



SERVICE MANUAL

Series 1 and 2

M810 / M1610

MODEL TYPE: YS1032 (M1610)
MODEL TYPE: YS1033 (M810)

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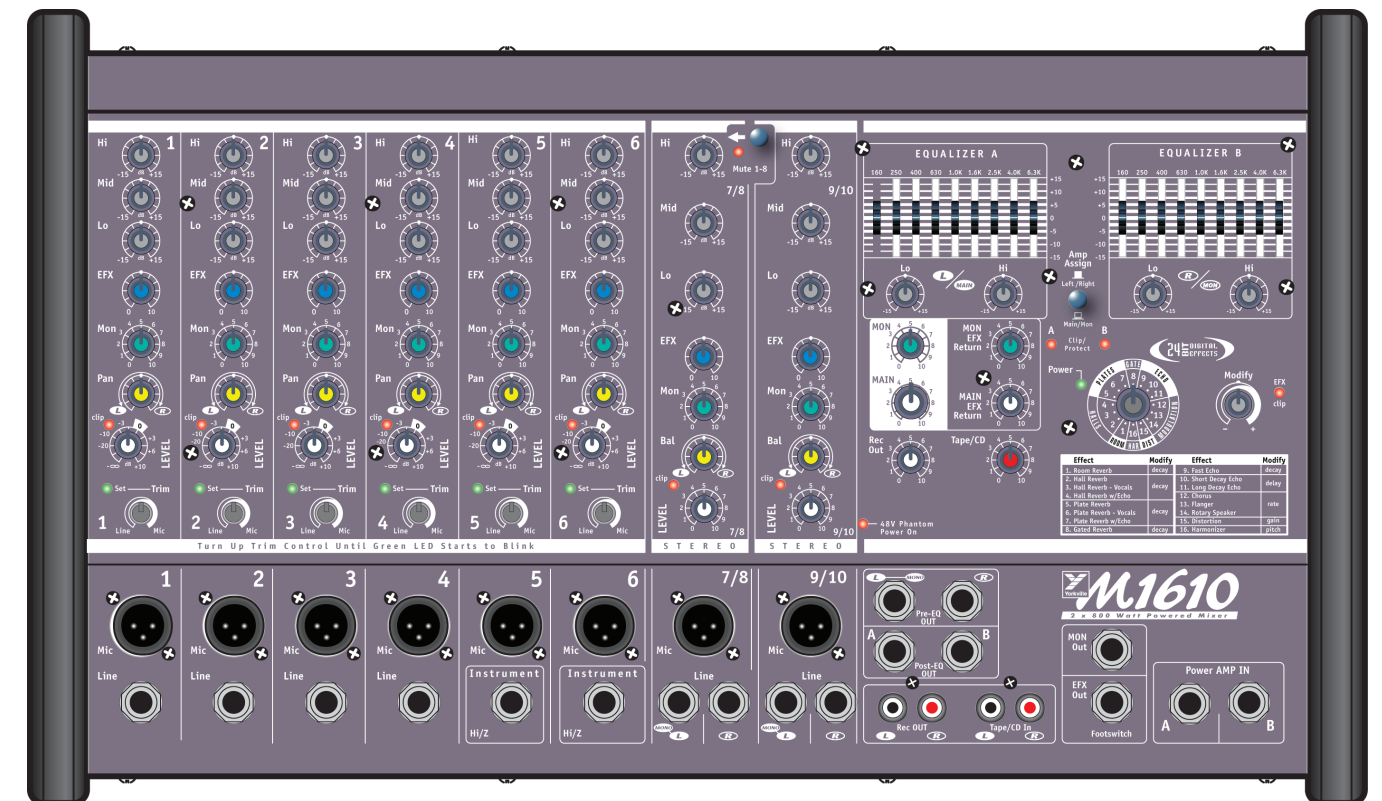
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IMPORTANT SAFETY INSTRUCTIONS



INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).

NO USER SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

INSTRUCTIONS RELATIVES AU RISQUE DE FEU, CHOC ÉLECTRIQUE, OU BLESSURES AUX PERSONNES

AVIS:

AFIN DE REDUIRE LES RISQUE DE CHOC ELECTRIQUE, N'ENLEVEZ PAS LE COUVERT (OU LE PANNEAU ARRIERE)

NE CONTIENT AUCUNE PIECE REPARABLE PAR L'UTILISATEUR.

CONSULTEZ UN TECHNICIEN QUALIFIE POUR L'ENTRETIEN

Read Instructions

The Owner's Manual should be read and understood before operation of your unit. Please, save these instructions for future reference.

Packaging

Keep the box and packaging materials, in case the unit needs to be returned for service.

Warning

When using electric products, basic precautions should always be followed, including the following:

Power Sources

Your unit should be connected to a power source only of the voltage specified in the owners manual or as marked on the unit. This unit has a polarized plug. Do not use with an extension cord or receptacle unless the plug can be fully inserted. Precautions should be taken so that the grounding scheme on the unit is not defeated.

Hazards

Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious personal injury and serious damage to the product. Use only with cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Follow the manufacturer's instructions when installing the product and use mounting accessories recommended by the manufacturer.

The apparatus should not be exposed to dripping or splashing water; no objects filled with liquids should be placed on the apparatus.

Terminals marked with the "lightning bolt" are hazardous live; the external wiring connected to these terminals require installation by an instructed person or the use of ready made leads or cords.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

Power Cord

The AC supply cord should be routed so that it is unlikely that it will be damaged. If the AC supply cord is damaged DO NOT OPERATE THE UNIT.

Service

The unit should be serviced only by qualified service personnel.

Veillez Lire le Manuel

Il contient des informations qui devraient être comprises avant l'opération de votre appareil. Conservez S.V.P. ces instructions pour consultations ultérieures.

Emballage

Conservez la boîte au cas où l'appareil devait être retourner pour réparation.

Attention:

Lors de l'utilisation de produits électrique, assurez-vous d'adhérer à des précautions de bases incluant celle qui suivent:

Alimentation

L'appareil ne doit être branché qu'à une source d'alimentation correspondant au voltage spécifié dans le manuel ou tel qu'indiqué sur l'appareil. Cet appareil est équipé d'une prise d'alimentation polarisée. Ne pas utiliser cet appareil avec un cordon de raccordement à moins qu'il soit possible d'insérer complètement les trois lames. Des précautions doivent être prises afin d'éviter que le système de mise à la terre de l'appareil ne soit désengagé.

Risque

Ne pas placer cet appareil sur un chariot, un support, un trépied ou une table instables. L'appareil pourrait tomber et blesser quelqu'un ou subir des dommages importants. Utiliser seulement un chariot, un support, un trépied ou une table recommandés par le fabricant ou vendus avec le produit. Suivre les instructions du fabricant pour installer l'appareil et utiliser les accessoires recommandés par le fabricant.

Il convient de ne pas placer sur l'appareil de sources de flammes nues, telles que des bougies allumées.

L'appareil ne doit pas être exposé à des égouttements d'eau ou des éclaboussures et qu'aucun objet rempli de liquide tel que des vases ne doit être placé sur l'appareil.

Les dispositifs marqués d'une symbole "d'éclair" sont des parties dangereuses au toucher et que les câblages extérieurs connectés à ces dispositifs de connexion extérieure doivent être effectués par un opérateur formé ou en utilisant des cordons déjà préparés.

Cordon d'Alimentation

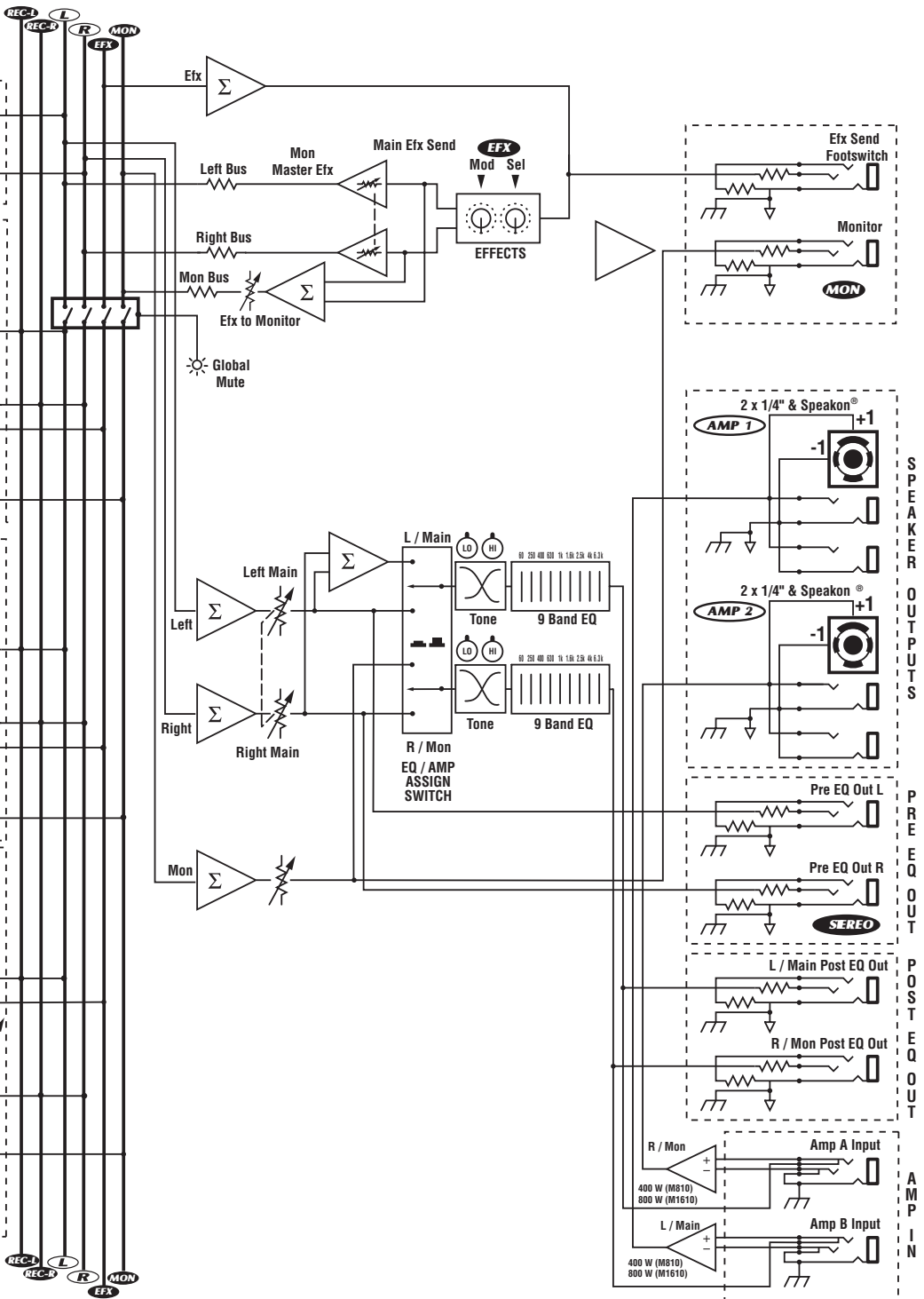
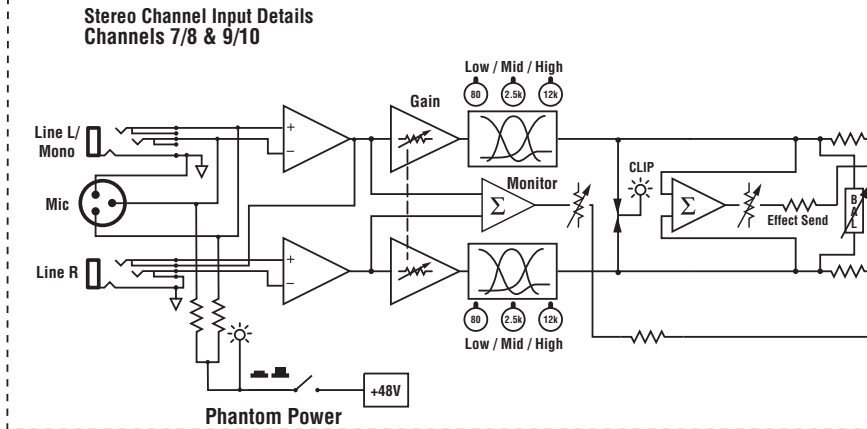
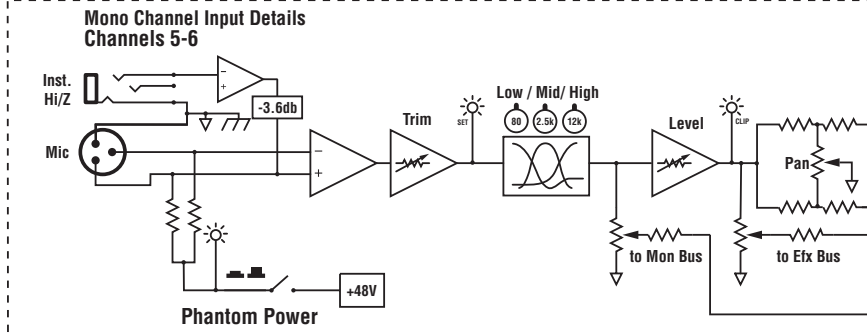
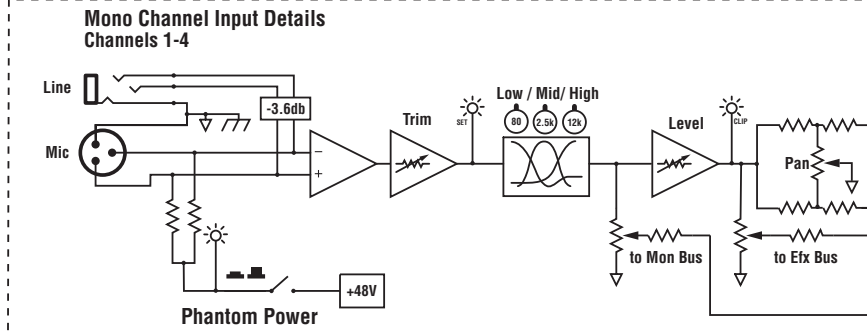
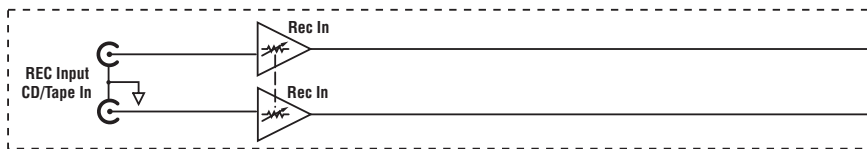
Évitez d'endommager le cordon d'alimentation. N'UTILISEZ PAS L'APPAREIL si le cordon d'alimentation est endommagé.

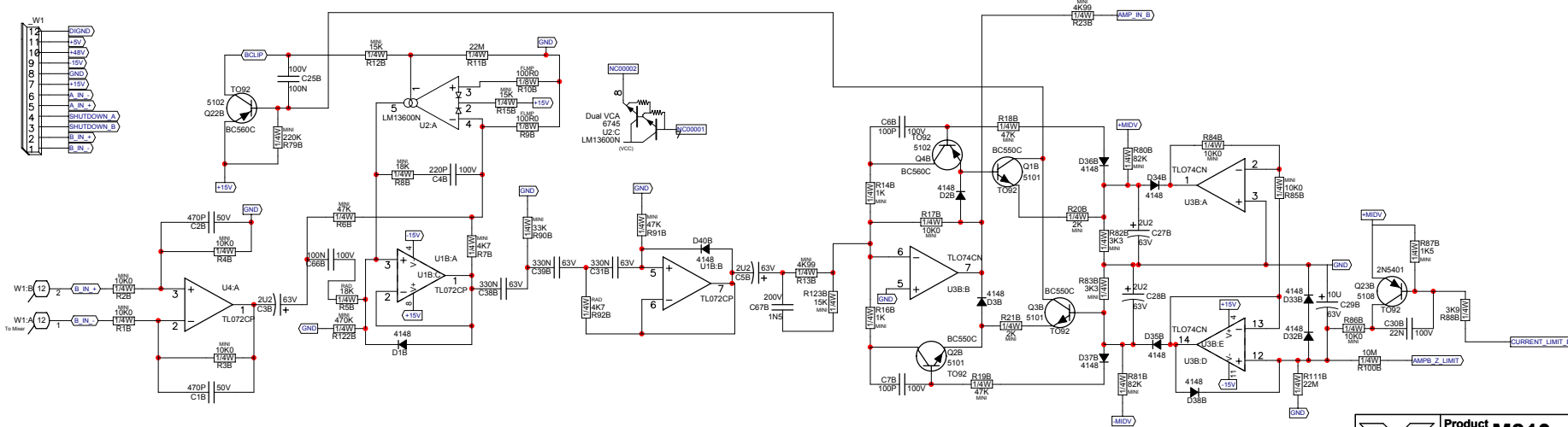
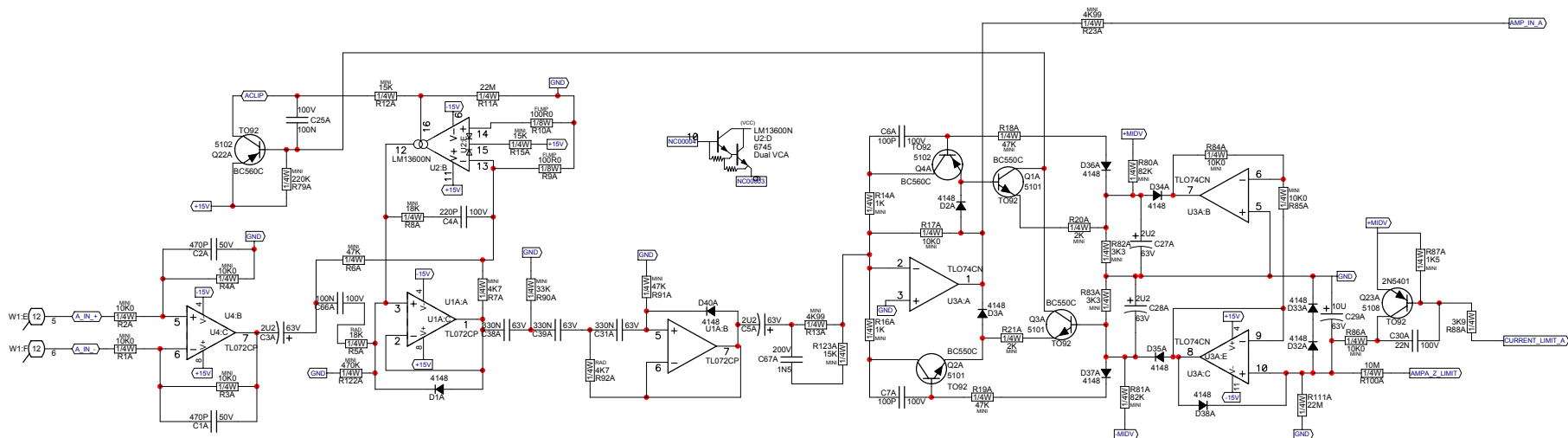
Service

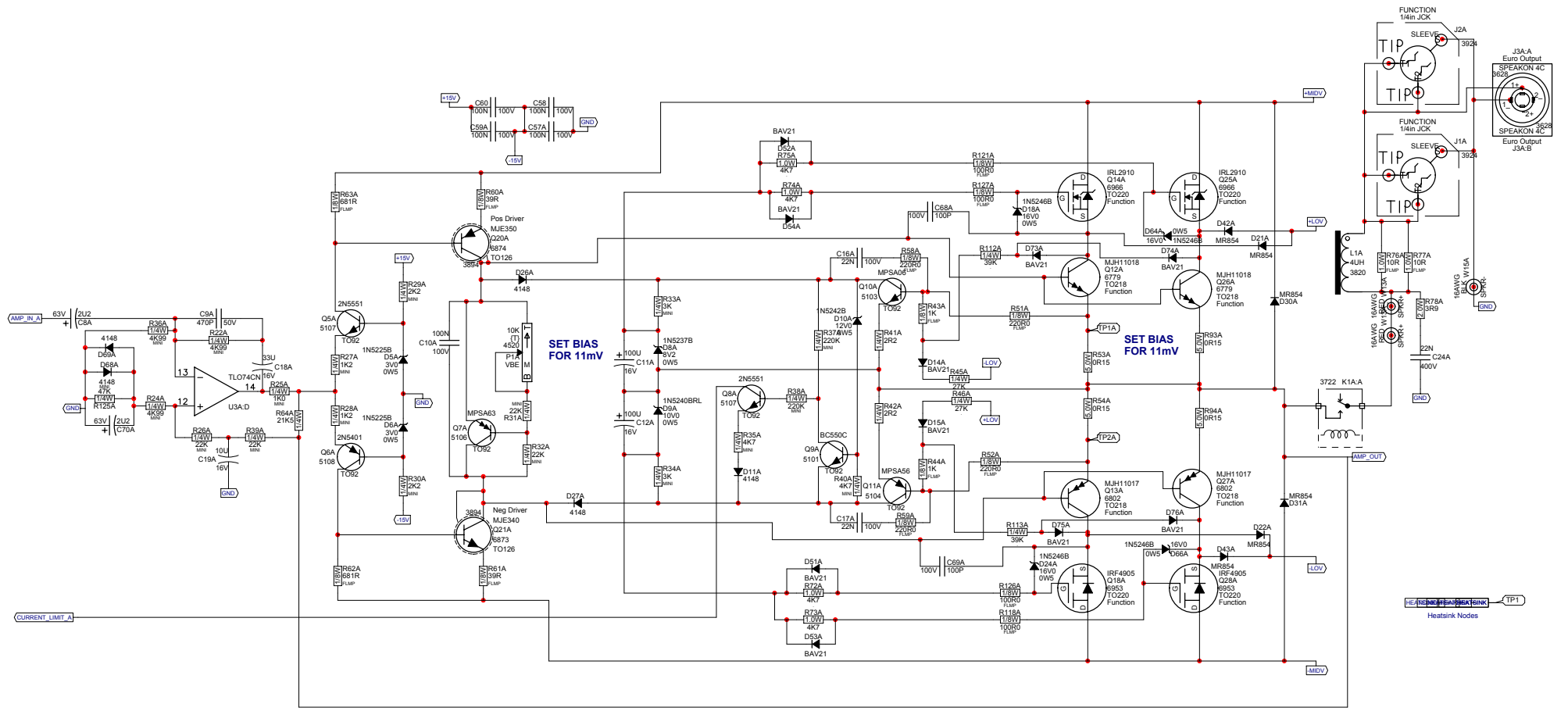
Consultez un technicien qualifié pour l'entretien de votre appareil.

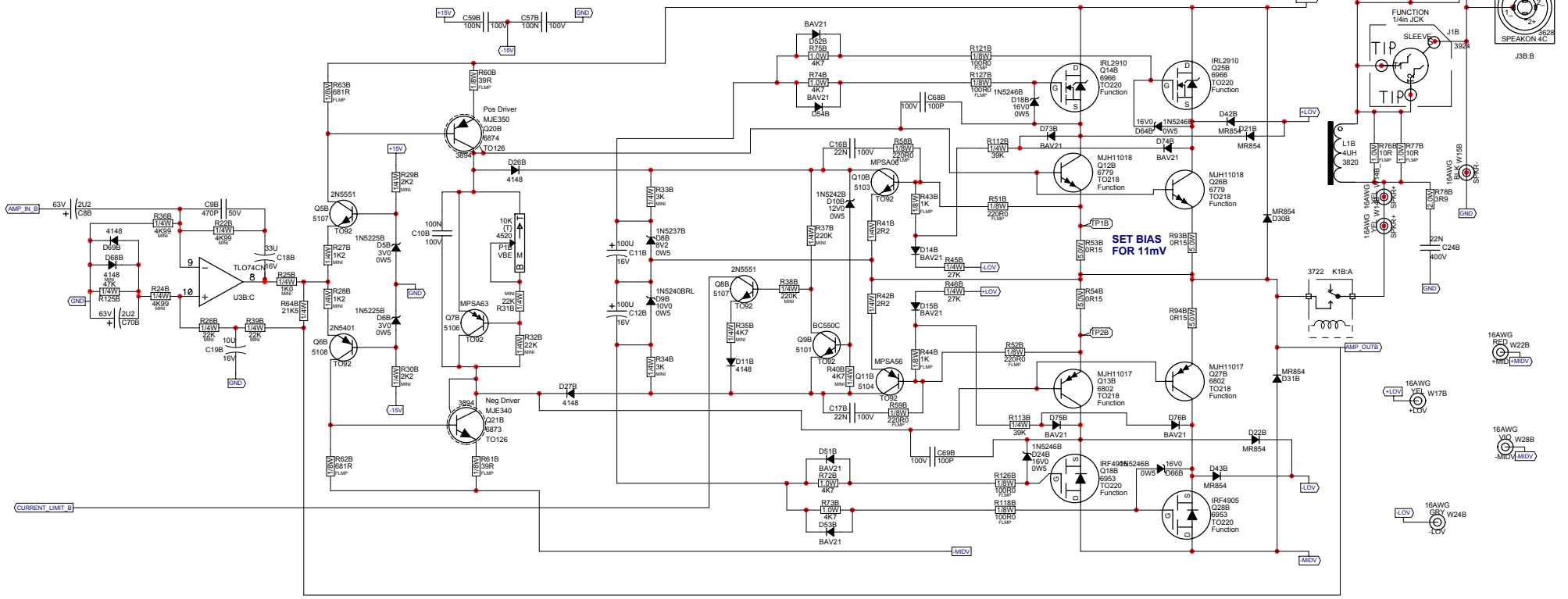
Block Diagram for M810 / M1610

DESIGNED & MANUFACTURED BY YORKVILLE SOUND

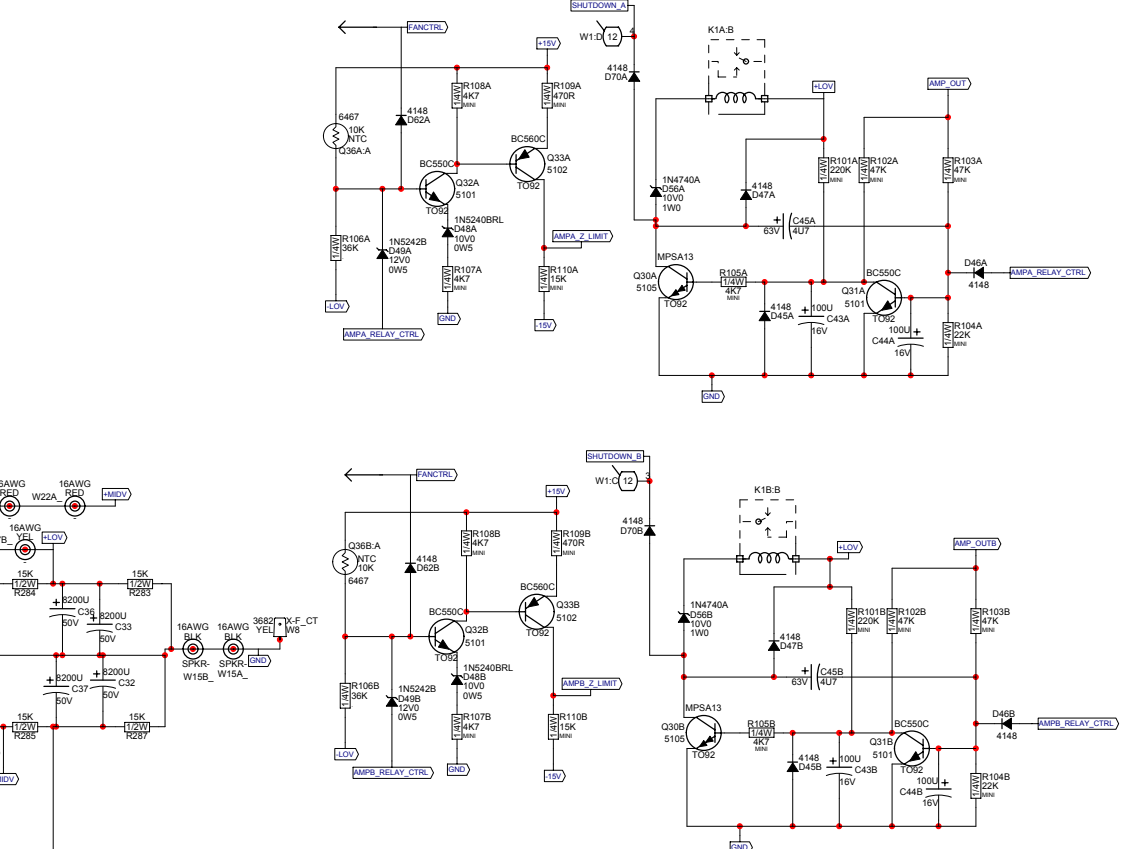
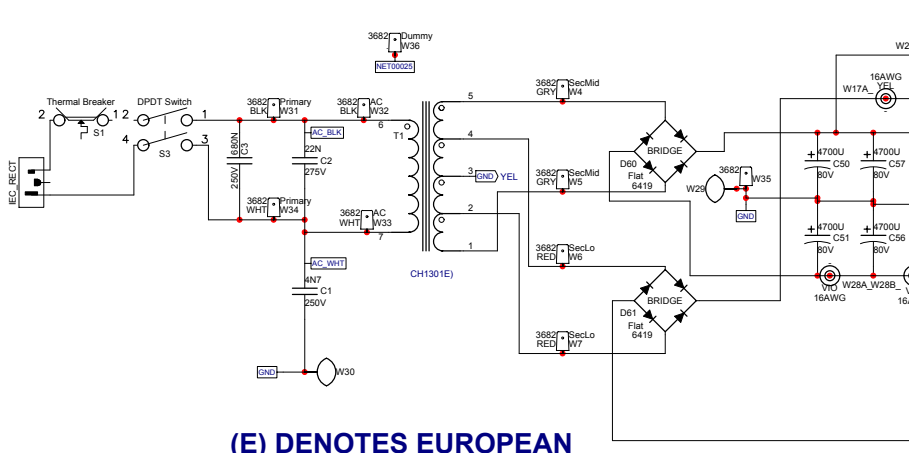
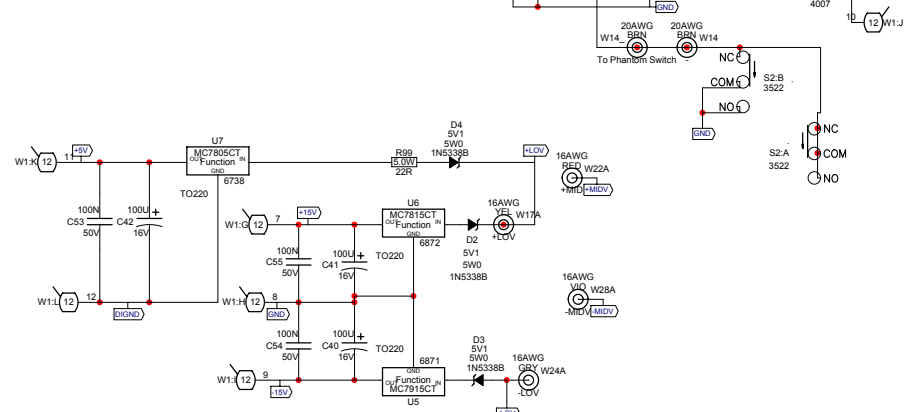
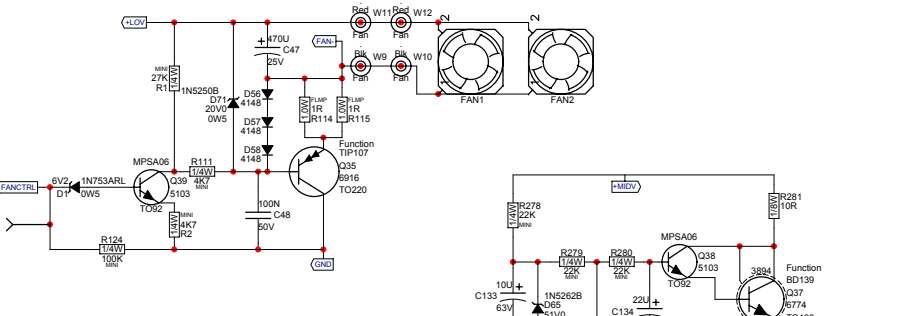








M1194.PCB_DATABASE_HISTORY			#	DATE	VER#	DESCRIPTION OF CHANGE
MODEL(S):- M810			24			35V AND C36&C37#58964700/80V->#5898 8200U/50V
			25			UPDATED BIAS NOTE TO READ 11mV R45A/B&R46A/B
			26			#4890 30K->#4833 27K, R112A/B&R113A/B #4868 36K->
			27			#4853 39K, C25A/B #5224 47N/100V->#5212 100N/63V,
			28			R79A/B #6127 470K->#6128 220K, SWAPPED W8 AND W35
			29			IAH, PC#6983, WIDEN TRACE BETWEEN C32 AND C37
			30	19-JUN-2006	7.00	PC#7091, ENLARGE HOLE SIZE FOR #3522
			31			
			32			
			33			
			34			
			35			
			36			
			37			
			38			
			39			
			40			
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			49			
			50			

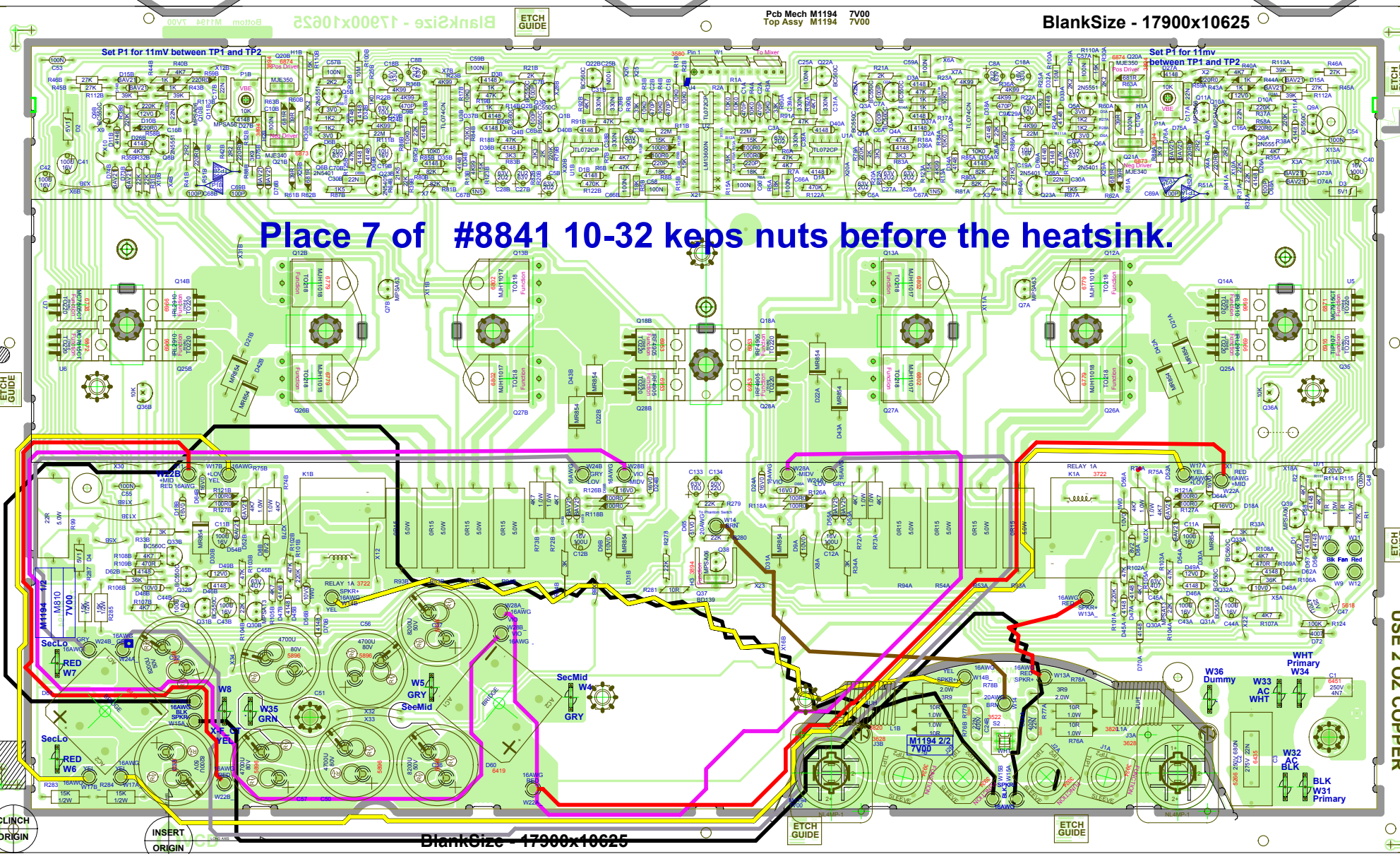


(E) DENOTES EUROPEAN

Product M810

Power Supply	PCB# M1194	Sheet 4 of 5
Date: Wed Jun 28, 2006	Rev: 7V00	YsType: (Company)
Filename: M1194-7V00sch.2002		

Place 7 of #8841 10-32 keps nuts before the heatsink.





SEE LAYOUT DIAGRAM



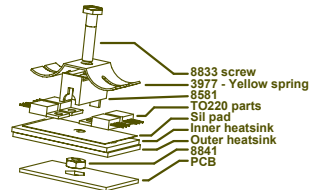
M1194.PCB_DATABASE_HISTORY				#	DATE	VER#	DESCRIPTION OF CHANGE
MODEL(S):- M810				24	.	.	35V AND C36&C37#58964700/80V->#5898 8200U/50V
				25	.	.	UPDATED BIAS NOTE TO READ 11mV, R45A/B&R46A/B
				26	.	.	#4890 30K->#4833 27K, R112A/B&R113A/B #4868 36K->
				27	.	.	#4853 39K, C25A/B #5224 47N/100V->#5212 100N/63V,
				28	.	.	R79A/B #6127 470K->#6126 220K, SWAPPED W8 AND W35
				29	19-JUN-2006	7.00	AH, PC#6983, WIDEN TRACE BETWEEN C32 AND C37
				30	.	.	PC#7091, ENLARGE HOLE SIZE FOR #3522
#	DATE	VER#	DESCRIPTION OF CHANGE				
1	10 Jan, 2004	1.00	Rationalize wire refdes				
2	24 Feb, 2004	1.00	Add speakon jacks to output section				
3	10 Mar, 2004	1.00	Enlarge cutouts for 8841 nuts				
4	1-APR-2004	1.10	PC#6674 Change R31A,B 15k-->22k (4979-->6118)				
5	15-APR-2004	1.20	PC#6678 Chg. R5A,B 6k8->18k; R82A,B 5k6->3k3				
6			R83A,B 56k->3k3; R80A,B, R81A,B 133k->100k				
7	21-APR-2004	1.20	PC#6681 Modified route to let grn wire pass near power				
8	6-MAY-2004	2.00	PC#6685 R80&R81(A,B) 100K->82K, ADDED D71, D72				
9	JUN/17/2004	2.10	PC# 6707 Q12 (A+B) Q26 (A+B) TIP142 -> MJH11018				
10			Q13 (A+B), Q27 (A+B) TIP147 -> MJH11017				
11	13 Sept, 2004	2.11	TC:PC#6763:Moved HS alignment hole to match HS				
12	JAN-05-2005	4.00	PC#6808 R72,R73,R74,R75 FROM 10K0 1W TO 4K7 1W				
13			D8 A/B 12V0 TO 8V2, D9A/B 14V0 TO 10V0, D10A/B 16V0				
14			TO 12V0. ADD R112A/B, R113A/B (36K), D73A/B, D74A/B				
15			D75A/B, D76A/B (BAV21). R45A/B, R46A/B 36K TO 30K				
16			REMOVE D16,D17,R47,R48,R49, R50 (ALL A/B)				
17			ADD JUMPERS X1 TO X12				
18			PC#6794: AC CLEARANCE FIX				
19	MAR-24-2005	5.00	FIXED MASK SPREAD TO 30MIL				
20	APR-13-2005	5.10	CHANGE IRF3205 #6954 TO IRL2910 #6966				
21			PLACE MICA UNDER MIDDLE TIER MOSFETS				
22	JUN-29-2005	6.00	PC#6920:GT:R106A/B #6122 33K->#4868 36K, D56A/B				
23			#6440 4V7/0W5->#6484 10V1W, C32&C33#5903 12000U/				
DRILL & ROUTE HISTORY				M1194 PENDING CHANGES			
MODEL(S):- M810				MODEL(S):- M810			
#	DATE	VER#	DESCRIPTION OF CHANGE	#	PC#		PENDING CHANGE
1	10-MAR-2004	V02	Enlarged routing for hex nuts	1	PC	X	
2	5-MAY-2004	V03	Added notch to routing to pass GRN wire from front	2	PC	X	
3	6-MAY-2004	V04	To match v2.00 changes	3	PC	X	
4	JAN-05-2005	V05	PC#6763 MOVE TOP LEFT HEATSINK LINE-UP HOLE	4	PC	X	
5	20 Apr,2005	5.11	Corrected 'BlankSize' field for clinch program	5	PC	X	
6			Corrected pad orientations on 4520, 5840 and 3722	6	PC	X	
7	D	V	N				
8	D	V	N				
9	D	V	N				
10	D	V	N				
11	D	V	N				
12	D	V	N				
13	D	V	N				

*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

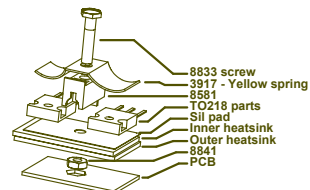
PRODUCTION NOTES

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 prevent heatsink from shorting other components.
3. Add grease under middle tier mosfets.

4XTO220-MTG



2XTO218-MTG





STEREO DIGITAL EFFECTS

YORKVILLE SOUND • DIGITAL EFFECTS BY A.R.T.

A ROOMS

- 1 0.5s Bright Small Room
- 2 0.5s Warm Small Room
- 3 0.5s Dark Small Room
- 4 0.8s Bright Small Room
- 5 0.8s Warm Small Room
- 6 1.0s Bright Small Room
- 7 1.0s Warm Small Room
- 8 1.2s Bright Medium Room
- 9 1.2s Warm Medium Room
- 10 1.5s Bright Medium Room
- 11 1.5s Warm Medium Room
- 12 1.5s Dark Medium Room
- 13 2.0s Bright Large Room
- 14 2.0s Warm Large Room
- 15 2.5s Bright Large Room
- 16 2.5s Warm Large Room

B ROOMS & THICKENING DELAYS

- 1 0.5s Bright Small Room + 50ms doubling delay
- 2 0.5s Warm Small Room + 40ms doubling delay
- 3 0.5s Dark Small Room + 40ms doubling delay
- 4 0.8s Bright Small Room + 60ms doubling delay
- 5 0.8s Warm Small Room + 50ms doubling delay
- 6 1.0s Bright Small Room + 70ms slap delay
- 7 1.0s Warm Small Room + 50ms doubling delay
- 8 1.2s Bright Medium Room + 50ms doubling delay
- 9 1.2s Warm Medium Room + 50ms doubling delay
- 10 1.5s Bright Medium Room + 80ms slap delay
- 11 1.5s Warm Medium Room + 60ms doubling delay
- 12 1.5s Dark Medium Room + 70ms slap delay
- 13 2.0s Bright Large Room + 80ms slap delay
- 14 2.0s Warm Large Room + 60ms doubling delay
- 15 2.5s Bright Large Room + 100ms slap delay
- 16 2.5s Warm Large Room + 80ms slap delay

C ROOMS & REGENERATION DELAYS

- 1 0.5s Bright Small Room + 200ms regen delay
- 2 0.5s Warm Small Room + 175ms regen delay
- 3 0.5s Dark Small Room + 150ms regen delay
- 4 0.8s Bright Small Room + 200ms regen delay
- 5 0.8s Warm Small Room + 150ms regen delay
- 6 1.0s Bright Small Room + 175ms regen delay
- 7 1.0s Warm Small Room + 125ms regen delay
- 8 1.2s Bright Medium Room + 150ms regen delay
- 9 1.2s Warm Medium Room + 200ms regen delay
- 10 1.5s Bright Medium Room + 200ms regen delay
- 11 1.5s Warm Medium Room + 175ms regen delay
- 12 1.5s Dark Medium Room + 150ms regen delay
- 13 2.0s Bright Large Room + 200ms regen delay
- 14 2.0s Warm Large Room + 125ms regen delay
- 15 2.5s Bright Large Room + 150ms regen delay
- 16 2.5s Warm Large Room + 200ms regen delay

D ROOMS / HALLS & CHORUS

- 1 0.5s Bright Room + slow chorus
- 2 0.8s Warm Room + medium chorus
- 3 1.0s Bright Room + slow chorus
- 4 1.2s Warm Room + medium chorus
- 5 1.5s Bright Room + slow chorus
- 6 1.8s Warm Room + slow chorus
- 7 2.5s Bright Room + medium chorus
- 8 3.0s Warm Room + slow chorus
- 9 2.0s Bright Hall + slow chorus
- 10 2.5s Warm Hall + medium chorus
- 11 2.5s Bright Hall + slow chorus
- 12 3.0s Warm Hall + slow chorus
- 13 3.5s Warm Hall + slow chorus
- 14 3.5s Bright Hall + medium chorus
- 15 5.0s Warm Hall + slow chorus
- 16 8.0s Warm Hall + slow chorus

E HALLS

- 1 1.5s Dark Medium Hall
- 2 1.5s Warm Medium Hall
- 3 1.5s Bright Medium Hall
- 4 2.0s Dark Medium Hall
- 5 2.0s Warm Medium Hall
- 6 2.0s Bright Medium Hall
- 7 2.5s Dark Medium Hall
- 8 2.5s Warm Medium Hall
- 9 2.5s Bright Medium Hall
- 10 3.5s Dark Medium Hall
- 11 3.5s Warm Medium Hall
- 12 3.5s Bright Medium Hall
- 13 5.0s Dark Large Hall
- 14 5.0s Warm Large Hall
- 15 8.0s Dark Huge Hall
- 16 8.0s Warm Huge Hall

F HALLS & THICKENING DELAYS

- 1 1.5s Dark Medium Hall + 50ms doubling delay
- 2 1.5s Warm Medium Hall + 70ms slap delay
- 3 1.5s Bright Medium Hall + 90ms slap delay
- 4 2.0s Dark Medium Hall + 90ms slap delay
- 5 2.0s Warm Medium Hall + 70ms slap delay
- 6 2.0s Bright Medium Hall + 50ms doubling delay
- 7 2.5s Dark Medium Hall + 70ms slap delay
- 8 2.5s Warm Medium Hall + 80ms slap delay
- 9 2.5s Bright Medium Hall + 100ms slap delay
- 10 3.5s Dark Medium Hall + 80ms slap delay
- 11 3.5s Warm Medium Hall + 90ms slap delay
- 12 3.5s Bright Medium Hall + 100ms slap delay
- 13 5.0s Dark Large Hall + 80ms slap delay
- 14 5.0s Bright Large Hall + 100ms slap delay
- 15 8.0s Dark Huge Hall + 100ms slap delay
- 16 8.0s Warm Huge Hall + 100ms slap delay

G HALLS & REGENERATION DELAYS

- 1 1.5s Dark Medium Hall + 150ms regen delay
- 2 1.5s Warm Medium Hall + 175ms regen delay
- 3 1.5s Bright Medium Hall + 200ms regen delay
- 4 2.0s Dark Medium Hall + 200ms regen delay
- 5 2.0s Warm Medium Hall + 150ms regen delay
- 6 2.0s Bright Medium Hall + 175ms regen delay
- 7 2.5s Dark Medium Hall + 200ms regen delay
- 8 2.5s Warm Medium Hall + 150ms regen delay
- 9 2.5s Bright Medium Hall + 175ms regen delay
- 10 3.5s Dark Medium Hall + 125ms regen delay
- 11 3.5s Warm Medium Hall + 150ms regen delay
- 12 3.5s Bright Medium Hall + 200ms regen delay
- 13 5.0s Dark Large Hall + 175ms regen delay
- 14 5.0s Bright Large Hall + 200ms regen delay
- 15 8.0s Dark Huge Hall + 150ms regen delay
- 16 8.0s Bright Large Hall + 200ms regen delay

H GATED / REVERSE REVERB

- 1 0.8s decay 100ms Gate
- 2 0.8s decay 200ms Gate
- 3 1.2s decay 100ms Gate
- 4 1.2s decay 200ms Gate
- 5 1.8s decay 150ms Gate
- 6 1.8s decay 200ms Gate
- 7 2.0s decay 300ms Gate
- 8 2.0s decay 300ms Gate
- 9 2.5s decay 250ms Gate
- 10 2.5s decay 400ms Gate
- 11 0.5s decay 100ms Reverse
- 12 0.5s decay 200ms Reverse
- 13 1.0s decay 100ms Reverse
- 14 1.0s decay 200ms Reverse
- 15 2.5s decay 250ms Reverse
- 16 4.0s decay 300ms Reverse

I CHAMBERS / PLATES

- 1 0.8s Warm Chamber
- 2 0.8s Bright Chamber
- 3 1.2s Warm Chamber
- 4 1.2s Bright Chamber
- 5 1.5s Warm Chamber
- 6 1.5s Bright Chamber
- 7 2.5s Warm Chamber
- 8 2.5s Bright Chamber
- 9 3.5s Warm Chamber
- 10 3.5s Bright Chamber
- 11 0.3s Bright Plate
- 12 0.5s Bright Plate
- 13 0.8s Bright Large Plate
- 14 1.2s Bright Plate
- 15 1.5s Bright Plate
- 16 2.0s Bright Plate

J CHAMBERS / PLATES + THICKENING DELAYS

- 1 0.8s Warm Chamber + 50ms doubling delay
- 2 0.8s Bright Chamber + 50ms doubling delay
- 3 1.2s Warm Chamber + 60ms doubling delay
- 4 1.2s Bright Chamber + 70ms slap delay
- 5 1.5s Warm Chamber + 70ms slap delay
- 6 1.5s Bright Chamber + 80ms slap delay
- 7 2.5s Warm Chamber + 80ms slap delay
- 8 2.5s Bright Chamber + 100ms slap delay
- 9 3.5s Warm Chamber + 90ms slap delay
- 10 3.5s Bright Chamber + 100ms slap delay
- 11 0.3s Bright Plate + 40ms doubling delay
- 12 0.5s Bright Plate + 50ms doubling delay
- 13 0.8s Bright Plate + 50ms doubling delay
- 14 1.2s Bright Plate + 80ms slap delay
- 15 1.5s Bright Plate + 80ms slap delay
- 16 2.0s Bright Plate + 100ms slap delay

K CHAMBERS / PLATES + REGEN DELAYS

- 1 0.8s Warm Chamber + 150ms regen delay
- 2 0.8s Bright Chamber + 125ms regen delay
- 3 1.2s Warm Chamber + 175ms regen delay
- 4 1.2s Bright Chamber + 200ms regen delay
- 5 1.5s Warm Chamber + 150ms regen delay
- 6 1.5s Bright Chamber + 200ms regen delay
- 7 2.5s Warm Chamber + 175ms regen delay
- 8 2.5s Bright Chamber + 125ms regen delay
- 9 3.5s Warm Chamber + 200ms regen delay
- 10 3.5s Bright Chamber + 150ms regen delay
- 11 0.3s Bright Plate + 125ms regen delay
- 12 0.5s Bright Plate + 150ms regen delay
- 13 0.8s Bright Plate + 200ms regen delay
- 14 1.2s Bright Plate + 175ms regen delay
- 15 1.5s Bright Plate + 150ms regen delay
- 16 2.0s Bright Plate + 200ms regen delay

L SHORT DELAYS

- 1 30ms slap delay
- 2 35ms slap delay
- 3 40ms slap delay
- 4 50ms slap delay
- 5 60ms slap delay
- 6 70ms slap delay
- 7 80ms slap delay
- 8 90ms slap delay
- 9 100ms slap delay
- 10 100ms regen delay
- 11 125ms low regen delay
- 12 125ms medium regen delay
- 13 150ms low regen delay
- 14 150ms medium regen delay
- 15 175ms low regen delay
- 16 175ms medium regen delay

M MEDIUM DELAYS

- 1 200ms low regen delay
- 2 200ms medium regen delay
- 3 225ms low regen delay
- 4 225ms medium regen delay
- 5 250ms low regen delay
- 6 250ms medium regen delay
- 7 275ms low regen delay
- 8 275ms medium regen delay
- 9 300ms low regen delay
- 10 300ms medium regen delay
- 11 325ms low regen delay
- 12 325ms medium regen delay
- 13 350ms low regen delay
- 14 350ms medium regen delay
- 15 375ms low regen delay
- 16 375ms medium regen delay

N LONG DELAYS

- 1 390ms low regen delay
- 2 390ms medium regen delay
- 3 400ms low regen delay
- 4 400ms medium regen delay
- 5 410ms low regen delay
- 6 410ms medium regen delay
- 7 420ms low regen delay
- 8 420ms medium regen delay
- 9 430ms low regen delay
- 10 430ms medium regen delay
- 11 450ms low regen delay
- 12 450ms medium regen delay
- 13 475ms low regen delay
- 14 475ms medium regen delay
- 15 500ms low regen delay
- 16 500ms medium regen delay

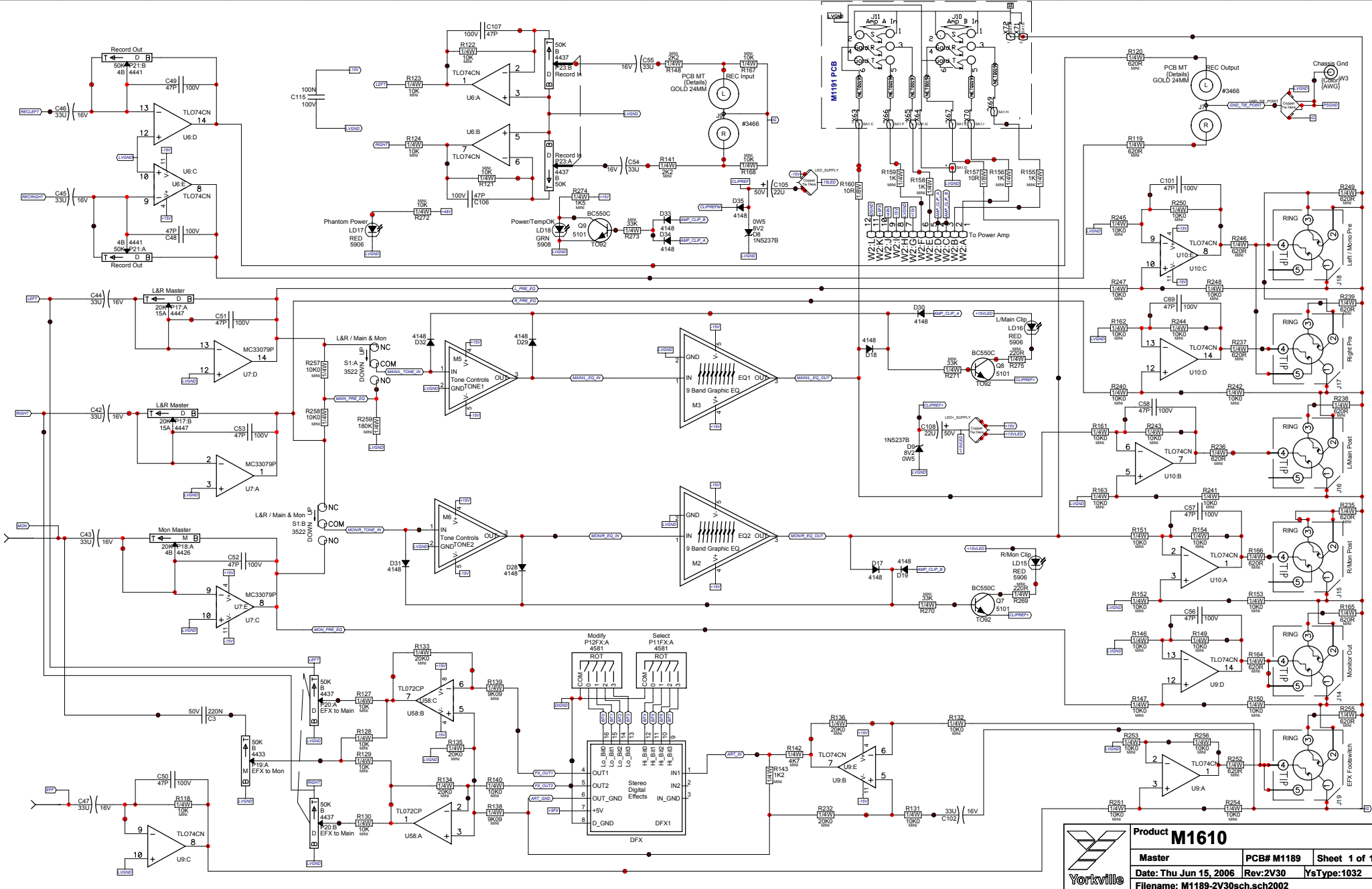
O DELAYS & CHORUS

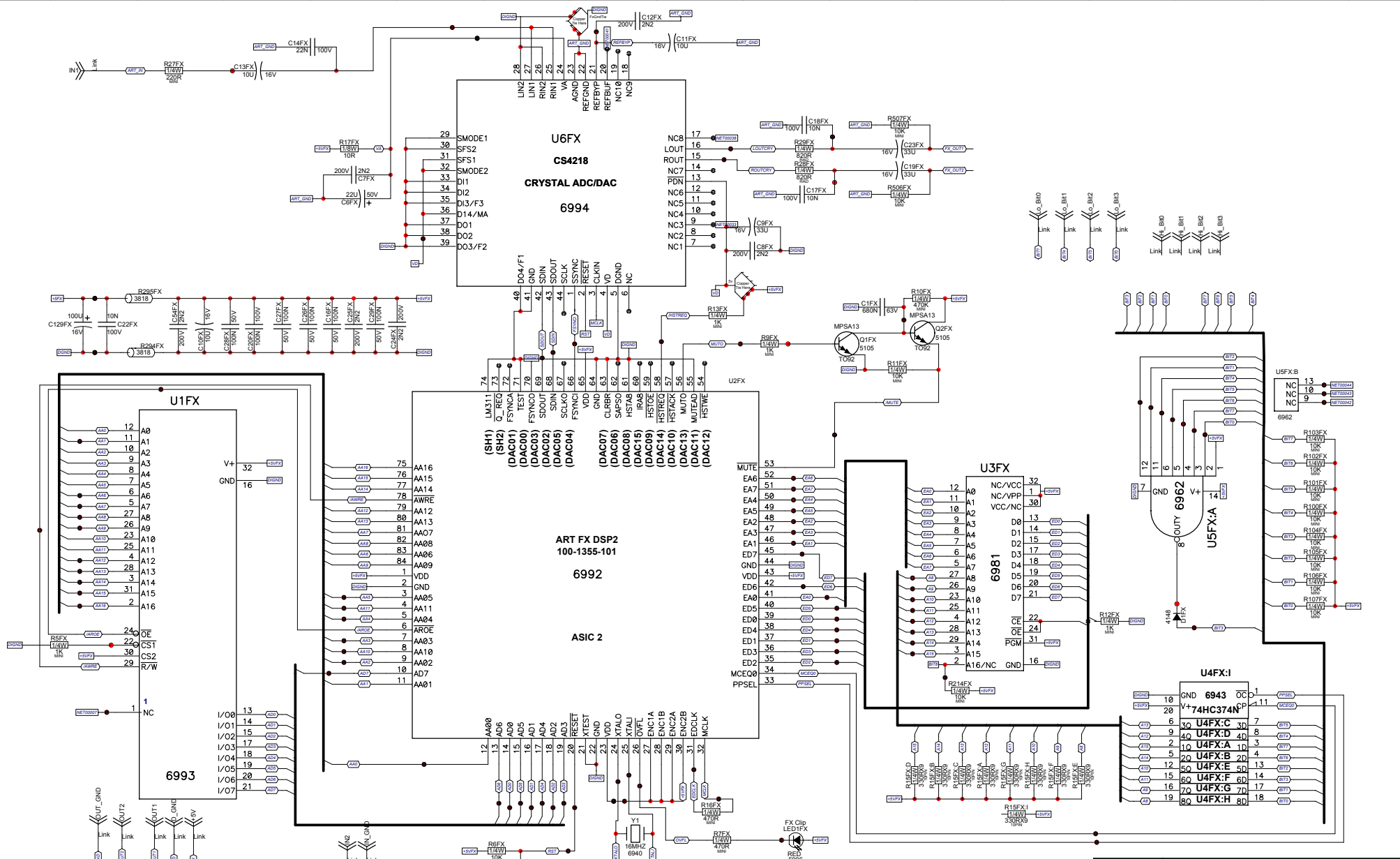
- 1 50ms doubling delay + slow chorus
- 2 80ms slap delay + medium chorus
- 3 100ms slap delay + medium chorus
- 4 150ms regen delay + slow chorus
- 5 175ms regen delay + medium chorus
- 6 200ms regen delay + slow chorus
- 7 225ms regen delay + medium chorus
- 8 250ms regen delay + slow chorus
- 9 275ms regen delay + medium chorus
- 10 300ms regen delay + slow chorus
- 11 325ms regen delay + medium chorus
- 12 350ms regen delay + slow chorus
- 13 370ms regen delay + medium chorus
- 14 380ms regen delay + slow chorus
- 15 390ms regen delay + medium chorus
- 16 400ms regen delay + slow chorus

P SPECIAL EFFECTS

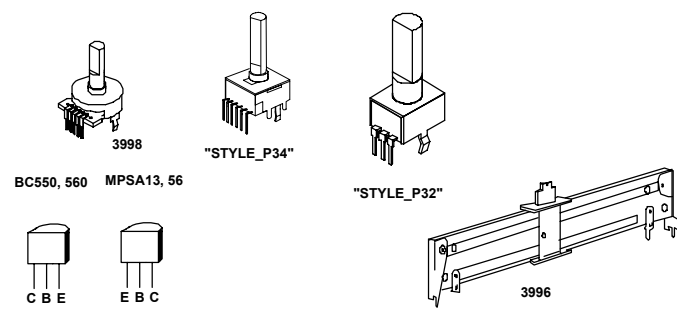
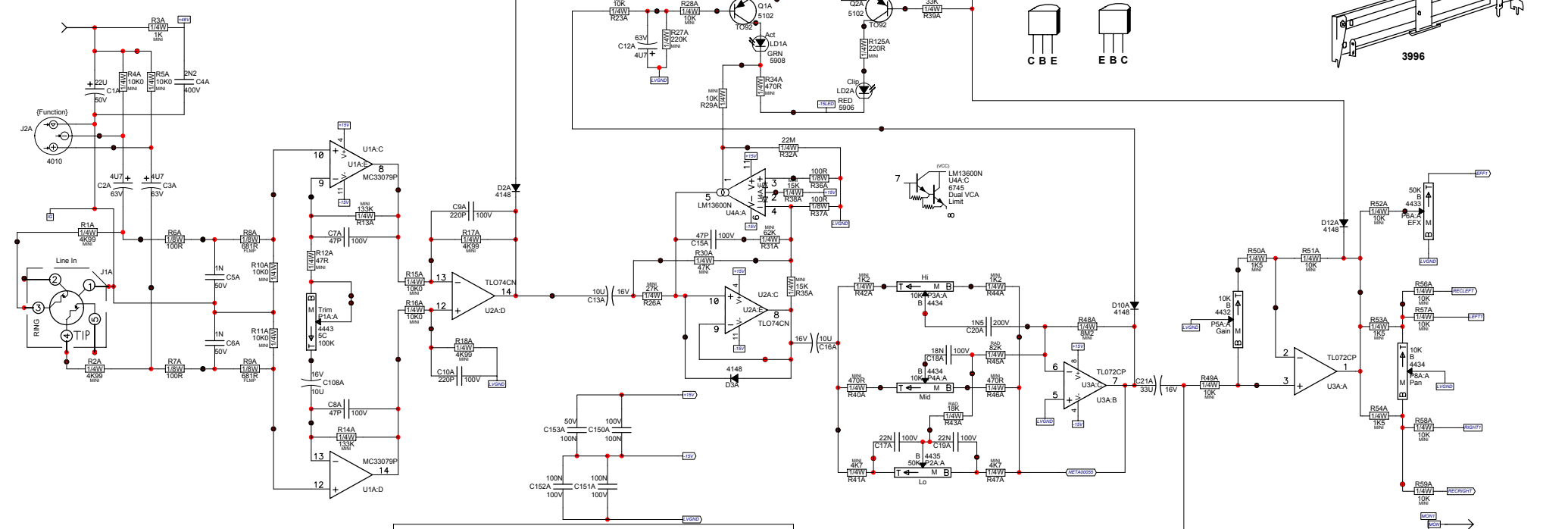
- 1 Pitch Shift octave down
- 2 Pitch Shift octave up
- 3 Pitch Shift major 3rd up
- 4 Pitch Shift major 5th down
- 5 Dual Pitch Shift major 3rd and 5th up
- 6 Dual Pitch Shift octave up and octave down
- 7 Detune Flanger
- 8 Slow Flanger w/ medium regen
- 9 Slow Flanger w/ high regen
- 10 Medium Flanger w/ medium regen
- 11 Medium Flanger w/ high regen
- 12 250ms high regen delay
- 13 500ms medium regen delay
- 14 500ms high regen delay
- 15 Slow Flanger + Pitch Shift octave down
- 16 Slow Flanger + Pitch Shift octave up

255 PRESET 16 Bit DIGITAL EFFECTS PROCESSOR





**Only Channel 1 is shown,
Channels 1 - 4 employ the
same circuit.**



M1189 POTLIST			
M1610			
MODEL(S):-	FUNCTION	PART#	NOB (NEW)
P25-34 L&R	Graphic EQ	3988	N/A
P1A,1B,1C,1D,1E,1F	Trim	4443	9915 P32
P9G,9H	Mon Send	4443	9917 P32
P6A,5B,5C,5D,5E,5F	Level	4432	9920 P32
P15G,15H,6A,6B,6C,6D,6E,6F	FX Send	4433	9918 P32
P7A,7B,7C,7D,7E,7F	Mon Send	4433	9917 P32
P3A-F,4A-F	HL, Mid	4434	9916 P32
P16G,16H, 8A-F	Bal, Pan	4434	9919 P32
P2A,2B,2C,2D,2E,2F	Lo	4435	9916 P32
P35,36,37,38	Master Treble, Bass	4435	9916 P32
P17-20	Master, FX2 Main	4437	9920 P34
P21,23	Rec Out	4437	9920 P34
P13G,13H,14G,14H	Stereo HI, Mid	4438	9916 P34
P12G,12H	Stereo Lo	4439	9916 P34
P11FX,12FX	FX Select, Modify	4581	8398 P23
P23	Tape/CD	4437	9915 P34
P18,19	Monitor, FX2 Mon	4433	9917 P34
R	P	K	P32
R	F	K	N
R	F	K	N
R	F	K	N
R	F	K	N
R	F	K	N
R	F	K	N
R	F	K	N

M1189 HISTORY			
MODEL(S):-	M810/M1610	#	DATE
		1	31 Dec 2003
		2	2 Feb 2004
		3	17 Feb 2004
		4	D
		5	D
		6	24 Feb 2004
		7	7-APR-2004
		8	D
		9	15-APR-2004
		10	D
		11	D
		12	6-MAY-2004
		13	Aug 4, 2004
		1	AUG-16-2004
		2	D
		3	NOV-23-2004
		4	JAN-05-2005
		5	21 Apr 2005
		6	4 Aug 2005
		7	D
		8	D
		9	14 JUN 2006
		10	D
		11	D
		12	D
		13	D

M1189 DRILL HISTORY			
MODEL(S):-	M810/M1610	#	DATE
		1	24-FEB-2004
		2	21-APR-2005
		3	4-AUG-2005
		4	D
		5	D
		6	D

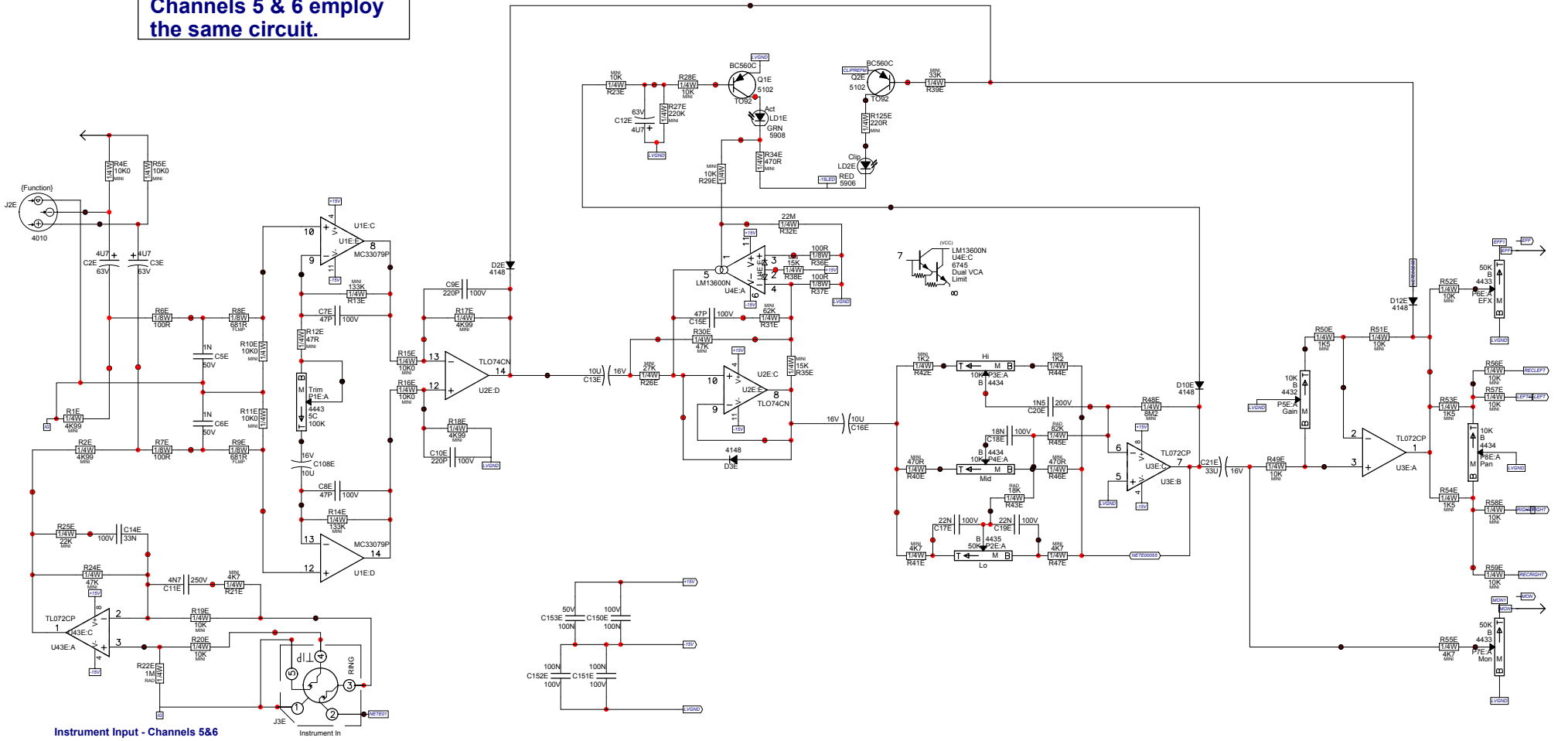
M1189 PENDING CHANGES			
MODEL(S):-	M1610	#	PC#
		1	PC#6718
		2	PC#6771
		3	PC#6792
		4	PC#6818
		5	PC#6816
		6	PC#7091



Product M1610		
Mono Ch1	PCB# M1189	Sheet 3 of 16
Date: Thu Jun 15, 2006	Rev:2V30	YsType:1032
Filename: M1189-2V30sch.sch2002		

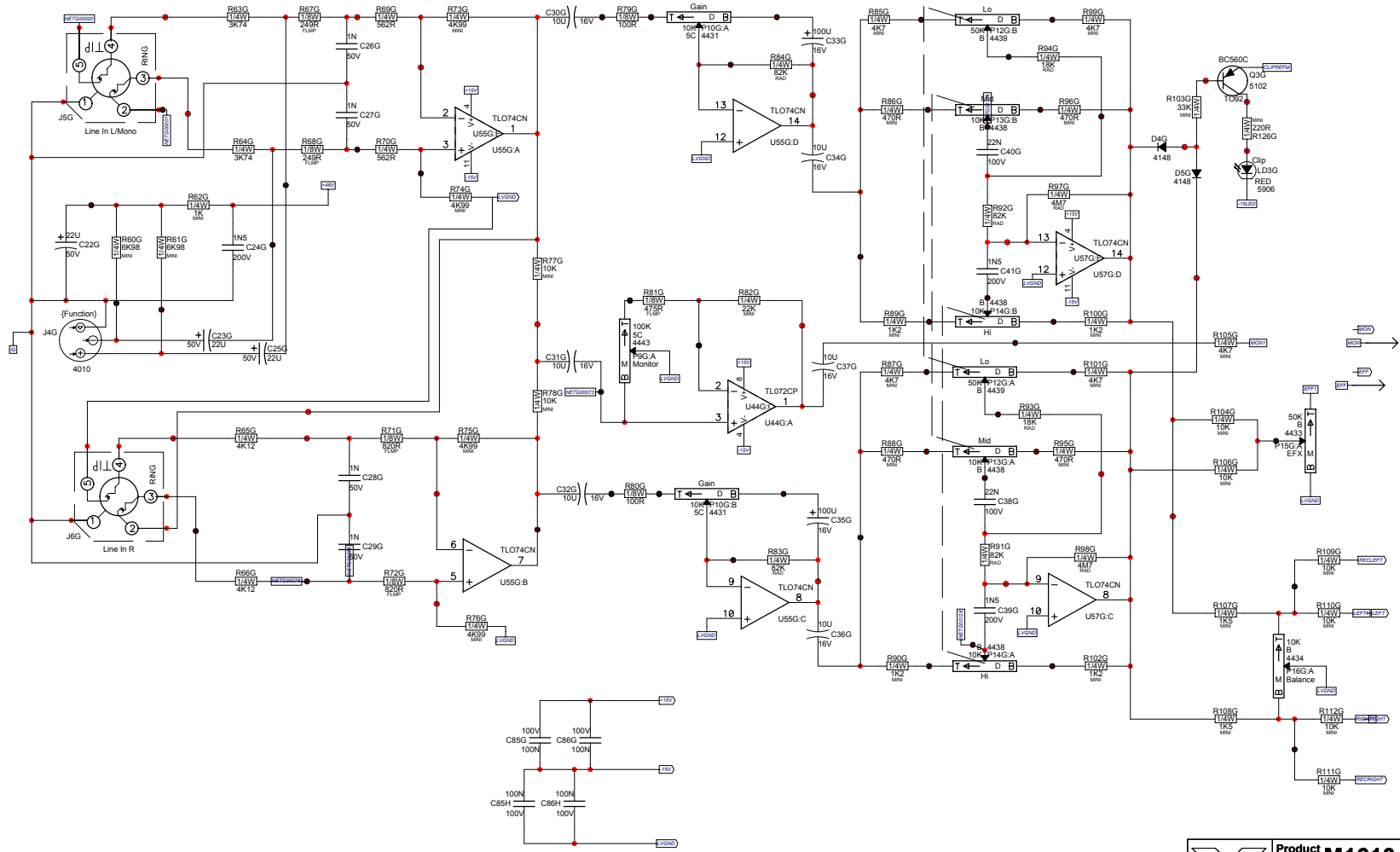
*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

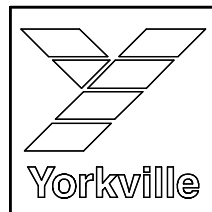
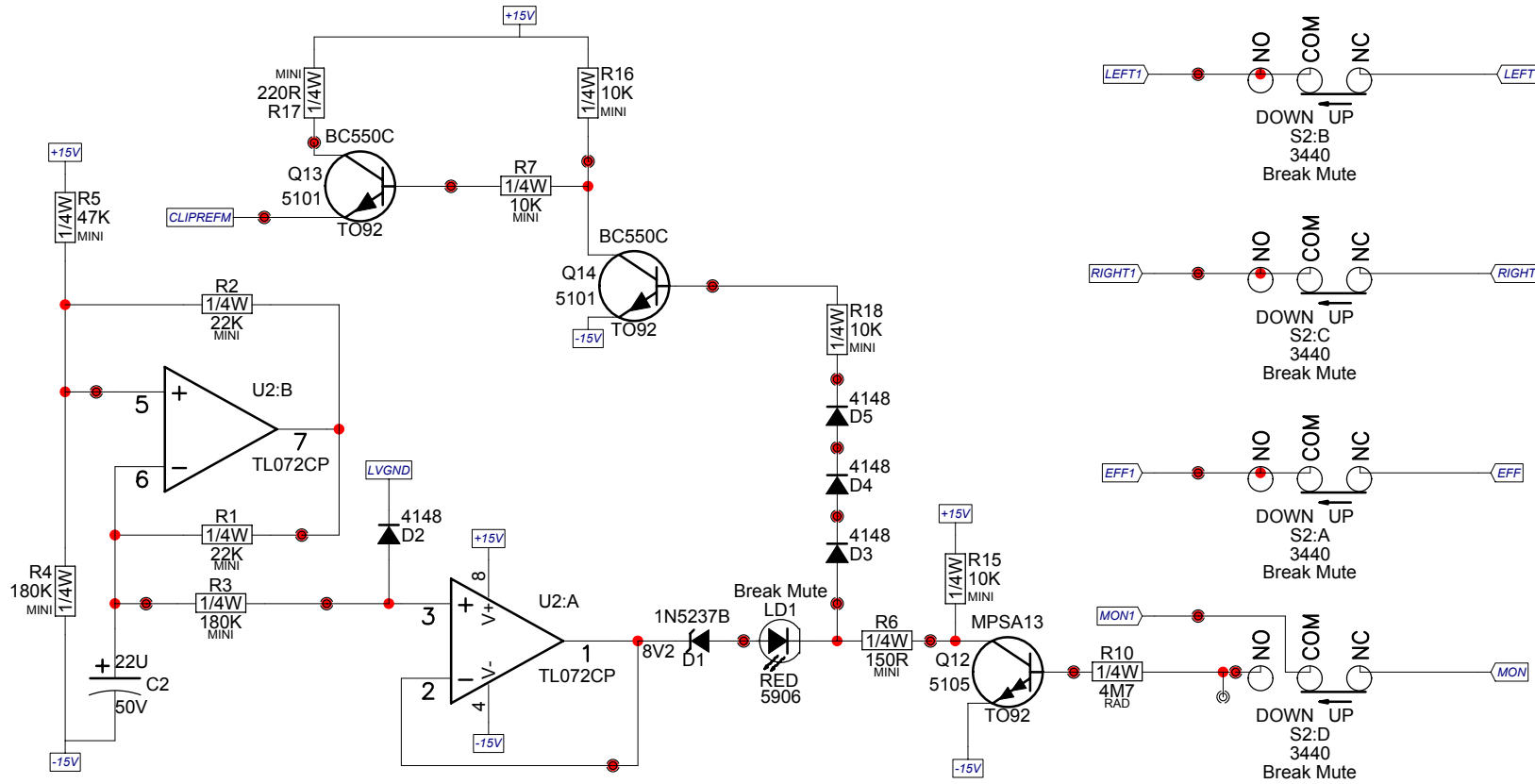
Only Channel 5 is shown.
Channels 5 & 6 employ
the same circuit.



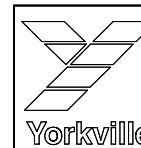
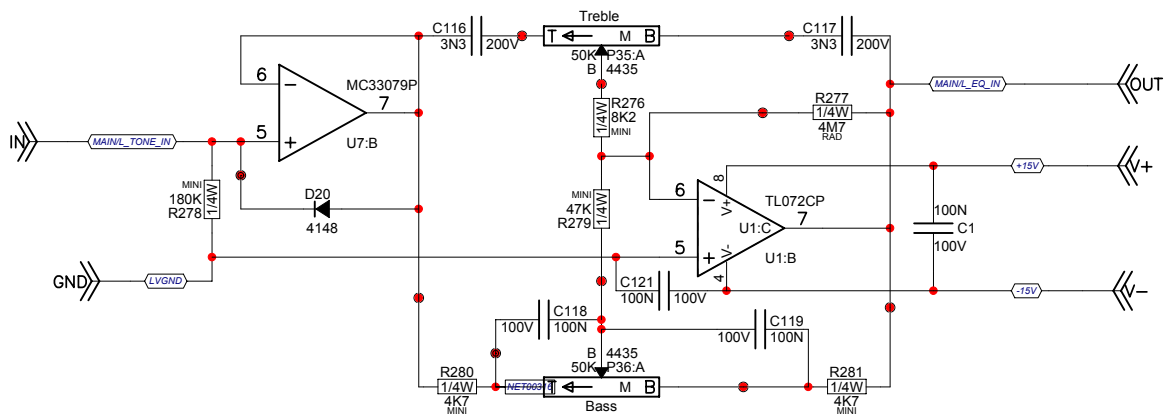
Instrument Input - Channels 5&6

Only channels 7&8 are shown.
Channels 9&10 employ
the same circuit.

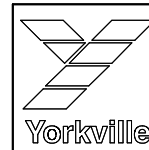
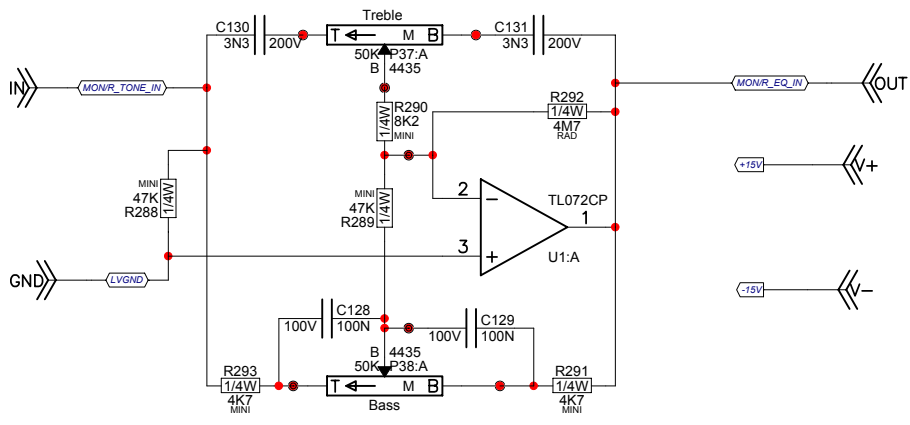




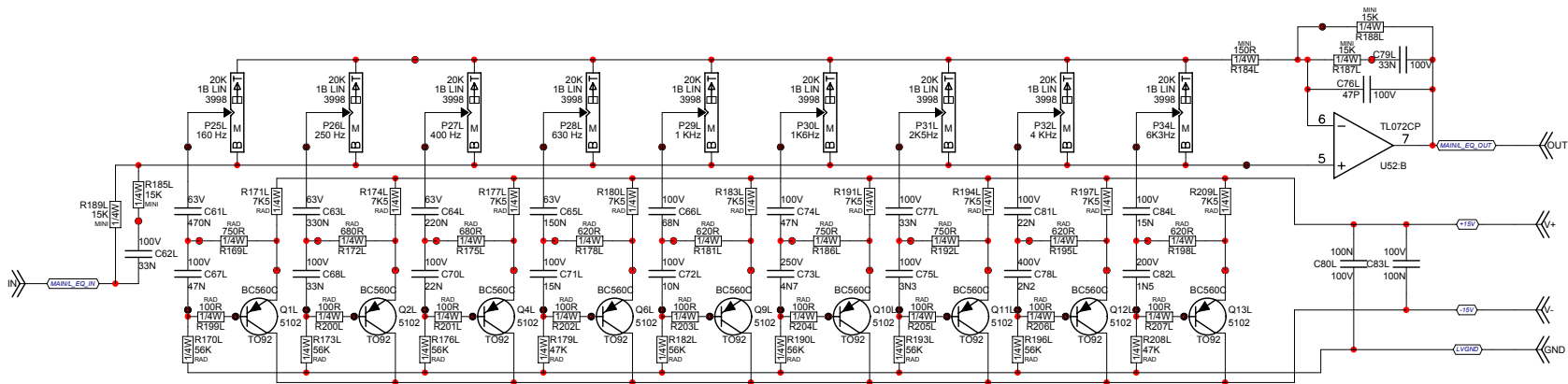
Product M1610		
BreakMute	PCB# M1189	Sheet 11 of 16
Date: Thu Jun 15, 2006	Rev: 2V30	YsType: 1032
Filename: M1189-2V30sch.sch2002		



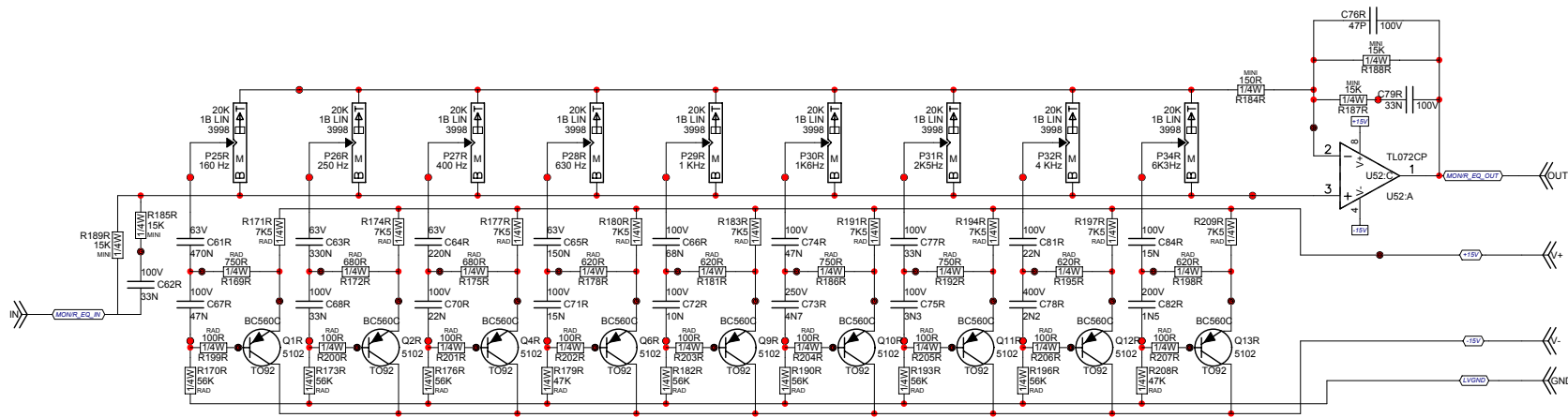
Product M1610		
TONE1	PCB# M1189	Sheet 13 of 16
Date: Thu Jun 15, 2006	Rev: 2V30	YsType: 1032
Filename: M1189-2V30sch.sch2002		



Product M1610		Sheet 14 of 16
TONE2	PCB# M1189	YsType:1032
Date: Thu Jun 15, 2006	Rev:2V30	
Filename: M1189-2V30sch.sch2002		



Product M1610		
EQ1	PCB# M1189	Sheet 15 of 16
Date: Thu Jun 15, 2006	Rev: 2V30	YsType: 1032
Filename: M1189-2V30sch.sch2002		



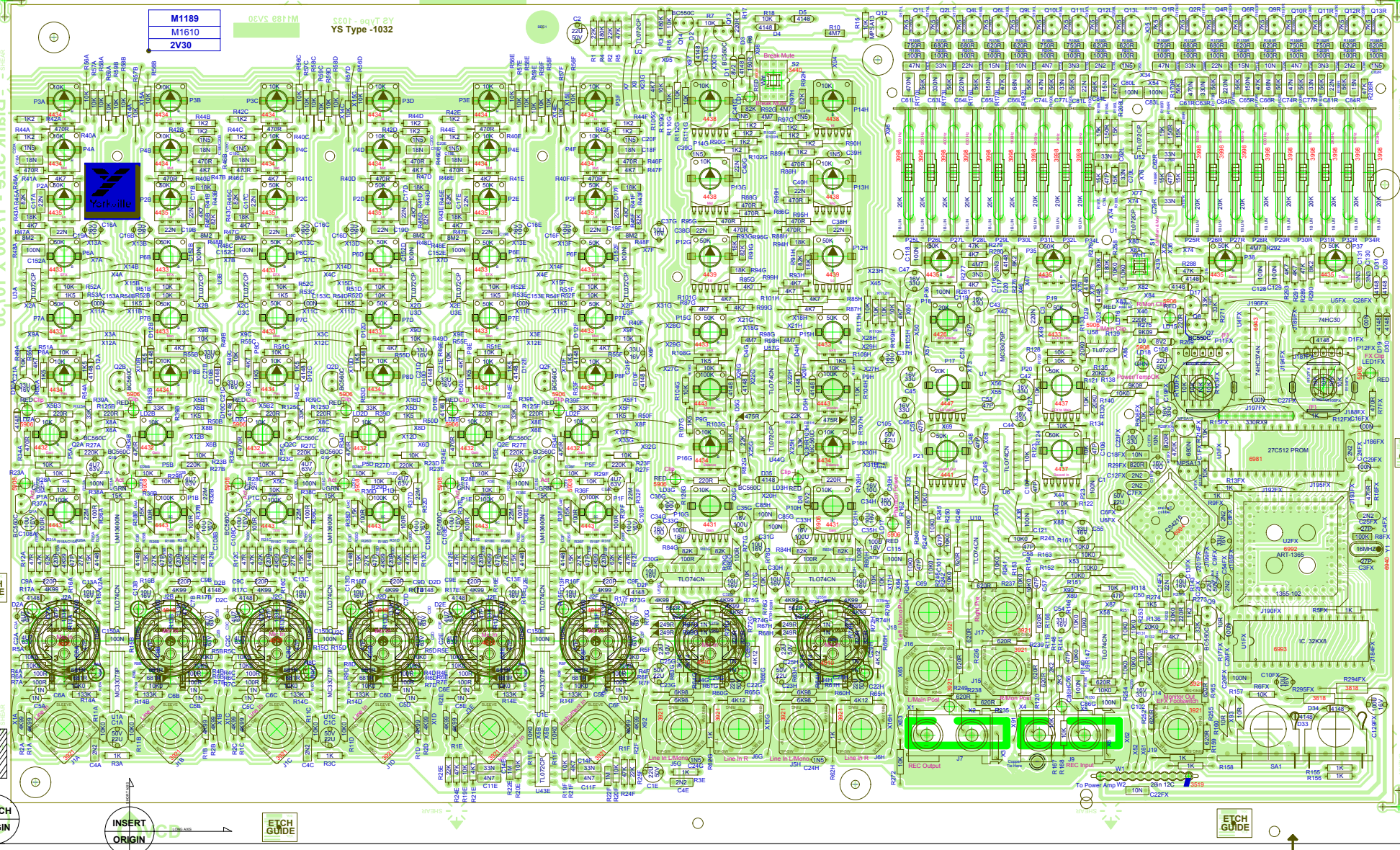
Product M1610		
EQ2	PCB# M1189	Sheet 16 of 16
Date: Thu Jun 15, 2006	Rev: 2V30	YsType: 1032
Filename: M1189-2V30sch.sch2002		

M1189
M1610
2V30

0EV5 8B11M

SF01 - 09V1 2V
YS Type -1032

Blank Size - 17900 x 10750
05V01 x 00EY1 - 0512 XnsB12



ETCH GUIDE

ETCH GUIDE

CLINCH ORIGIN

INSERT ORIGIN

ETCH GUIDE

ETCH GUIDE

SEE LAYOUT DOCUMENTATION



SEE LAYOUT DIAGRAM



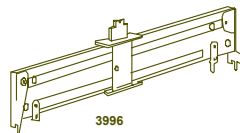
PRODUCTION NOTES

1. Stuff 1 M1191 pcb here.
2. U3FX & U1FX - Mount 28 pin IC sockets to the RIGHT side of the 32 holes.

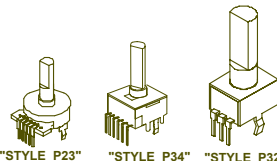
M1189 HISTORY				M1189 POTLIST					
MODEL(S):- M1610				MODEL(S):- M1610					
#	DATE	VER#	DESCRIPTION OF CHANGE	REF	FUNCTION	PART#	NOB	(NEW)	
1	31 Dec, 2003	v1.00p3	Moved D3 anode to cathode of LD1	P25-34 L&R	Graphic EQ	3998	N/A	N	
2	2 Feb, 2004	1.00	Change break mute flash rate	P1A,1B,1C,1D,1E,1F	Trim	4443	9915	N	
3	17 Feb, 2004	1.01	Move C7a-f, R13a-f to make room for AA series xlr.	P9G,9H	Mon Send	4443	9917	N	
4	.	.	Change hole sizes for AA series xlr.	P5A,5B,5C,5D,5E,5F	Level	4432	9920	N	
5	.	.	Changed U1FX SRAM to 32kX8	P15G,15H,6A,6B,6C,6D,6E,6F	FX Send	4433	9918	N	
6	24 Feb, 2004	1.02	Changed 3925 XLRs to 4010 AA series	P7A,7B,7C,7D,7E,7F	Mon Send	4433	9917	N	
7	7-APR-2004	2.00	PC#6675 Moved C150(A,C,E) to avoid hitting ICs	P3A-F,4A-F	Hi, Mid	4434	9916	N	
8	.	.	Removed routing from board - slots done on drill now	P16G,16H, 8A-F	Bal, Pan	4434	9919	N	
9	15-APR-2004	2.00	PC#6677 Chg X41 to C3(220n 50V), set gerber so TIE4 gets output properly	P2A,2B,2C,2D,2E,2F	Lo	4435	9916	N	
10	.	.	PC#6679 Chg. C21(A,B,C,D,E,F) from 470nF to 33uF	P35,36,37,38	Master Treble, Bass	4435	9916	N	
11	6-MAY-2004	2.00	PC#6686 MOVED C23FX AWAY FROM SPACER	P17,20	Master, Rec Out	4441	9920	N	
12	Aug 4, 2004	2.00	Fixed silk screen on U6FX and U2FX	P21	FX2 Main	4437	9920	N	
13	AUG-16-2004	2.10	PC#6718 CHANGE R140 TO 10K0 (6116), R138&R139 TO 9K09 (6112)	P13G,13H,14G,14H	Stereo Hi, Mid	4438	9916	N	
1	D	V	PC#6771:#3571->#3507 SKT FOR #6993 SRAM (GT)	P12G,12H	Stereo Lo	4439	9916	N	
2	NOV-23-2004	.	GT:PC#6792:P17 FROM 50KB #4441 TO 20KA #4447	P11FX,12FX	FX Select, Modify	4581	8398	N	
3	JAN-05-2005	.	Updated 3921 jacks for clinch.	P23	Tape/CD	4437	9915	N	
4	21 Apr, 2005	2.11	AH, PC#6816, ADD A HOLE FOR FEEDING GREEN GROUND WIRE.	P18	Monitor	4441	9917	N	
5	4 Aug 2005	2.20	AH, PC#7091, UPDTAE #5322 CHANGE DRILL SIZE TO #0	P19	FX2 Mon	4433	9917	N	
6	14 JUN 2006	2.30	PC#6989, STRENGTHEN RCA JACK SECTION BREAKAWAY #4581 UPDATED, PROPER DRILLING ORDER	R	F	P	K	N	
7	.	.		R	F	P	K	N	
8	.	.		R	F	P	K	N	
9	.	.		R	F	P	K	N	
10	D	V	N	R	F	P	K	N	
11	D	V	N	R	F	P	K	N	
12	D	V	N	R	F	P	K	N	
13	D	V	N	R	F	P	K	N	

M1189 DRILL HISTORY				M1189 PENDING CHANGES	
MODEL(S):- M810/M1610				MODEL(S):- M1610	
#	DATE	VER#	DESCRIPTION OF CHANGE	#	PC#
1	24-FEB-2004	V01	N	1	PC
2	21-APR-2005	V02	N	2	PC
3	4-AUG-2005	V03	N	3	PC
4	D	V	N	4	PC
5	D	V	N	5	PC
6	D	V	N	6	PC

*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY



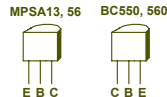
3996



"STYLE_P23"

"STYLE_P34"

"STYLE_P32"

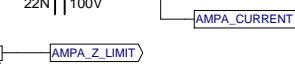
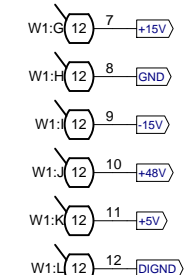
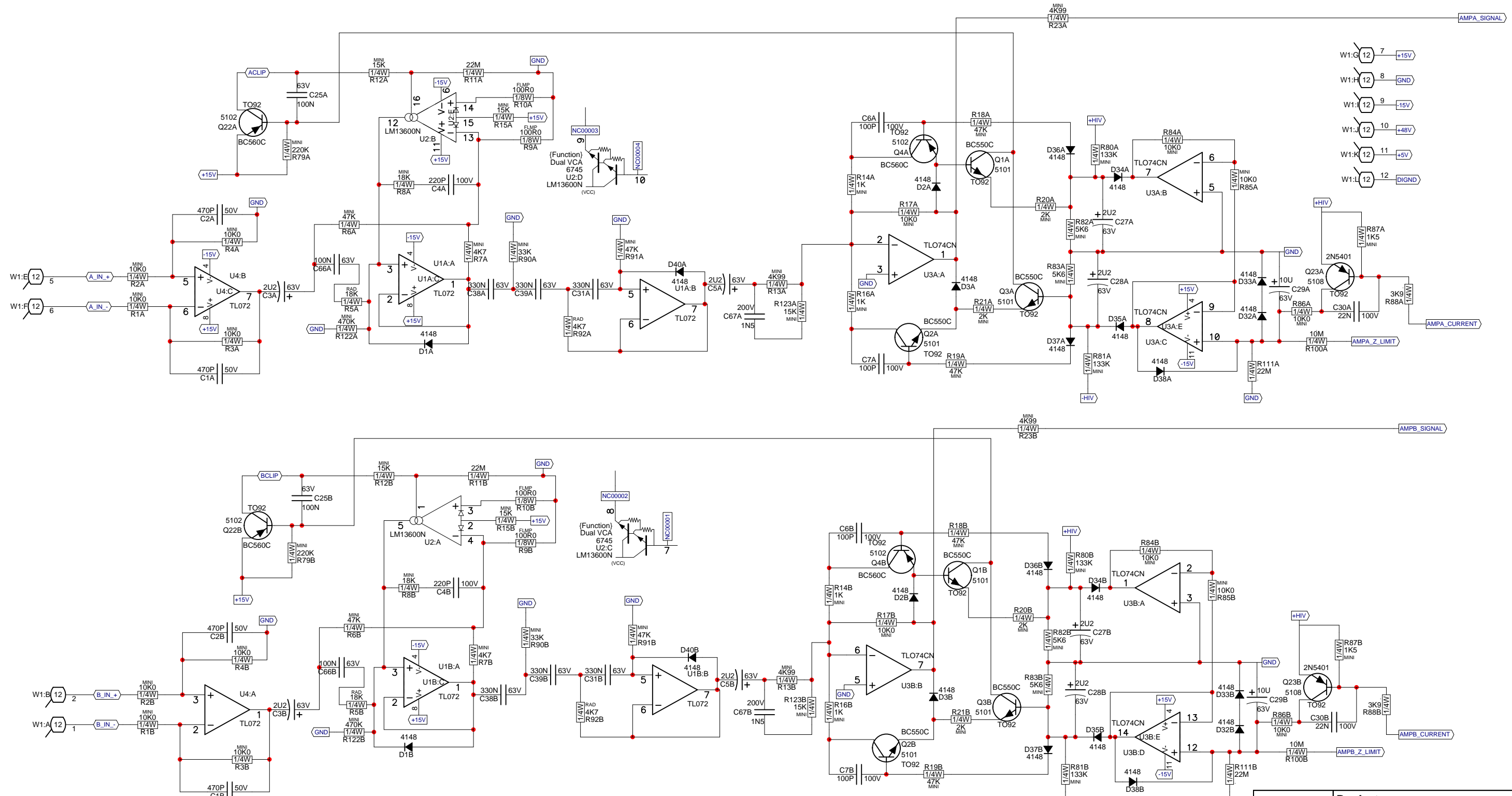


MPSA13, 56

BC550, 560

E B C

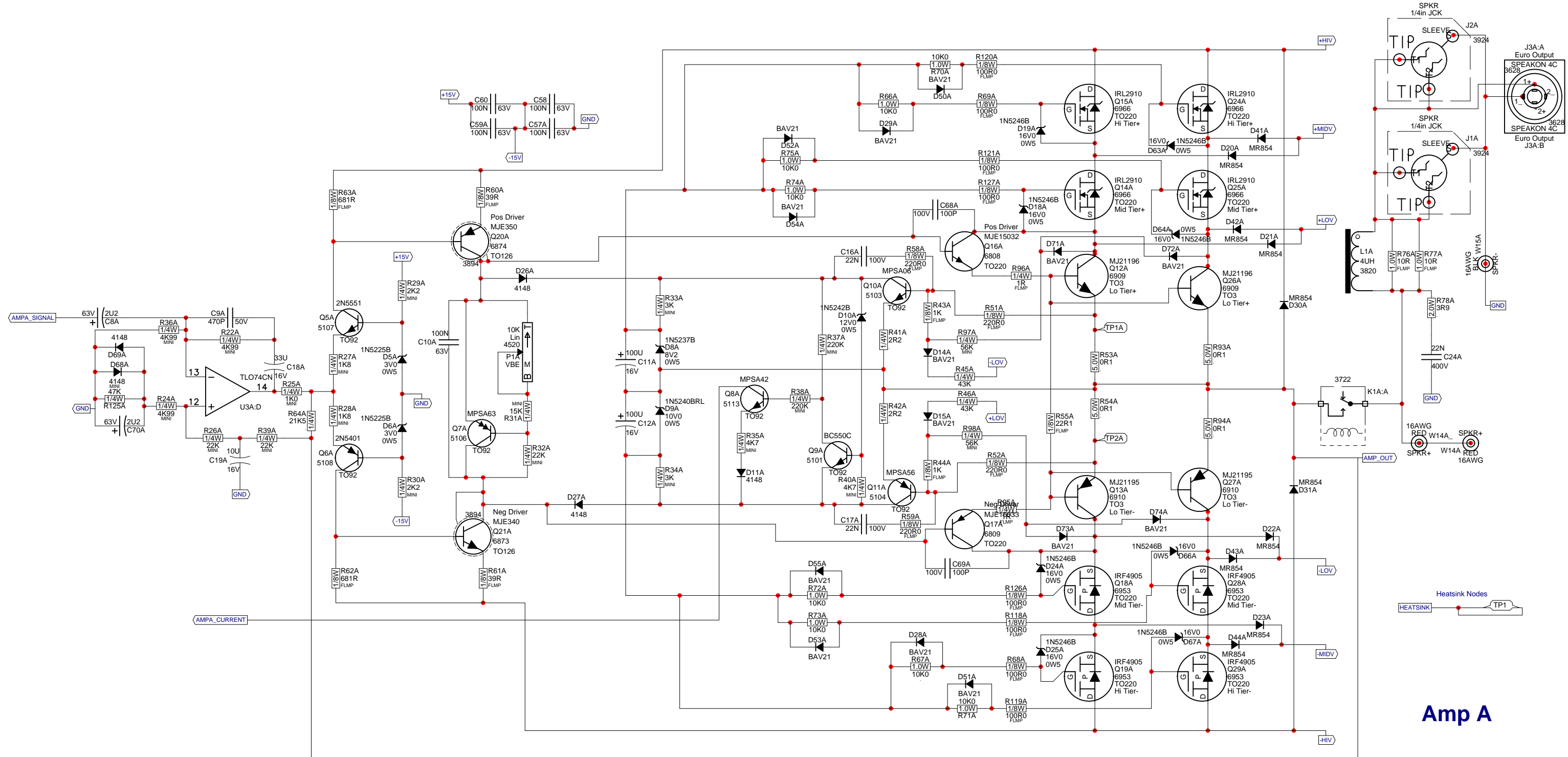
C B E



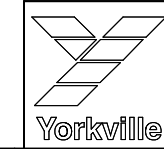
Yorkville

Product M1610

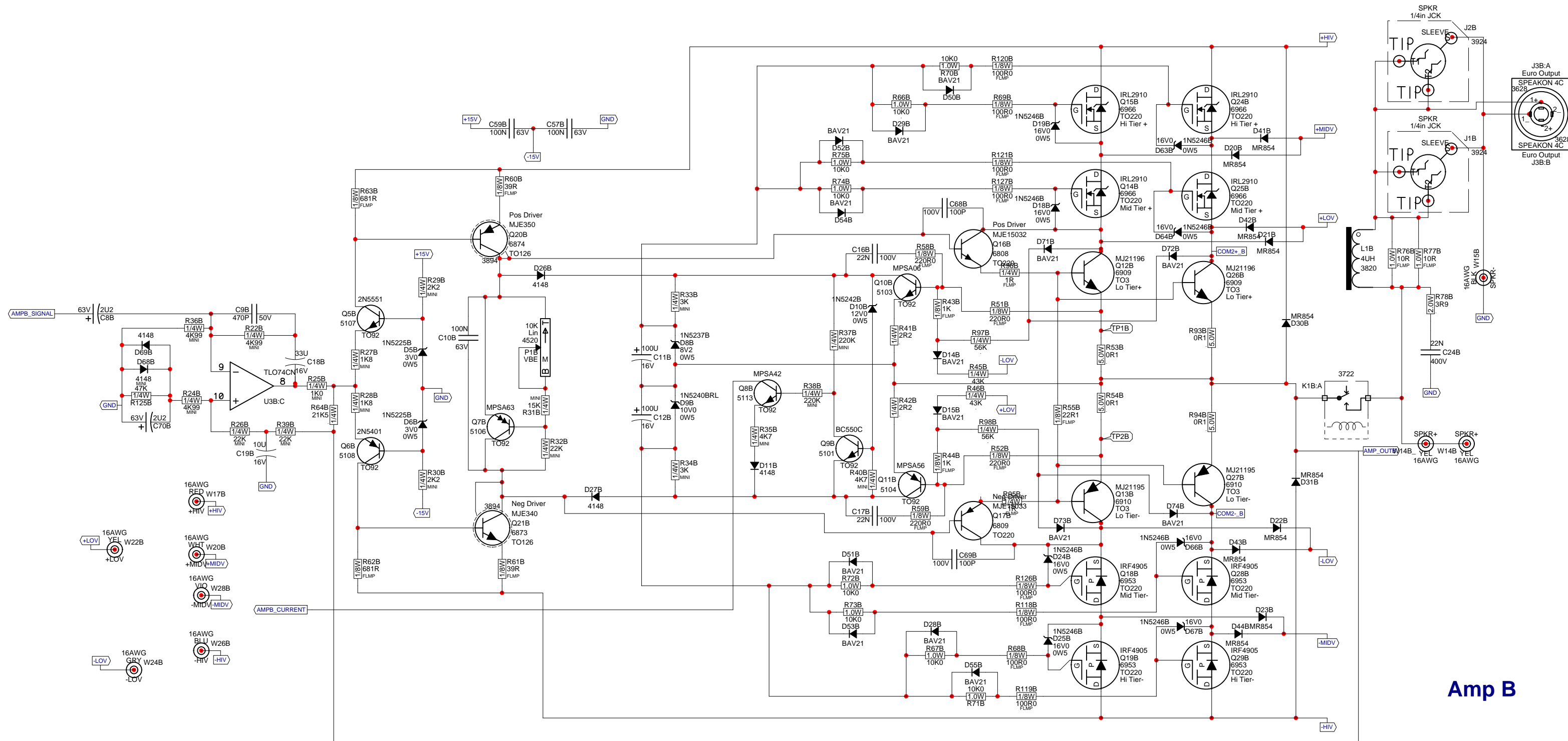
Ampln	PCB# M1190	Sheet 1 of 4
Date: Thu May 29, 2008	Rev:v9.00	YsType:.
Filename: M1190V900sch.sch2002		



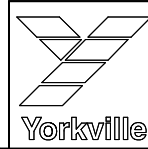
Amp A



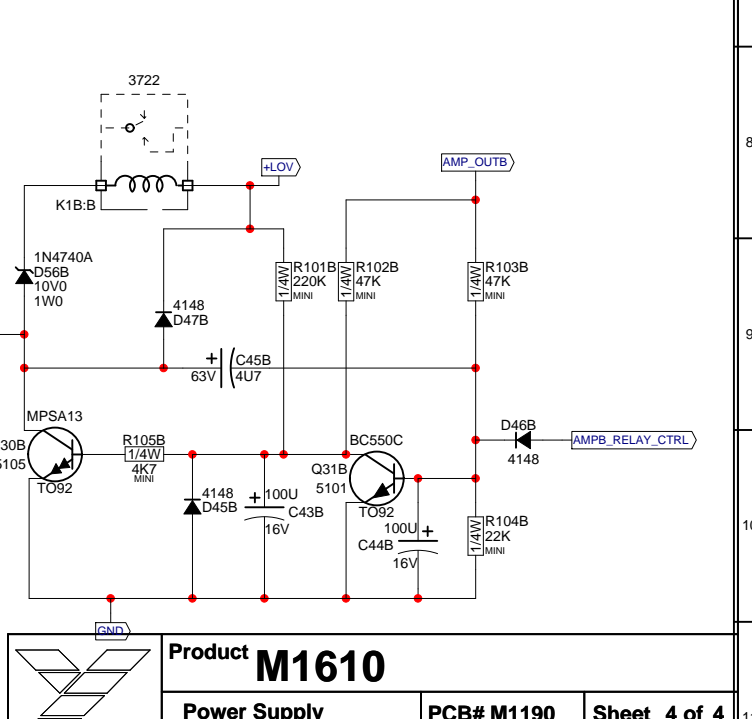
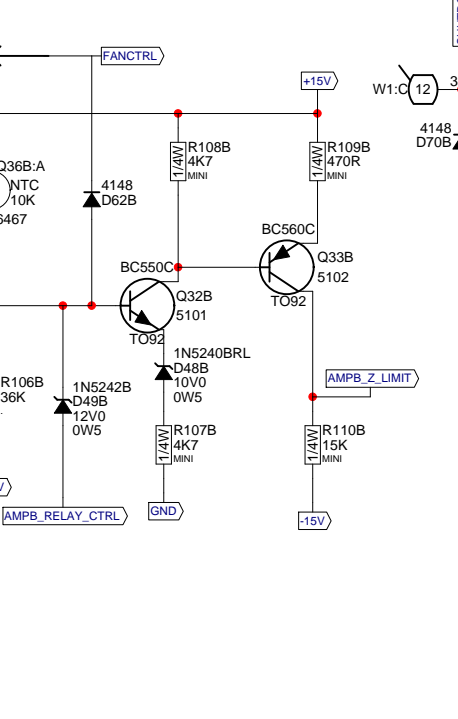
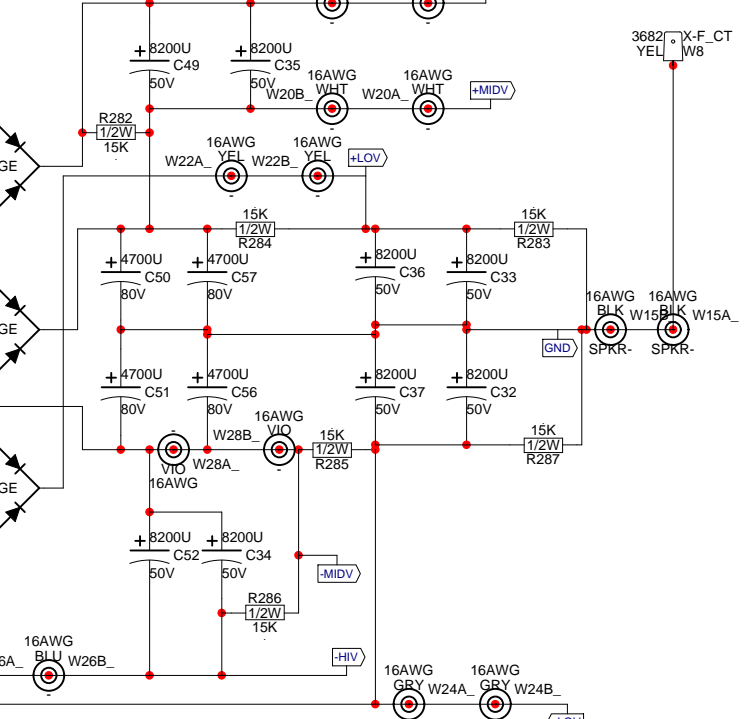
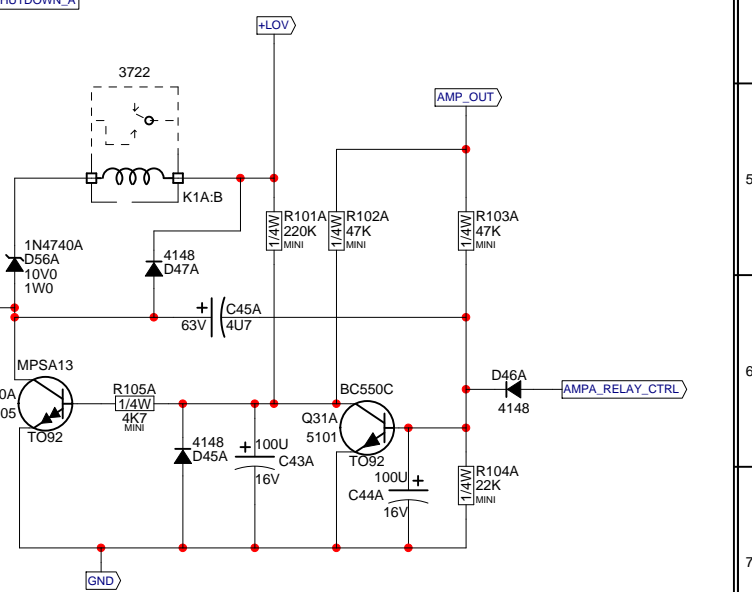
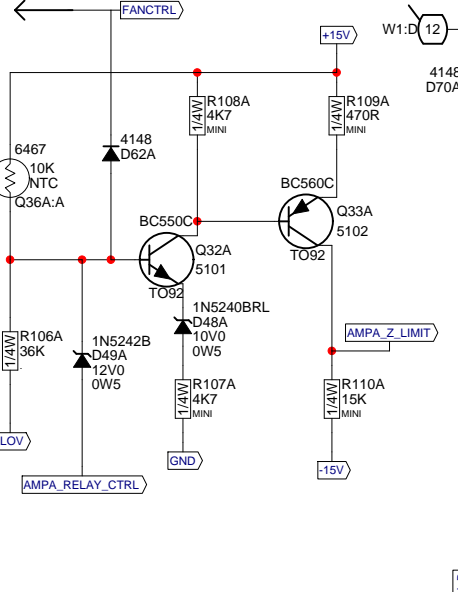
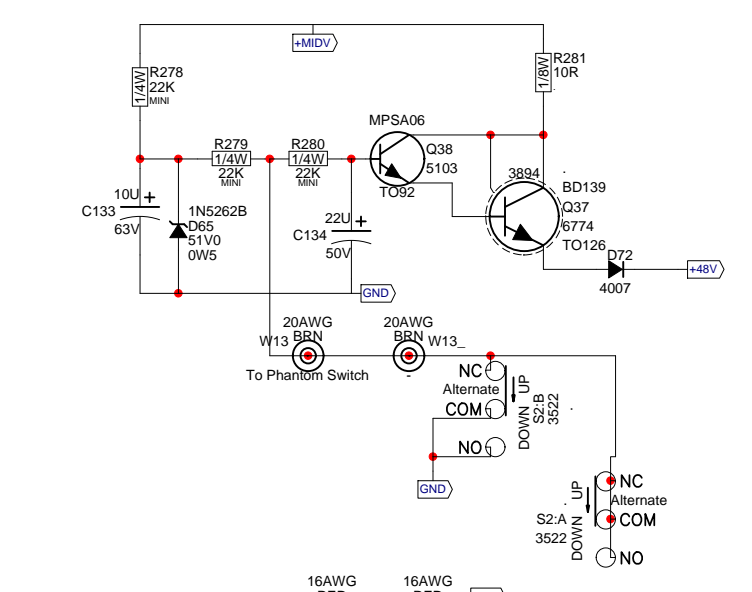
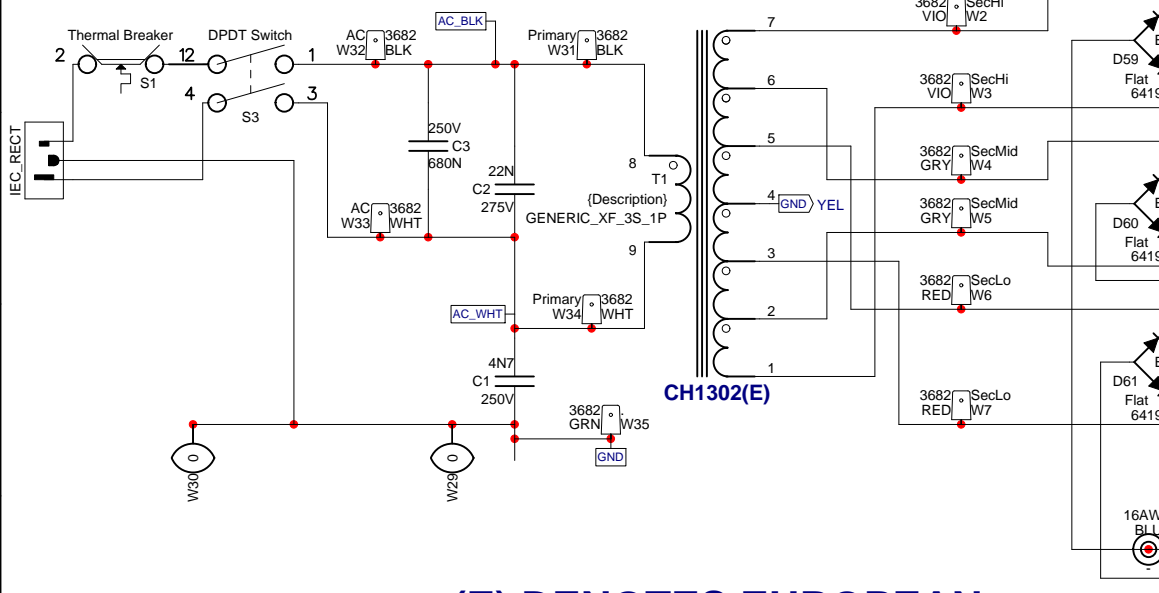
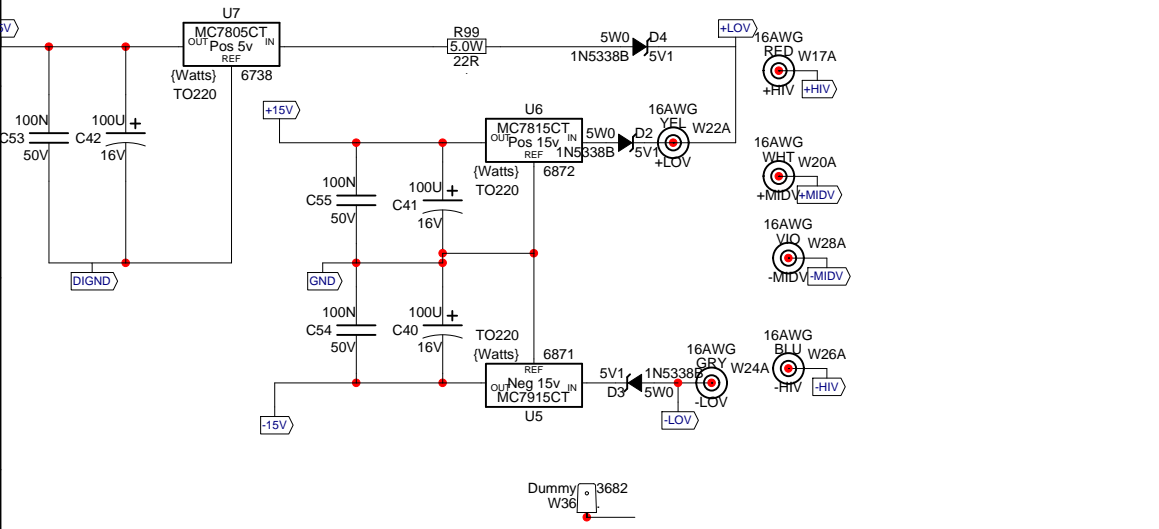
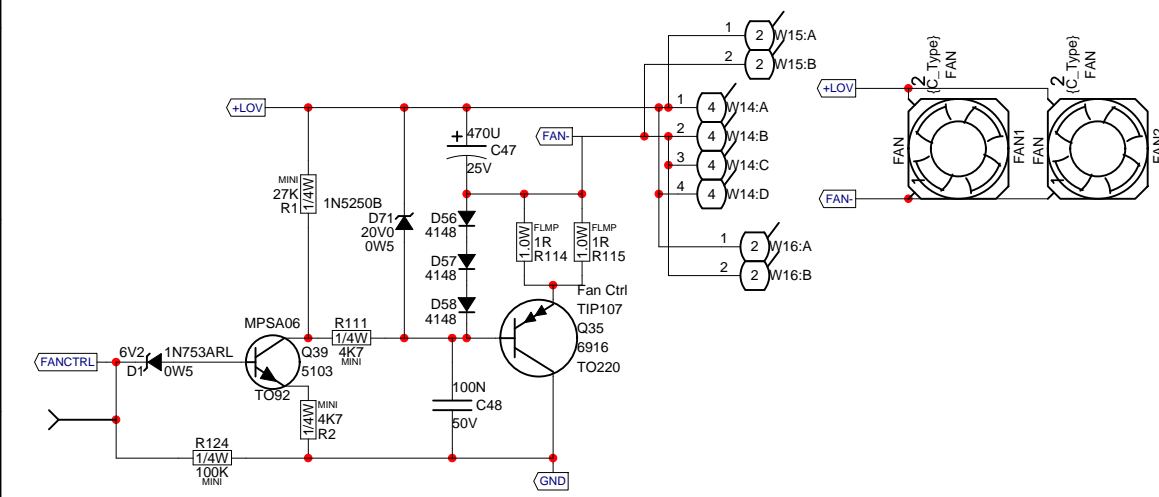
Product M1610		
Channel A	PCB# M1190	Sheet 2 of 4
Date: Thu May 29, 2008	Rev:v9.00	YsType:..
Filename: M1190V900sch.sch2002		



Amp B

	Product M1610		
	Channel B	PCB# M1190	Sheet 3 of 4
	Date: Thu May 29, 2008	Rev:v9.00	YsType:..
	Filename: M1190V900sch.sch2002		

M1190.PCB_DATABASE_HISTORY				#	DATE	VER#	DESCRIPTION OF CHANGE
MODEL(S):- M1610				24			R79A&B #6127 470K->#6127 220K
				25			ADDED D4 #5124 5V1/5W, R97&R98 #2006 1R/1W->#5124
				26			Corrected the position of some test nodes.
				27			Fixed BlankSize field
				28	Jun-15-2006	7.00	AH, PC#7021, SPACE BETWEEN R96 AND R53
				29			PC#6983, WIDEN TRACE BETWEEN C32 AND C37
				30			PC#7091, ENLARGE HOLE SIZE FOR #3522
				31	2008/04/07	v8.00	Swap c37 with c51; c51 with c36. Moved x11b & x31b to middle of HS slots. Solder updates, part updates.
				32			Changed Q8a&b from 5107 to 5113 - MPSA42
				33	2008/04/25	v8.00	PC#7590 - PS hum fix. Moved K1B away from X15B.
				34	2008/05/29	9.00	
				35			
				36			
				37			
				38			
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				49			
				50			



(E) DENOTES EUROPEAN

Product **M1610**

Power Supply PCB# M1190 Sheet 4 of 4

Date: Thu May 29, 2008 Rev:v9.00 YsType:..

Filename: M1190V900sch.sch2002

Set P1 for 8mv
between TP1 and TP2

Set P1 for 8mv
between TP1 and TP2

BEC
LOC

Heatsink covers this area

ETCH GUIDE

ETCH GUIDE

USE 2 OZ COPPER

CLICK ORIGIN

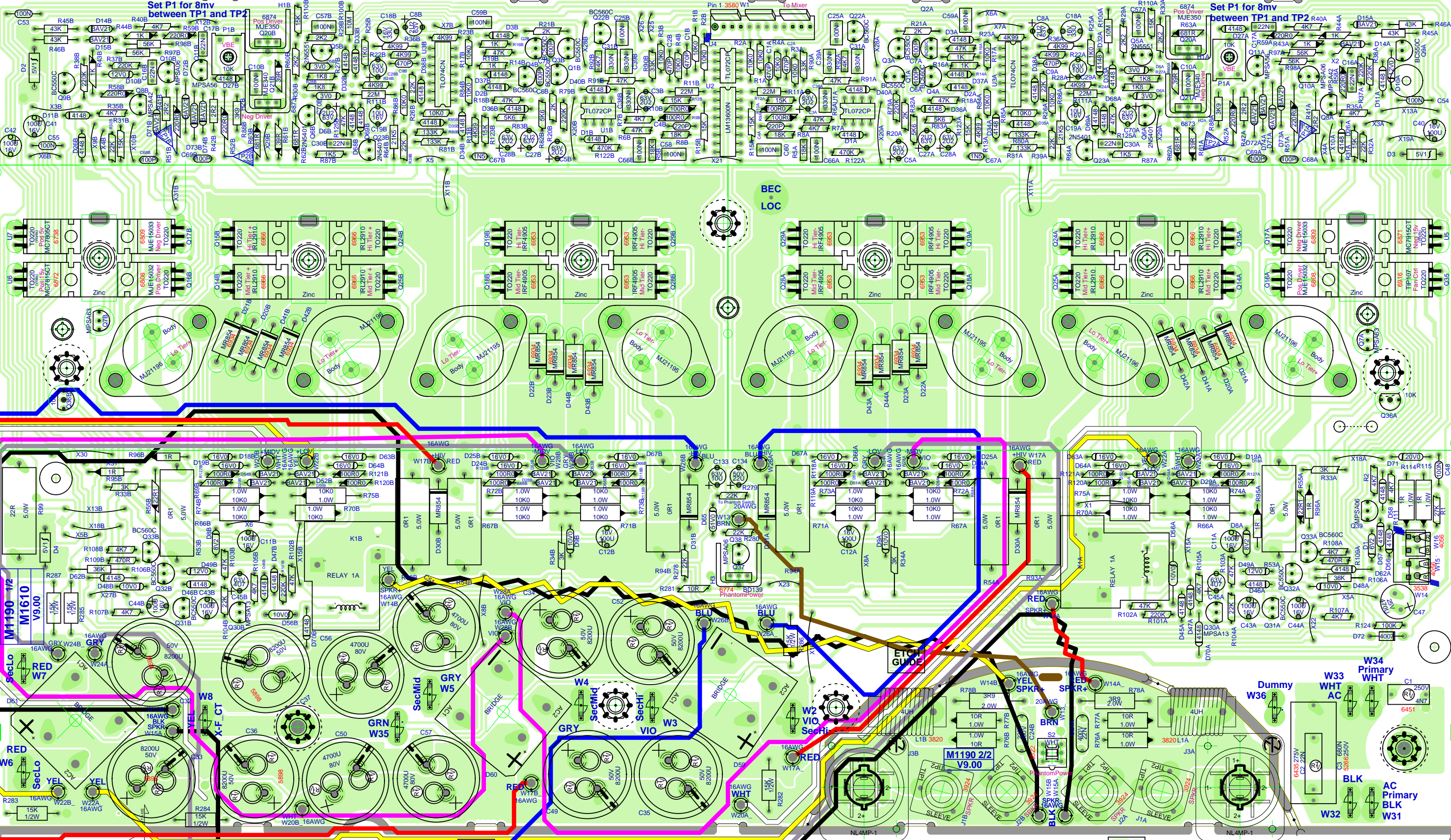
INSERT ORIGIN

ETCH GUIDE

ETCH GUIDE

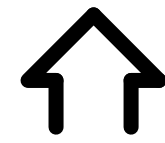
ETCH GUIDE

SEE LAYOUT DOCUMENTATION



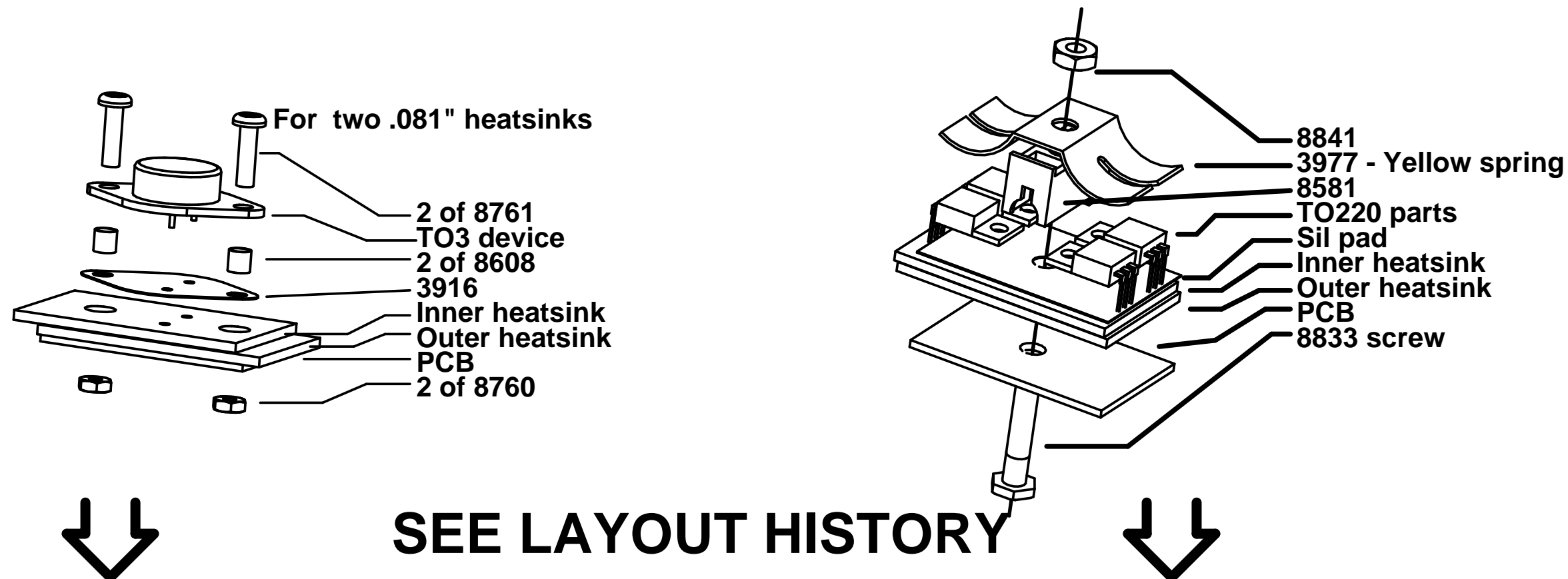


SEE LAYOUT DIAGRAM



M1190 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 prevent heatsink from shorting other components.





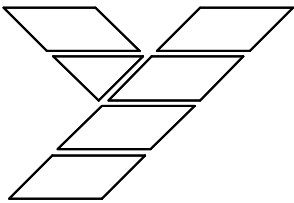
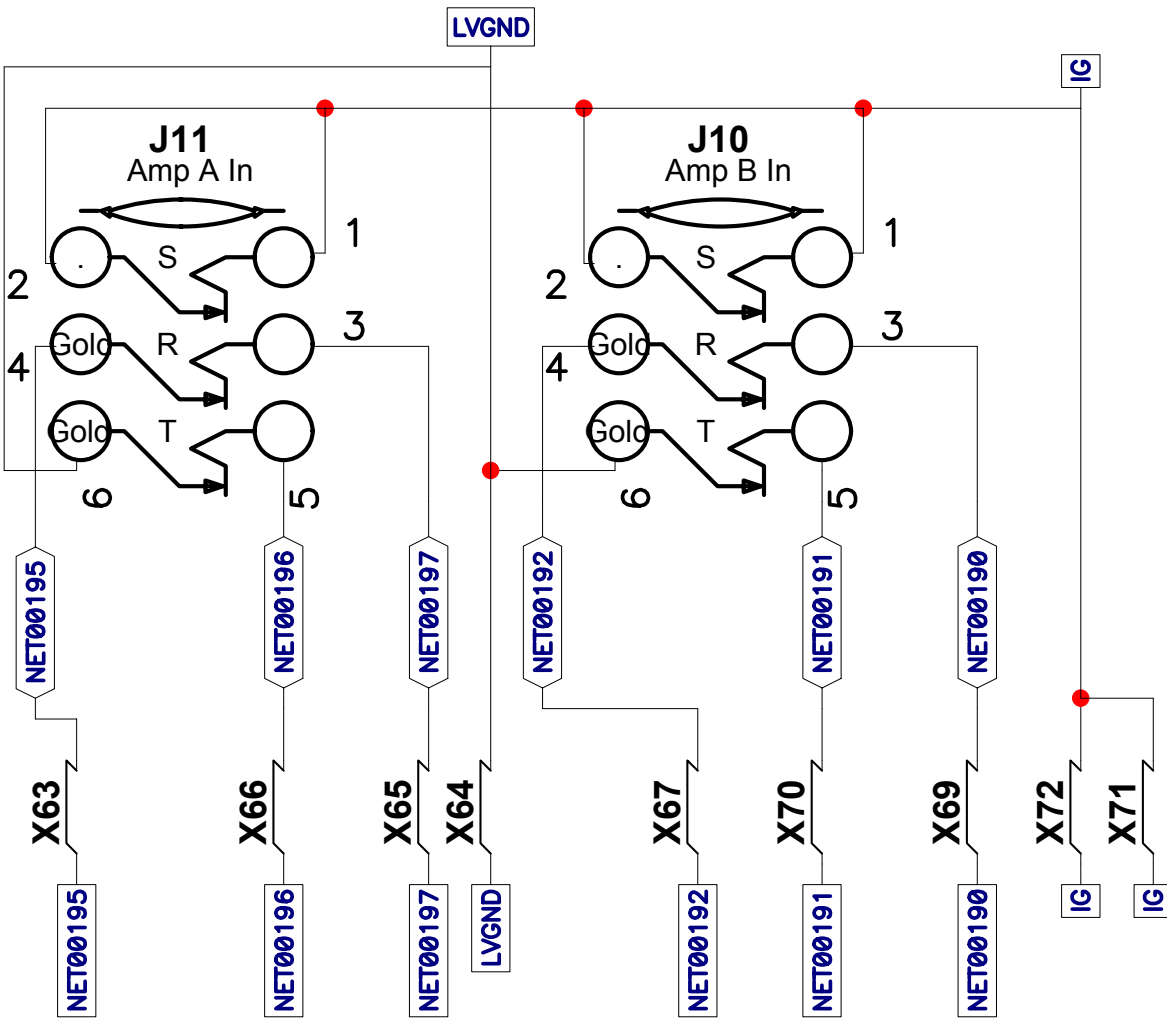
SEE PPRODUCTION NOTES



M1190.PCB_DATABASE_HISTORY				#	DATE	VER#	DESCRIPTION OF CHANGE
MODEL(S):- M1610				24	.	.	R79A&B #6127 470K->#6127 220K
				25	.	.	ADDED D4 #5124 5V1/5W, R97&R98 #2006 1R/1W->#5124
				26	.	.	Corrected the position of some test nodes.
				27	.	.	Fixed BlankSize field
				28	Jun-15-2006	7.00	AH, PC#7021, SPACE BETWEEN R96 AND R53
				29	.	.	PC#6983, WIDEN TRACE BETWEEN C32 AND C37
				30	.	.	PC#7091, ENLARGE HOLE SIZE FOR #3522
				31	2008/04/25	8.00	Swap c37 with c51; c57 with c36. Moved x11b & x31b to
				32	.	.	middle of HS slots. Solder updates, part updates.
				33	.	.	Changed Q8a&b from 5107 to 5113 - MPSA42
				34	2008/05/29	9.00	PC#7590 - PS hum fix. Moved K1B away from X15B.
				35	D	V	N
				36	D	V	N
				37	D	V	N
				38	D	V	N
				39	D	V	N
				40	D	V	N
				41	D	V	N
				42	D	V	N
				43	D	V	N
				44	D	V	N
				45	D	V	N
				46	D	V	N
				47	D	V	N
				48	D	V	N
				49	D	V	N
				50	D	V	N
#	DATE	VER#	DESCRIPTION OF CHANGE				
1	7 Jan, 2004	1.00	Rationalize wire refdes				
2	24 Feb, 2004	1.00	Add speakon jacks to output section				
3	10 Mar, 2004	1.00	Enlarge cutouts for 8841 nuts				
4	21-APR-2004	1.00	PC#6681 Modify route to let grn wire pass board near pwr cap				
5	6-MAY-2004	2.00	PC#6684 R83(A,B)->5K6,R5(A,B)6K8->18K,				
6			D16&D17(A,B) 4148->BAT85,R47&R48(A,B)22R1->100R0				
7			ADDED D71, D72				
8	DEC-14-2004	3.00	GT:PC#6787: Fixed AC clearance, and W2&W3 tab label				
9	FEB-07-2005	4.00	PC#6809 Remove D17,D16,D12,D13, R47,R48,R49,R50,C14				
10	D	V	C15 (All A/B) R45,R46 A/B 36K->43K, D10 16V->12V				
11	D	V	D9 A/B 14V->10V0, D8 A/B 12V->8V2. ADD R95 A/B				
12	D	V	ADD R96 A/B, R97 A/B, R98 A/B, D71 A/B, D72 A/B				
13	D	V	D73 A/B, D74 A/B, X1 ,X2 ,X3 ,X4 X5 AND X6				
14	MAR-30-2005	5.00	RECREATED MASK LAYER TO FIX TESTPADS				
15	MAR-13-2005	5.10	CHANGE IRF3205 #6954 TO IRL2910 #6966				
16	.	.	PLACE MICA UNDER MIDDLE TIER MOSFETS				
17	21 Apr, 2005	5.11	Force update parts to fix pad orientation				
18	JUN-08-2005	6.00	PC#6919:GT:MOVED R95B AVOID HEATSINK COLLISION				
19	.	.	XFORMER -> CH1302/E, ADDED 2x#4599,SWAPPED W8 &				
20	.	.	W35,R106A&B #6122 33K->#4868 36K, D56A&B #6440				
21	.	.	4V7/0.5W->#6484 10V/1W, C32&C33 #5903 12000UF/35V ->				
22	.	.	#5898 8200UF/50V, C36&C37 #5896 4700UF/80V->#5898				
23	.	.	C25A&B #5224 47N/100V->#5212 100N/63V				

M1190 Drill History				M1190 PENDING CHANGES		
MODEL(S):- M1610				MODEL(S):- M1610		
#	DATE	VER#	DESCRIPTION OF CHANGE	#	PC#	PENDING CHANGE
1	5-MAY-2004	V03	Added notch to pass GRN wire from front	1	PC	X
2	6-MAY-2004	V04	To match V2.00 changes	2	PC	X
3	NOV-05-2004	V05	HG:PC#6730:REMOVED EXTRA ROUTING BITS	3	PC	X
4	AUG-26-2005	V07	GT:CHANGES FOR 6V00 RELEASE. SEE HISTORY BOX	4	PC	X
5	2008/04/25	V08	Solder updates.	5	PC	X
6	2008/05/29	V09	PC#7590	6	PC	X

*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY



Yorkville

Product **M1610**

Amp in Jacks	PCB# M1191	Sheet 1 of 2
--------------	------------	--------------

Date: Tue Feb 10, 2004	Rev: V1.00
------------------------	------------

Filename: m1191 sch .sch2002

StepAndRepeat - X9@1750:Y4@2000
BlankSize = 16.750 x 9.000

SHEAR OFF THIS SIDE SECOND

ETCH GUIDE

BlankSize = 16.750 x 9.000

SHEAR

SHEAR

SHEAR

SHEAR

FEED THIS SIDE INTO SHEARER FIRST

SHEAR OFF THIS SIDE FIRST

CLINCH ORIGIN

ETCH GUIDE

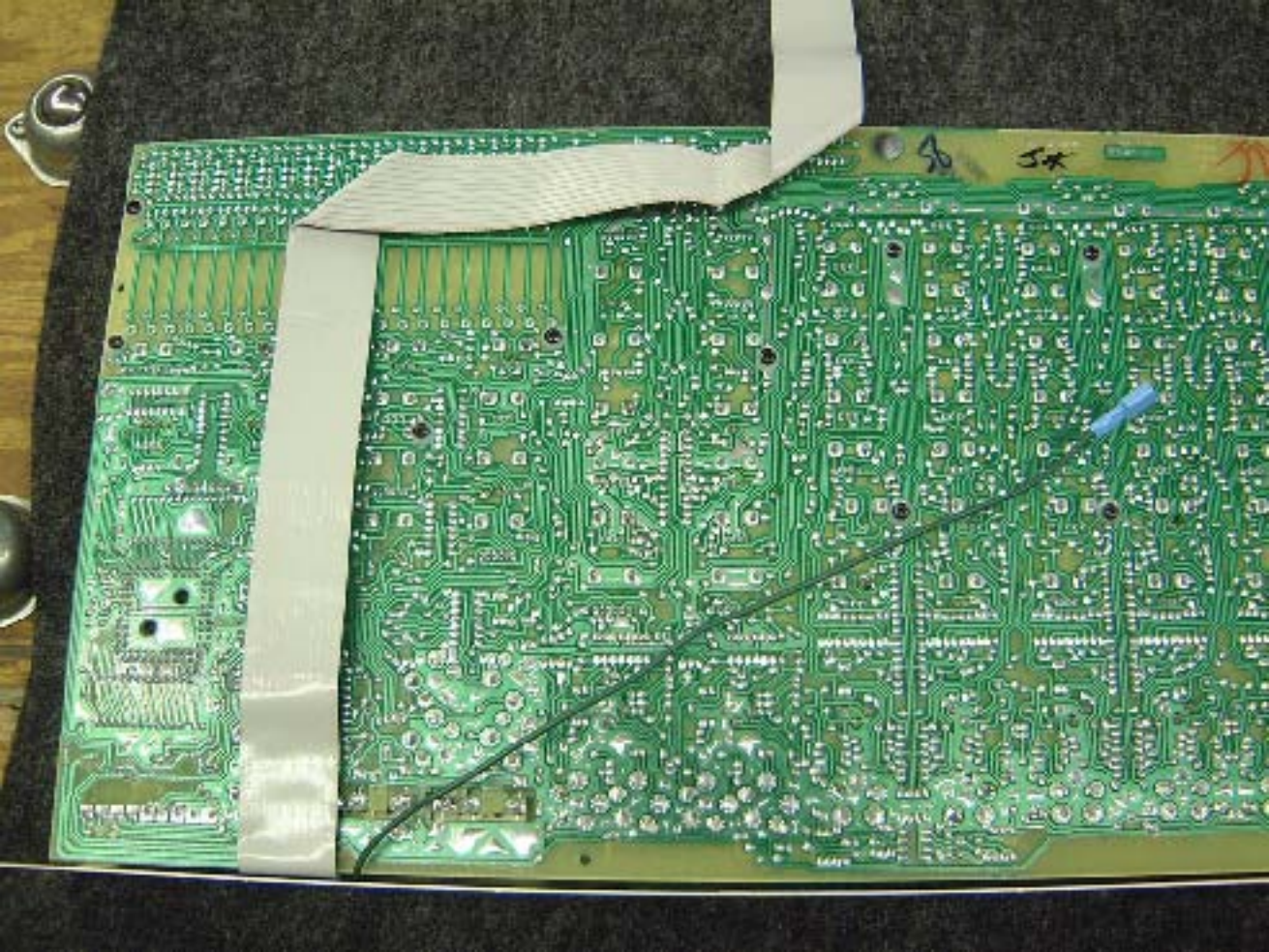
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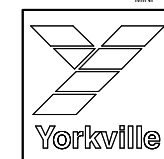
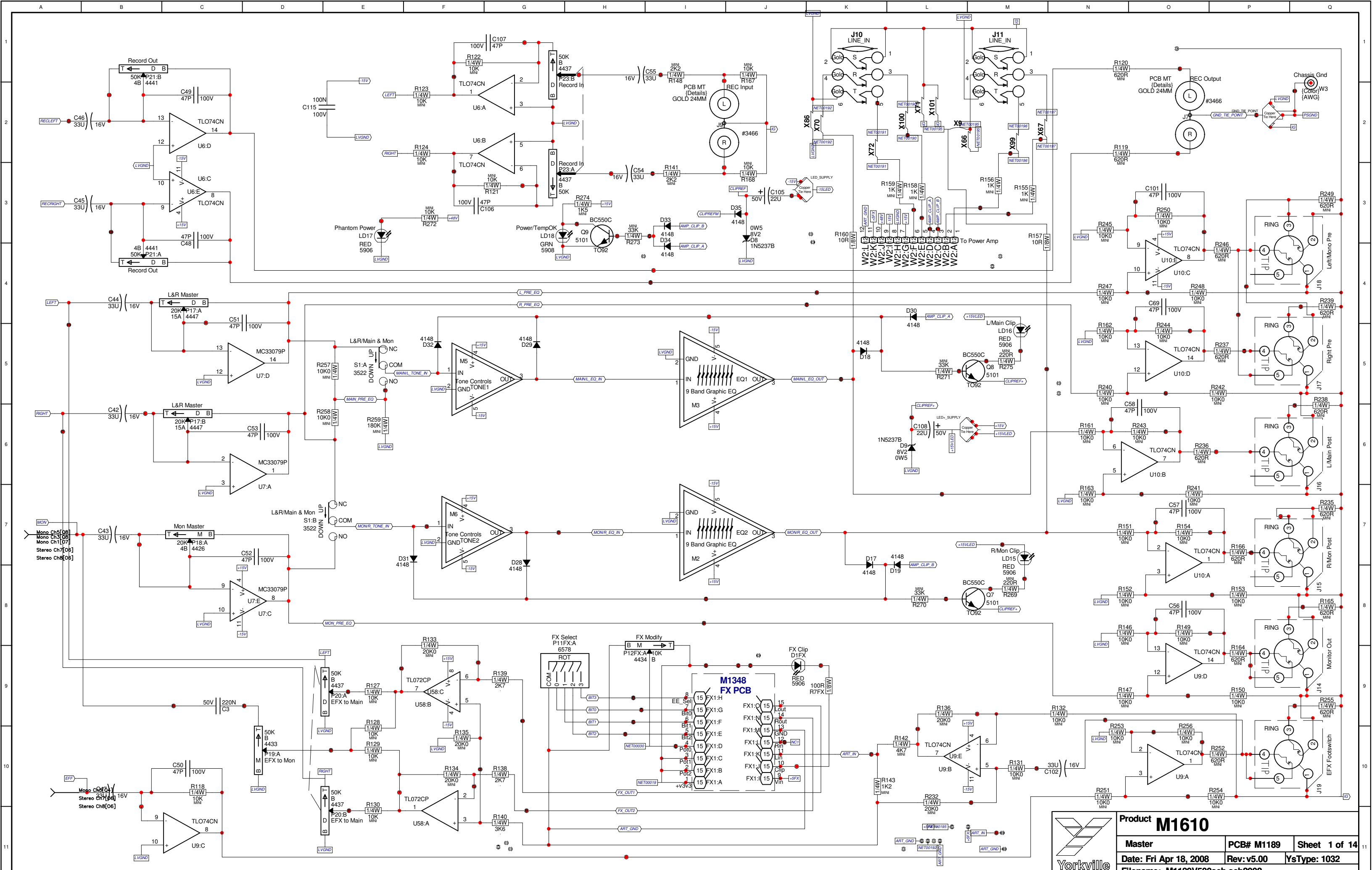
Top Assy M1191v1.00

PRODUCTION NOTES

1. Shear off sides containing VCD origin and VCD finger tabs (top and bottom sides) before shearing the board into rows.
2. Feed board into shearer in the direction shown.
3. DO NOT remove the strip of board attached to each set of jumpers. It will keep the jumpers straight until they arrive in wiring.

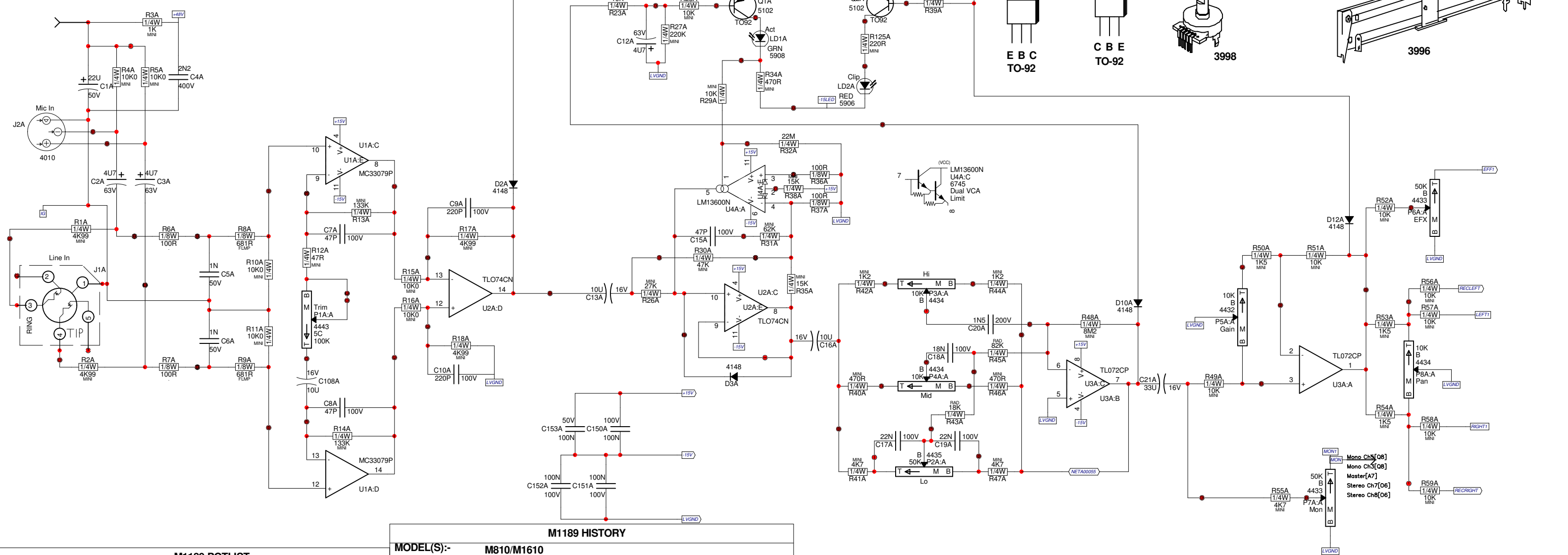




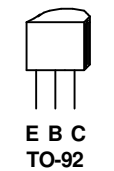


Product M1610		
Master	PCB# M1189	Sheet 1 of 14
Date: Fri Apr 18, 2008	Rev: v5.00	YsType: 1032
Filename: M1189V500sch.sch2002		

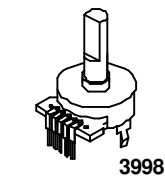
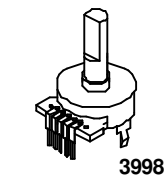
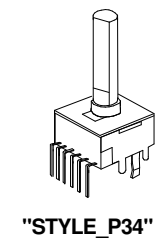
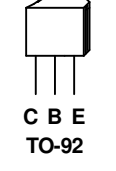
**Only Channel 1 is shown.
Channels 1 - 4 employ the
same circuit.**



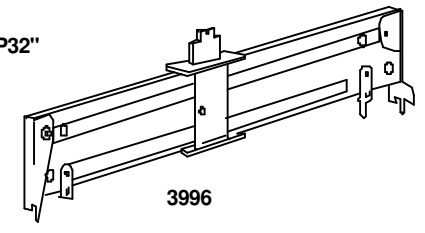
2N5401
2N5551
MPSA06
MPSA13
MPSA43
MPSA56
MPSA63



BC550C
BC560C



"STYLE_P32"



M1189 POTLIST

MODEL(S):-	M1610	FUNCTION	PART#	KNOB	{NEW}
P25-34 L&R	Graphic EQ	3998	N/A	S04	
P1A,1B,1C,1D,1E,1F	Trim	4443	9915	P32	
P9G,9H	Mon Send	4443	9917	P32	
P5A,5B,5C,5D,5E,5F	Level	4432	9920	P32	
P15G,15H,6A,6B,6C,6D,6E,6F	FX Send	4433	9918	P32	
P7A,7B,7C,7D,7E,7F	Mon Send	4433	9917	P32	
P3A-F,4A-F	Hi, Mid	4434	9916	P32	
P16G,16H, 8A-F	Bal, Pan	4434	9919	P32	
P2A,2B,2C,2D,2E,2F	Lo	4435	9916	P32	
P35,36,37,38	Master Treble, Bass	4435	9916	P32	
P21	Record Out	4437	9920	P34	
P20	FX2 Main	4437	9920	P34	
P13G,13H,14G,14H	Stereo Hi, Mid	4438	9916	P34	
P12G,12H	Stereo Lo	4439	9916	P34	
P11FX	FX Select	6587	8398	P23	
P23	Record In	4437	9915	P34	
P18	Monitor	4426	9917	P34	
P19	FX2 Mom	4433	9917	P32	
P17	L&R Master	4447	9920	N	
P12FX	FX Modify	4434	9918	N	

M1189 HISTORY

MODEL(S):-	M810/M1610	#	DATE	VER#	DESCRIPTION OF CHANGE
		1	31 Dec, 2003	v1.00p3	Moved D3 anode to cathode of LD1
		2	2 Feb, 2004	1.00	Change break mute flash rate
		3	17 Feb, 2004	1.01	Move C7a-f, R13a-f to make room for AA series xlr.
		4	D	V	Change hole sizes for AA series xlr.
		5	D	V	Changed U1FX SRAM to 32kx8
		6	24 Feb, 2004	1.02	Changed 3925 XLRs to 4010 AA series
		7	7-APR-2004	2.00	PC#6675 Moved C150(A,C,E) to avoid hitting ICs
		8	D	V	Removed routing from board - slots done on drill now
		9	15-APR-2004	2.00	PC#6677 Chg X41 to C3(220n 50V), set gerber so TIE4 gets output properly
		10	D	V	PC#6679 Chg. C21(A,B,C,D,E,F) from 470nF to 33uF
		11	D	V	PC#6686 MOVED C23FX AWAY FROM SPACER
		12	6-MAY-2004	2.00	Fixed silk screen on U6FX and U2FX
		13	Aug 4, 2004	2.00	
		1	AUG-16-2004	2.10	PC#6718 CHANGE R140 TO 10K0 (6116), R138&R139 TO 9K09 (6112)
		2	D	V	
		3	NOV-23-2004	V	PC#6771:#3571->#3507 SKT FOR #6993 SRAM (GT)
		4	JAN-05-2005	.	GT:PC#6792:P17 FROM 50K# 4441 TO 20KA #4447
		5	21 Apr, 2005	2.11	Updated 3921 jacks for clinch.
		6	4 Aug 2005	2.20	AH, PC#6816, ADD A HOLE FOR FEEDING GROUND WIRE
		7	D	V	
		8	14 JUN 2006	2.30	AH, PC#7091, UPDTAE #5322 CHANGE DRILL SIZE TO 40
		9	.	.	PC#6989, STRENGTHEN RCA JACK SECTION BREAKAWAY
		10	.	.	#4581 UPDATED, PROPER DRILLING ORDER
		11	11-JAN-2008	3.00	PC#7325, FORCE UPDATE PARTS FOR NEW PAD TYPE
		12	.	.	PC#7330, REMOVE EXTRA PADS FROM U1FX AND U3FX
		13	2008/02/20	4.00	New DFX, solder updates, add amp in jacks, link for tie4

#	DATE	VER#	DESCRIPTION OF CHANGE
1	2008/03/19	5.00	Corrected Amp in jack swap.
2	2008/03/25	.	Added copper pour to encoder and pot legs. Rotated thief
3	.	.	pads on stereo channel pots.
4	2008/04/18	.	Added scoring tooling holes.
5	D	V	
6	D	V	
7	D	V	
8	D	V	
9	D	V	
10	D	V	
11	D	V	
12	D	V	
13	D	V	

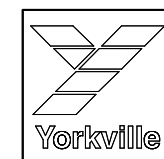
M1189 PENDING CHANGES

MODEL(S):-	M1610	#	PC#	PENDING CHANGE
		1	PC	X
		2	PC	X
		3	PC	X
		4	PC	X
		5	PC	X
		6	PC	X

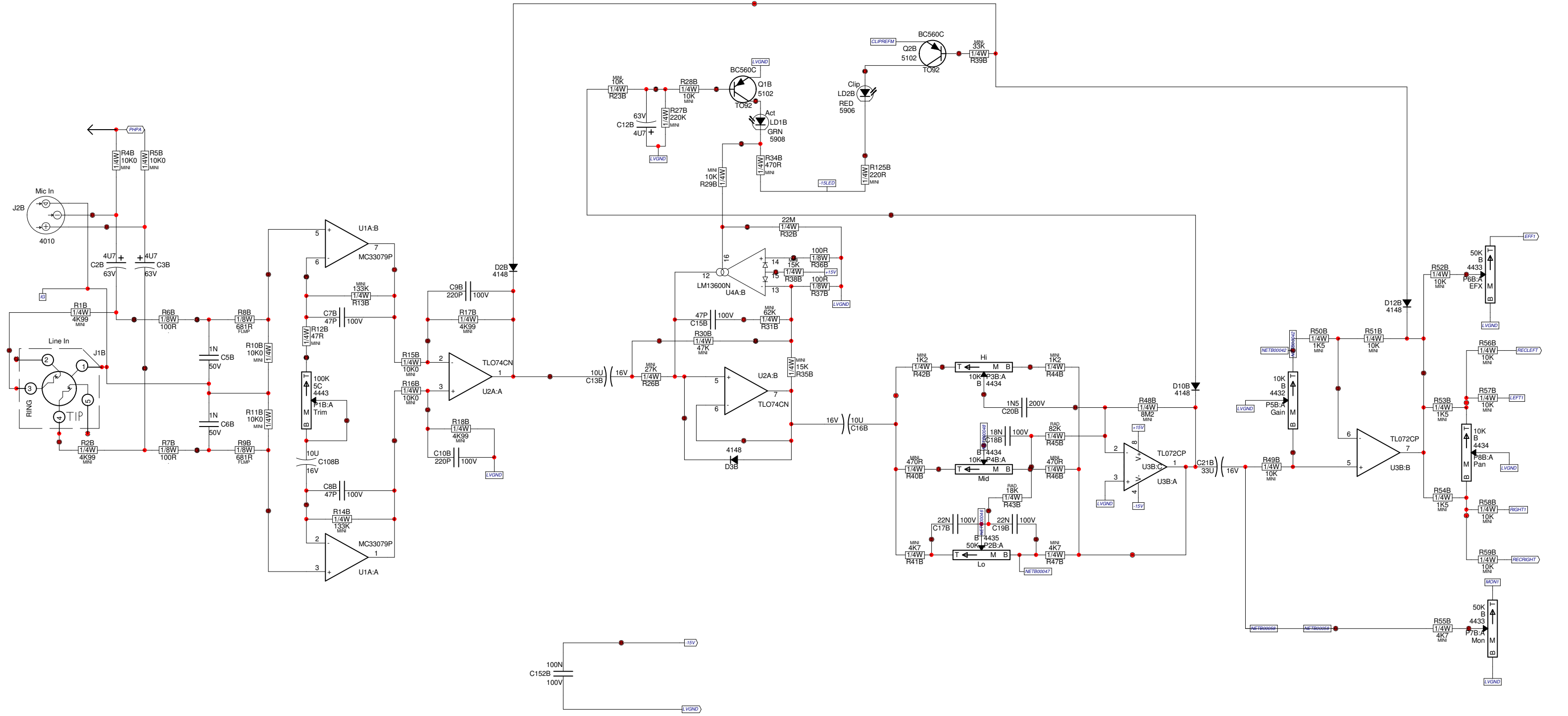
*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

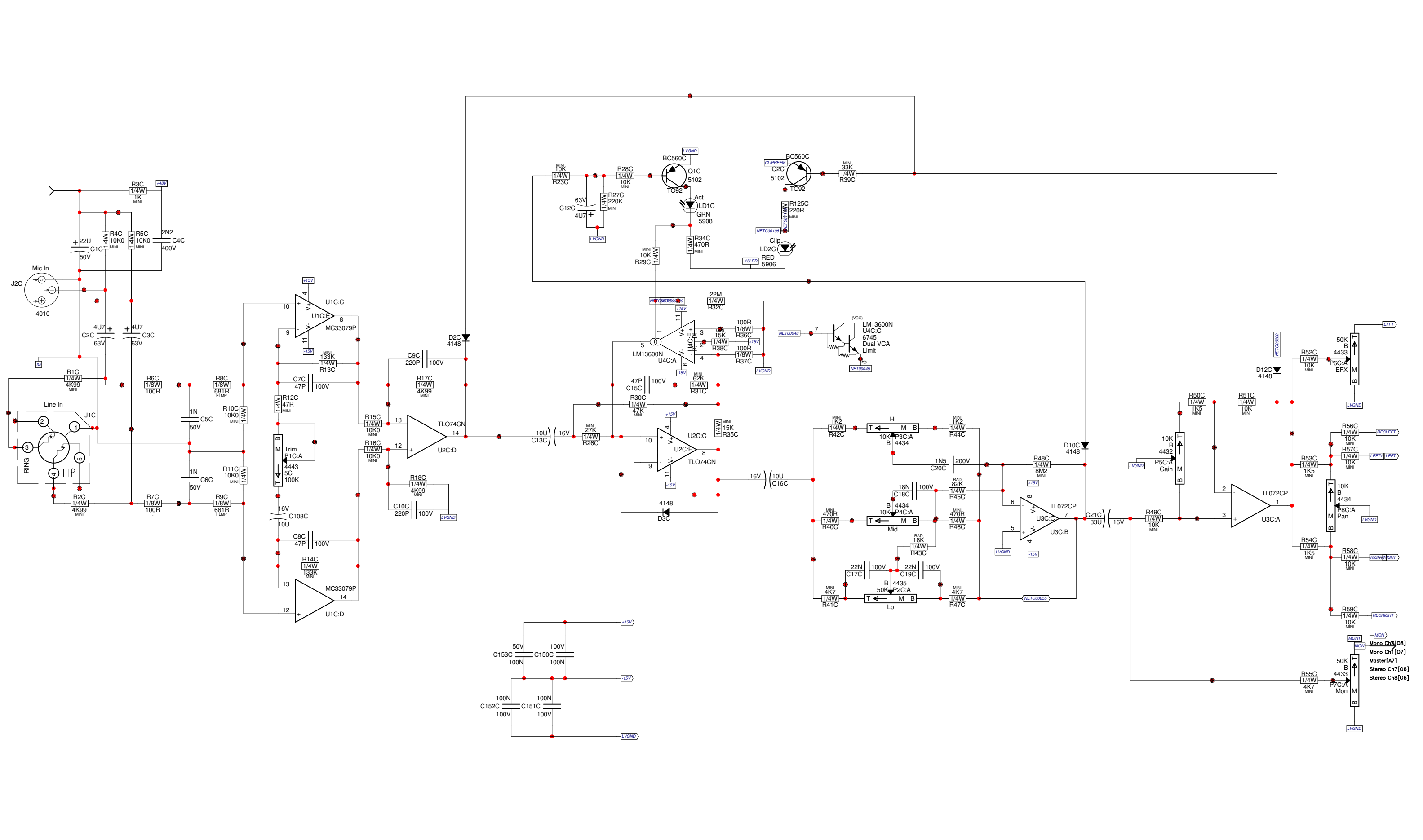
M1189 DRILL HISTORY

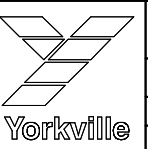
MODEL(S):-	M810/M1610	#	DATE	VER#	DESCRIPTION OF CHANGE
		1	24-FEB-2004	V01	N
		2	21-APR-2005	V02	N
		3	4-AUG-2005	V03	PC#6818, ADDING A HOLE FOR FEEDING GREEN GND
		4	2008/02/20	V04	N
		5	2008/04/18	V05	N
		6	D	V	N

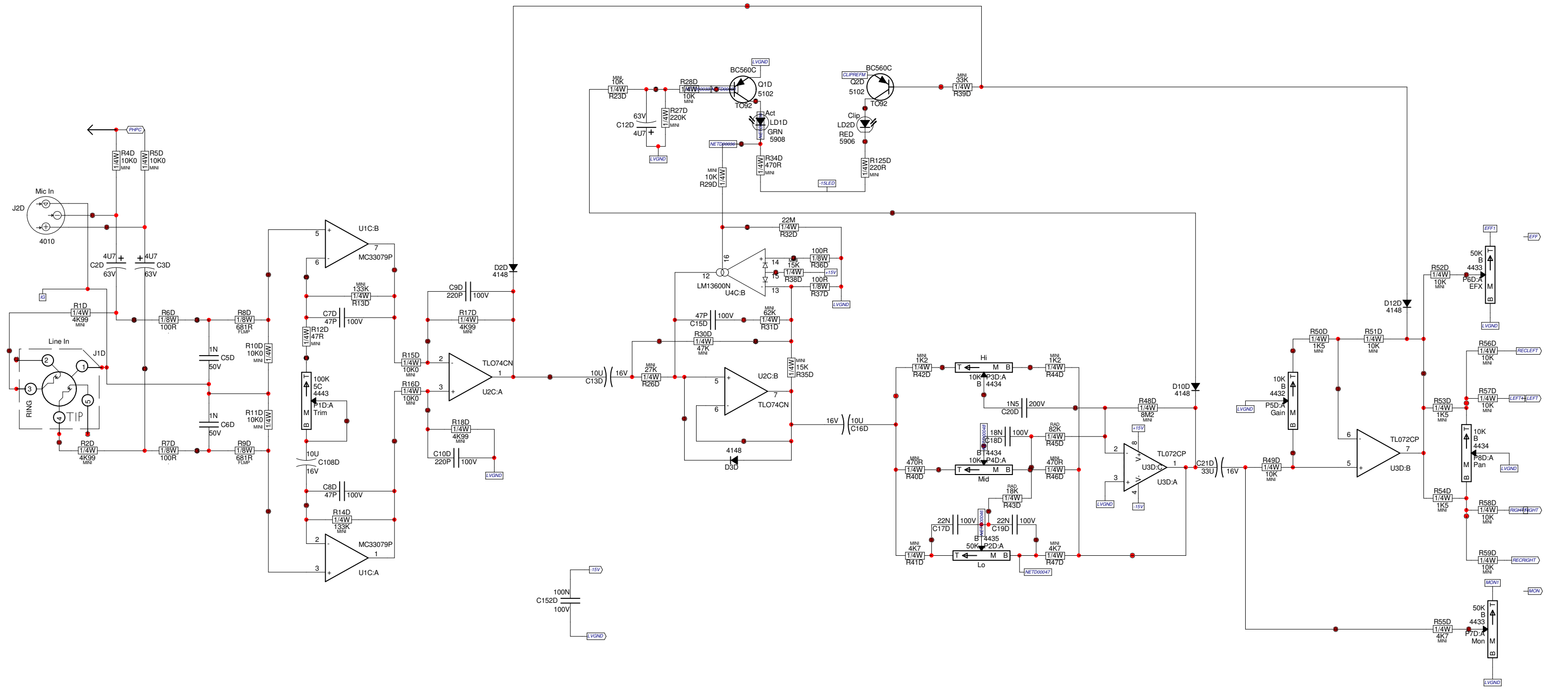


Product M1610		
Mono Ch1	PCB# M1189	Sheet 2 of 14
Date: Fri Apr 18, 2008	Rev: v5.00	YsType: 1032
Filename: M1189V500sch.sch2002		

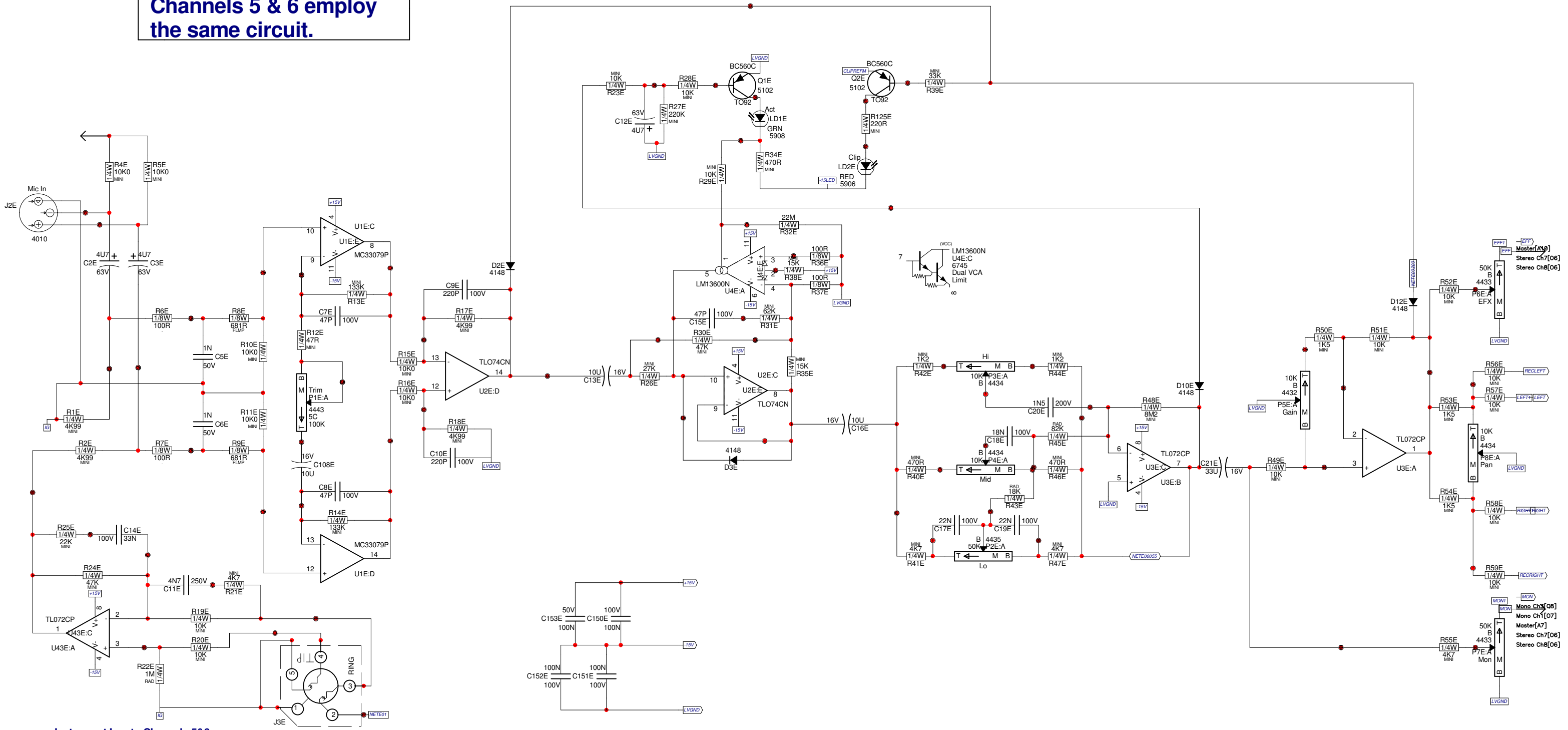


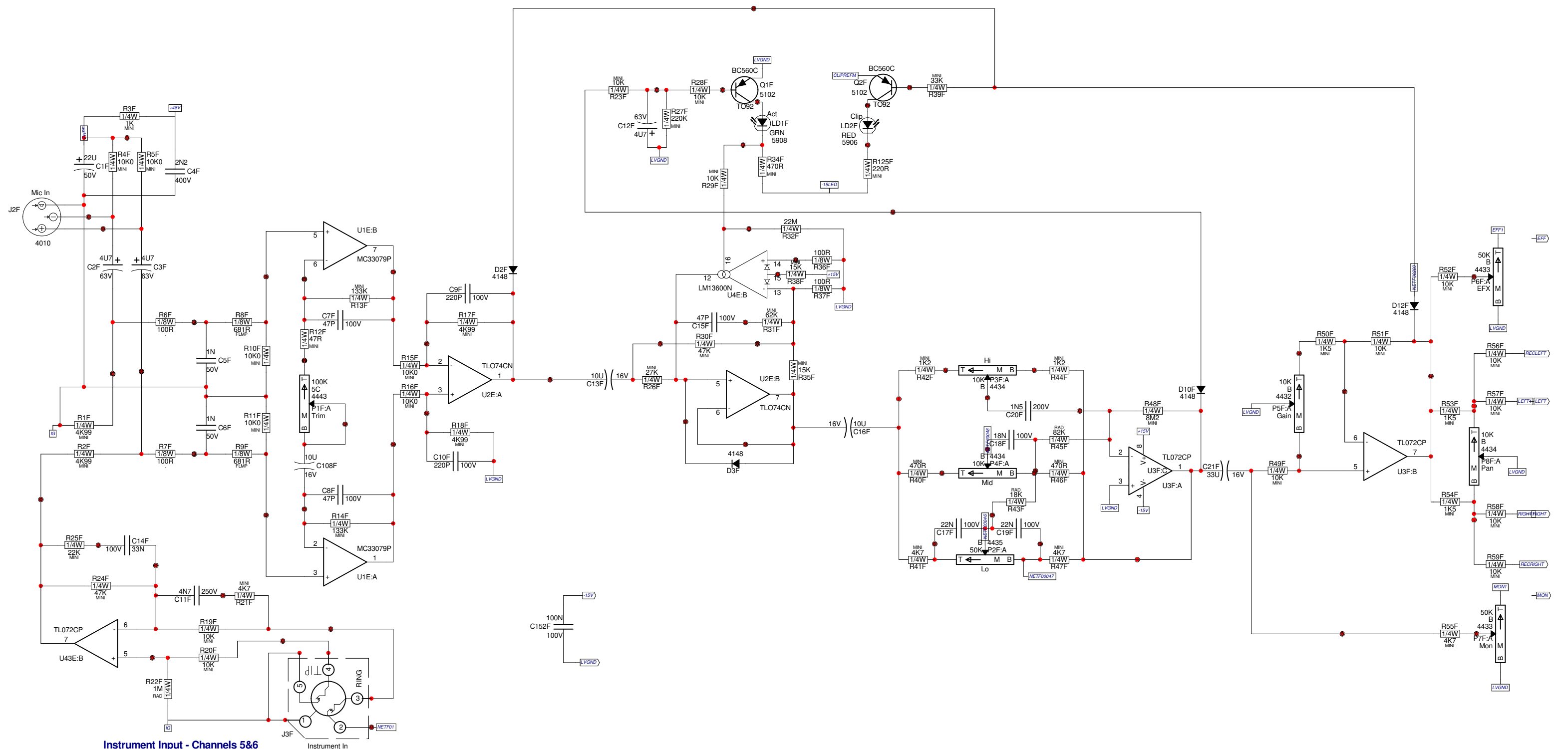


	Product M1610		
	Mono Ch3	PCB# M1189	Sheet 4 of 14
	Date: Fri Apr 18, 2008	Rev: v5.00	YsType: 1032
	Filename: M1189V500sch.sch2002		



**Only Channel 5 is shown.
Channels 5 & 6 employ
the same circuit.**



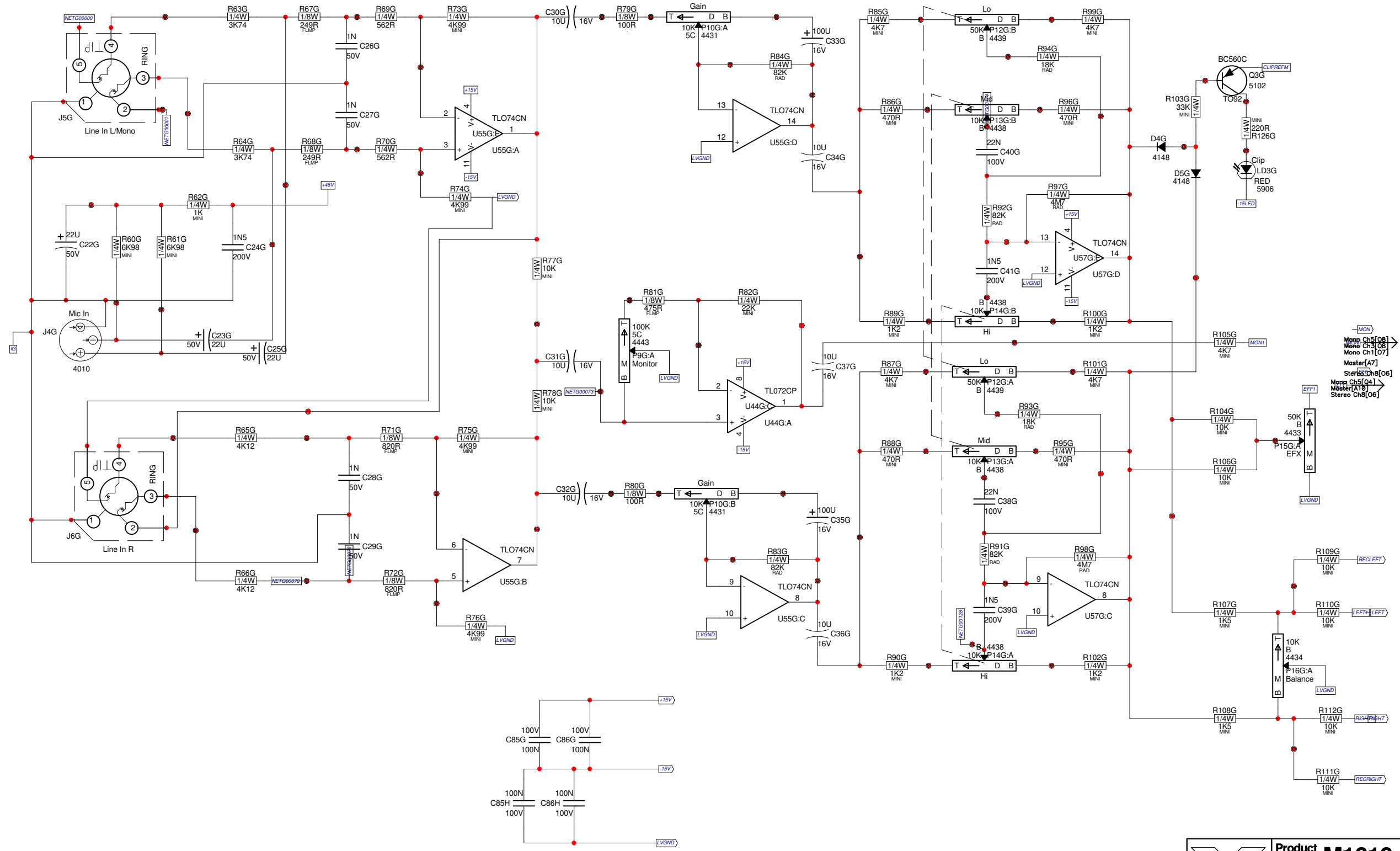


Instrument Input - Channels 5&6

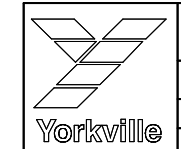
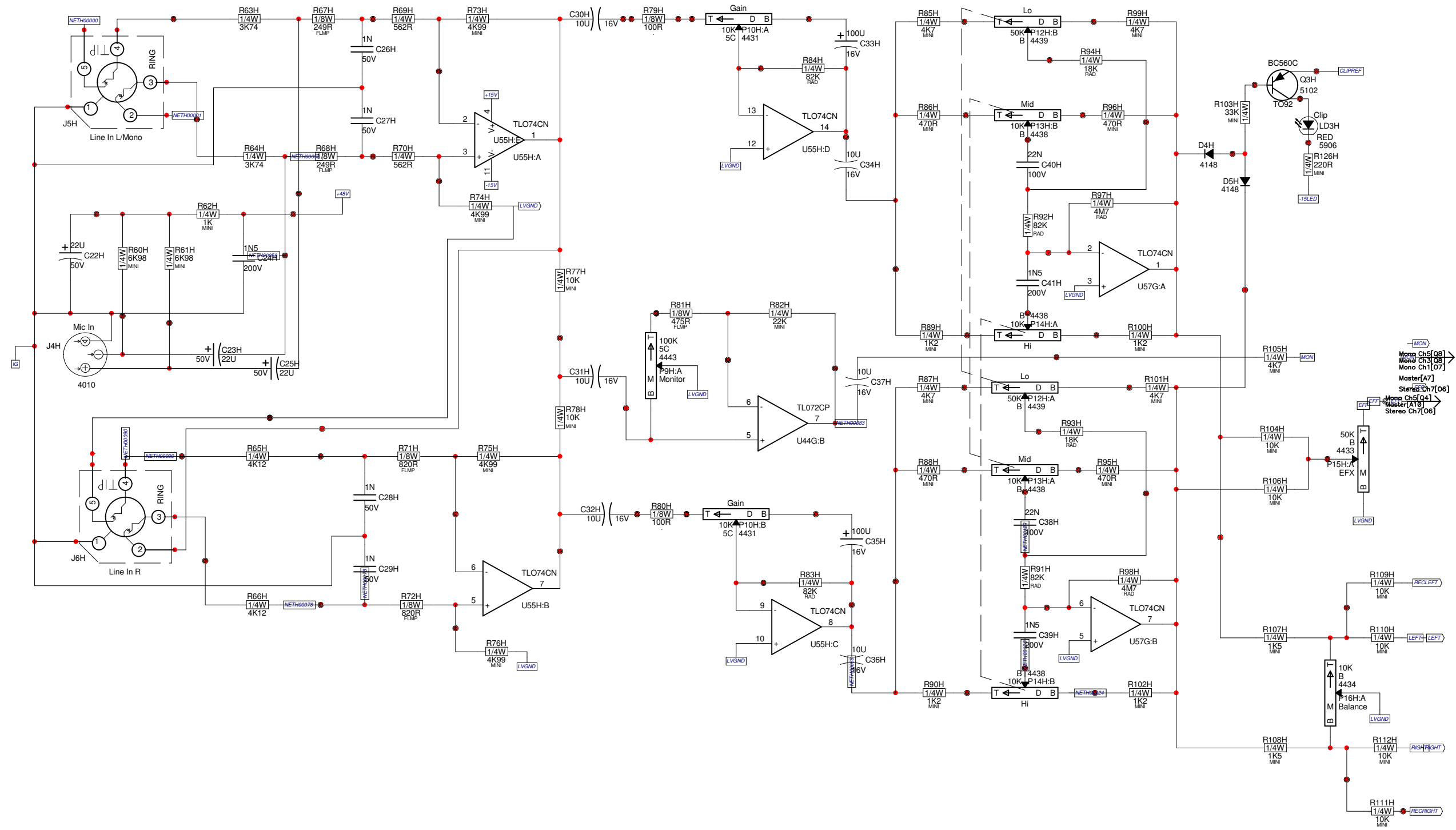


Product M1610		
Mono Ch6	PCB# M1189	Sheet 7 of 14
Date: Fri Apr 18, 2008	Rev:v5.00	YsType: 1032
Filename: M1189V500sch.sch2002		

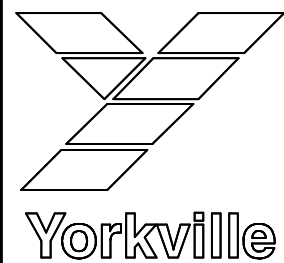
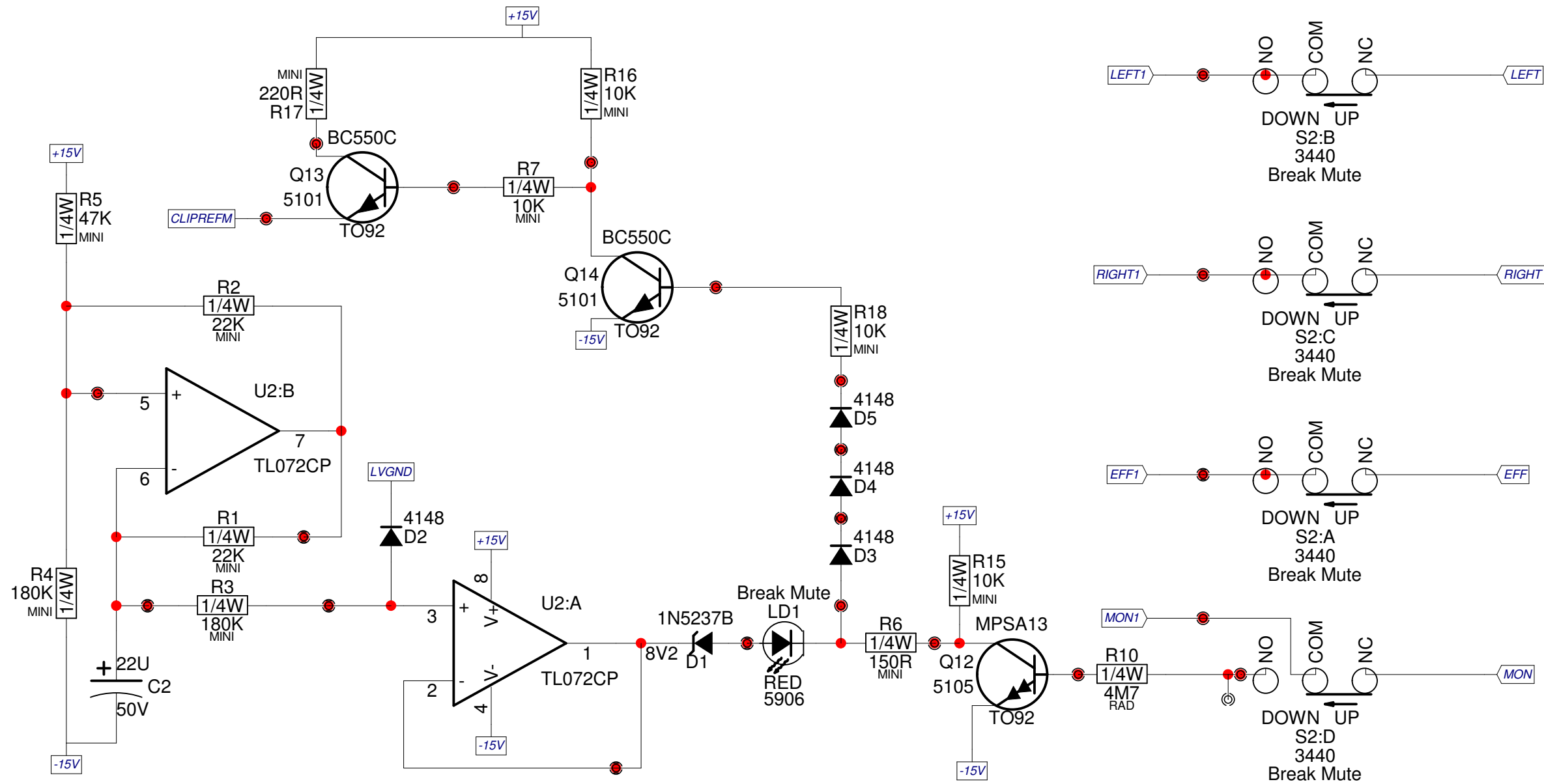
**Only channels 7&8 are shown.
Channels 9&10 employ
the same circuit.**



Product M1610		
Stereo Ch7	PCB# M1189	Sheet 8 of 14
Date: Fri Apr 18, 2008	Rev: v5.00	YsType: 1032
Filename: M1189V500sch.sch2002		



Product M1610		
Stereo Ch8	PCB# M1189	Sheet 9 of 14
Date: Fri Apr 18, 2008	Rev: v5.00	YsType: 1032
Filename: M1189V500sch.sch2002		



Product **M1610**

BreakMute

PCB# M1189

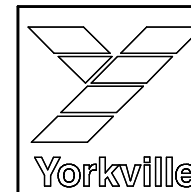
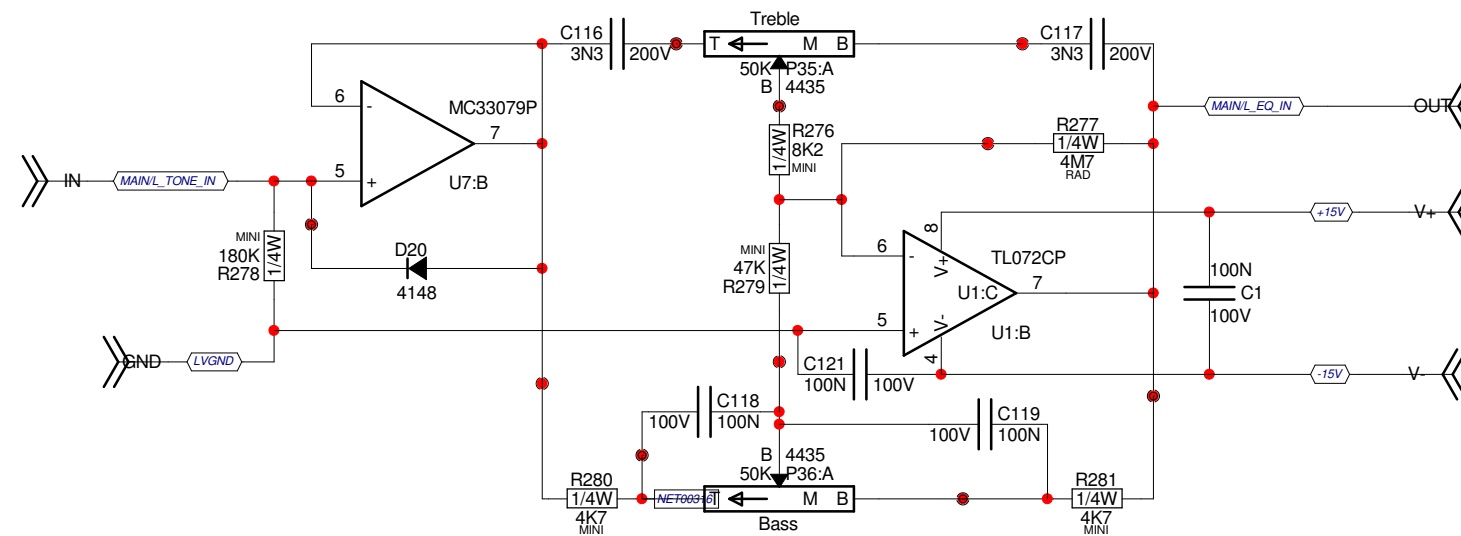
Sheet 10 of 14

Date: Fri Apr 18, 2008

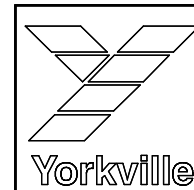
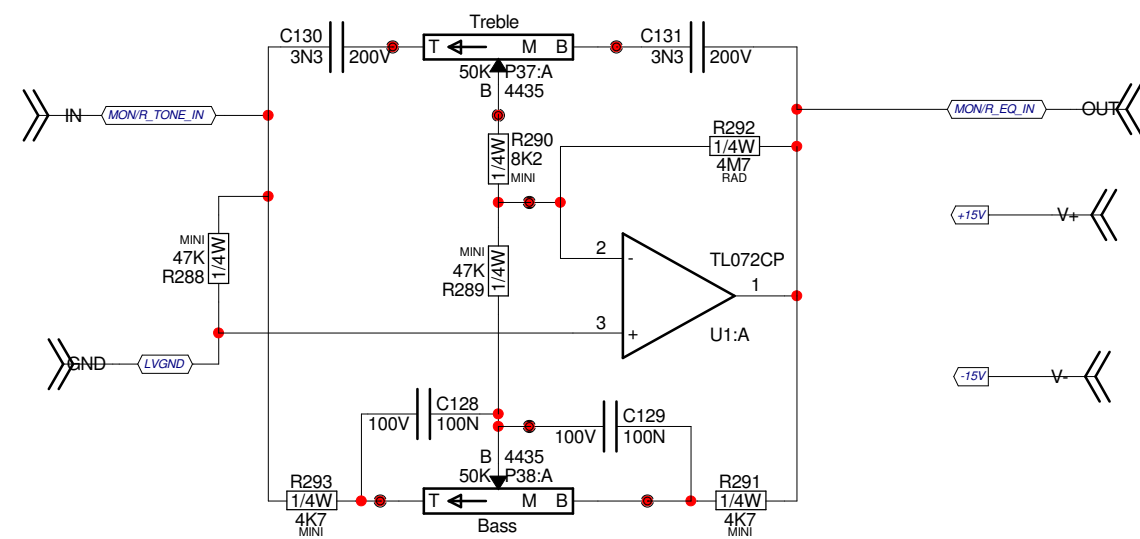
Rev: v5.00

YsType: 1032

Filename: M1189V500sch.sch2002



Product M1610		
TONE1	PCB# M1189	Sheet 11 of 14
Date: Fri Apr 18, 2008	Rev: v5.00	YsType: 1032
Filename: M1189V500sch.sch2002		

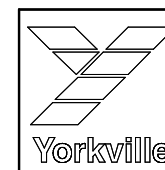
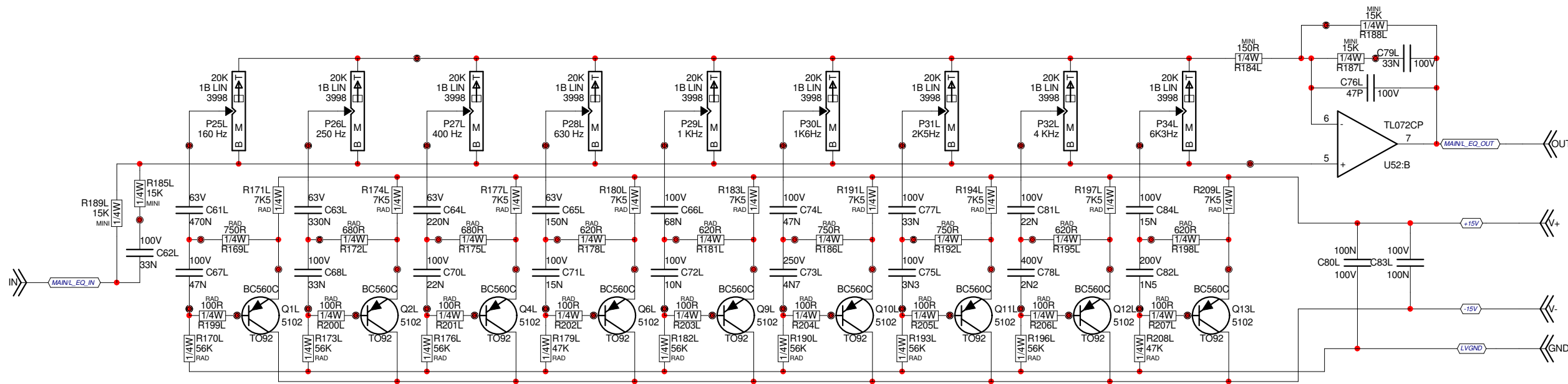


Product **M1610**

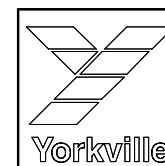
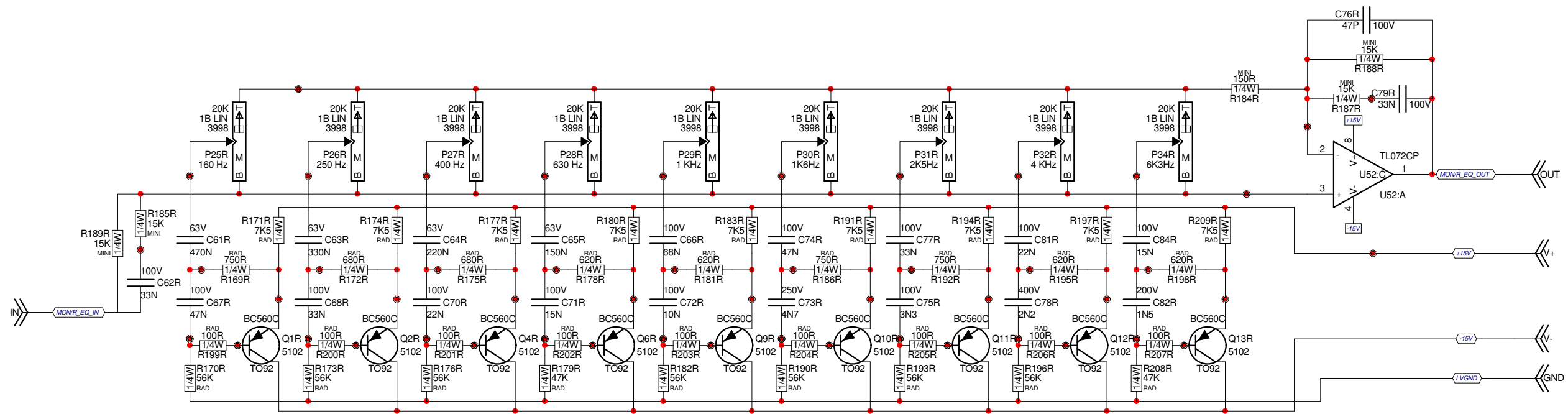
TONE2 PCB# M1189 Sheet 12 of 14

Date: Fri Apr 18, 2008 Rev: v5.00 YsType: 1032

Filename: M1189V500sch.sch2002



Product M1610		
EQ1	PCB# M1189	Sheet 13 of 14
Date: Fri Apr 18, 2008	Rev: v5.00	YsType: 1032
Filename: M1189V500sch.sch2002		



Product M1610		
EQ2	PCB# M1189	Sheet 14 of 14
Date: Fri Apr 18, 2008	Rev: v5.00	YsType: 1032
Filename: M1189V500sch.sch2002		

ETCH GUIDE

Pcb Mech M1189 v5.00
Top Assy M1189 v5.00

00.2v 8811M

Wave Solder

ETCH GUIDE

M1189
M1610
v5.00

00.2v 8811M

YS Type - 1032

BlankSize - 18000x11000

BlankSize - 18000x11000

ETCH GUIDE

ETCH GUIDE

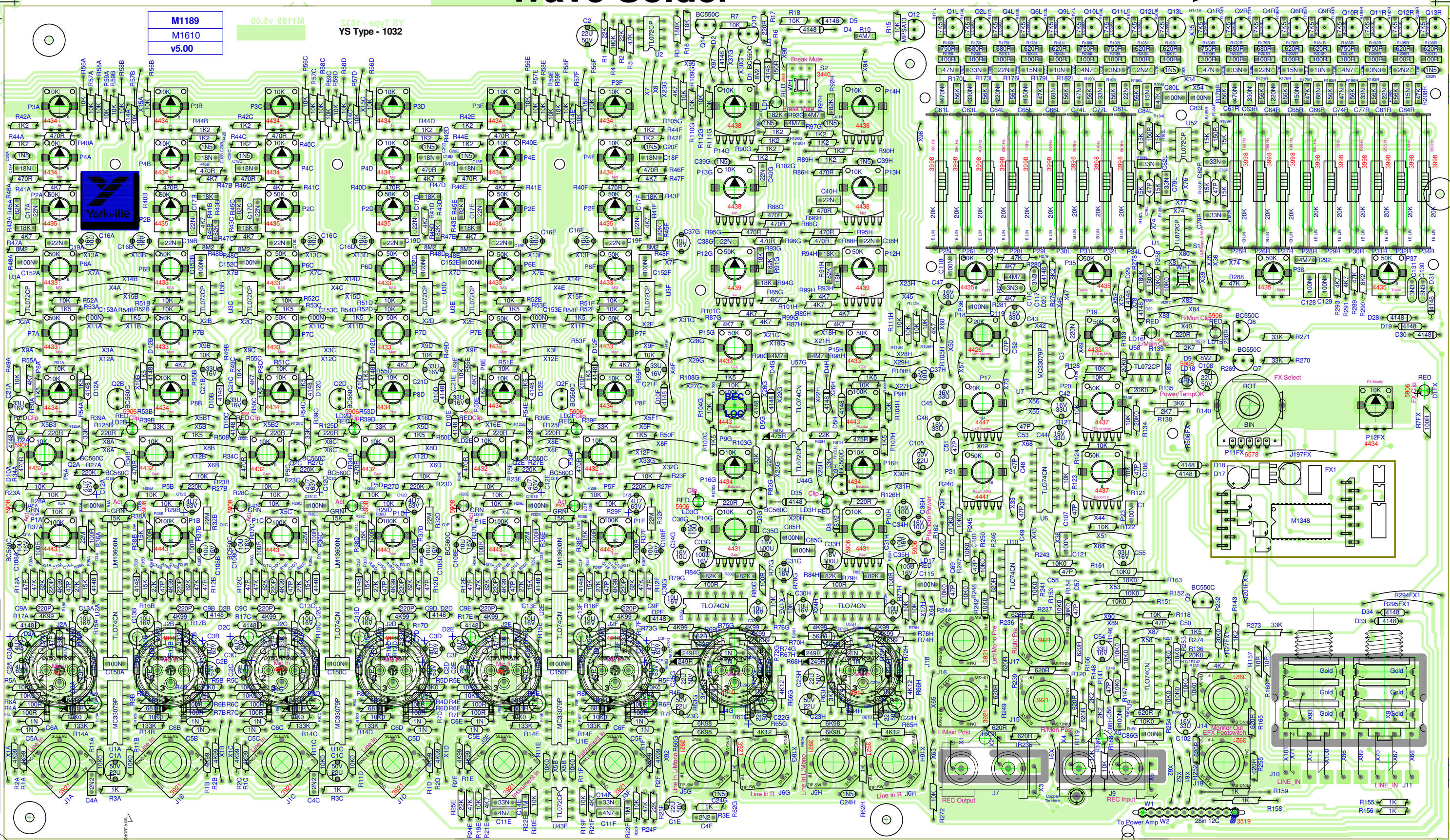
CLINCH ORIGIN

INSERT ORIGIN

ETCH GUIDE

ETCH GUIDE

SEE LAYOUT DOCUMENTATION



CLINCH ORIGIN

INSERT ORIGIN

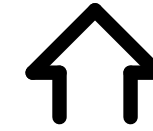
ETCH GUIDE

ETCH GUIDE

SEE LAYOUT DOCUMENTATION

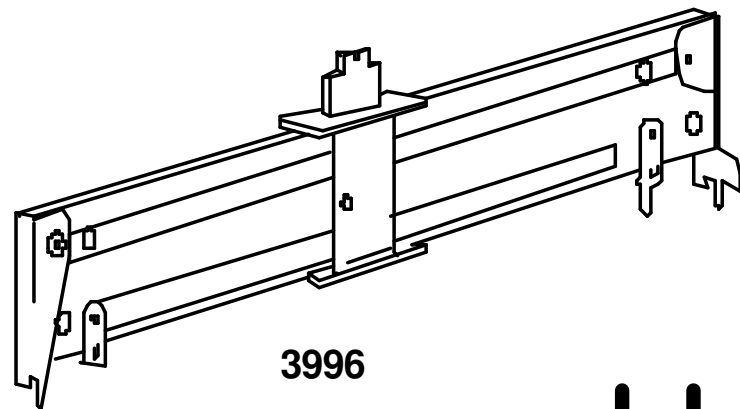


SEE LAYOUT DIAGRAM

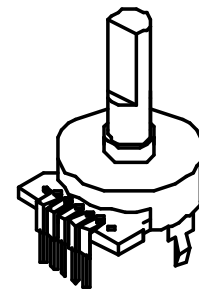


M1189 PRODUCTION NOTES

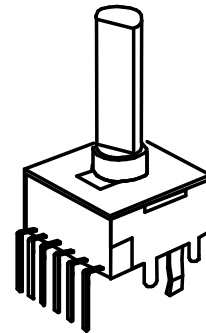
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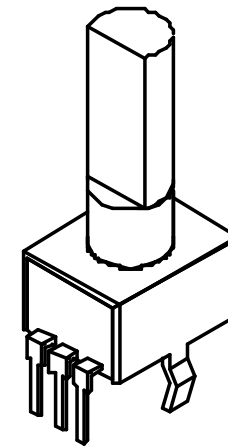
3996



"STYLE_P23"

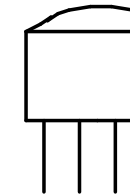


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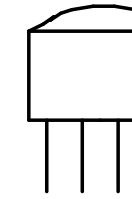
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2N5401
2N5551
MPSA06
MPSA13
MPSA43
MPSA56
MPSA63



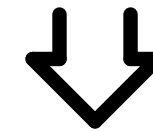
E B C
TO-92

BC550C
BC560C



C B E
TO-92

SEE PRODUCT HISTORY





SEE PRODUCTION NOTES



M1189 HISTORY

M1189 POTLIST

MODEL(S):- M1610			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	31 Dec, 2003	v1.00p3	Moved D3 anode to cathode of LD1
2	2 Feb, 2004	1.00	Change break mute flash rate
3	17 Feb, 2004	1.01	Move C7a-f, R13a-f to make room for AA series xlr.
4	.	.	Change hole sizes for AA series xlr.
5	.	.	Changed U1FX SRAM to 32kX8
6	24 Feb, 2004	1.02	Changed 3925 XLRs to 4010 AA series
7	7-APR-2004	2.00	PC#6675 Moved C150(A,C,E) to avoid hitting ICs
8	.	.	Removed routing from board - slots done on drill now
9	15-APR-2004	2.00	PC#6677 Chg X41 to C3(220n 50V), set gerber so TIE4 gets output properly
10	.	.	PC#6679 Chg. C21(A,B,C,D,E,F) from 470nF to 33uF
11	6-MAY-2004	2.00	PC#6686 MOVED C23FX AWAY FROM SPACER
12	Aug 4, 2004	2.00	Fixed silk screen on U6FX and U2FX
1	AUG-16-2004	2.10	PC#6718 CHANGE R140 TO 10K0 (6116),
2	D	V	R138&R139 TO 9K09 (6112)
3	NOV-23-2004	.	PC#6771:#3571->#3507 SKT FOR #6993 SRAM (GT)
4	JAN-05-2005	.	GT:PC#6792:P17 FROM 50KB #4441 TO 20KA #4447
5	21 Apr, 2005	2.11	Updated 3921 jacks for clinch.
6	4 Aug 2005	2.20	AH, PC#6816, ADD A HOLE FOR FEEDING GREEN GROUND WIRE.
7	.	.	
8	14 JUN 2006	2.30	AH, PC#7091, UPDTAE #5322 CHANGE DRILL SIZE TO 40
9	.	.	PC#6989, STRENGTHEN RCA JACK SECTION BREAKAWAY
10	.	.	#4581 UPDATED, PROPER DRILLING ORDER
11	11-JAN-2008	3.00	PC#7325, FORCE UPDATE PARTS FOR NEW PAD TYPE
12	.	.	PC#7330, REMOVE EXTRA PADS FROM U1FX AND U3FX
13	2008/02/20	4.00	New DFX, solder updates, add amp in jacks, link for tie4
1	2008/03/19	5.00	Corrected Amp in jack swap.
2	2008/03/25	.	Added copper pour to encoder and pot legs. Rotated thief
3	.	.	pads on stereo channel pots.
4	2008/04/18	.	Added scoring tooling holes.
5	D	V	N
6	D	V	N
7	D	V	N
8	D	V	N
9	D	V	N
10	D	V	N
11	D	V	N
12	D	V	N
13	D	V	N

MODEL(S):- M1610				
REF	FUNCTION	PART#	KNOB	{NEW}
P25-34 L&R	Graphic EQ	3998	N/A	N
P1A,1B,1C,1D,1E,1F	Trim	4443	9915	N
P9G,9H	Mon Send	4443	9917	N
P5A,5B,5C,5D,5E,5F	Level	4432	9920	N
P15G,15H,6A,6B,6C,6D,6E,6F	FX Send	4433	9918	N
P7A,7B,7C,7D,7E,7F	Mon Send	4433	9917	N
P3A-F,4A-F	Hi, Mid	4434	9916	N
P16G,16H, 8A-F	Bal, Pan	4434	9919	N
P2A,2B,2C,2D,2E,2F	Lo	4435	9916	N
P35,36,37,38	Master Treble, Bass	4435	9916	N
P21	Record Out	4441	9920	N
P20	FX2 Main	4437	9920	N
P13G,13H,14G,14H	Stereo Hi, Mid	4438	9916	N
P12G,12H	Stereo Lo	4439	9916	N
P11FX	FX Select	6587	8398	N
P23	Record In	4437	9915	N
P18	Monitor	4426	9917	N
P19	FX2 Mon	4433	9917	N
P17	L&R Master	4447	9920	N
P12FX	FX Modify	4434	9918	N

M1189 PENDING CHANGES

MODEL(S):- M1610		
#	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**

M1189 DRILL HISTORY

MODEL(S):- M810/M1610			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	24-FEB-2004	V01	N
2	21-APR-2005	V02	N
3	4-AUG-2005	V03	N
4	2008/02/20	V04	N
5	2008/04/18	V05	N
6	D	V	N

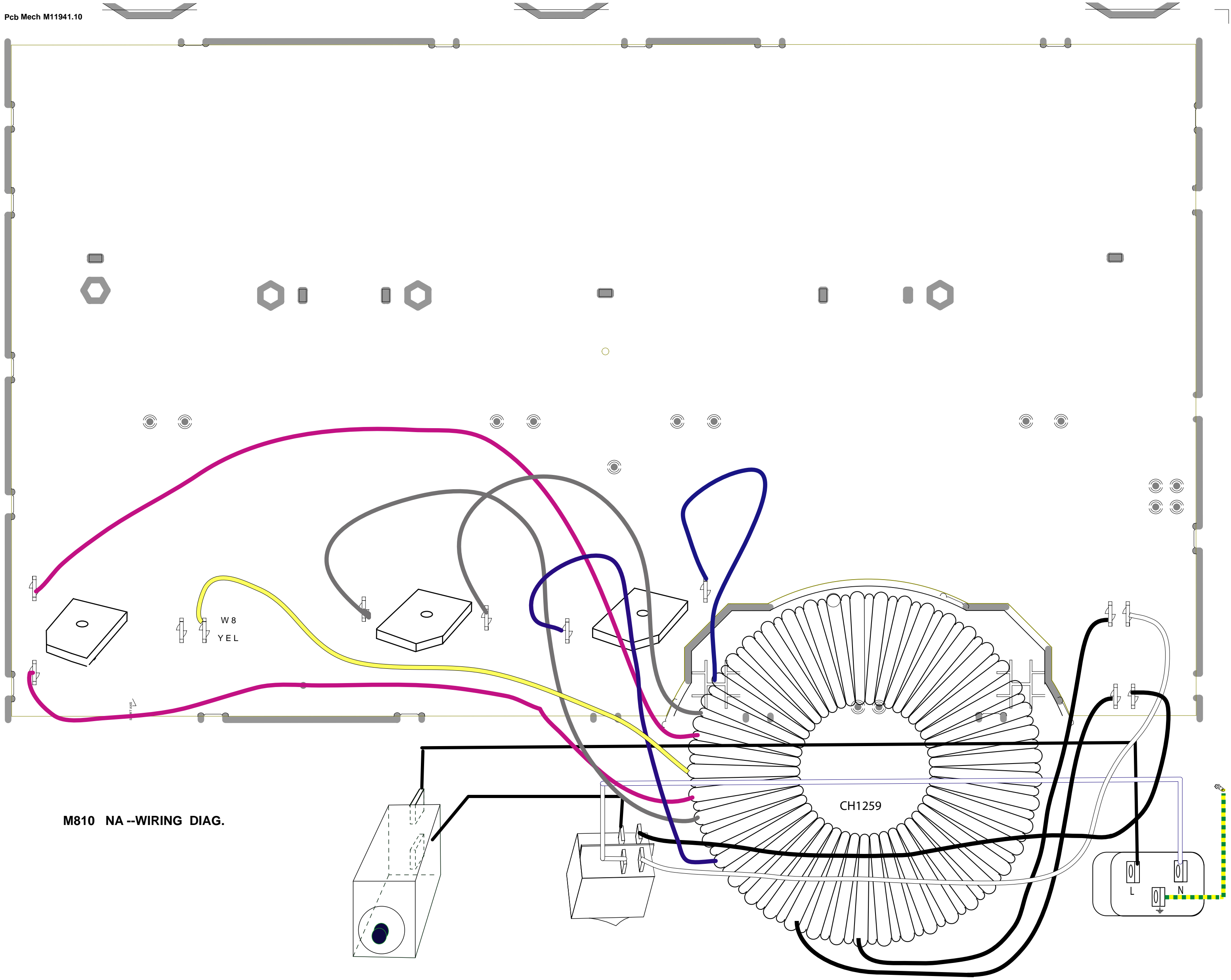


M810/M1610

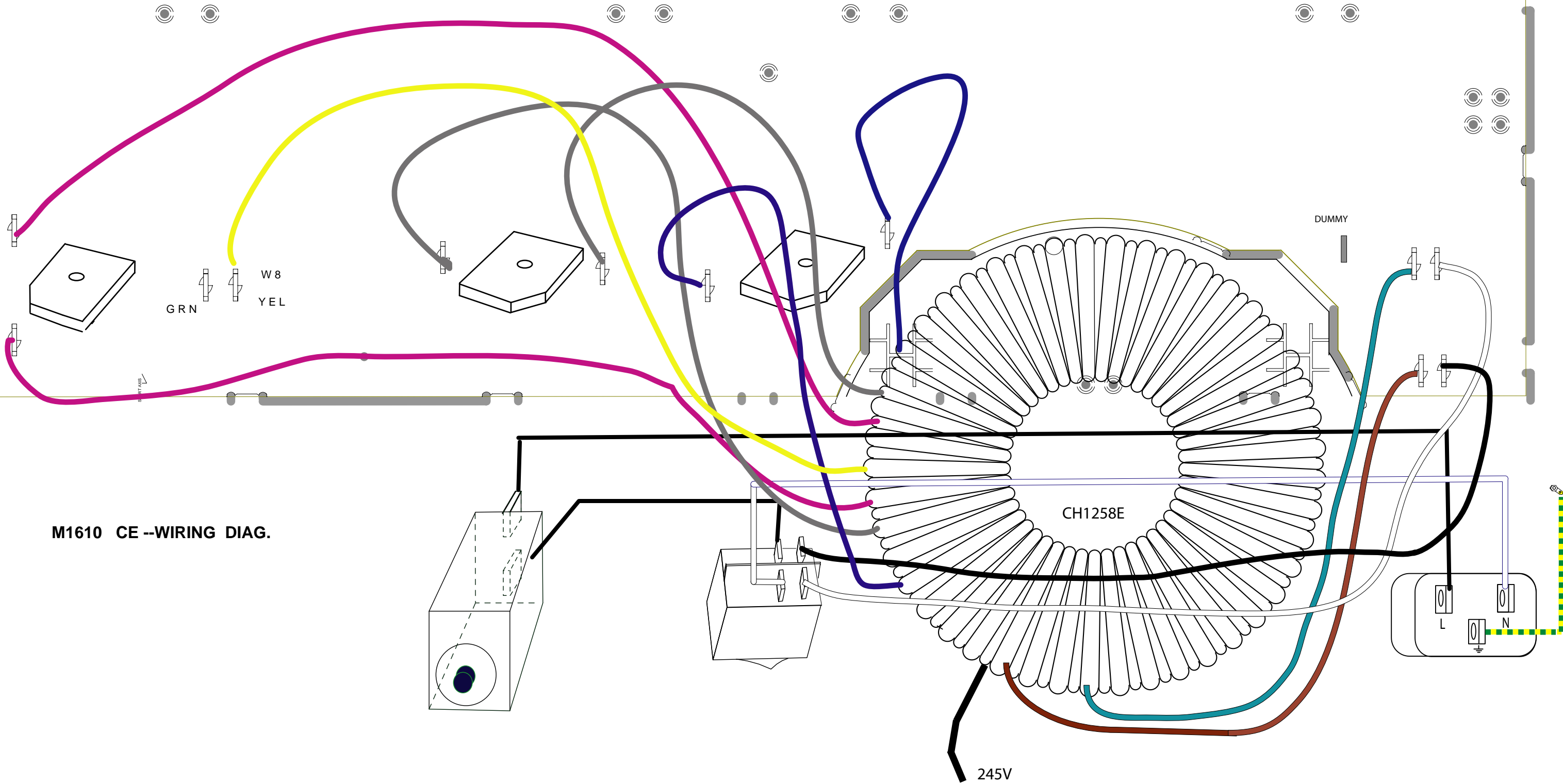
Series 2



Effect	Modify	Effect	Modify
1. Room Reverb	decay	9. Fast Echo	decay
2. Hall Reverb	decay	10. Short Decay Echo	delay
3. Hall Reverb - Vocals			
4. Hall Reverb w/Echo	decay	11. Long Decay Echo	rate
5. Plate Reverb			
6. Plate Reverb - Vocals			
7. Plate Reverb w/Echo	decay	12. Chorus	gain
8. Gated Reverb			
		13. Flanger	
		14. Rotary Speaker	
		15. Distortion	
		16. Harmonizer	pitch



M810 NA --WIRING DIAG.



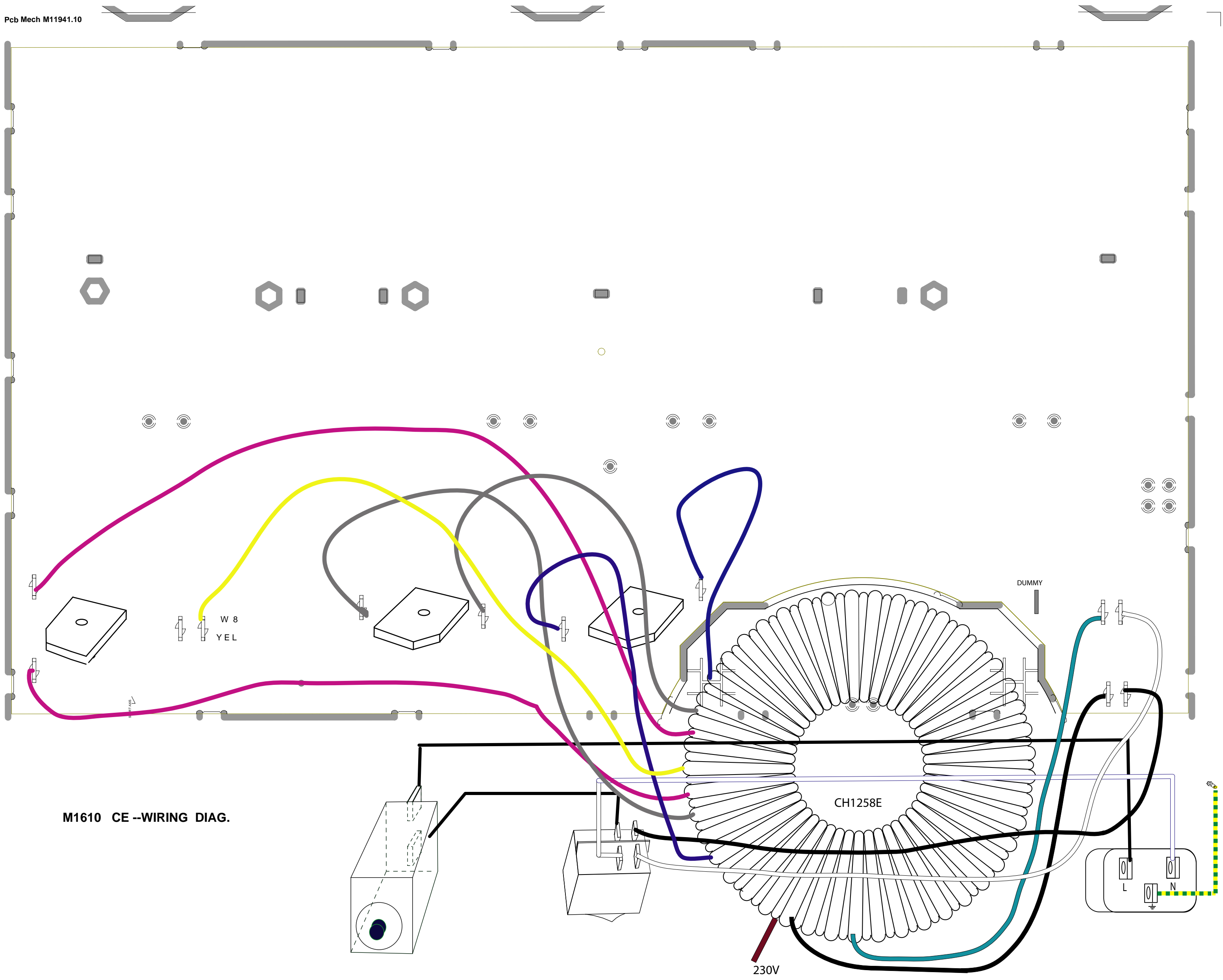
M1610 CE --WIRING DIAG.

CH1258E

DUMMY

245V

SHOWN AS 230V OPERATION



M1610 CE --WIRING DIAG.

CH1258E

DUMMY

W 8
YEL

230V

L
N
GND

SHOWN AS 245V OPERATION
FOR 245V: USE BLUE AND BLACK PRIMARY WIRES