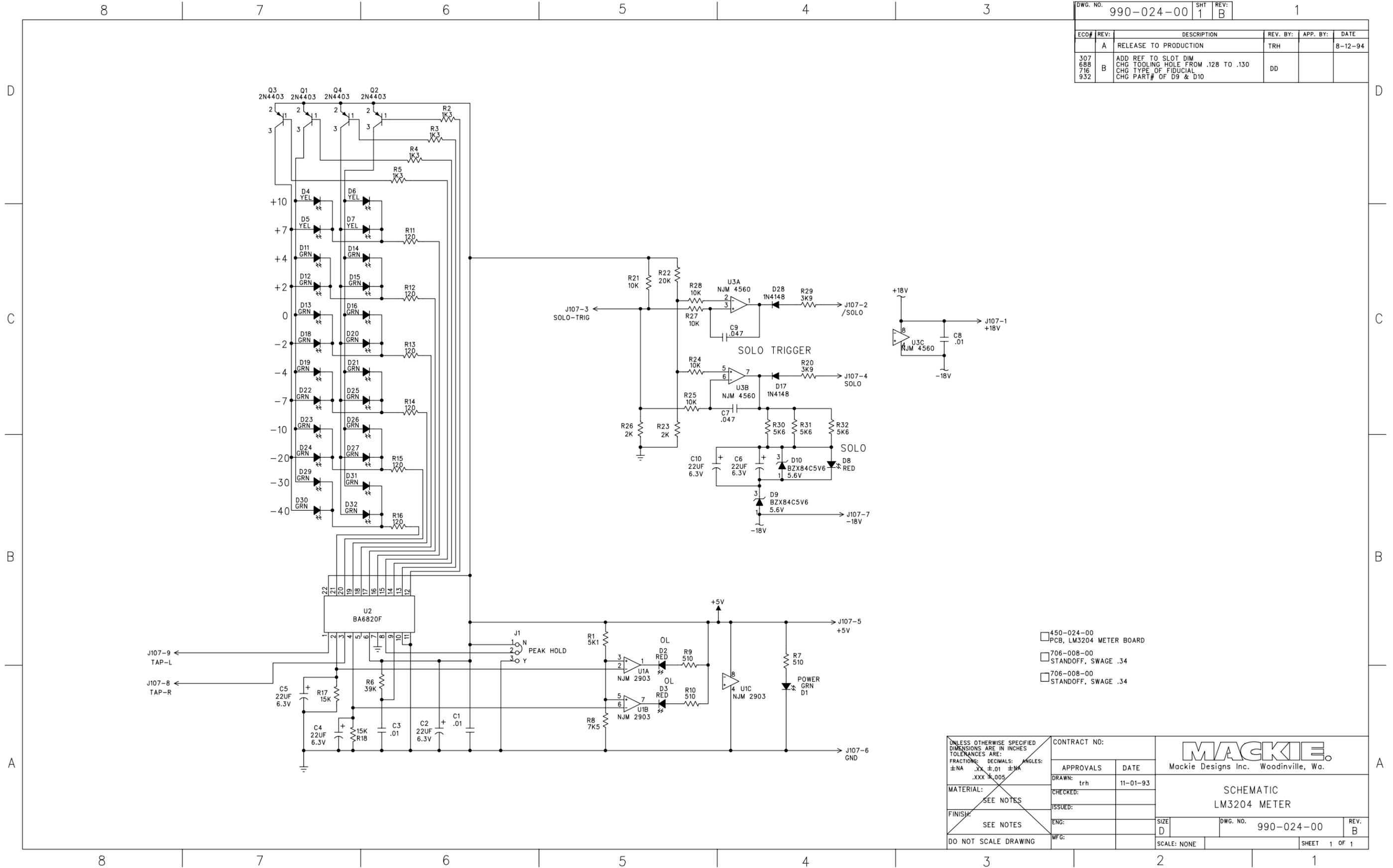
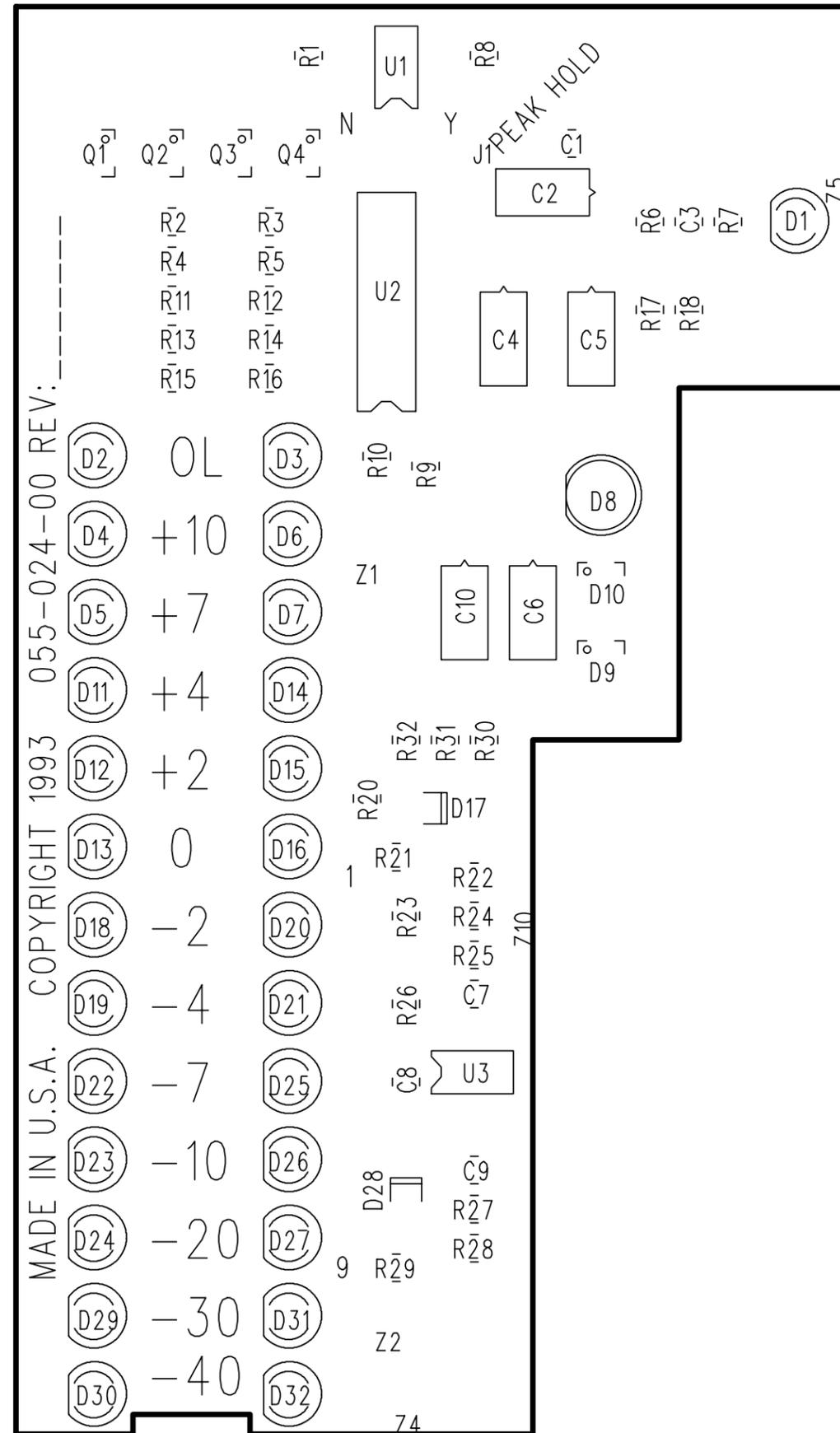


DWG. NO.	990-024-00	SHT	1	REV:	B	1
ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE	
	A	RELEASE TO PRODUCTION	TRH		8-12-94	
307	B	ADD REF TO SLOT DIM				
688		CHG TOOLING HOLE FROM .128 TO .130				
716		CHG TYPE OF FIDUCIAL				
932		CHG PART# OF D9 & D10	DD			

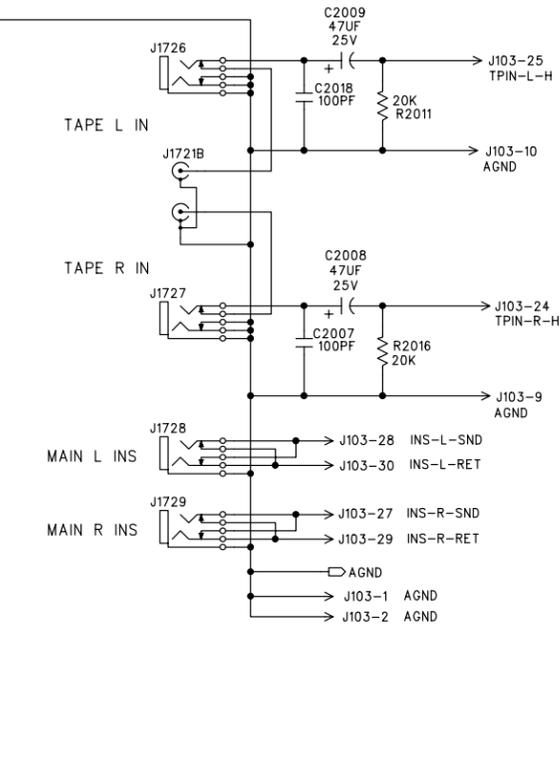
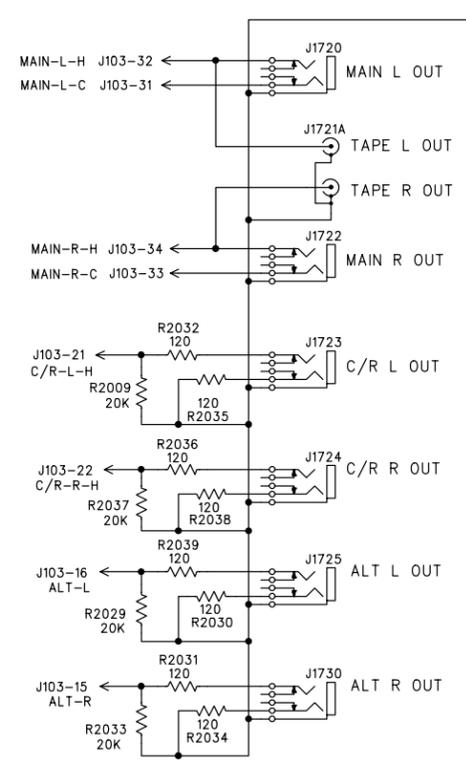
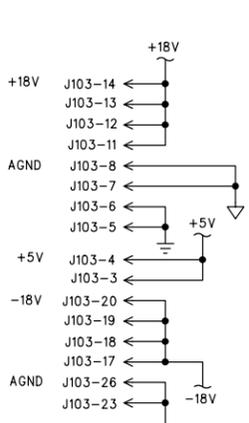
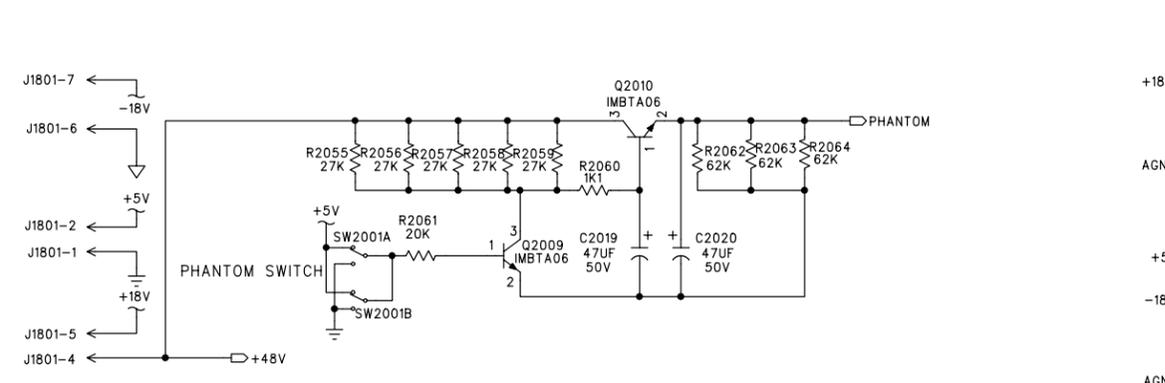
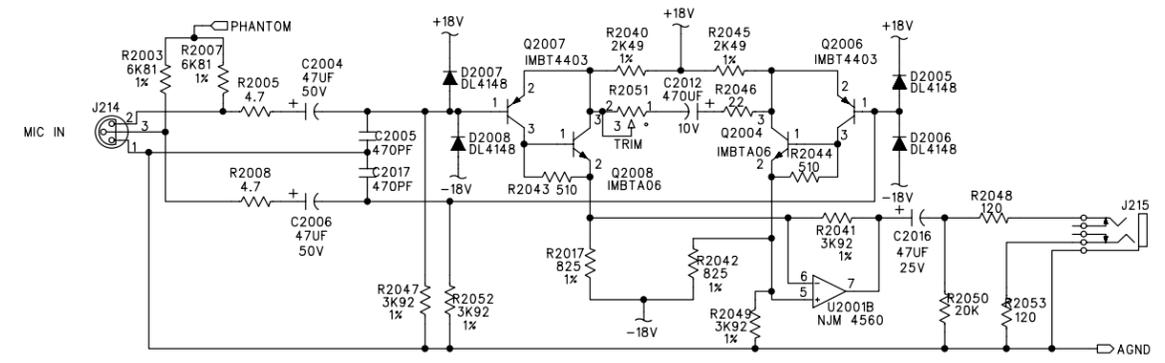
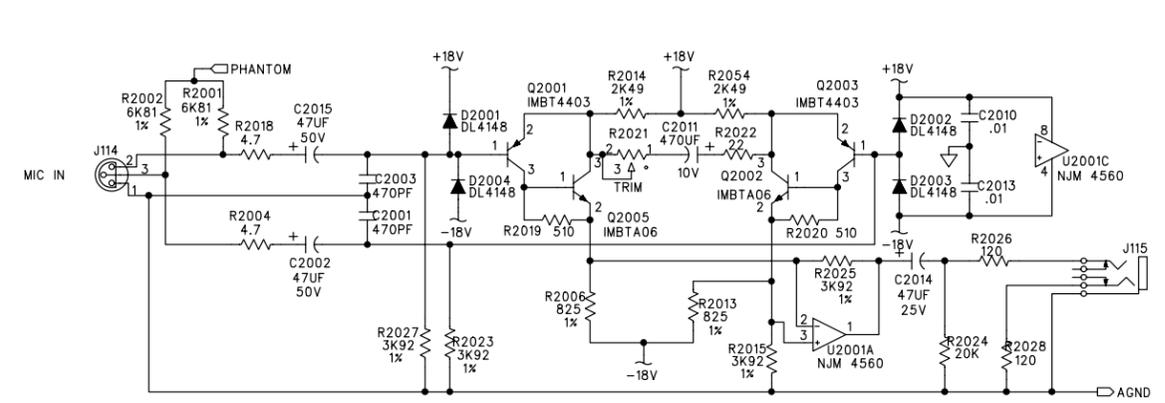


- 450-024-00 PCB, LM3204 METER BOARD
- 706-008-00 STANDOFF, SWAGE .34
- 706-008-00 STANDOFF, SWAGE .34

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±NA .XX ±.01 ±NA .XXX ±.005	CONTRACT NO:		Mackie Designs Inc. Woodinville, Wa.	
	APPROVALS	DATE		
	MATERIAL:	CHECKED:	trh	11-01-93
	FINISH:	ISSUED:	ENG:	
DO NOT SCALE DRAWING	MFG:			SIZE D DWG. NO. 990-024-00 REV. B SCALE: NONE SHEET 1 OF 1



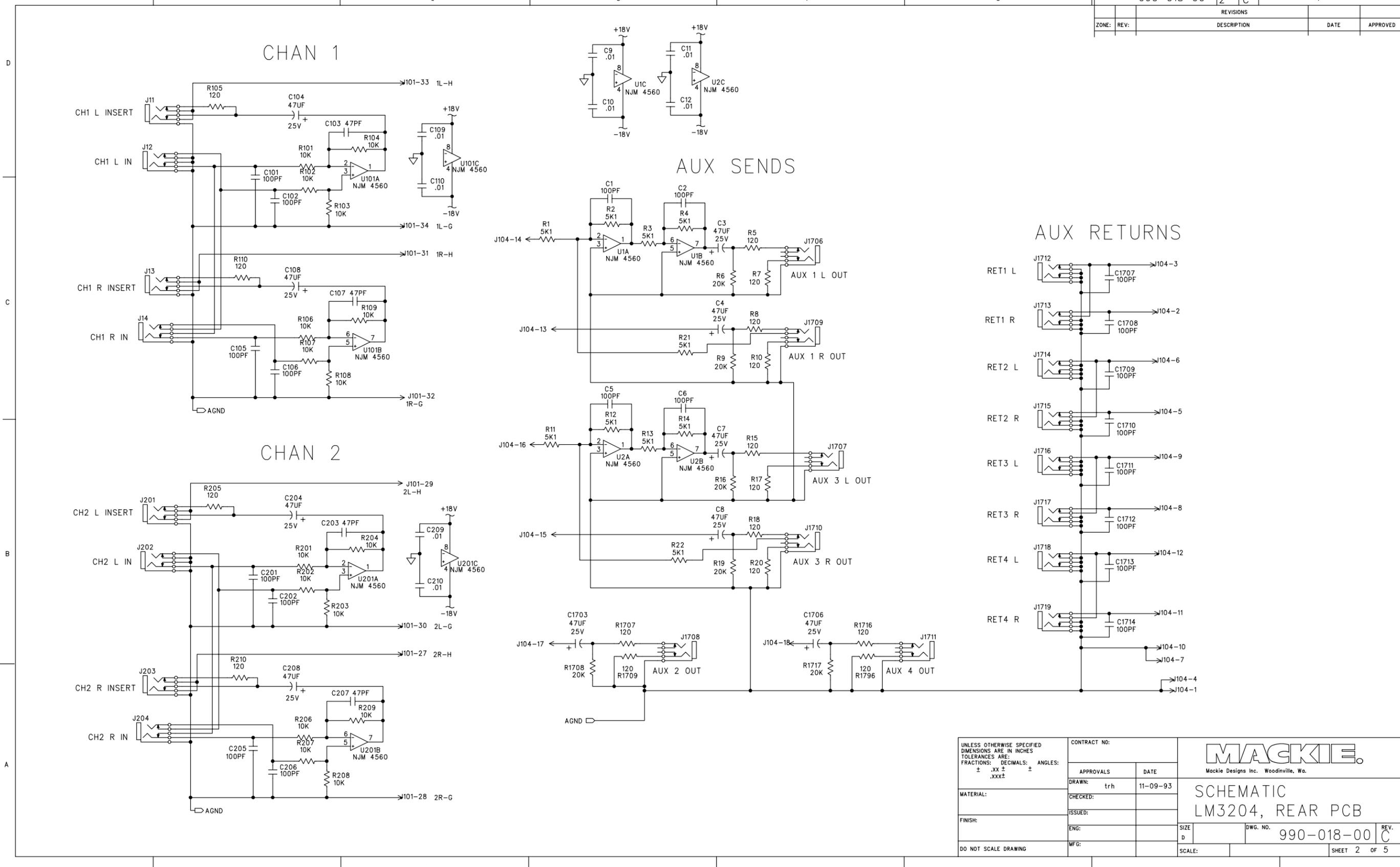
ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE
	A	RELEASED TO PRODUCTION	TRH		8-12-94
307	B	ADDED REF TO DIM R6,R16 WERE 120	TRH		10-3-94
324		ADDED COMP OUTLINES TO SILKSCREEN			
334		MOVED STANDOFFS			
631	C	CONSOLIDATE SIMILAR PARTS	DD		
688		ENCREASED TOOLING HOLE SIZE			
716		CHG TYPE OF FIDUCIAL			
726		CHG FIXTURE STDOFF HOLE SIZE TO .089			
738		CHG TO SMOOTHER TAPER POT			
934		CHG BLK TO BLU JACKS			



- 760-015-00 EXTENDER, SWITCH BUTTON
- 760-003-00 BUTTON SW 9X5 MM
- 040-037-00 CABLE ASSY, 3204 POWER
- 450-018-00 PCB, LM3204 REAR BOARD

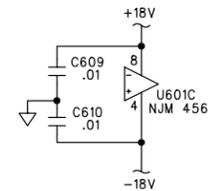
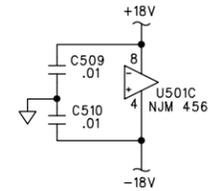
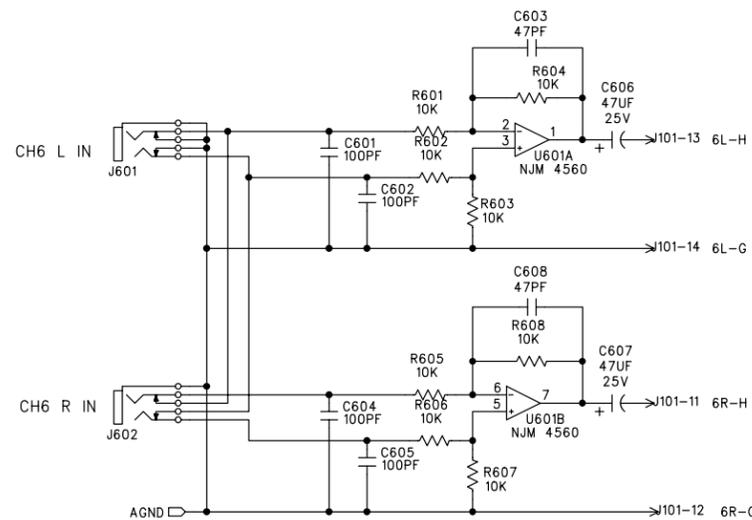
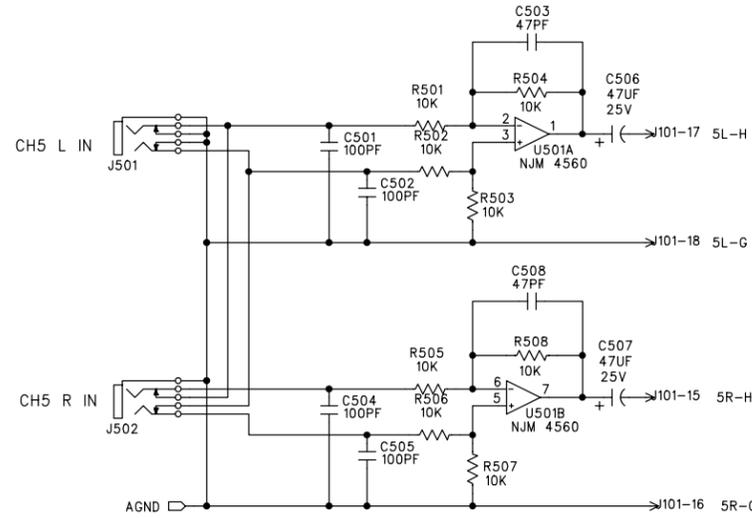
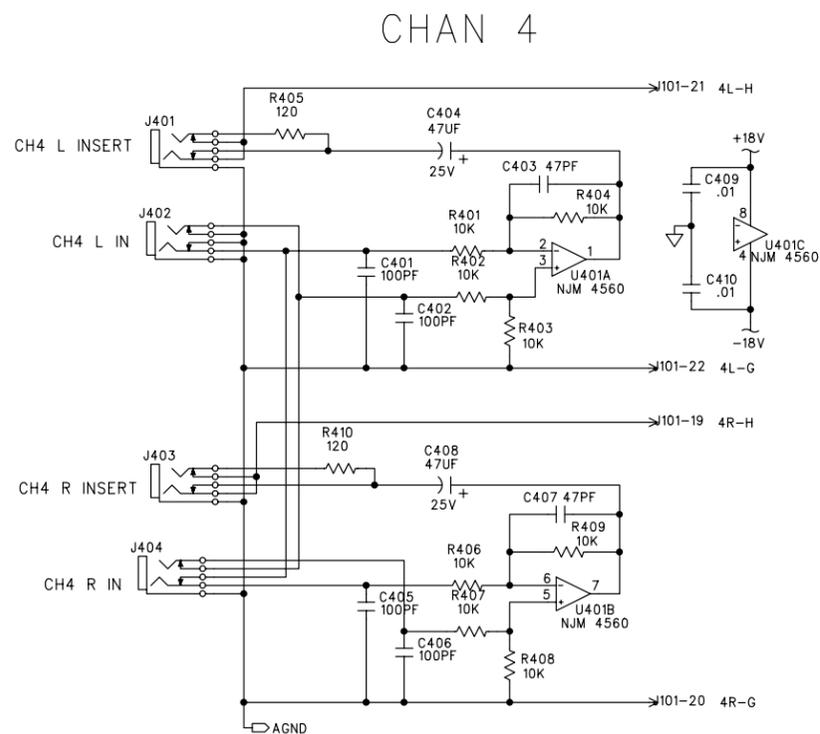
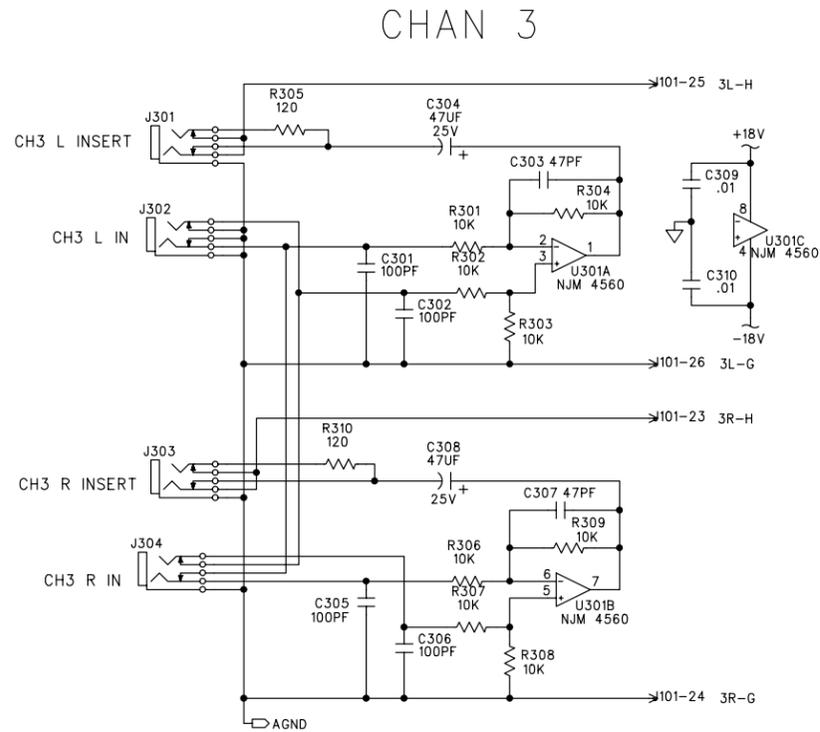
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±.NA .XX ±.01 ±NA .XXX ±.005	CONTRACT NO:		Mackie Designs Inc. Woodinville, Wa.		
	APPROVALS	DATE			
	MATERIAL:	CHECKED: LM	DATE: 9-9-94	SCHEMATIC LM3204, REAR PCB	
	FINISH:	ISSUED: CR	DATE: 9-9-94		
DO NOT SCALE DRAWING	ENG: JG	DATE: 9-9-94	SIZE: D	DWG. NO. 990-018-00	
	MFG: AR	DATE: 9-9-94	SCALE: NONE	REV: C	

DWG. NO.	990-018-00	SHT	2	REV:	C
REVISIONS					
ZONE:	REV:	DESCRIPTION	DATE	APPROVED	



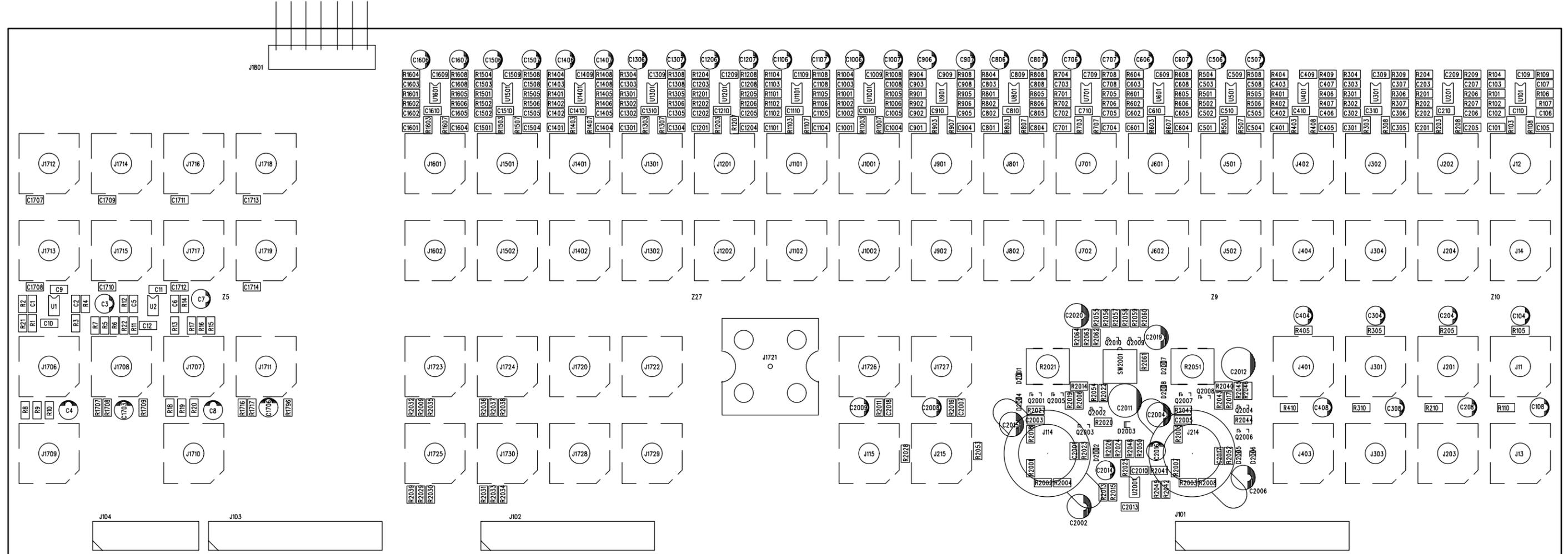
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ± .xx ± ± .xxx ±	CONTRACT NO:		 Mackie Designs Inc. Woodville, Wa.
	APPROVALS	DATE	
MATERIAL:	DRAWN: trh	11-09-93	SCHEMATIC LM3204, REAR PCB
FINISH:	CHECKED:	ISSUED:	
DO NOT SCALE DRAWING	ENG:	MFG:	DWG. NO. 990-018-00 REV. C SCALE: SHEET 2 OF 5

DWG. NO.	990-018-00	SHT	3	REV:	C	1
REVISIONS						
ZONE:	REV:	DESCRIPTION	DATE	APPROVED		



CH 7 to 16 are not shown, but they have the same schematic.
See overleaf for the connector pinouts and the printed circuit board.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±.xx ± .xxx ±	CONTRACT NO:		MACKIE Mackie Designs Inc. Woodville, Wa.	
	APPROVALS	DATE		
MATERIAL:	DRAWN: trh	11-09-93	SCHEMATIC LM3204 REAR	
FINISH:	CHECKED:	ISSUED:	SIZE D	DWG. NO. 990-018-00
DO NOT SCALE DRAWING	ENG:	MFG:	SCALE:	REV. C
			SHEET 3 OF 5	



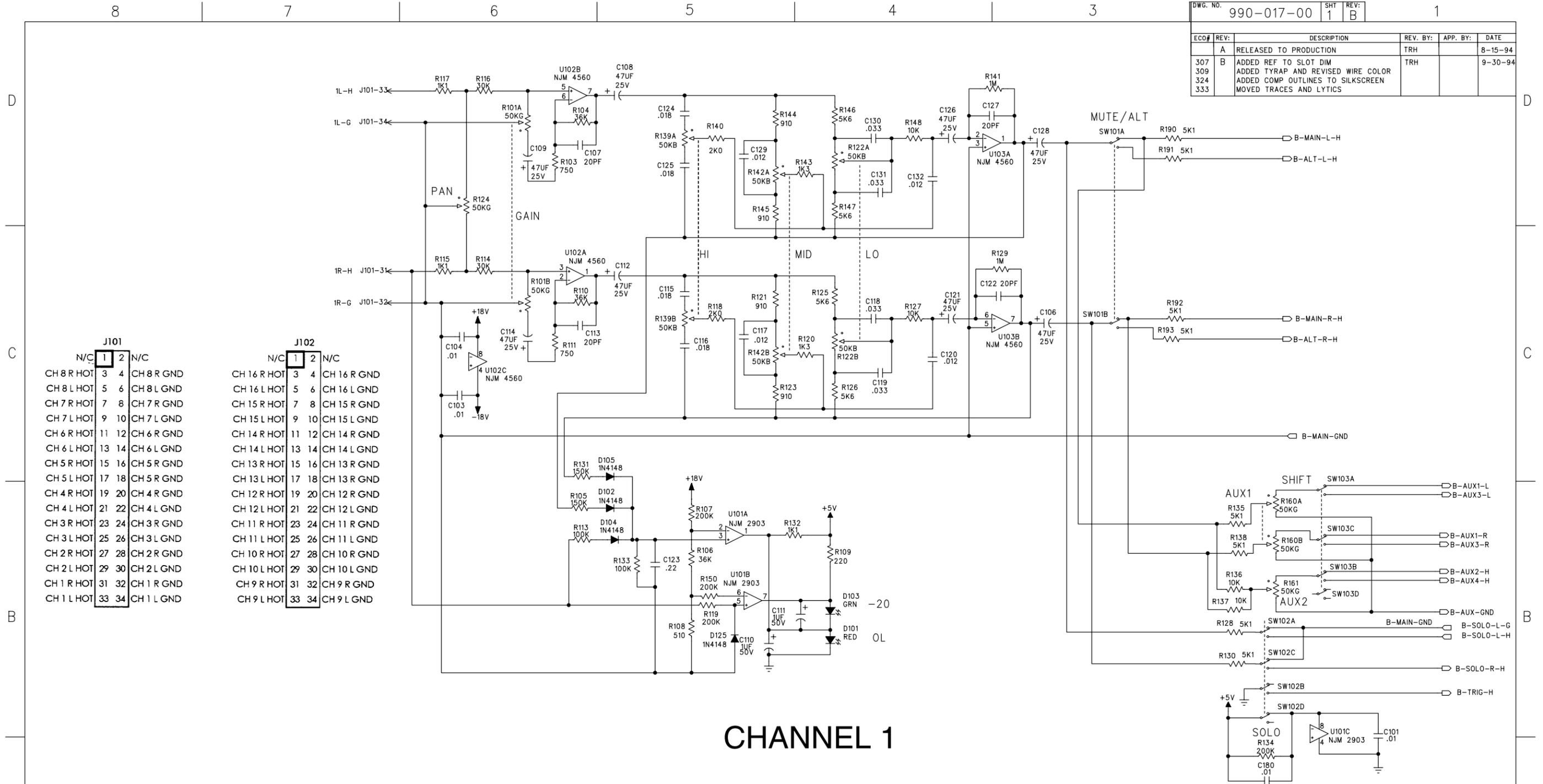
J101		N/C		N/C	
CH 8 R HOT	3	4	CH 8 R GND	3	4
CH 8 L HOT	5	6	CH 8 L GND	5	6
CH 7 R HOT	7	8	CH 7 R GND	7	8
CH 7 L HOT	9	10	CH 7 L GND	9	10
CH 6 R HOT	11	12	CH 6 R GND	11	12
CH 6 L HOT	13	14	CH 6 L GND	13	14
CH 5 R HOT	15	16	CH 5 R GND	15	16
CH 5 L HOT	17	18	CH 5 L GND	17	18
CH 4 R HOT	19	20	CH 4 R GND	19	20
CH 4 L HOT	21	22	CH 4 L GND	21	22
CH 3 R HOT	23	24	CH 3 R GND	23	24
CH 3 L HOT	25	26	CH 3 L GND	25	26
CH 2 R HOT	27	28	CH 2 R GND	27	28
CH 2 L HOT	29	30	CH 2 L GND	29	30
CH 1 R HOT	31	32	CH 1 R GND	31	32
CH 1 L HOT	33	34	CH 1 L GND	33	34

J102		N/C		N/C	
CH 16 R HOT	3	4	CH 16 R GND	3	4
CH 16 L HOT	5	6	CH 16 L GND	5	6
CH 15 R HOT	7	8	CH 15 R GND	7	8
CH 15 L HOT	9	10	CH 15 L GND	9	10
CH 14 R HOT	11	12	CH 14 R GND	11	12
CH 14 L HOT	13	14	CH 14 L GND	13	14
CH 13 R HOT	15	16	CH 13 R GND	15	16
CH 13 L HOT	17	18	CH 13 L GND	17	18
CH 12 R HOT	19	20	CH 12 R GND	19	20
CH 12 L HOT	21	22	CH 12 L GND	21	22
CH 11 R HOT	23	24	CH 11 R GND	23	24
CH 11 L HOT	25	26	CH 11 L GND	25	26
CH 10 R HOT	27	28	CH 10 R GND	27	28
CH 10 L HOT	29	30	CH 10 L GND	29	30
CH 9 R HOT	31	32	CH 9 R GND	31	32
CH 9 L HOT	33	34	CH 9 L GND	33	34

J103		N/C		N/C	
AGND	1	2	AGND	1	2
+5V	3	4	+5V	3	4
GND	5	6	GND	5	6
GND	7	8	GND	7	8
AGND	9	10	AGND	9	10
+16V	11	12	+16V	11	12
+16V	13	14	+16V	13	14
ALT R OUT	15	16	ALT L OUT	15	16
-18V	17	18	-18V	17	18
-18V	19	20	-18V	19	20
C/R L OUT	21	22	C/R R OUT	21	22
AGND	23	24	TAPE IN R	23	24
TAPE IN L	25	26	AGND	25	26
R INS SEND	27	28	L INS SEND	27	28
R INS RTN	29	30	L INS RTN	29	30
L MAIN OUT -	31	32	L MAIN OUT +	31	32
R MAIN OUT -	33	34	R MAIN OUT +	33	34

J104		N/C		N/C	
AGND	1	2	AUX RTN 1 R	1	2
AUX RTN 1 L	3	4	AGND	3	4
AUX RTN 2 R	5	6	AUX RTN 2 L	5	6
AGND	7	8	AUX RTN 3 R	7	8
AUX RTN 3 L	9	10	AGND	9	10
AUX RTN 4 R	11	12	AUX RTN 4 L	11	12
AUX SEND 1 R	13	14	AUX SEND 1 L	13	14
AUX SEND 3 R	15	16	AUX SEND 3 L	15	16
AUX 2 SEND	17	18	AUX 4 SEND	17	18
N/C	19	20	N/C	19	20

DWG. NO:	990-017-00	SHT	1	REV:	B	1
ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE	
307	A	RELEASED TO PRODUCTION	TRH		8-15-94	
309	B	ADDED REF TO SLOT DIM	TRH		9-30-94	
324		ADDED TYRAP AND REVISED WIRE COLOR				
333		ADDED COMP OUTLINES TO SILKSCREEN MOVED TRACES AND LYTICS				



CHANNEL 1

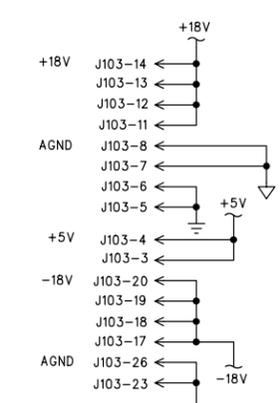
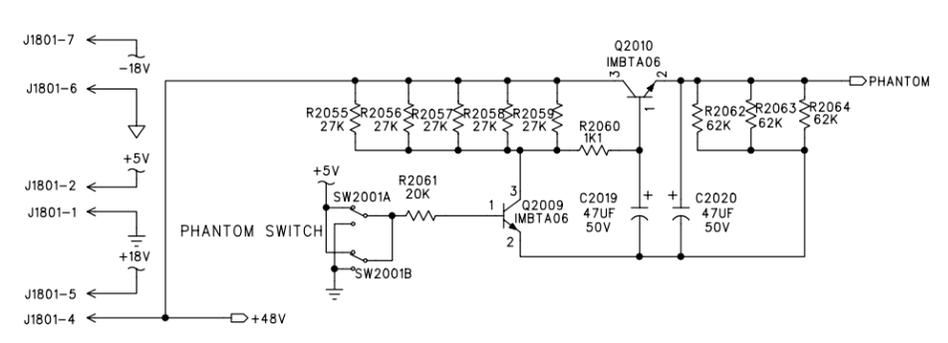
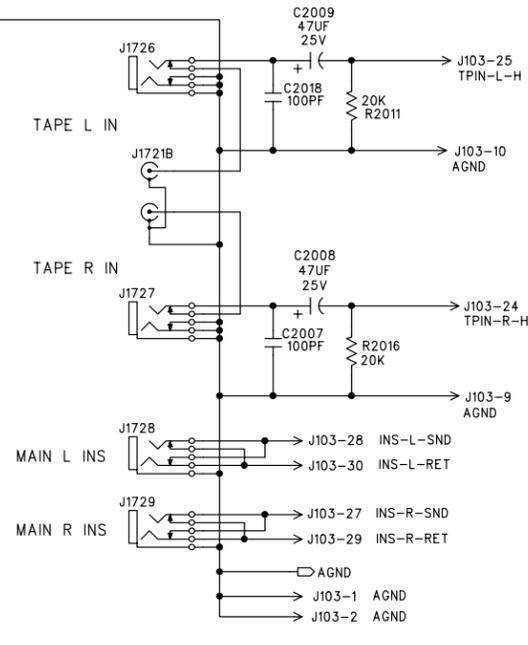
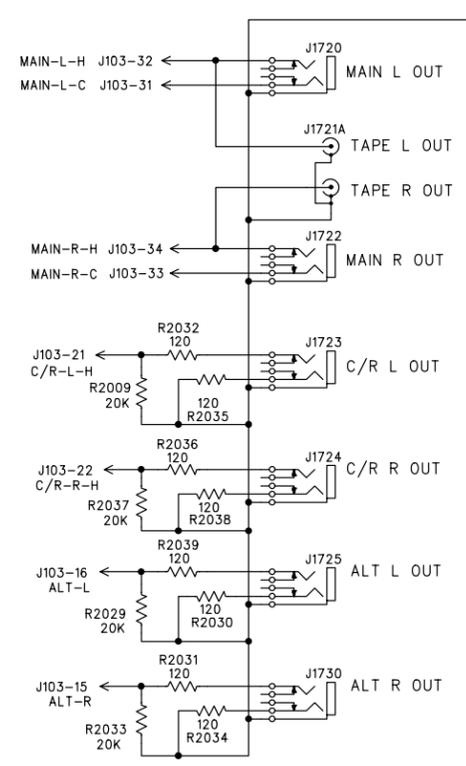
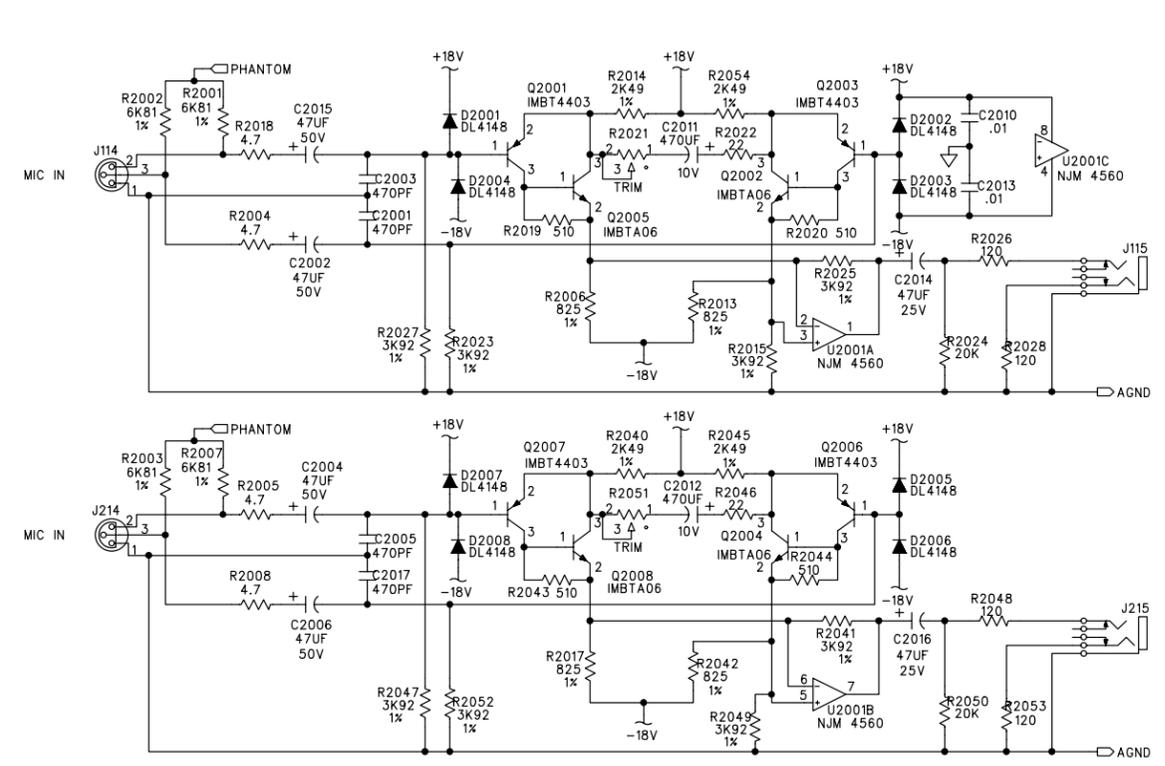
The other channels have the same schematic design.
 Channel 2 has part numbers in the 200s
 Channel 3 has part numbers in the 300s
 and so on through to Channel 16

J101		N/C		1		2		N/C	
CH 8 R HOT	3	4	CH 8 R GND						
CH 8 L HOT	5	6	CH 8 L GND						
CH 7 R HOT	7	8	CH 7 R GND						
CH 7 L HOT	9	10	CH 7 L GND						
CH 6 R HOT	11	12	CH 6 R GND						
CH 6 L HOT	13	14	CH 6 L GND						
CH 5 R HOT	15	16	CH 5 R GND						
CH 5 L HOT	17	18	CH 5 L GND						
CH 4 R HOT	19	20	CH 4 R GND						
CH 4 L HOT	21	22	CH 4 L GND						
CH 3 R HOT	23	24	CH 3 R GND						
CH 3 L HOT	25	26	CH 3 L GND						
CH 2 R HOT	27	28	CH 2 R GND						
CH 2 L HOT	29	30	CH 2 L GND						
CH 1 R HOT	31	32	CH 1 R GND						
CH 1 L HOT	33	34	CH 1 L GND						

- N101 □ 760-002-00 BUTTON SW 9X9 MM
- N102 □ 760-013-00 BUTTON SW 9X5 MM
- N103 □ 760-013-00 BUTTON SW 9X5 MM

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: .XX ±.01 ANGLES: ±NA .xxx ±.005	CONTRACT NO:		Mackie Designs Inc. Woodinville, Wa.		
	APPROVALS	DATE			
	MATERIAL:	CHECKED: LM	9-9-94	SCHEMATIC LM3204 FRONT BOARD	
	FINISH:	ISSUED: CR	9-9-94		
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	MFG: AR	9-9-94	SCALE: NONE	REV. B	

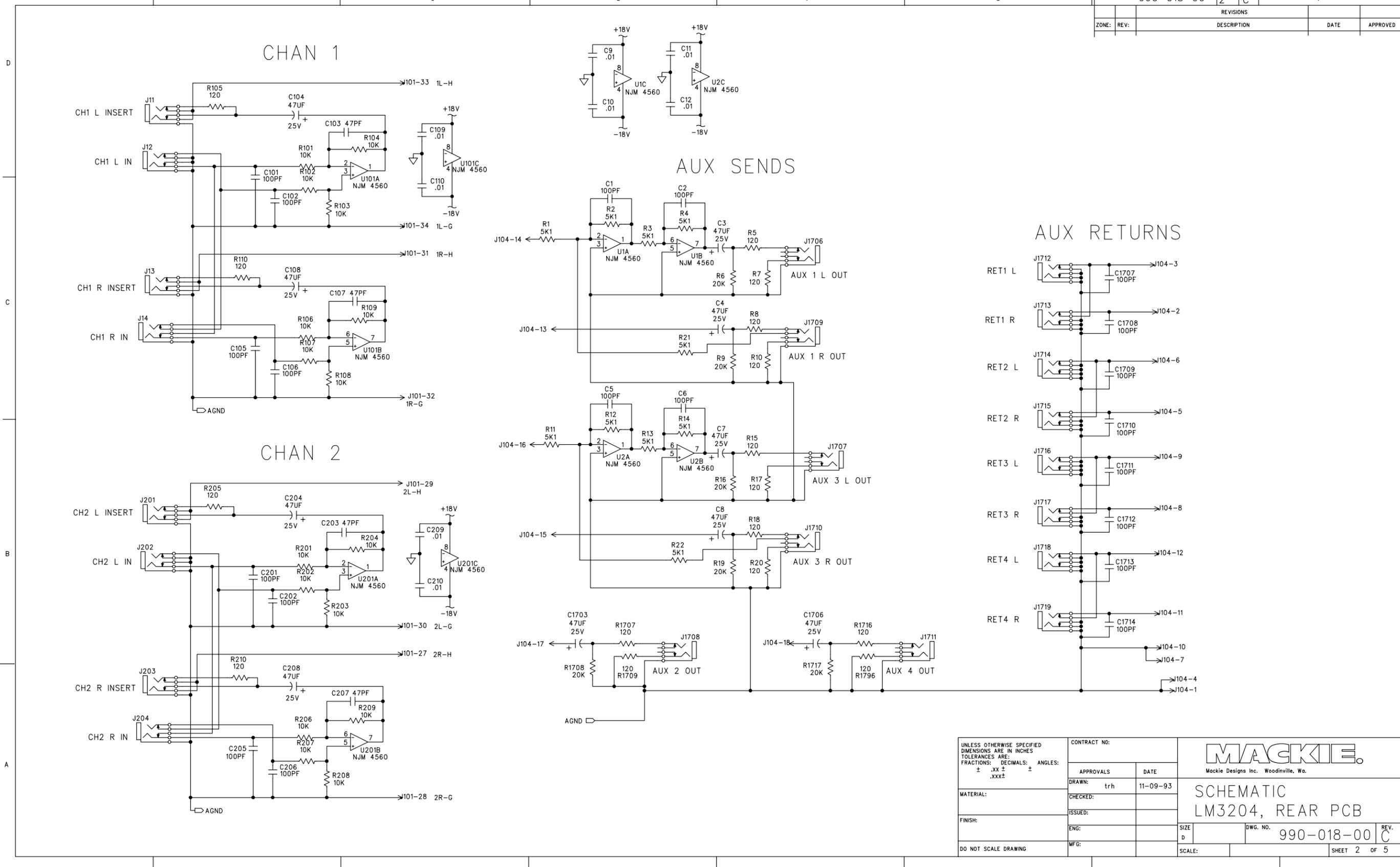
ECO#	REV.	DESCRIPTION	REV. BY:	APP. BY:	DATE
	A	RELEASED TO PRODUCTION	TRH		8-12-94
307	B	ADDED REF TO DIM R6,R16 WERE 120	TRH		10-3-94
324		ADDED COMP OUTLINES TO SILKSCREEN			
334		MOVED STANDOFFS			
631	C	CONSOLIDATE SIMILAR PARTS	DD		
688		ENCREASED TOOLING HOLE SIZE			
716		CHG TYPE OF FIDUCIAL			
726		CHG FIXTURE STDOFF HOLE SIZE TO .089			
738		CHG TO SMOOTHER TAPER POT			
934		CHG BLK TO BLU JACKS			



- 760-015-00 EXTENDER, SWITCH BUTTON
- 760-003-00 BUTTON SW 9X5 MM
- 040-037-00 CABLE ASSY, 3204 POWER
- 450-018-00 PCB, LM3204 REAR BOARD

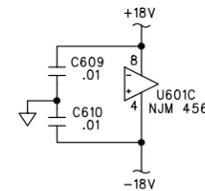
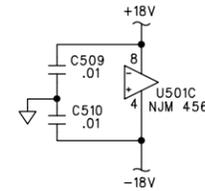
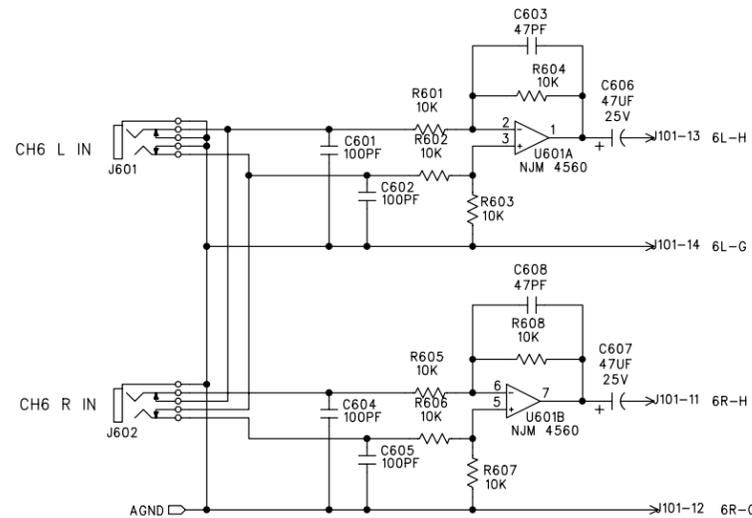
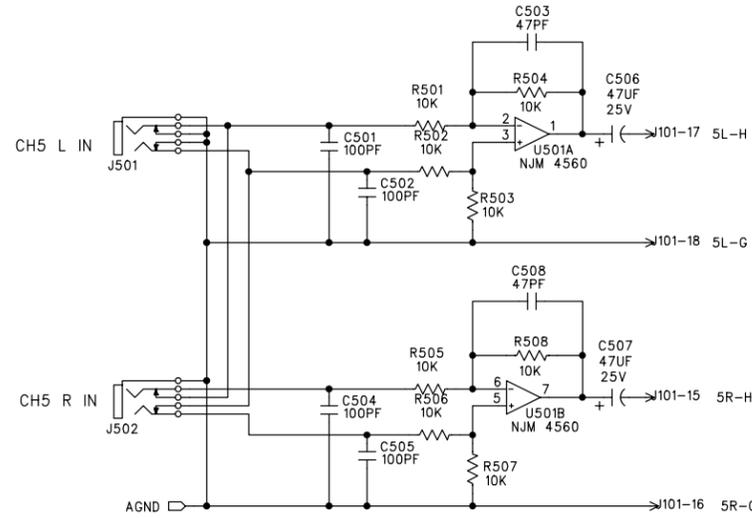
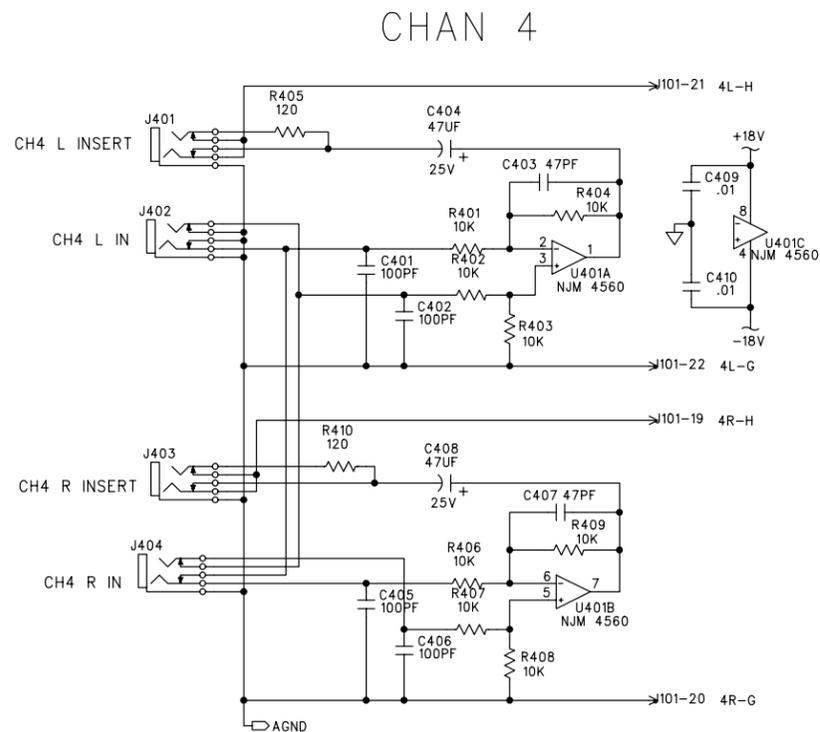
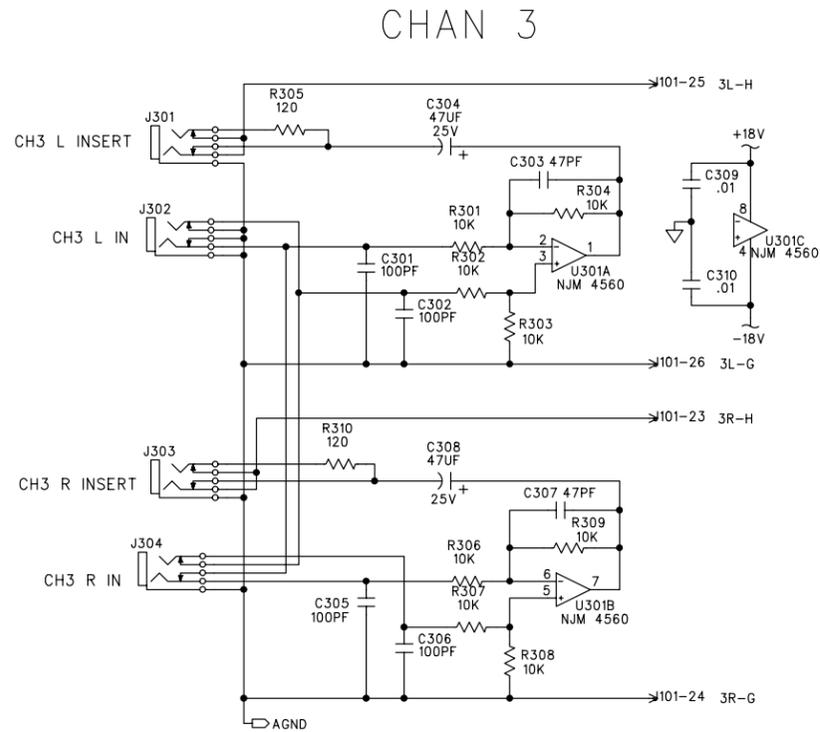
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±.NA .XX ±.01 ±NA .XXX ±.005	CONTRACT NO:		Mackie Designs Inc. Woodinville, Wa.		
	APPROVALS	DATE			
	MATERIAL:	CHECKED: LM	DATE: 9-9-94	SCHEMATIC LM3204, REAR PCB	
	FINISH:	ISSUED: CR	DATE: 9-9-94		
DO NOT SCALE DRAWING	ENG: JG	DATE: 9-9-94	SIZE: D	DWG. NO. 990-018-00	
	MFG: AR	DATE: 9-9-94	SCALE: NONE	REV. C	

DWG. NO.	990-018-00	SHT	2	REV:	C
REVISIONS					
ZONE:	REV:	DESCRIPTION	DATE	APPROVED	



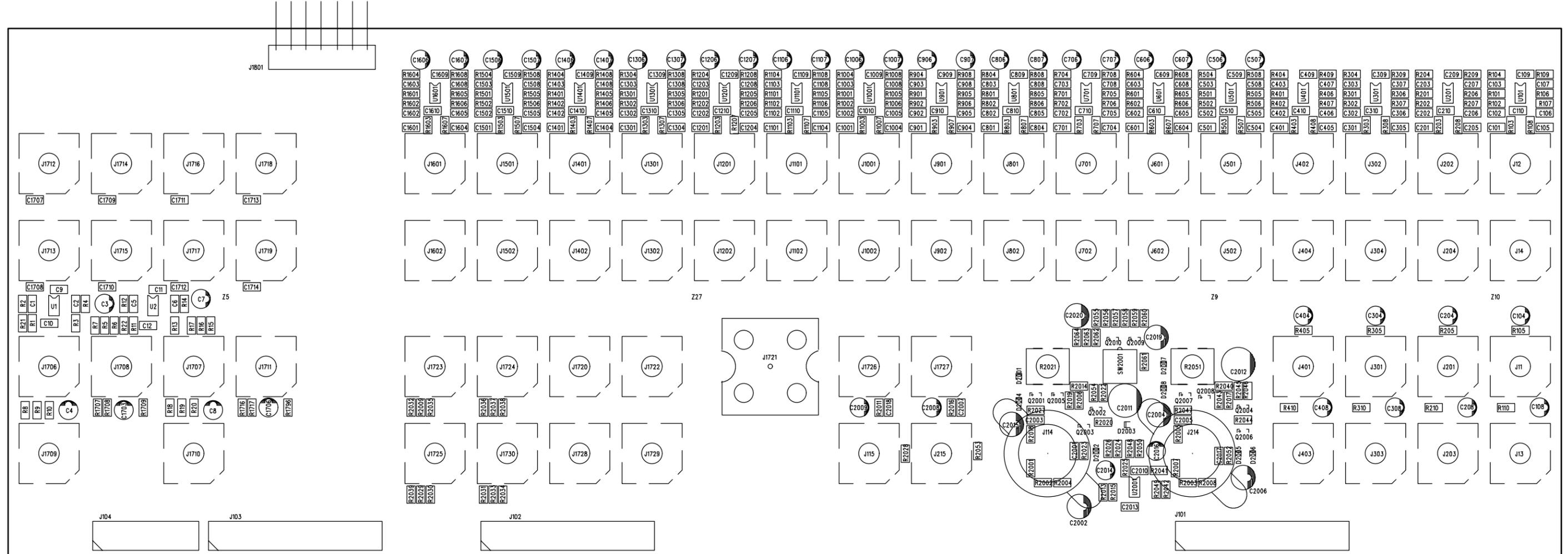
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	APPROVALS	DATE			
	MATERIAL:	DRAWN: trh	11-09-93	SCHEMATIC LM3204, REAR PCB	
	FINISH:	CHECKED:	ISSUED:	SIZE D	DWG. NO. 990-018-00 REV. C
DO NOT SCALE DRAWING	ENG:	MFG:	SCALE:	SHEET 2 OF 5	

DWG. NO.	990-018-00	SHT	3	REV:	C	1
REVISIONS						
ZONE:	REV:	DESCRIPTION	DATE	APPROVED		



CH 7 to 16 are not shown, but they have the same schematic.
See overleaf for the connector pinouts and the printed circuit board.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±.xx ± .xxx ±	CONTRACT NO:		MACKIE Mackie Designs Inc. Woodville, Wa.	
	APPROVALS	DATE		
MATERIAL:	DRAWN: trh	11-09-93	SCHEMATIC LM3204 REAR	
FINISH:	CHECKED:	ISSUED:	SIZE D	DWG. NO. 990-018-00
DO NOT SCALE DRAWING	MFG:		SCALE:	REV. C
			SHEET 3 OF 5	



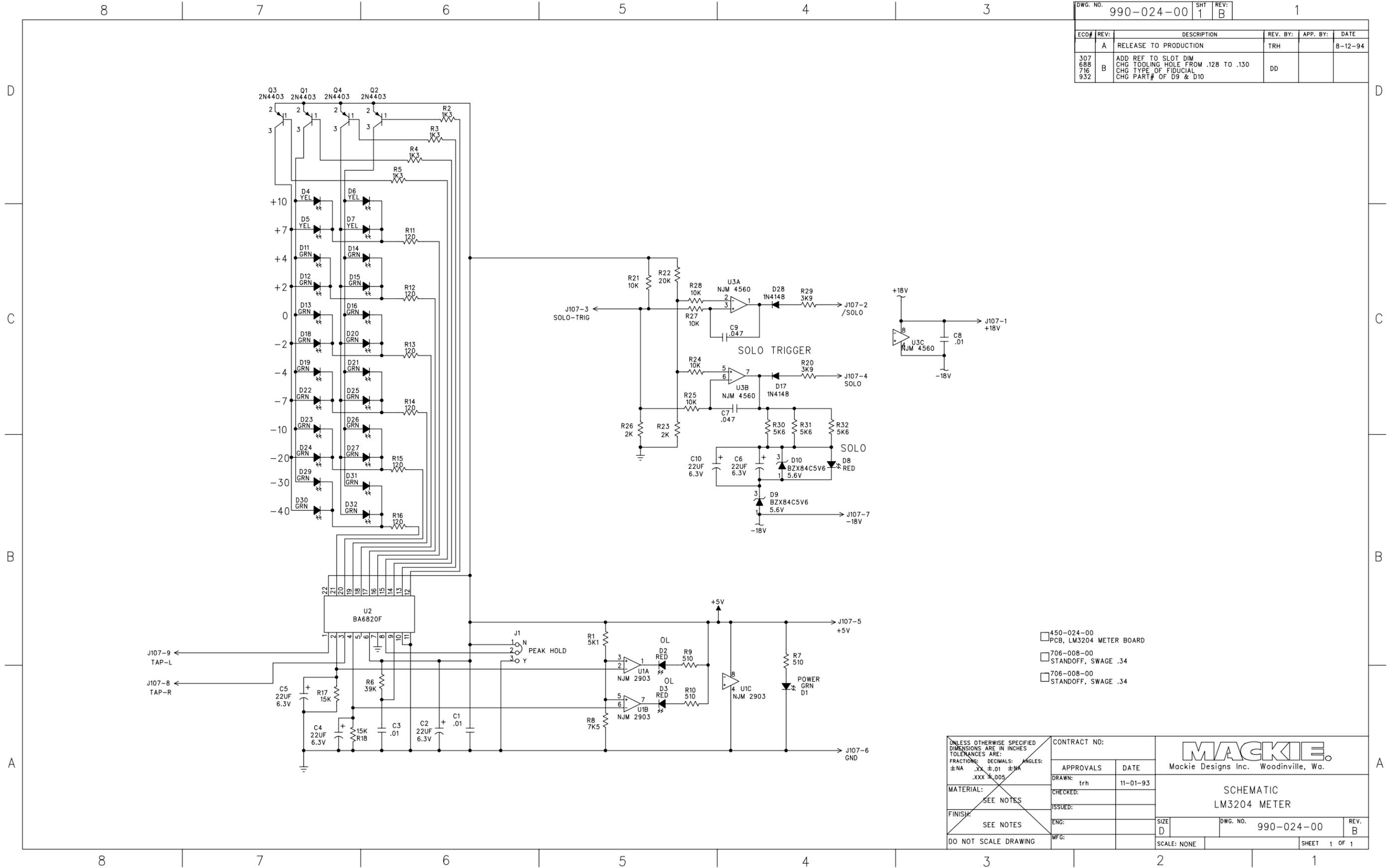
J101		N/C		N/C	
1	2	3	4	5	6
CH 8 R HOT	3	4	CH 8 R GND	5	6
CH 8 L HOT	7	8	CH 7 R GND	9	10
CH 7 L HOT	11	12	CH 6 R GND	13	14
CH 6 L HOT	15	16	CH 5 R GND	17	18
CH 5 L HOT	19	20	CH 4 R GND	21	22
CH 4 L HOT	23	24	CH 3 R GND	25	26
CH 3 L HOT	27	28	CH 2 R GND	29	30
CH 2 L HOT	31	32	CH 1 R GND	33	34
CH 1 L HOT			CH 1 L GND		

J102		N/C		N/C	
1	2	3	4	5	6
CH 16 R HOT	7	8	CH 15 R GND	9	10
CH 15 L HOT	11	12	CH 14 R GND	13	14
CH 14 L HOT	15	16	CH 13 R GND	17	18
CH 13 L HOT	19	20	CH 12 R GND	21	22
CH 12 L HOT	23	24	CH 11 R GND	25	26
CH 11 L HOT	27	28	CH 10 R GND	29	30
CH 10 L HOT	31	32	CH 9 R GND	33	34
CH 9 L HOT			CH 9 L GND		

J103		AGND		AGND	
1	2	3	4	5	6
+5V	7	8	GND	9	10
GND	11	12	+16V	13	14
+16V	15	16	ALT R OUT	17	18
-18V	19	20	-18V	21	22
C/R L OUT	23	24	TAPE IN R	25	26
AGND	27	28	L INS SEND	29	30
R INS SEND	31	32	L MAIN OUT +	33	34
R INS RTN			R MAIN OUT +		

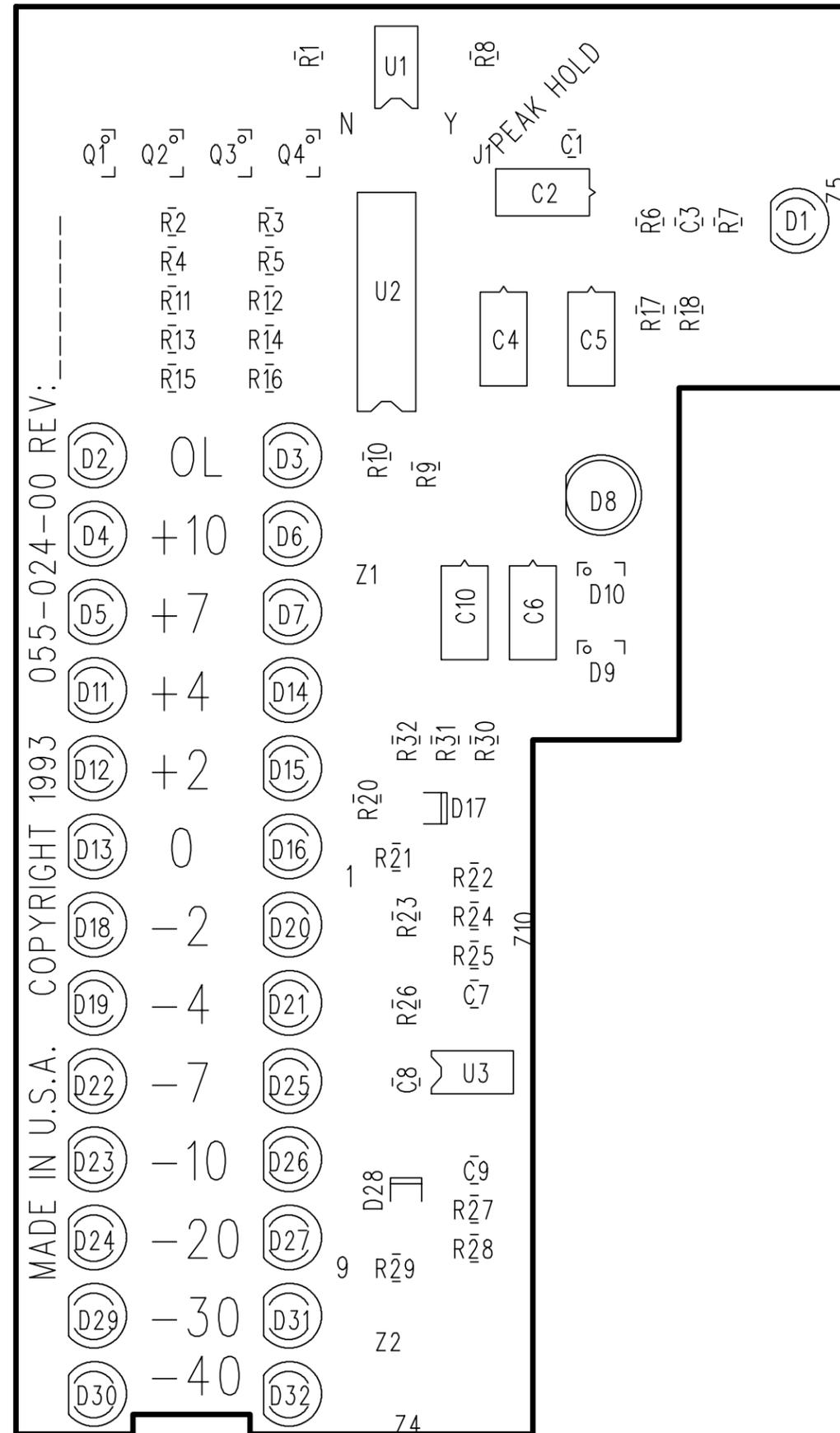
J104		AGND		AUX RTN 1 R	
1	2	3	4	5	6
AUX RTN 1 L	7	8	AUX RTN 2 L	9	10
AUX RTN 2 R	11	12	AUX RTN 3 R	13	14
AGND	15	16	AUX SEND 1 L	17	18
AUX RTN 3 L	19	20	AUX SEND 3 L		
AUX RTN 4 R			AUX 4 SEND		
AUX SEND 1 R			N/C		
AUX SEND 3 R					

DWG. NO.	990-024-00	SHT	1	REV:	B	1
ECO#	REV:	DESCRIPTION	REV. BY:	APP. BY:	DATE	
	A	RELEASE TO PRODUCTION	TRH		8-12-94	
307	B	ADD REF TO SLOT DIM				
688		CHG TOOLING HOLE FROM .128 TO .130				
716		CHG TYPE OF FIDUCIAL				
932		CHG PART# OF D9 & D10				

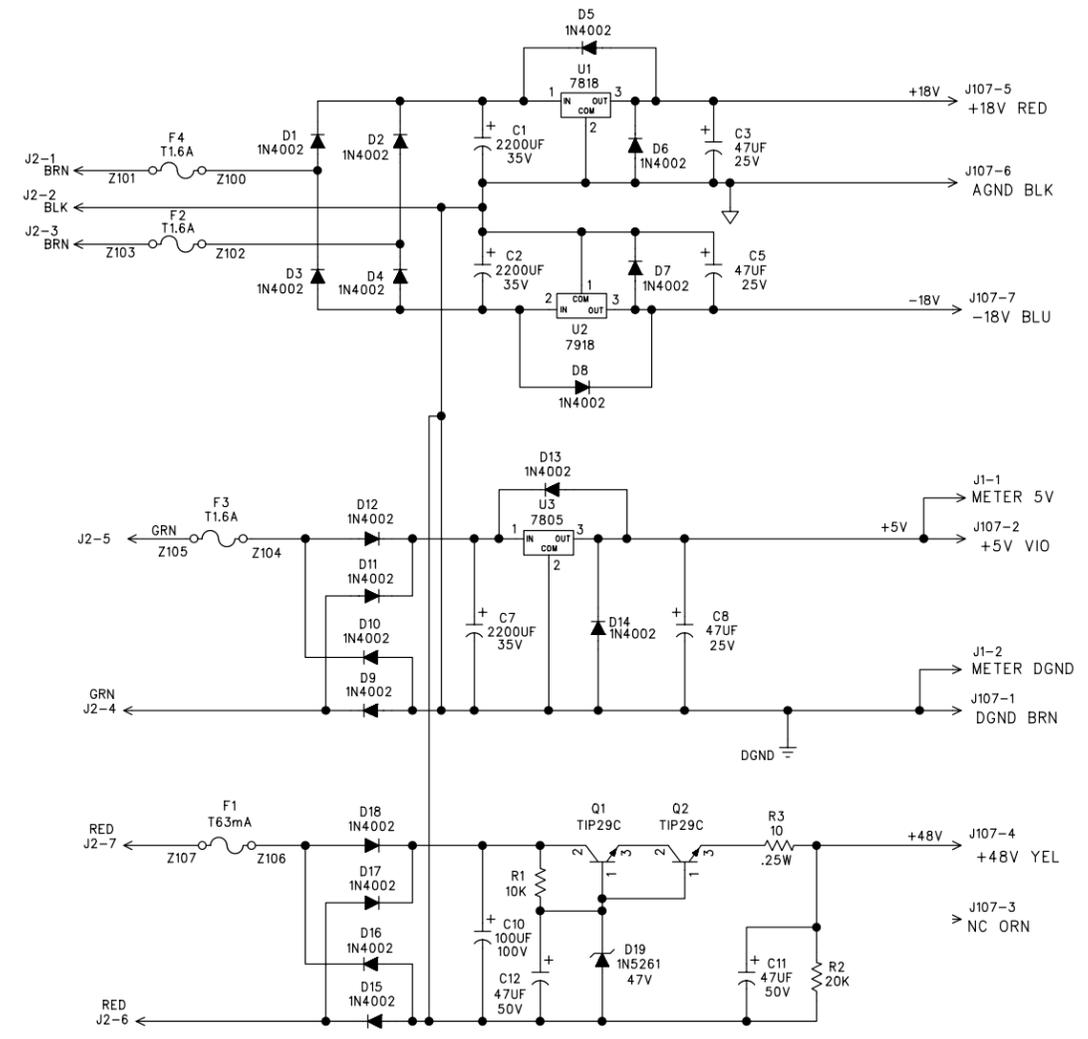


- 450-024-00 PCB, LM3204 METER BOARD
- 706-008-00 STANDOFF, SWAGE .34
- 706-008-00 STANDOFF, SWAGE .34

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±NA .XX ±.01 ±NA .XXX ±.005	CONTRACT NO:		MACKIE Mackie Designs Inc. Woodinville, Wa.		
	APPROVALS	DATE			
	MATERIAL: SEE NOTES	CHECKED: trh	11-01-93	SCHEMATIC LM3204 METER	
	FINISH: SEE NOTES	ISSUED:			
DO NOT SCALE DRAWING	ENG:		SIZE D	DWG. NO. 990-024-00	REV. B
	MFG:		SCALE: NONE	SHEET 1 OF 1	

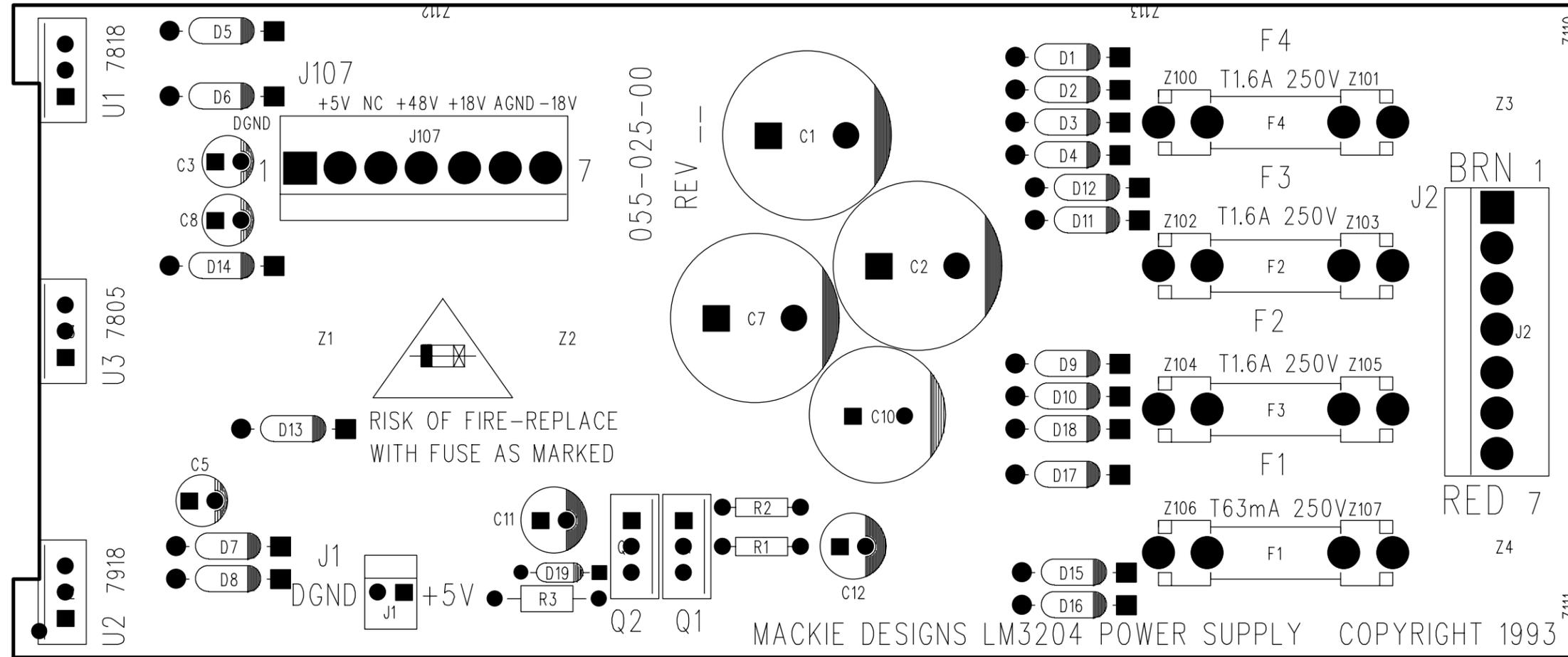


DWG. NO:	990-025-00	SHT	1	REV:	B	1
REV:	ECO#	DESCRIPTION	REV. BY:	APP. BY:	DATE	
A		RELEASED TO PRODUCTION	TRH		8-10-94	
B	326 407 607 688 895	MOVE CAPS FOR HOT MELT PHANTOM POWER ZENER TO 47V 2200/25V CAPS TO 35V TOOLING HOLES FROM .128 TO .130 ADD TIP29C FOR SAFETY	KR		3-6-96	

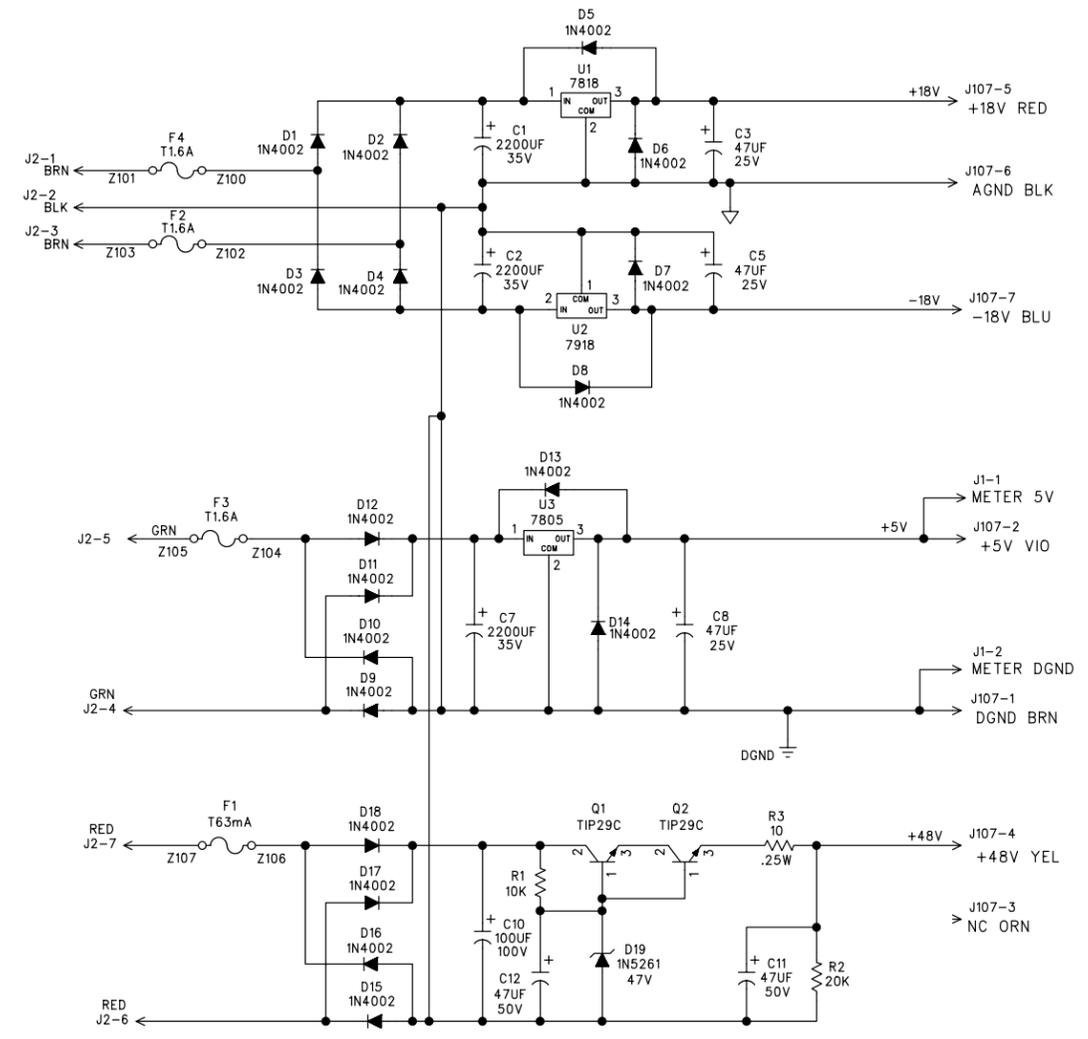


- 450-025-00 PCB, LM3204 POWER SUPPLY
- 410-002-00 SILPAD
- 410-002-00 SILPAD
- 410-002-00 SILPAD
- 550-126-00 CLAMP
- 550-123-00 HEATSINK BRACKET
- 700-023-00 SCREW, 6-32 X .50
- 700-023-00 SCREW, 6-32 X .50

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: .XX ±.01 ±.01 DECIMALS: .XXX ±.005 ANGLES: ±.1°	CONTRACT NO:		MACKIE Mackie Designs Inc. Woodinville, Wa.		
	APPROVALS	DATE			
	MATERIAL:	CHECKED: LM	DATE: 9-9-94	SCHEMATIC LM3204 POWER SUPPLY	
	ISSUED: CR	DATE: 9-9-94			
FINISH:	ENG: JGG	DATE: 9-9-94	SIZE: D	DWG. NO. 990-025-00	
DO NOT SCALE DRAWING	MFG: AR	DATE: 9-9-94	SCALE: NONE	REV. B	



DWG. NO.	990-025-00	SHT	1	REV:	B	1
REV:	ECO#	DESCRIPTION	REV. BY:	APP. BY:	DATE	
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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: .XX ±.01 ±.01 DECIMALS: .XXX ±.005 ANGLES: ±NA	CONTRACT NO:		MACKIE Mackie Designs Inc. Woodinville, Wa.		
	APPROVALS	DATE			
	MATERIAL: SEE NOTES	CHECKED: LM	9-9-94	SCHEMATIC LM3204 POWER SUPPLY	
	ISSUED: CR	9-9-94			
FINISH: SEE NOTES	ENG: JGG	9-9-94	SIZE D	DWG. NO. 990-025-00	
DO NOT SCALE DRAWING	MFG: AR	9-9-94	SCALE: NONE	REV. B	

