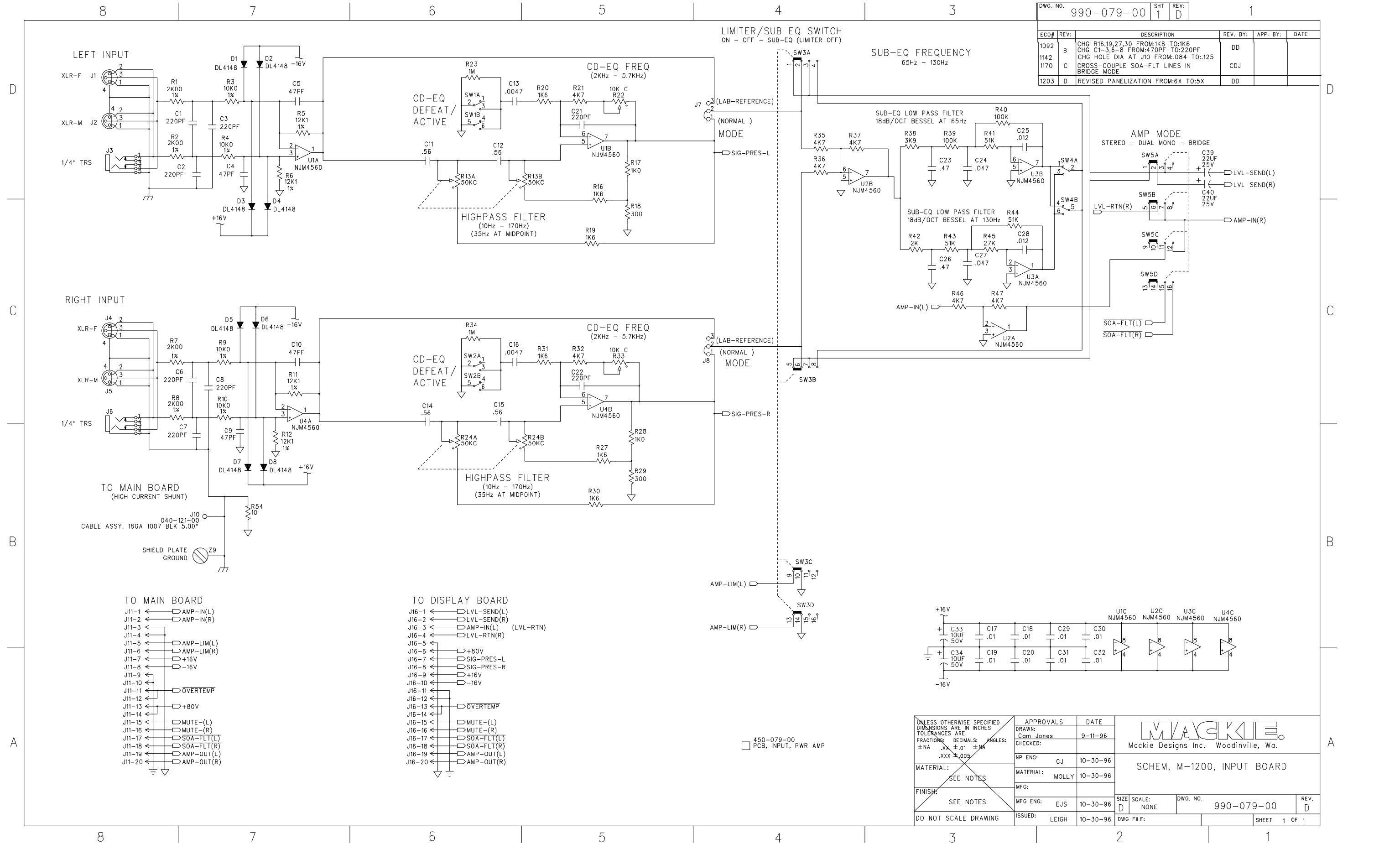


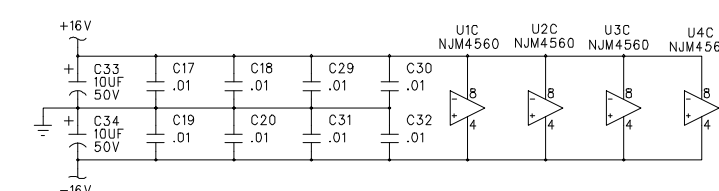
DWG. NO. 990-079-00 SHT 1 REV: D

ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE
1092	B	CHG R16,19,27,30 FROM:1K8 TO:1K6	DD		
1142	C	CHG C11-3,6-B FROM:470PF TO:220PF	DD		
1170	C	CHG HOLE DIA AT J10 FROM:.084 TO:.125	CDJ		
1203	D	REVISED PANELIZATION FROM:6X TO:5X	DD		

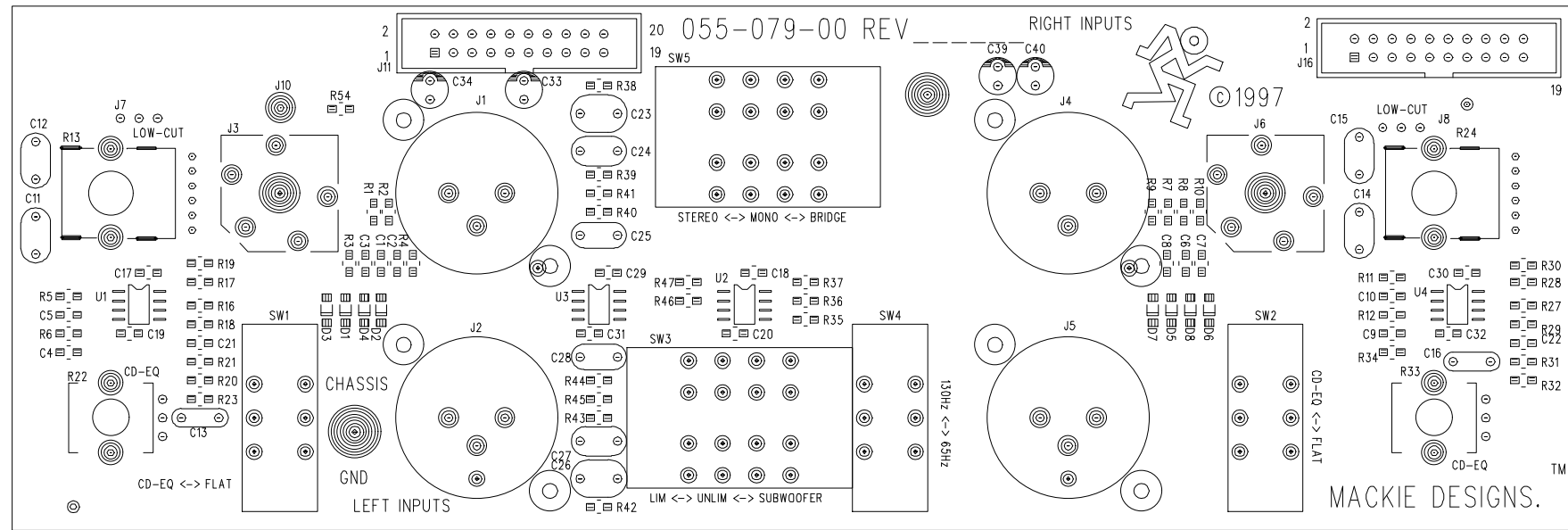


- TO MAIN BOARD
- J11-1 ← AMP-IN(L)
 - J11-2 ← AMP-IN(R)
 - J11-3 ←
 - J11-4 ←
 - J11-5 ← AMP-LIM(L)
 - J11-6 ← AMP-LIM(R)
 - J11-7 ← +16V
 - J11-8 ← -16V
 - J11-9 ←
 - J11-10 ← OVERTEMP
 - J11-11 ←
 - J11-12 ← +80V
 - J11-13 ←
 - J11-14 ←
 - J11-15 ← MUTE-(L)
 - J11-16 ← MUTE-(R)
 - J11-17 ← SOA-FLT(L)
 - J11-18 ← SOA-FLT(R)
 - J11-19 ← AMP-OUT(L)
 - J11-20 ← AMP-OUT(R)

- TO DISPLAY BOARD
- J16-1 ← LVL-SEND(L)
 - J16-2 ← LVL-SEND(R)
 - J16-3 ← AMP-IN(L)
 - J16-4 ← LVL-RTN(R) (LVL-RTN)
 - J16-5 ←
 - J16-6 ← +80V
 - J16-7 ← SIG-PRES-L
 - J16-8 ← SIG-PRES-R
 - J16-9 ← +16V
 - J16-10 ← -16V
 - J16-11 ←
 - J16-12 ← OVERTEMP
 - J16-13 ←
 - J16-14 ←
 - J16-15 ← MUTE-(L)
 - J16-16 ← MUTE-(R)
 - J16-17 ← SOA-FLT(L)
 - J16-18 ← SOA-FLT(R)
 - J16-19 ← AMP-OUT(L)
 - J16-20 ← AMP-OUT(R)



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±NA .XX ±.01 ±MA .XXX ±.005	APPROVALS	DATE	 Mackie Designs Inc. Woodinville, Wa.
	DRAWN: Cam Jones	9-11-96	
MATERIAL: SEE NOTES	NP ENG: CJ	10-30-96	SCHEM, M-1200, INPUT BOARD
	MATERIAL: MOLLY	10-30-96	
FINISH: SEE NOTES	MFG:		SIZE: D SCALE: NONE DWG. NO. 990-079-00 REV. D
	MFG ENG: EJS	10-30-96	
DO NOT SCALE DRAWING	ISSUED: LEIGH	10-30-96	DWG FILE: SHEET 1 OF 1

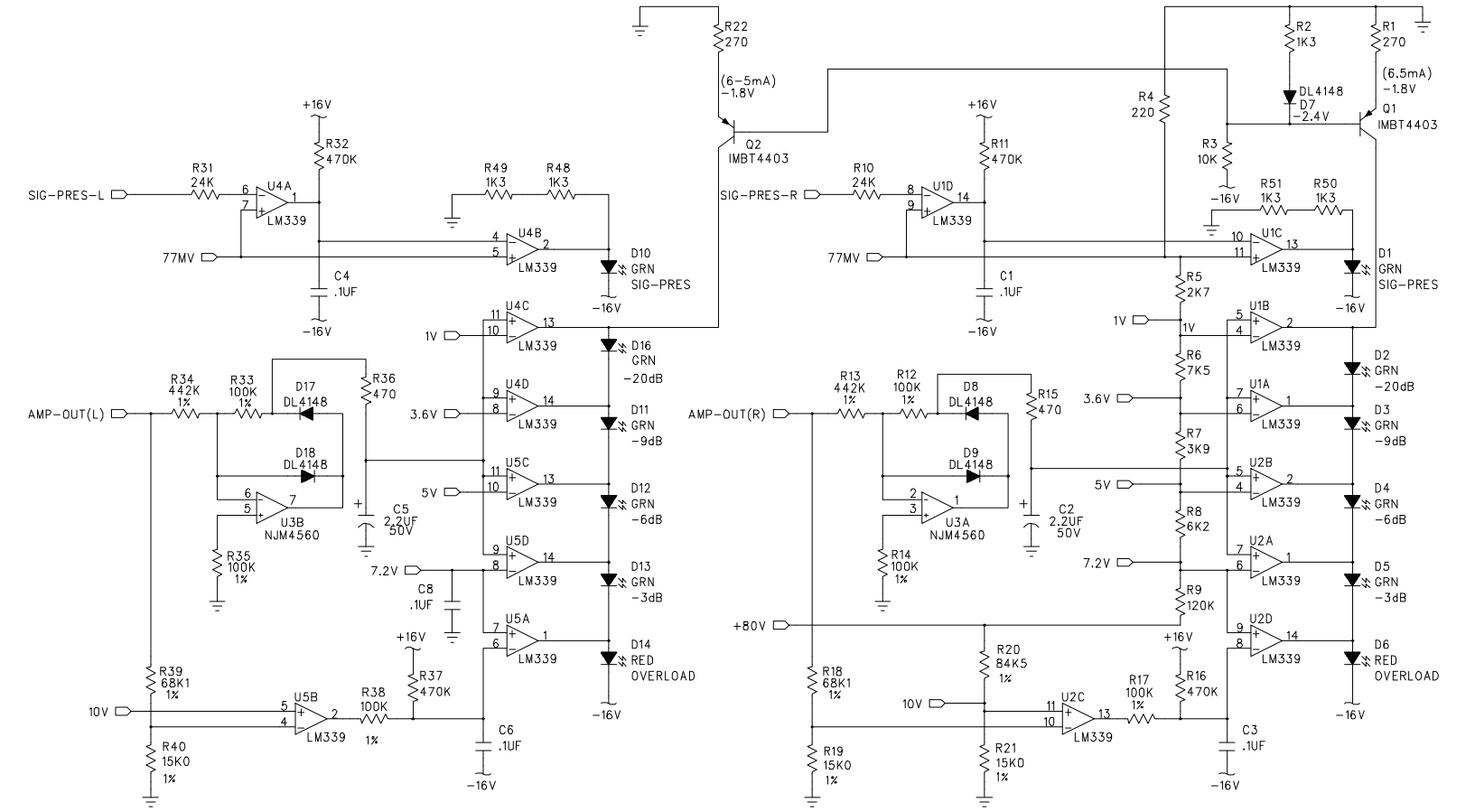
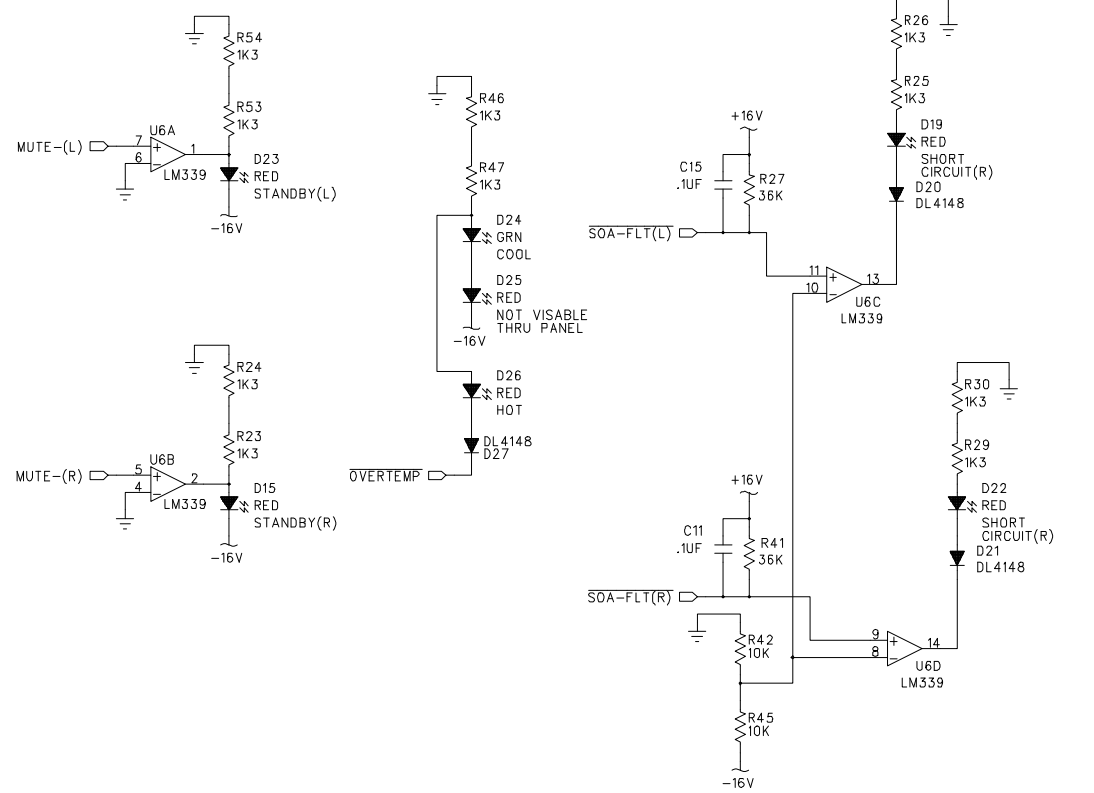


DWG. NO.	990-080-00	SHT	1	REV:	A
ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE

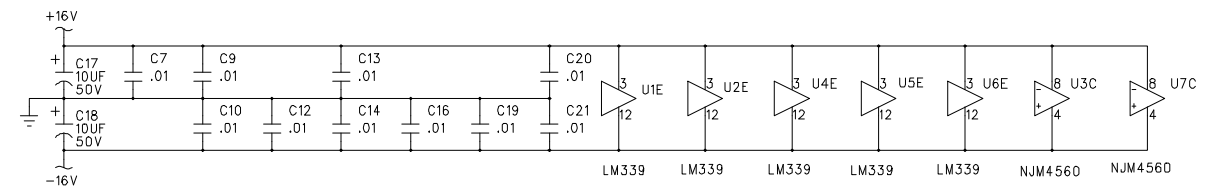
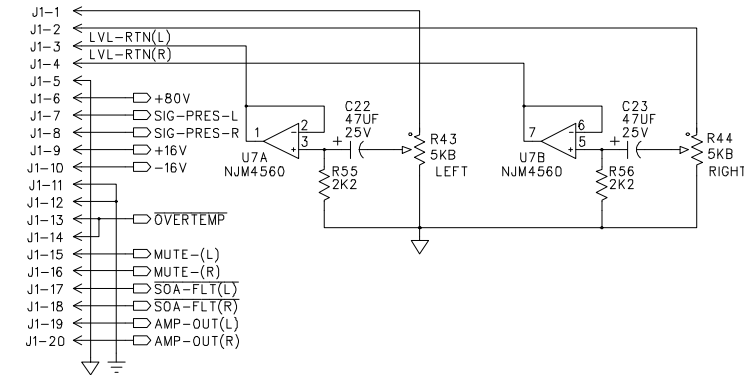
AMPLIFIER STATUS INDICATORS

LEFT METER

RIGHT METER



TO INPUT BOARD OUTPUT LEVEL



- 706-043-00 SPACER, LED, PVC, .750"
- 712-021-00 RIVET
- 706-045-00 SPACER, LED, PVC, .770"
- 712-020-00 BRACKET, ANGLE
- 450-080-00 PCB, DISPLAY, PWR AMP

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS: DECIMALS: ANGLES:
±NA .XX ±.01 ±MA
.XXX ±.005

MATERIAL:
SEE NOTES

FINISH:
SEE NOTES

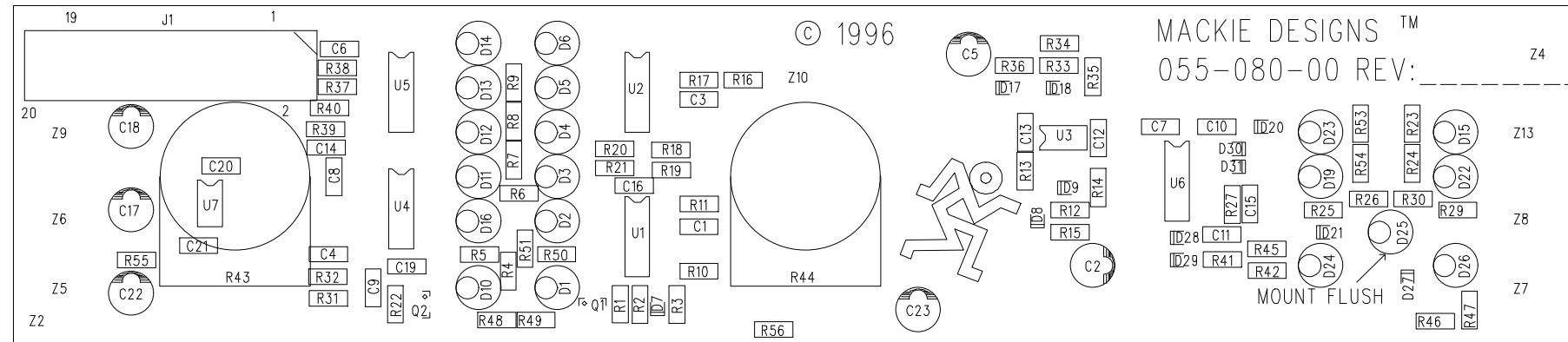
DO NOT SCALE DRAWING

APPROVALS		DATE
DRAWN:	Cam Jones	9-9-96
CHECKED:		
NP ENG:		
MATERIAL:		
MFG:		
MFG ENG:		
ISSUED:		



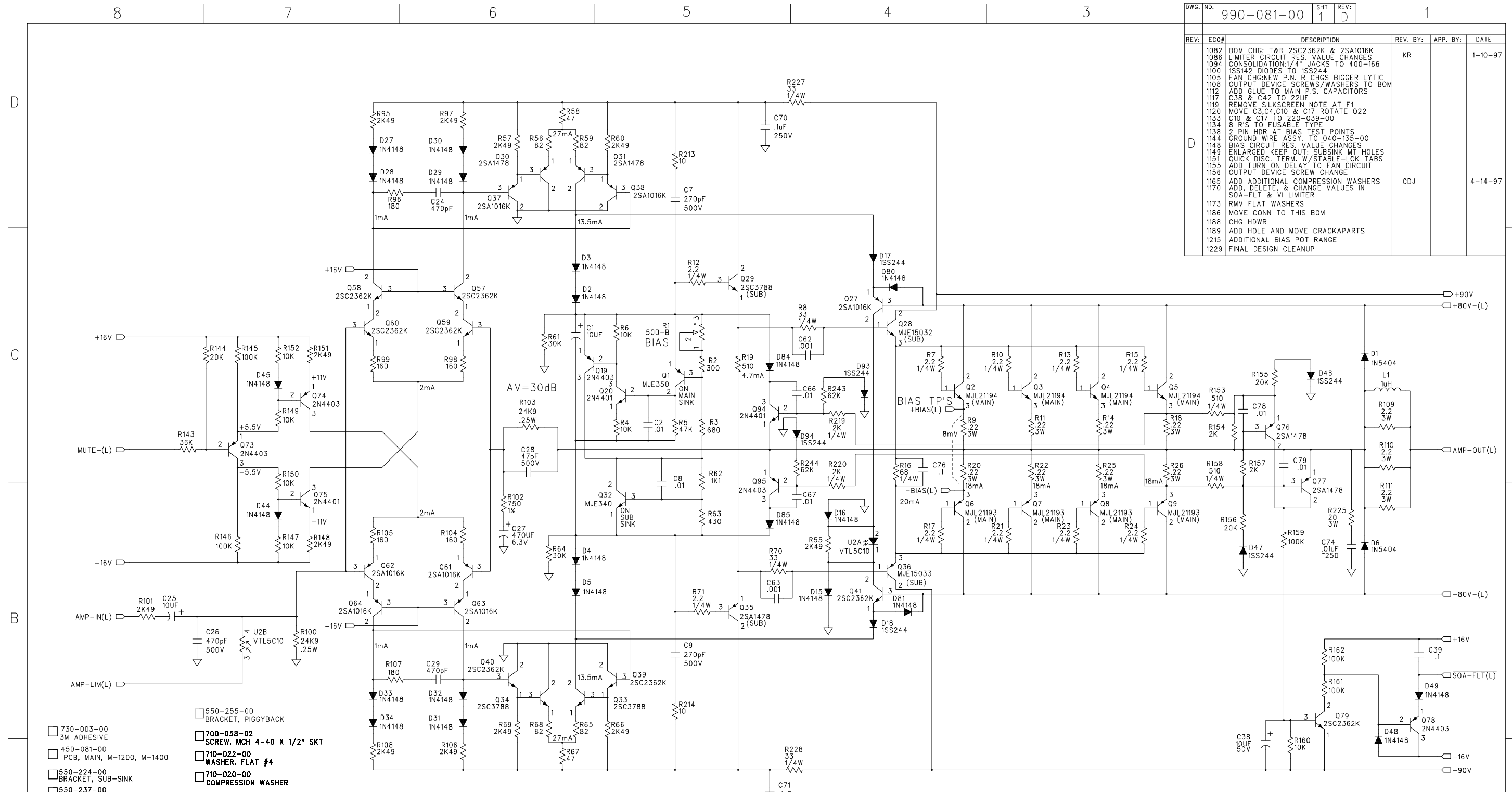
SCHEM, M-1200, DISPLAY BOARD

SIZE	SCALE:	DWG. NO.	REV.
D	NONE	990-080-00	A
DWG FILE: 080ALAST.SCH		SHEET 1 OF 1	



DWG. NO.	990-081-00	SHT	1	REV:	D	1
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REV:	ECO#	DESCRIPTION	REV. BY:	APP. BY:	DATE
1082		BOM CHG: T&R 2SC2362K & 2SA1016K			1-10-97
1086		LIMITER CIRCUIT RES. VALUE CHANGES			
1094		CONSOLIDATION: 1/4" JACKS TO 400-166	KR		
1100		ISS142 DIODES TO ISS244			
1105		FAN CHG: NEW P.N. R CHGS BIGGER LYTIC			
1108		OUTPUT DEVICE SCREWS/WASHERS TO BOM			
1112		ADD GLUE TO MAIN P.S. CAPACITORS			
1117		C38 & C42 TO 22UF			
1119		REMOVE SILKSCREEN NOTE AT F1			
1120		MOVE C3, C4, C10 & C17 ROTATE Q22			
1133		C10 & C17 TO 220-039-00			
1134		8 R'S TO FUSABLE TYPE			
1138		2 PIN HDR AT BIAS TEST POINTS			
1144		GROUND WIRE ASSY. TO 040-135-00			
1148		BIAS CIRCUIT RES. VALUE CHANGES			
1149		ENLARGED KEEP OUT: SUBSINK MT HOLES			
1151		QUICK DISC. TERM. W/STABLE-LOK TABS			
1155		ADD TURN ON DELAY TO FAN CIRCUIT			
1156		OUTPUT DEVICE SCREW CHANGE			
1165		ADD ADDITIONAL COMPRESSION WASHERS	CDJ		4-14-97
1170		ADD, DELETE, & CHANGE VALUES IN SOA-FLT & VI LIMITER			
1173		RMV FLAT WASHERS			
1186		MOVE CONN TO THIS BOM			
1188		CHG HDWR			
1189		ADD HOLE AND MOVE CRACKAPARTS			
1215		ADDITIONAL BIAS POT RANGE			
1229		FINAL DESIGN CLEANUP			



- 730-003-00 BRACKET, PIGGYBACK
- 450-081-00 PCB, MAIN, M-1200, M-1400
- 550-224-00 BRACKET, SUB-SINK
- 550-237-00 SPRING CLIP, SUB-SINK
- 710-013-00 WASHER, FLAT, #6, FIBER
- 700-010-04 SCREW, PANPHP, TF, BLK ZC, 6-32 X 3/8
- 700-028-02 SCREW, PANPHP, BLK SEMS, 6-32 X 3/8
- 710-008-00 WASHER, SPLIT LOCK, #4
- 410-003-00 SILPAD, K6, W/ADHESIVE, 16.8"
- 551-032-00 HEATSINK, MAIN
- 700-022-00 SCREW PAN FIL STL ZC 6-32 X 5/8"
- 550-255-00 BRACKET, PIGGYBACK
- 700-058-02 SCREW, MCH 4-40 X 1/2" SKT
- 710-022-00 WASHER, FLAT #4
- 710-020-00 COMPRESSION WASHER
- 550-225-00 HEATSINK COWLING
- 550-219-00 FAN BRACKET
- 700-010-00 SCREW, PANPHP, TF, BLK ZC, 6-32 X 1/4
- 700-047-04 SCREW PAN FILSTL ZC 10-32 X 3/8"
- 400-060-00 FUSE CLIP PC MT 5mm DIA
- 400-129-00 FUSE CLIP PC MT .25" DIA
- 770-006-00 FAN, 24V MECHATRONICS **FOR M1200**
- 410-003-00 SILPAD, K6, W/ADHESIVE, 4.1"
- 410-002-00 SILPAD .007THK SELF ADHESIVE
- 730-001-00 QTY AS REQ'D

- ON M-1400 ONLY
- 220-035-00 12,000uF
 - SEE C11, C12, C15, C16
 - 100-076-00 13K RESISTOR **REPLACES R209 FOR M1400**
 - 770-007-00 FAN, 24V PANASONIC **FOR M1400**
 - 400-083-00 CONN 2P .100 X 1 22GA END

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:
 FRACTIONS: DECIMALS: ANGLES:
 ±NA .XX ±.01 ±NA .XXX ±.005

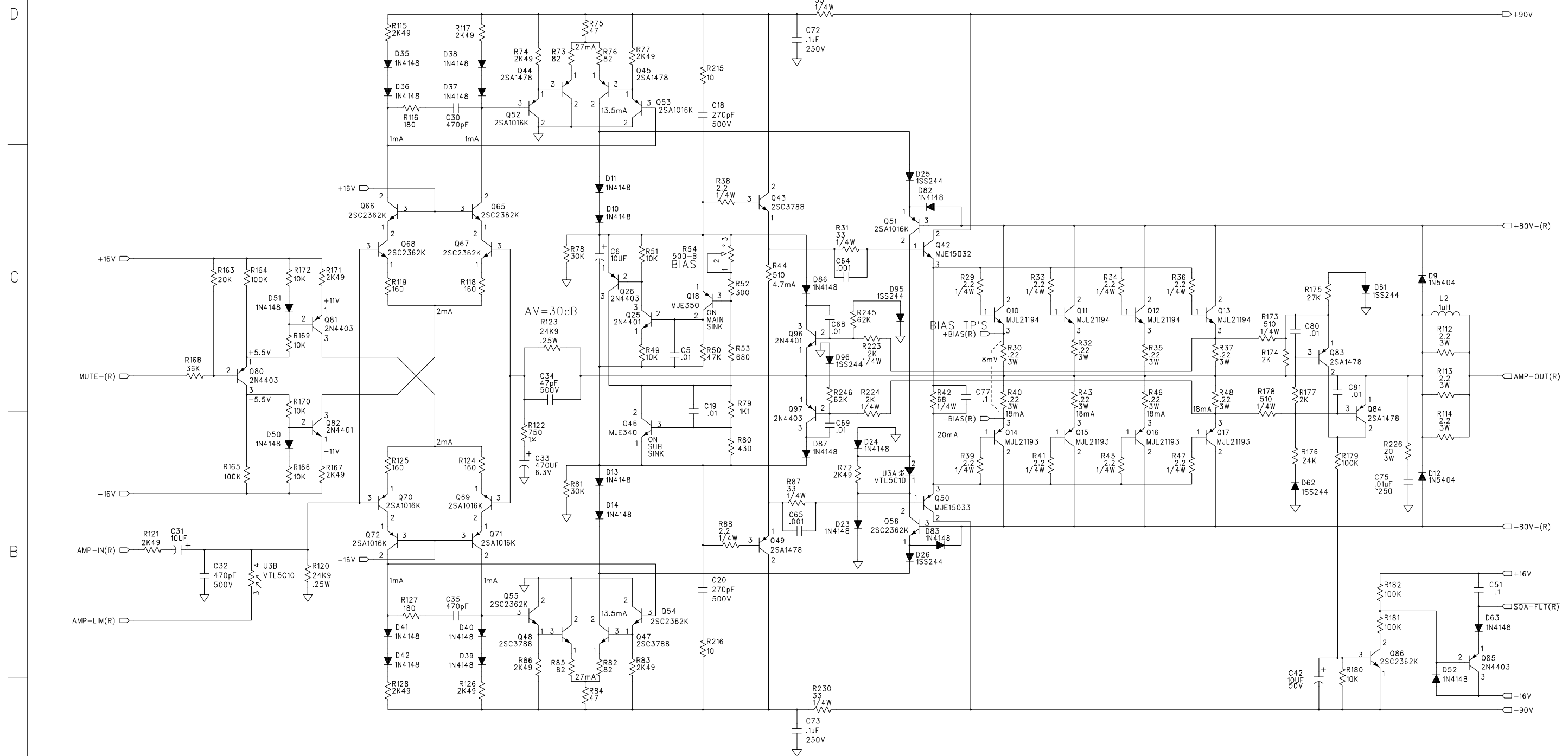
MATERIAL: SEE NOTES
 FINISH: SEE NOTES
 DO NOT SCALE DRAWING

APPROVALS	DATE
DRAWN: Cam Jones	10-31-96
CHECKED:	
NP ENG: CJ	11-12-96
MATERIAL: MS	11-12-96
MFG: RR	11-12-96
MFG ENG: ES	11-12-96
ISSUED: LV	11-12-96

MACKIE
 Mackie Designs Inc. Woodinville, Wa.

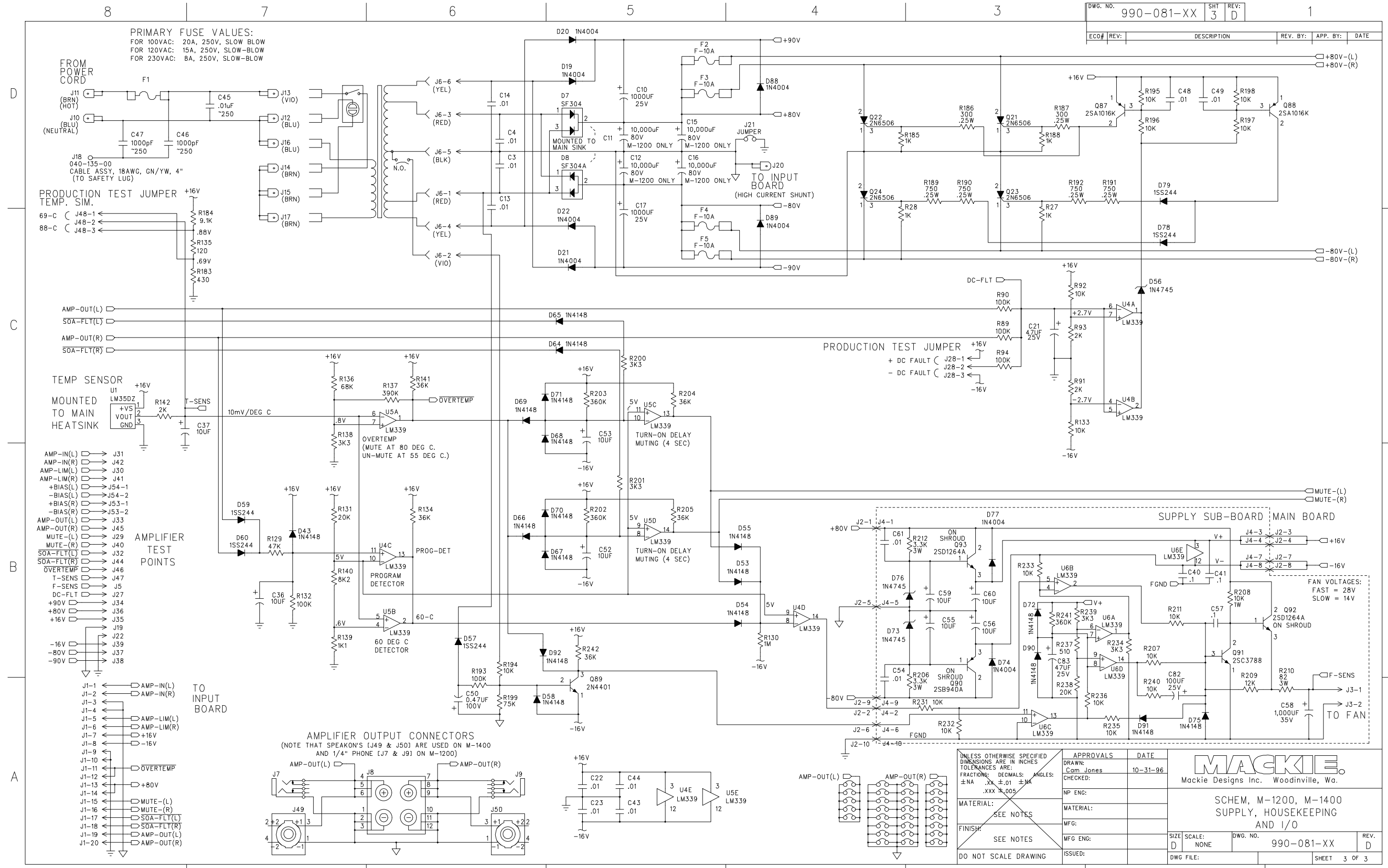
SCHEM, M-1200, M-1400
 LEFT MAIN AMP

SIZE: D	SCALE: NONE	DWG. NO. 990-081-00	REV. D
DWG FILE:		SHEET 1 OF 3	



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±NA .XX ±.01 ±NA .xxx ±.005	APPROVALS	DATE	 Mackie Designs Inc. Woodinville, Wa.
	DRAWN: Cam Jones	10-31-96	
	CHECKED:		
	NP ENG:		
MATERIAL: SEE NOTES	MATERIAL:		SCHEM, M-1200, M-1400 RIGHT MAIN AMP
FINISH: SEE NOTES	MFG:		
DO NOT SCALE DRAWING	MFG ENG:		SIZE SCALE: D NONE
	ISSUED:		DWG. NO. 990-081-XX
			REV. D
			DWG FILE:
			SHEET 2 OF 3

DWG. NO.	990-081-XX	SHT	3	REV:	D
ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE



PRIMARY FUSE VALUES:
 FOR 100VAC: 20A, 250V, SLOW BLOW
 FOR 120VAC: 15A, 250V, SLOW-BLOW
 FOR 230VAC: 8A, 250V, SLOW-BLOW

PRODUCTION TEST JUMPER
 TEMP. SIM.
 69-C (J48-1)
 48-C (J48-2)
 88-C (J48-3)

TEMP SENSOR
 U1
 LM35DZ
 MOUNTED TO MAIN HEATSINK

AMPLIFIER TEST POINTS
 AMP-IN(L) J31
 AMP-IN(R) J42
 AMP-LIM(L) J30
 AMP-LIM(R) J41
 +BIAS(L) J54-1
 -BIAS(L) J54-2
 +BIAS(R) J53-1
 -BIAS(R) J53-2
 AMP-OUT(L) J33
 AMP-OUT(R) J45
 MUTE-(L) J29
 MUTE-(R) J40
 SOA-FLT(L) J32
 SOA-FLT(R) J44
 OVERTEMP J46
 T-SENS J47
 F-SENS J5
 DC-FLT J27
 +90V J34
 +80V J36
 +16V J35
 -16V J19
 -90V J37
 -80V J38

AMPLIFIER OUTPUT CONNECTORS
 (NOTE THAT SPEAKERS [J49 & J50] ARE USED ON M-1400 AND 1/4" PHONE [J7 & J9] ON M-1200)

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES ARE:
 FRACTIONS: DECIMALS: ANGLES:
 ±NA .XX ±.01 ±MA
 .XXX ±.005

MATERIAL: SEE NOTES
 FINISH: SEE NOTES

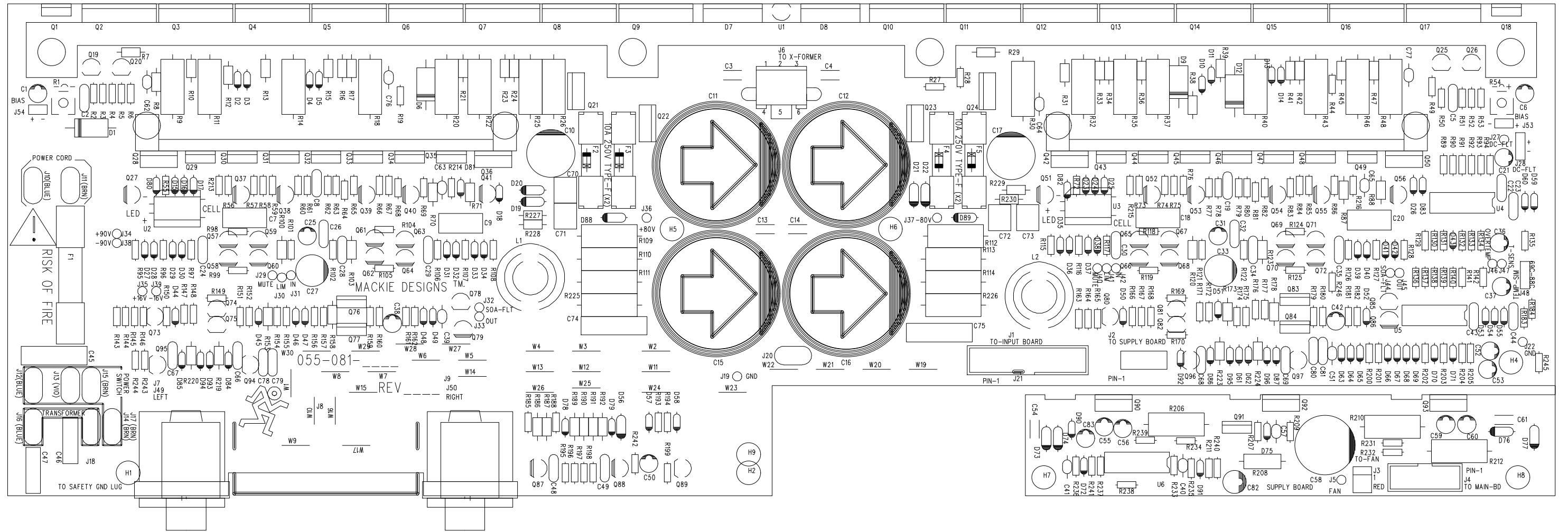
DO NOT SCALE DRAWING

APPROVALS	DATE
DRAWN: Cam Jones	10-31-96
CHECKED:	
NP ENG:	
MATERIAL:	
MFG:	
MFG ENG:	
ISSUED:	

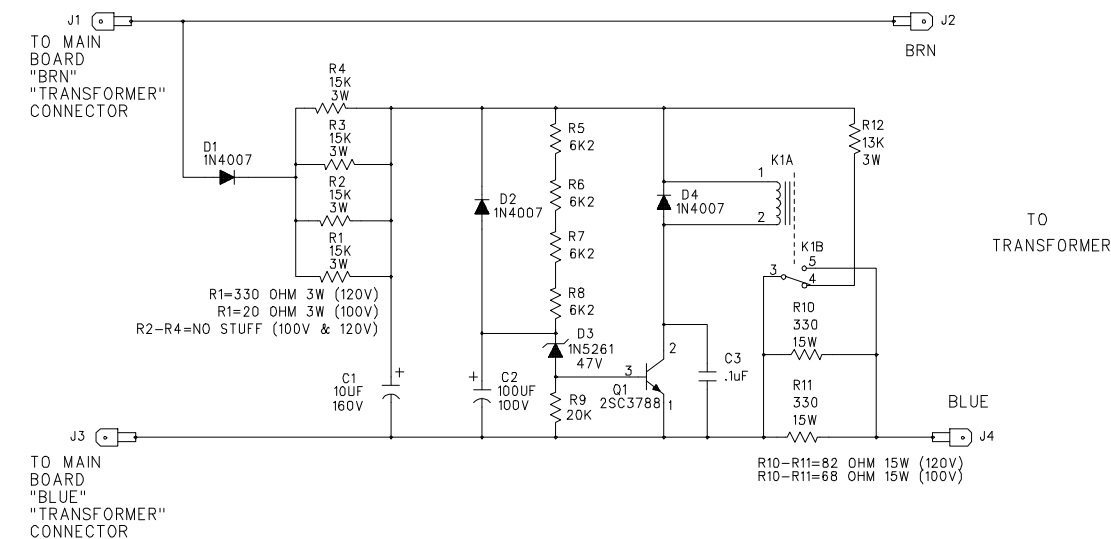
MACKIE
 Mackie Designs Inc. Woodinville, Wa.

SCHEM, M-1200, M-1400
 SUPPLY, HOUSEKEEPING
 AND I/O

SIZE: D SCALE: NONE DWG. NO. 990-081-XX REV. D
 DWG FILE: SHEET 3 OF 3



DWG. NO.	990-162-00	SHT	1	REV:	A	1
ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE	

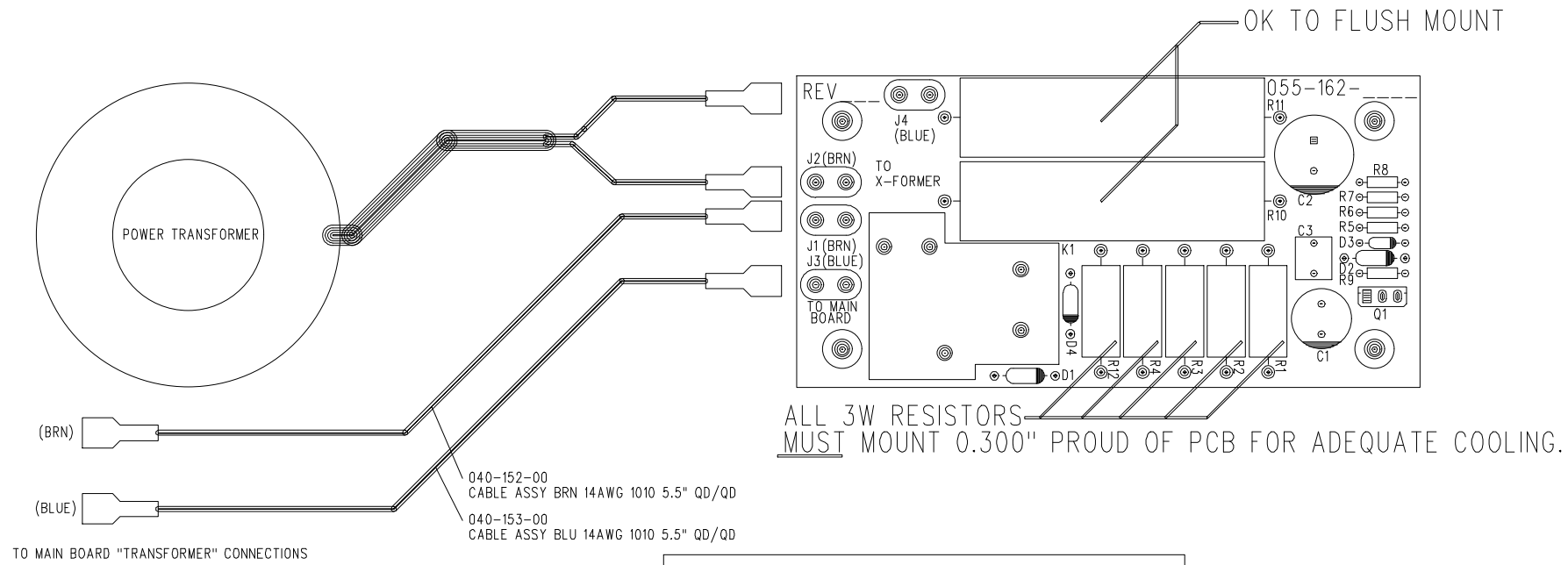


NOTE: SCHEMATIC IS SHOWN WITH 240VAC VALUES

- **NO STUFF R2-R4 FOR 100VAC OR 120VAC VERSIONS**
XXX
- **REPLACES R10-R11 FOR 120VAC VERSION**
82 15W
- **REPLACES R1 FOR 120VAC VERSION**
330 3W
- **REPLACES R10-R11 FOR 100VAC VERSION**
68 15W
- **REPLACES R1 FOR 100VAC VERSION**
20 3W
- PCB, M-1200/M-1400 SOFT START

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±NA .XX ±.01 ±NA .XXX ±.005	APPROVALS		DATE	 Mackie Designs Inc. Woodinville, Wa.
	DRAWN: Chuck J		4-15-97	
	CHECKED:			
	NP ENG: Cameron Jones		4-25-97	
MATERIAL:	SEE NOTES		MFG:	
FINISH:	SEE NOTES		MFG ENG:	
DO NOT SCALE DRAWING	ISSUED:			
SIZE: D	SCALE: NONE	DWG. NO. 990-162-00	REV. A	
DWG FILE:			SHEET 1 OF 1	

DWG. NO.	055-162-00	SHT	1	REV:	A	1
REVISIONS						
ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE	



DIFFERENCES IN ASSEMBLY FOR VARIOUS VOLTAGES			
AC-PRIMARY VOLTAGE	240VAC	120VAC	100VAC
ASSEMBLY NUMBER	055-162-01	055-162-00	055-162-02
R1 VALUE	15K 5% 3W MOF 123-125-00	330 5% 3W MOF 123-085-00	20 5% 3W MOF 123-056-00
R2-R4 VALUES	15K 5% 3W MOF 123-125-00	DO NOT STUFF	DO NOT STUFF
R10-R11 VALUES	330 5% 15W WW 125-021-00	82 5% 15W WW 125-020-00	68 5% 15W WW 125-019-00

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±.NA .XX ± NA ±.NA .XXX ± NA	APPROVALS	DATE	 Mackie Designs Inc. Woodinville, Wa.
	DRAWN: CDJ	4-16-97	
	CHECKED:		
	NP ENGINEERING: Cameron Jones	4-25-97	
MATERIAL:	MATERIAL:		PCB ASSY, M-1400 SOFT START
FINISH:	MANUFACTURING:		
DO NOT SCALE DRAWING	MFG ENGINEERING:		SIZE D
	ISSUED:		SCALE: 2:1
			DWG. NO. 055-162-00
			REV. A
			DWG FILE:
			SHEET 1 OF 1