



SERVICE MANUAL

MODEL TYPE: YS1011
PM16-2 & PM22-2

WEB ACCESS: <http://www.yorkville.com>

**WORLD HEADQUARTERS
CANADA**

Yorkville Sound
550 Granite Court
Pickering, Ontario
L1W-3Y8 CANADA

Voice: (905) 837-8481
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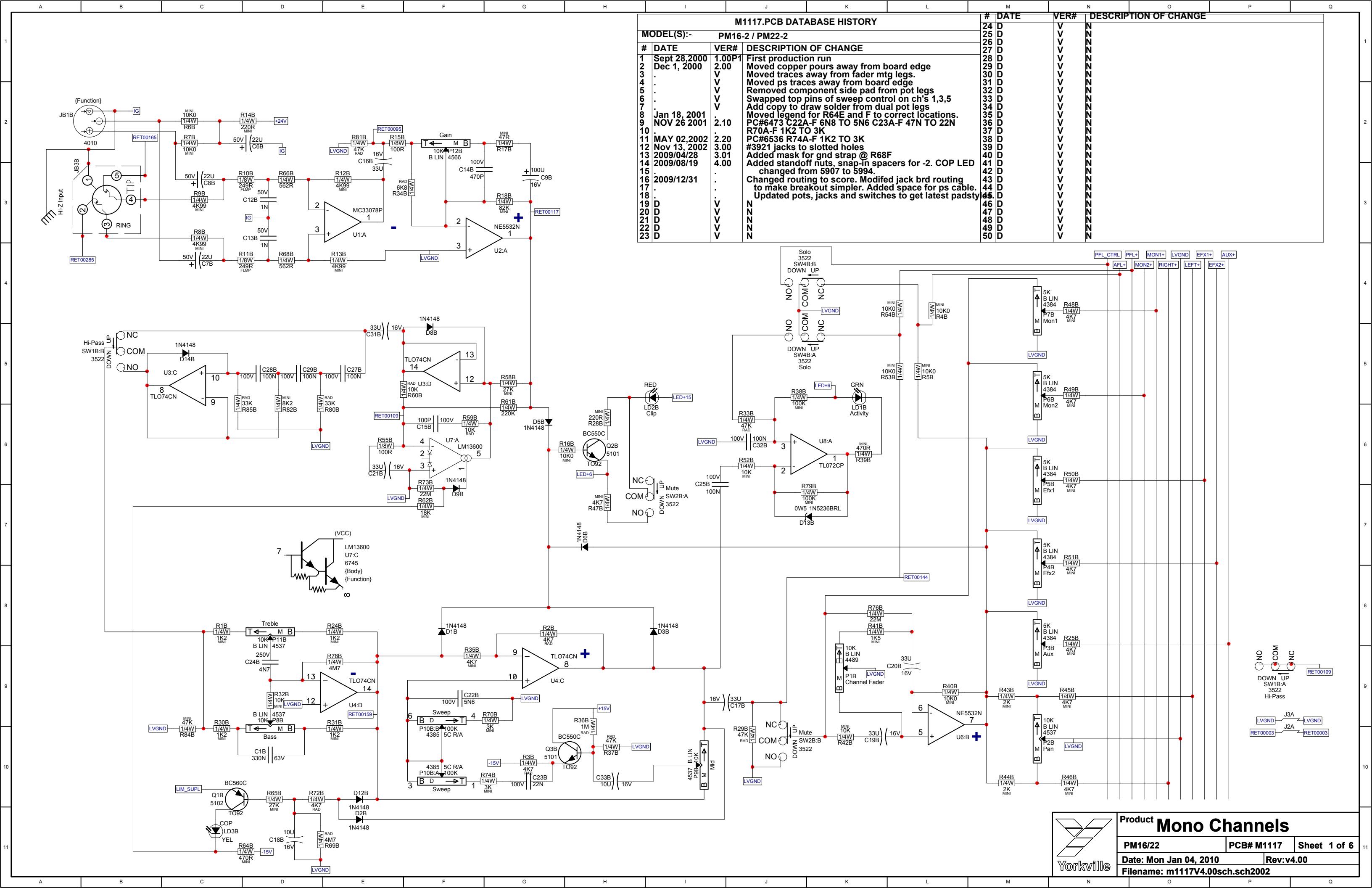
U.S.A.

Yorkville Sound Inc.
4625 Witmer Industrial Estate
Niagara Falls, New York
14305 USA

Voice: (716) 297-2920
Fax: (716) 297-3689



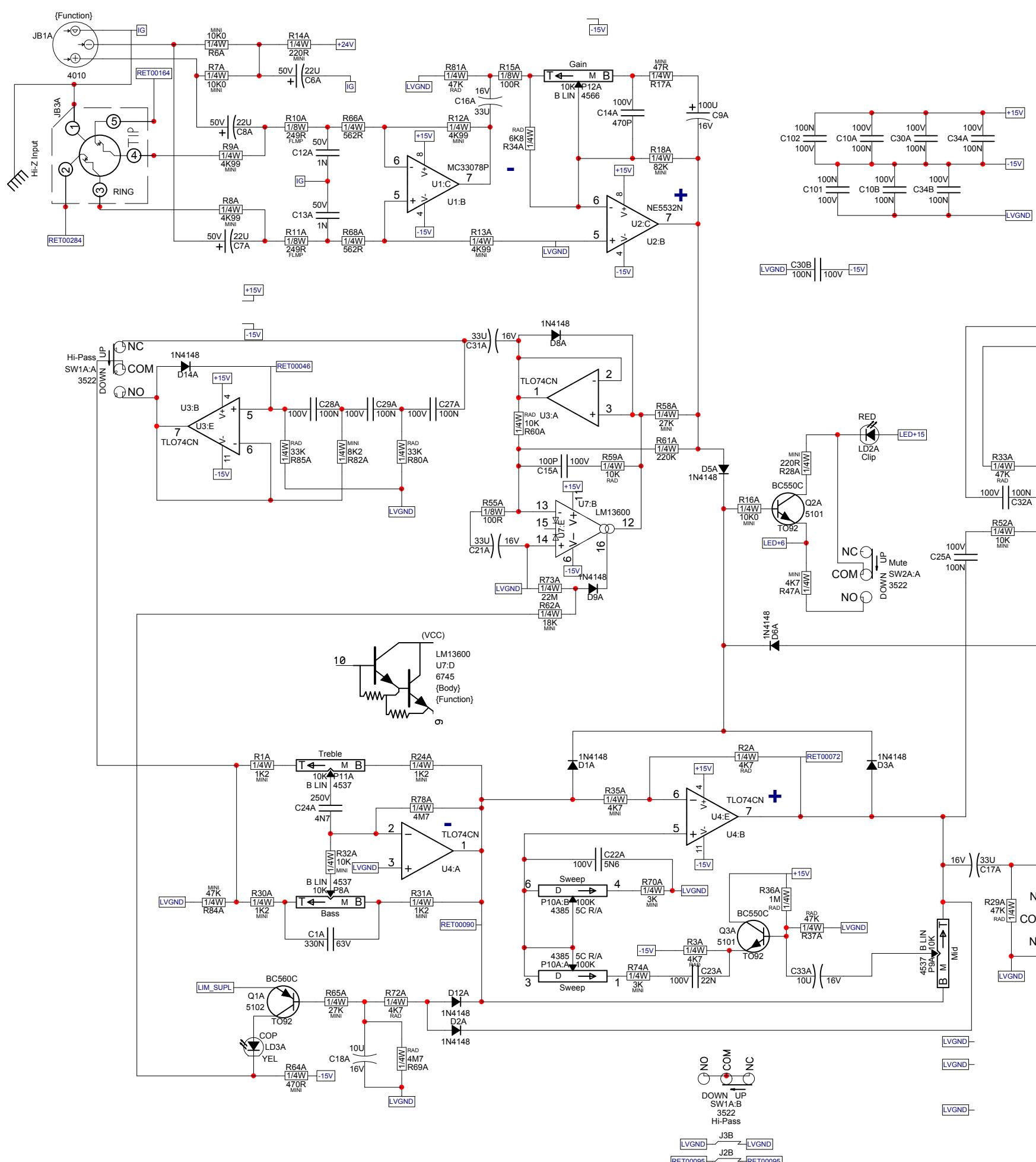
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Printed in Canada



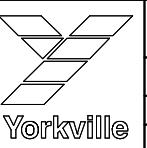
M1117.PCB_POT_LIST

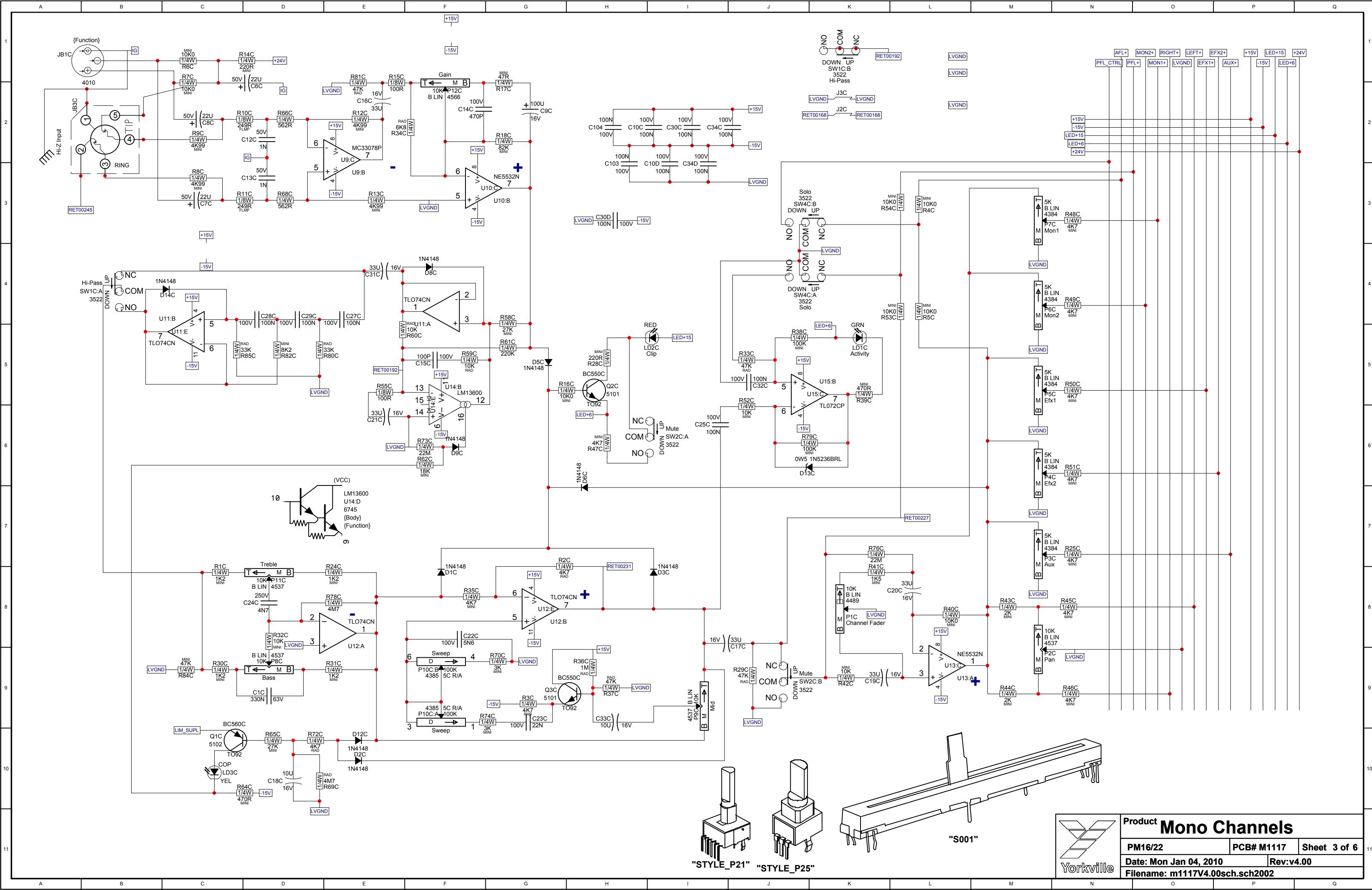
MODEL(S):- PM16-2 / PM22-2

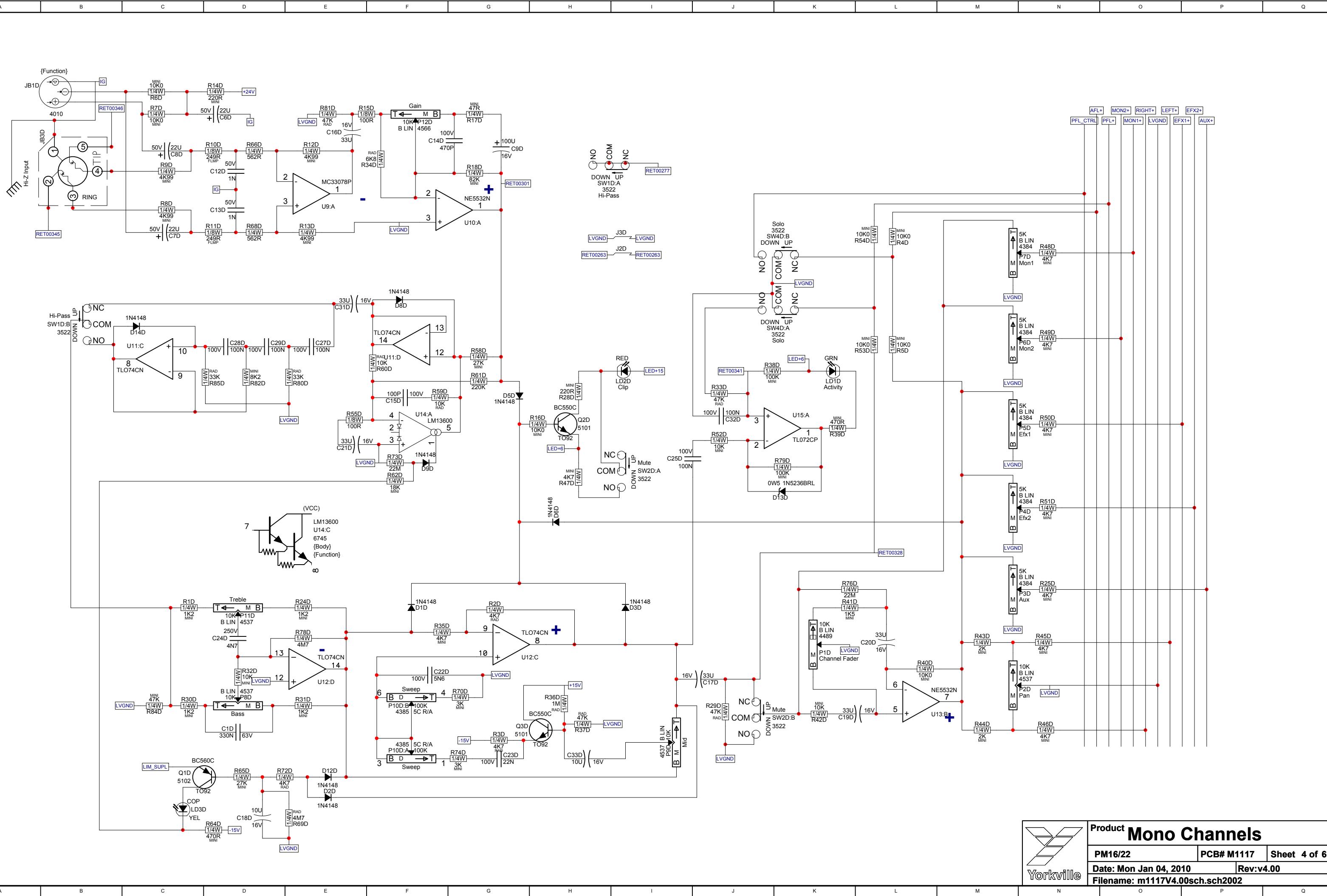
REF	FUNCTION	PART# KNOB	As Of
P12A-F	GAIN	#4566	#9920
P11A-F	HIGH	#4537	#9916
P9A-F	MID	#4537	#9916
P10A-F	SWEET	#4385	#9915
P8A-F	LOW	#4537	#9916
P7A-F	MON1	#4384	#9917
P6A-F	MON2	#4384	#9917
P3A-F	AUX	#4384	#9918
P5A-F	EFX1	#4384	#9918
P4A-F	EFX2	#4384	#9918
P2A-F	PAN	#4537	#9919
P1A-F	VOLUME	#4489	#8680



ONE/6CHANNELS





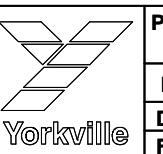


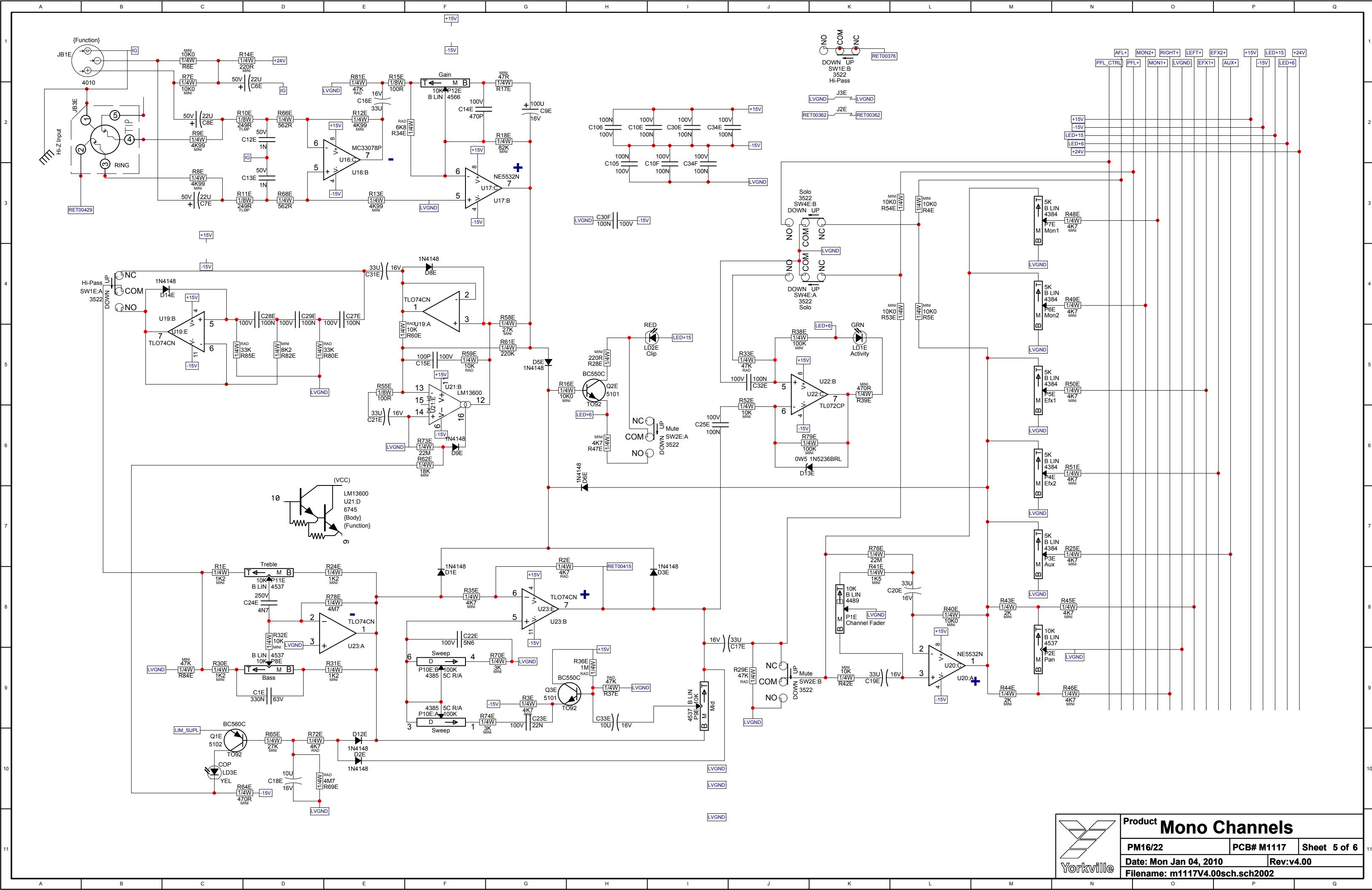
Product Mono Channels

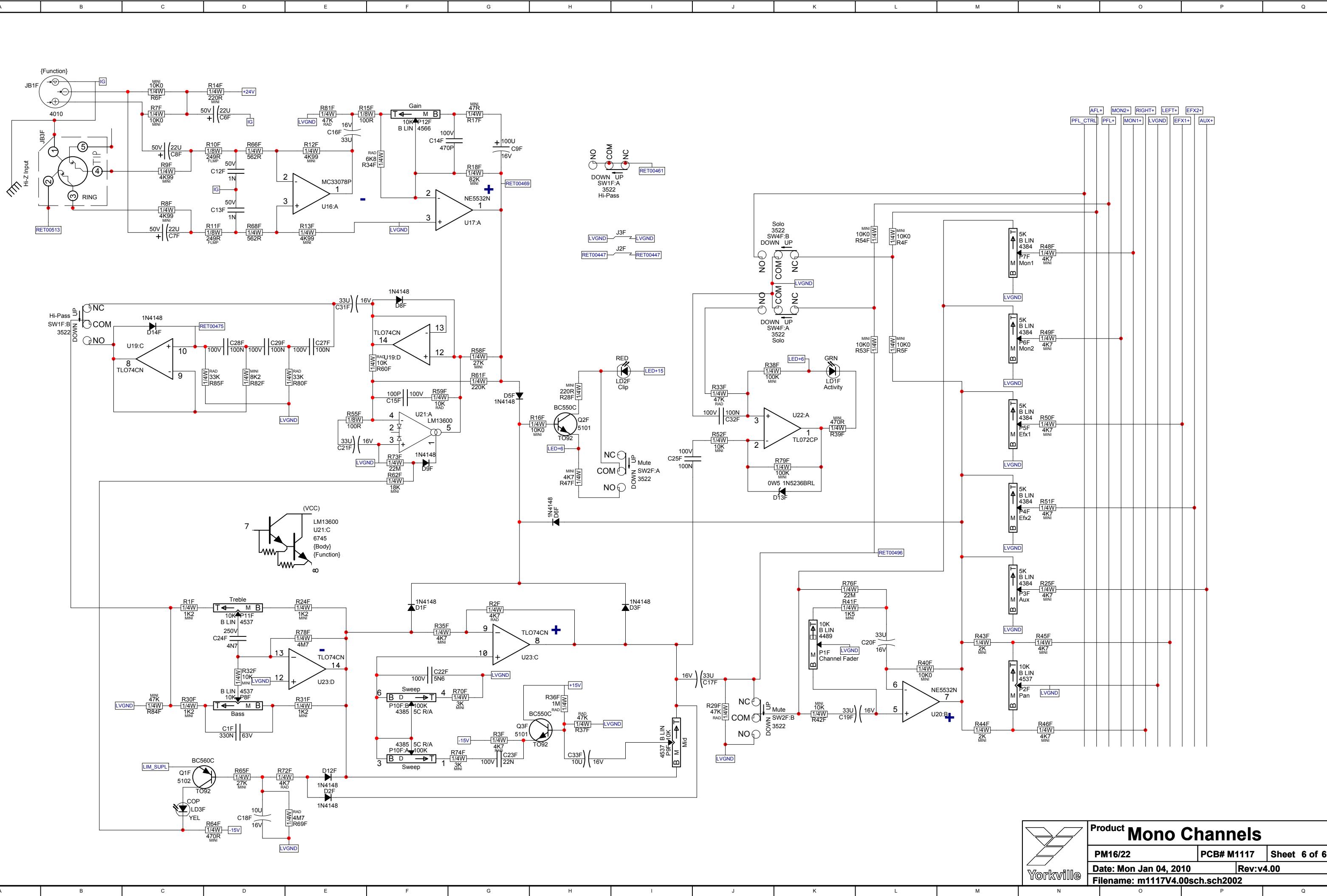
PM16/22 PCB# M1117 Sheet 4 of 6

Date: Mon Jan 04, 2010 Rev:v.4.00

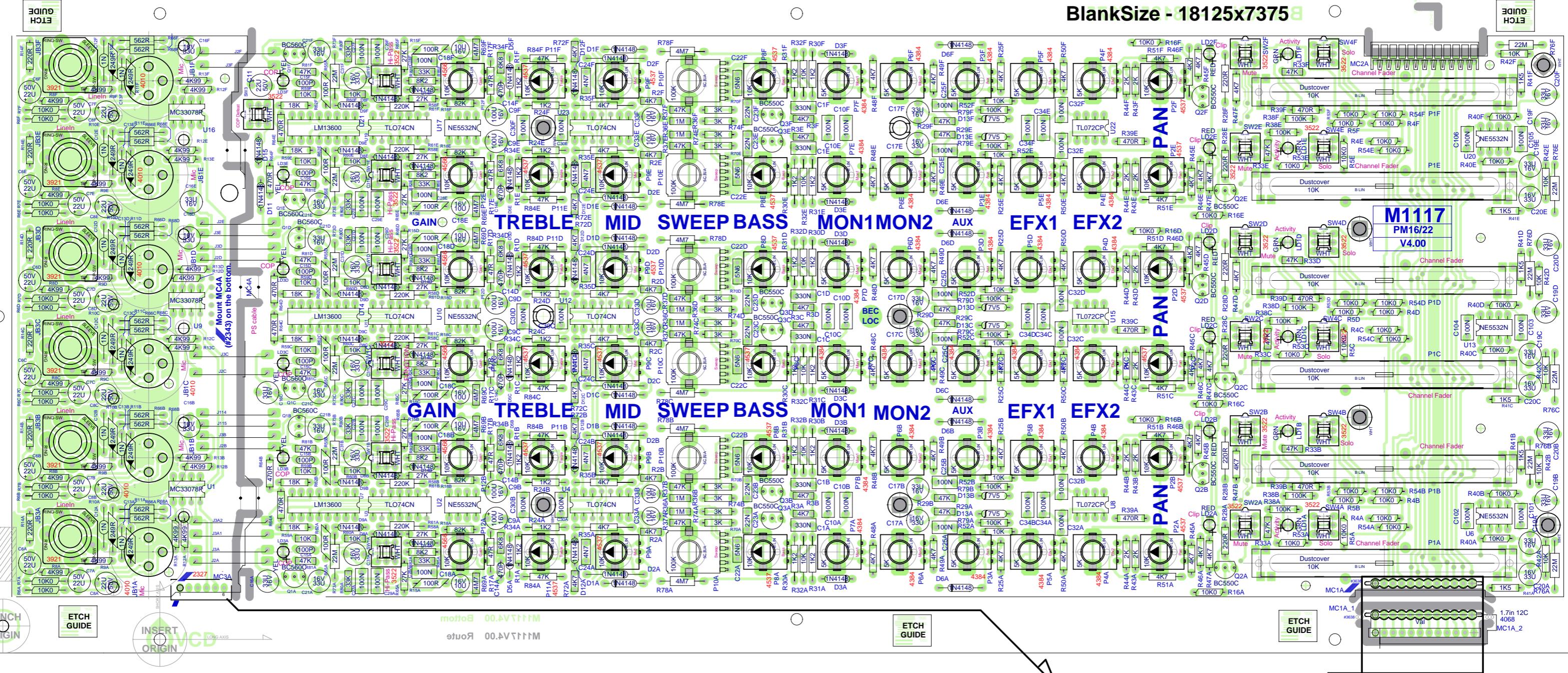
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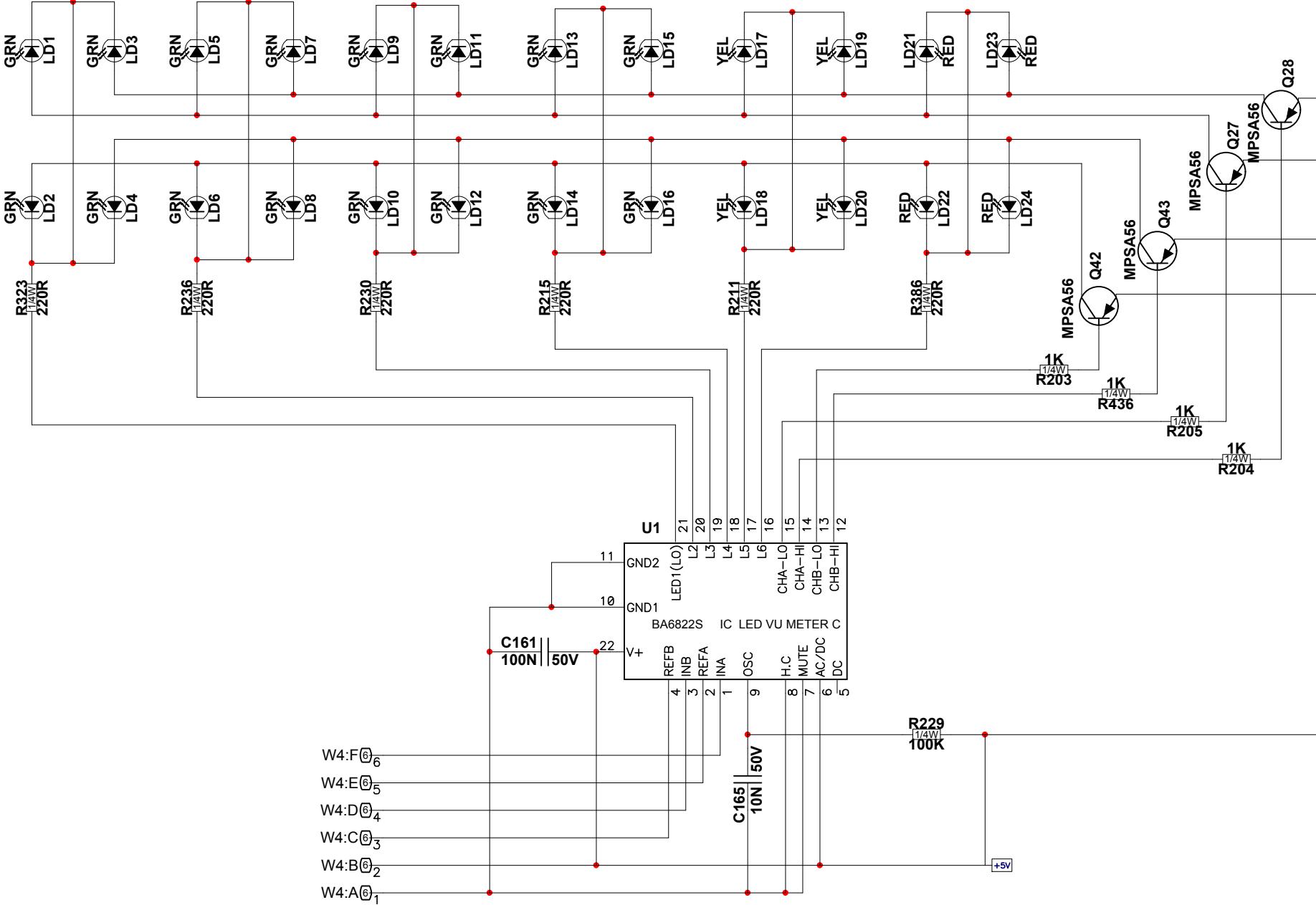


BlankSize -18125x7375



SEE LAYOUT DOCUMENTATION

THESE MOLEX PARTS STUFFED FOR M1117B ONLY

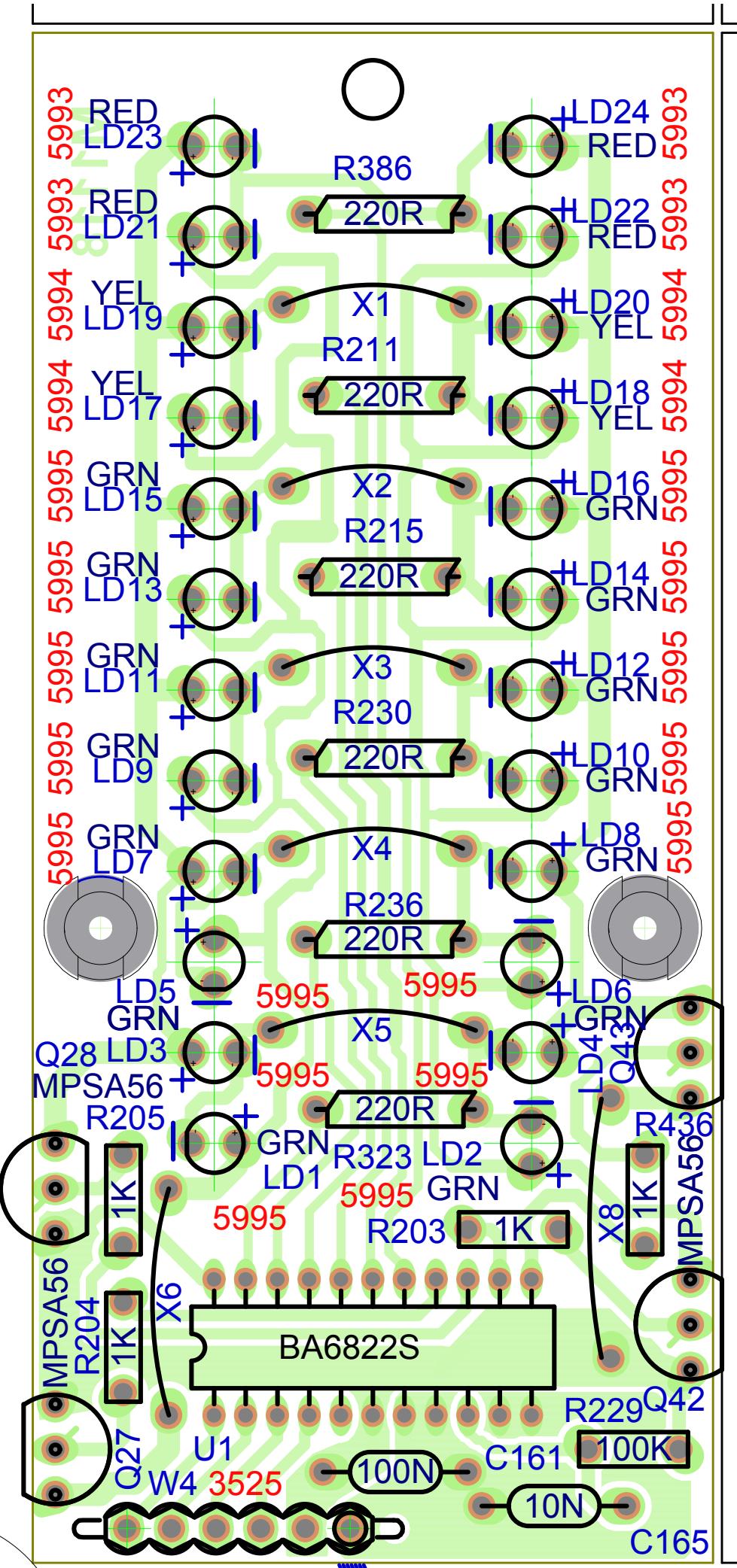


Product M1118

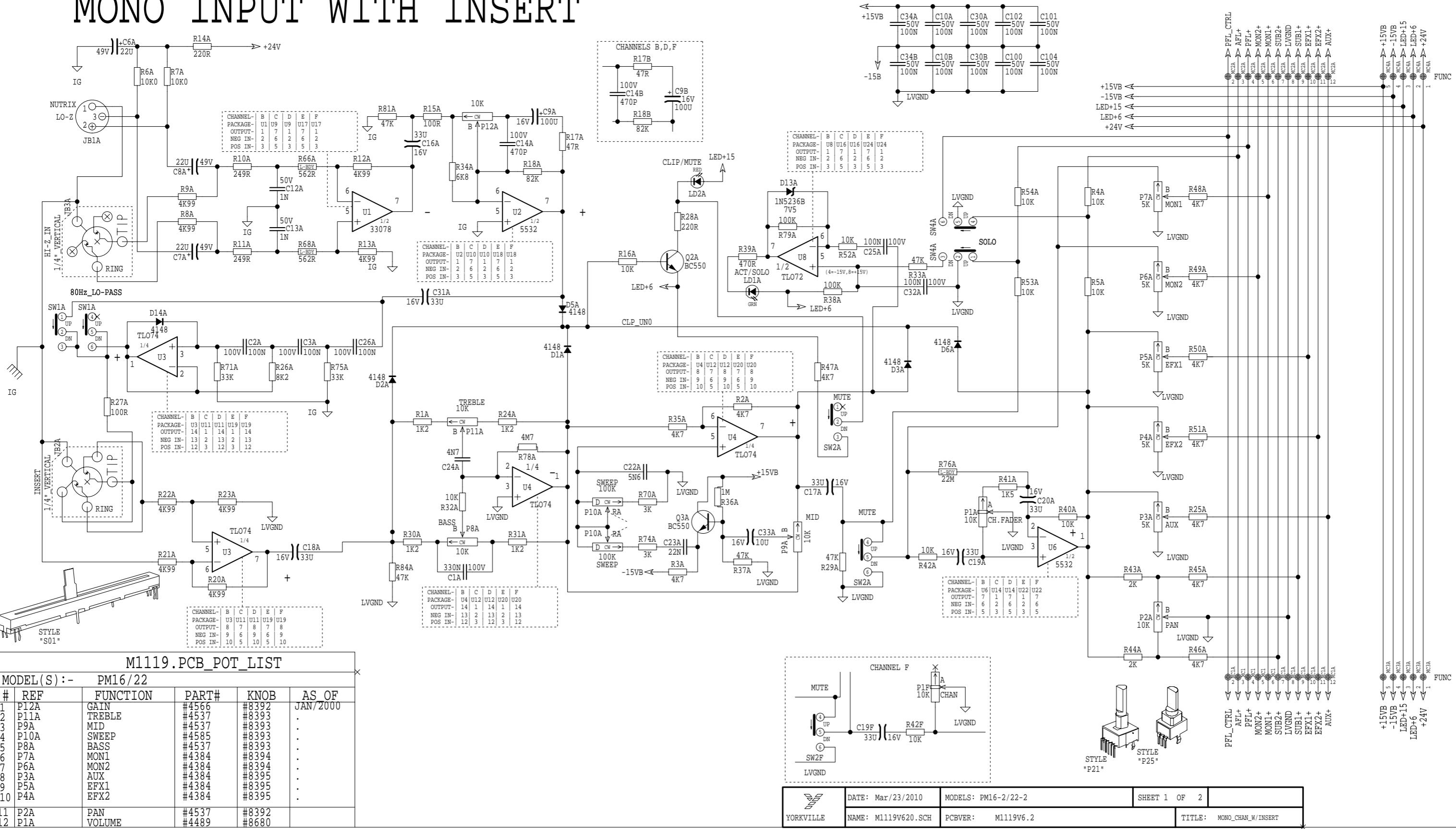
PM16 PM22 PCB# M1118 Sheet 1 of 1

Date: Mon May 25, 2009 Rev:v2.00p0

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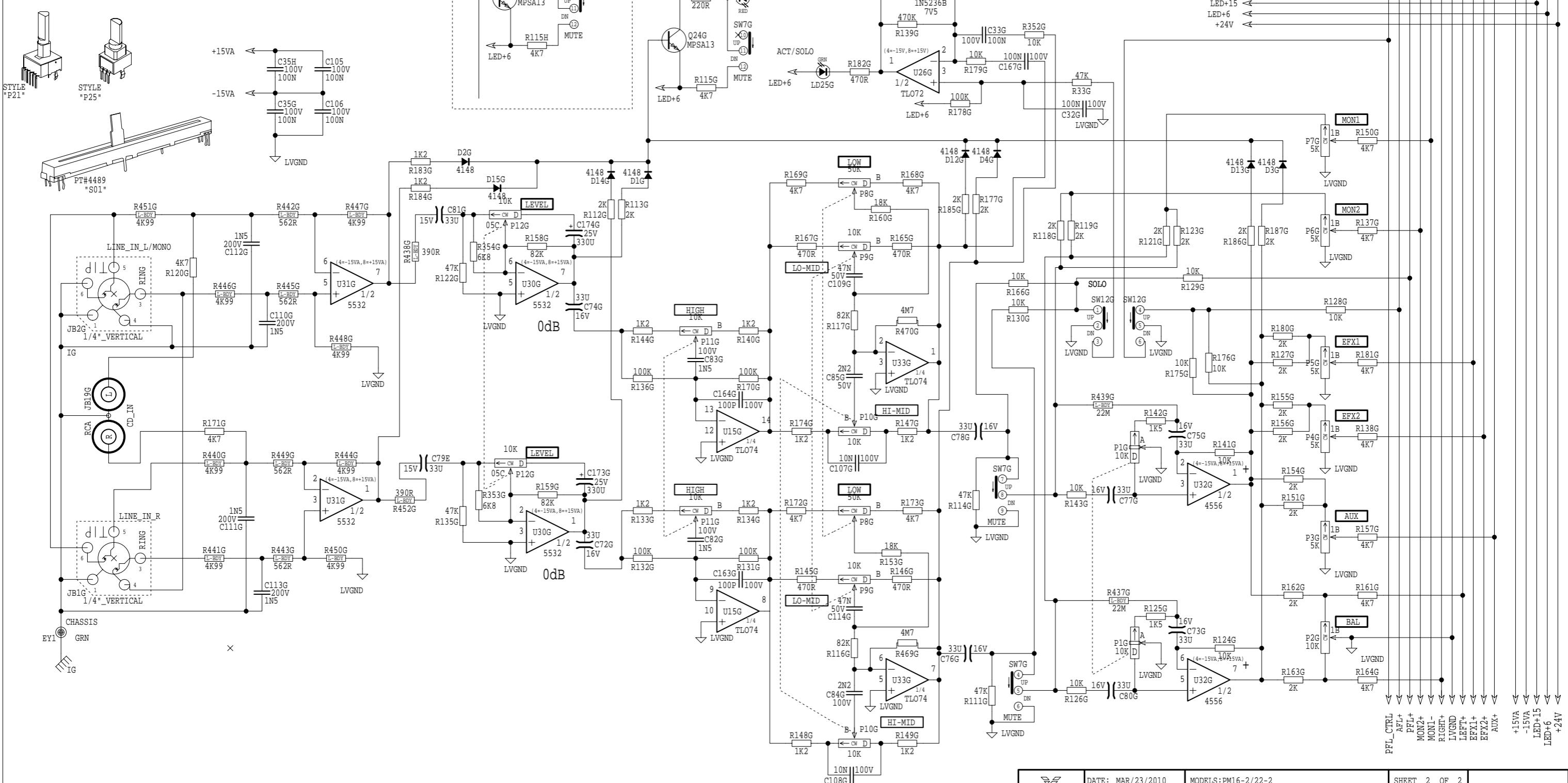


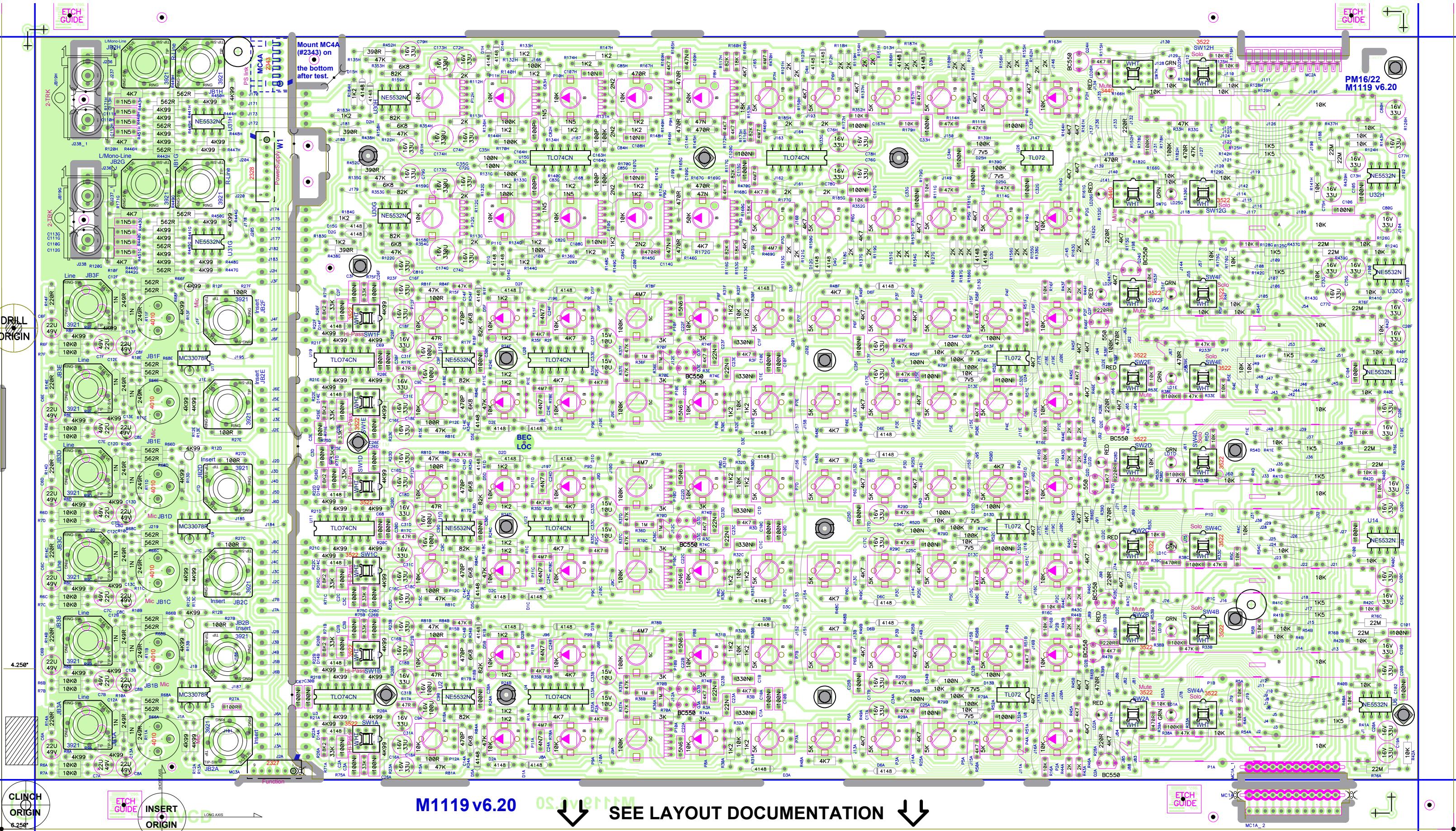
MONO INPUT WITH INSERT



#	REF	FUNCTION	PART#	KNOB	AS OF
1	P12G	GAIN	P21	#4569	#8392
2	P11G	HIGH	P21	#4562	#8393
3	P9G	HI-MID	P21	#4562	#8393
4	P10G	LO-MID	P21	#4562	#8393
5	P8G	LOW	P21	#4545	#8393
6	P7G	MON1	P25	#4384	#8394
7	P6G	MON2	P25	#4384	#8394
8	P3G	AUX	P25	#4384	#8395
9	P5G	EFX1	P25	#4384	#8395
10	P4G	EFX2	P25	#4384	#8395
11	P2G	BALANCE	P25	#4537	#8392
12	P1G	VOLUME	S01	#4489	#8680

STEREO INPUTS





M1119 v6.20

SEE LAYOUT DOCUMENTATION

SEE LAYOUT DIAGRAM

M1119_PCB_DATABASE_HISTORY			
MODEL(S):-		PM16/22	
#	DATE	VER#	DESCRIPTION OF CHANGE
1	06/APR/98	1.0P0	FIRST PROTOTYPE
2	27/MAY/98	1.0P1	MOVED XLR'S .025" AWAY FROM 1/4"
3	1/JUN/98	.	SECOND PROTOTYPE
4	18/NOV/98	1.10	CHG C33A-F FROM 220N TO 33U/16V
5	04/DEC/98	1.20	ENLARGED SOME PADS,FILL_IN_BETWEEN PADS THAT ARE CLOSE
6	.	.	MOVED R78F AWAY FROM POT (J200 MOVED ALSO)
7	17/DEC/98	.	
8	.	.	
9	10/FEB/99	2.00	ROTATE LEDS FOR AUTO INSERT
10	.	.	MOVED PARTS TO ELIMINATE SHORTS
11	11/FEB/99	.	ADDED C67,8,9 FOR RF SUPPRESSION
12	2/MAR/99	2.01	FIXED SHORT@LD26H
13	APR/15/99	2.10	PC#5989 R122G,H,R135G,H_4K7->47K_ ALL A,B,C,D,E,F
14	.	.	R71,R75 18K->33K R81,R84 4K7->47K
15	.	.	R26 4K7->8K2 R37 10K->47K
16	.	.	C2,C3,C26 180N->100N
17	.	.	
18	MAY/18/00	.	PC#6244 RCA-JK HOLE SIZE .070"->.059"
19	NOV/26/01	2.20	PC#6473_C22A-F_6N8->5N6_R70A-F_1K2 ->3K
20	.	.	
21	APR/24/02	3.00	UPDATE #3921 JACKS
22	MAY/02/02	3.10	PC#6536_R74A-F_1K2->3K
23	MAY/23/02	3.20	PC#6473_C23A-F_47N->22N

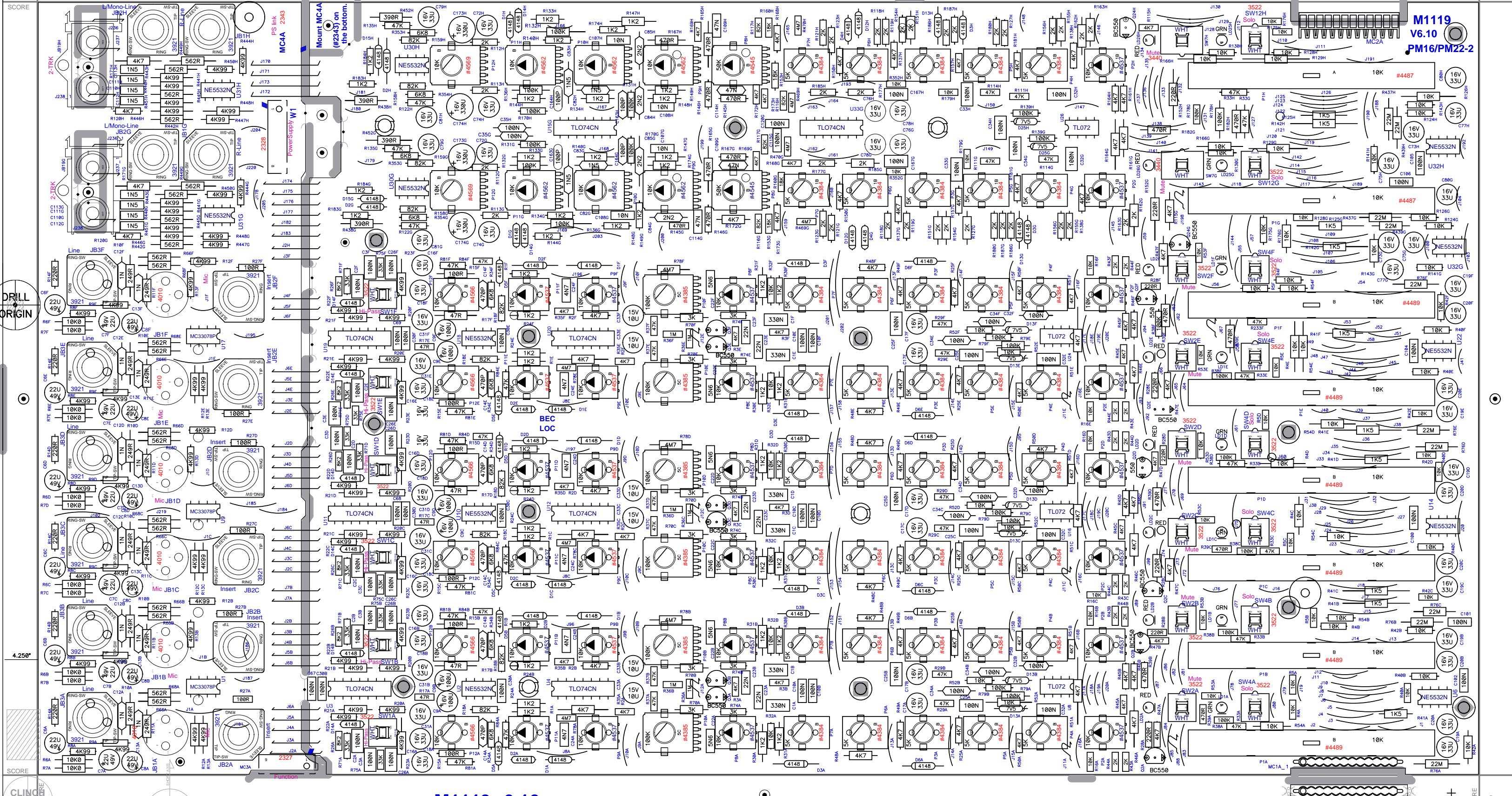


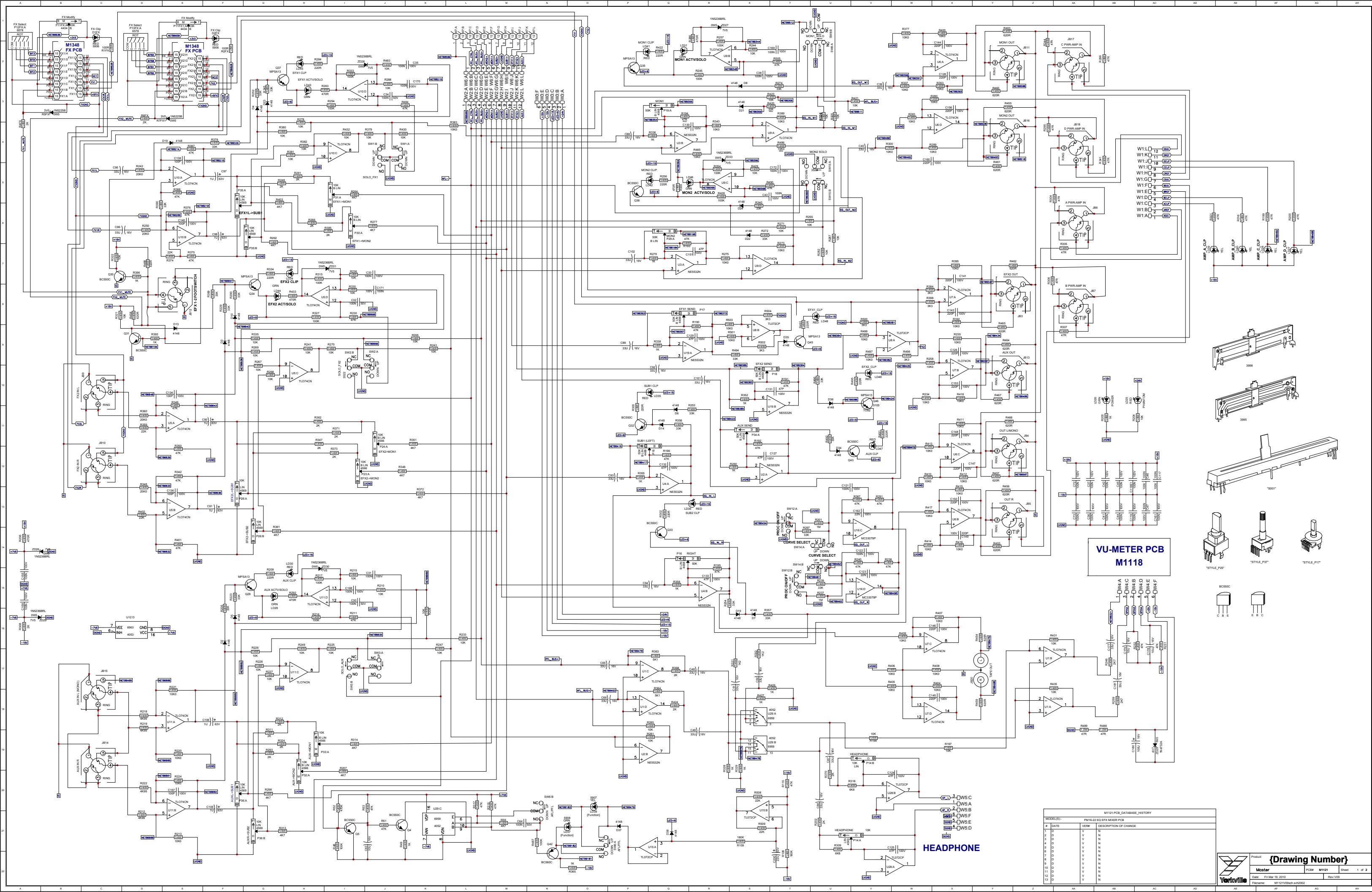
M1119 PRODUCTION NOTES

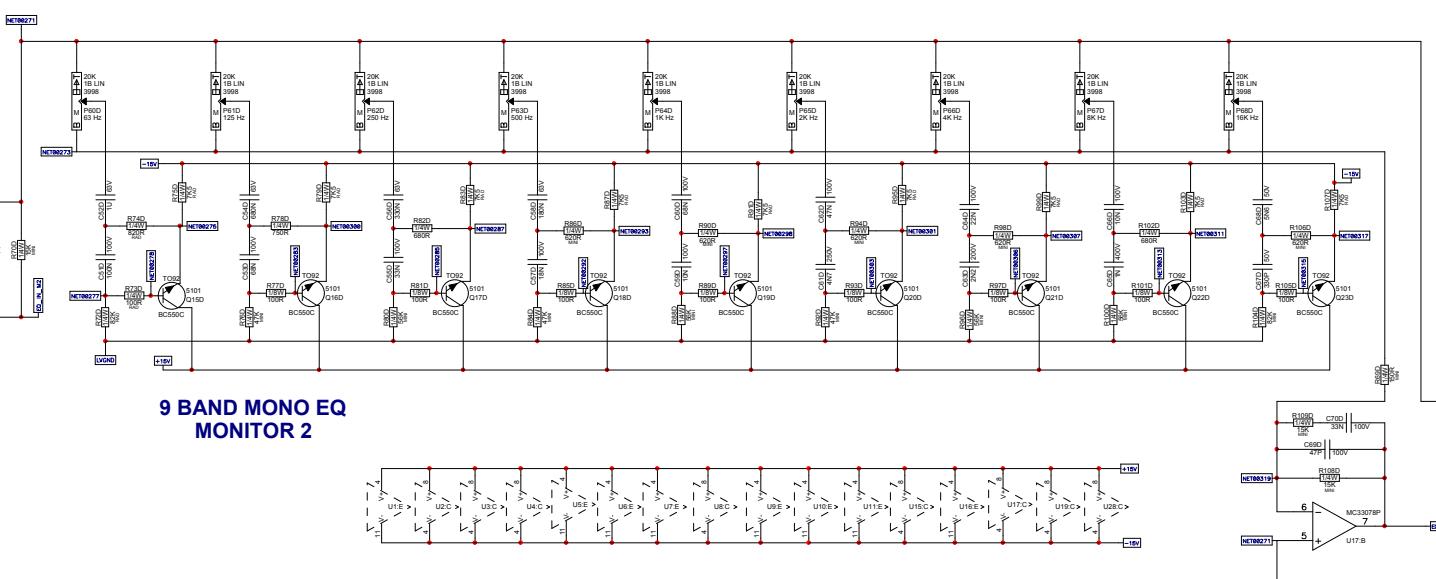
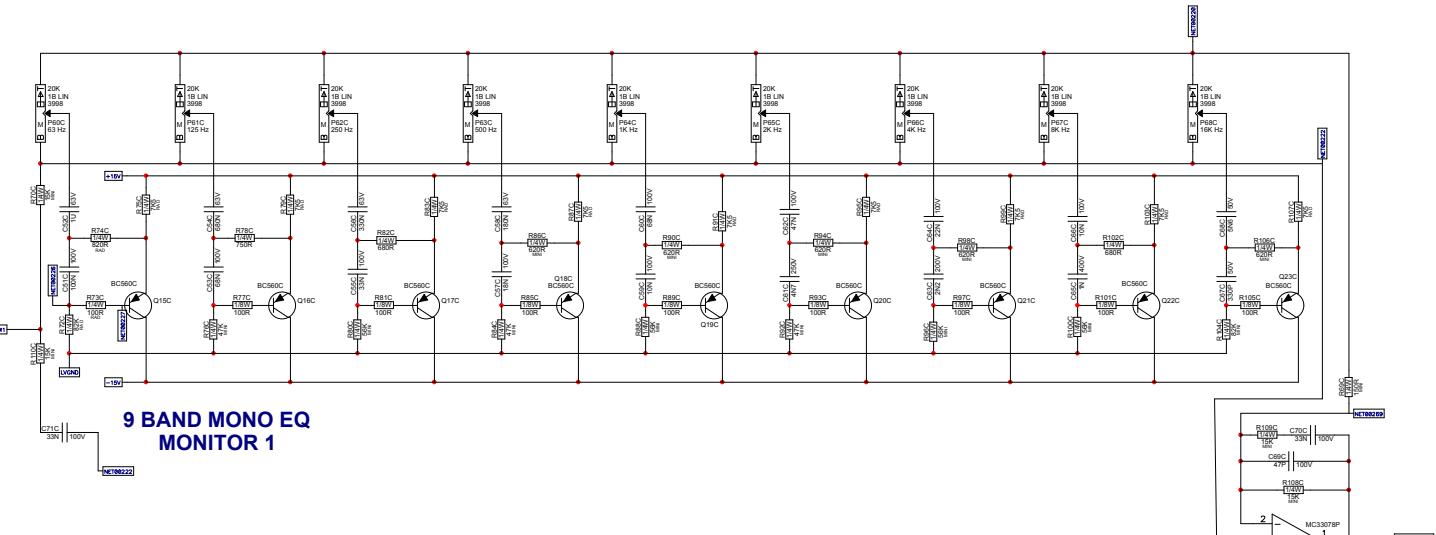
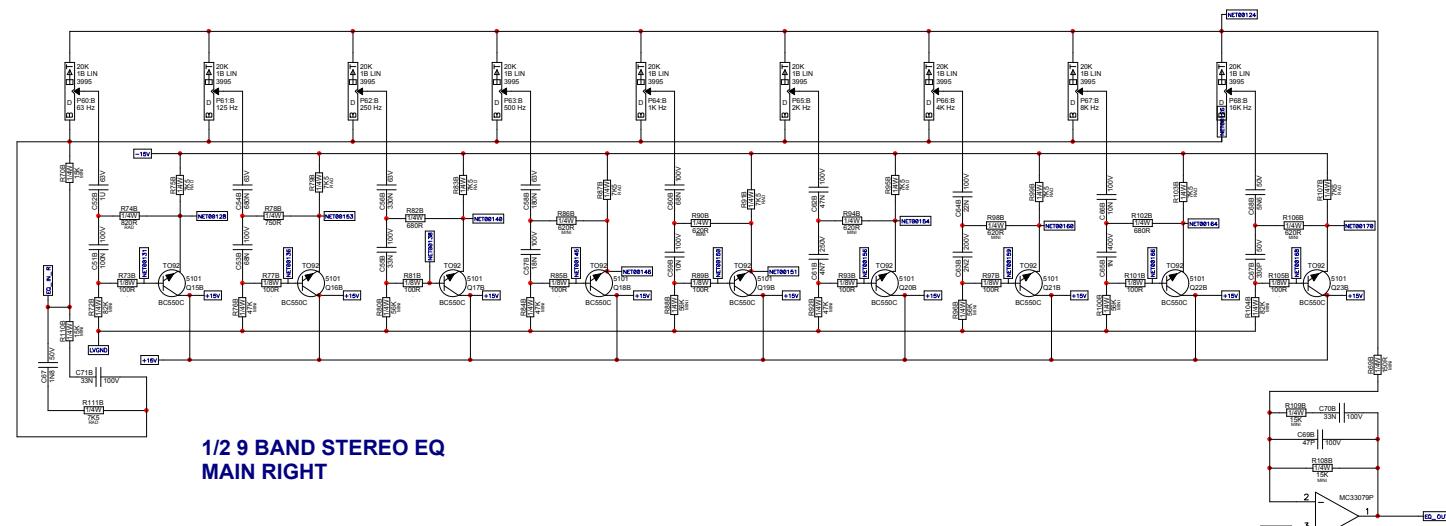
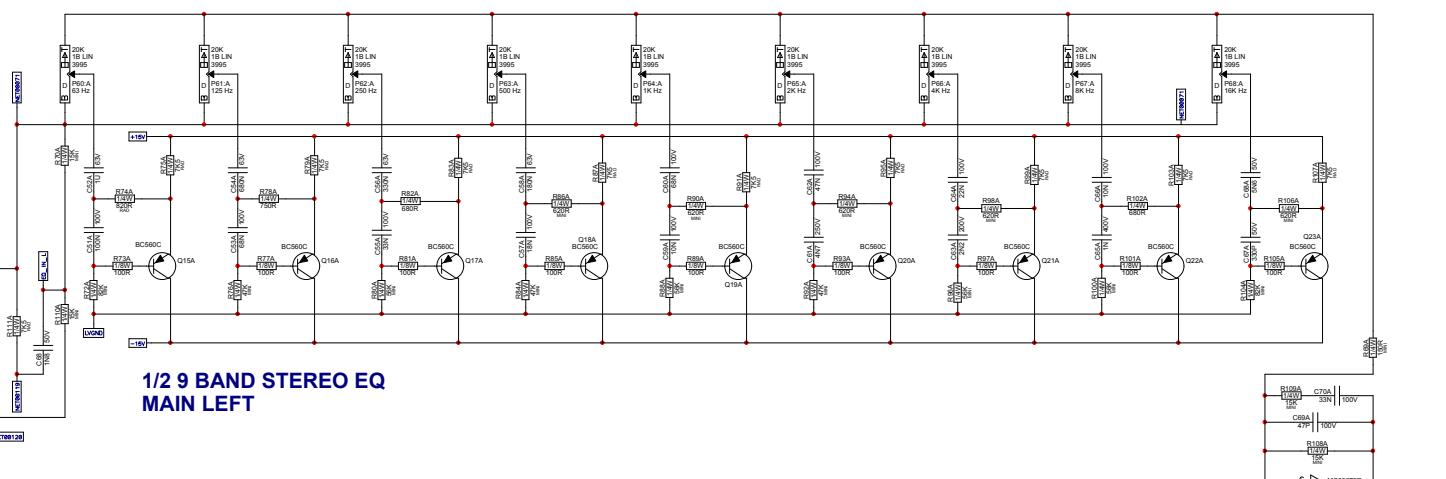
- 1) NOTE THAT THE LAST MUTE SWITCH IS
OPPOSITE TO ALL THE OTHERS.(SW7H)
- 2) MC4A is mounted on the back of the board after testing.

M1119 V6.10

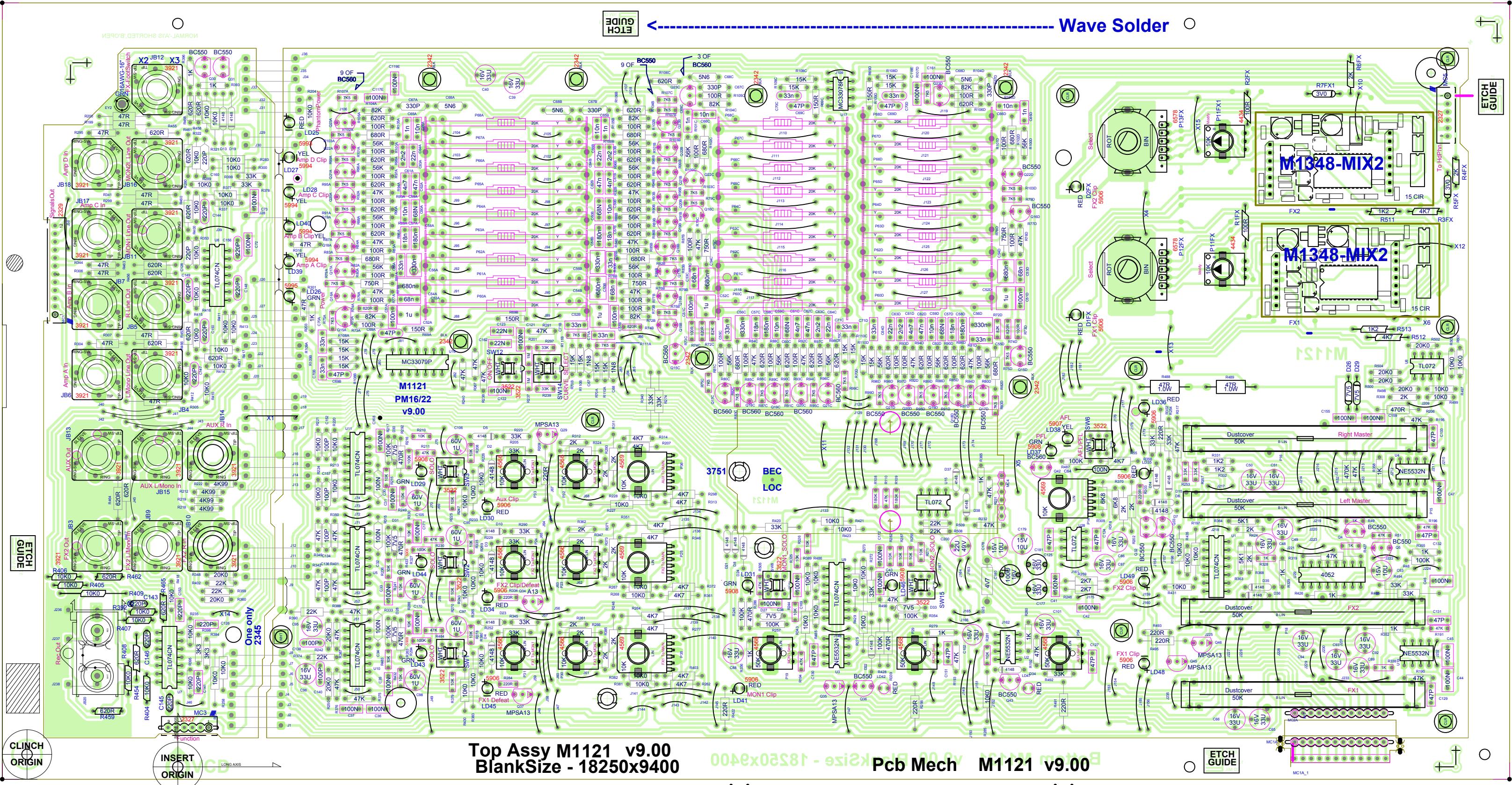
PM16/PM22-2

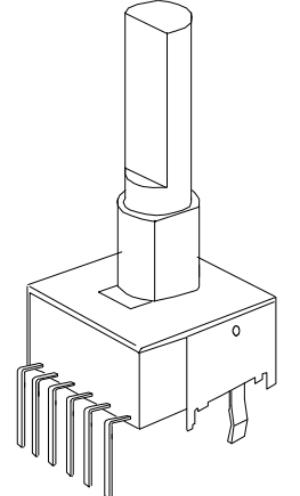




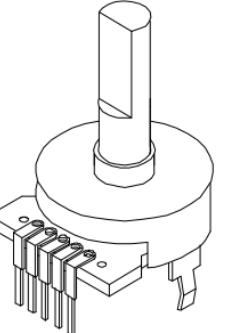


Wave Solder

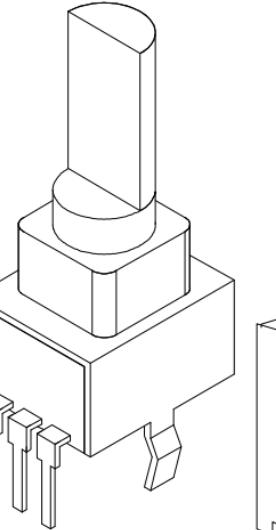




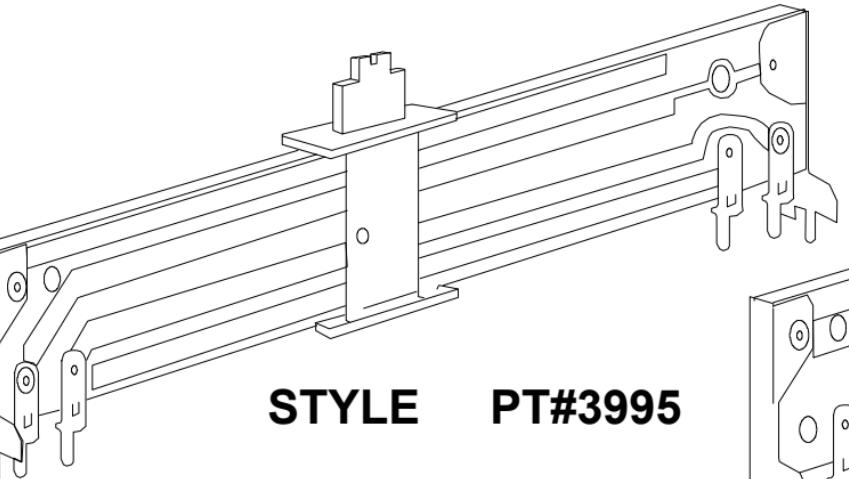
**STYLE
"P21"**



**STYLE
"P23"**



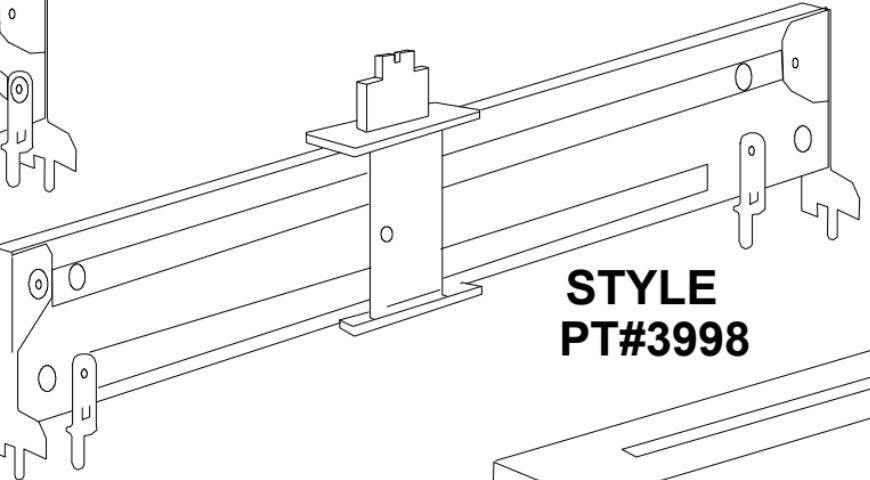
**STYLE
"P25"**



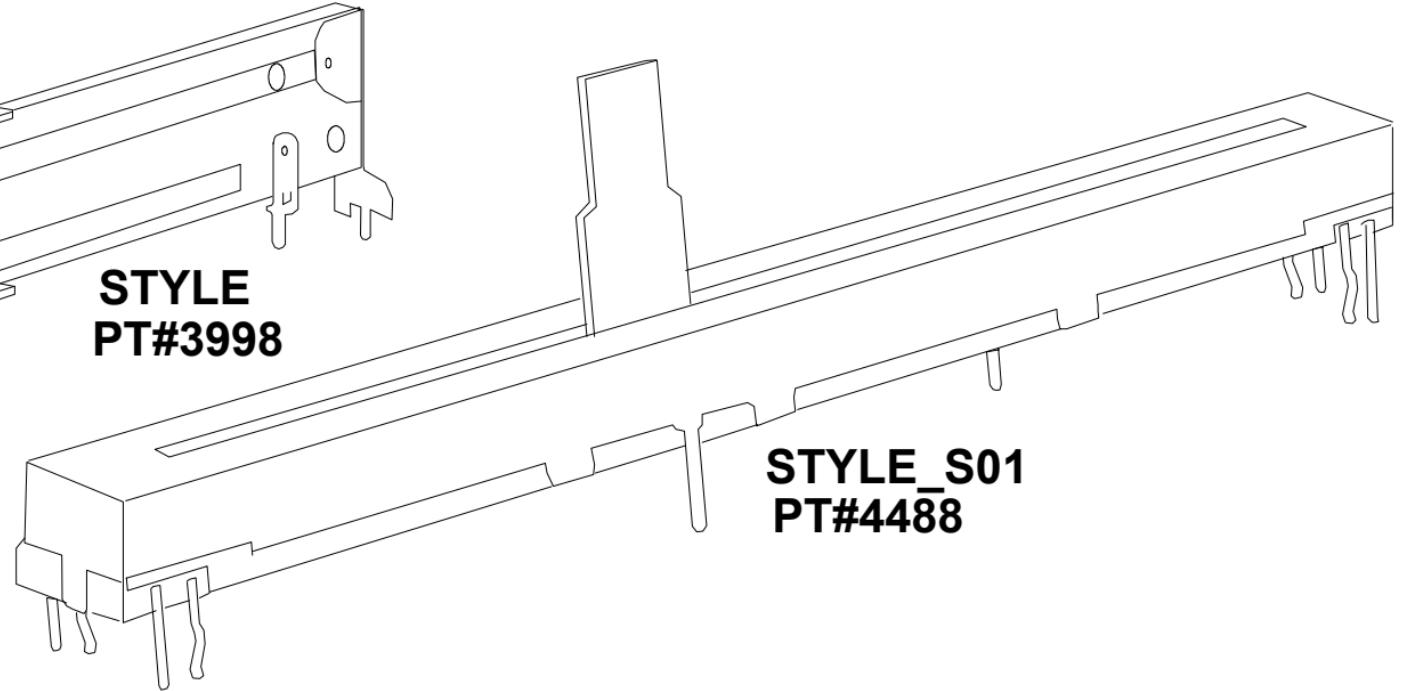
STYLE PT#3995



SEE PCB HISTORY



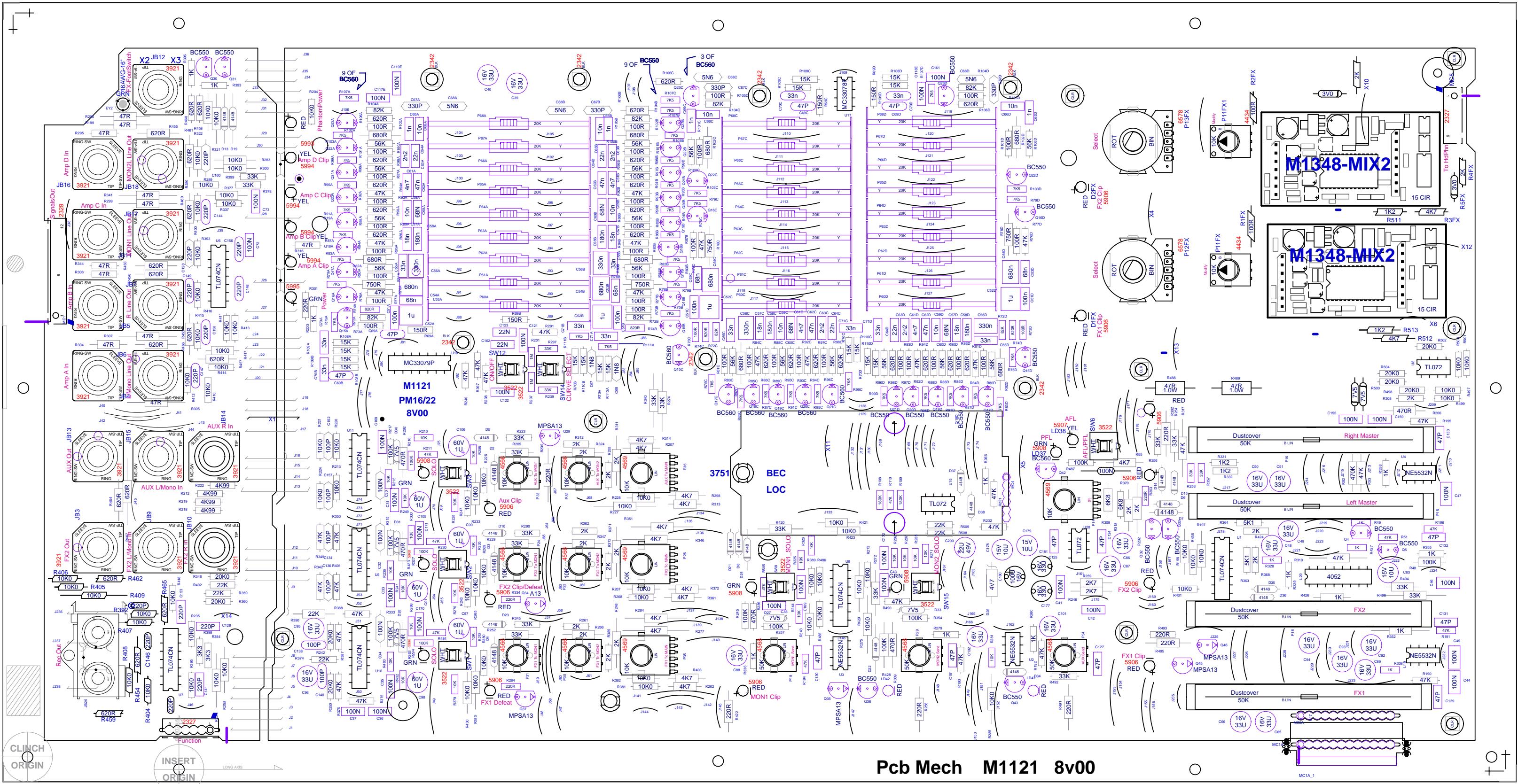
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PT#3998**

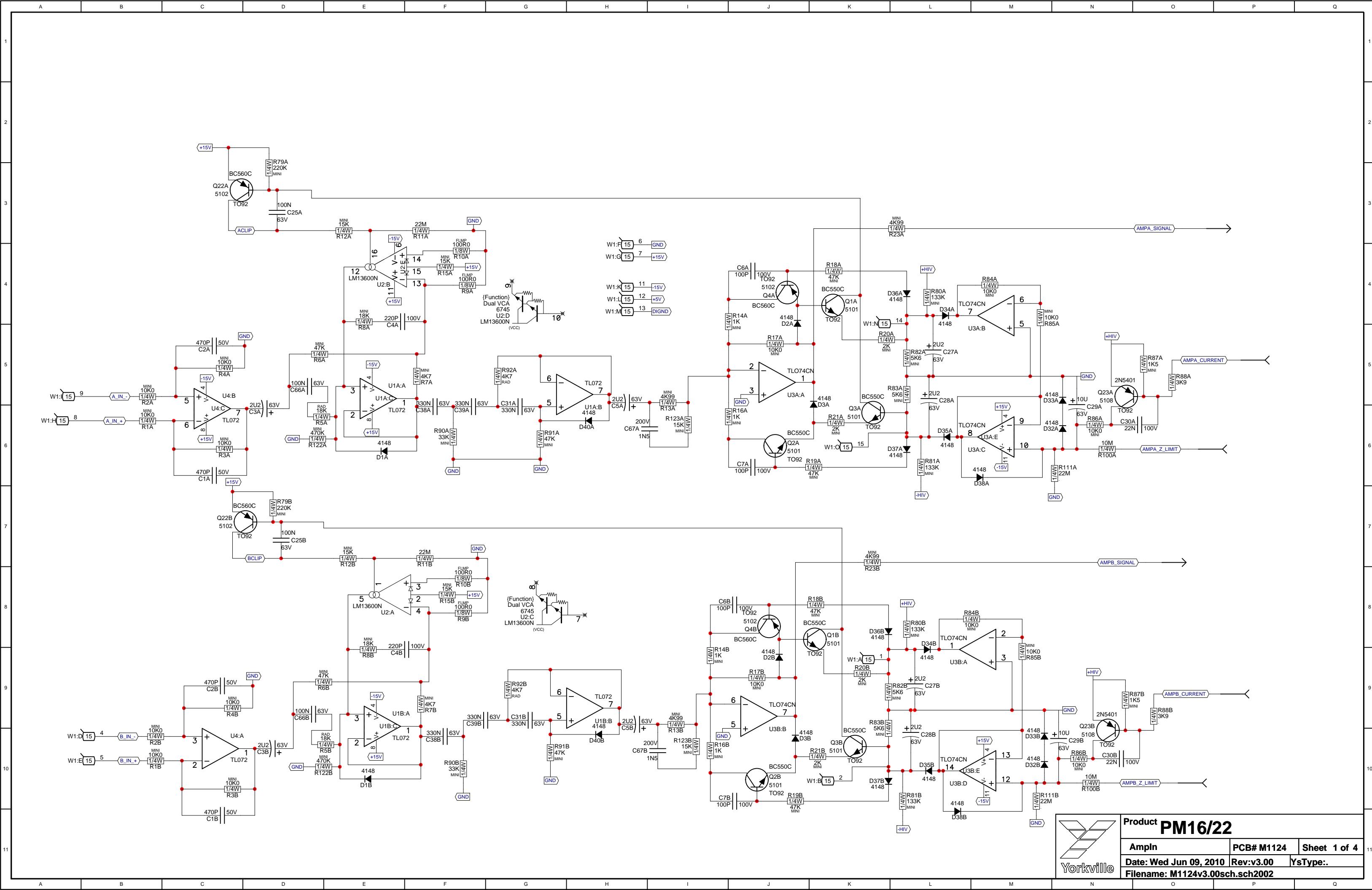


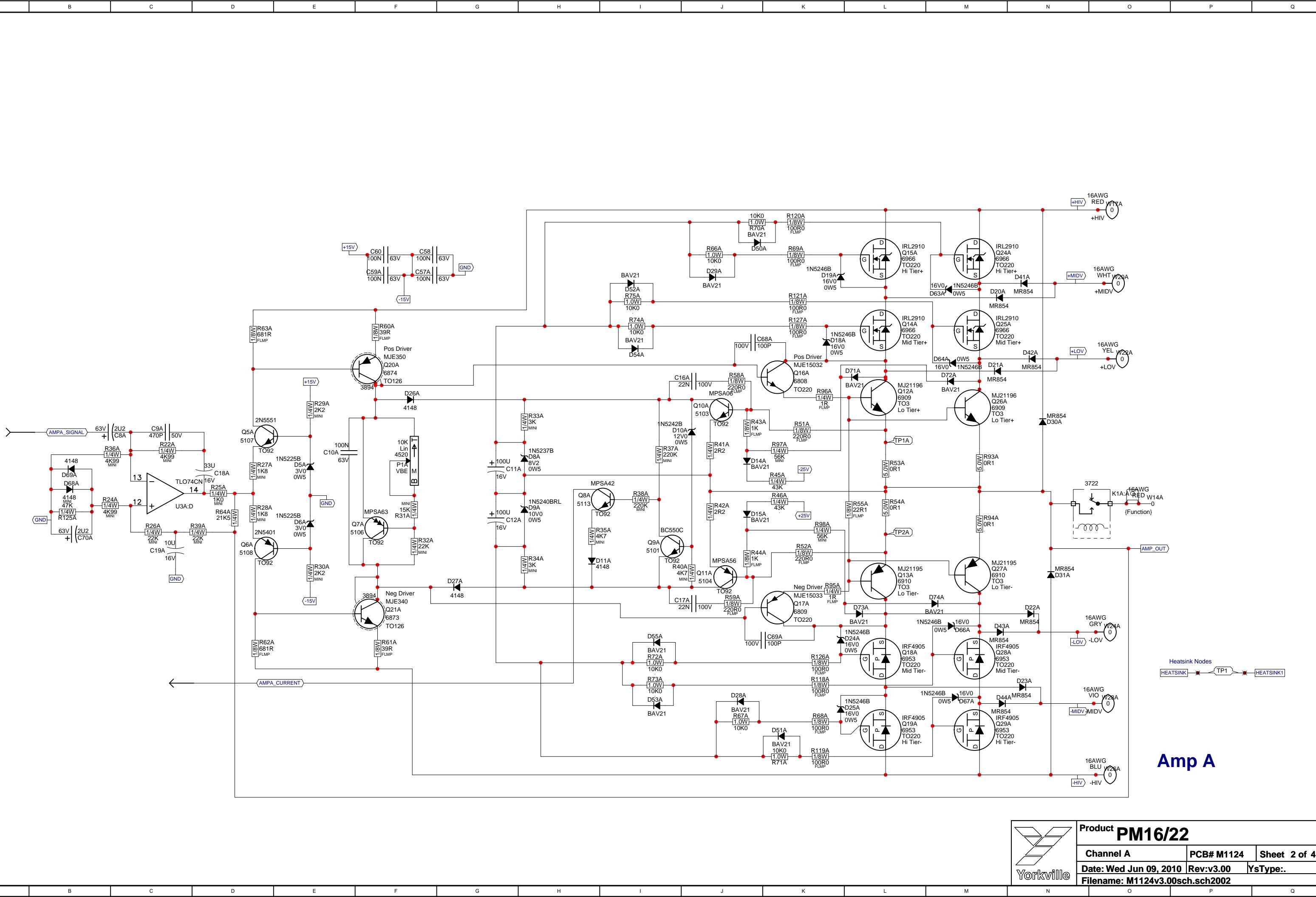
**STYLE_S01
PT#4488**

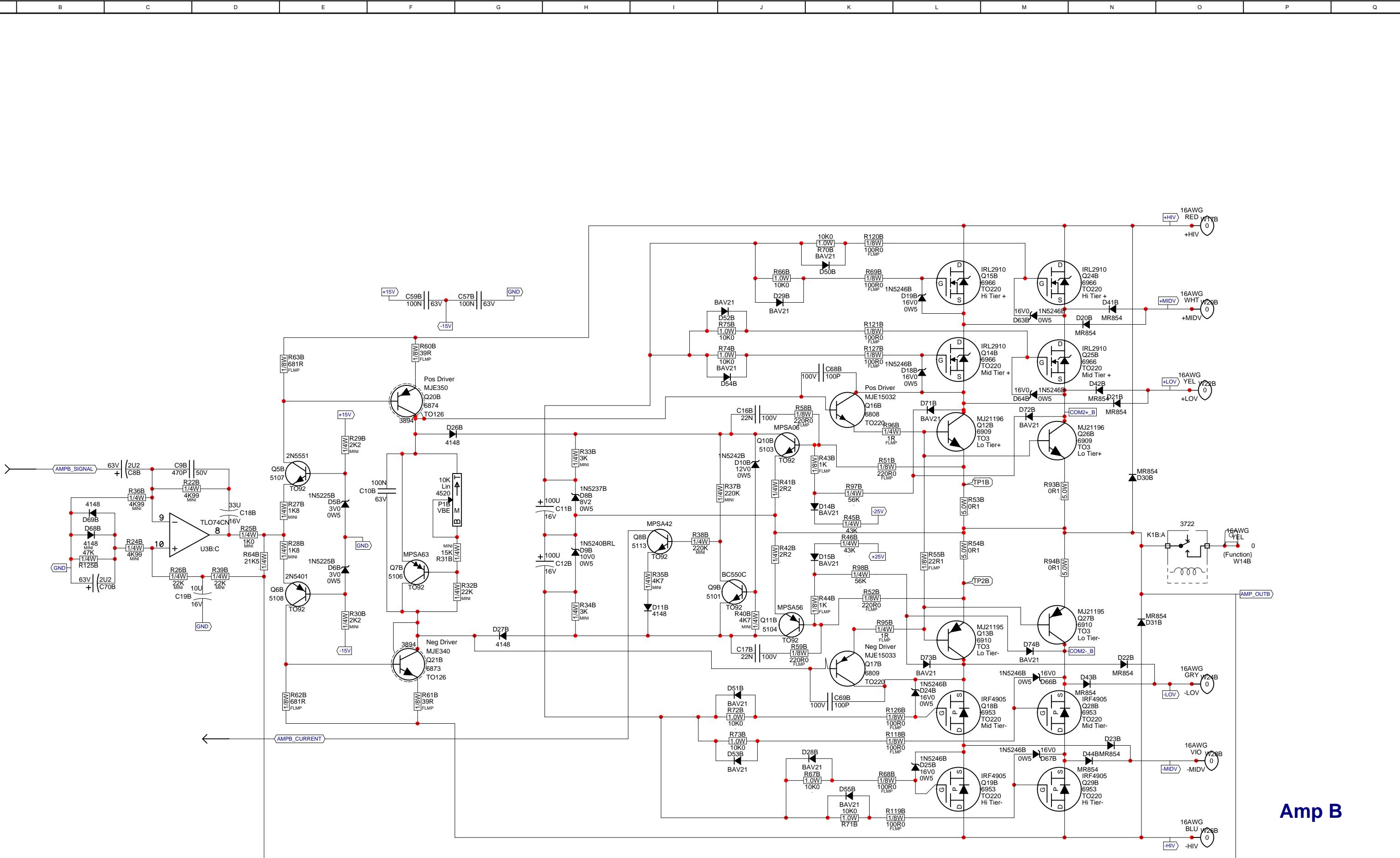


Pcb Mech M1121 8v00









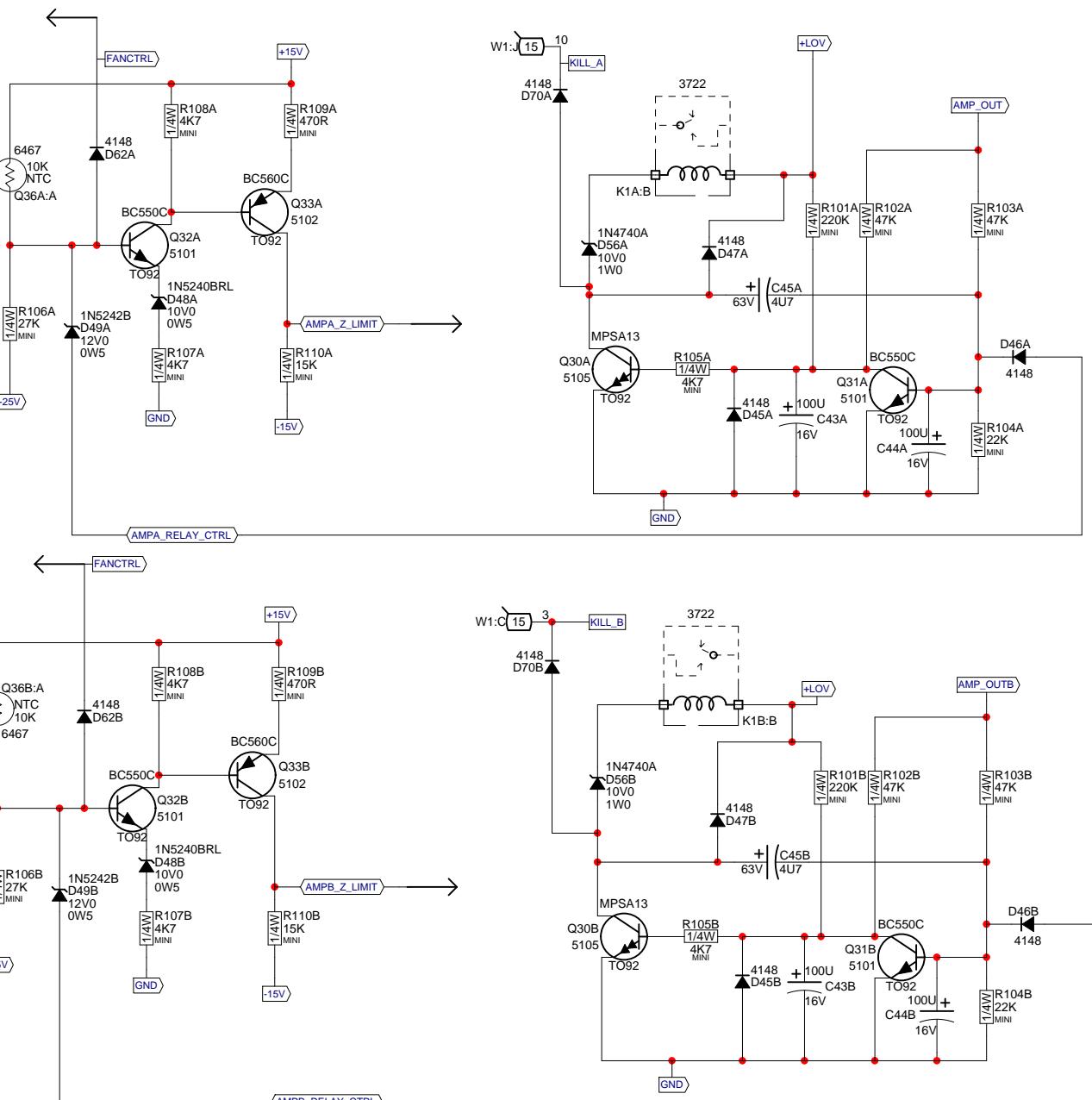
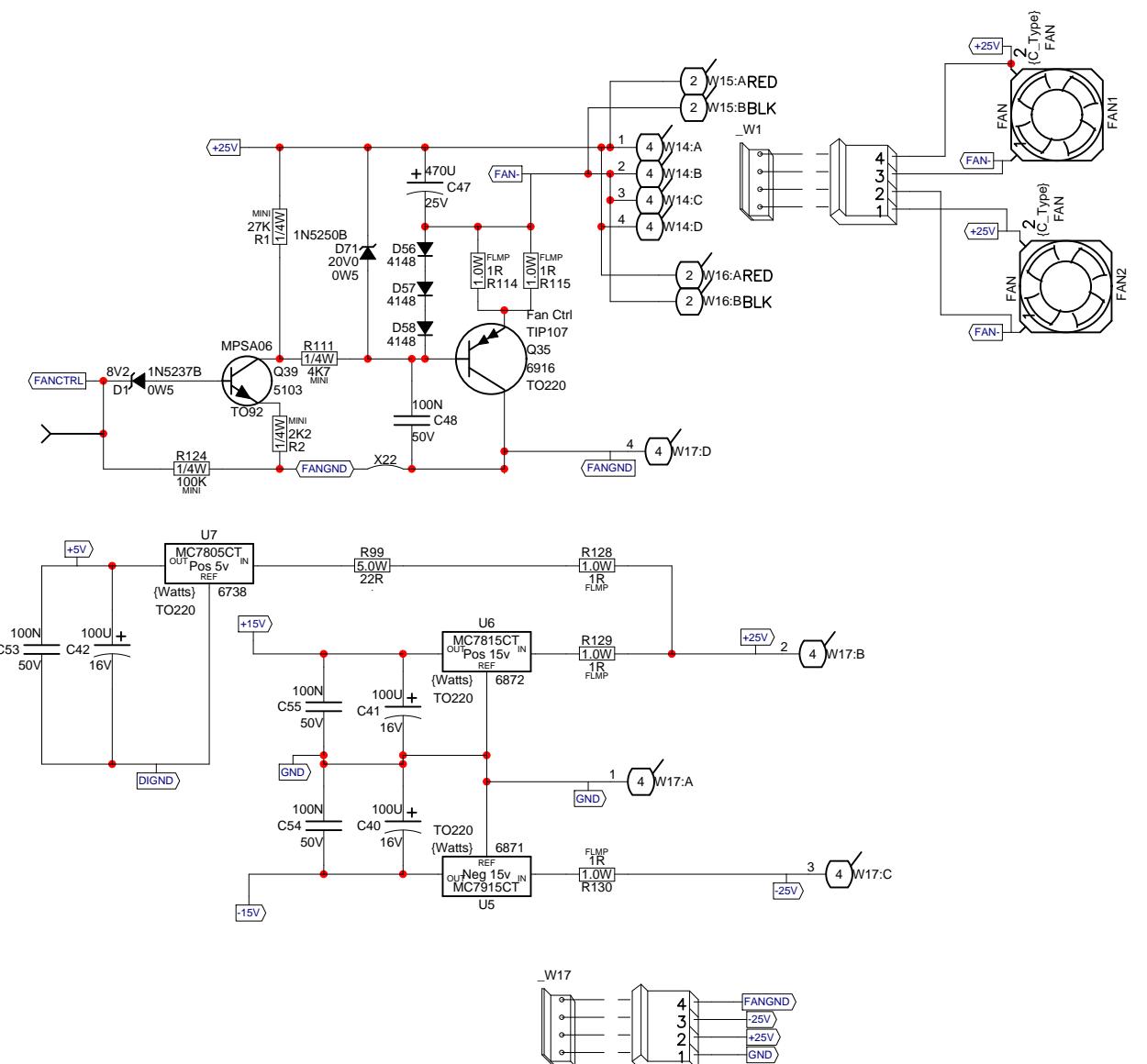
Product PM16/22

Channel B	PCB# M1124	Sheet 3 of 4
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Date: Wed Jun 09, 2010 Rev:v3.00 YsType::

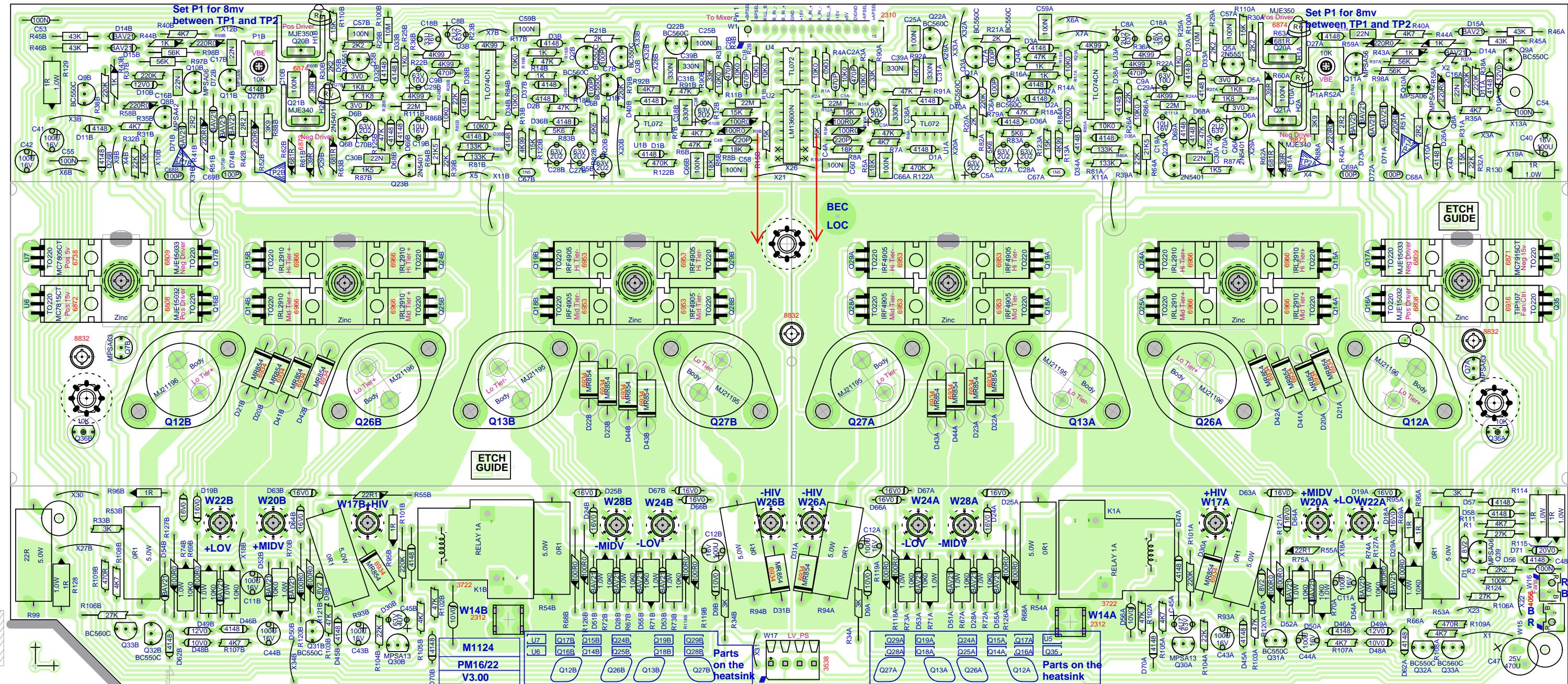
Filename: M1124v3.00sch.sch2002

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
M1124.PCB_DATABASE_HISTORY																
MODEL(S):- PM16-2/22-2													#	DATE	VER#	DESCRIPTION OF CHANGE
1	2008/06/18	1.00p0	New board derived from m1190v9													
2	2009/05/11	1.00p1	2nd proto. Minor changes from p0. Test points added.													
3	16NOV2009	1V0	update score, board size													
4	2009/12/18	v2.00	Changed TO220 parts to -Pad. Add thief pads to Q16B													
5	.	.	Changed all PS screw connections to new X pads. Flipped													
6	.	.	pads on R94B & R93A - 90degree rotation.													
7	.	.	Imported nodes added by Agilent software N1419-1460													
8	09/JUN/2010	V03	Updated #2312 mtg holes.													
9	D	N	PC#8056 Corrected U4 input.													
10	V	N														
11	D	N														
12	V	N														
13	D	N														
14	V	N														
15	D	N														
16	V	N														
17	D	N														
18	D	N														
19	V	N														
20	D	N														
21	D	N														
22	V	N														
23	D	N														
24	D	V														
25	D	V														
26	D	V														
27	D	V														
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34	D	V														
35	D	V														
36	D	V														
37	D	V														
38	D	V														
39	D	V														
40	D	V														
41	D	V														
42	D	V														
43	D	V														
44	D	V														
45	D	V														
46	D	V														
47	D	V														
48	D	V														
49	D	V														
50	D	V														



(E) DENOTES EUROPEAN

Heatsink covers this area



No RTV under resistors or relays.

No RTV under resistors or relays.

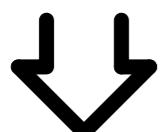
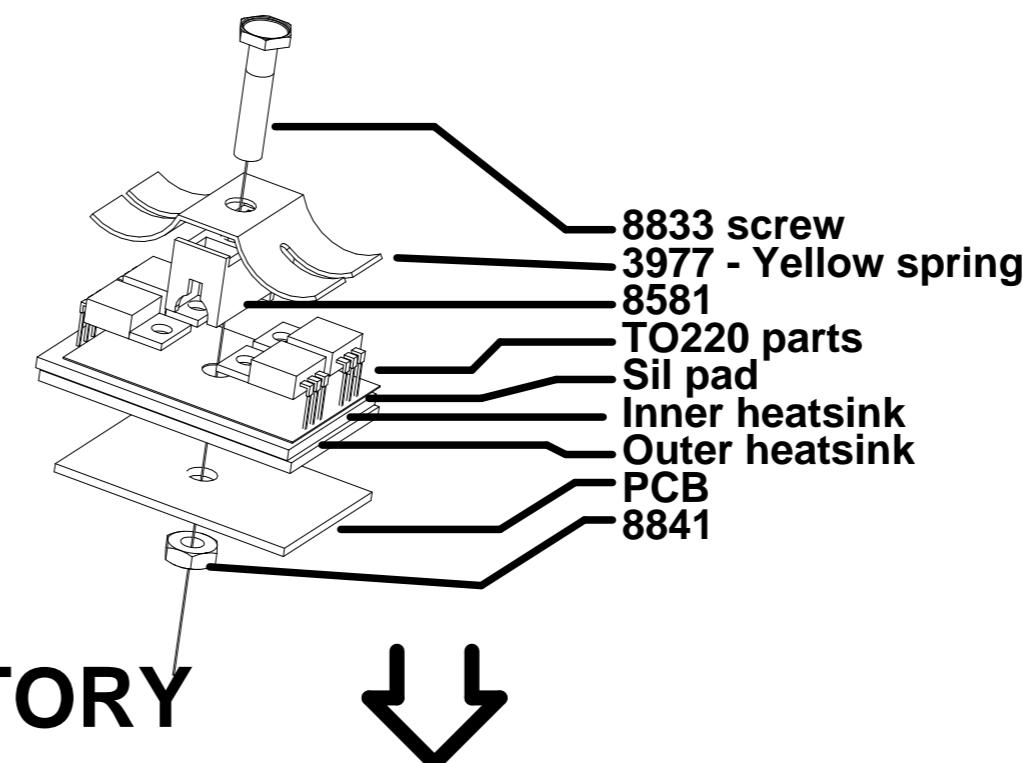
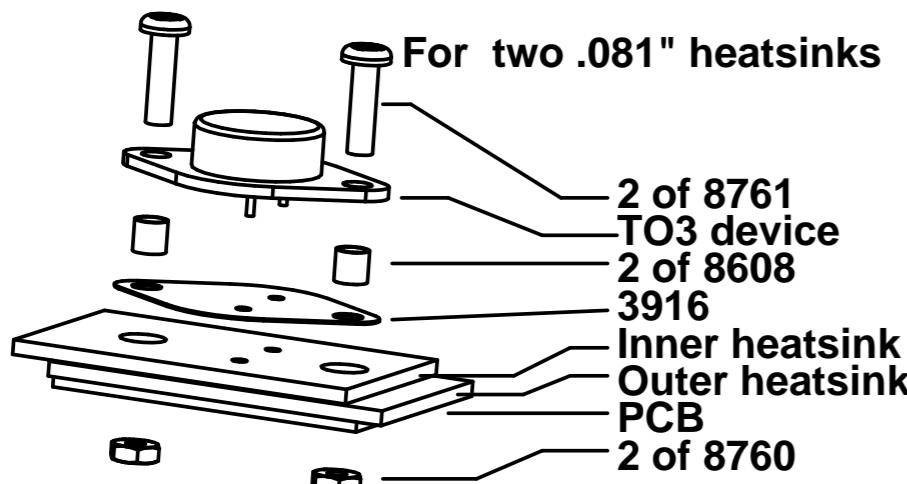


SEE LAYOUT DIAGRAM



M1124 PRODUCTION NOTES

1. Use three 8832 screws to align and attach the heatsinks to the board.
2. When assembling heatsinks to Q20(A&B), Q21(A&B), Q37, ensure heatsinks are straight and sit flat against board. Add a very small amount of RTV between heatsink and board if necessary.
This prevents the heatsink from shorting other components.
3. There are no eyelets or tabs on this board, so there will be no mechanical drawing.
4. No RTV under 5watt resistors or relays. Bend leads straight no reliefs.
5. PCBSA: Break out board before testing.



SEE LAYOUT HISTORY





SEE PRODUCTION NOTES



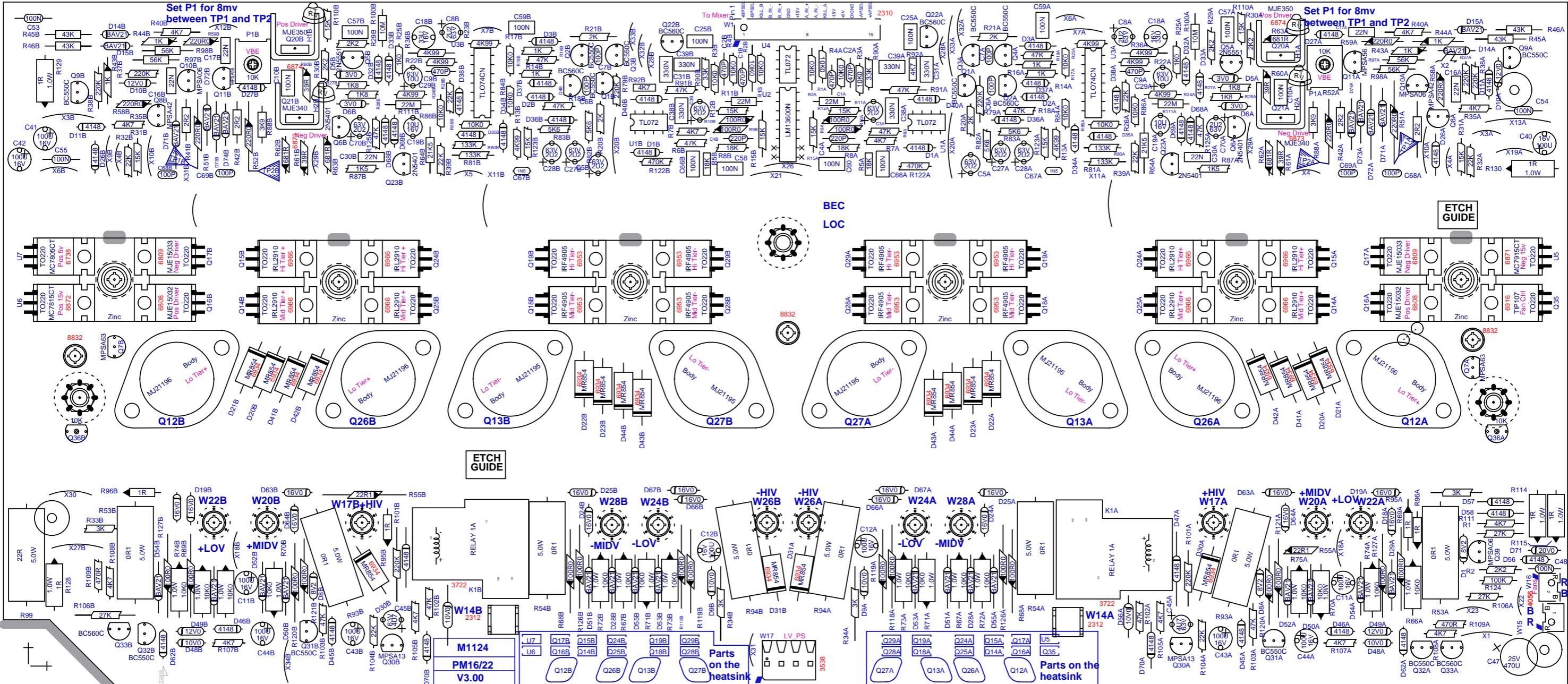
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MODEL(S):- PM16/22			#	DATE	VER#	DESCRIPTION OF CHANGE	
#	DATE	VER#	DESCRIPTION OF CHANGE				
1	2008/06/18	1.00p0	New board derived from m1190v9	24	D	V	N
2	2009/05/11	1.00p1	2nd proto. Minor changes from p0. Test points added.	25	D	V	N
3	16NOV2009	1V0	update score, board size	26	D	V	N
4	2009/12/18	v2.00	Changed TO220 parts to -Pad. Add thief pads to Q16B Changed all PS screw connections to new X pads. Flipped pads on R94B & R93A - 90degree rotation.	27	D	V	N
5	.	.	Imported nodes added by Agilent software N1419-1460	28	D	V	N
6	.	.	Updated #2312 mtg holes.	29	D	V	N
7	.	.	PC#8056 Corrected U4 input.	30	D	V	N
8	09/JUN/2010	V03		31	Q	DYB	
9				32	D	V	N
10	D	V	N	33	D	V	N
11	D	V	N	34	D	V	N
12	D	V	N	35	D	V	N
13	D	V	N	36	D	V	N
14	D	V	N	37	D	V	N
15	D	V	N	38	D	V	N
16	D	V	N	39	D	V	N
17	D	V	N	40	D	V	N
18	D	V	N	41	D	V	N
19	D	V	N	42	D	V	N
20	D	V	N	43	D	V	N
21	D	V	N	44	D	V	N
22	D	V	N	45	D	V	N
23	D	V	N	46	D	V	N
				47	D	V	N
				48	D	V	N
				49	D	V	N
				50	D	V	N

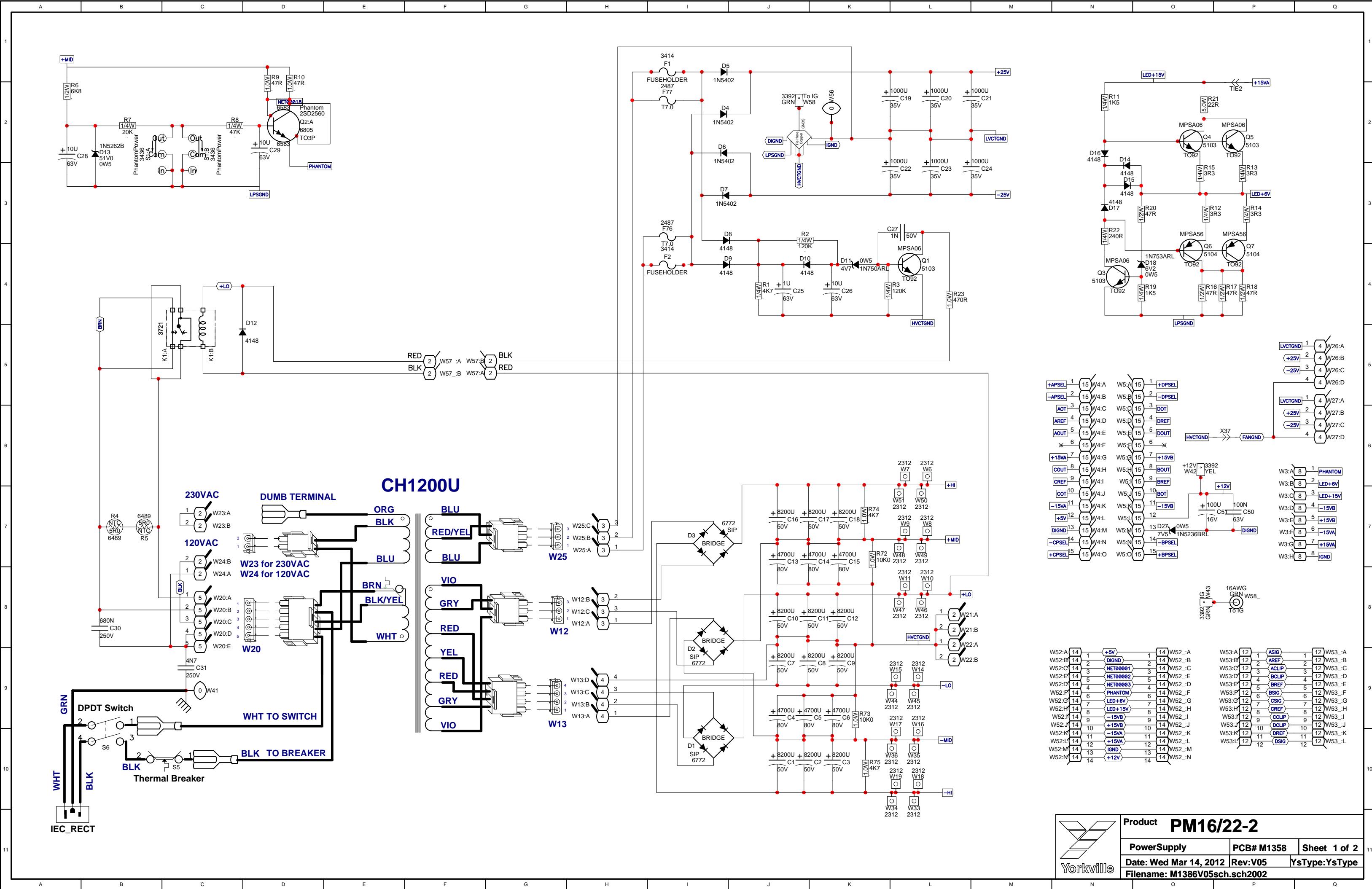
M1124 DRILL_HISTORY				M1124 PENDING CHANGES			
MODEL(S):- PM16/22			#	PC#	PENDING CHANGE		
#	DATE	VER#	DESCRIPTION OF CHANGE	#	PC#	PENDING CHANGE	
1	D	V	N	1	PC	X	
2	D	V	N	2	PC	XX	
3	D	V	N	3	PC	X	
4	D	V	N	4	PC	X	
5	D	V	N	5	PC	XX	
6	D	V	N	6	PC	X	

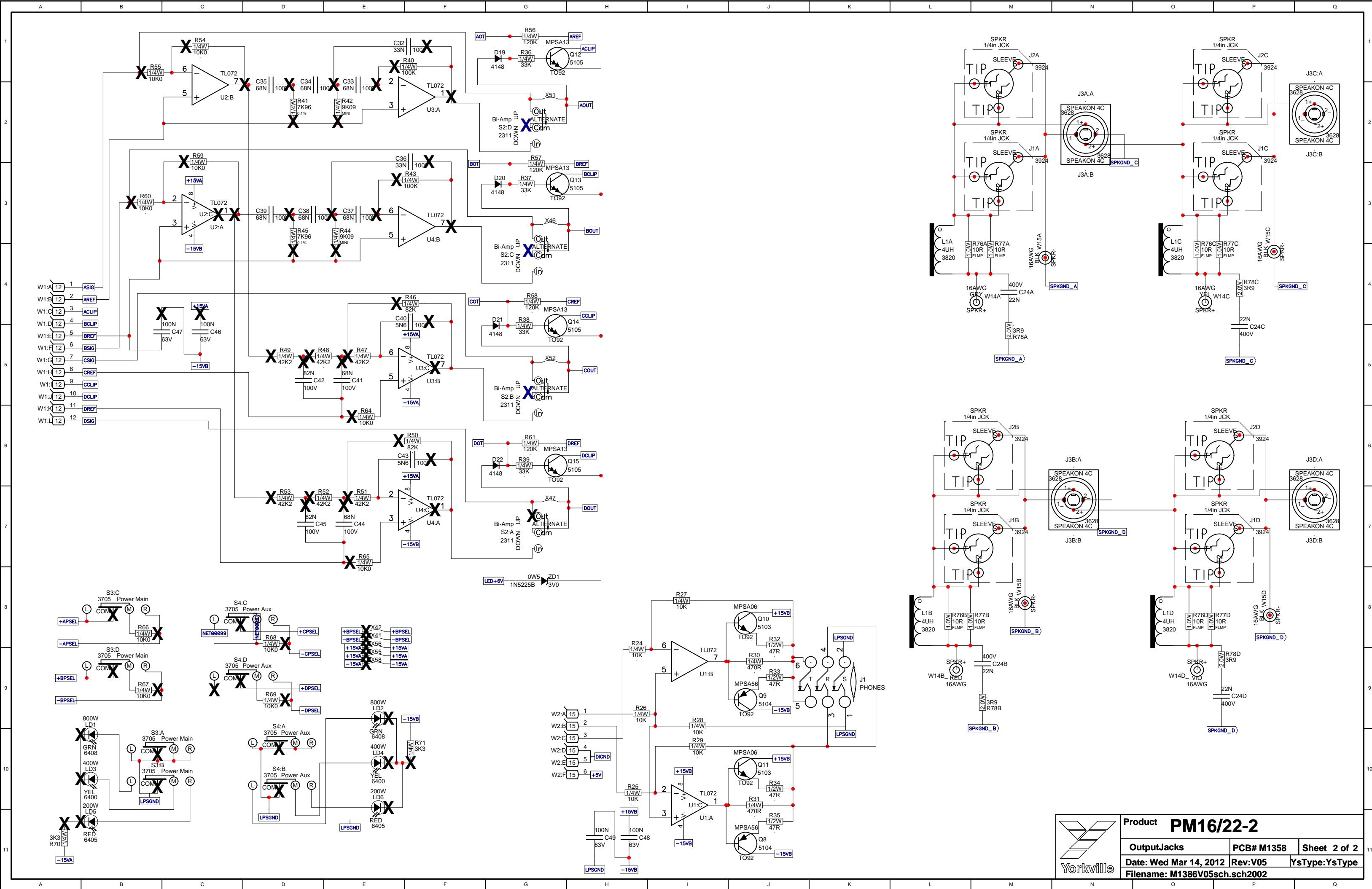
*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

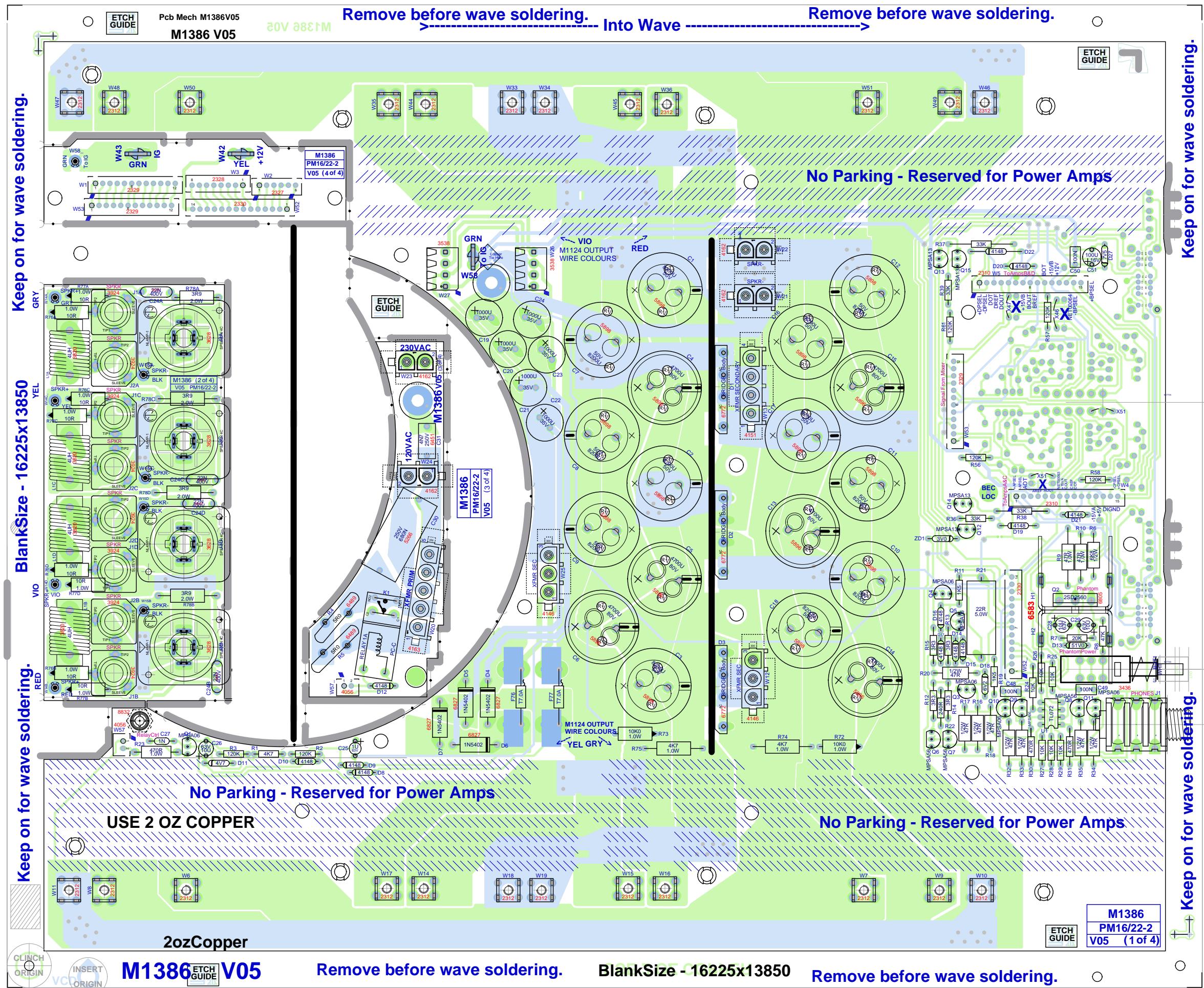
Top Assy M1124V3.00

Wave Solder











SEE LAYOUT DIAGRAM



M1386.PCB_DATABASE_HISTORY

MODEL(S):- PM16-2, PM22-2			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	2008/12/10	1.00p1	First proto.
2	2009/05/12	1.00p2	2nd proto.
3	2009/07/28	1.00p3	Chg W58 from eyelet to tab. Disconnected S4, pin9.
4	.	.	X'd parts in bi-amp and max power circuits.
5	2009/11/23	v1.00	First Production Run
6	2009/12/31	v2.00	Changed D23,4,5,6 to jumpers X123,4,5,6. Added 120K from jumper to ref gnd. Moved holes on 2312 terminals.
7	.	.	Removed large pad on 2312 clearance hole. Moved W37
8	.	.	-0.025 to clear X24. Moved C30 back. PC#7965
9	.	.	PC7970: Add 'M1386' next to 'Production Notes' GG
10	2010/03/16	V03	Moved R77A,B,D & R76C away from eyelets- PC#8052
11			Updated 2312 terminals with new hole positions- PC#8060
12	.	.	Rotated C25 - PC#8054.
13	.	.	
1	2010/09/04	V04	PC8164: Move R5, made AC board (3/4) slimmer GG
2	D		Tony rotated connector board (4/4) for better soldering
3	08/01/2012	V05	DS board, no eyelets GG
4	D		PC8254: Change R8 from #4851 120k to #4834 47k
5	D		PC8254: Change Q2 from #6902 TIP142 to #6805 2SD2560
6	D		
7	D		
8	D		
9	D		
10	D		
11	D		
12	D		
13	D		

IRF720
MTP23P06

IRF830

IRF822

IRF5210

IRL2910

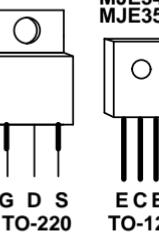
MTP2P50E

MTP8P20

MTP10N15

MTP12P10

IRF720



LEAD/PIN REFERENCE

M1386 PENDING CHANGES

MODEL(S):- PM16-2, PM22-2		
#	PC#	PENDING CHANGE
1	PC	X
2	PC	X
3	PC	X
4	PC	X
5	PC	X
6	PC	X

*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

IRF822 BD139
IRL2910 BD238

BD140

BD237

2N5401

2N5551

MPSA06

MPSA13

MPSA43

MPSA56

MPSA63



LEAD/PIN REFERENCE

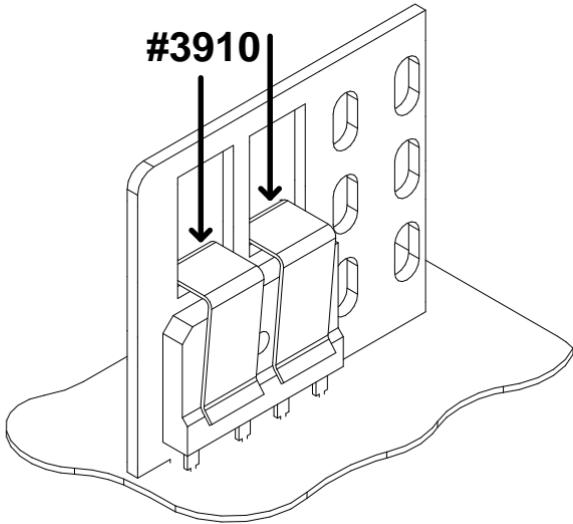
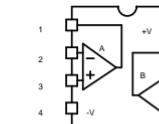
TO-92

E B C

TO-92

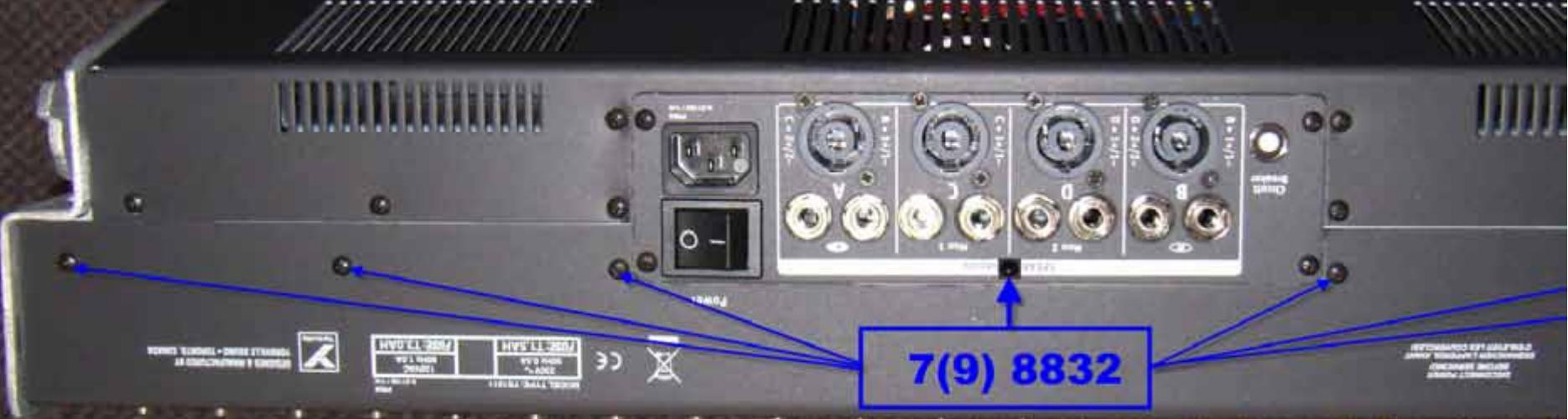
C B E

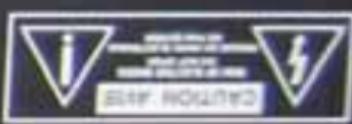
TO-92



M1386 V05 PRODUCTION NOTES

- Wires use #3465 crimp pins to connect on the board.
- Use the second heatsink for the wavesolder to make board stronger.
- Add #3910 clips two per bridge as in picture





6
8832

AMPLIFIER Inputs



Line Out

Internal
Effects Bypass
Tone

STATUS

Power Amplifier Full-Power Phantom

A B C D

0 00000000 00000000

Speaker Processor

Volume

Bass

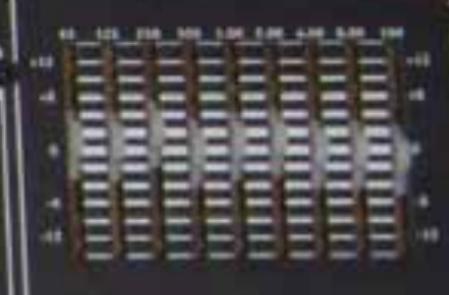
Middle

Treble

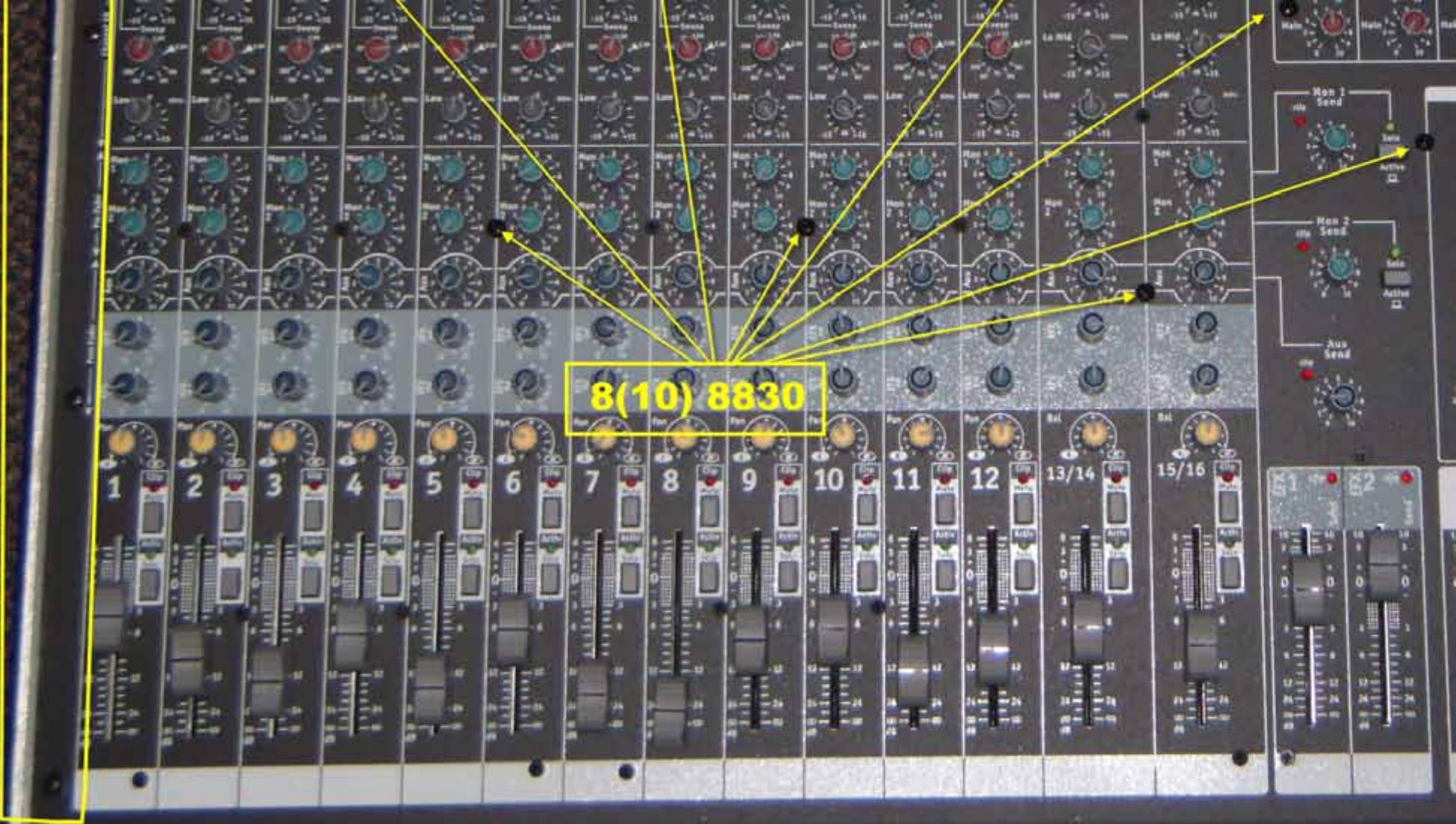
100 Hz

200 Hz

Main EQ



8(10) 8830





power Max[®]
SERIES TWO
3200 WATT STEREO MIXING CONSOLE



4 8868

6(8) 8832

6(8) 8832

**6 of 8547
w/ 8868 +8841**

12 8832

**8(10)
8832**



27(39) 8842



1 881

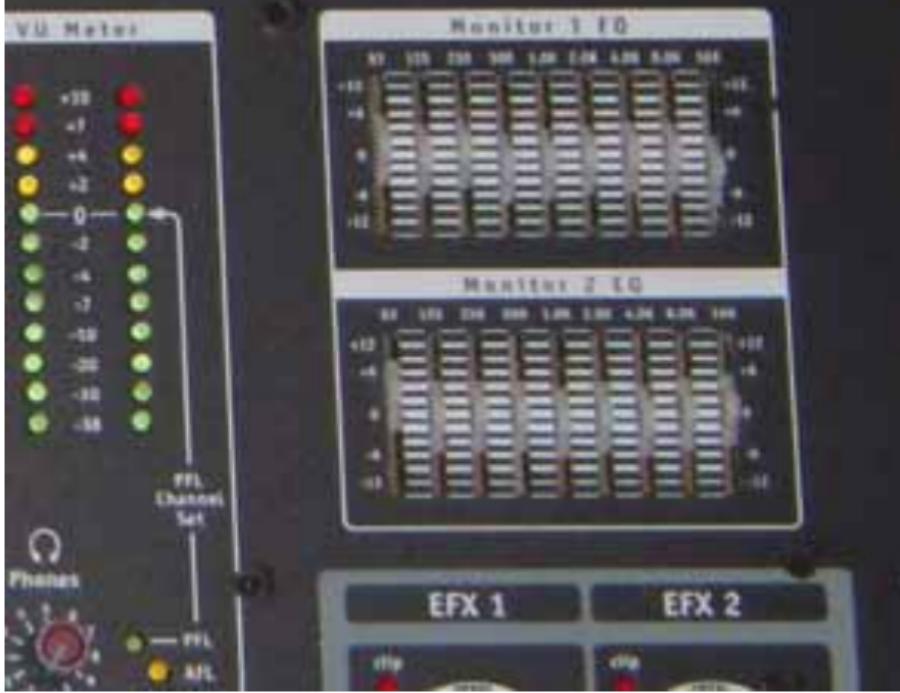
Remaining flathead screws:

33(41) 8808





19





Solo Mode

1

2



Mixing

Mixing



Effect	Mixing	Effect	Mixing
1. Multi Reverb	Mixing	6. Left Talk	Mixing
2. Hall Reverb	Mixing	11. Short Decay Talk	Mixing
3. Hall Reverb - Vocals	Mixing	12. Long Decay Talk	Mixing
4. Hall Reverb - 457ms	Mixing	13. Chorus	Mixing
5. Plate Reverb	Mixing	14. Flanger	Mixing
6. Plate Reverb - Vocals	Mixing	15. Reverb Doubler	Mixing
7. Reverb Doubler	Mixing	16. Distortion	Mixing
8. Canned Reverb	Mixing	17. Tremolo	Mixing

MAIN