

Technical Manual JBL M553

3-WAY STEREO/4-WAY MONO VARIABLE ELECTRONIC CROSSOVER



SPECIFICATIONS

ELECTRICAL SPECIFICATIONS:

- Crossover Frequencies:
 - Stereo Mode:
 - Low/Mid: 180 to 2 kHz (Divisible by 10)
 - Mid/High: 450 to 5 kHz
 - Mono Mode:
 - Low/LowMid: 180 to 2 kHz (Divisible by 10)
 - LowMid/HiMid: 450 to 5 kHz
 - HiMid/High: 800 to 9 kHz
- Maximum Input Level: +24 dBu (XLR balanced)
- Maximum Output Level: +27 dBu; +25 dBm (XLR balanced)
- Input Impedance:
 - Balanced: 10 kOhms
 - Unbalanced: 20 kOhms
- Output Impedance:
 - Balanced: 102 Ohms
 - Unbalanced: 51 Ohms

ELECTRICAL SPECIFICATIONS: (cont'd)

- Noise: Less than -90 dBu (LF); -88 dBu (HF)
- THD + Noise: Less than 0.004% (in band)
- Frequency Response: 10 Hz (-0.5 dB) to 75 kHz (-3 dB)

PHYSICAL SPECIFICATIONS:

- Enclosure Dimensions: SEE BELOW
- Shipping Weight: 6 lbs. (2.7 kg.)

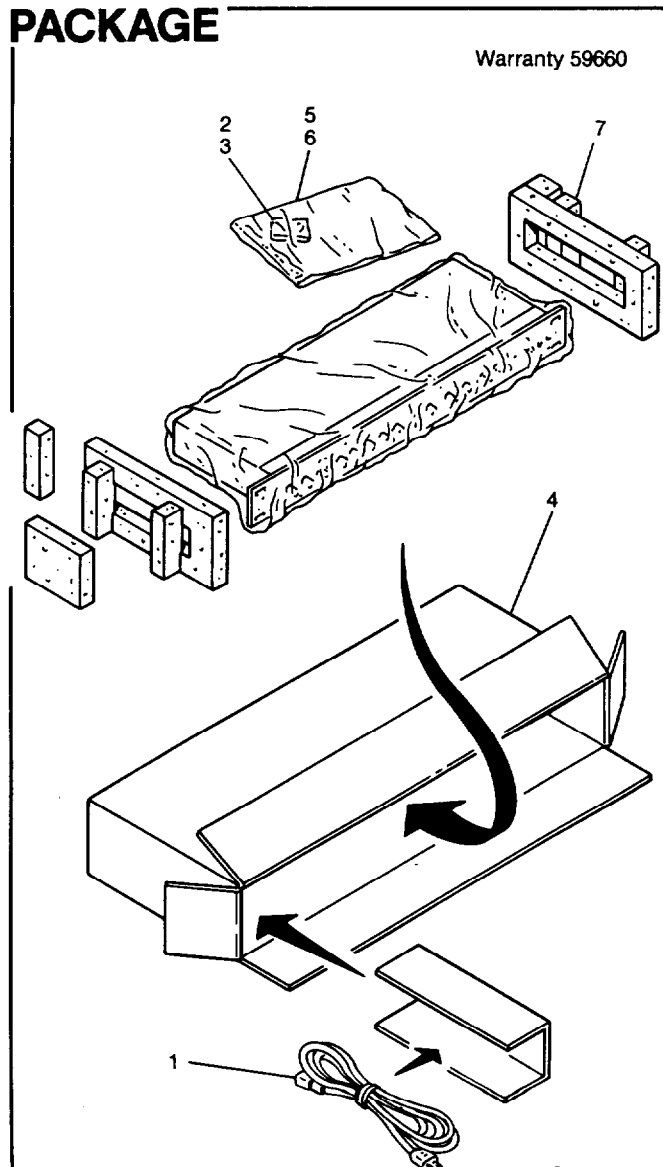
WARRANTY INFORMATION:

- Refer to the Warranty Statement packed with each product.

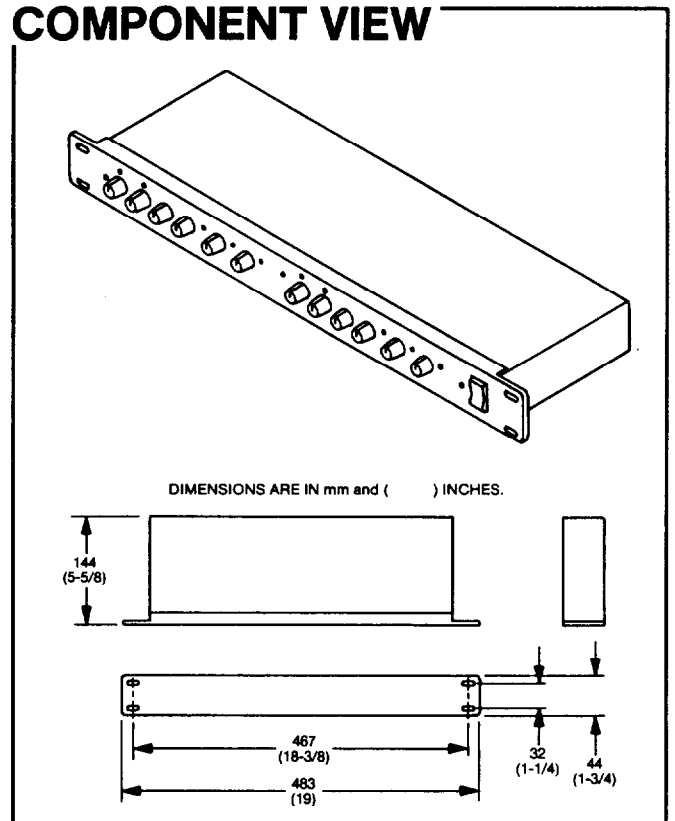
ACCESSORY:

Model SC8 Security Cover

PACKAGE



COMPONENT VIEW



COMPONENT PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	36-0061	1	US/JA USA POWER CORD BME TYPE
2	28-0095	4	JBL RACK SCREW
3	28-0096	4	JBL RACK WASHER
4	20-0080	1	M SERIES PRODUCT BOX
5	22-0020	1	LITERATURE BAG (CLEAR PLASTIC)
6	18-0411	1	M553 OWNER'S MANUAL

Please add the letters JBL behind part numbers when ordering.

JBL M553

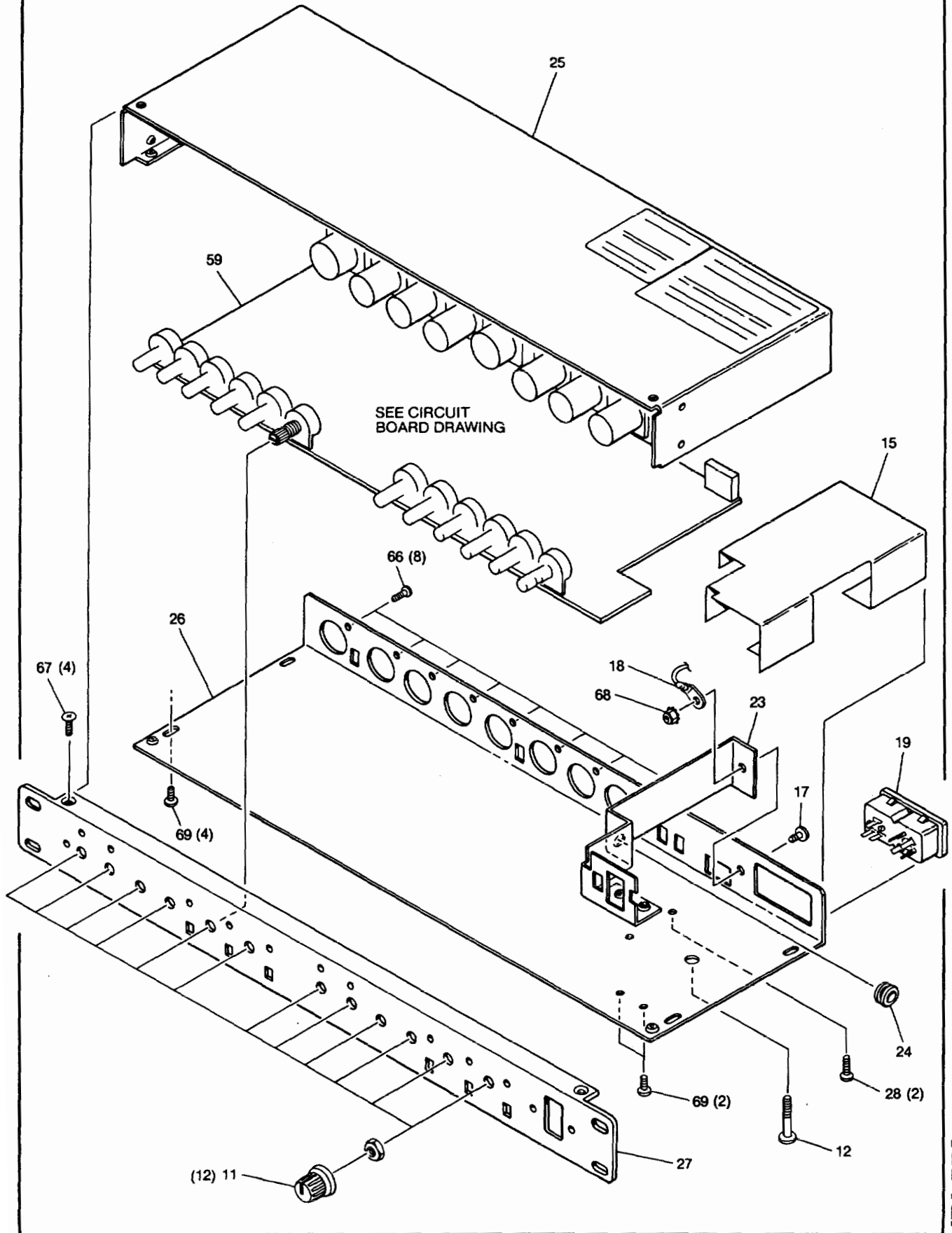
COMPONENT PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
7	—	2	INSERT, FOAM
8	32-2082	4	.250" FASTON CONNECTOR
9	32-1075	22	SHUNT/JUMPER FOR HEADER
10	32-0002	2	FUSE 200MA 5x20MM (200-250V)
11	34-0080	12	M SERIES KNOB REAN (LW)
12	28-0076	1	10-32x1-1/4 PHIL PAN SCREW STEEL BLK
13	24-0035	1	TOROID RETAINER
14	24-0201-A	1	TOROID CUSHION
15	24-0206-A	1	PCB INSULATOR LEXAN (A/L)
16	26-0048	1	4 TAP TOROID TRANSFORMER
17	28-0055	1	6-32x1/4 SMOOTH TRUSS HD SCREW BLK
18	32-2103	1	NO. 6 SOLDER LUG LOCKING TERMINAL
19	32-0056	1	AC RECEPTACLE MULTI VOLTAGE (CERT)
20	44-0010	1	M SERIES POWER SWITCH
21	70-2061	1	LED SMALL RED DIFFUSED T1
22	32-1090	1	M SERIES POWER LED HARNESS
23	24-0209	1	JBL OEM POWER SUPPLY SHIELD
24	24-0043	1	RUBBER GROMMET
25	10-2050	1	AL GENERIC TOP BLACK
26	10-1353	1	M553 CHASSIS PAINTED
27	10-1352	1	M553 FRONT PAINTED
28	28-0058	4	6-32x3/8 POZI PAN TR3 BLK .375
29	70-4209	1	INSULATOR FOR HS-2 HEATSINK - REV A
30	70-4200-A	1	HEATSINK SPACER ALUM
31	70-4204	1	HS-1 3REG HEATSINK TOP - REV A
32	70-4203	1	HS-2 3REG HEATSINK BASE - REV A
33	70-4124	1	7915 -15V REGULATOR TO-220 1500MA
34	70-4123	1	7815 +15V REGULATOR TO-220 1500MA
35	72-4023	6	5532 DUAL LOW NOISE OP AMP
36	72-4248	1	MC33078 DUAL OP-AMP
37	34-0050	10	M SERIES MINI SWITCH CAP
38	44-0027	7	MINI IN/OUT DPDT SWITCH (6 PIN)
39	44-0022	3	MINI IN/OUT 6PDT SWITCH (18 PIN)
40	42-0211	6	TRIM POT 10K OHM HORIZONTAL 10MM
41	40-2022	4	RACK 100K QUAD POT (12 PIN) 25C TAPER
42	40-2071	8	RACK POT 2B5K 16MM
43	32-0198	6	XLR MALE PCB MOUNT REAN
44	32-0199	2	XLR FEMALE PCB MOUNT REAN
45	32-0300	1	2 POS PCB BARRIER STRIP A/L
46	72-4068	4	5534 LOW NOISE OP AMP
47	72-4024	1	4558 DUAL LOW NOISE OP AMP
48	72-4248	15	MC33078 DUAL OP-AMP

ITEM	PART NO.	QTY	DESCRIPTION
49	70-1009	2	2N4124 NPN TRANSISTOR
50	32-1078	1	5 PIN HEADER STRAIGHT PIN
51	32-1071	1	5 PIN LOCKING HEADER
52	60-0063	2	1000 UF 35V 13x28 BODY
53	60-0055	16	100 UF 25V 8x11 BODY
54	60-0053-01	11	15 NP 16V DOG LEG 5x11 BODY
55	60-0050-01	4	10 UF 25V DOG LEG 5x7 BODY
56	60-0054-01	12	47 UF 16V DOG LEG 6x11 BODY
57	70-0129	1	D-101 BRIDGE RECTIFIER (100V)
58	70-3020	8	8 PIN DIP SOCKET
59	12-4045	1	M553 MAIN PCB AMISTAR ASSY REV CO
60	28-1012	11	1 POSITION LED SPACER
61	38-0105	1	"AF" HARNESS 12 PIN 5 INCH
62	70-2066	1	LED SMALL YELLOW DIFFUSED T1
63	70-2062	2	LED SMALL GREEN DIFFUSED T1
64	70-2061	8	LED SMALL RED DIFFUSED T1
65	80-4033-C	1	X34/M552 FRONT PCB
66	28-0263	8	NO. 4x3/8 PLASTITE SCREW PHIL HEAD
67	28-0060	4	6-32x1/2 POZI FLAT TR3 BLK
68	28-0065	1	6-32 KEPS HEX NUT
69	28-0059	8	6-32x1/4 POZI PAN TR3 BLK .250
70	28-0291	3	4-40x1/4 PHIL PAN SCREW .250
71	28-0204	1	NO. 6 INTERNAL TOOTH LOCKWASHER BLK
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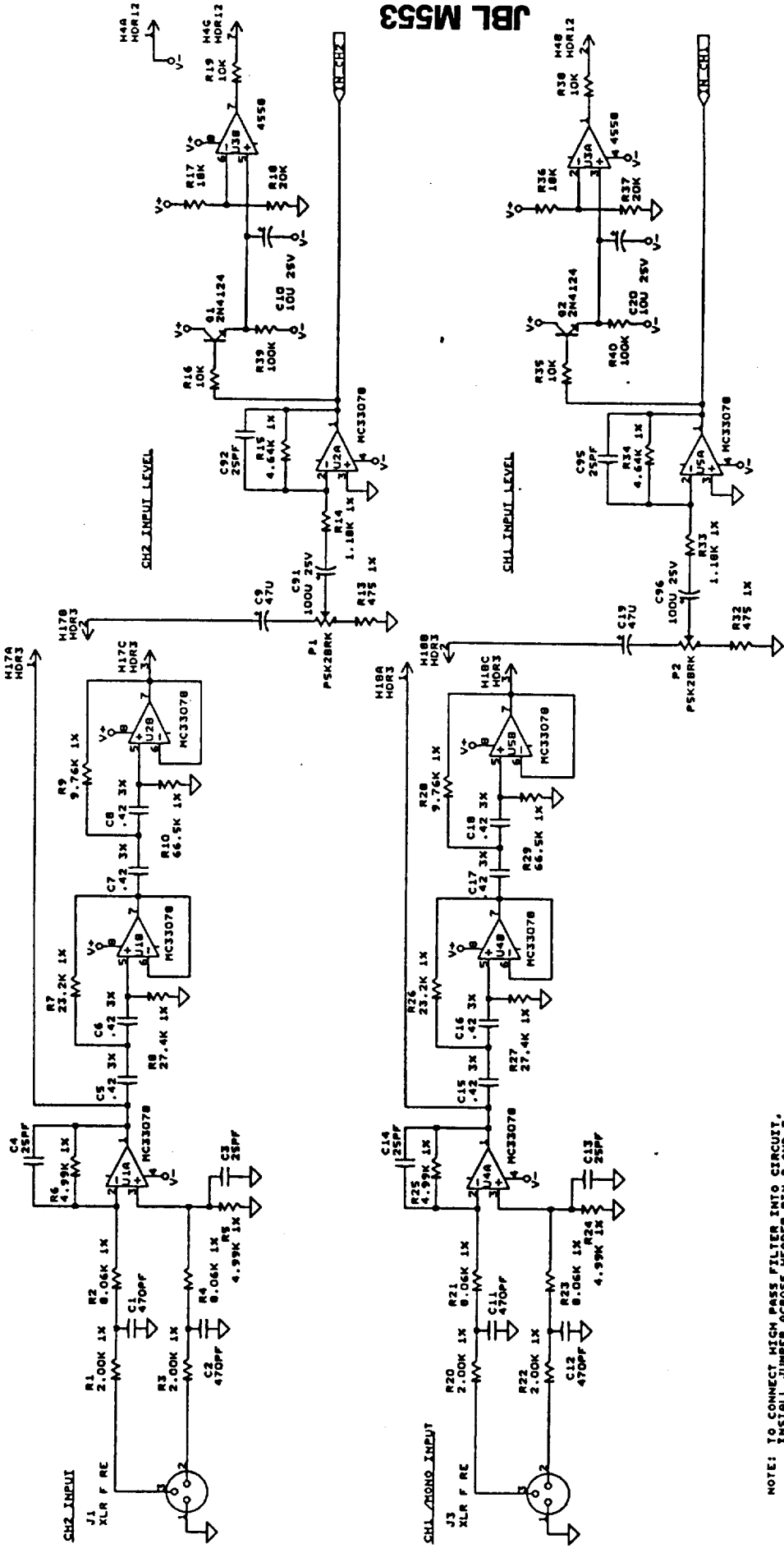
JBL M553

COMPONENT EXPLODED VIEW



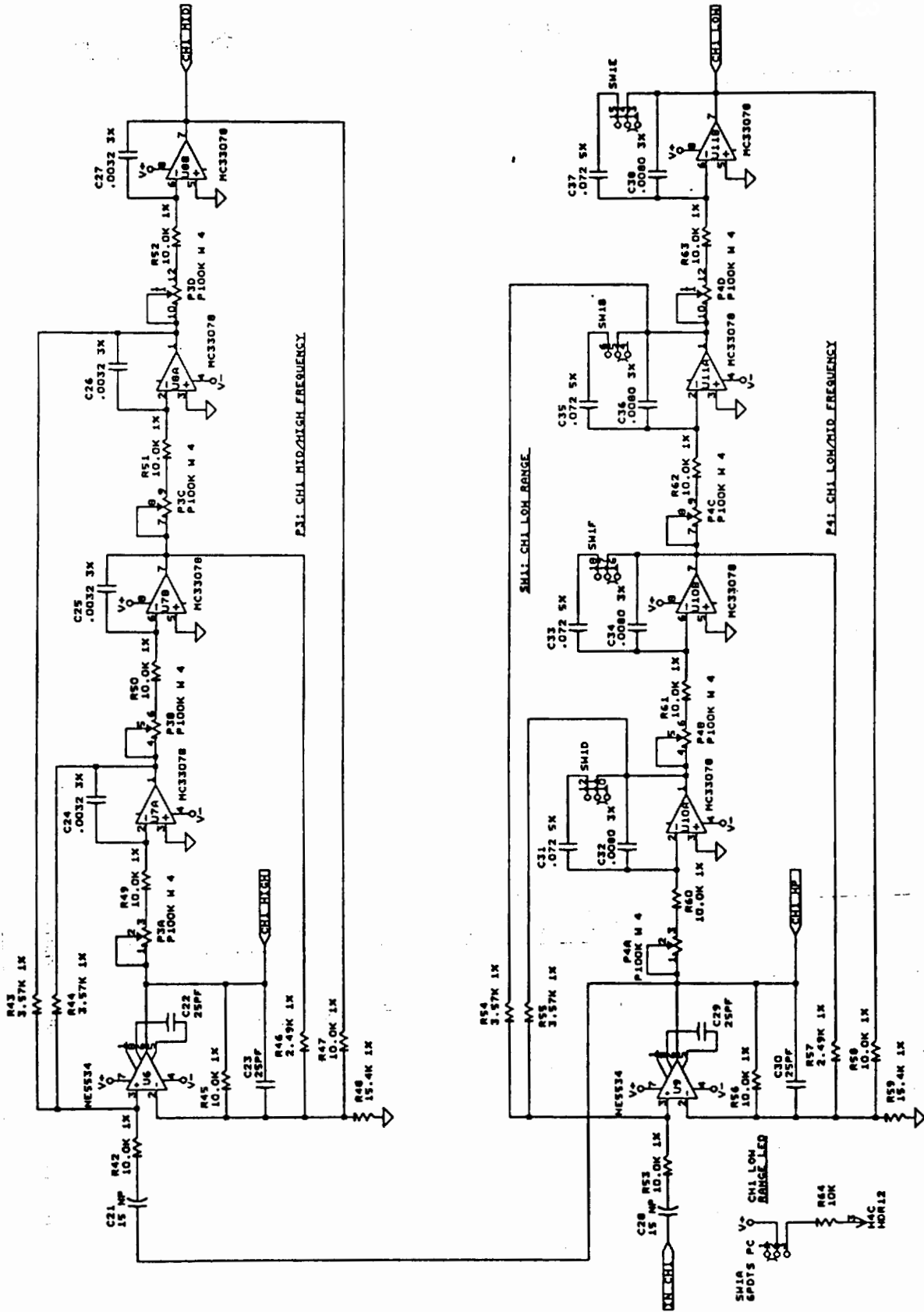
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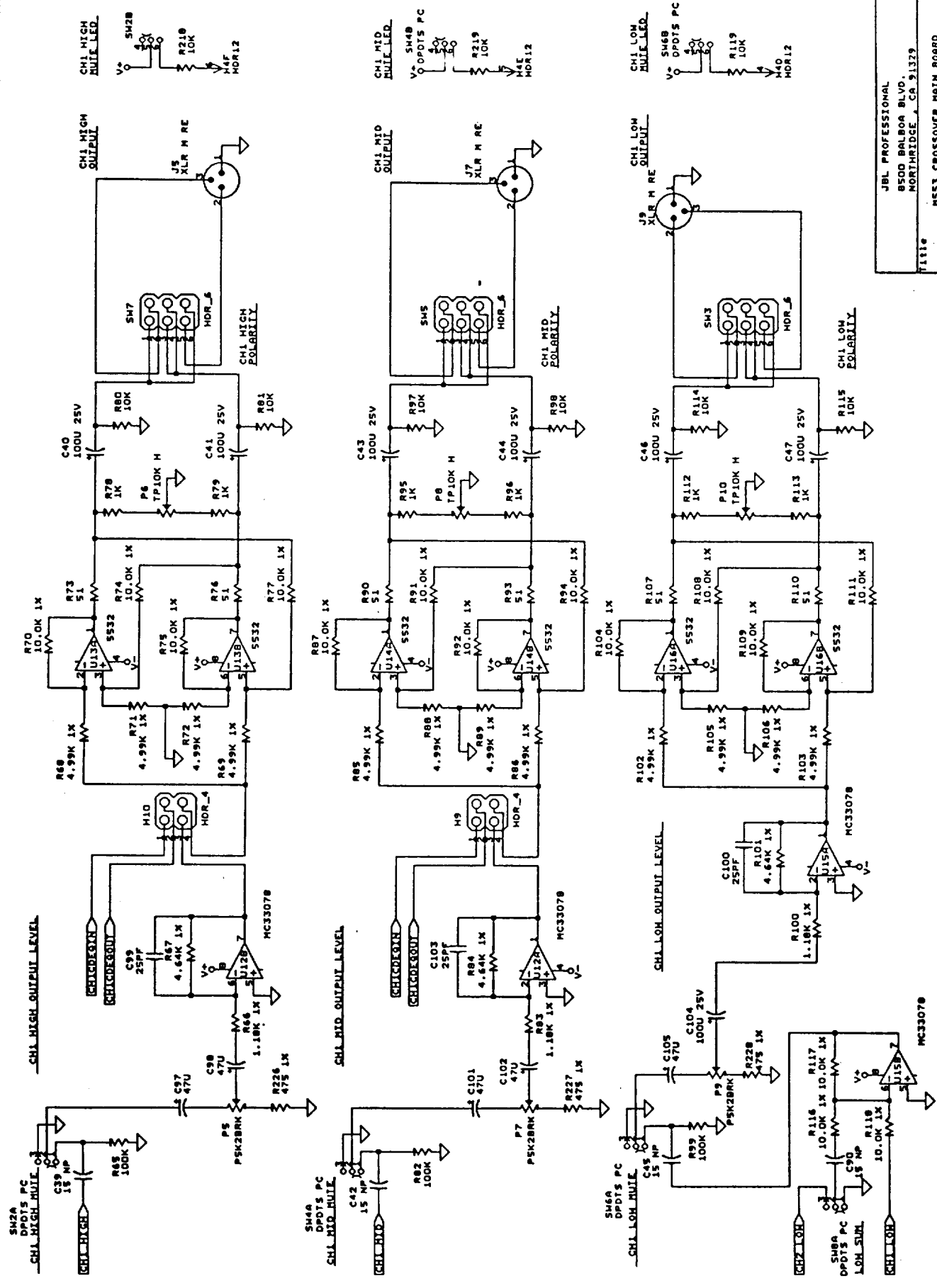
NOTE: TO CONNECT HIGH PASS FILTER INTO CIRCUIT, INSTALL JUMPER ACROSS HEADER PIN 2 AND 3 TO BYPASS HIGH PASS FILTER. INSTALL JUMPER ACROSS HEADER PIN 1 AND 2

JBL PROFESSIONAL 8500 BALBOA BLVD. MORTMORRIDGE, CA 91329	
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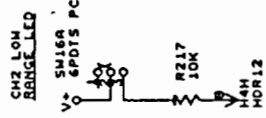
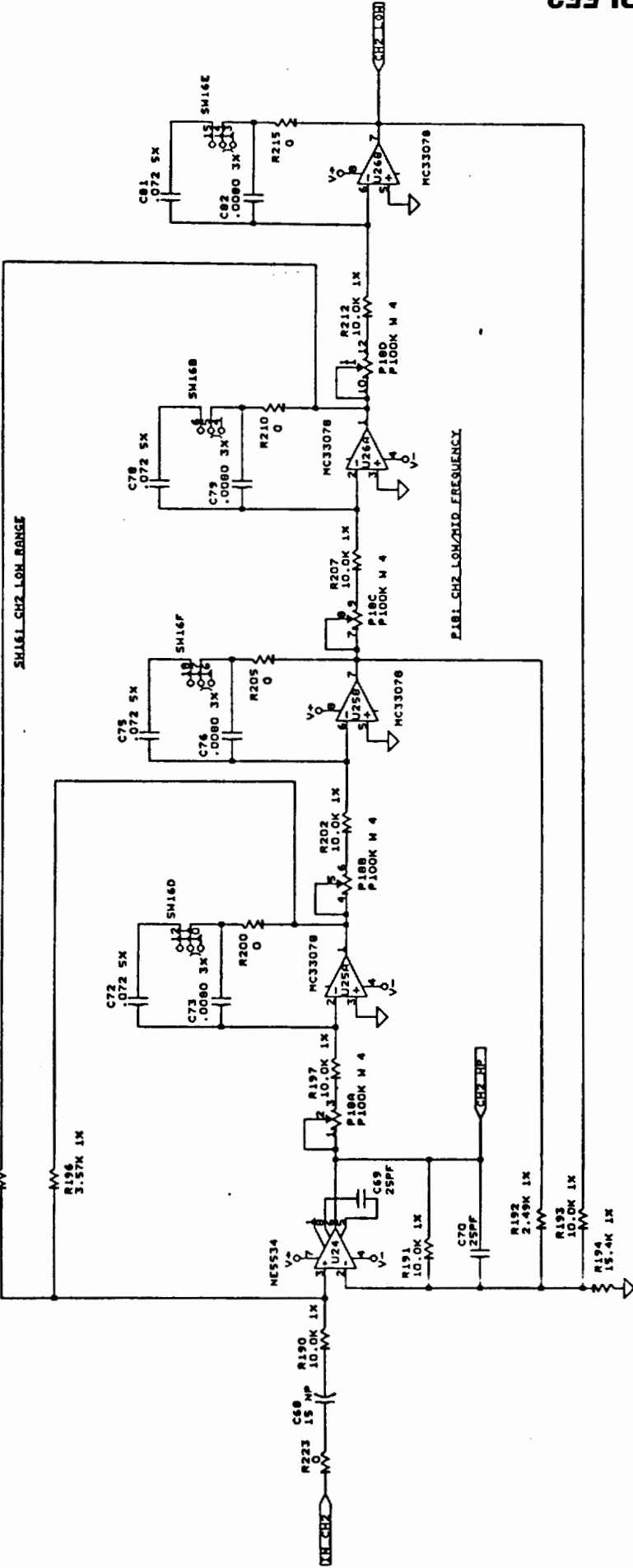
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Date: JANUARY 21, 1992	Sheet 3 of 8

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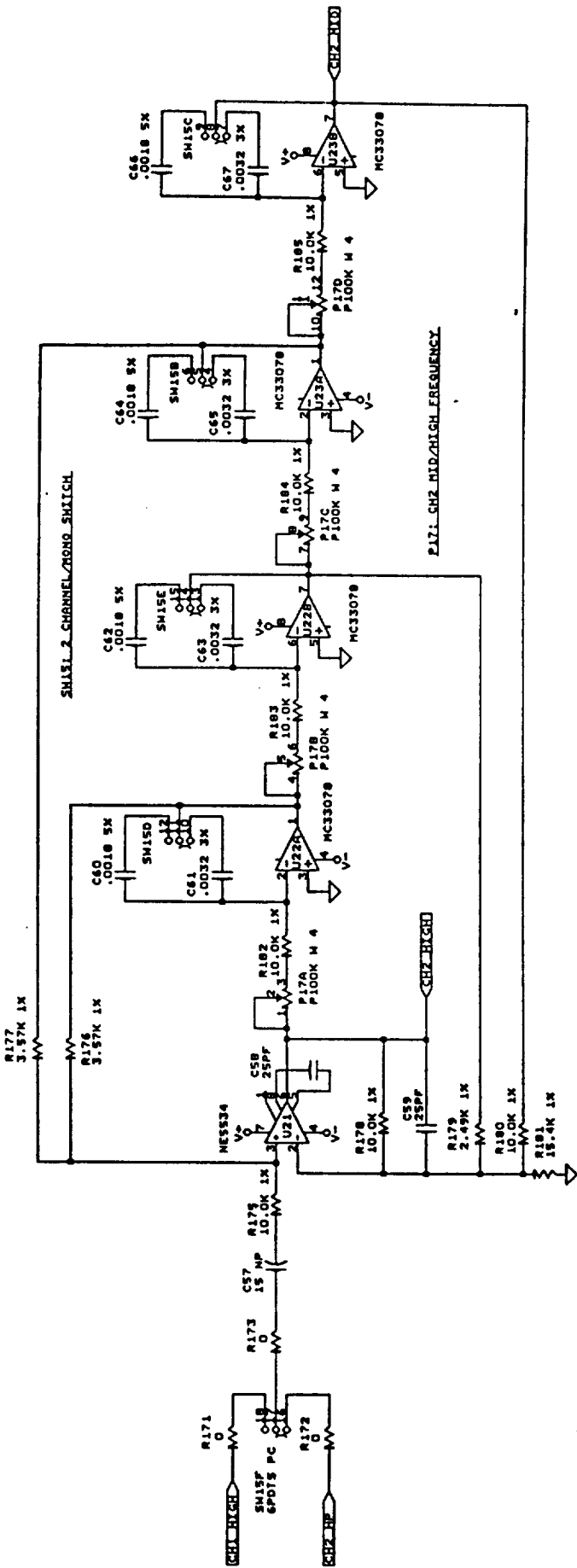


JBL PROFESSIONAL
 9500 BALBOA BLVD.
 NORTHridge, CA 91329

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 REV: C0
 Date: January 21, 1992 Sheet 3 of 8

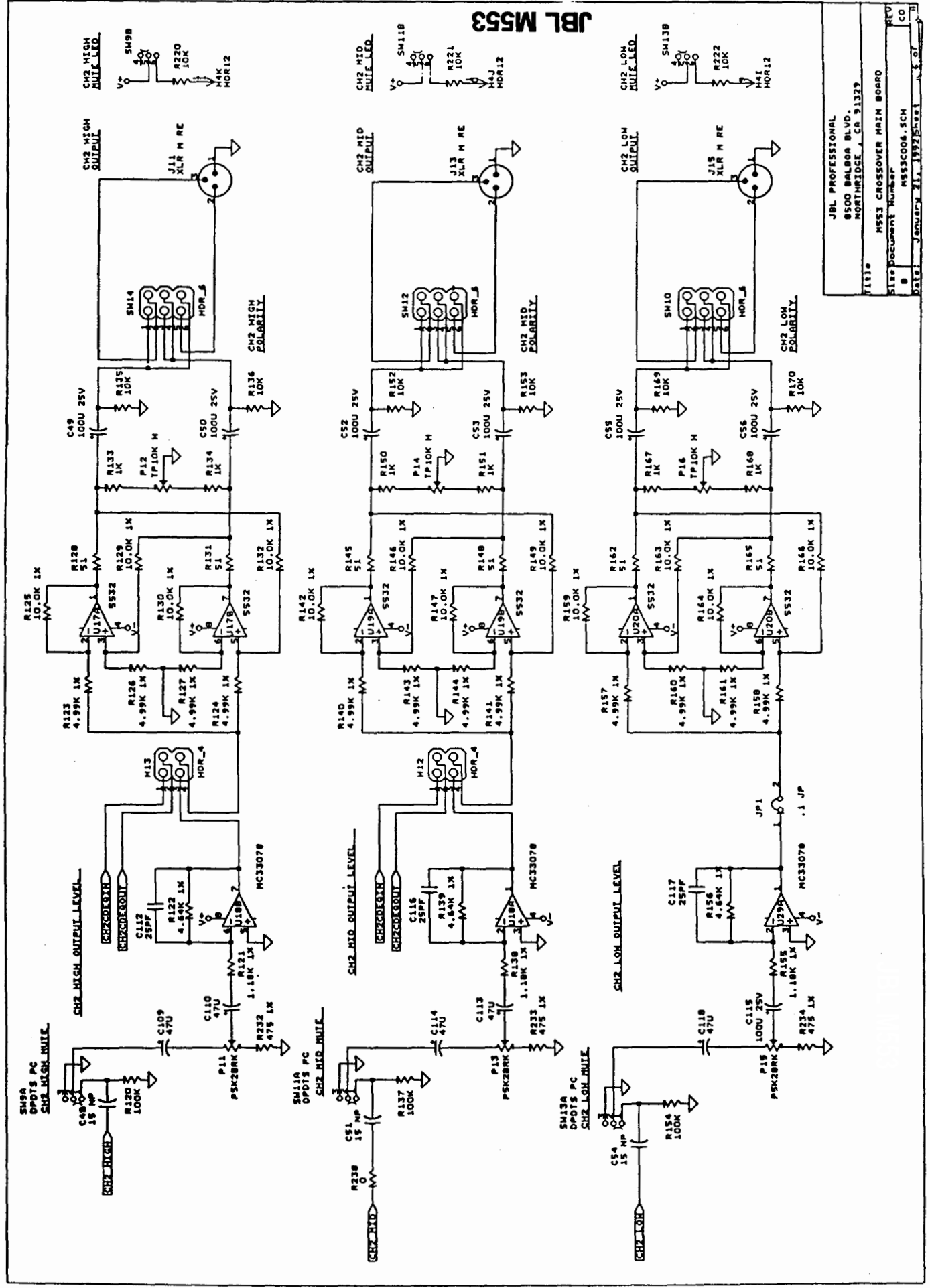


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9500 BALBOA BLVD.	
NORTHBRIDGE, CA. 91329	
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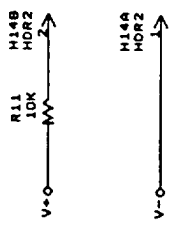
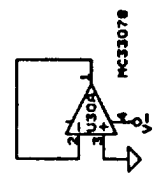
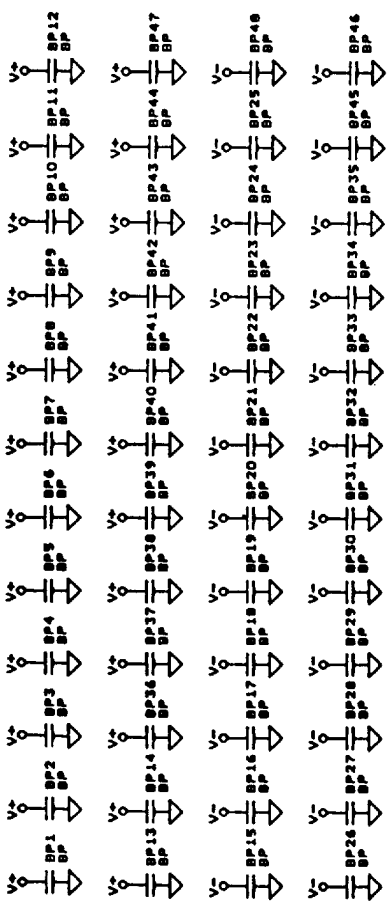
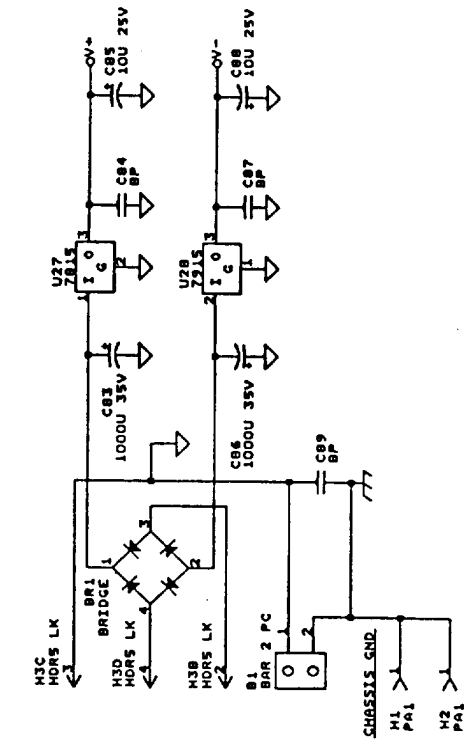


JBL PROFESSIONAL	
8500 BALBOA BLVD.	
MORTMORRIDGE, CA 91329	
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SHEET NUMBER	8
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DATE	JANUARY 21, 1992
SHEET	5 OF 5

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JBL PROFESSIONAL
 8500 BALBOA BLVD.
 NORTHBRIDGE, CR 31323
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 Schematic Number M553006.SCH
 DATE January 21, 1992
 REV CO



- NOT USED
 C106
 C107
 C108
 C109
 C110
 C111
 C112
 R30
 R31
- LAST REF.
 B1
 BP48
 BR1
 C113
 C114
 L4
 P18
 P246
 S416
 U30
 JPI

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Revision		MSS3 CROSSOVER MAIN BOARD
REV	CO	MSS3C008.SCH
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