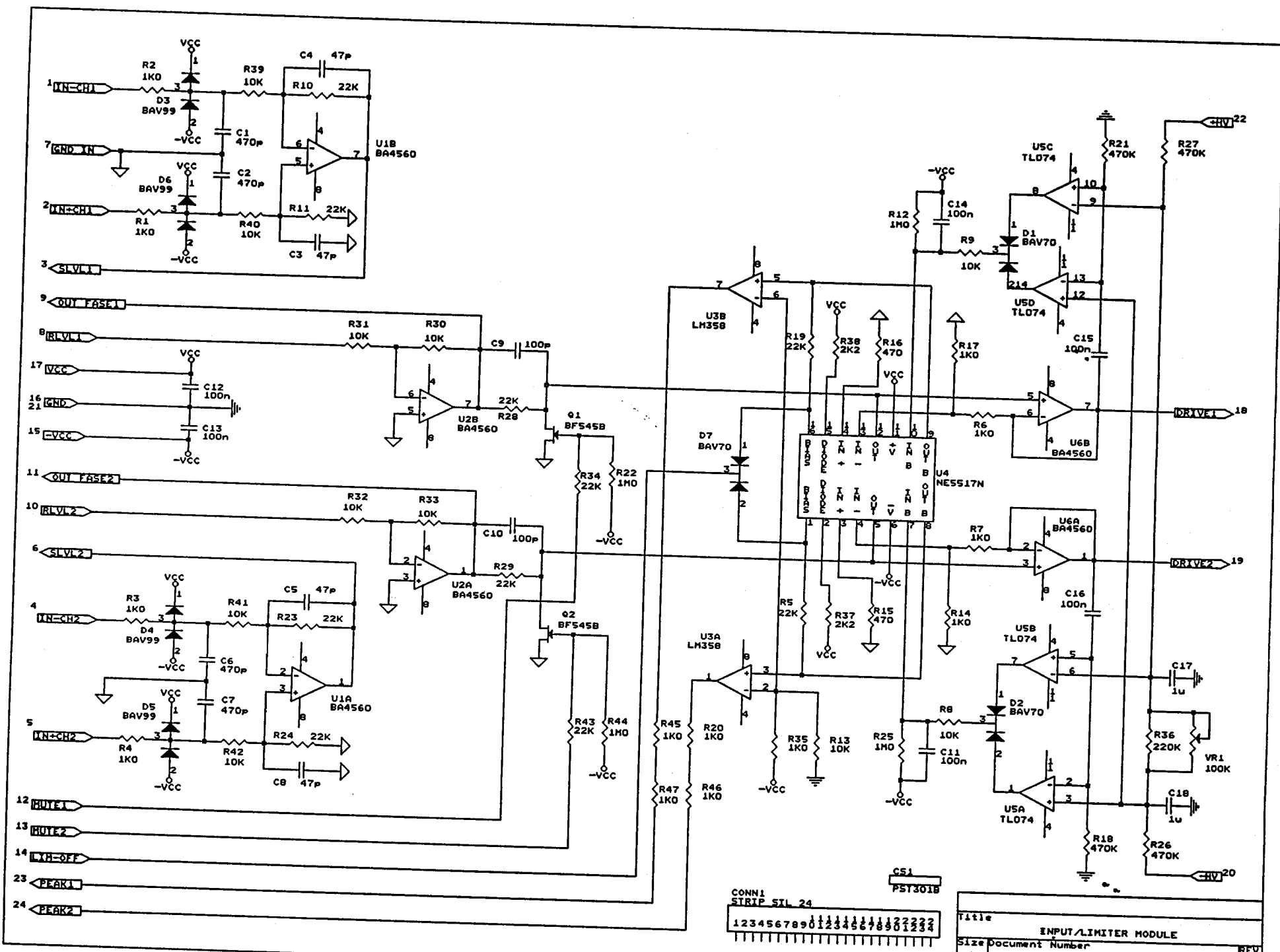


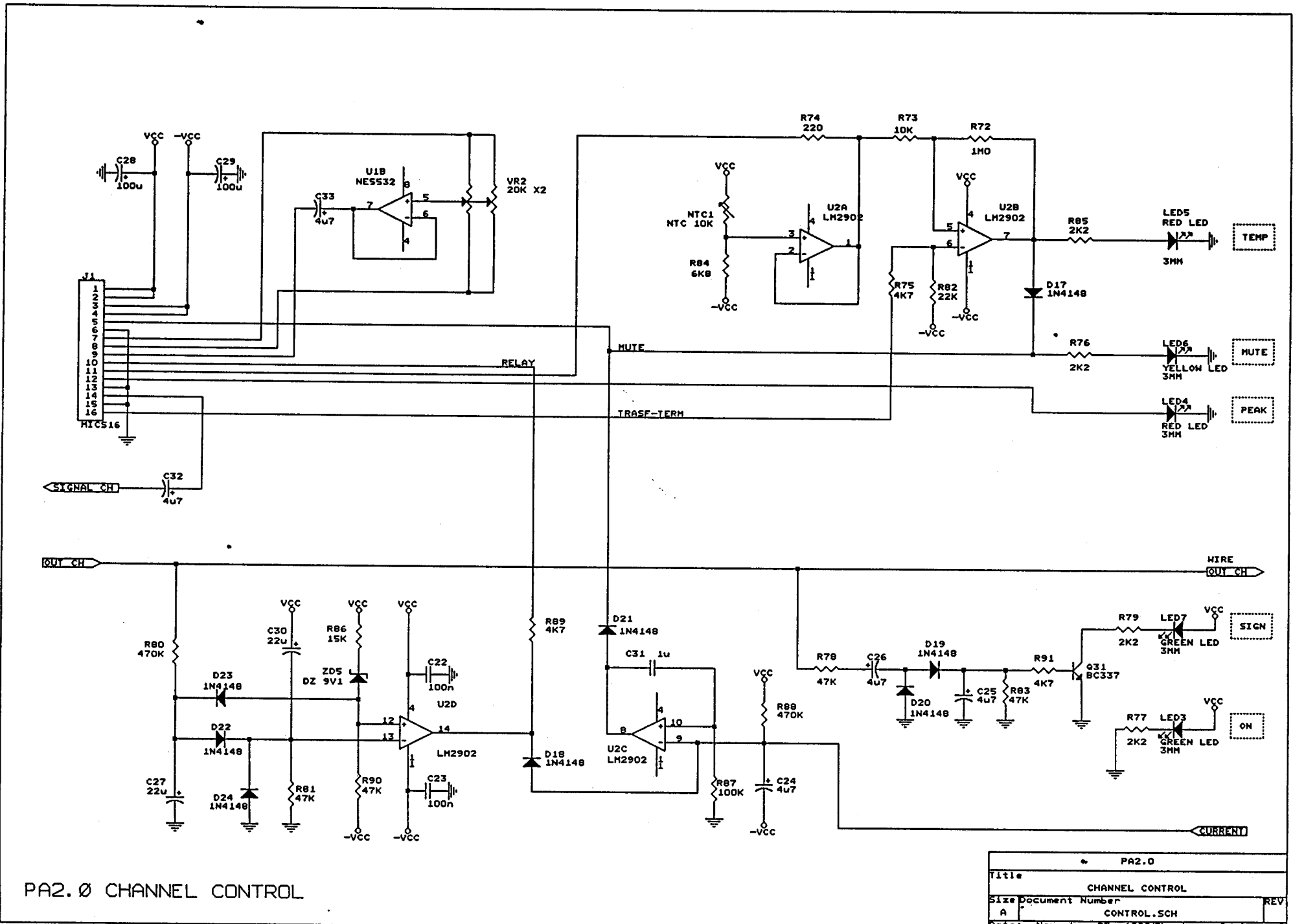
PA2.0 POWER SUPPLY

Title		PA2.0	
Size		POWER SUPPLY	
Document Number		A	
Date:		November 25, 1998	
Sheet		1 of 1	



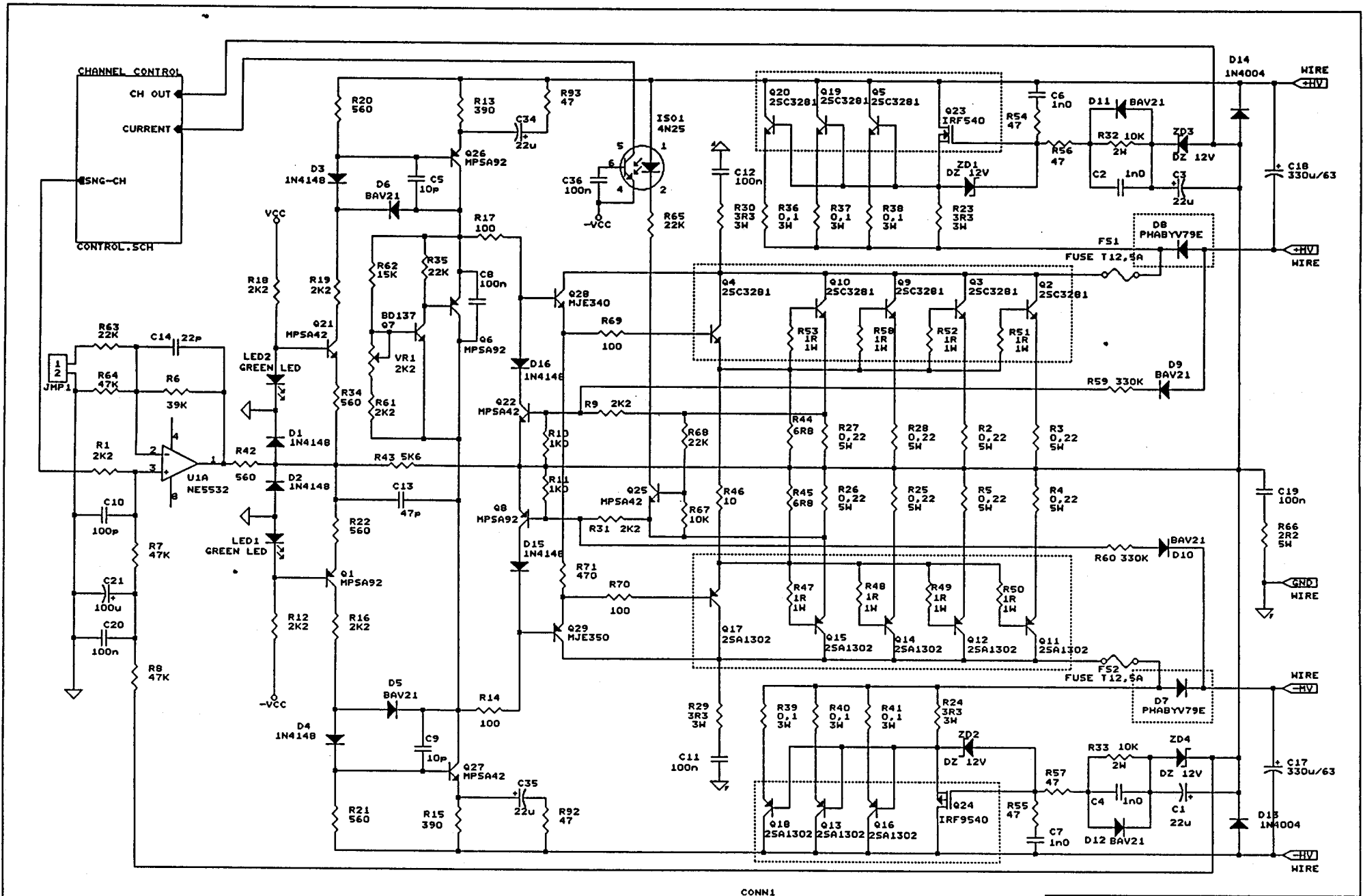
CONN1 STRIP STL 24
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Title		INPUT/LIMITER MODULE
Size Document Number		
A	LIM-MOD.SCH	REV



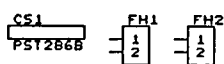
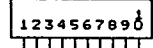
PA2.0 CHANNEL CONTROL

* PA2.0	
Title	CHANNEL CONTROL
Size	Document Number
A	CONTROL.SCH
Date:	November 25, 1998
Sheet	2 of 2

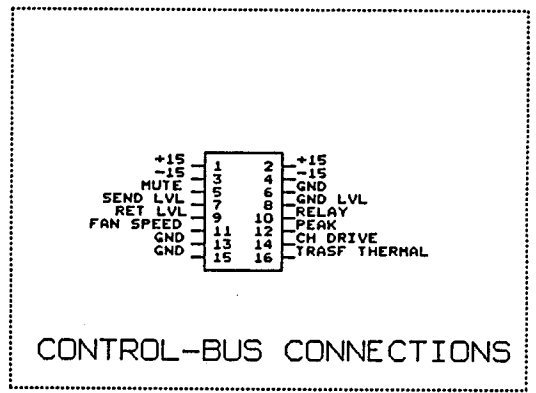
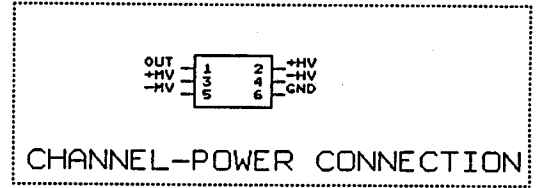
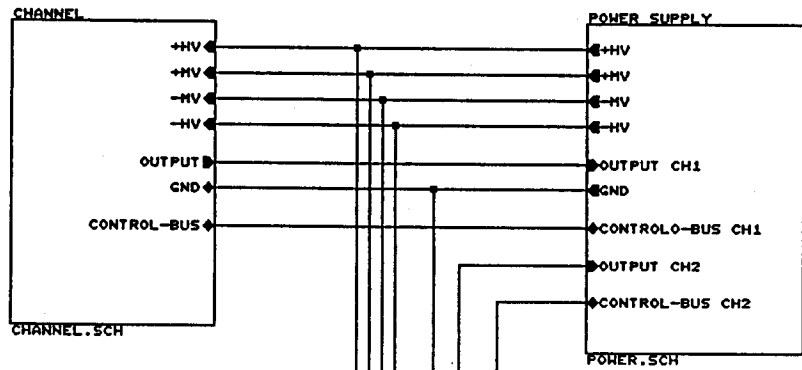


PA2.0 CHANNEL

CONN1 10 WAY SINGLE STRIP



CHANNEL	
Title	PA2.0
Size	Document Number
A	CHANNEL.SCH
Date:	November 26, 1998 Sheet 1 of 2



Item	Quantity	Reference	Part
1	1	CONN1	10 WAY SINGLE STRIP P2,54 X12mm
2	1	CS1	PST286B
3	6	C1,C3,C27,C30,C34,C35	22u VERT. ELECT. CAP. 25 VDC
4	4	C2,C4,C6,C7	1n0 POL. CAP. P5
5	2	C5,C9	10p CER. CAP. NP0 P2,5
6	5	C8,C20,C22,C23,C36	100n CER. CAP. P5
7	1	C10	100p CER. CAP. P5
8	2	C11,C12	100n 100V P10
9	1	C13	47p CER. CAP. NP0 P2,5
10	1	C14	22p CER. CAP. NP0 P2,5
11	2	C18,C17	330u/63 HORIZ. ELECT. CAP. 13x26
12	1	C19	100n 250V P10
13	3	C21,C28,C29	100u VERT. ELECT. CAP. 25 VDC
14	5	C24,C25,C26,C32,C33	4u7 VERT. ELECT. CAP. 25 VDC
15	1	C31	1u X7R CAP. P5
16	14	D1,D2,D3,D4,D15,D16,D17, D18,D19,D20,D21,D22,D23, D24	1N4148 SIGNAL DIODE
17	6	D5,D6,D9,D10,D11,D12	BAV21 SIGNAL DIODE
18	2	D7,D8	PHABYV79E TO220 DIODE
19	2	D13,D14	1N4004 1A DIODE
20	2	FH2,FH1	FUSEHOLDER 6X30
21	2	FS2,FS1	FUSE T12,5A
22	1	ISO1	4N25
23	1	JMP1	STRIP 2POS
24	1	J1	MICS16 LUMBERG
25	4	LED1,LED2,LED3,LED7	GREEN LED 3MM
26	2	LED5,LED4	RED LED 3MM
27	1	LED6	YELLOW LED 3MM
28	1	NTC1	NTC 10K
29	4	Q1,Q6,Q8,Q26	MPSA92 PNP LF TRANS. TO92
30	8	Q2,Q3,Q4,Q5,Q9,Q10,Q19, Q20	2SC3281 NPN POWER TRANSISTOR
31	1	Q7	BD137 NPN LF TRANS. TO92
32	8	Q11,Q12,Q13,Q14,Q15,Q16, Q17,Q18	2SA1302 PNP POWER TRANSISTOR
33	4	Q21,Q22,Q25,Q27	MPSA42 NPN LF TRANS. TO92
34	1	Q23	IRF540 N MOSFET TO220
35	1	Q24	IRF9540 P MOSFET TO220
36	1	Q28	MJE340 NPN TO126
37	1	Q29	MJE350 PNP TO126
38	1	Q31	BC337 NPN LF TRANS. TO92
39	12	R1,R9,R12,R16,R18,R19, R31,R61,R76,R77,R79,R85	2K2 RESIST 1/4W 5%
40	8	R2,R3,R4,R5,R25,R26,R27, R28	0,22 5W
41	1	R6	39K RESIST 1/4W 5%
42	7	R7,R8,R64,R78,R81,R83, R90	47K RESIST 1/4W 5%
43	2	R10,R11	1K0 RESIST 1/4W 5%
44	2	R13,R15	390 RESIST 1/4W 5%
45	4	R14,R17,R69,R70	100 RESIST 1/4W 5%
46	5	R20,R21,R22,R34,R42	560 RESIST 1/4W 5%

Item	Quantity	Reference	Part
47	4	R23,R24,R29,R30	3R3 3W
48	2	R32,R33	10K 2W
49	4	R35,R63,R65,R68	22K RESIST 1/4W 5%
50	6	R36,R37,R38,R39,R40,R41	0,1 3W
51	1	R43	5K6 RESIST 1/4W 5%
52	2	R44,R45	6R8 RESIST 1/4W 5%
53	1	R46	10 RESIST 1/4W 5%
54	8	R47,R48,R49,R50,R51,R52, R53,R58	1R 1W
55	6	R54,R55,R56,R57,R92,R93	47 RESIST 1/4W 5%
56	2	R59,R60	330K RESIST 1/4W 5%
57	2	R62,R86	15K RESIST 1/4W 5%
58	1	R66	2R2 5W
59	2	R67,R73	10K RESIST 1/4W 5%
60	1	R71	470 RESIST 1/4W 5%
61	1	R72	1M0 RESIST 1/4W 5%
62	1	R74	220 RESIST 1/4W 5%
63	1	R75	4K7 RESIST 1/4W 1%
64	2	R88,R80	470K RESIST 1/4W 5%
65	1	R82	22K RESIST 1/4W 1%
66	1	R84	6K8 RESIST 1/4W 5%
67	1	R87	100K RESIST 1/4W 5%
68	2	R91,R89	4K7 RESIST 1/4W 5%
69	1	U1	NE5532 DUAL LF OP.AMP.
70	1	U2	LM2902 QUAD LF OP.AMP.
71	1	VR1	2K2 PT5V
72	1	VR2	20K X2 31 STEP POT LOG
73	4	ZD1,ZD2,ZD3,ZD4	DZ 12V ZENER DIODE 1/2W
74	1	ZD5	DZ 9V1 ZENER DIODE 1/2W

PA2.0
 POWER SUPPLY
 POWER.SCH
 Bill Of Materials

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 Revision:
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Item	Quantity	Reference	Part
1	1	BR1	WL02 1A BRIDGE
2	2	BR2, BR3	BRIDGE 25A
3	2	CONN1, CONN2	MATE-LOOK 6 CS CONNECTOR
4	2	CONN3, CONN4	CON3
5	2	CONN5, CONN7	XLR F VERT
6	2	CONN6, CONN8	JACK STEREO 6,3 VERT
7	2	CONN11, CONN12	SPEAKON-90
8	2	CONN14, CONN13	MICS16
9	1	CS1	PST287A
10	2	C1, C4	100n CER. CAP. P5
11	2	C2, C3	22u VERT. ELECT. CAP. 25 VDC
12	1	C5	10n 100V P10
13	2	C6, C7	2200u VERT. ELECT. CAP. 35 VDC D15
14	2	C9, C8	470n MKT 400V
15	1	C10	100n 250V P15
16	1	C11	220u VERT. ELECT. CAP. 25 VDC
17	8	C12, C13, C14, C15, C16, C17, C18, C19	10000u 63V D30
18	2	C20, C21	1000u VERT. ELECT. CAP. 25 VDC
19	4	C22, C23, C24, C25	4u7 VERT. ELECT. CAP. 25 VDC
20	2	DISS1, DISS2	TO220 DISSIPATOR
21	2	D1, D2	1N5402 1A DIODE
22	3	D3, D4, D5	1N4007 1A DIODE
23	2	FH1, FH2	FUSEHOLDER 5X20
24	2	FS1, FS2	FUSE T1A
25	18	J1, J2, J3, J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18	6,3 FASTON
26	2	L1, L2	1,2uH
27	1	MODULE1	LIM-MOD
28	1	PTC1	PTC 11R 265V
29	2	Q1, Q2	TIP29C NPN TRANS. TO220
30	2	Q4, Q3	BC337 NPN LF TRANS. TO92
31	2	RL1, RL2	RELAY 24V 30A
32	1	RL3	RELAY 24V 30A
33	1	R1	1K0 RESIST 1/4W 5%
34	1	R2	220 RESIST 1/4W 5%
35	2	R3, R4	2R2 5W
36	2	R6, R5	10 1W
37	2	R10, R9	4K7 5W
38	4	R11, R12, R13, R14	100K RESIST 1/4W 5%
39	1	SW1	1RSW3
40	1	T1	HC2000 TRANSFORMER
41	1	U1	LM7915 NEG VOLTAGE REGULATOR TO220
42	1	U2	LM7815 POS VOLTAGE REGULATOR TO220
43	2	ZD2, ZD1	5V1 ZENER DIODE 1/2W

Item	Quantity	Reference	Part
1	1	CONN1	STRIP SIL 24
2	1	CS1	PST301B PCB 66X32mm
3	4	C1,C2,C6,C7	470p CC0805 X7R CAP. 10%
4	4	C3,C4,C5,C8	47p CC0805 CER. CAP. NPO
5	2	C9,C10	100p CC0805 CER. CAP. NPO
6	2	C11,C14	100n CC0805 CAP. Y5V
7	4	C12,C13,C15,C16	100n CC0805 CER. CAP.
8	2	C17,C18	1u CC0805 CER.CAP.
9	3	D1,D2,D7	BAV70 DIODE SOT23
10	4	D3,D4,D5,D6	BAV99 SOT23
11	2	Q1,Q2	BF545B SOT23
12	13	R1,R2,R3,R4,R6,R7,R14, R17,R20,R35,R45,R46,R47	1K0 RC0805
13	10	R5,R10,R11,R19,R23,R24, R28,R29,R34,R43	22K RC0805
14	11	R8,R9,R13,R30,R31,R32, R33,R39,R40,R41,R42	10K RC0805
15	4	R12,R22,R25,R44	1M0 RC0805
16	2	R15,R16	470 RC0805
17	4	R18,R21,R26,R27	470K RC0805
18	1	R36	220K RC0805
19	2	R37,R38	2K2 RC0805
20	3	U1,U2,U6	BA4560 SOP8
21	1	U3	LM358 SOP8
22	1	U4	NE5517N SOP16
23	1	U5	TL074 SOP14
24	1	VR1	100K POZ3AN