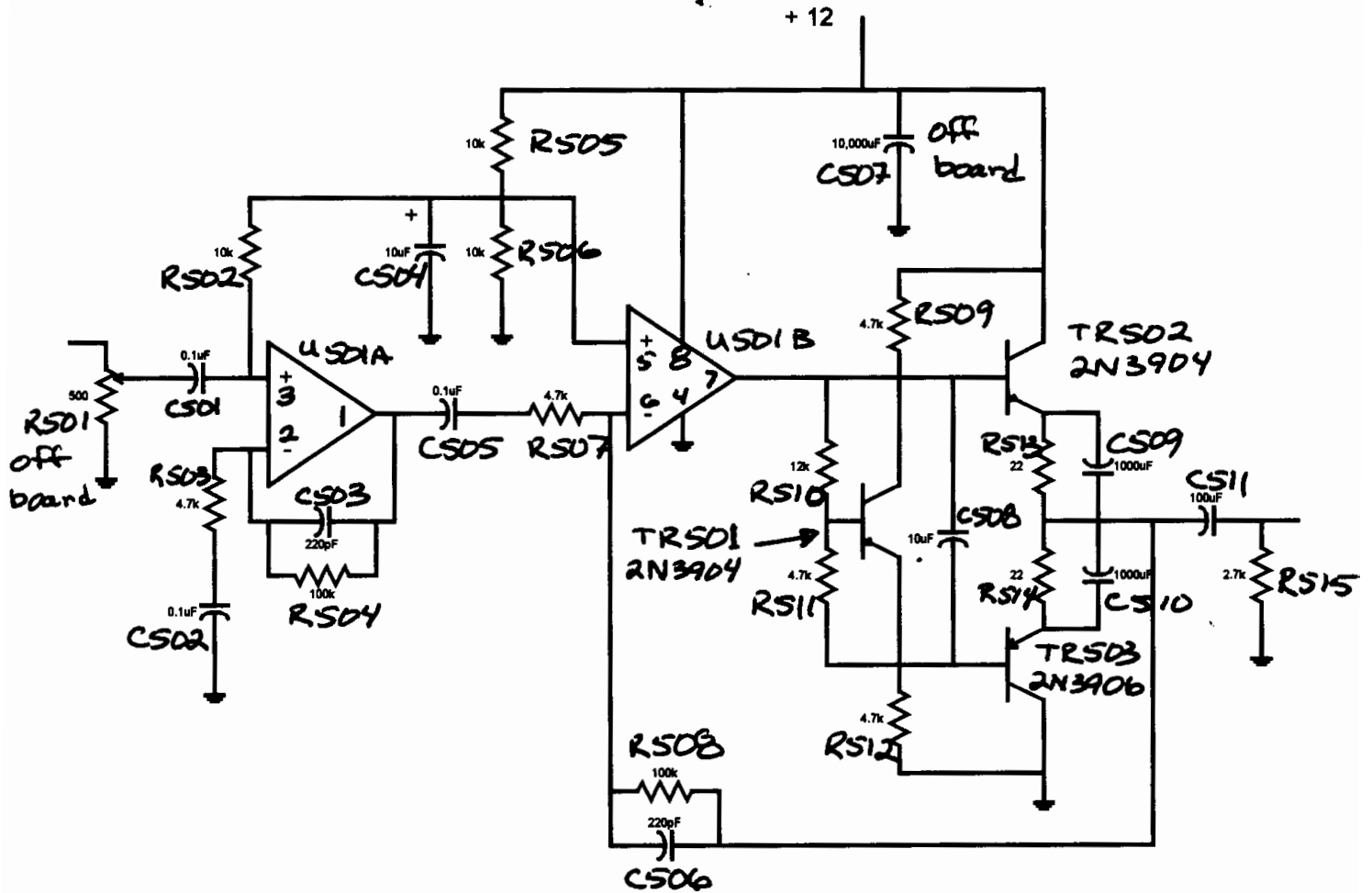


Ground connections

Audio Output Amplifier

revised 8/31/00 RLC

revised 5/02/01 RLC



R2Pro

Audio Amp Parts List

Designator	Value	
R501 (off board mount)	500 pot	
R502	10k	
R503	4.7k	
R504	100k	
R505	10k	
R506	10k	
R507	4.7k	
R508	100k	
R509	4.7k	
R510	12k	
R511	4.7k	
R512	4.7k	
R513	22	
R514	22	
R515	2.7k	
C501	.1 u	
C502	.1 u	
C503	220 p	
C504	10 u	
C505	.1 u	
C506	220 p	
C507 (off board mount)	10,000 u	
C508	10 u	
C509	1000 u	
C510	1000u	
C511	100 u	
TR501	2N3904	
Tr502	2N3904	
Tr503	2N3906	
U501	NE5532	