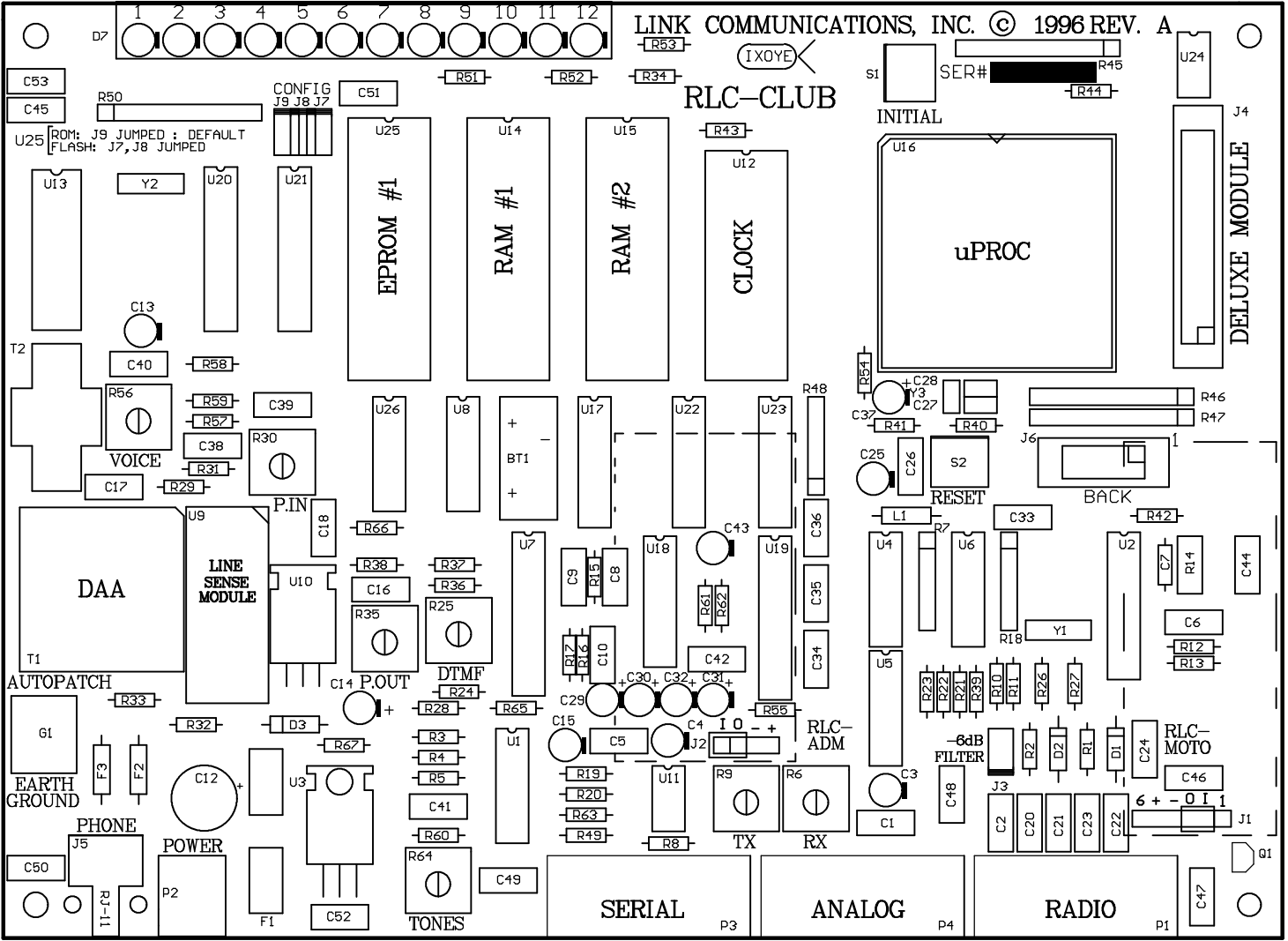
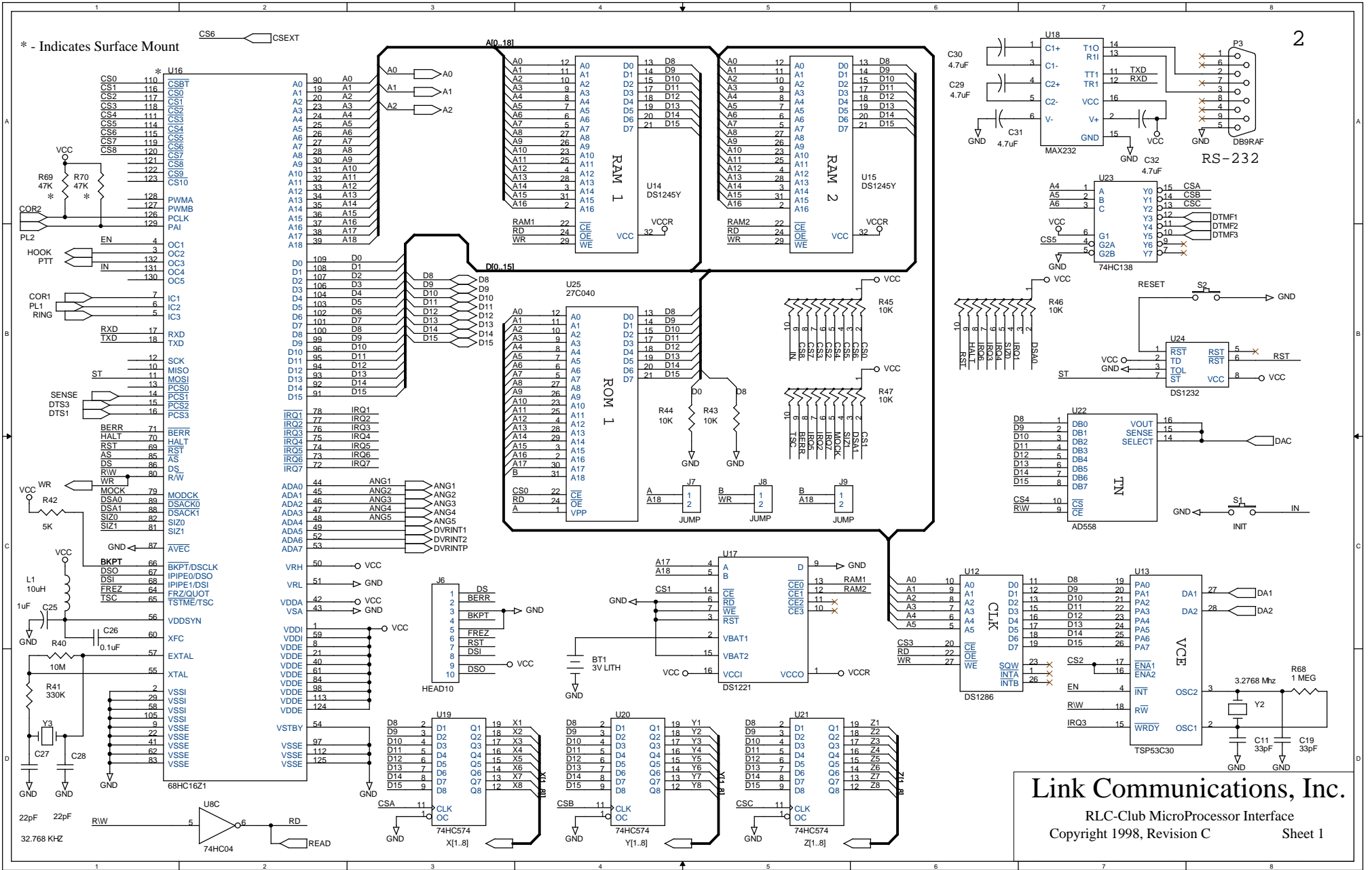
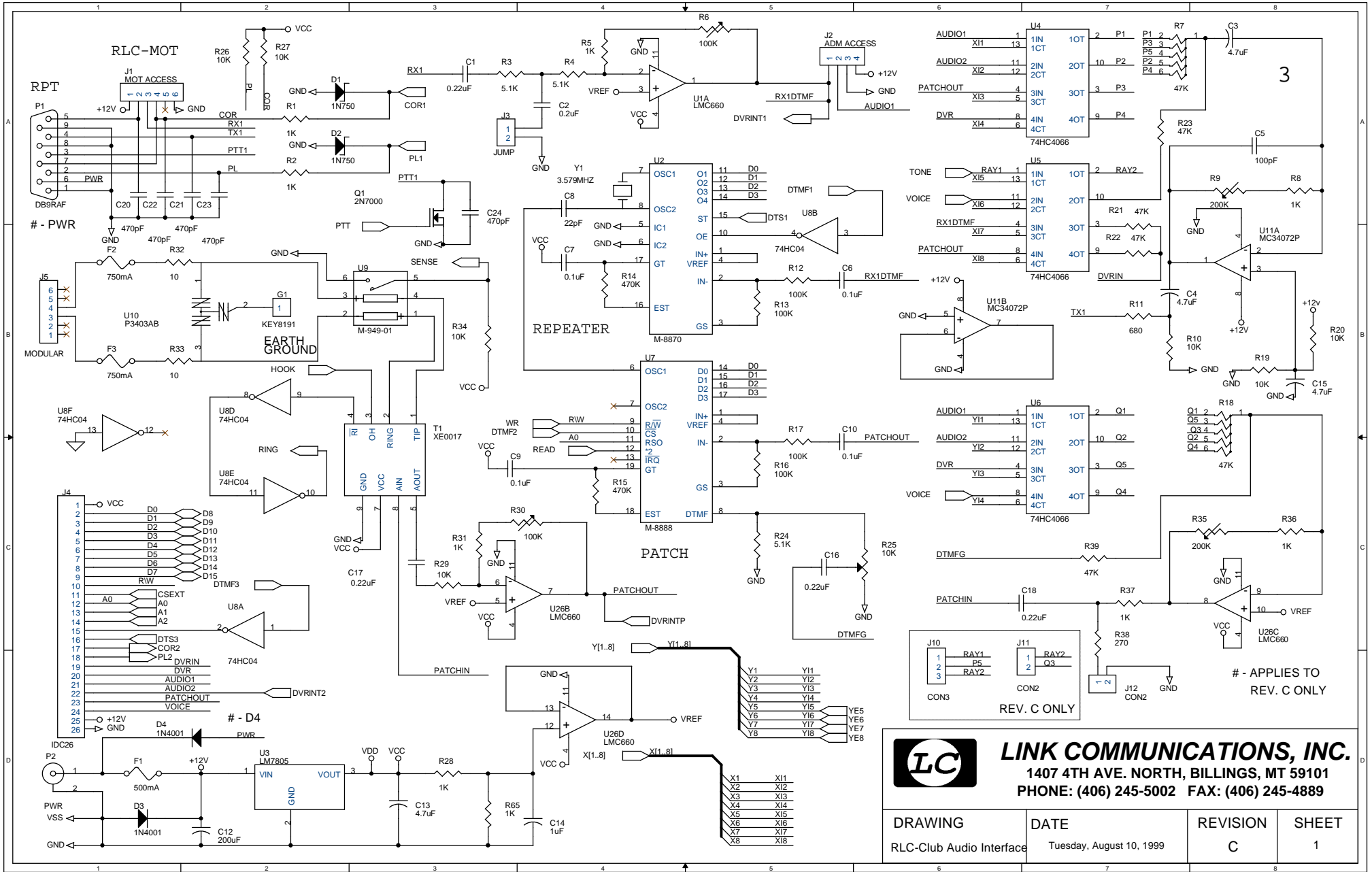


RLC-CLUB





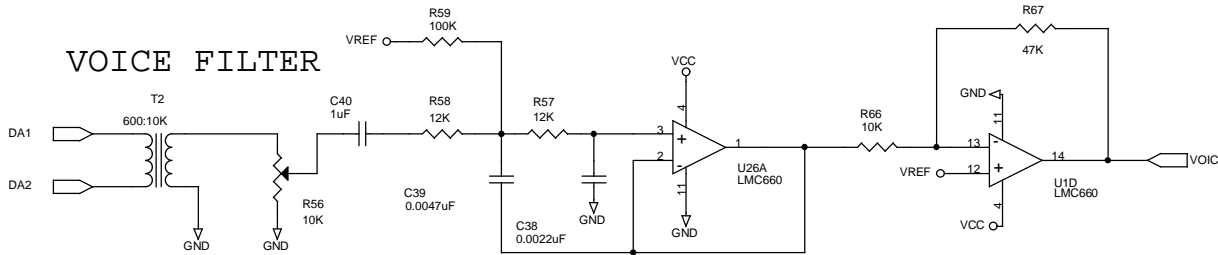


- APPLIES TO REV. C ONLY

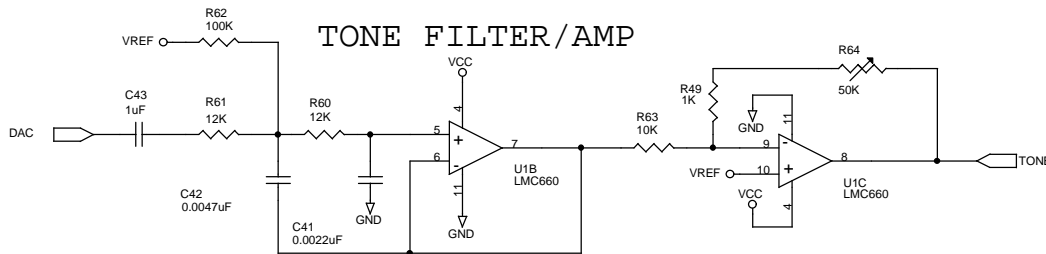
LINK COMMUNICATIONS, INC.
 1407 4TH AVE. NORTH, BILLINGS, MT 59101
 PHONE: (406) 245-5002 FAX: (406) 245-4889

DRAWING	DATE	REVISION	SHEET
RLC-Club Audio Interface	Tuesday, August 10, 1999	C	1

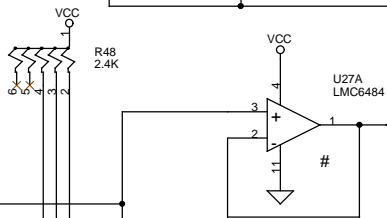
VOICE FILTER



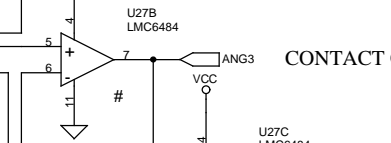
TONE FILTER/AMP



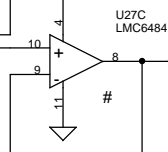
SIGNAL STRENGTH



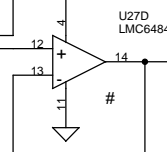
CONTACT CLOSURE



TEMPERATURE 2

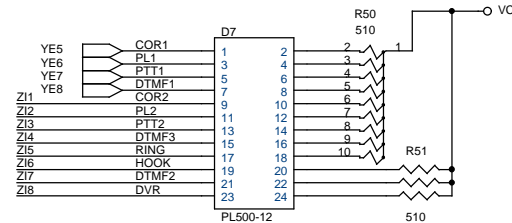
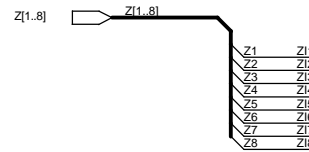
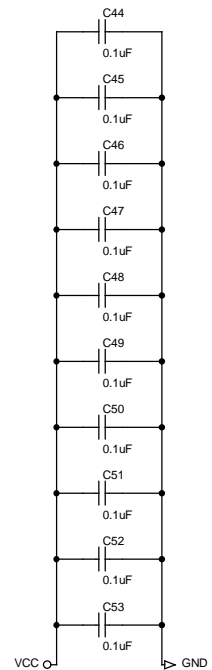


TEMPERATURE 1

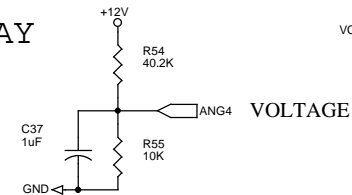


- U27 ON REV. C ONLY

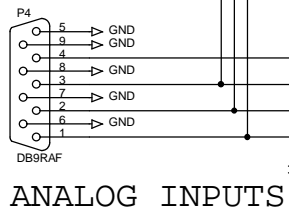
BYPASS



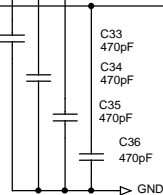
LED DISPLAY



VOLTAGE



ANALOG INPUTS



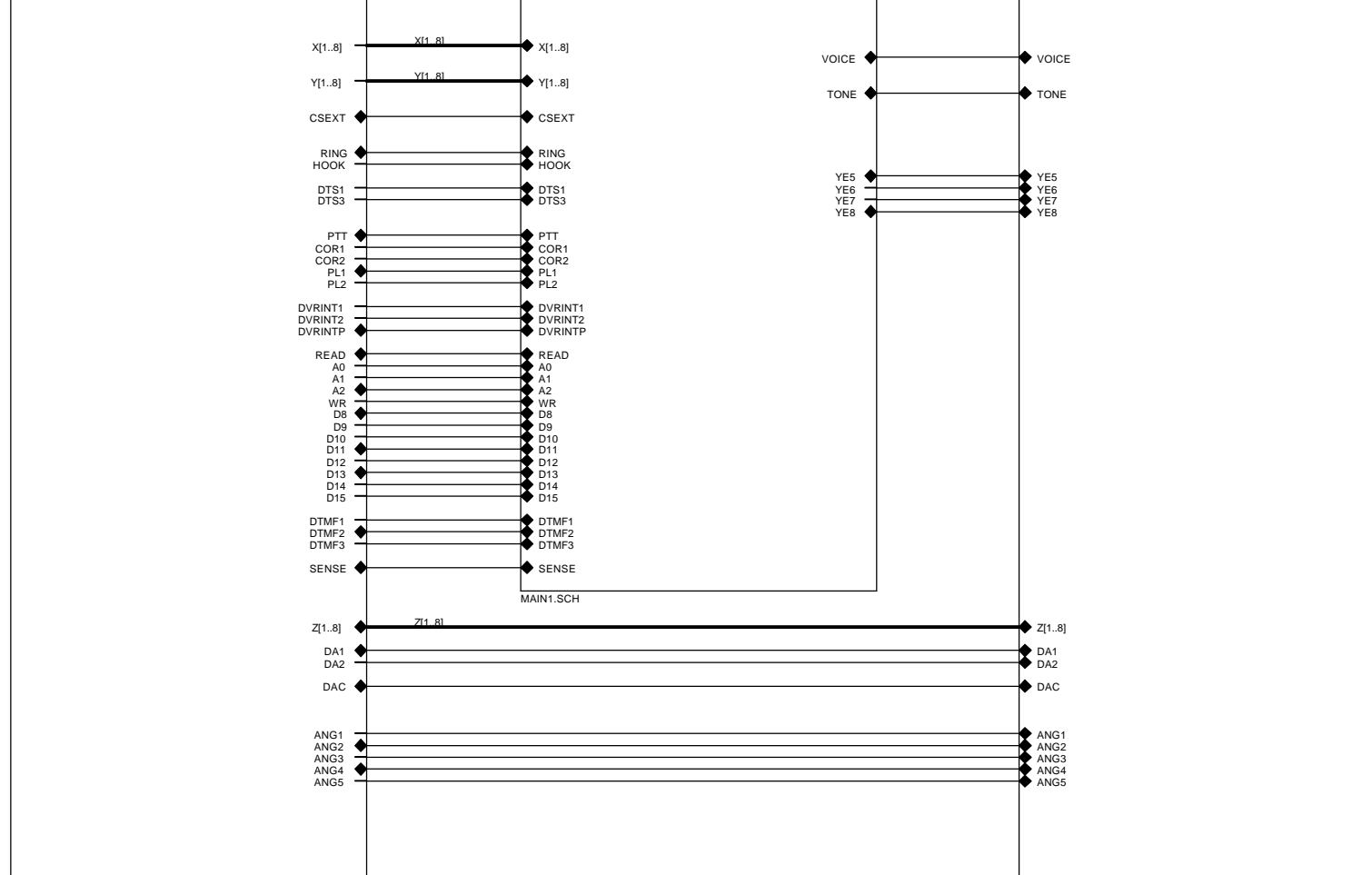
LC **LINK COMMUNICATIONS, INC.**
 1407 4TH AVE. NORTH, BILLINGS, MT 59101
 PHONE: (406) 245-5002 FAX: (406) 245-4889

DRAWING	DATE	REVISION	SHEET
RLC-Club User Interface	Tuesday, August 10, 1999	C	3

MAIN PROCESSING

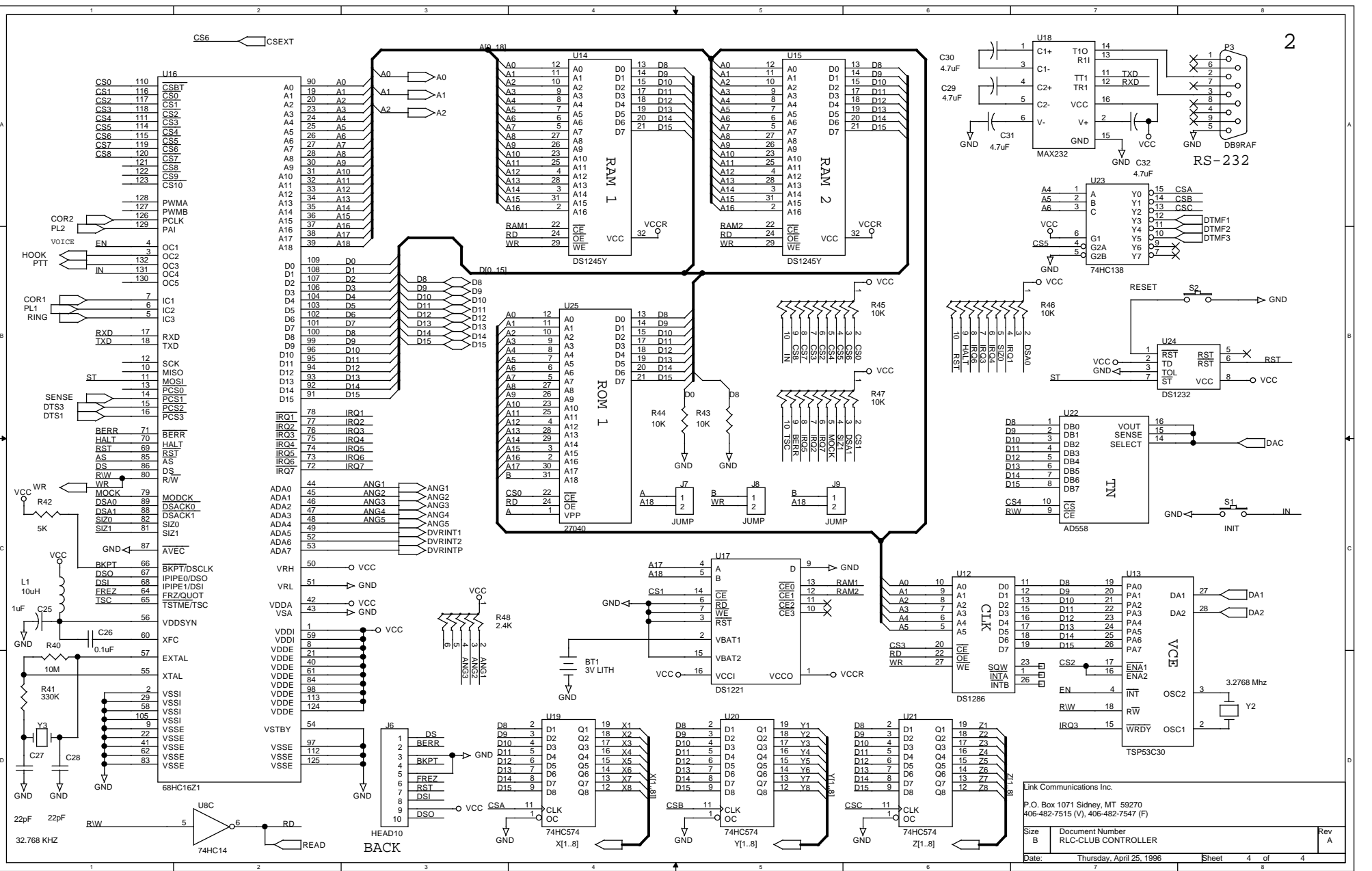
AUDIO PROCESSING

MISC. PROCESSING



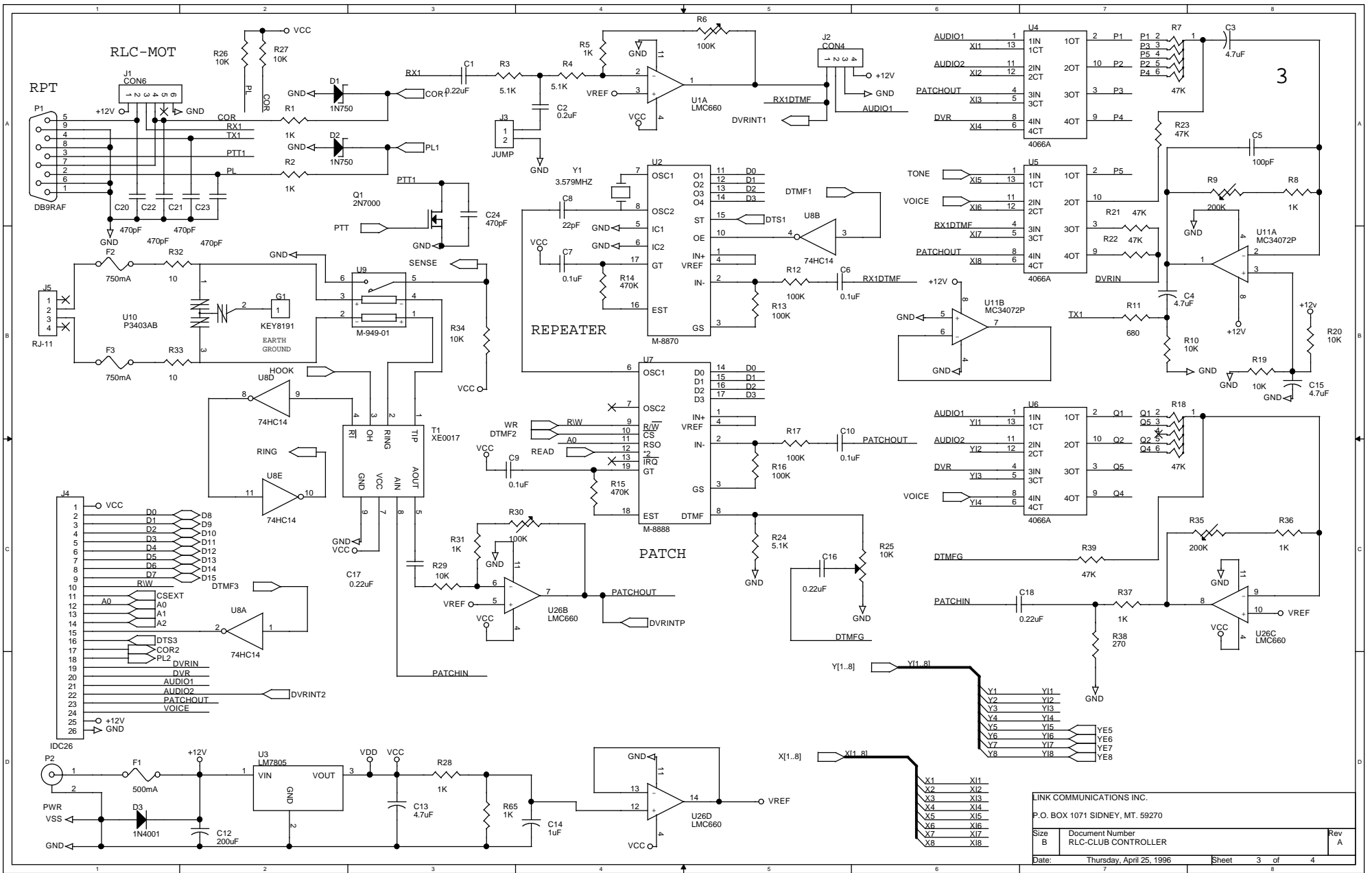
MAIN.SCH

MAIN2.SCH



Link Communications Inc.
 P.O. Box 1071 Sidney, MT 58270
 406-482-7515 (V), 406-482-7547 (F)

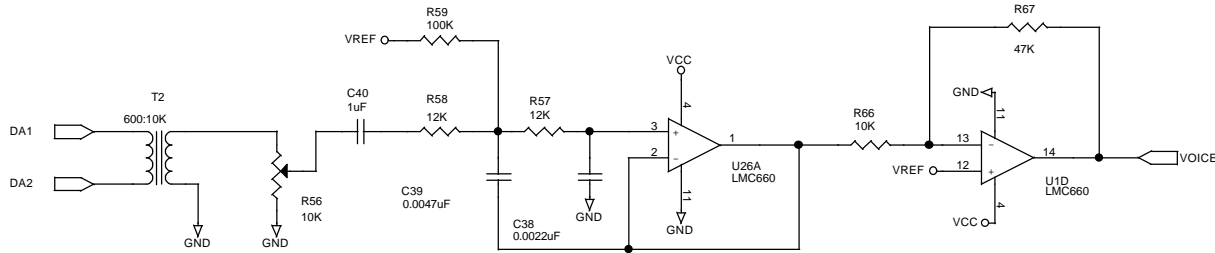
Size B	Document Number RLC-CLUB CONTROLLER	Rev A
Date: Thursday, April 25, 1996	Sheet 4 of 4	



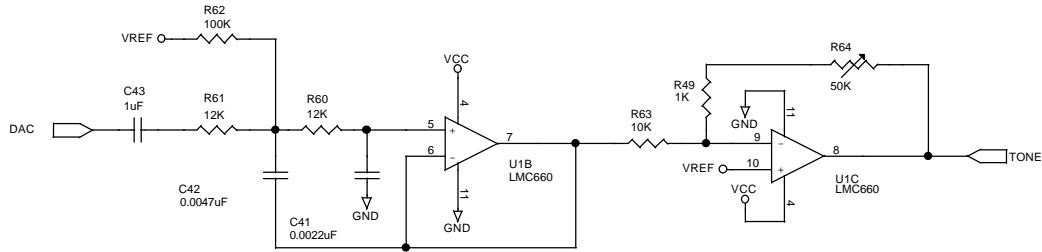
LINK COMMUNICATIONS INC.
P.O. BOX 1071 SIDNEY, MT. 59270

Size	Document Number	Rev
B	RLC-CLUB CONTROLLER	A

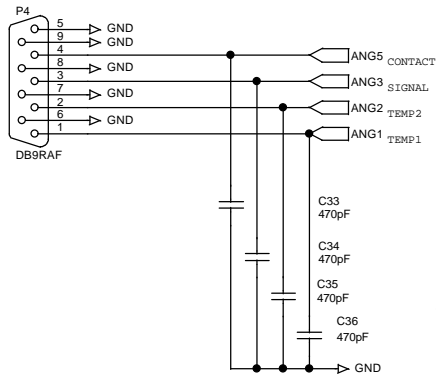
Date: Thursday, April 25, 1996 Sheet 3 of 4



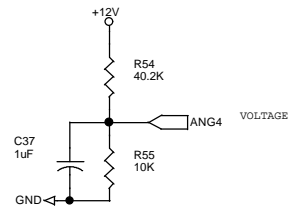
VOICE FILTER



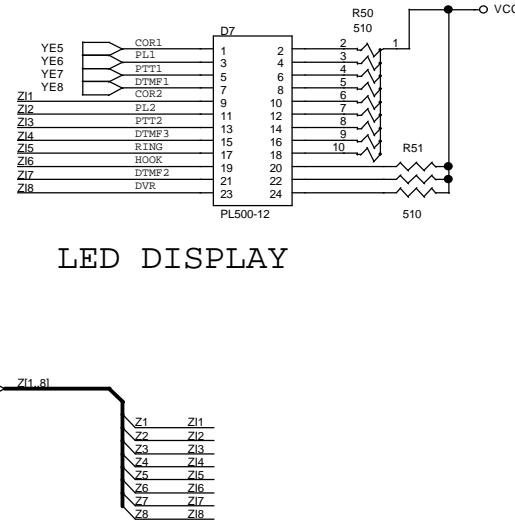
TONE FILTER/AMP



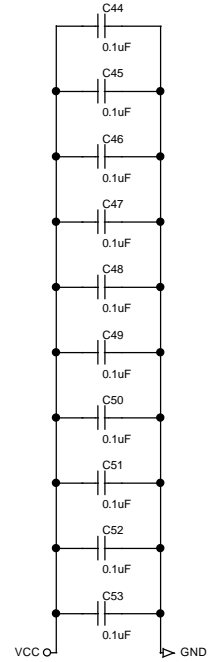
ANALOG INPUTS



LED DISPLAY



BYPASS



Bill of Materials

RLC-Club Controller, Revision: A

Item	Quantity	Reference	Part	Description
1	1	BT1	3VLITH	Digi-Key # P195-ND
2	5	C1,C16,C17,C18,C2	0.22uF	0.2"LS, AXIAL
3	3	C3,C13,C15	4.7uF	0.1"LS, ELECT, 20V
3a	5	C4,C29,C30,C31,C32	4.7uF	0.1"LS, TANTALIUM, 20V
4	15	C6,C7,C9,C10,C26,C44,C45, C46,C47,C48,C49,C50,C51, C52,C53	0.1uF	0.2"LS, AXIAL
5	3	C8,C27,C28	22pF	0.1"LS, CER OR AXIAL
6	1	C12	200uF	0.2"LS, ELECT., 50V
7	1	C5	100pF	0.2"LS, AXIAL
8	4	C14,C25,C37,C40,C43	1uF	0.1"LS, ELECT, 20V
8a	1	C43	1uF	0.1"LS, TANTALIUM
9	9	C20,C21,C22,C23,C24,C33, C34,C35,C36	470pF	0.2"LS, AXIAL
10	2	C38,C41	0.0022uF	0.2"LS, AXIAL
11	2	C39,C42	0.0047uF	0.2"LS, AXIAL
12	2	D1,D2	1N750A	0.4"LS, DIODE
13	1	D3	1N4004	0.5"LS, DIODE
14	3	D7a,D7b,D7c	PL501-4R-D	LED DISPLAY MOUSER #512-MV60539.MPA8A
15	1	F1, 2 FUSE CLIPS	CLIPS	5mm CLIPS, MOUSER #44FH052
16	1	F1	500mA	5mm FAST BLOW FUSE

Bill of Materials Cont...

Item	Quantity	Reference	Part	Description
17	2	F3,F2	750mA	PICO FUSE,MOUSER#5761-51750
18	1	G1	KEY8191	SCREW LUG
19	1	J1	6 PIN	6 PIN MALE HEADER
19a	1	J1	JUMPER	SHORTING BLOCK
20	1	J2	4 PIN	4 PIN MALE HEADER
20a	1	J2	JUMPER	SHORTING BLOCK
21	4	J3,J7,J8,J9	2 PIN	2 PIN MALE HEADER
21a	4	J3,J7,J8,J9	JUMPER	SHORTING BLOCK
22	1	J4	HEADER	26 PIN SHROUD HEADER
23	1	J5	RJ-11	AMP #520250-2
24	1	J6	HEADER	NO-LOAD
25	1	L1	10uH	INDUCTOR, 0.5"LS
26	3	P1,P3,P4	DB9	DB-09, RAF
27	1	P2	POWER	2.5mm, PWR CONNECTOR
28	1	Q1	2N7000	TO-92 2N-7000 MOSFET
29	10	R1,R2,R5,R8,R28,R31,R36, R37,R49,R65	1K	RESISTOR, 1%, 0.25W
30	4	R3,R4,R24,R42	5.1K	RESISTOR, 1%, 0.25W
31	6	R12,R13,R16,R17,R59,R62	100K	RESISTOR, 1%, 0.25W
32	2	R6,R30	100K	VAR.RESISTOR
33	6	R21,R22,R23,R34,R39,R67	47K	RESISTOR, 1%, 0.25W
34	2	R7,R18	47K	RESISTOR, 6 PIN, SIP
35	2	R9,R35	200K	VAR.RESISTOR

Bill of Materials Cont...

Item Description	Quantity	Reference		Part
36	11	R10,R19,R20,R26,R27,R29	10K	RESISTOR, 1%, 0.25W
		R43,R44,R55,R63,R66		
36a	2	R25,R56	10K	VAR.RESISTOR
37	3	R45,R46,R47	10K	RESISTOR, 10 PIN,SIP
38	1	R11	680	RESISTOR, 1%, 0.25W
39	2	R14,R15	470K	RESISTOR, 1%, 0.25W
40	2	R32,R33	10	RESISTOR, 1%, 0.25W
41	1	R38	270	RESISTOR, 1%, 0.25W
42	1	R40	10M	RESISTOR, 1%, 0.25W
43	1	R41	330K	RESISTOR, 1%, 0.25W
44	1	R48	2.4K	RESISTOR, 6 PIN, SIP
45	3	R51,R52,R53	510	RESISTOR, 1%, 0.25W
46	1	R50	510	RESISTOR, 10 PIN,SIP
47	1	R54	40.2K	RESISTOR, 1%, 0.25W
48	4	R57,R58,R60,R61	12K	RESISTOR, 1%, 0.25W
49	1	R64	50K	VAR.RESISTOR
50	2	S1,S2	INIT	SWITCH, KEYBOARD
51	1	T1	XE0017	XECOM DAA
52	1	T2	600:10K	AUDIO TRANSFORMER (MOUSER #42-TL-019)
53	2	U1,U26	LMC660CN	AUDIO OP-AMP (LINK)
53a	2	U1,U26	14 PIN	DUAL LEAF SOCKET

Bill of Materials Cont...

Item	Quantity	Reference	Part	Description
54	1	U2	M-8870	DTMF DECODER (LINK)
54a	1	U2	18 PIN	DUAL LEAF SOCKET
55	1	U3	LM7805	TO-220 REGULATOR
55a	1	6-32" SCREW	SCREW	6-32" PHILLIPS SCREW
56	3	U4,U5,U6	74HC4066	AUDIO SWITCH (LINK)
56a	3	U4,U5,U6	14 PIN	DUAL LEAF SOCKET
57	1	U7	M-8880	DTMF TRANSIEVER (LINK)
57a	1	U7	20 PIN	DUAL LEAF SOCKET
58	1	U8	74HC04	CMOS INVERTOR (LINK)
58a	1	U8	14 PIN	DUAL LEAF SOCKET
59	1	U10	P3403AB	TECCOR SIDACTOR
60	1	U11	MC34072P	CMOS OP-AMP (LINK)
60a	1	U11	8 PIN	DUAL LEAF SOCKET
61	1	U12	DS1286	CLOCK CHIP (LINK)
61a	1	U12	28 PIN	MACHINED SOCKET
62	1	U13	TSP53C30	VOICE SYNTH. (LINK)
62a	1	U13	28 PIN	0.7" DUAL LEAF SOCKET
63	2	U14,U15	681000BLP	128K RAM CHIP (LINK)
63a	2	U14,U15	32 PIN	DUAL LEAF SOCKET
64	1	U16	68HC16Z1	MICROPROCESSOR (LINK)
64a	1	U16	132 PIN	AMP# 821949-5 SOCKET
64b	1	U16	COVER	AMP# 82-1942-1 COVER
65	1	U17	DS1221	BACK-UP CHIP (LINK)
65a	1	U17	16 PIN	DUAL LEAF SOCKET
66	1	U18	MAX232CPE	RS-232 SERIAL CHIP (LINK)
66a	1	U18	16 PIN	DUAL LEAF SOCKET
67	3	U19,U20,U21	74HC574	LINE DRIVER (LINK)
67a	3	U19,U20,U21	20 PIN	DUAL LEAF SOCKET

Bill of Materials Cont...

Item	Quantity	Reference	Part	Description
68	1	U22	AD557JN	DAC TONE CHIP (LINK)
68a	1	U22	16 PIN	DUAL LEAF SOCKET
69	1	U23	74HC138	3-8 SELECTOR (LINK)
69a	1	U23	16 PIN	DUAL LEAF SOCKET
70	1	U24	DS1232	DALLAS RESET CHIP
(LINK)				
70a	1	U24	8 PIN	DUAL LEAF SOCKET
71	1	U25	27C040	512Kx8 EPROM (LINK)
71a	1	U25	32 PIN	DUAL LEAF SOCKET
72	1	U9	M-949-01	LINE SENSE, TELETONE
73	1	Y1	3.5795Mhz	CRYSTAL HC-49U
74	1	Y2	3.2768Mhz	CRYSTAL HC-49U
75	1	Y3	32.768Khz	CRYSTAL TUNING FORK
76	1	PC1	PC BOARD	4 LAYER PC BOARD (LINK)