

# Technical Manual

# JBL M552

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



## SPECIFICATIONS

### ELECTRICAL SPECIFICATIONS:

- Crossover Frequencies:
  - Stereo Mode: Low/High: 180 to 2 kHz (Divisible by 10)
  - Mono Mode: Low/Mid: 180 to 2 kHz (Divisible by 10)
  - Mid/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.)

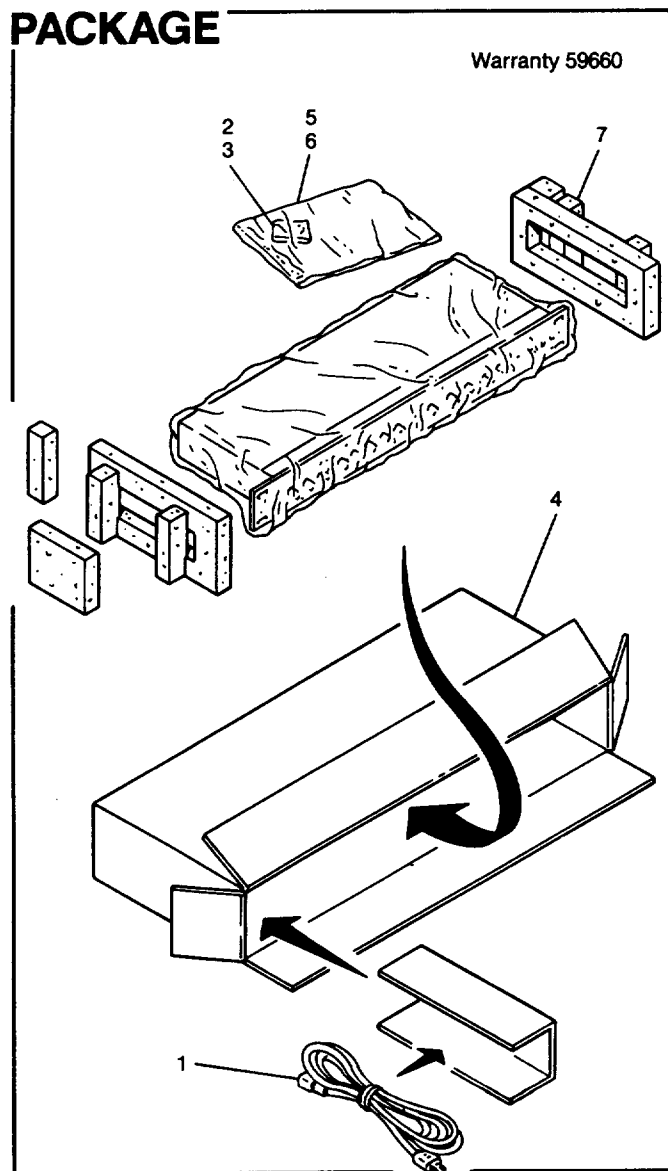
### WARRANTY INFORMATION:

- Refer to the Warranty Statement packed with each product.

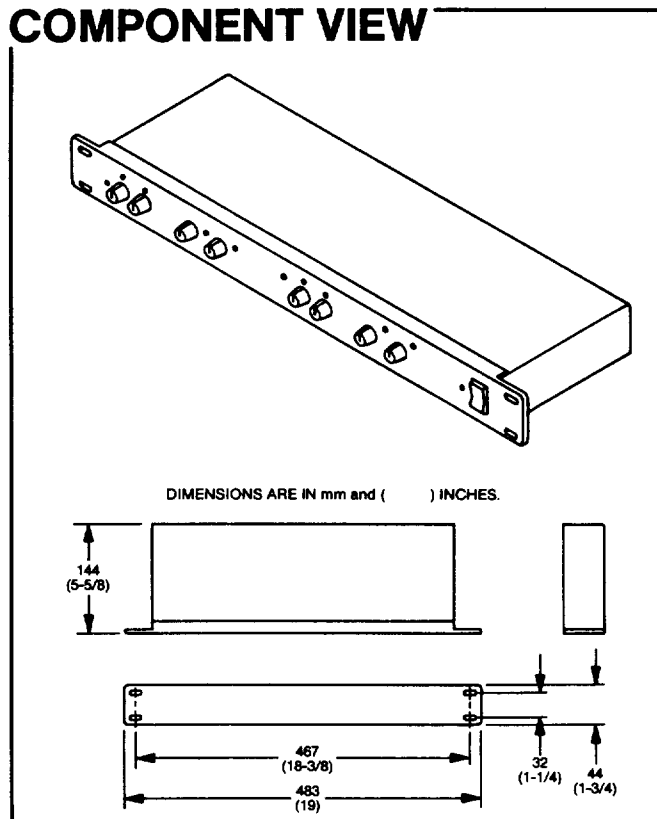
### ACCESSORY:

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	18-0410	1	M552 OWNER'S MANUAL

Please add the letters JBL behind part numbers when ordering.

# JBL M552

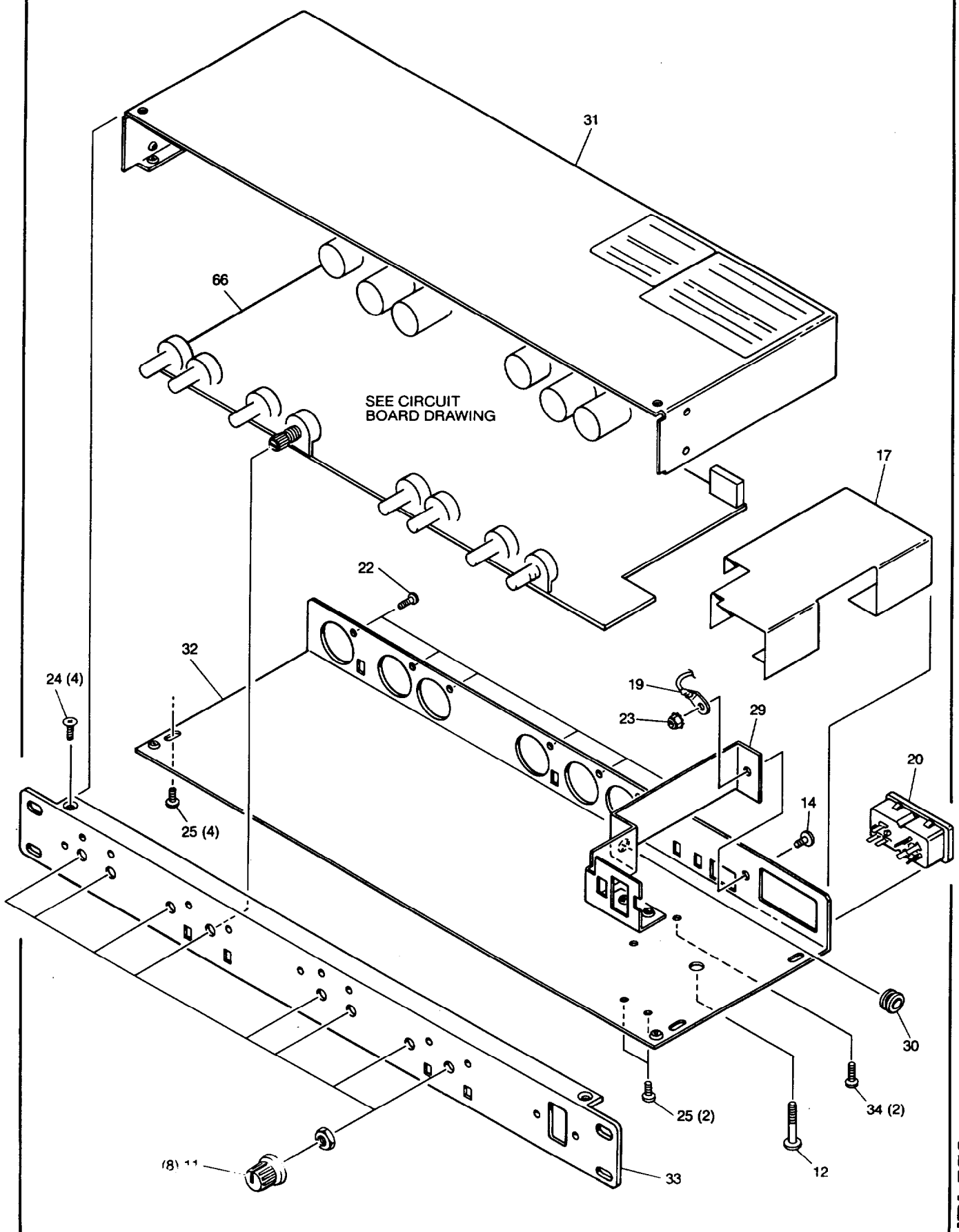
## COMPONENT PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
7	—	2	INSERT, FOAM
8	32-2082	4	.250" FASTON CONNECTOR
9	32-1075	17	SHUNT/JUMPER FOR HEADER
10	32-0002	2	FUSE 200MA 5x20MM (200-250V)
11	34-0080	8	M SERIES KNOB REAN (LW)
12	28-0076	1	10-32x1-1/4 PHIL PAN SCREW STEEL BLK
13	24-0204	1	NO. 6 INTERNAL TOOTH LOCKWASHER BLK
14	24-0055	1	6-32x1/4 SMOOTH TRUSS HD SCREW BLK
15	24-0035	1	TOROID RETAINER
16	24-0201-A	1	TOROID CUSHION
17	24-0206-A	1	PCB INSULATOR LEXAN (A/L)
18	26-0048	1	4 TAP TOROID TRANSFORMER
19	32-2103	1	NO. 6 SOLDER LUG LOCKING TERMINAL
20	32-0056	1	AC RECEPTACLE MULTI VOLTAGE (CERT)
21	28-0291	3	4-4/x1/4 PHIL PAN SCREW .250
22	28-0263	6	NO. 4x3/8 PLASTITE SCREW PHIL HEAD
23	28-0065	1	6-32 KEPS HEX NUT
24	28-0060	4	6-32x1/2 POZI FLAT TR3 BLK
25	28-0059	8	6-32x1/4 POZI PAN TR3 BLK .250
26	44-0010	1	M SERIES POWER SWITCH
27	70-2061	1	LED SMALL RED DIFFUSED T1
28	32-1090	1	M SERIES POWER LED HARNESS
29	24-0209	1	JBL OEM POWER SUPPLY SHIELD
30	24-0043-A	1	RUBBER GROMMET
31	10-2050	1	AL GENERIC TOP BLACK
32	10-1351	1	M552 CHASSIS PAINTED
33	10-1350	1	M552 FRONT PAINTED & SCREENED
34	28-0058	4	6-32x3/8 POZI PAN TR3 BLK .375
35	70-4209	1	INSULATOR FOR HS-2 HEATSINK - REV A
36	70-4200-A	1	HEATSINK SPACER ALUM
37	70-4204	1	HS-1 3REG HEATSINK TOP - REV A
38	70-4203	1	HS-2 3REG HEATSINK BASE - REV A
39	70-4124	1	7915 -15V REGULATOR T0-220 1500MA
40	70-4123	1	7815 +15V REGULATOR T0-220 1500MA
41	72-4023	4	5532 DUAL LOW NOISE OP AMP
42	34-0050	8	M SERIES MINI SWITCH CAP
43	44-0027	5	MINI IN/OUT DPDT SWITCH (6 PIN)
44	44-0022	3	MINI IN/OUT 6PDT SWITCH (18 PIN)
45	42-0211	4	TRIM POT 10K OHM HORIZONTAL 10MM
46	40-2022	2	RACK 100K QUAD POT (12 PIN) 25C TAPER
47	40-2071	6	RACK POT 2B5K 16MM
48	32-0198	4	XLR MALE PCB MOUNT REAN

ITEM	PART NO.	QTY	DESCRIPTION
49	32-0199	2	XLR FEMALE PCB MOUNT REAN
50	32-0300	1	2 POS PCB BARRIER STRIP A/L
51	72-4248	2	MC33078 DUAL OP-AMP
52	72-4068	2	5534 LOW NOISE OP AMP
53	72-4024	1	4558 DUAL LOW NOISE OP AMP
54	72-4248	11	MC33078 DUAL OP-AMP
55	70-1009	2	2N4124 NPN TRANSISTOR
56	32-1069	1	5 PIN HEADER STRAIGHT PIN
57	32-1067	1	14 PIN HEADER STRAIGHT PIN
58	32-1071	1	5 PIN LOCKING HEADER
59	60-0063	2	1000 UF 35V 13x28 BODY
60	60-0055	12	100 UF 25V 8x11 BODY
61	60-0063-01	7	15 NP 16V DOG LEG 5x11 BODY
62	60-0050-01	4	10 UF 25V DOG LEG 5x7 BODY
63	60-0054-01	8	47 UF 16V DOG LEG 6x11 BODY
64	70-0129	1	D-101 BRIDGE RECTIFIER (100V)
65	70-3020	6	8 PIN DIP SOCKET
66	80-4034-C	1	X34/M552 MAIN PCB
67	28-1012	9	1 POSITION LED SPACER
68	38-0105	1	"AF" HARNESS 12 PIN 5 INCH
69	70-2066	1	LED SMALL YELLOW DIFFUSED T1
70	70-2062	2	LED SMALL GREEN DIFFUSED T1
71	70-2061	6	LED SMALL RED DIFFUSED T1
72	80-4033-C	1	X34/M552 FRONT PCB
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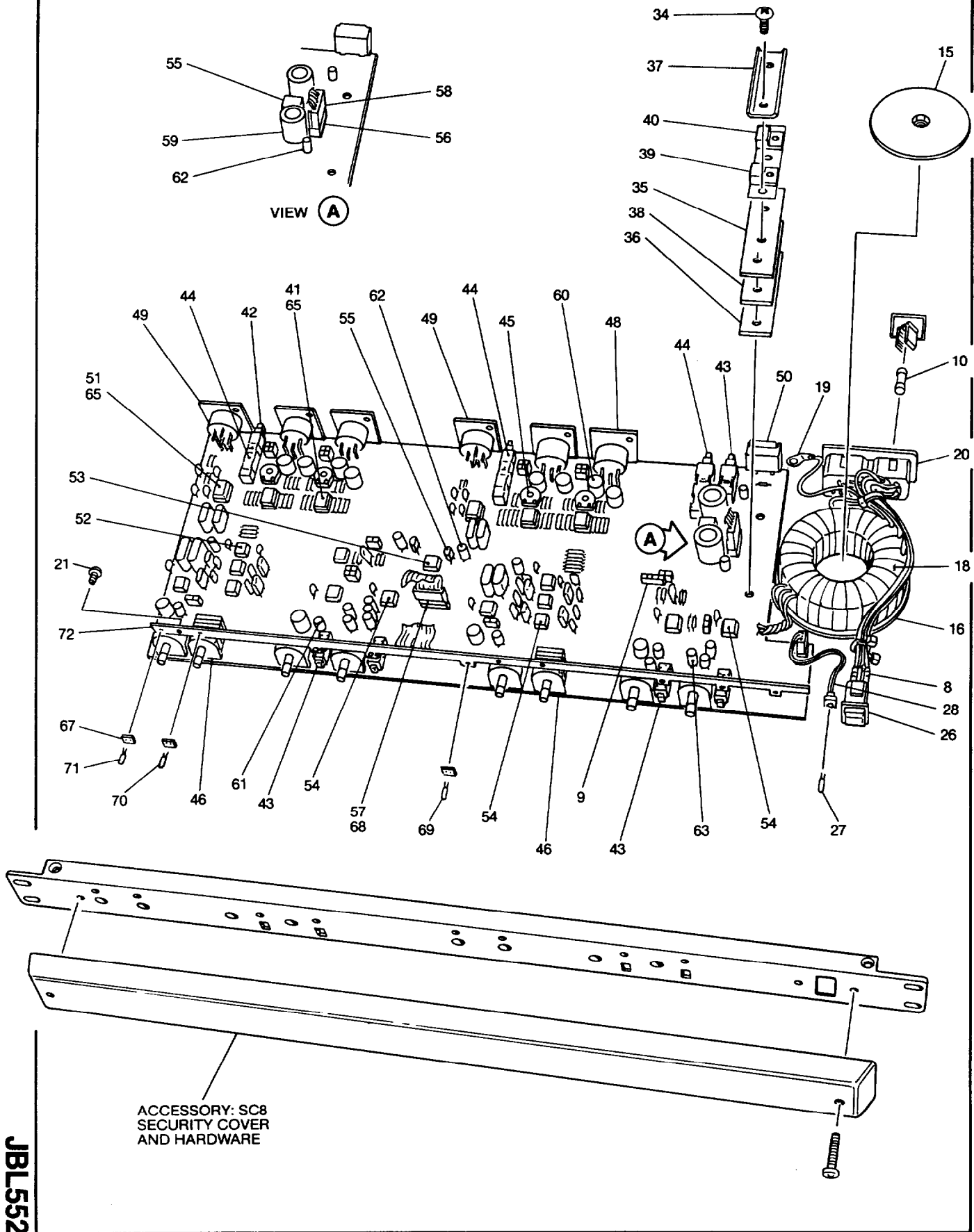
# JBL M552

## COMPONENT EXPLODED VIEW

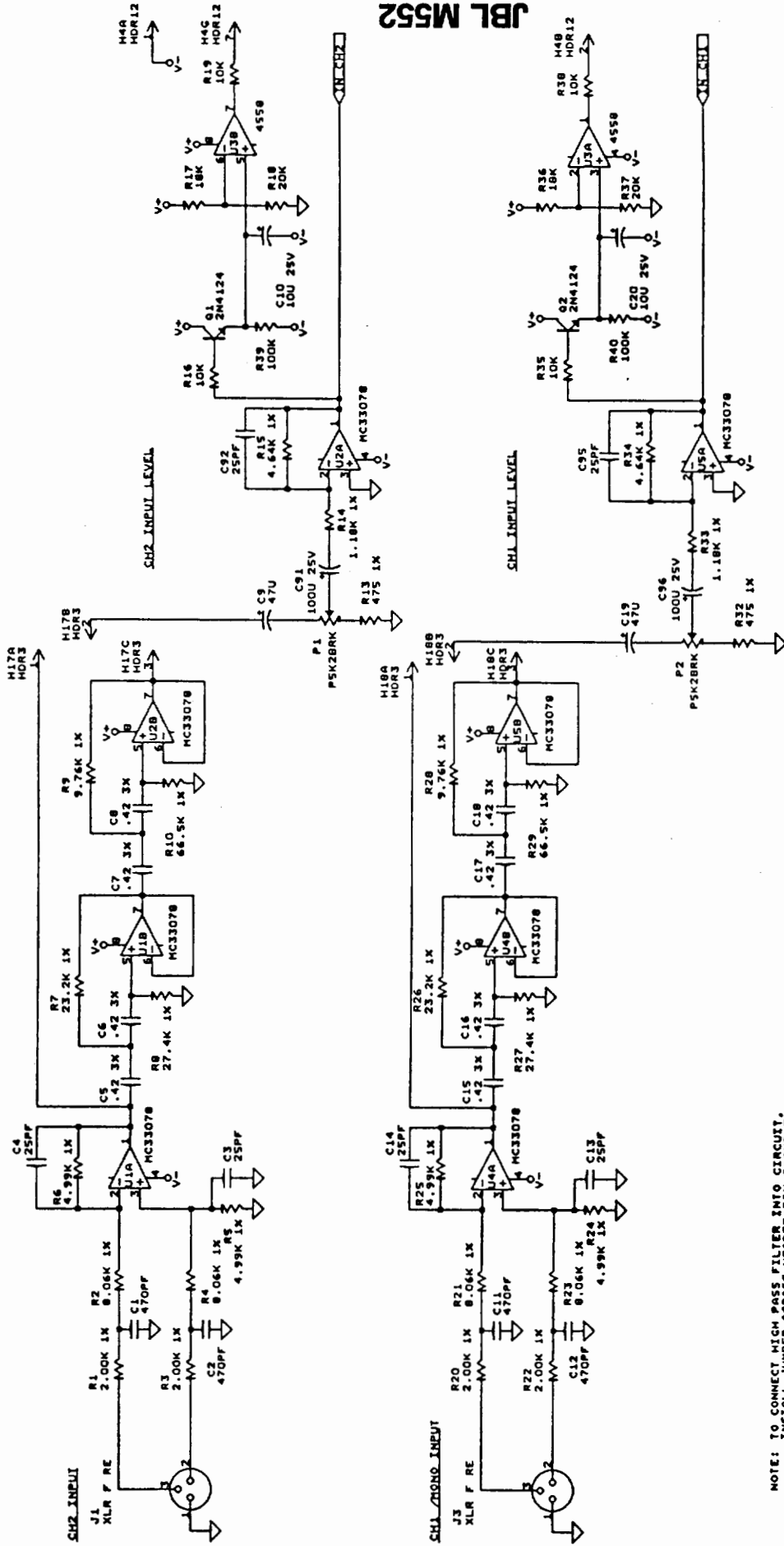


# JBL M552

## CIRCUIT BOARD

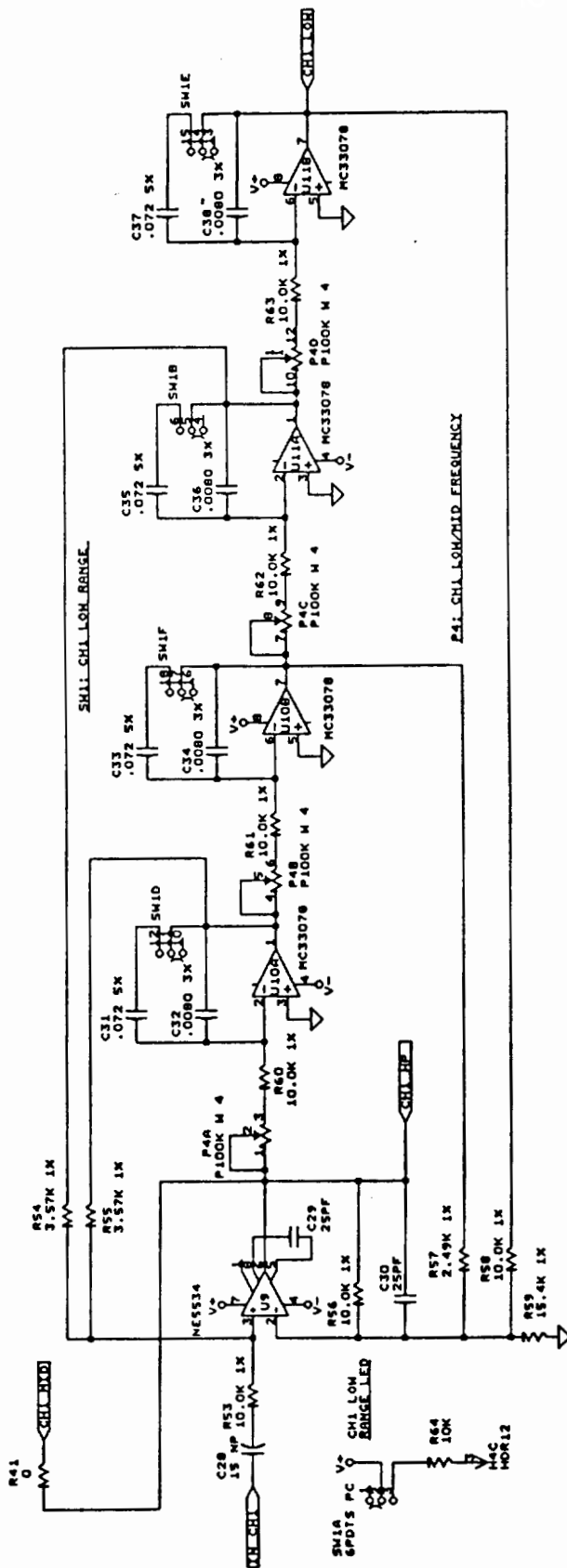


# JBL M552

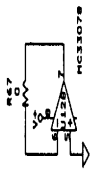


NOTE: TO CONNECT HIGH PASS FILTER INTO CIRCUIT, INSTALL JUMPER ACROSS HEADER PIN 2 AND 3. TO BYPASS HIGH PASS FILTER, INSTALL JUMPER ACROSS HEADER PIN 1 AND 2.

JBL PROFESSIONAL 9500 BALBOA BLVD. MORRISTOWN, NJ 07970	
Title	M552 CROSSOVER MAIN BOARD
Size	Document Number M552001.SCH
Rev	0
Date	JANUARY 21, 1992

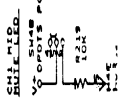
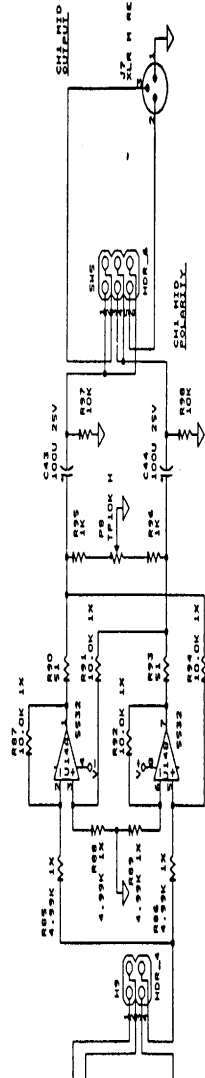


JBL PROFESSIONAL	
6500 BALBOA BLVD.	
MORTMIDGE, CA 91323	
TITLE	M552 CROSSOVER MAIN BOARD
SHEET NUMBER	M552C002.SCH
REV	CO
DATE	JANUARY 21, 1977



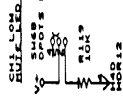
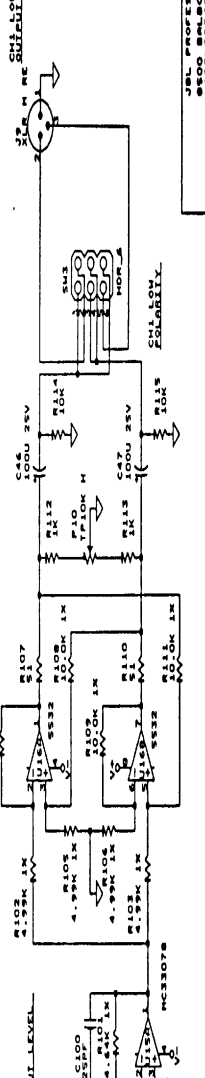
CHL\_HRD\_QUIET\_LEVEL

CHL\_HRD\_QUIET\_LEVEL



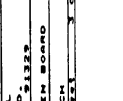
CHL\_LOM\_OUTLET\_LEVEL

CHL\_LOM\_OUTLET\_LEVEL

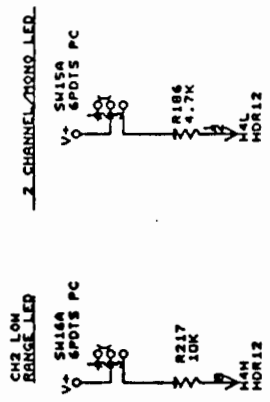
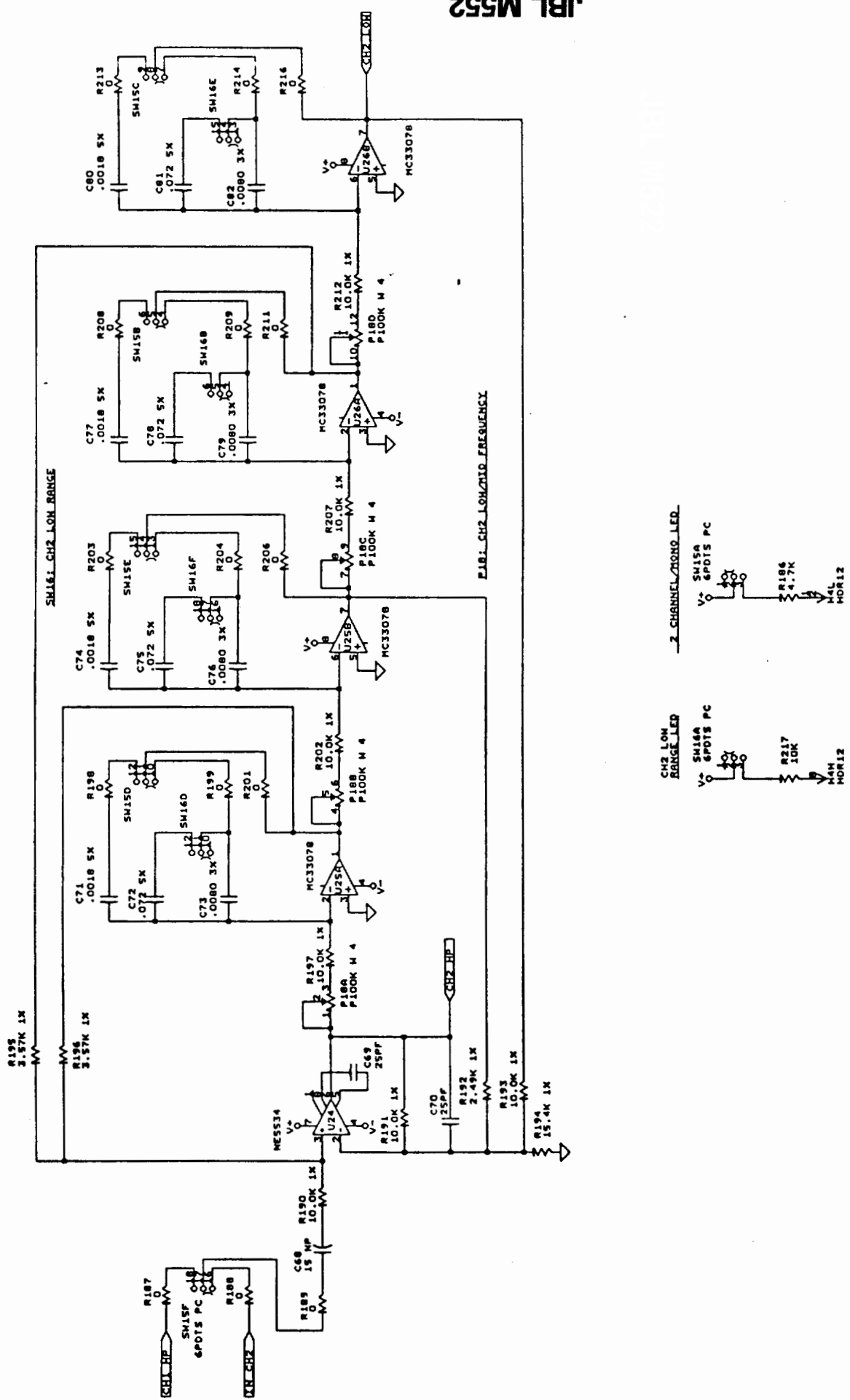


CHL\_LOM\_QUIET\_LEVEL

CHL\_LOM\_QUIET\_LEVEL

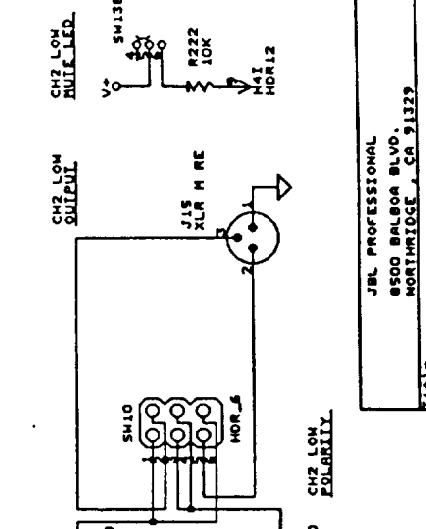
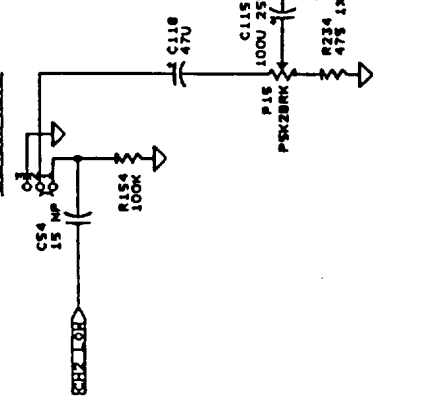
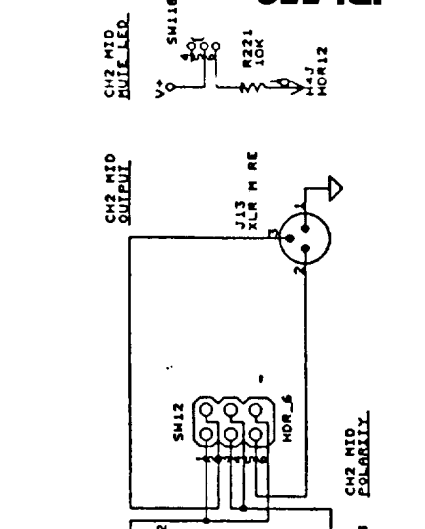
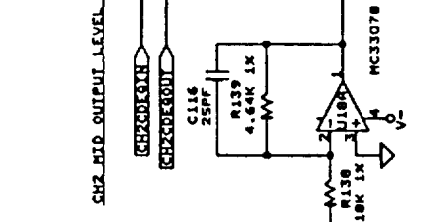
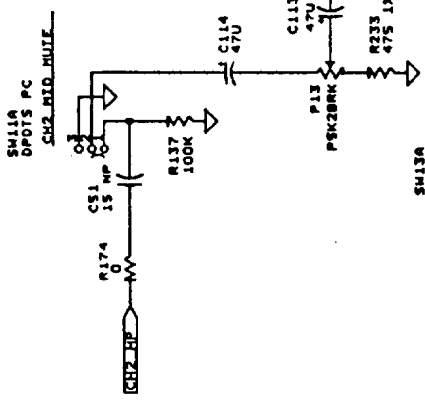
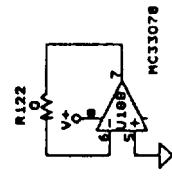


JBL PROFESSIONAL  
 MODEL NUMBER MC33078  
 PART NUMBER CROSSOVER MAIN BOARD  
 SEE PREVIOUS NUMBERS FOR OTHER  
 PARTS



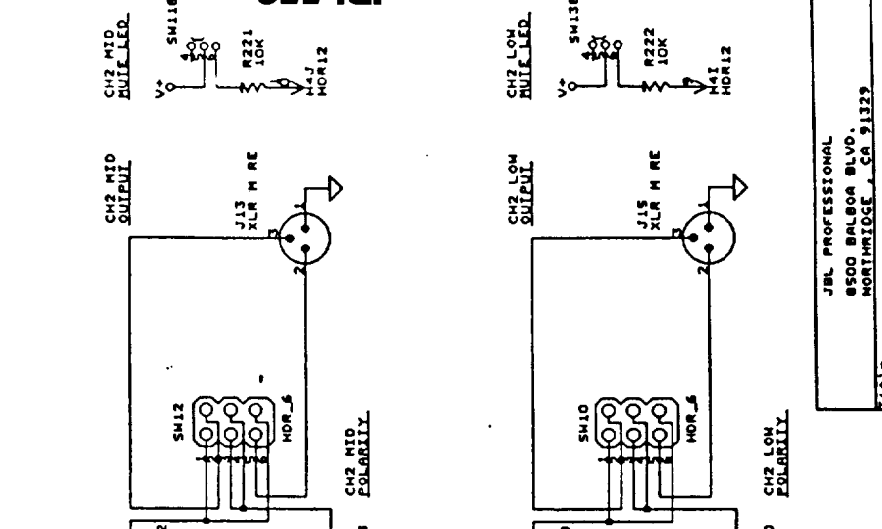
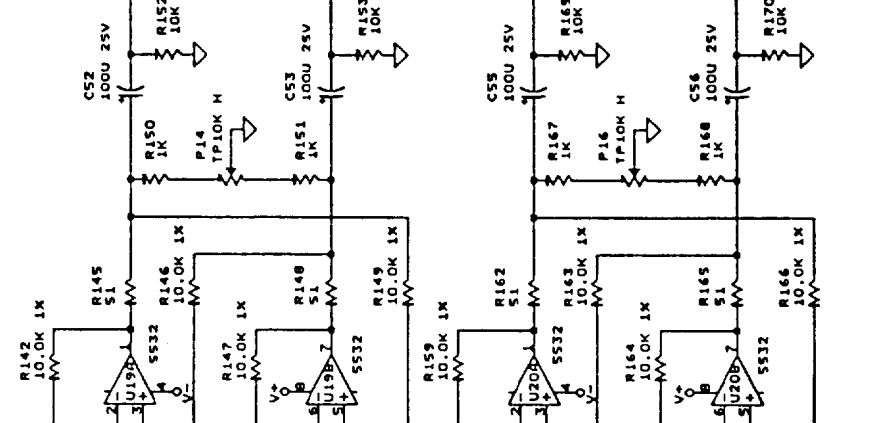
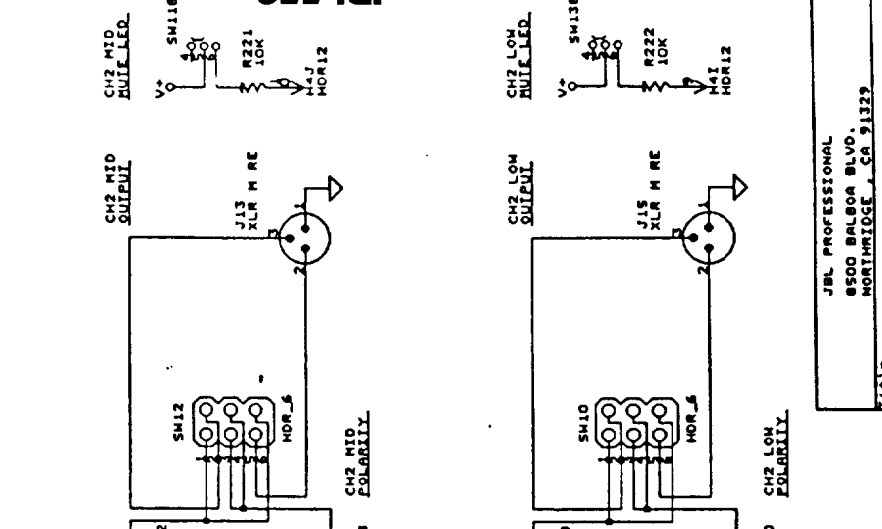
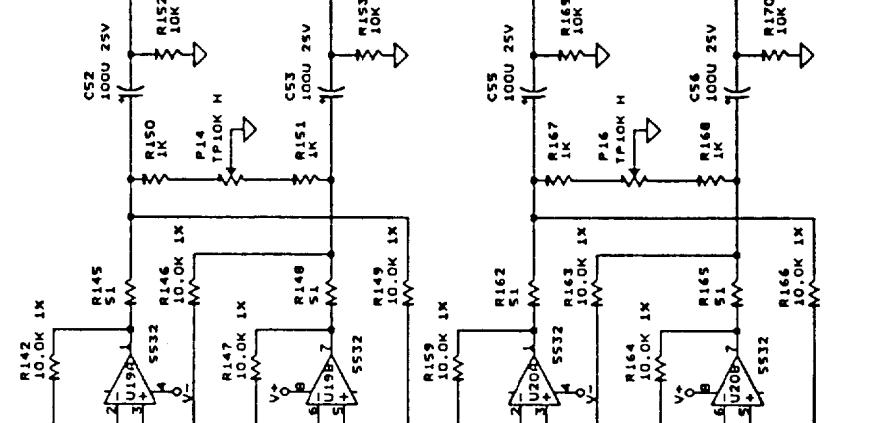
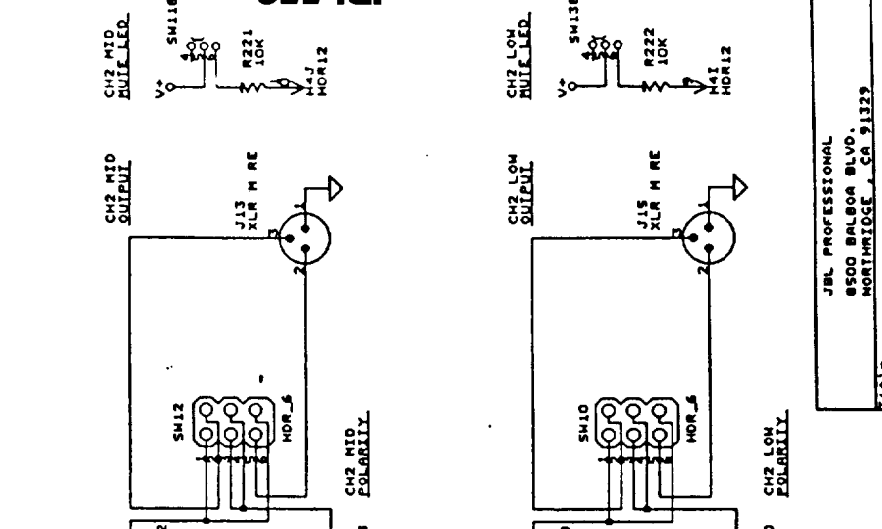
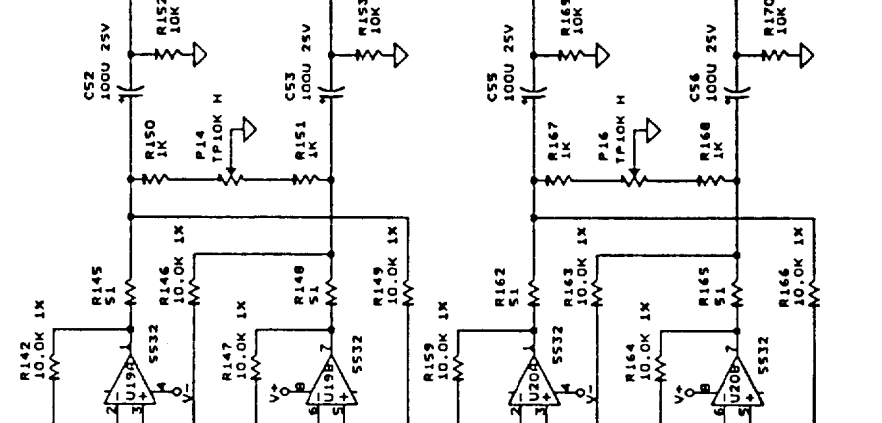
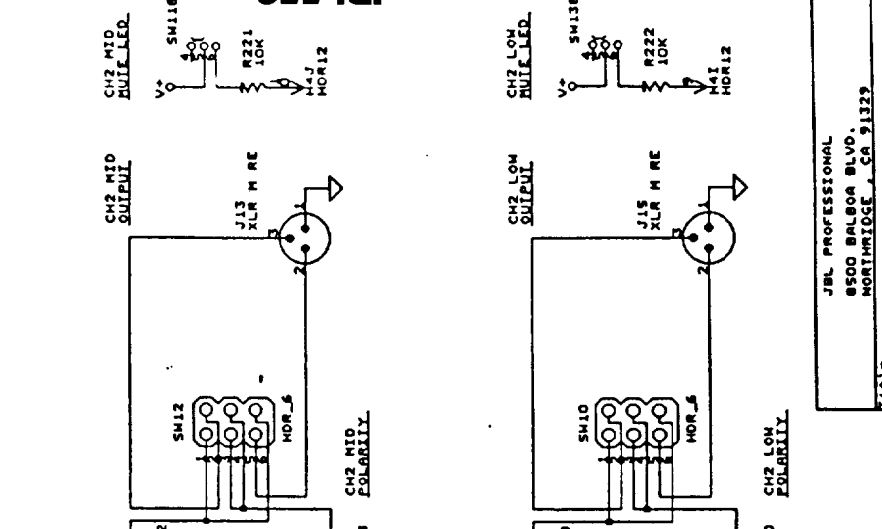
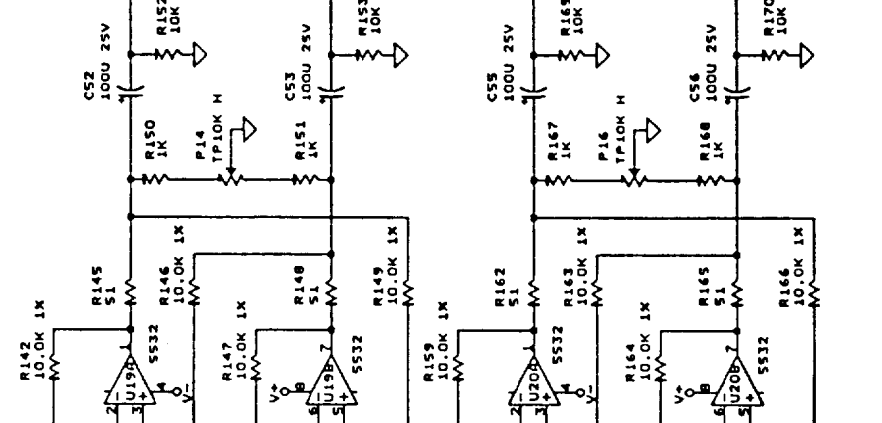
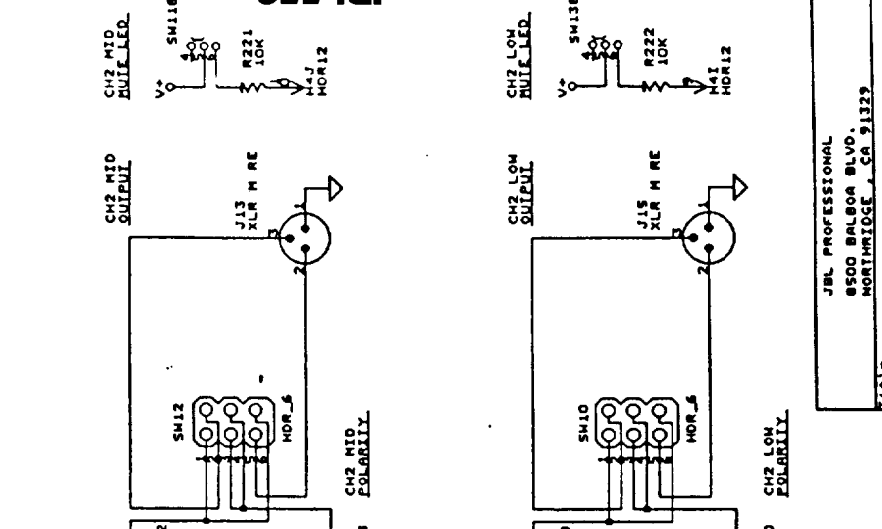
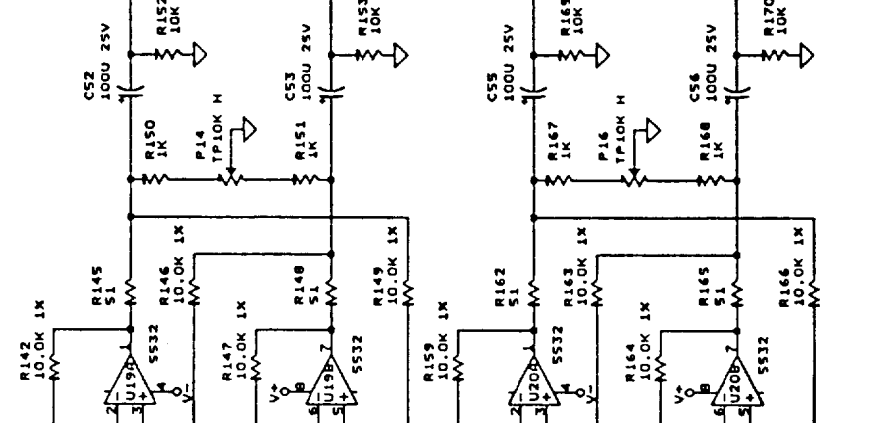
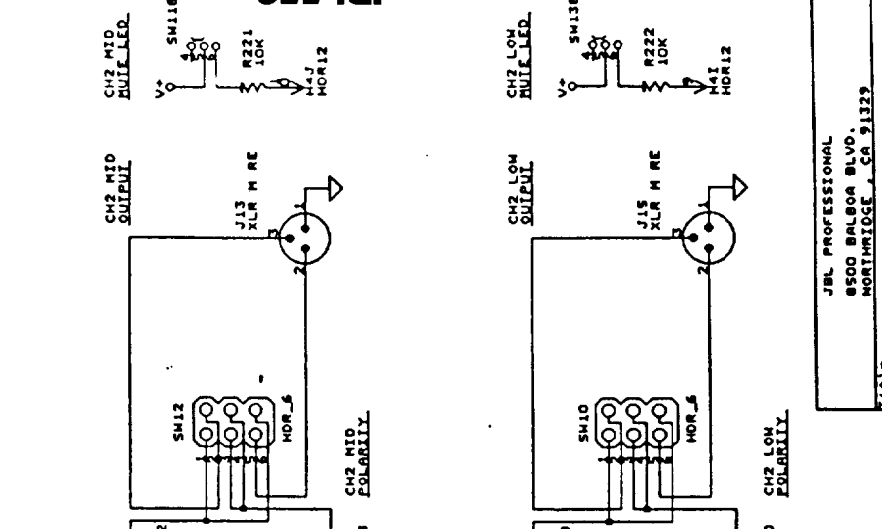
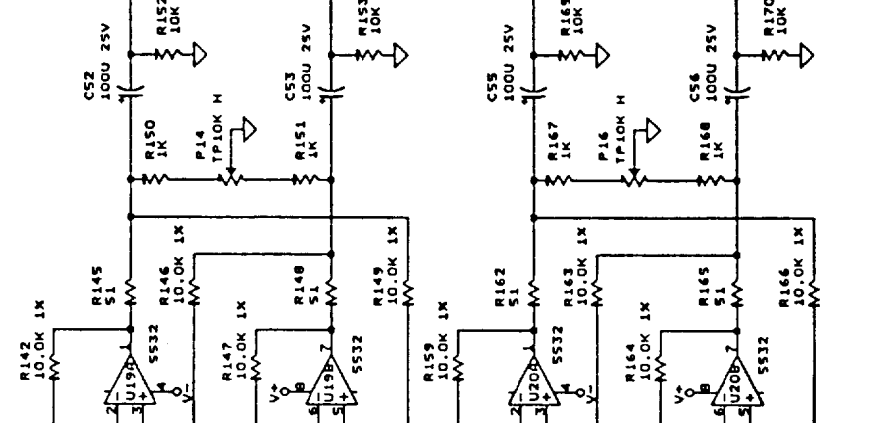
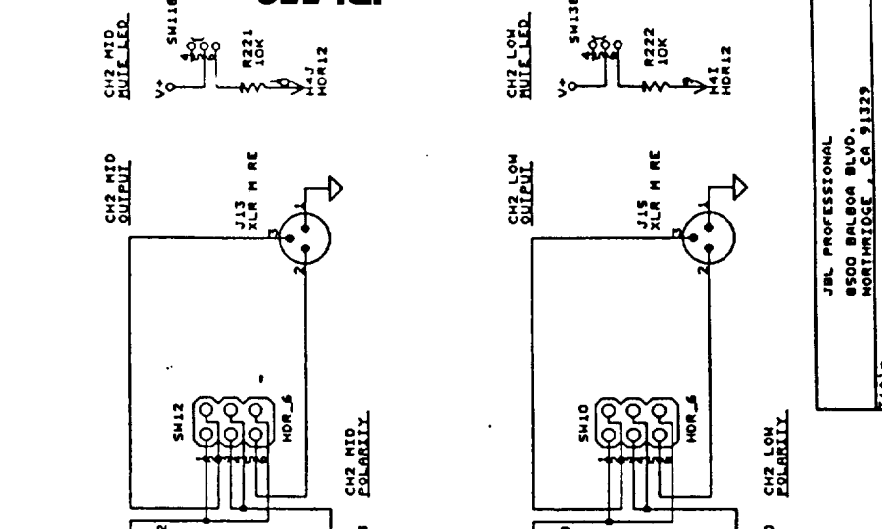
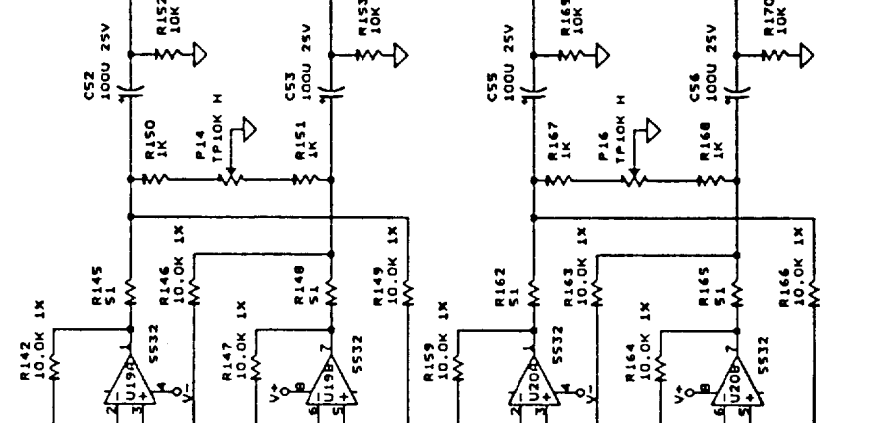
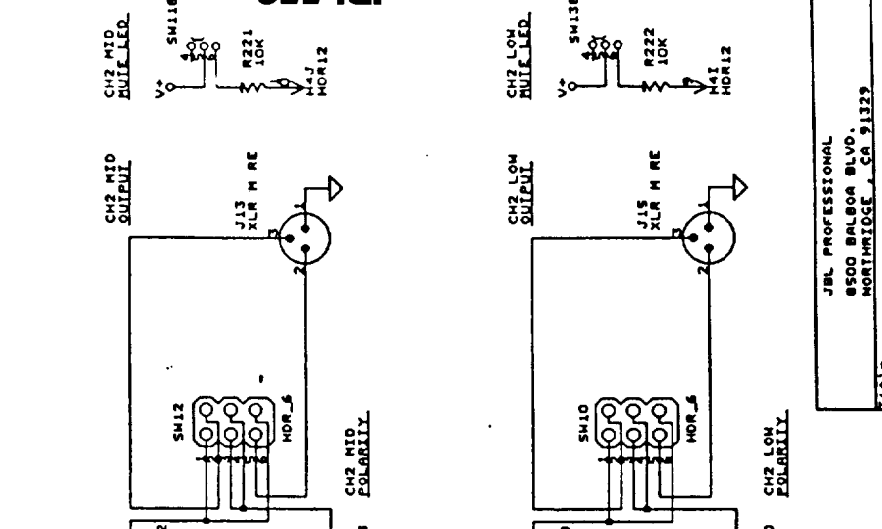
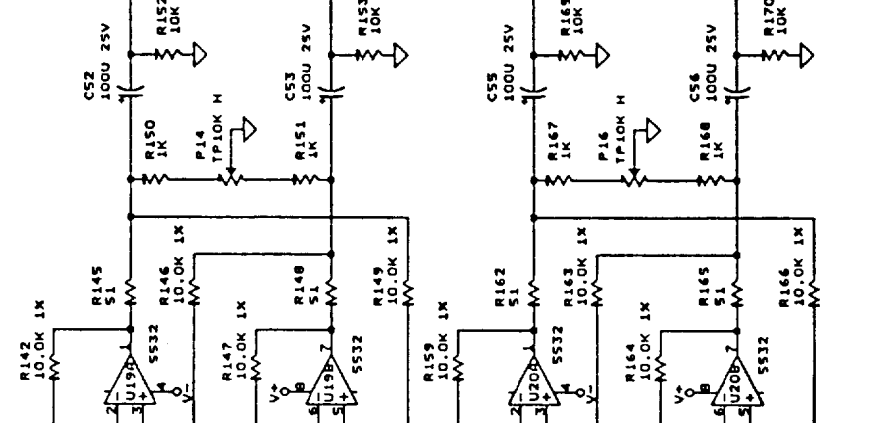
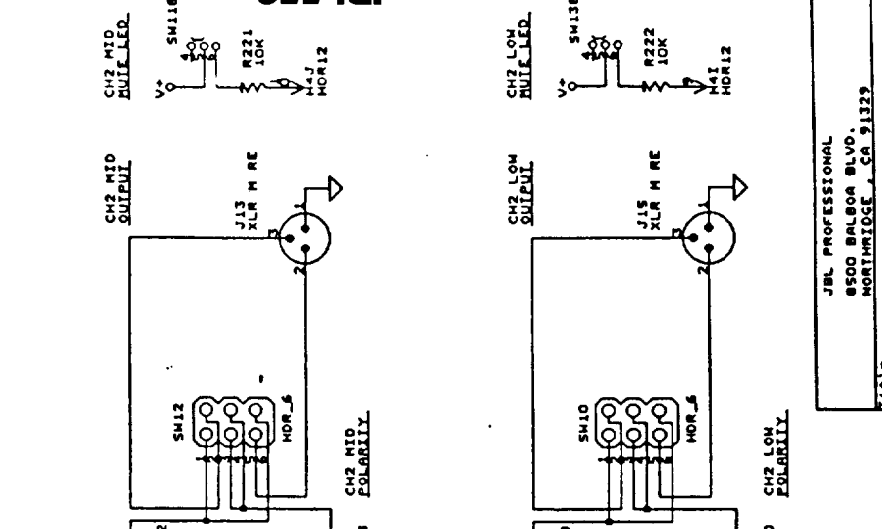
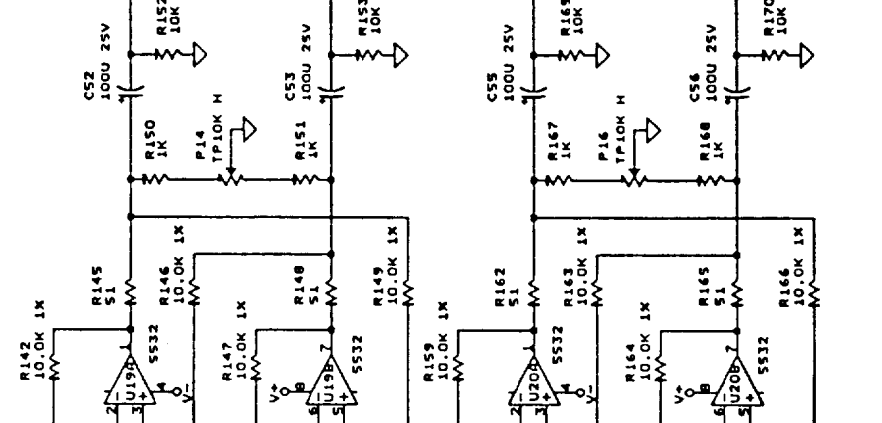
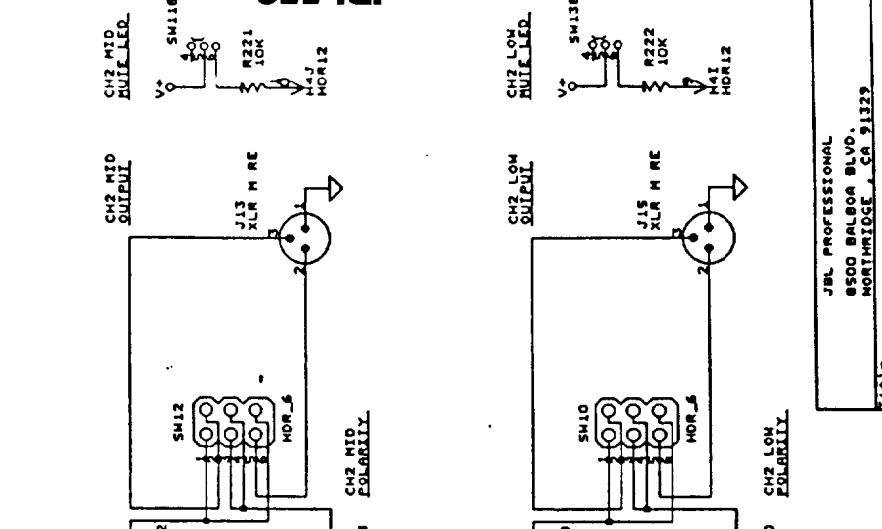
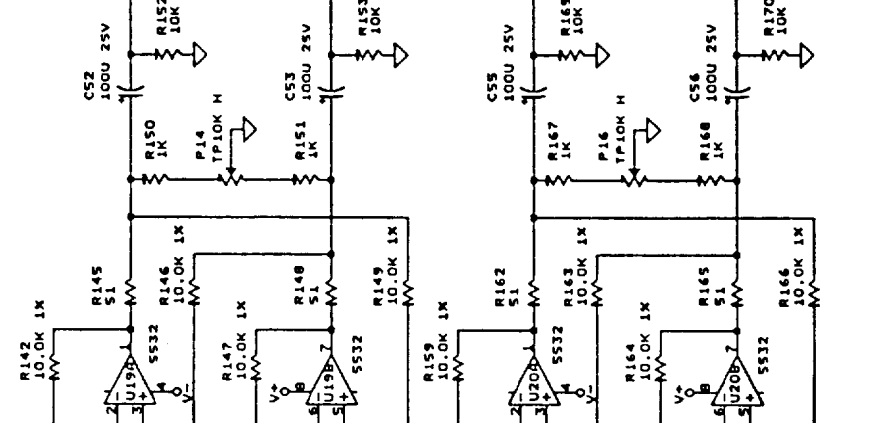
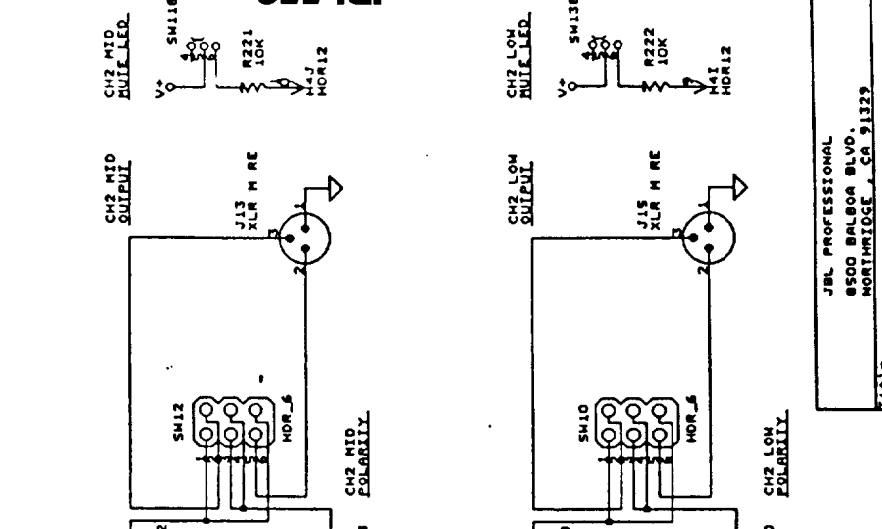
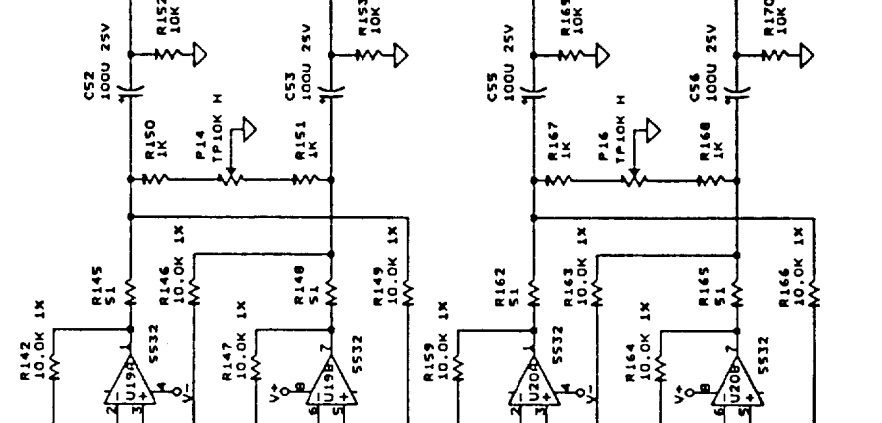
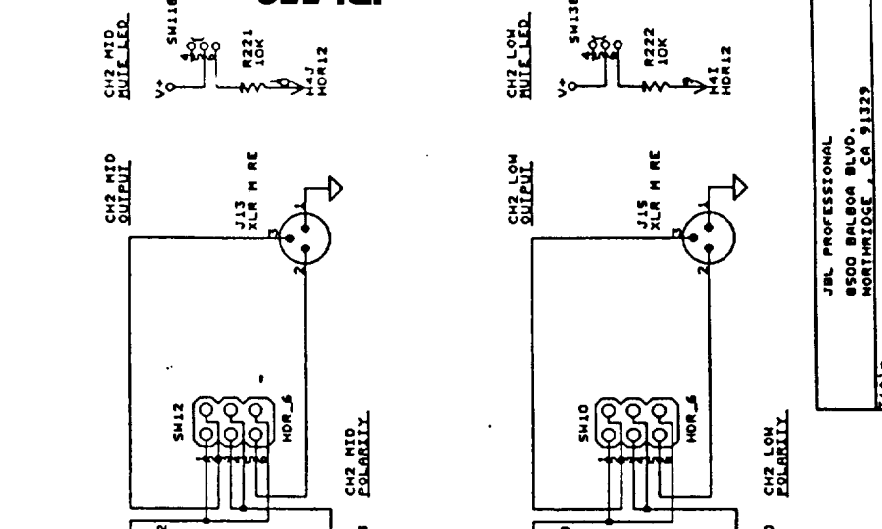
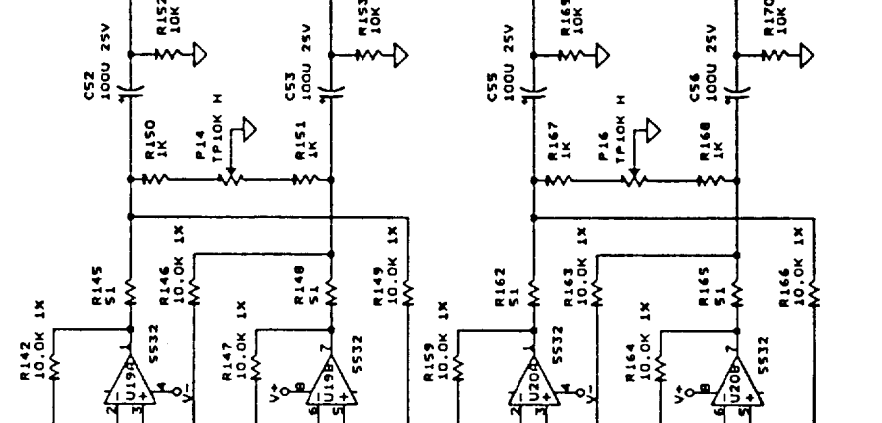
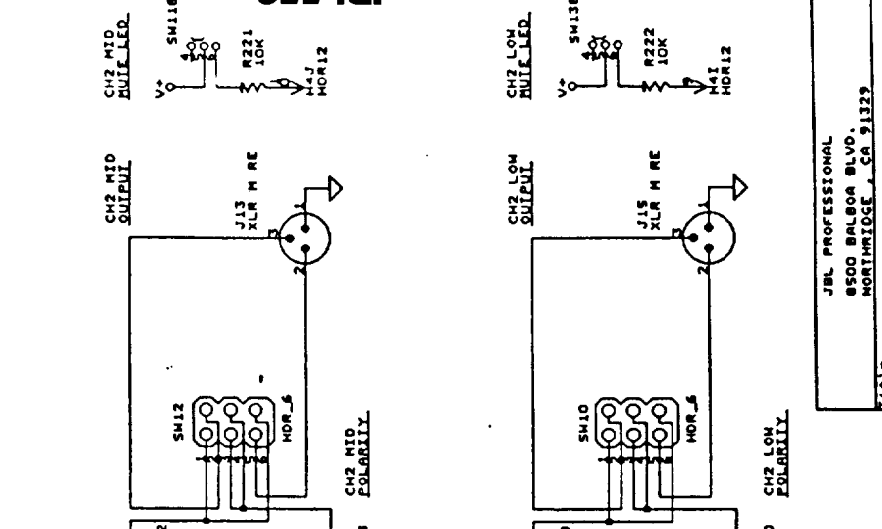
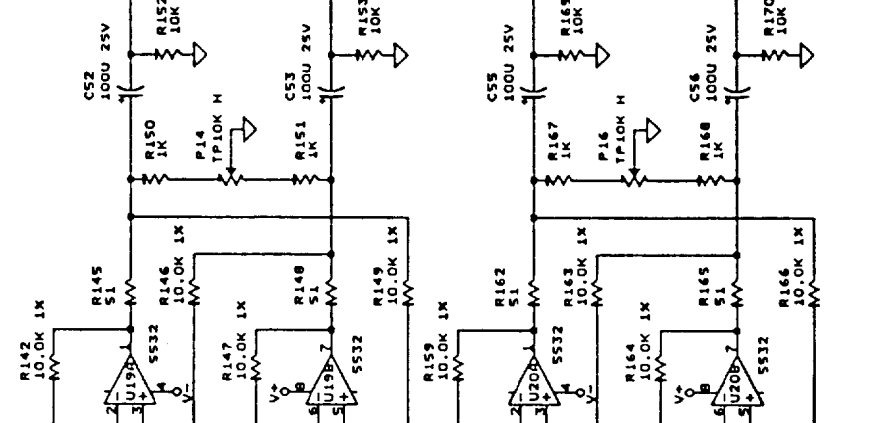
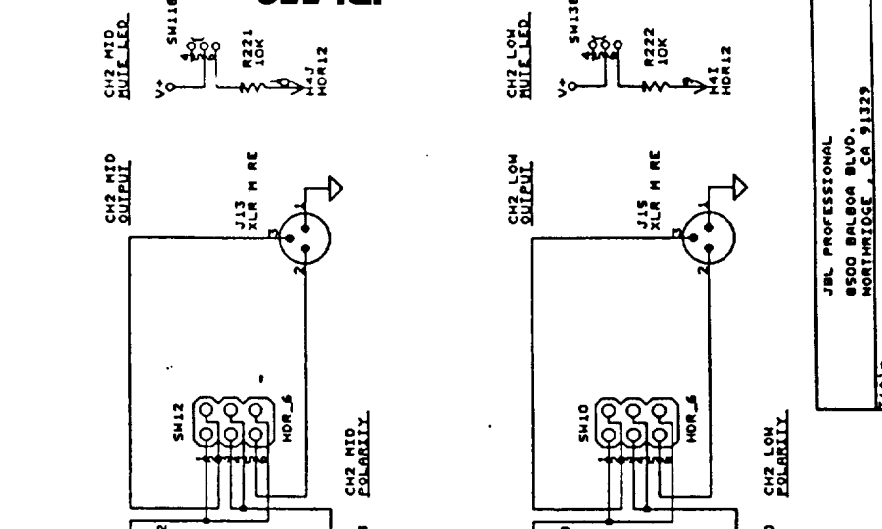
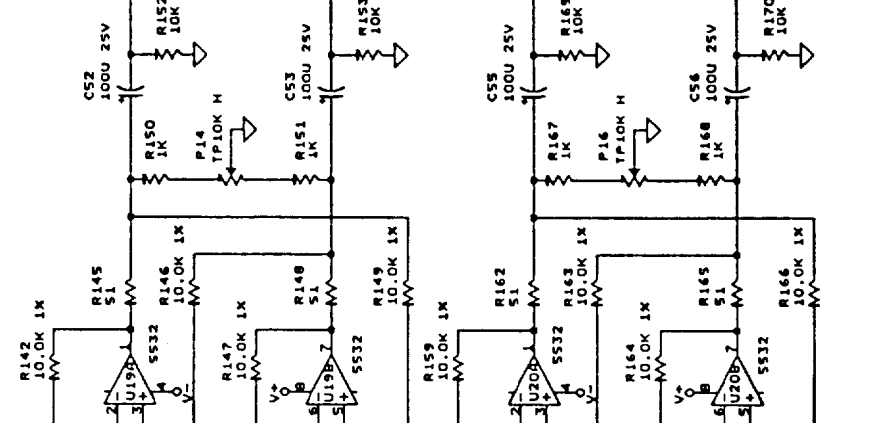
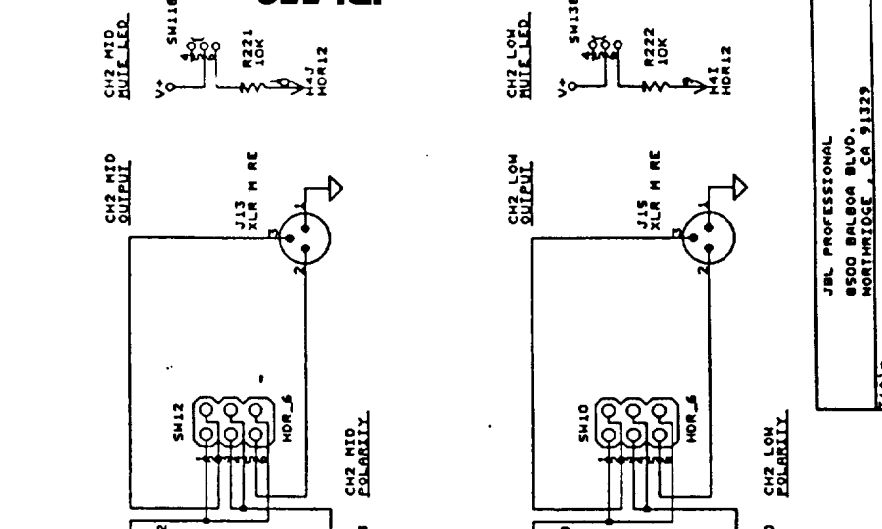
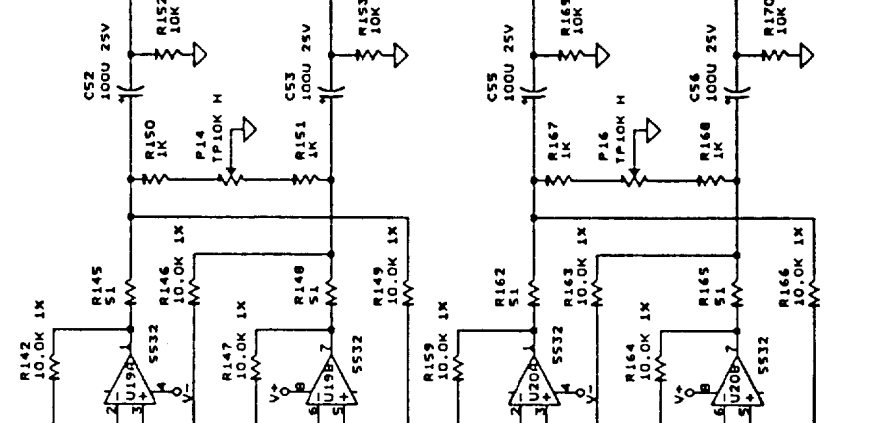
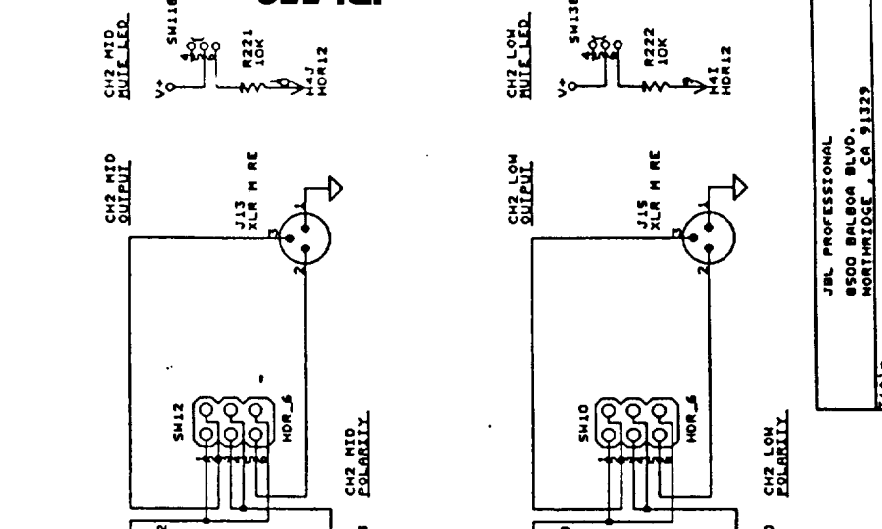
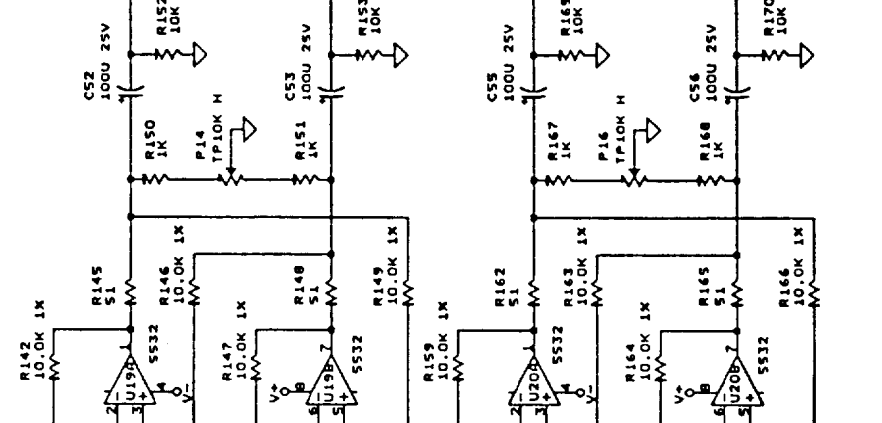
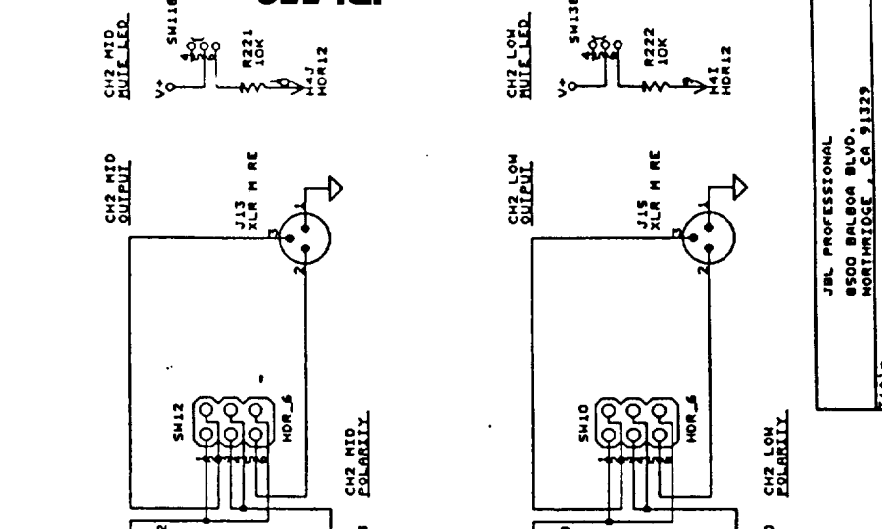
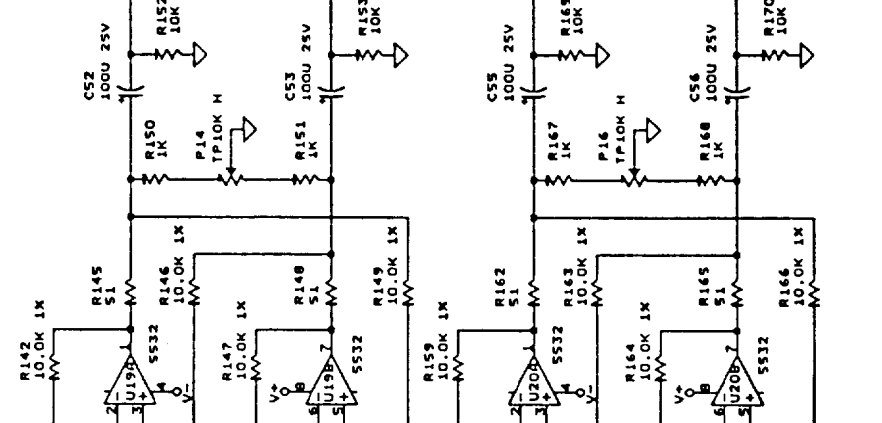
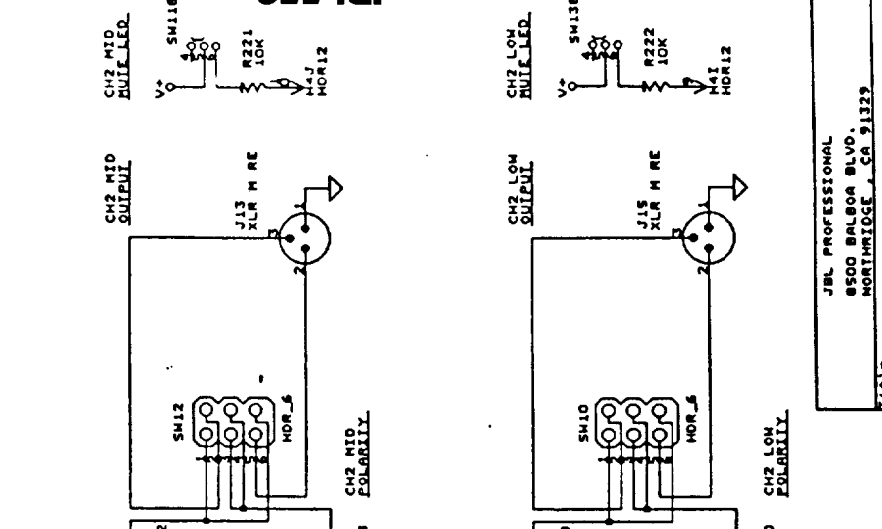
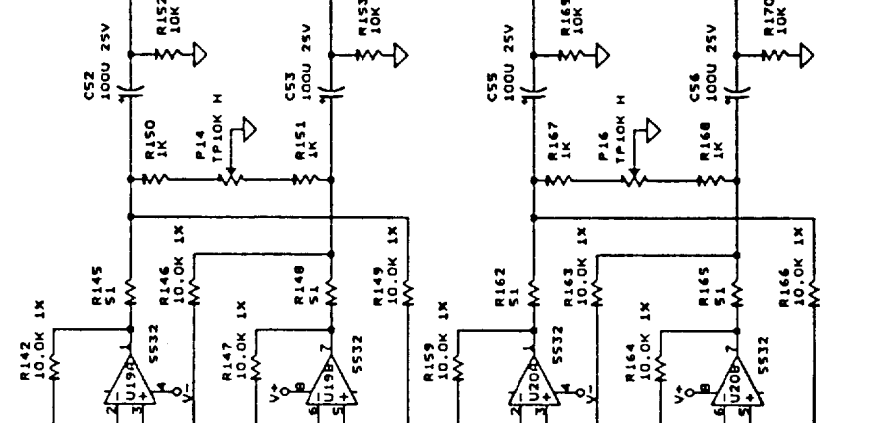
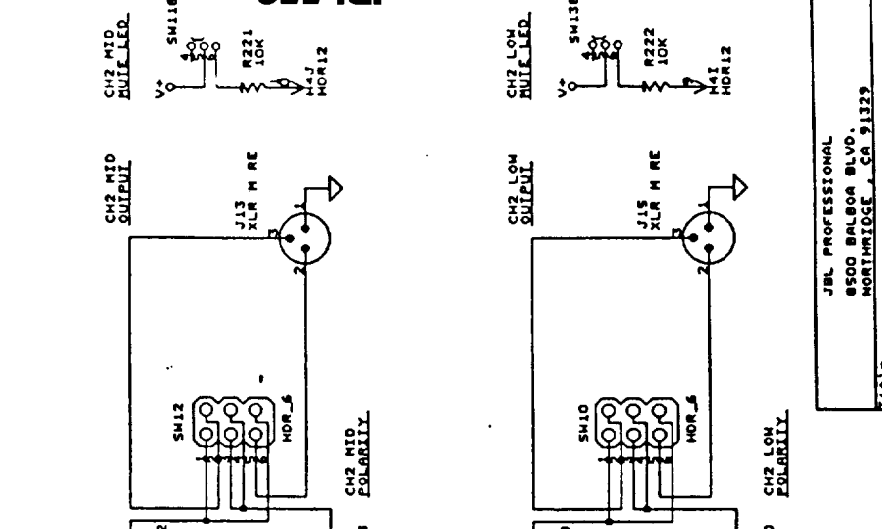
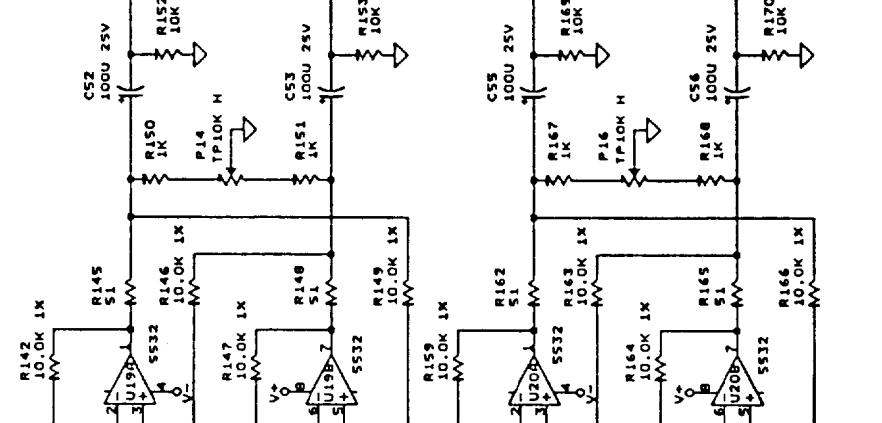
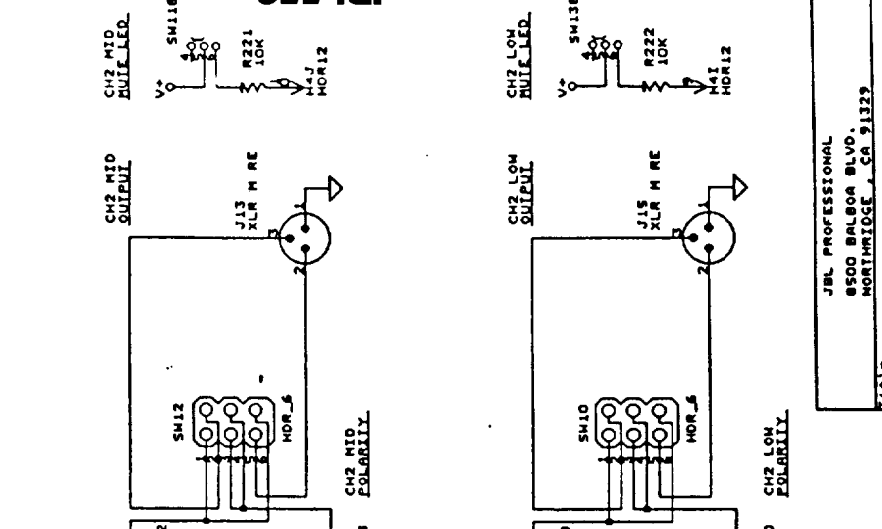
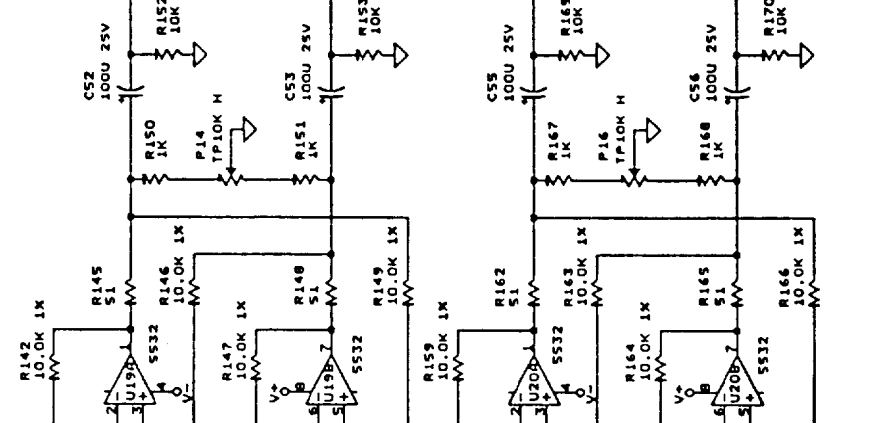
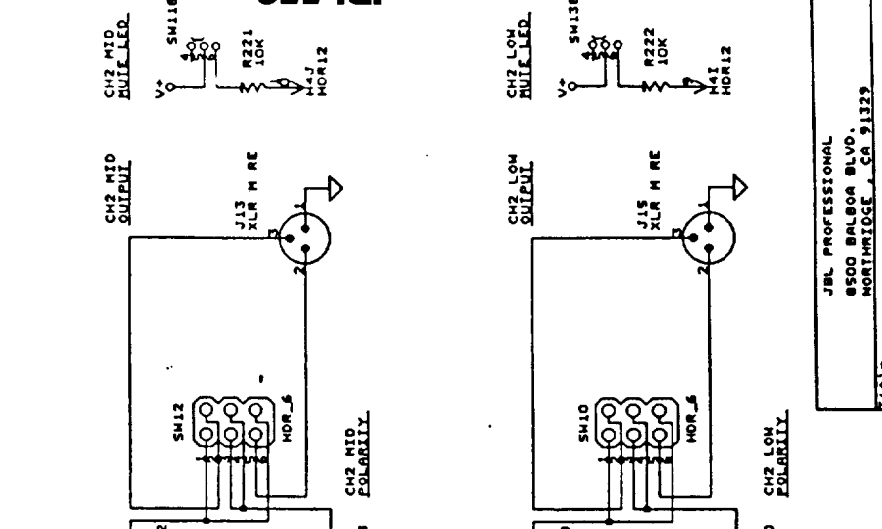
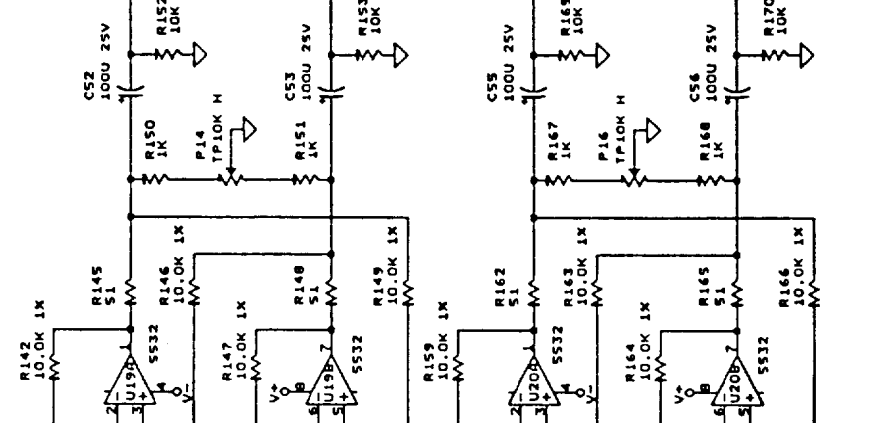
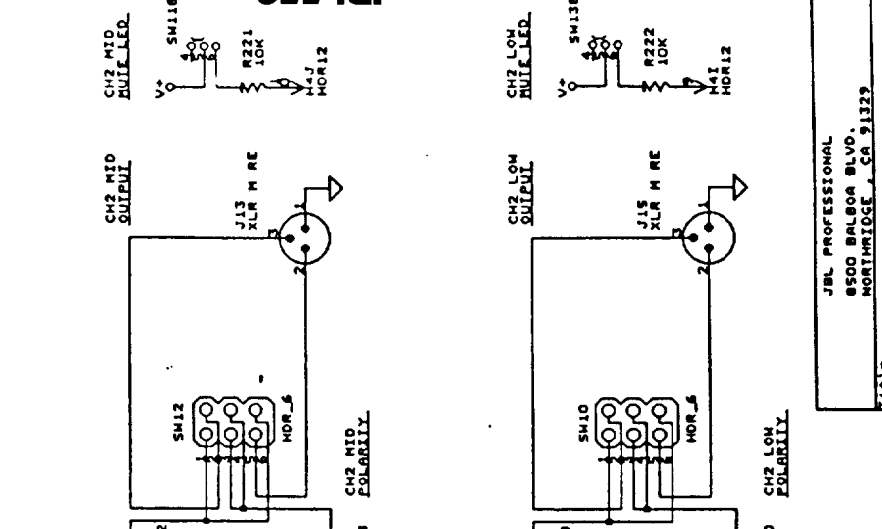
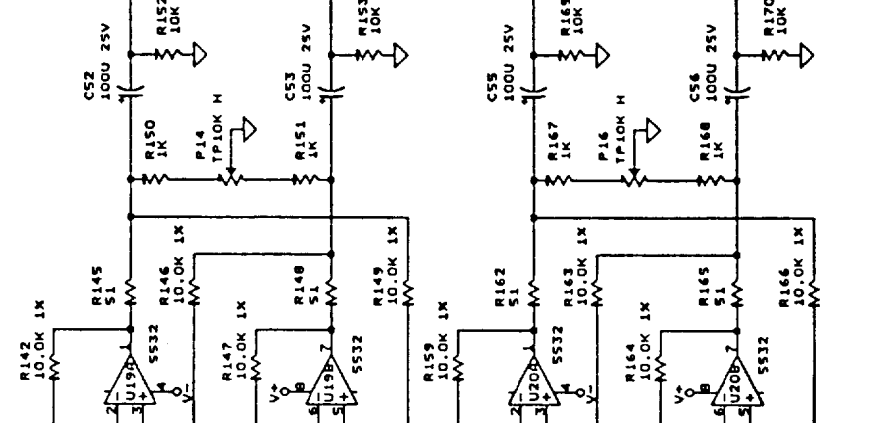
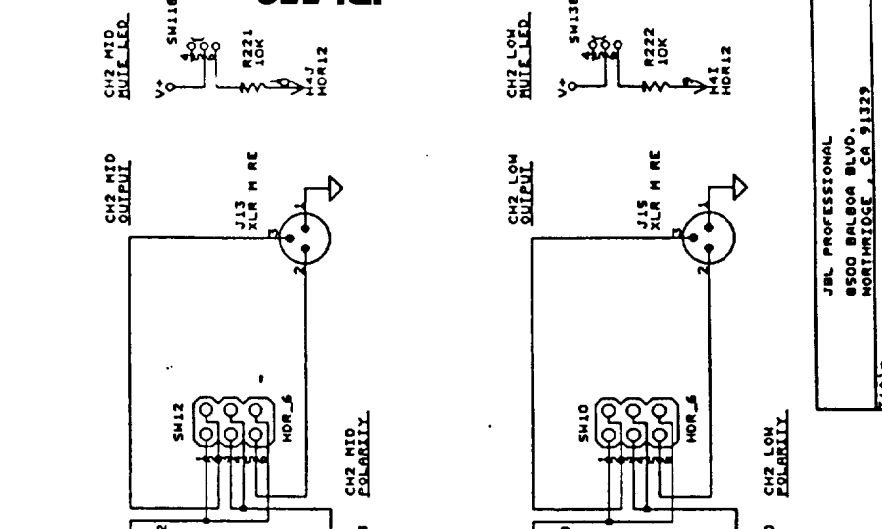
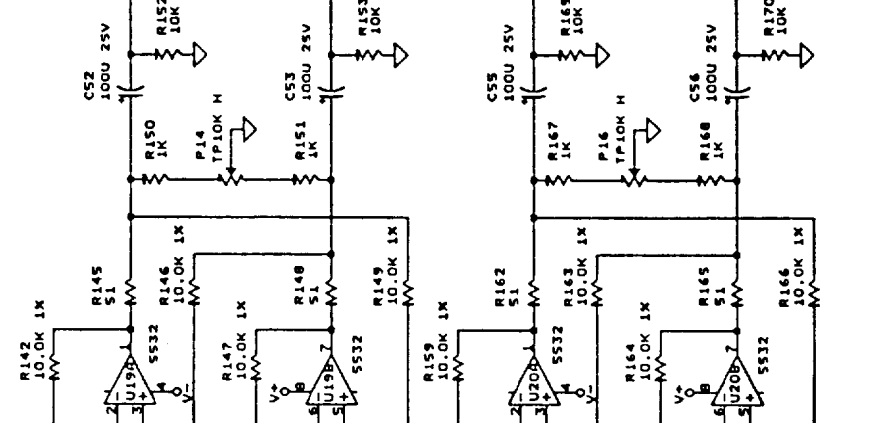
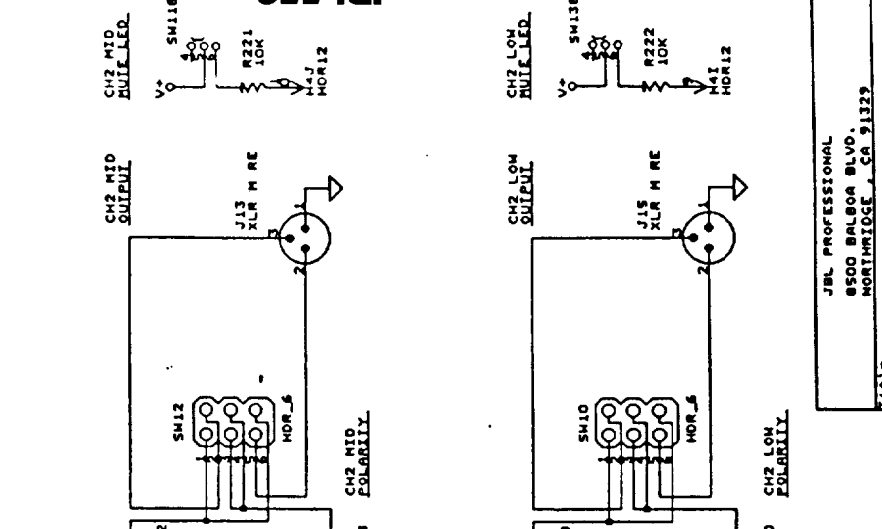
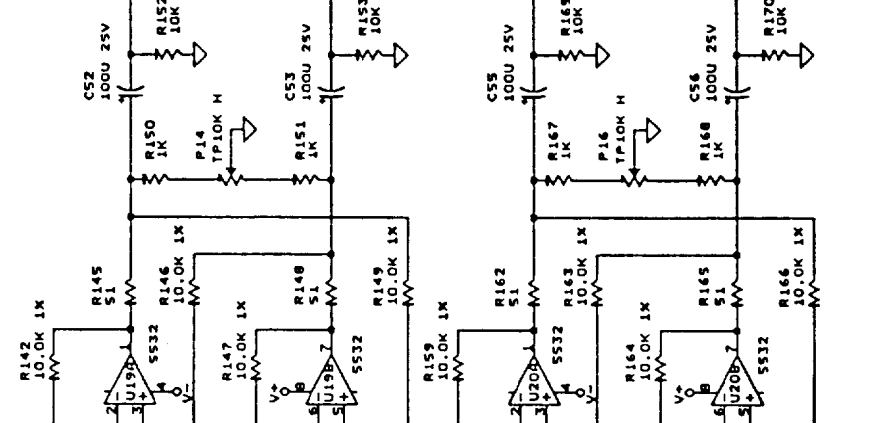
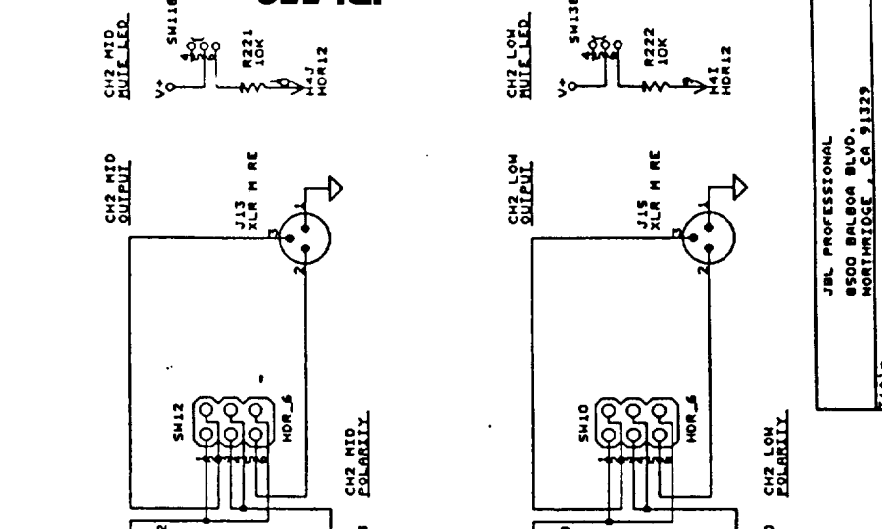
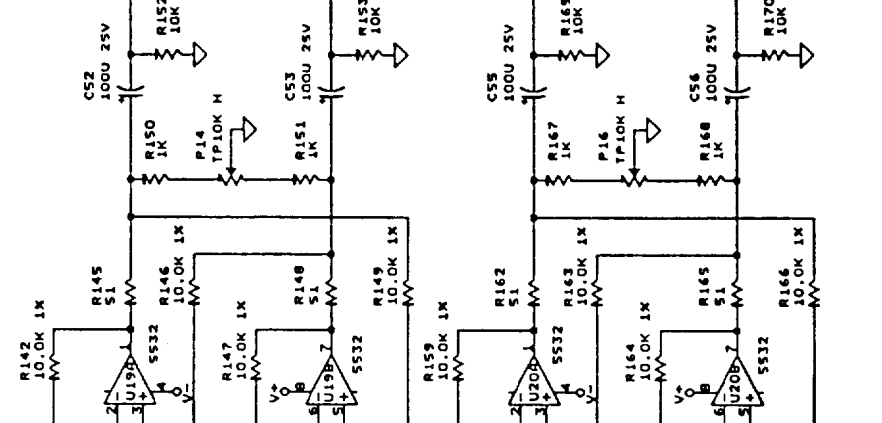
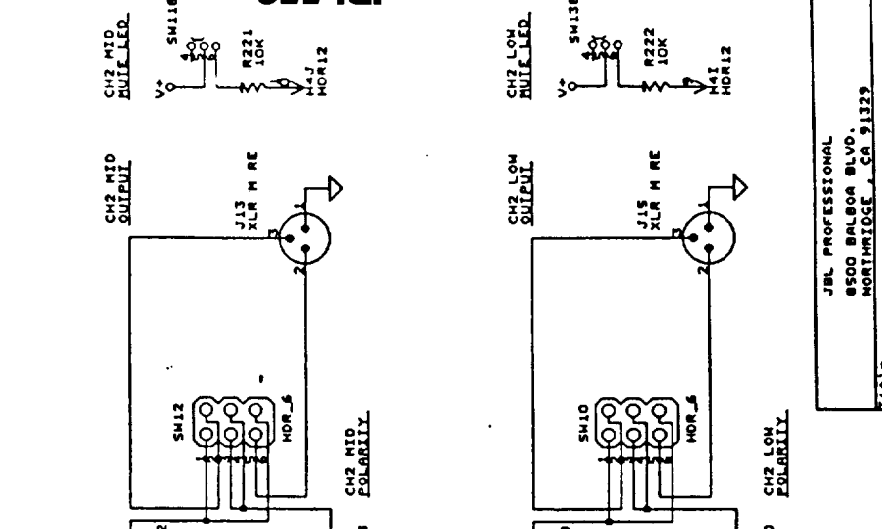
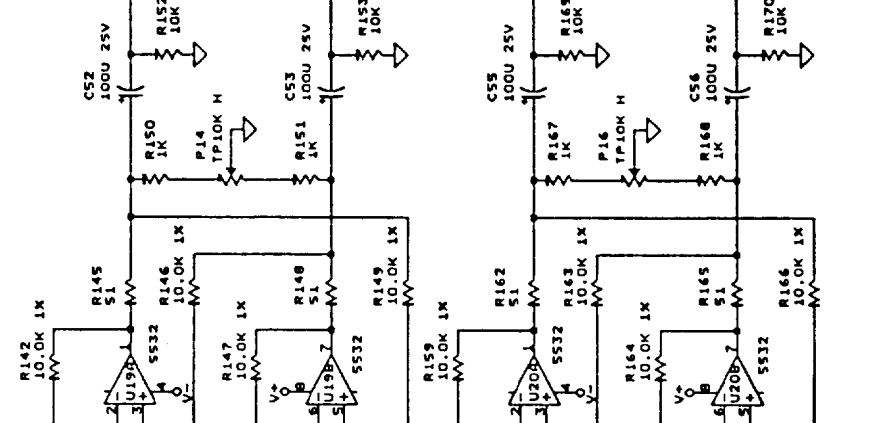
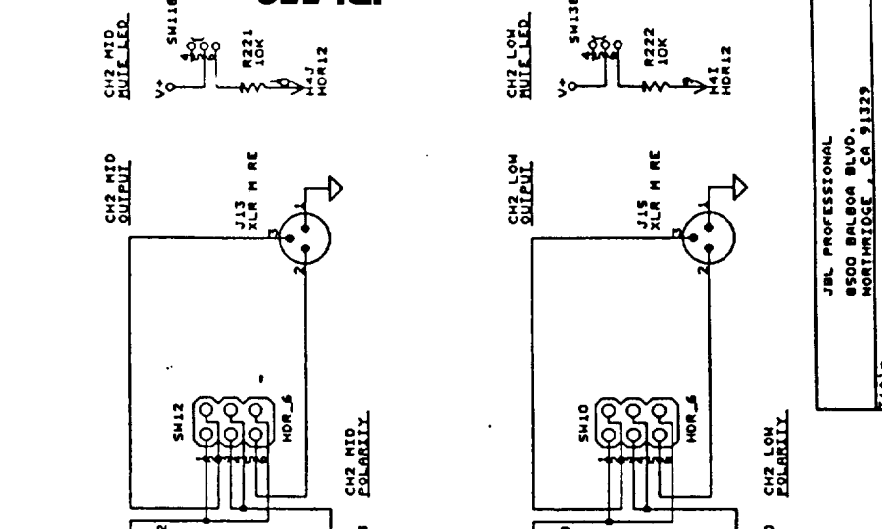
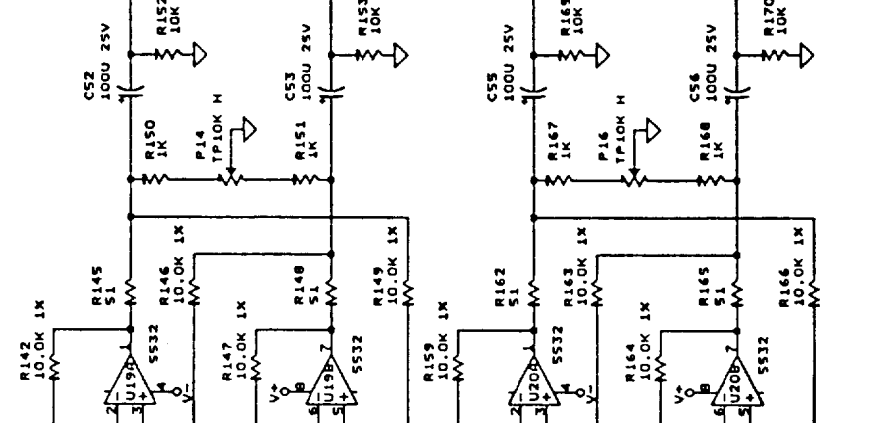
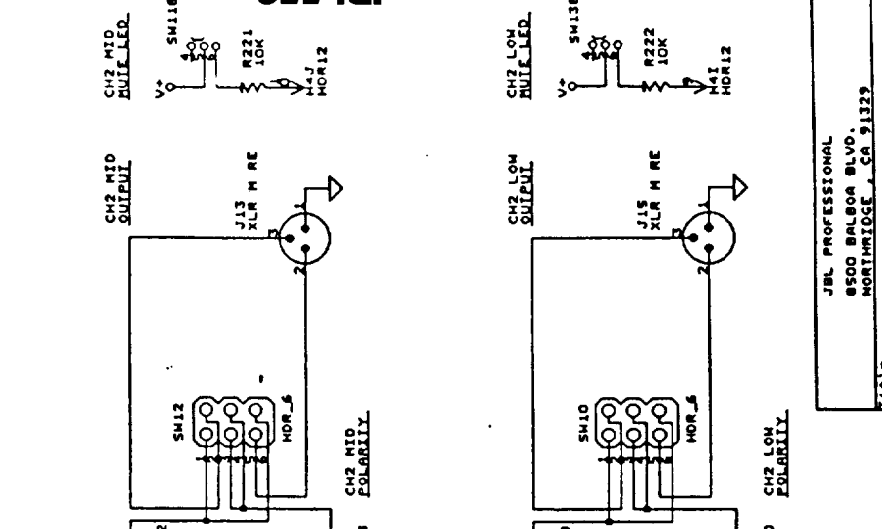
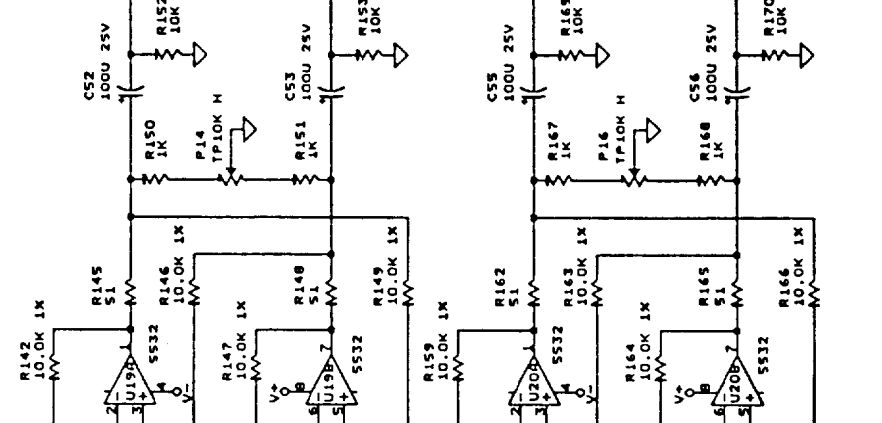
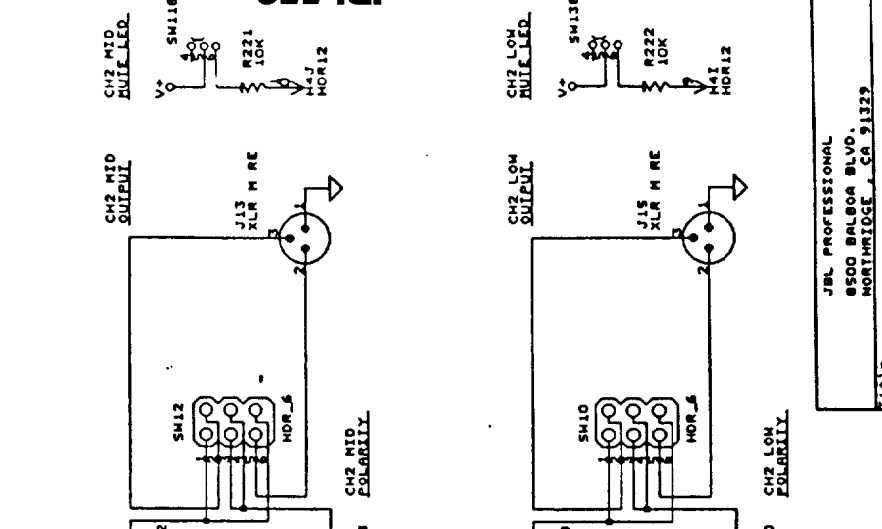
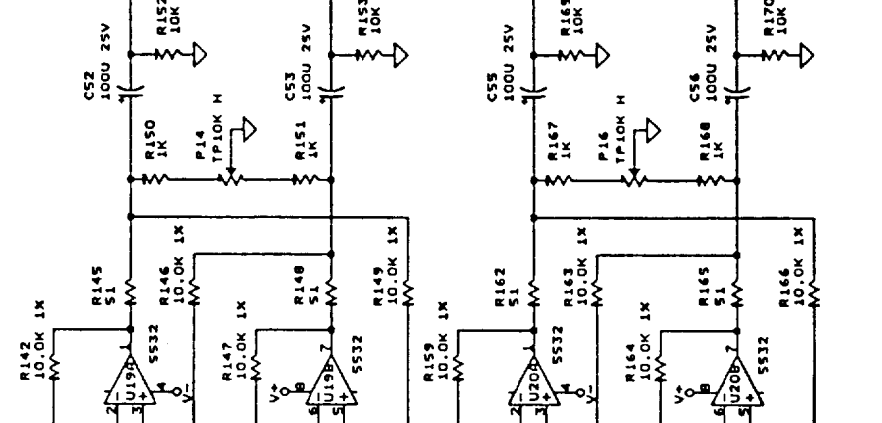
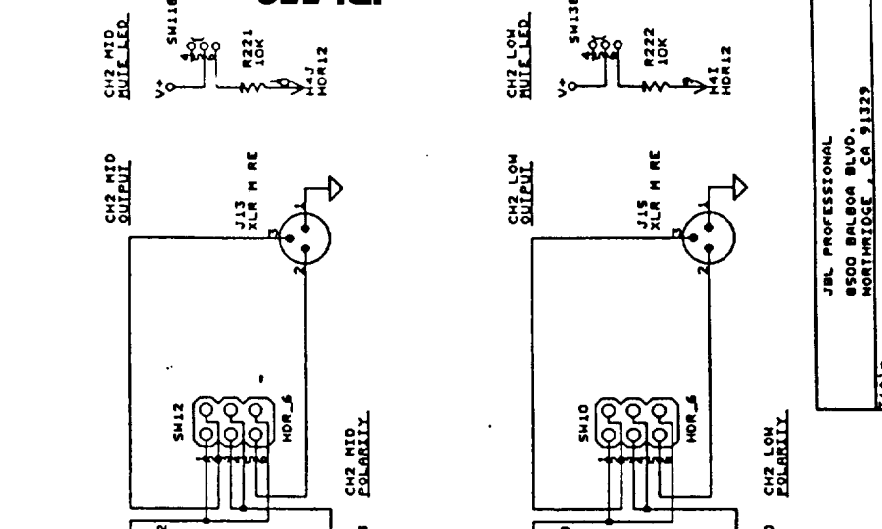
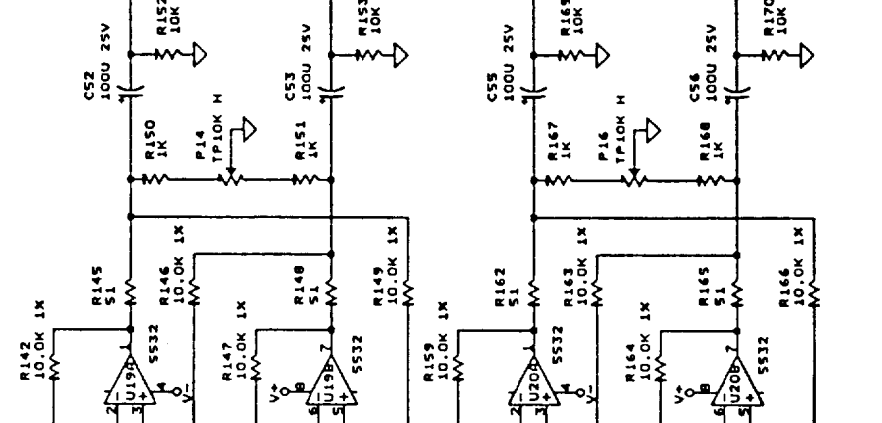
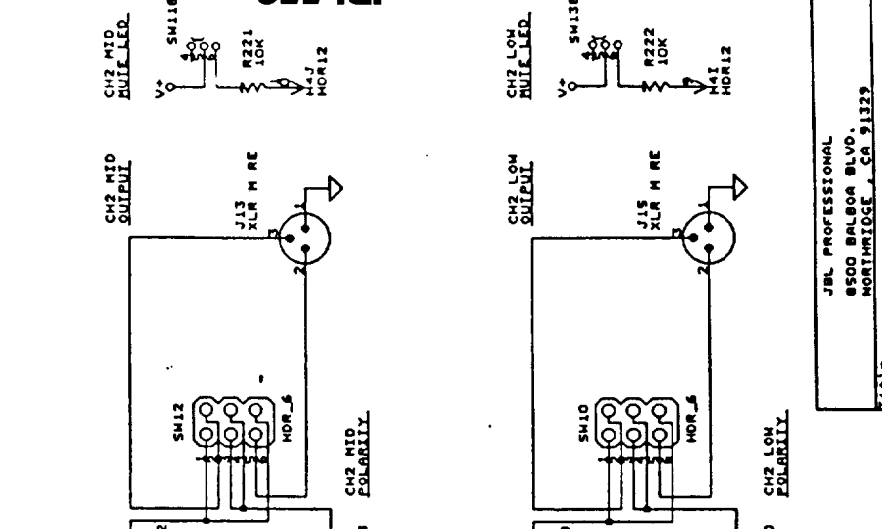
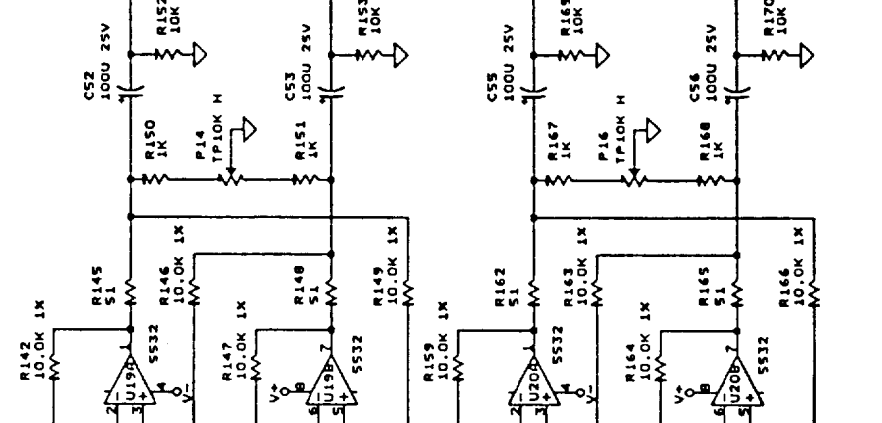
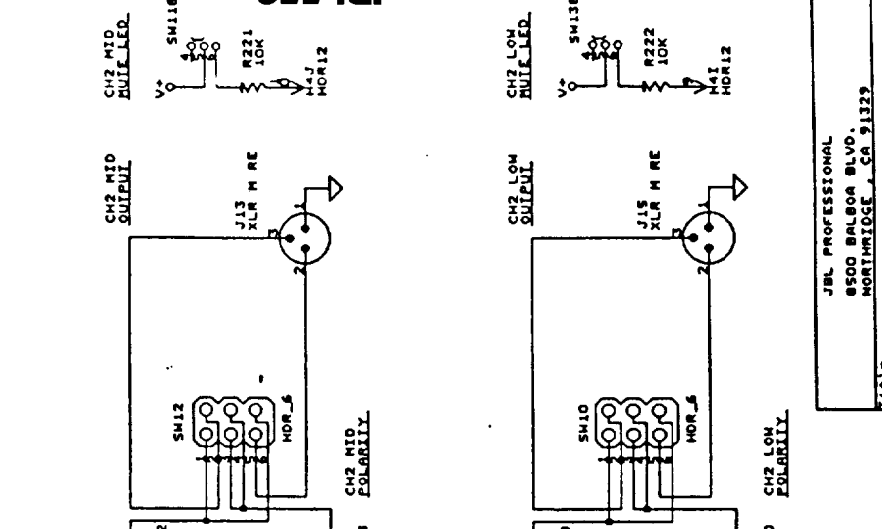
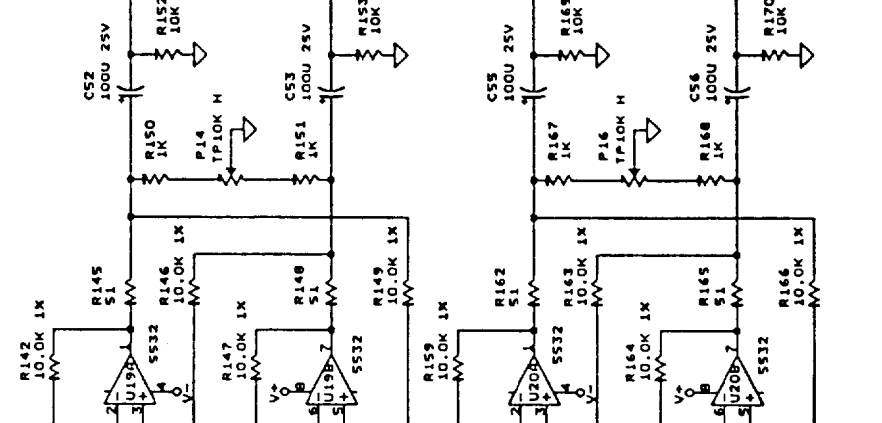
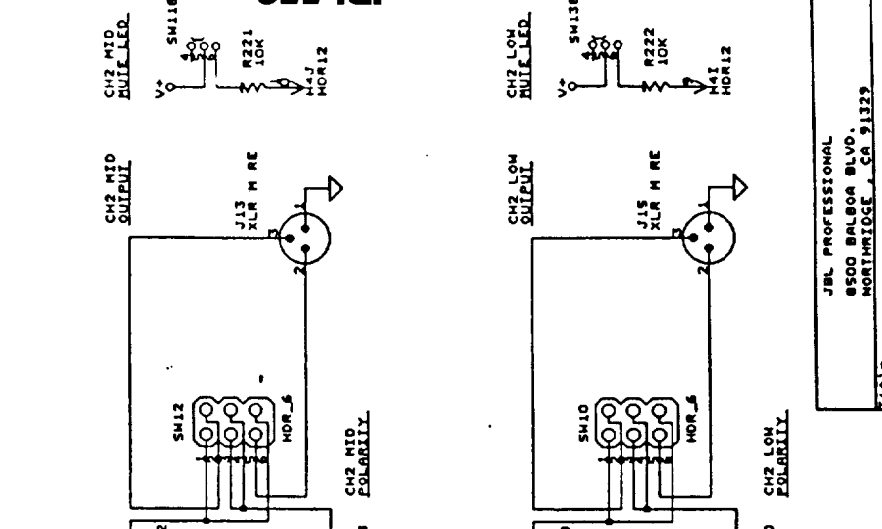
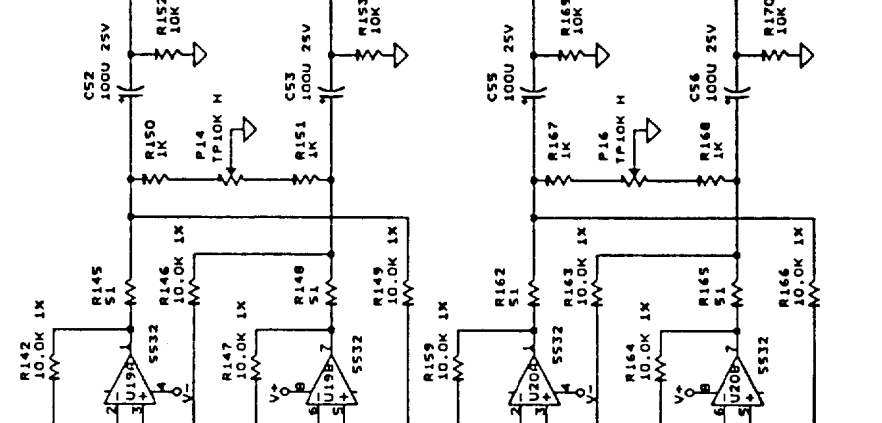
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SIZE DOCUMENT NUMBER	M552C004.SCH
REV	CO
DATE	JANUARY 21, 1992

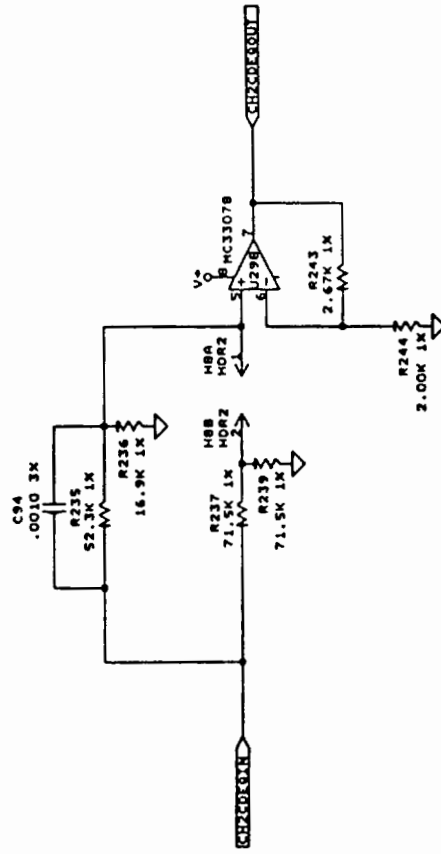
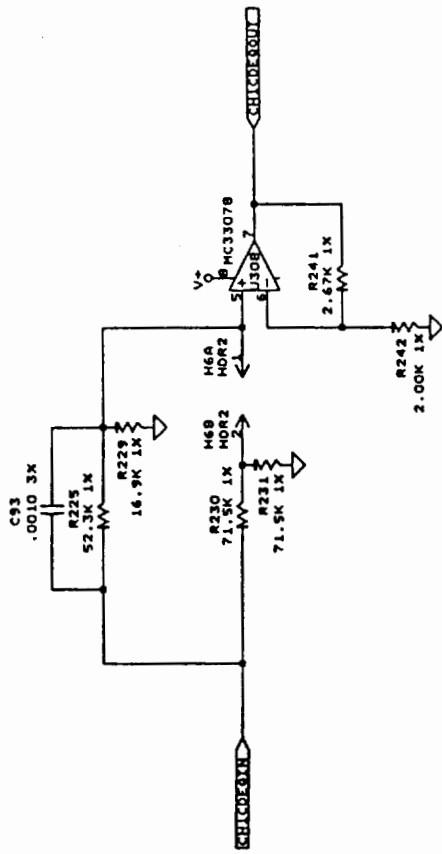




JBL PROFESSIONAL  
 8500 BALBOA BLVD.  
 NORTHBRIDGE, CA 91329

Part# MS52 CROSSOVER MAIN BOARD  
 REV B  
 Schematic Number: MSSIC005.SCH  
 Date: January 21, 1977  
 REV CC  
 3 of 3





JBL PROFESSIONAL 9500 BALBOA BLVD. NORTHBRIDGE, CA 91329	
Title	M552 CROSSOVER MAIN BOARD
Schematic Number	M552C006.SCH
REV	CO
Date	JANUARY 11, 1977
Page	6 of 7

