



# SERVICE MANUAL

Series 1 and 2

## M810 / M1610

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

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

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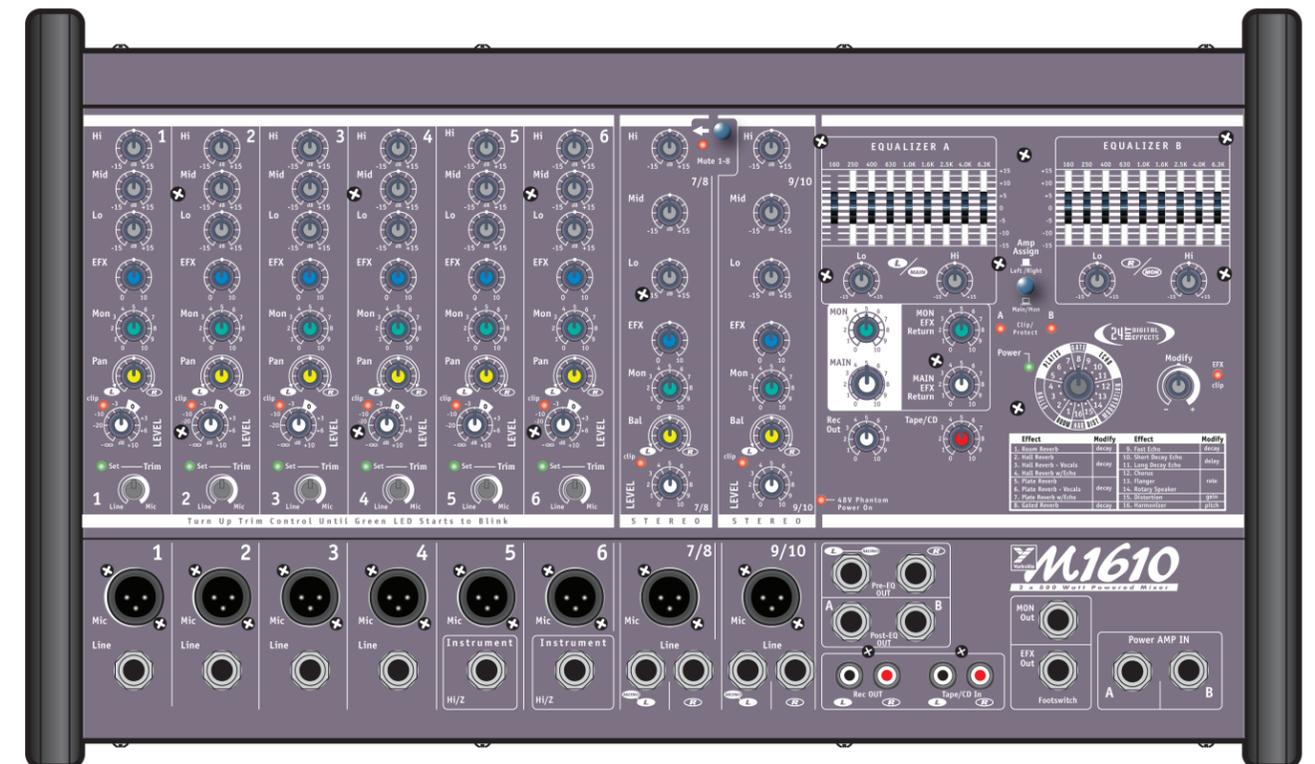
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# IMPORTANT SAFETY INSTRUCTIONS



This lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Ce symbole d'éclair avec tête de flèche dans un triangle équilatéral est prévu pour alerter l'utilisateur de la présence d'un « voltage dangereux » non-isolé à proximité de l'enceinte du produit qui pourrait être d'ampleur suffisante pour présenter un risque de choc électrique.



## CAUTION AVIS

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**

**RISQUE DE CHOC ELECTRIQUE  
NE PAS OUVRIR**



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est prévu pour alerter l'utilisateur de la présence d'instructions importantes dans la littérature accompagnant l'appareil en ce qui concerne l'opération et la maintenance de cet appareil.

### FOLLOW ALL INSTRUCTIONS

**Instructions pertaining to a risk of fire,  
electric shock, or injury to a person**

**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.**

**THIS DEVICE IS FOR INDOOR USE ONLY!**

### SUIVEZ TOUTES LES INSTRUCTIONS

**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**

**CE PRODUIT EST POUR L'USAGE À L'INTÉRIEUR SEULEMENT**

**Read Instructions:** The Owner's Manual should be read and understood before operation of your unit. Please, save these instructions for future reference and heed all warnings.

Clean only with dry cloth.

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

**Warning:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. *Do not use this apparatus near water!*

**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. An apparatus with CLASS I construction shall be connected to a Mains socket outlet with a protective earthing ground. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

#### 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. Only use attachments/accessories specified by the manufacturer

Note: Prolonged use of headphones at a high volume may cause health damage on your ears.

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.

Ensure that proper ventilation is provided around the appliance. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

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

#### Power Cord

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. The AC supply cord should be routed so that it is unlikely that it will be damaged. Protect the power cord from being walked on or pinched particularly at plugs. If the AC supply cord is damaged DO NOT OPERATE THE UNIT. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle. The mains plug of the power supply cord shall remain readily operable.

Unplug this apparatus during lightning storms or when unused for long periods of time.

#### Service

The unit should be serviced only by qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**Veillez Lire le Manuel:** Il contient des informations qui devraient être comprises avant l'opération de votre appareil. Conservez. Gardez S.V.P. ces instructions pour consultations ultérieures et observez tous les avertissements.

Nettoyez seulement avec le tissu sec.

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

**Avertissement:** Pour réduire le risque de feu ou la décharge électrique, n'exposez pas cet appareil à la pluie ou à l'humidité. *N'utilisez pas cet appareil près de l'eau!*

**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. Un appareil construit selon les normes de CLASS I devrait être raccordé à une prise murale d'alimentation avec connexion intacte de mise à la masse. Lorsqu'une prise de branchement ou un coupleur d'appareils est utilisée comme dispositif de débranchement, ce dispositif de débranchement devra demeurer pleinement fonctionnel avec raccordement à la masse.

#### 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. Utilisez seulement les attachments/accessoires indiqués par le fabricant

Note: L'utilisation prolongée des écouteurs à un volume élevé peut avoir des conséquences néfastes sur la santé sur vos oreilles. .

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.

Assurez que l'appareil est fourni de la propre ventilation. Ne procédez pas à l'installation près de source de chaleur tels que radiateurs, registre de chaleur, fous ou autres appareils (incluant les amplificateurs) qui produisent de la chaleur.

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

Ne pas enlever le dispositif de sécurité sur la prise polarisée ou la prise avec tige de mise à la masse du cordon d'alimentation. Une prise polarisée dispose de deux lames dont une plus large que l'autre. Une prise avec tige de mise à la masse dispose de deux lames en plus d'une troisième tige qui connecte à la masse. La lame plus large ou la tige de mise à la masse est prévu pour votre sécurité. La prise murale est désuète si elle n'est pas conçue pour accepter ce type de prise avec dispositif de sécurité. Dans ce cas, contactez un électricien pour faire remplacer la prise murale. Évitez d'endommager le cordon d'alimentation. Protégez le cordon d'alimentation. Assurez-vous qu'on ne marche pas dessus et qu'on ne le pince pas en particulier aux prises. **N'UTILISEZ PAS L'APPAREIL** si le cordon d'alimentation est endommagé. Pour débrancher complètement cet appareil de l'alimentation CA principale, déconnectez le cordon d'alimentation de la prise d'alimentation murale. Le cordon d'alimentation du bloc d'alimentation de l'appareil doit demeurer pleinement fonctionnel.

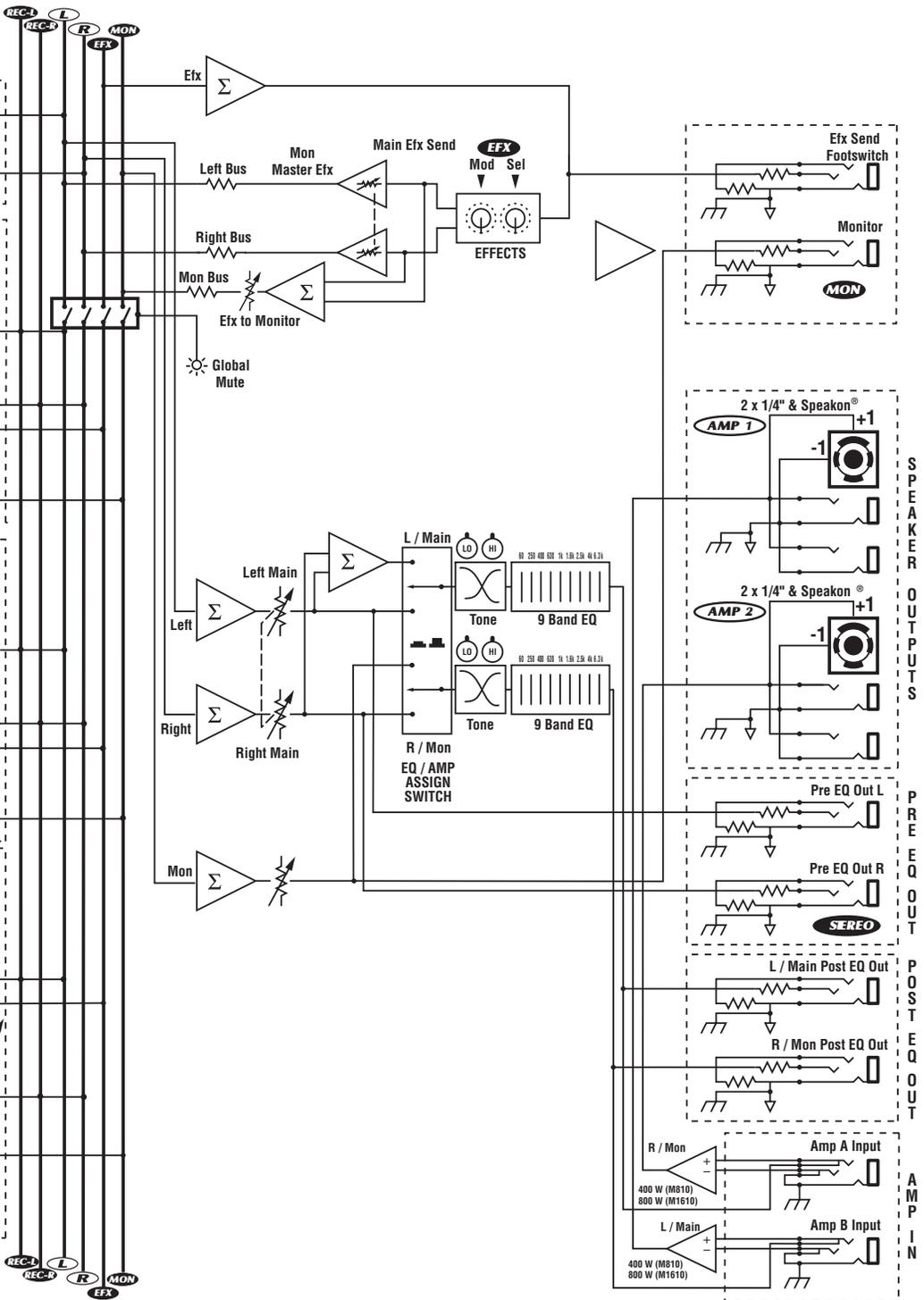
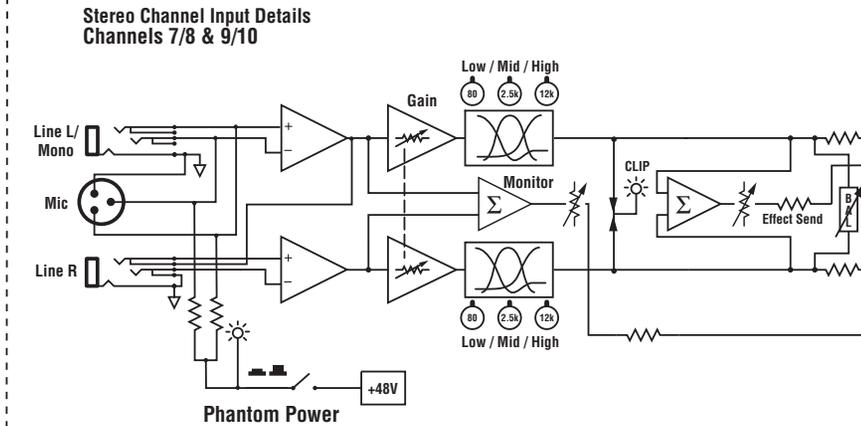
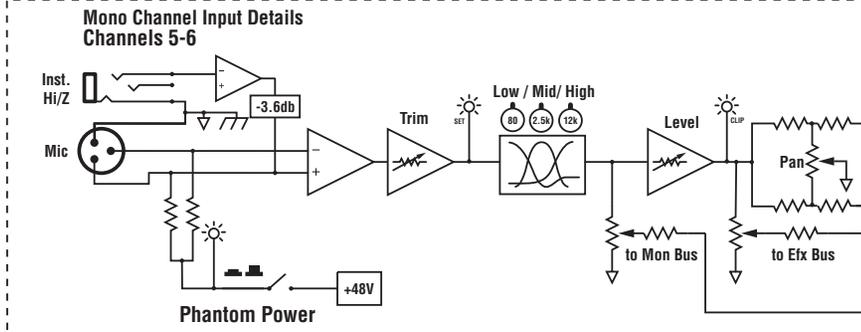
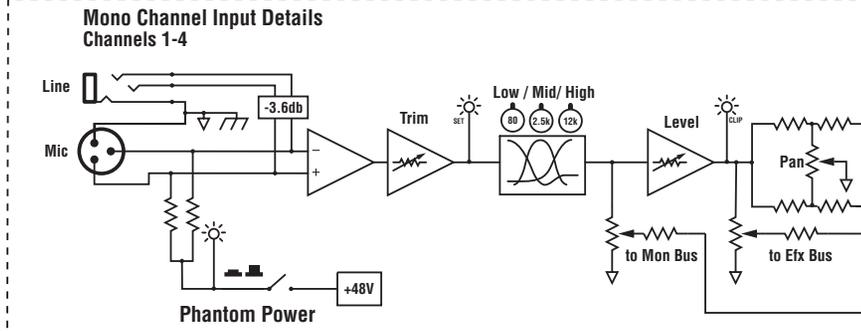
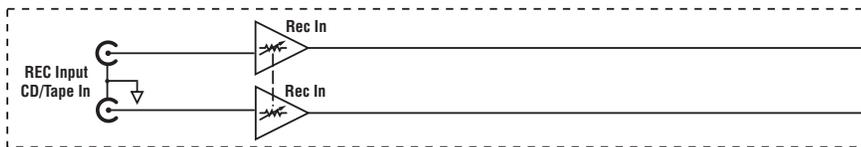
Débranchez cet appareil durant les orages ou si inutilisé pendant de longues périodes.

#### Service

Consultez un technicien qualifié pour l'entretien de votre appareil. L'entretien est nécessaire quand l'appareil a été endommagé de quelque façon que se soit. Par exemple si le cordon d'alimentation ou la prise du cordon sont endommagés, si il y a eu du liquide qui a été renversé à l'intérieur ou des objets sont tombés dans l'appareil, si l'appareil a été exposé à la pluie ou à l'humidité, si il ne fonctionne pas normalement, ou a été échappé.

# Block Diagram for M810 / M1610

DESIGNED & MANUFACTURED BY YORKVILLE SOUND



M810-2 Parts List 8/15/2012

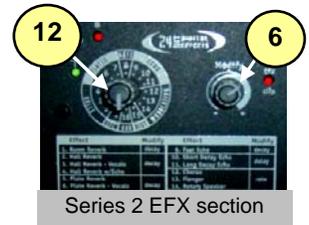
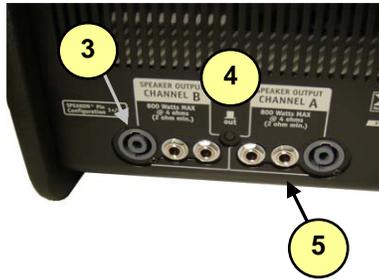
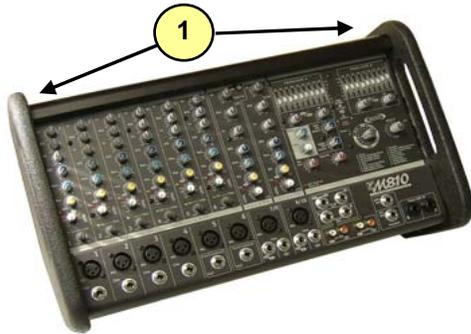
YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
5906	RED 3MM LED 1V9 20MA 4SPCER T&R	13	4432	10K B LIN 9MM P32	6	2033	1/6W 1K 2%FLAME PROOF T&R RES	4
5908	GRN 3MM LED 1V9 20MA 4SPCER T&R	7	4434	10K B LIN 9MM DETENT P32	21	4981	1/4W 1K 5%MINI T&R RES	13
6419	BRIDGE 35A 400V WIRE LEAD G13504	2	3998	20K 1B LIN 20MM DETENT S04	18	6110	1/4W 1K0 1%MINI MF T&R RES	2
6425	BAV21 200V 0A25 DIODE T&R	20	4426	20K 4B LIN 9MM P32	1	4585	1/4W 1K2 5%MINI T&R RES	25
6825	1N4148 75V 0A45 DIODE T&R	89	4433	50K B LIN 9MM P32	15	4988	1/4W 1K5 5%MINI T&R RES	25
6438	1N4007 1000V 1A0 DIODE T&R	1	4435	50K B LIN 9MM DETENT P32	10	6113	1/4W 2K 5%MINI T&R RES	4
6934	MR854 400V 3A0 DIODE FASREC	12	4443	100K 5C R/A 9MM P32	8	6104	1/4W 2K2 5%MINI T&R RES	6
6436	1N753ARL 6V2 0W5 ZENER 5% T&R	1	4431	10K 5C R/A 12MM STEREO P34	2	4864	1/4W 2K7 5% T&R RES	2
6437	1N5237B 8V2 0W5 ZENER 5% T&R	5	4438	10K B LIN 12MM STEREO DETENTP34	4	6124	1/4W 3K 5%MINI T&R RES	4
6439	1N5225B 3V0 0W5 ZENER 5% T&R	4	4447	20K 15A AUD 12MM STEREO P34	1	6136	1/4W 3K3 5%MINI T&R RES	4
6450	1N5242B 12V0 0W5 ZENER 5% T&R	4	4437	50K B LIN 12MM STEREO P34	2	4814	1/4W 3K6 5% T&R RES	1
6461	1N5240BRL 10V0 0W5 ZENER 5% T&R	4	4439	50K B LIN 12MM STEREO DETENTP34	2	5028	1/4W 3K74 1% T&R RES	4
6465	1N5250B 20V0 0W5 ZENER 5% T&R	1	4441	50K 4B LIN 12MM STEREO P34	1	4850	1/4W 3K9 5% T&R RES	2
6475	1N5262B 51V0 0W5 ZENER 5% T&R	1	4520	10K TRIM POT	2	4774	1/4W 4K12 1% T&R RES	4
6824	1N5246B 16V0 0W5 ZENER 5% T&R	8	2408	8.00 AMP CIRCUIT BREAKER	1	4681	1.0W 4K7 5% T&R RES	8
6484	1N4740A 10V0 1W0 ZENER 5% T&R	2	3820	4UH COIL 14AWG ZOBEL HORIZONTAL	2	4943	1/4W 4K7 5% 2"U T&R RES	2
5124	1N5338B 5V1 5W0 ZENER 5% T&R	3	8497	M1610/M810 GABLE	2	4982	1/4W 4K7 5%MINI T&R RES	49
6738	MC7806CT TO220 P 5V0 REG 36V	1	3489	CLIP 250X032 18-22AWG DISCO/INSL	1	6128	1/4W 4K99 1%MINI MF T&R RES	42
6871	MC7915CT TO220 N 15V0 REG V2	1	3490	CLIP 250X032 14-16AWG DISCO/INSL	11	6121	1/4W 6K98 1%MINI MF T&R RES	4
6872	MC7815CT TO220 P 15V0 REG V1	1	3601	RING TERMINAL 16AWG WIRE & #8 SCREW	1	4926	1/4W 7K5 5% 2"U T&R RES	18
5101	BC550C TO92 NPN TRAN T&R TB	17	3450	1/4" JCK PCB MT ALL-GOLD SKT	2	4990	1/4W 8K2 5%MINI T&R RES	2
5102	BC560C TO92 PNP TRAN T&R TB	38	3921	1/4" JCK PCB MT VERT STER RT SWT	16	4983	1/4W 10K 5%MINI T&R RES	96
5103	MPSA06 TO92 NPN TRAN T&R TA	4	3924	1/4" JCK PCB MT VERT 2XTIP HICURNT	4	6116	1/4W 10K0 1%MINI MF T&R RES	80
5104	MPSA56 TO92 PNP TRAN T&R TA	2	3466	RCA DUAL PCB MT VERT GOLD 24MM	2	4630	1/2W 15K 5% T&R RES	4
5107	2N5551 TO92 NPN TRAN T&R TA	4	3628	SPKON 4C PCB MT VERT 250TAB GRY #4	2	4979	1/4W 15K 5%MINI T&R RES	28
5108	2N5401 TO92 PNP TRAN T&R TA	4	4010	XLR FEML PCB MT VERT 24MM AA-SERIES	8	4954	1/4W 18K 5% 2"U T&R RES	12
5105	MPSA13 TO92 NPN DARL T&R TA	3	3451	EYELET SMALL 0.089 OD PLATED	1	6125	1/4W 18K 5%MINI T&R RES	2
5106	MPSA63 TO92 PNP DARL T&R TA	2	3856	FAN 80MM X 80MM 39CFM 12VDC 200MA	2	6123	1/4W 20K0 1%MINI MF T&R RES	5
6774	BD139 TO126 NPN TRAN TG	1	3894	HEATSINK TO-220 W/TAB BLACK ANODIZE	5	4777	1/4W 21K5 1% T&R RES	2
6873	MJE340 TO126 NPN TRAN TG	2	3501	B52200F006 COMP WASH #4 SMALL	5	6118	1/4W 22K 5%MINI T&R RES	19
6874	MJE350 TO126 PNP TRAN TG	2	3719	DUAL XSISTOR SPRING, ZINC CLEAR	4	4833	1/4W 27K 5% T&R RES	4
6805	2SD2560 TO3P NPN TRAN DARL	4	3977	QUAD XSISTOR SPRING, ZINC YELLOW	3	6129	1/4W 27K 5%MINI T&R RES	7
6812	2SB1647 TO3P PNP TRAN DARL	4	8889	RUBBER GROMMET #2183-034-BLK	1	6122	1/4W 33K 5%MINI T&R RES	13
6916	TIP107 TO220 PNP TRAN DARL TE	1	3801	5/8" BUMPER BUTTON BLACK	1	4868	1/4W 36K 5% T&R RES	2
6953	IRF4905 TO220 PCH MFET	4	3810	4" NYLON CABLE TIE	8	4853	1/4W 39K 5% T&R RES	4
6966	IRL2910 NCH MFET 100V TN	4	8397	KNOB STYLE 2 GREY	1	4927	1/4W 47K 5% 2"U T&R RES	4
6804	MC33079P IC QUAD OP AMP	4	8632	KNOB ROUND PUSHBUTTON 1/4" GREY	2	6119	1/4W 47K 5%MINI T&R RES	26
6882	TL072CP IC FET DUAL OP AMP	15	8637	ROUND PUSHBUTTON 1/4" BLK 24MM	1	4928	1/4W 56K 5% 2"U T&R RES	14
6889	TL074CN IC QUAD O/A T.I. ONLY	11	9915	KNOB 0-DEG RED SOFT GRAY RIB	2	6139	1/4W 62K 5%MINI T&R RES	6
6745	LM13600N IC XCONDUCTANCE AMP	4	9916	KNOB 0-DEG GRY SOFT GRAY RIB	29	4586	1/4W 82K 5%MINI T&R RES	4
6619	10K 3% THERMISTOR VISH NTC	2	9917	KNOB 0-DEG GRN SOFT GRAY RIB	9	4929	1/4W 82K 5% 2"U T&R RES	14
5408	47P 100V 10%CAP T&R BEAD NPO	33	9918	KNOB 0-DEG BLU SOFT GRAY RIB	10	6120	1/4W 100K 5%MINI T&R RES	1
5199	100P 100V 2%CAP T&R RAD CER.2NPO	8	9919	KNOB 0-DEG YELT SOFT GRAY RIB	8	4991	1/4W 133K 1%MINI T&R RES	12
5412	220P 100V 10%CAP T&R BEAD NPO	14	9920	KNOB 0-DEG WHT SOFT GRAY RIB	9	4796	1/4W 180K 5%MINI T&R RES	4
5416	470P 50V 10%CAP T&R BEAD NPO	6	9921	KNOB 0-DEG GRY W/O COVERING	6	6126	1/4W 220K 5%MINI T&R RES	14
5422	1N 50V 10%CAP T&R BEAD NPO	20	3426	8 3/16 SJT AC LINE CORD REMOVEV-CSA	1	6127	1/4W 470K 5%MINI T&R RES	2
5273	1N5 200V 5%CAP T&R RAD CER.2NPO	16	8701	4-40 KEPS NUT ZINC	5	4948	1/4W 1M 5% 2"U T&R RES	2
5208	2N2 400V 5%CAP T&R RAD .2FLM	5	8800	6-32 KEPS NUT ZINC	6	4951	1/4W 4M7 5% 2"U T&R RES	7
5275	3N3 100V 5%CAP T&R RAD .2FLM	6	8841	10-32 KEPS NUT TIN PLATED	7	6132	1/4W 8M2 5%MINI T&R RES	6
5209	4N7 250V 5%CAP T&R RAD .2FLM	4	8797	5/16-18 KEPS NUT JS500	1	4809	1/4W 10M 5% T&R RES	2
6451	4N7 250V 20%CAP BLK Y 10MM AC	1	4022	ELASTOMER PAD - 4-TO220 1X1.850	3	4751	1/4W 22M 5% T&R RES	10
5204	10N 100V 10%CAP T&R RAD .2FLM	4	4125	ELASTOMER PAD - 2-TO218 1X2.050	4	3722	RELAY 1A 30AMP DC24 036MA PC-C	2
5205	15N 100V 10%CAP T&R RAD .2FLM	4	8581	CUSTOM PBL TRANSISTOR SPACER	7	8842	#4 X 5/16 PAN QUAD TYPE A JS500 BLK	18
5207	18N 100V 5%CAP T&R RAD .2FLM	6	4597	22AWG STRAN TC WIR JMP	15	8729	#4 X 3/8 FLAT QUAD TYPE A JS500 BLK	4
5210	22N 100V 10%CAP T&R RAD .2FLM	26	4598	22AWG SOLID SC WIR T&R JMP	187	8865	4-40 X 5/16 PAN PH MS JS500	5
5840	22N 400V 10%CAP BLK RAD POLY FLM	2	4749	5.0W 0R15 5% BLK RES	8	8902	4-40 X 3/4 PAN PHIL MS B/O & WAX	15
6435	22N 275V 20%CAP BLK X2 15MM AC	1	2006	1.0W 1R 5%FLAME PROOF T&R RES	2	8822	6-32 X 1/4 PAN PH MS ZN C/W SPLIT_W	4
5222	33N 100V 10%CAP T&R RAD .2FLM	10	4911	1/4W 2R2 5% T&R RES	4	8831	6-32 X 1/4 PAN PH TAPTITE ZN	2
5224	47N 100V 10%CAP T&R RAD .2FLM	4	4748	2.0W 3R9 5% T&R	2	8832	6-32 X 1/4 PAN PH TAPTITE JS500	20
5226	68N 100V 5%CAP T&R RAD .2FLM	2	2008	1.0W 10R 5%FLAME PROOF T&R RES	4	8801	6-32 X 3/8 PAN PH TAPTITE JS500	4
5212	100N 63V 5%CAP T&R RAD .2FLM	37	4605	1/8W 10R 5% T&R RES	3	8829	6-32 X 3/8 FLAT PH TAPTITE BO#C HEA	3
5314	100N 50V 10%CAP T&R BEAD X7R	7	4709	5.0W 22R 5% BLK RES	1	8823	6-32 X 1 PAN PH TAPTITE JS500	3
5229	150N 63V 10%CAP T&R RAD .2FLM	2	2016	1/6W 39R 2%FLAME PROOF T&R RES	4	8809	10-32 X 1/4 PAN PH TAPTITE JS500	8
5231	220N 63V 5%CAP T&R RAD .2FLM	2	6134	1/4W 47R 5%MINI T&R RES	6	8833	10-32 X 7/8 IND HEX M/S BLACK OXIDE	7
5318	220N 50V 10%CAP T&R BEAD X7R	1	2019	1/8W 100R0 1%FLAME PROOF T&R RES	12	8893	10-32 X 1 FLAT PHILIPS TT JS500 BLK	10
5233	330N 63V 5%CAP T&R RAD .2FLM	8	4602	1/8W 100R 5% T&R RES	29	8733	5/16-18X2-1/2 GRD 5 HEX BOLT JS500	1
5234	470N 63V 10%CAP T&R RAD .2FLM	2	4921	1/4W 100R 5% 2"U T&R RES	18	3663	SNAP IEC PWR SOC W/250TAB FOR.060	1
5266	680N 250V 20%CAP BLK X2 30MM AC	1	4984	1/4W 150R 5%MINI T&R RES	3	2335	NYLON STANDOFF NUT #4 500MIL	9
5257	2U2 63V 20%CAP T&R RAD .2EL	12	2023	1/6W 220R0 1%FLAME PROOF T&R RES	8	2342	NYLON STANDOFF NUT #4 530MIL BLACK	6
5258	4U7 63V 20%CAP T&R 8X7MM .2EL	20	4977	1/4W 220R 5%MINI T&R RES	11	8657	6-32 X 3/8" HEX SPACER ALUMINUM	7
5282	10U 16V 20%CAP T&R 5X7MM .2NP	32	2024	1/6W 249R 2%FLAME PROOF T&R RES	4	8482	3/8 ID FLAT WASHER	20
5945	10U 63V 20%CAP T&R RAD .2EL	3	4980	1/4W 470R 5%MINI T&R RES	28	3524	NYLON SHWASHER ID385 OD750 T060	4
5260	22U 50V 20%CAP T&R RAD .2EL	1	2028	1/6W 475R 1%FLAME PROOF T&R RES	2	8485	#6 SPLIT WASHER ZINC	2
5631	22U 50V 20%CAP T&R 6X7MM .2EL	12	4799	1/4W 562R 1% T&R RES	4	3577	FIBER WASHER. 625OD .380ID .03	4
5961	33U 16V 20%CAP T&R RAD .2IN NP	17	4922	1/4W 620R 5% 2"U T&R RES	8	8818	3/4 OD X 3/8 ID X .080 THICK WASHER	2
5879	100U 16V 20%CAP T&R 8X7MM .2EL	15	5019	1/4W 620R 5%MINI T&R RES	14	3440	4PDT MINI VERT ALT SWITCH	1
5618	470U 25V 20%CAP BLK 10X15MM EL	1	4923	1/4W 680R 5% 2"U T&R RES	4	3522	DPDT MINI PC VERT SNP ALT	2
5896	4700U 80V 20%CAP BLK 25X50MM ELS	4	2030	1/6W 681R 1%FLAME PROOF T&R RES	16	3587	DPDT ROKR SW QUIK 250 AC/PWR ON-OFF	1
5898	8200U 50V 20%CAP 25X50MM ELS	4	4924	1/4W 750R 5% 2"U T&R RES	6	CH1301	M810 XFMR	1
6578	ROT BIN 18MM 4BIT ENCODER P23	1	2031	1/6W 820R 5%FLAME PROOF T&R RES	4			

M1610-2 Parts List 8/15/2012

YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
5906	RED 3MM LED 1V9 20MA.4SPCER T&R	13	5898	8200U 50V 20%CAP 25X50MM ELS	8	5019	1/4W 620R 5%MINI T&R RES	14	8893	10-32 X 1 FLAT PHILIPS TT JS500 BLK	10
5908	GRN 3MM LED 1V9 20MA.4SPCER T&R	7	6578	ROT BIN 18MM 4BIT ENCODER P23	1	4923	1/4W 680R 5% 2U T&R RES	4	8733	5/16-18X2-1/2 GRD 5 HEX BOLT JS500	1
6419	BRIDGE 35A 400V WIRE LEAD G13504	3	4432	10K B LIN 9MM P32	6	2030	1/6W 681R 1%FLAME PROOF T&R RES	16	7613	100N 25V 10%CAP 0805 SMT X7R	5
6425	BAV21 200V 0A25 DIODE T&R	28	4434	10K B LIN 9MM DETENT P32	21	4924	1/4W 750R 5% 2U T&R RES	6	7621	0.1W 10K 1% 0805 SMT RES	4
6825	1N4148 75V 0A45 DIODE T&R	89	3998	20K 1B LIN 20MM DETENT S04	18	2031	1/6W 820R 5%FLAME PROOF T&R RES	4	7624	0.1W 100R 1% 0805 SMT RES	1
6438	1N4007 1000V 1A0 DIODE T&R	1	4426	20K 4B LIN 9MM P32	1	2033	1/6W 1K 2%FLAME PROOF T&R RES	4	7625	0.1W 10K0 1% 0805 SMT RES	5
6934	MR854 400V 3A0 DIODE FASREC	20	4433	50K B LIN 9MM P32	15	4981	1/4W 1K 5%MINI T&R RES	13	7634	0.1W 20K5 1% 0805 SMT RES	2
6436	1N753ARL 6V2 0W5 ZENER 5% T&R	1	4435	50K B LIN 9MM DETENT P32	10	6110	1/4W 1K0 1%MINI MF T&R RES	2	7693	1N 50V 5%CAP 0805 SMT NPO	2
6437	1N5237B 8V2 0W5 ZENER 5% T&R	5	4443	100K 5C R/A 9MM P32	8	4585	1/4W 1K2 5%MINI T&R RES	21	7766	15P 50V 5%CAP 0603 SMT NPO	1
6439	1N5225B 3V0 0W5 ZENER 5% T&R	4	4431	10K 5C R/A 12MM STEREO P34	2	4988	1/4W 1K5 5%MINI T&R RES	25	7781	W063 49R9 1% 0603 SMT RES	1
6450	1N5242B 12V0 0W5 ZENER 5% T&R	4	4438	10K B LIN 12MM STEREO DETENTP34	4	6105	1/4W 1K8 5%MINI T&R RES	4	7786	CD4052B IC DUAL 4CHANNEL MUX SMT	1
6461	1N5240BRL 10V0 0W5 ZENER 5% T&R	4	4447	20K 15A AUD 12MM STEREO P34	1	6113	1/4W 2K 5%MINI T&R RES	4	8485	#6 SPLIT WASHER ZINC	2
6465	1N5250B 20V0 0W5 ZENER 5% T&R	1	4437	50K B LIN 12MM STEREO P34	2	6104	1/4W 2K2 5%MINI T&R RES	6	3577	FIBER WASHER .625OD .380ID .03	4
6475	1N5262B 51V0 0W5 ZENER 5% T&R	1	4439	50K B LIN 12MM STEREO DETENTP34	2	4864	1/4W 2K7 5% T&R RES	2	8818	3/4 OD X 3/8 ID X .080 THICK WASHER	2
6824	1N5246B 16V0 0W5 ZENER 5% T&R	16	4441	50K 4B LIN 12MM STEREO P34	1	6124	1/4W 3K 5%MINI T&R RES	4	3440	4PDT MINI VERT ALT SWITCH	1
6484	1N4740A 10V0 1W0 ZENER 5% T&R	2	4520	10K TRIM POT	2	4814	1/4W 3K6 5% T&R RES	1	3522	DPDT MINI PC VERT SNP ALT	2
5124	1N5388B 5V1 5W0 ZENER 5% T&R	3	3606	12.00 AMP CIRCUIT BREAKER	1	5028	1/4W 3K74 1% T&R RES	4	3587	DPDT ROCKR SW QUIK 250V AC/PWR ON-OFF	1
6738	MC7805CT TO220 P 5V0 REG 36V	1	3820	4UH COIL 14AWG ZOBEL HORIZONTAL	2	4850	1/4W 3K9 5% T&R RES	2	CH1302	XFMR:UCSP1P / M1610	1
6871	MC7915CT TO220 N 15V0 REG V2	1	8497	M1610/M810 GABLE	2	4774	1/4W 4K12 1% T&R RES	4			
6872	MC7815CT TO220 P 15V0 REG V1	1	3489	CLIP 25X032 18-22AWG DISCO/INSL	1	4943	1/4W 4K7 5% 2U T&R RES	2			
5101	BC550C TO92 NPN TRAN T&R TB	17	3490	CLIP 25X032 14-16AWG DISCO/INSL	11	4982	1/4W 4K7 5%MINI T&R RES	49			
5102	BC560C TO92 PNP TRAN T&R TB	38	3601	RING TERMINAL 16AWG WIRE & #8 SCREW	1	6128	1/4W 4K99 1%MINI MF T&R RES	42			
5103	MPSA06 TO92 NPN TRAN T&R TA	4	3450	1/4" JCK PCB MT ALL-GOLD SKT	2	6141	1/4W 5K6 5%MINI T&R RES	4			
5104	MPSA56 TO92 PNP TRAN T&R TA	2	3921	1/4" JCK PCB MT VERT STER RT SWT	16	6121	1/4W 6K98 1%MINI MF T&R RES	4			
5107	2N5551 TO92 NPN TRAN T&R TA	2	3924	1/4" JCK PCB MT VERT 2XTIP HICURNT	4	4926	1/4W 7K5 5% 2U T&R RES	18			
5108	2N5401 TO92 PNP TRAN T&R TA	4	3466	RCA DUAL PCB MT VERT GOLD 24MM	2	4990	1/4W 8K2 5%MINI T&R RES	2			
5113	MPSA42 TO92 NPN TRAN T&R TA	2	3628	SPKON 4C PCB MT VERT 250TAB GRY #4	2	4983	1/4W 10K 5%MINI T&R RES	96			
5105	MPSA13 TO92 NPN DARL T&R TA	3	4010	XLR FEML PCB MT VERT 24MM AA-SERIES	8	5031	1.0W 10K0 5% T&R RES	16			
5106	MPSA63 TO92 PNP DARL T&R TA	2	3451	EYELET SMALL 0.089 OD PLATED	1	6116	1/4W 10K0 1%MINI MF T&R RES	80			
6774	BD139 TO126 NPN TRAN TG	1	3866	FAN 80MM X 80MM 39CFM 12VDC 200MA	2	4630	1/2W 15K 5% T&R RES	6			
6808	MJE15032 TO220 NPN TRAN TE	2	3894	HEATSINK TO-220 W/TAB BLACK ANODIZE	5	4979	1/4W 15K 5%MINI T&R RES	30			
6809	MJE15033 TO220 PNP TRAN TE	2	3501	B52200F006 COMP WASH #4 SMALL	3	4954	1/4W 18K 5% 2U T&R RES	12			
6873	MJE340 TO126 NPN TRAN TG	2	3977	QUAD XSISTOR SPRING, ZINC YELLOW	6	6125	1/4W 18K 5%MINI T&R RES	2			
6874	MJE350 TO126 PNP TRAN TG	2	8889	RUBBER GROMMET #2183-034-BLK	1	6123	1/4W 20K0 1%MINI MF T&R RES	5			
6916	TIP107 TO220 PNP TRAN DARL TE	1	3801	5/8" BUMPER BUTTON BLACK	1	4777	1/4W 21K5 1% T&R RES	2			
6953	IRF4905 TO220 PCH MFET	8	3803	NYLON SECUR-A-TACH MINI PLASTIC TIE	1	6118	1/4W 22K 5%MINI T&R RES	17			
6966	IRL2910 NCH MFET 100V TN	8	3810	4" NYLON CABLE TIE	10	6129	1/4W 27K 5%MINI T&R RES	7			
6909	MJ21196 TO3 NPN TRAN TH	4	8397	KNOB STYLE 2 GREY	1	6122	1/4W 33K 5%MINI T&R RES	13			
6910	MJ21195 TO3 PNP TRAN TH	4	8632	KNOB ROUND PUSHBUTTON 1/4" GREY	2	4868	1/4W 36K 5% T&R RES	2			
6804	MC33079P IC QUAD OP AMP	4	8637	ROUND PUSH BUTTON 1/4" BLK 24MM	1	4878	1/4W 43K 5% T&R RES	4			
6882	TL072CP IC FET DUAL OP AMP	15	9915	KNOB 0-DEG RED SOFT GRAY RIB	2	4927	1/4W 47K 5% 2U T&R RES	4			
6889	TL074CN IC QUAD O/A T.I ONLY	11	9916	KNOB 0-DEG GRY SOFT GRAY RIB	29	6119	1/4W 47K 5%MINI T&R RES	26			
6745	LM13600N IC XCONDUCTANCE AMP	4	9917	KNOB 0-DEG GRN SOFT GRAY RIB	9	4835	1/4W 56K 5% T&R RES	2			
6619	10K 3% THERMISTOR VISH NTC	2	9918	KNOB 0-DEG BLU SOFT GRAY RIB	10	4928	1/4W 56K 5% 2U T&R RES	14			
5408	47P 100V 10%CAP T&R BEAD NPO	33	9919	KNOB 0-DEG YEL SOFT GRAY RIB	8	5018	1/4W 56K 5%MINI T&R RES	2			
5199	100P 100V 2%CAP T&R RAD CER.2NPO	8	9920	KNOB 0-DEG WHT SOFT GRAY RIB	9	6139	1/4W 62K 5%MINI T&R RES	6			
5412	220P 100V 10%CAP T&R BEAD NPO	14	9921	KNOB 0-DEG GRY W/O COVERING	6	4929	1/4W 82K 5% 2U T&R RES	14			
5416	470P 50V 10%CAP T&R BEAD NPO	6	3426	8 3/16 SJT AC LINE CORD REMOVEB-CSA	1	6120	1/4W 100K 5%MINI T&R RES	1			
5422	1N 50V 10%CAP T&R BEAD NPO	20	8701	4-40 KEPS NUT ZINC	3	4991	1/4W 133K 1%MINI T&R RES	16			
5273	1N5 200V 5%CAP T&R RAD CER.2NPO	16	8760	6-32 KEPS NUT TIN PLATED	16	4796	1/4W 180K 5%MINI T&R RES	4			
5208	2N2 400V 5%CAP T&R RAD .2FLM	5	8800	6-32 KEPS NUT ZINC	13	6126	1/4W 220K 5%MINI T&R RES	14			
5275	3N3 100V 5%CAP T&R RAD .2FLM	6	8841	10-32 KEPS NUT TIN PLATED	6	6127	1/4W 470K 5%MINI T&R RES	2			
5209	4N7 250V 5%CAP T&R RAD .2FLM	4	8797	5/16-18 KEPS NUT JS500	1	4948	1/4W 1M 5% 2U T&R RES	2			
6451	4N7 250V 20%CAP BLK Y 10MM AC	1	3916	TO3 SIL-PAD REPLACES MICA	8	4951	1/4W 4M7 5% 2U T&R RES	7			
5204	10N 100V 10%CAP T&R RAD .2FLM	2	4022	ELASTOMER PAD - 4-TO220 1X1.850	6	6132	1/4W 9M2 5%MINI T&R RES	6			
5205	15N 100V 10%CAP T&R RAD .2FLM	4	8581	CUSTOM PBL TRANSISTOR SPACER	6	4809	1/4W 10M 5% T&R RES	2			
5207	18N 100V 5%CAP T&R RAD .2FLM	6	4597	22AWG STRAN TC WIR JMP	15	4751	1/4W 22M 5% T&R RES	10			
5210	22N 100V 10%CAP T&R RAD .2FLM	26	4599	22AWG SOLID SC WIR T&R JMP	187	3722	RELAY 1A 30AMP DC24 036MA PC-C	2			
5840	22N 400V 10%CAP BLK RAD POLY FLM	2	4745	5.0W 0R1 5% BLK RES	8	8842	#4 X 5/16 PAN QUAD TYPE A JS500 BLK	18			
6435	22N 275V 20%CAP BLK X2 15MM AC	1	2006	1.0W 1R 5%FLAME PROOF T&R RES	2	8729	#4 X 3/8 FLAT QUAD TYPE A JS500 BLK	4			
5222	33N 100V 10%CAP T&R RAD .2FLM	10	2007	1/4W 1R 5%FLAME PROOF T&R RES	4	8865	4-40 X 5/16 PAN PH MS JS500	3			
5224	47N 100V 10%CAP T&R RAD .2FLM	4	4911	1/4W 2R2 5% T&R RES	4	8902	4-40 X 3/4 PAN PHIL MS B/O & WAX	15			
5226	68N 100V 5%CAP T&R RAD .2FLM	2	4748	2.0W 3R9 5% T&R	2	8822	6-32 X 1/4 PAN PH MS ZN C/W SPLIT_W	4			
5212	100N 63V 5%CAP T&R RAD .2FLM	37	2008	1.0W 10R 5%FLAME PROOF T&R RES	4	8831	6-32 X 1/4 PAN PH TAPTITE ZN	2			
5314	100N 50V 10%CAP T&R BEAD X7R	7	4605	1/8W 10R 5% T&R RES	3	8832	6-32 X 1/4 PAN PH TAPTITE JS500	20			
5229	150N 63V 10%CAP T&R RAD .2FLM	2	4709	5.0W 22R 5% BLK RES	1	8801	6-32 X 3/8 PAN PH TAPTITE JS500	4			
5231	220N 63V 5%CAP T&R RAD .2FLM	2	2013	1/6W 22R1 1%FLAME PROOF T&R RES	2	8829	6-32 X 3/8 FLAT PH TAPTITE BO#C HEA	3			
5318	220N 50V 10%CAP T&R BEAD X7R	1	2016	1/6W 39R 2%FLAME PROOF T&R RES	4	8761	6-32 X 1/2 PAN PHIL MS ZINC CLEAR	16			
5233	330N 63V 5%CAP T&R RAD .2FLM	8	6134	1/4W 47R 5%MINI T&R RES	6	8823	6-32 X 1 PAN PH TAPTITE JS500	3			
5234	470N 63V 10%CAP T&R RAD .2FLM	2	2019	1/8W 100R0 1%FLAME PROOF T&R RES	20	8809	10-32 X 1/4 PAN PH TAPTITE JS500	8			
5257	2U2 63V 20%CAP T&R RAD .2EL	12	4602	1/8W 100R 5% T&R RES	29	8833	10-32 X 7/8 IND HEX M/S BLACK OXIDE	6			
5258	4U7 63V 20%CAP T&R 8X7MM .2EL	20	4921	1/4W 100R 5% 2U T&R RES	18	8893	10-32 X 1 FLAT PHILIPS TT JS500 BLK	10			
5282	10U 16V 20%CAP T&R 5X7MM .2NP	32	4984	1/4W 150R 5%MINI T&R RES	3	8733	5/16-18X2-1/2 GRD 5 HEX BOLT JS500	1			
5945	10U 63V 20%CAP T&R RAD .2EL	3	2023	1/6W 220R0 1%FLAME PROOF T&R RES	8	3663	SNAP IEC PWR SOC W/250TAB FOR .060	1			
5260	22U 50V 20%CAP T&R RAD .2EL	1	4977	1/4W 220R 5%MINI T&R RES	11	8608	NYLON SPACER .200 OD .145 ID .110 L	16			
5631	22U 50V 20%CAP T&R 6X7MM .2EL	12	2024	1/6W 249R 2%FLAME PROOF T&R RES	4	2335	NYLON STANDOFF NUT #4 500ML	9			
5961	33U 16V 20%CAP T&R RAD .2IN NP	17	4980	1/4W 470R 5%MINI T&R RES	28	2342	NYLON STANDOFF NUT #4 530ML BLACK	6			
5879	100U 16V 20%CAP T&R 8X7MM .2EL	15	2028	1/6W 475R 1%FLAME PROOF T&R RES	2	8657	6-32 X 3/8 HEX SPACER ALUMINUM	7			
5618	470U 25V 20%CAP BLK 10X15MM EL	1	4799	1/4W 562R 1% T&R RES	4	8482	3/8 1D FLAT WASHER	25			
5896	4700U 80V 20%CAP BLK 25X50MM ELS	4	4922	1/4W 620R 5% 2U T&R RES	8	3524	NYLON SHWASHER ID385 OD750 T060	4			



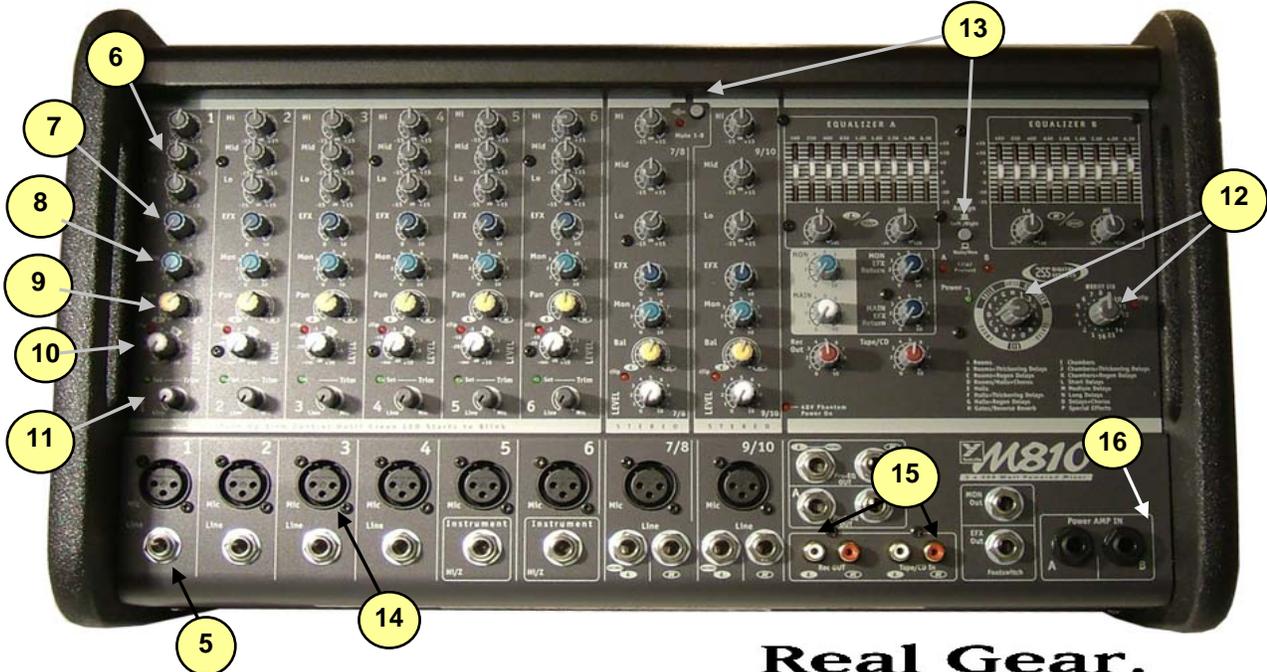
# m810/m1610 Powered Wedge Mixer



Series 2 EFX section

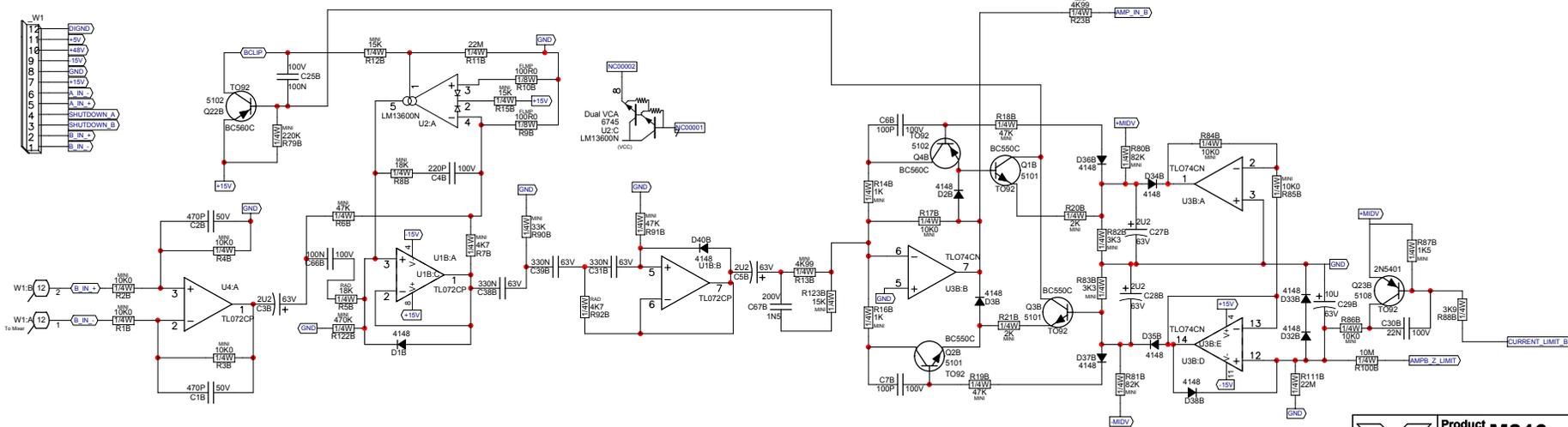
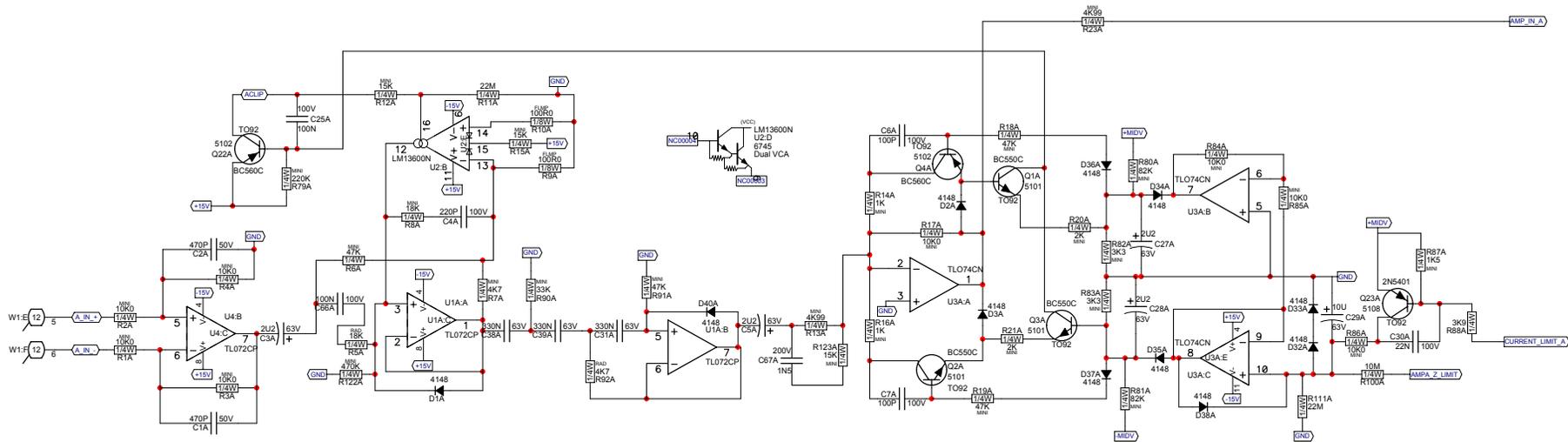


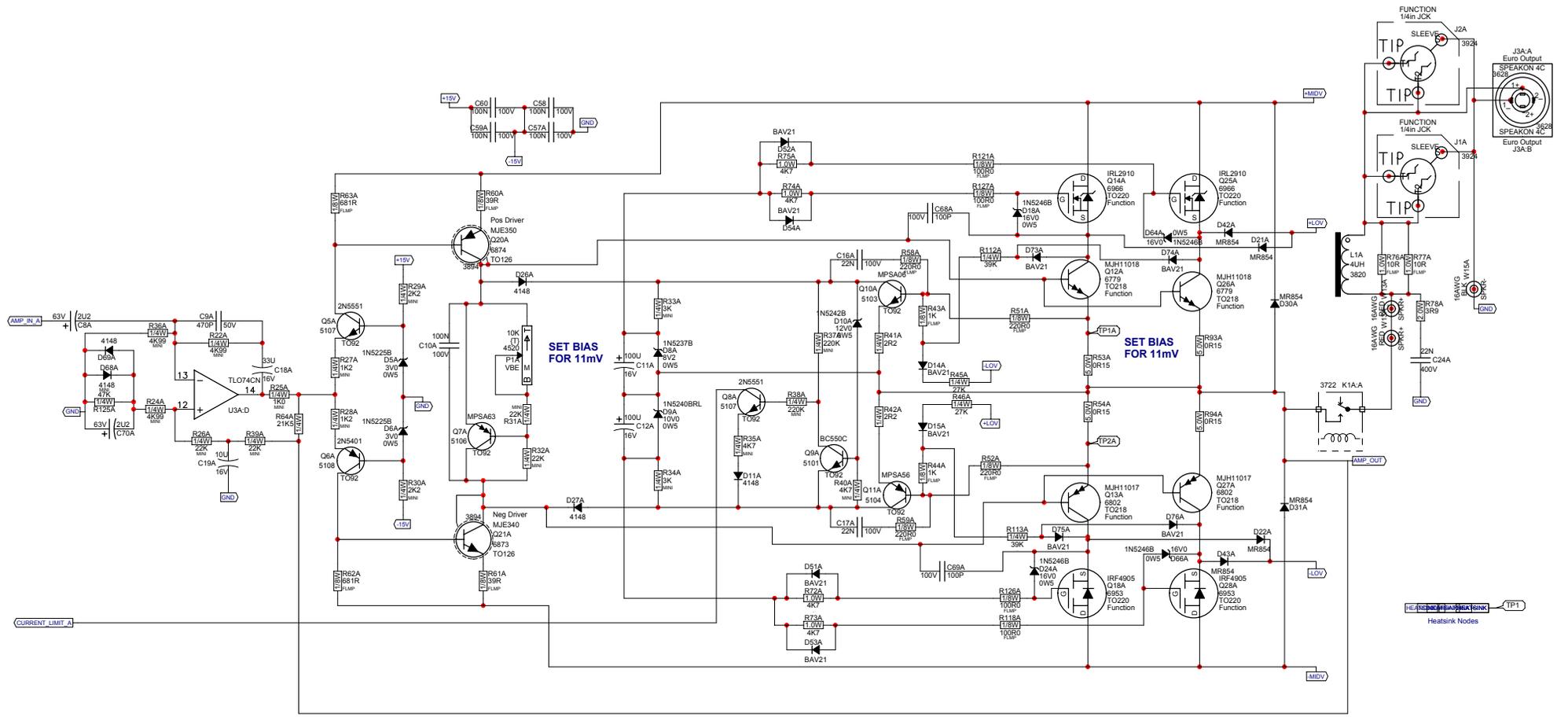
EURO PWR CORD

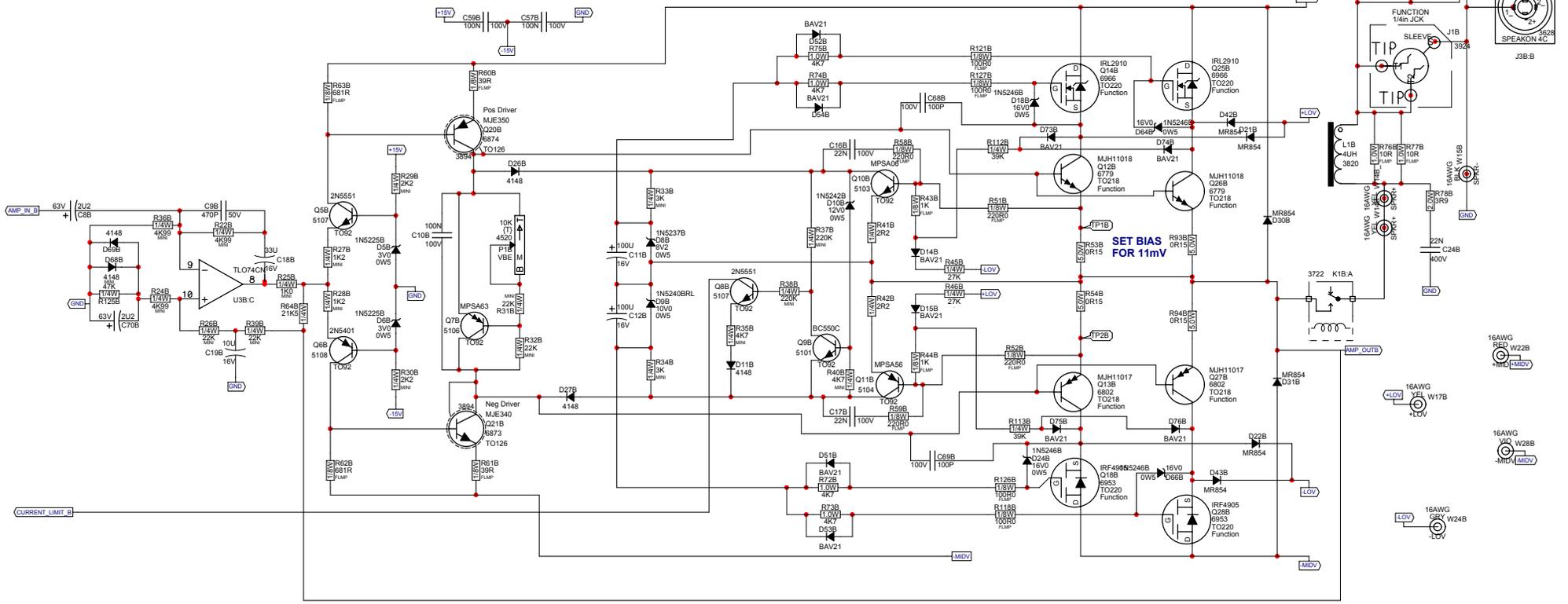


#	Part#	Description
Labeled Components		
1	8497	M1610/M810 GABLE
2	8893	10-32 X 1 FLAT PHILIPS TT JS500 BLK BOLTS
3	3628	SPKON 4C PCB MT VERT 250TAB GRY
4	8637/3522	PUSHBUTTON 1/4" BLK / DPDT MINI PC VERT
5	3924	1/4" JCK PCB MT VERT 2XTIP HICU
6	9916	GRY SOFT GRAY RIB KNOB 0-DEG
7	9918	BLU SOFT GRAY RIB KNOB 0-DEG
8	9917	GRN SOFT GRAY RIB KNOB 0-DEG
9	9919	YEL SOFT GRAY RIB KNOB 0-DEG
10	9920	WHT SOFT GRAY RIB KNOB 0-DEG
11	9921	GREY KNB W/O COVERING 0-DEG
12	8397	GREY STYLE 2 KNOB
13	8632	ROUND PUSH BUTTON 1/4" GREY
14	4010	XLR FEML PCB MT VERT 24MM AA-SE
15	3466	RCA DUAL PCB MT VERT GOLD 24MM
16	3450 & 3450NUT	1/4" ALL GOLD PC MNT JK SKT
17	2408/2456	8.0a CIR BREAKER (CE = 4.0A CIR BREAKER)
18	3587	DPDT ROKR SW QUIK 250°AC/PWR ON
19	3663	SNAP IEC PWR SOC W/250TAB
20	3426	8' 3/16 SJT AC LINE CORD REMOV-B-SEA
21	3474	6' 3X.075MM AC LINE CORD EURO-REMOV

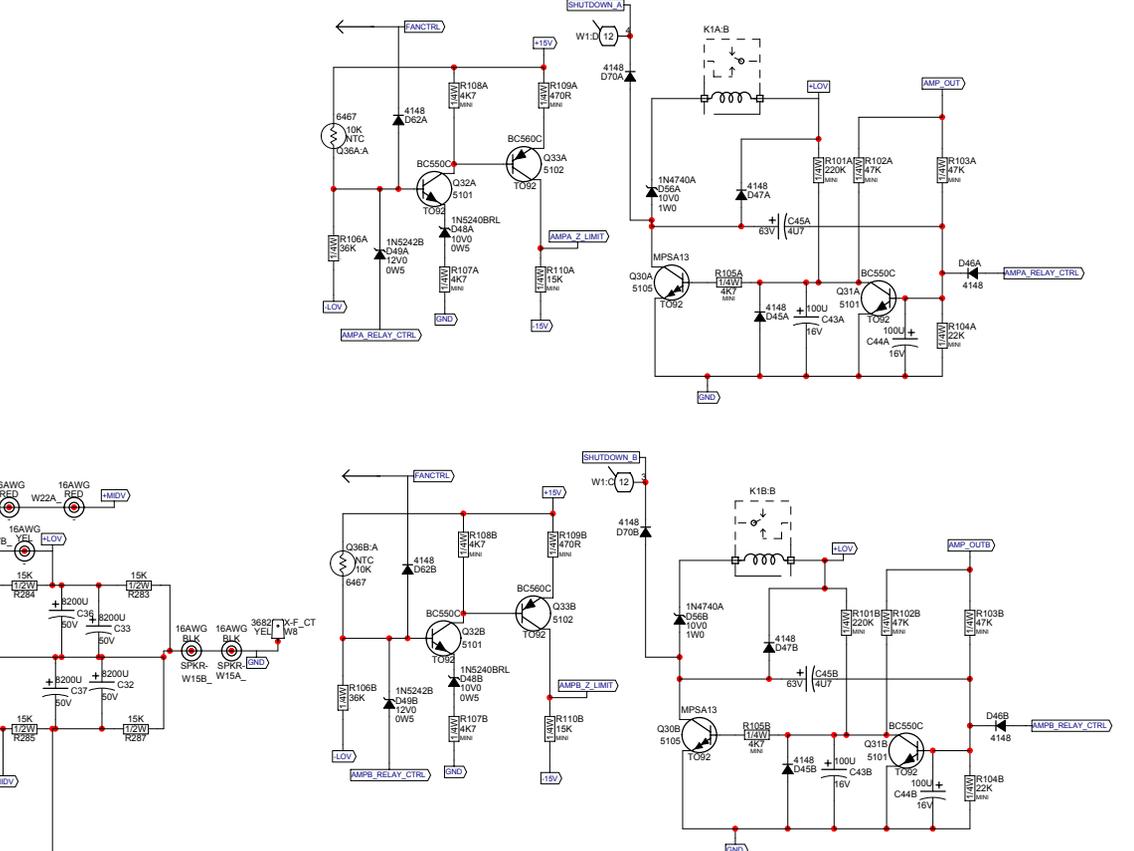
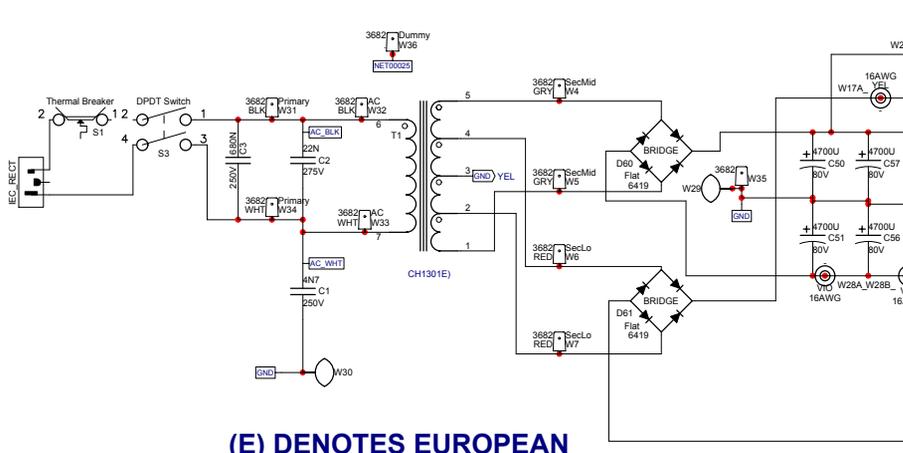
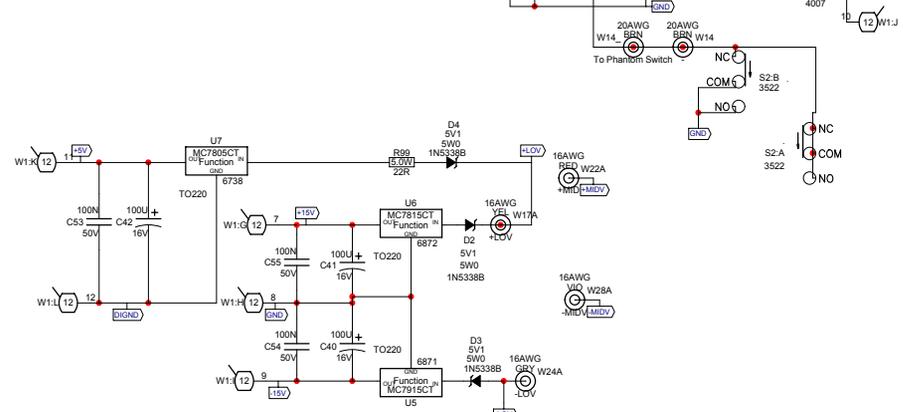
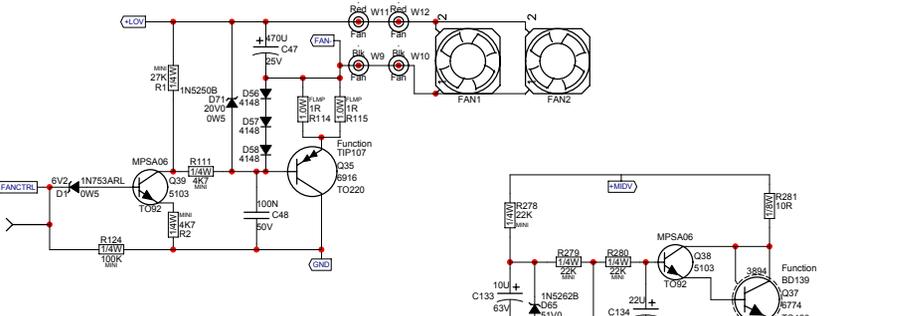
**Real Gear.  
Real People.**







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	19-JUN-2006	7.00	LAH, PC#6983, WIDEN TRACE BETWEEN C32 AND C37
			30			PC#7091, ENLARGE HOLE SIZE FOR #3522
			31			
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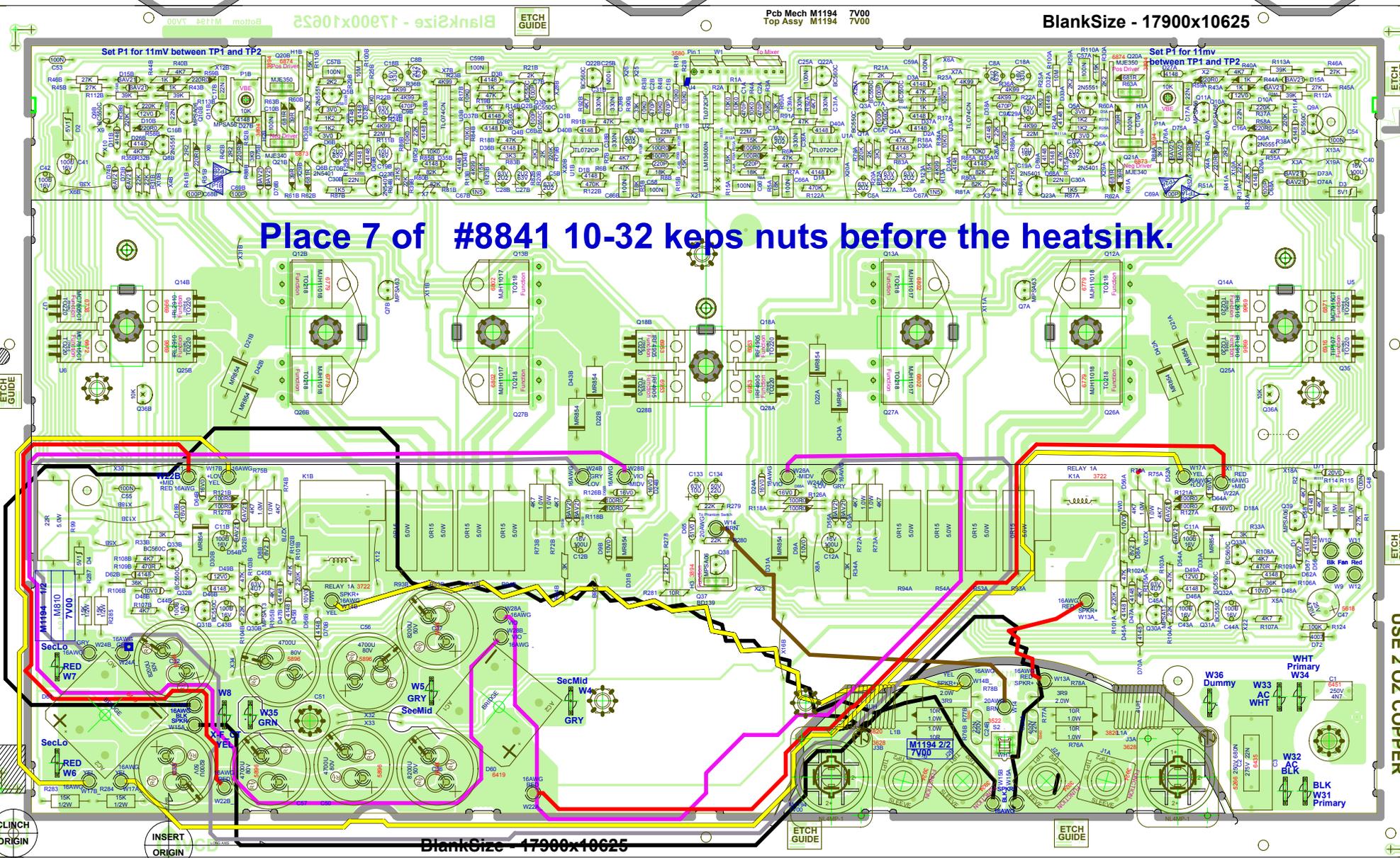


(E) DENOTES EUROPEAN



Product <b>M810</b>		
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/				

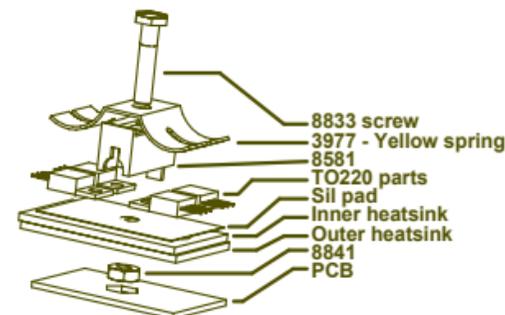
DRILL & ROUTE HISTORY				M1194 PENDING CHANGES			
MODEL(S):- M810				MODEL(S):- M810			
#	DATE	VER#	DESCRIPTION OF CHANGE	#	PC#		PENDING CHANGE
1	10-MAR-2004	V02	Enlarged routing for hex nuts	1	PC	X	
2	5-MAY-2004	V03	Added notch to routing to pass GRN wire from front	2	PC	X	
3	6-MAY-2004	V04	To match 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

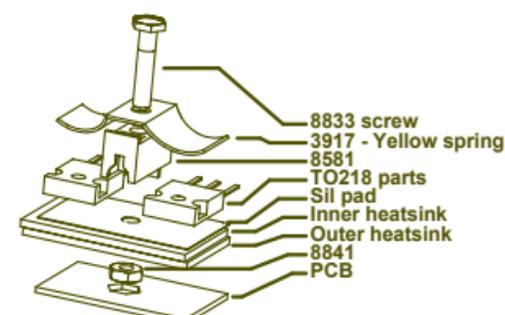
# PRODUCTION NOTES

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 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

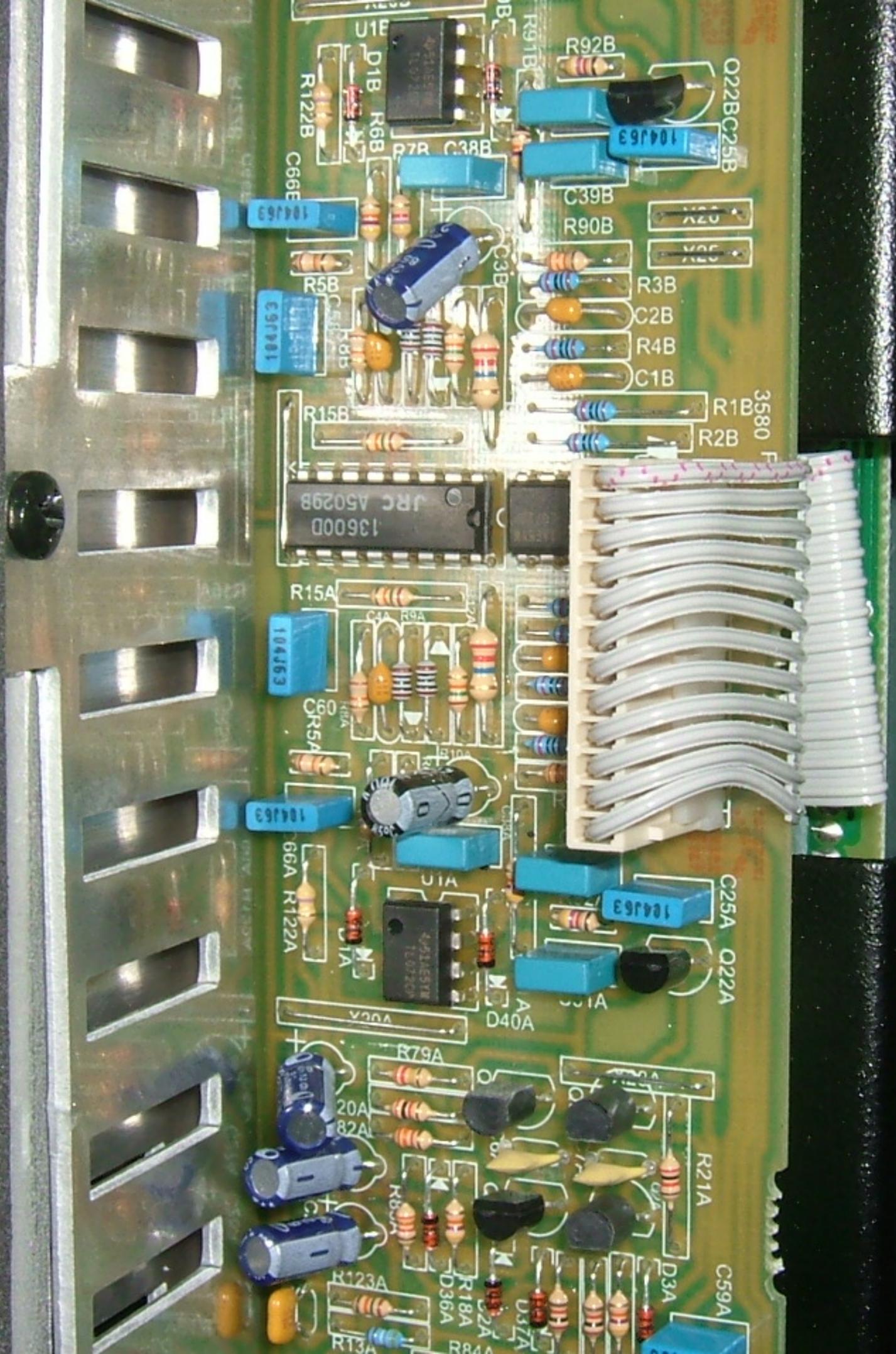
## O DELAYS & CHORUS

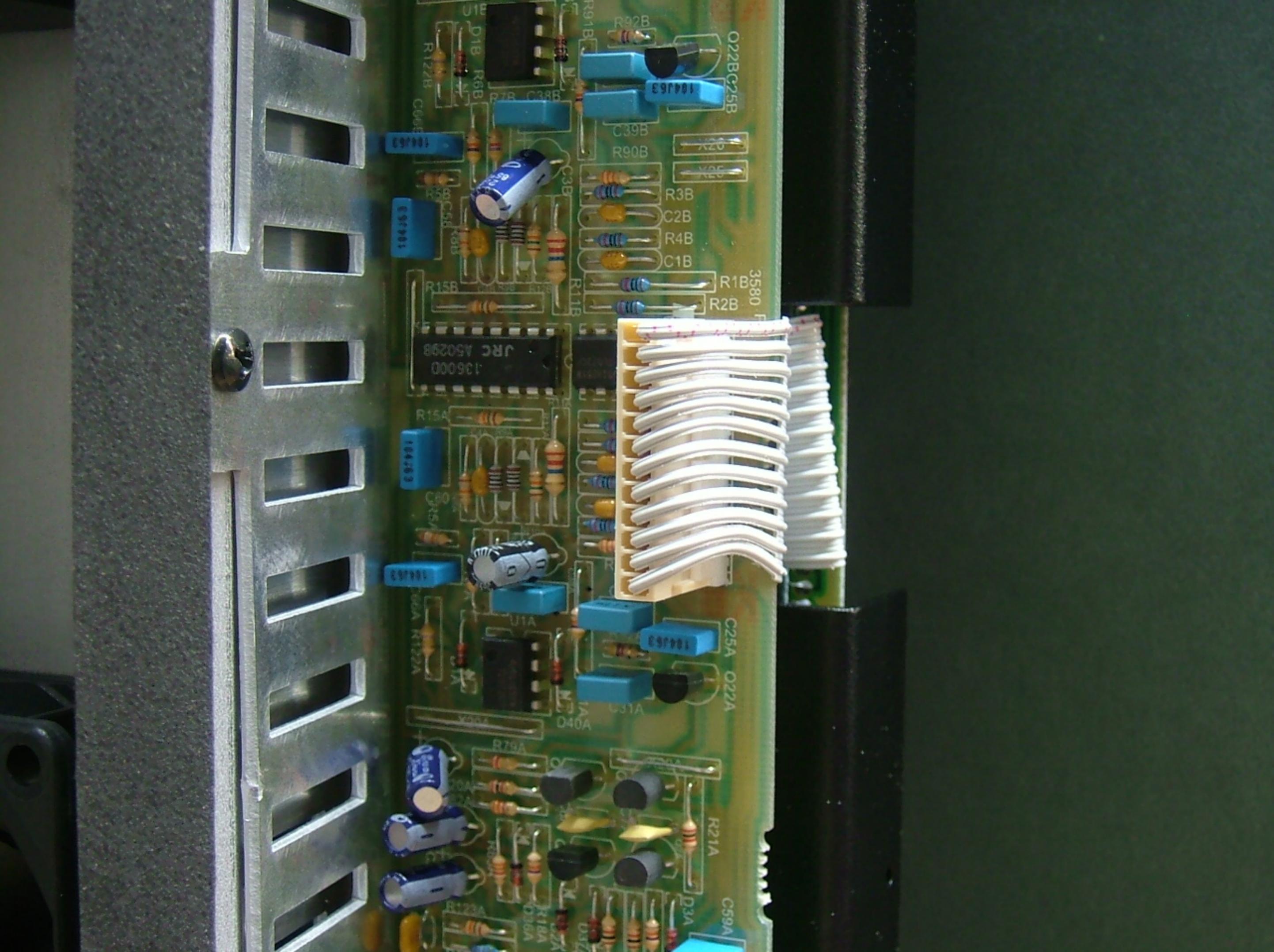
- 1 50ms doubling delay + slow chorus
- 2 80ms slap delay + medium chorus
- 3 100ms slap delay + medium chorus
- 4 150ms regen delay + slow chorus
- 5 175ms regen delay + medium chorus
- 6 200ms regen delay + slow chorus
- 7 225ms regen delay + medium chorus
- 8 250ms regen delay + slow chorus
- 9 275ms 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





O22BC25B

E91P01

R92B

C39B

R90B

X20

X25

R3B

C2B

R4B

C1B

3580

R1B

R2B

JRC A50298  
136000

R15B

104J53

C38B

D31A

E91P01

R122A

C25A

E91P01

O22A

C31A

D40A

R79A

R21A

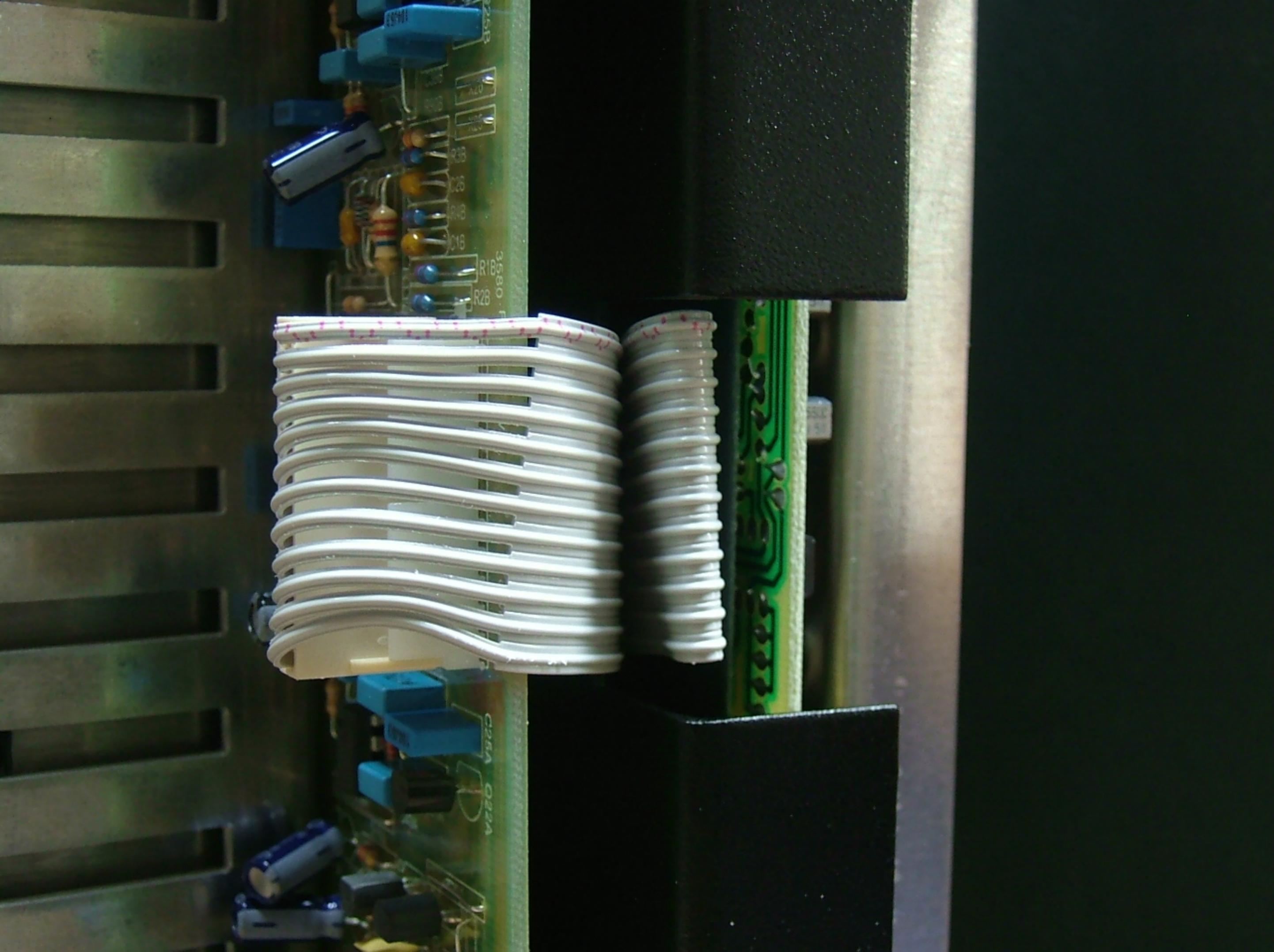
C59A

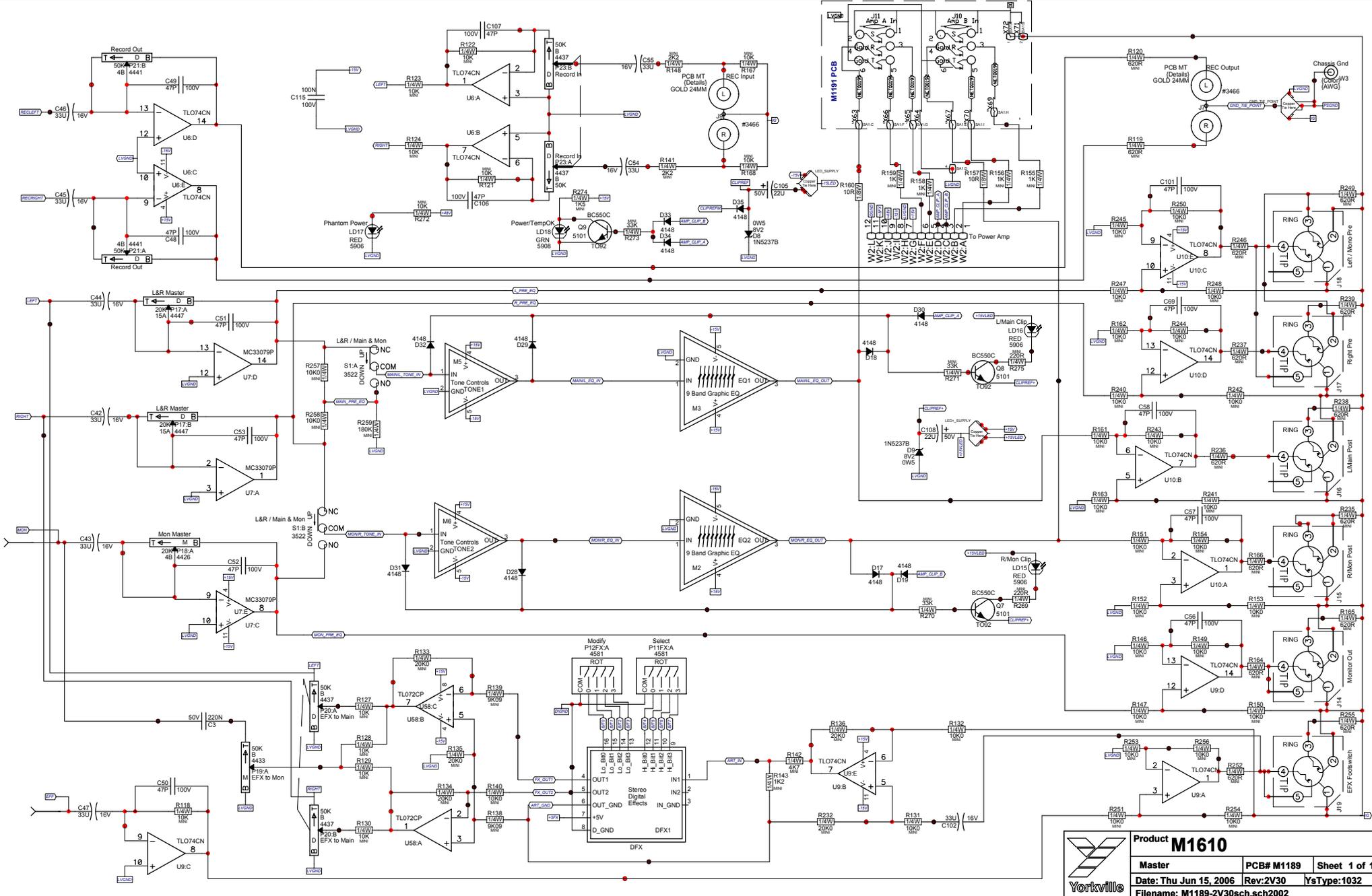
D3A

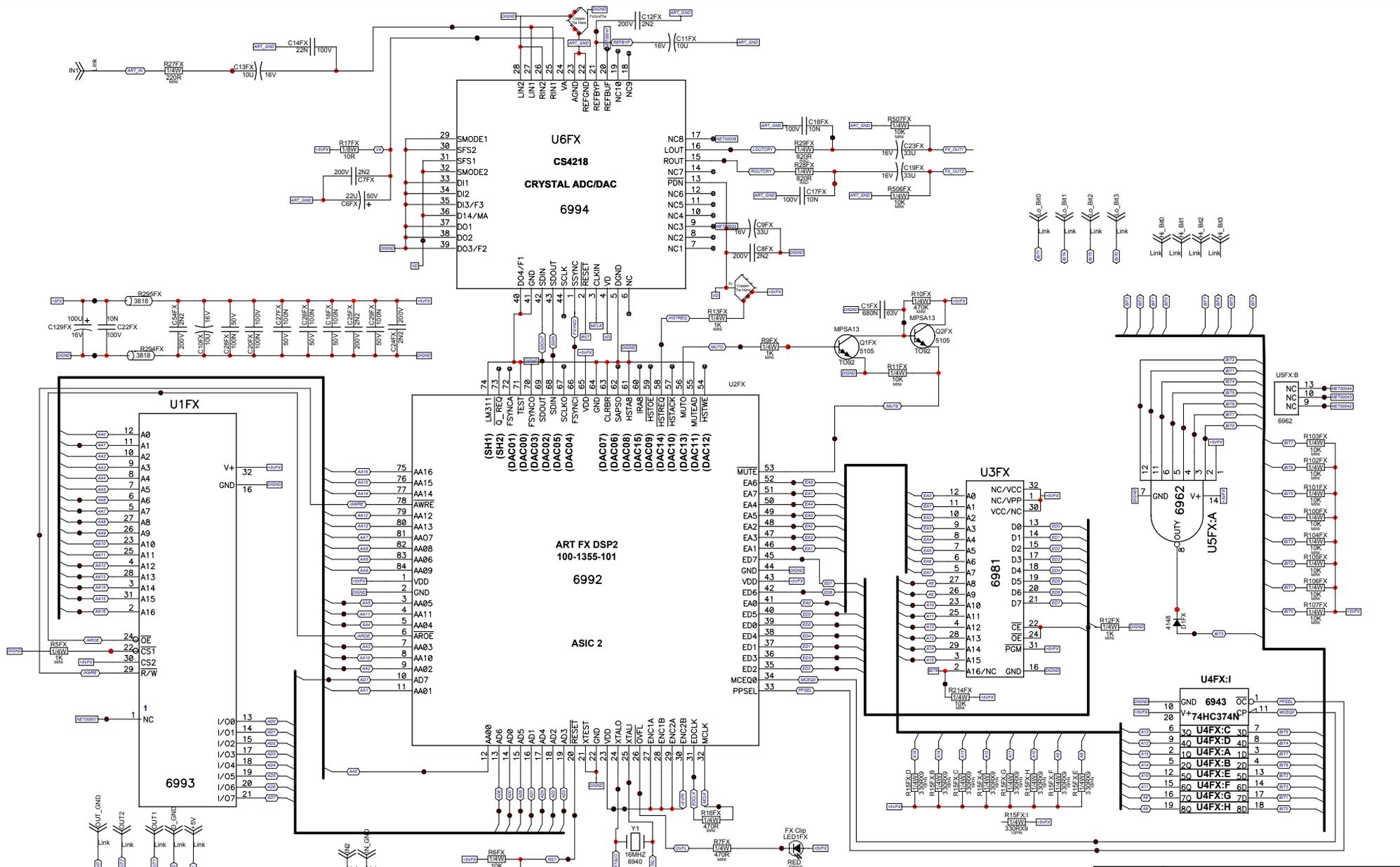
R18A

D32A

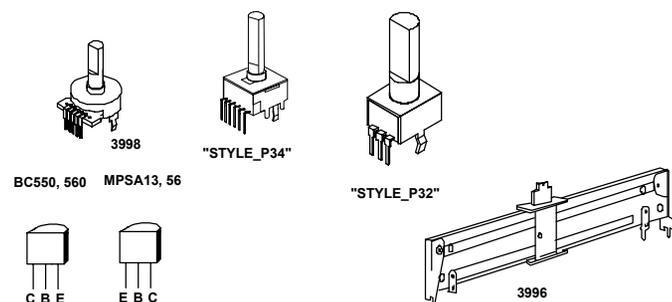
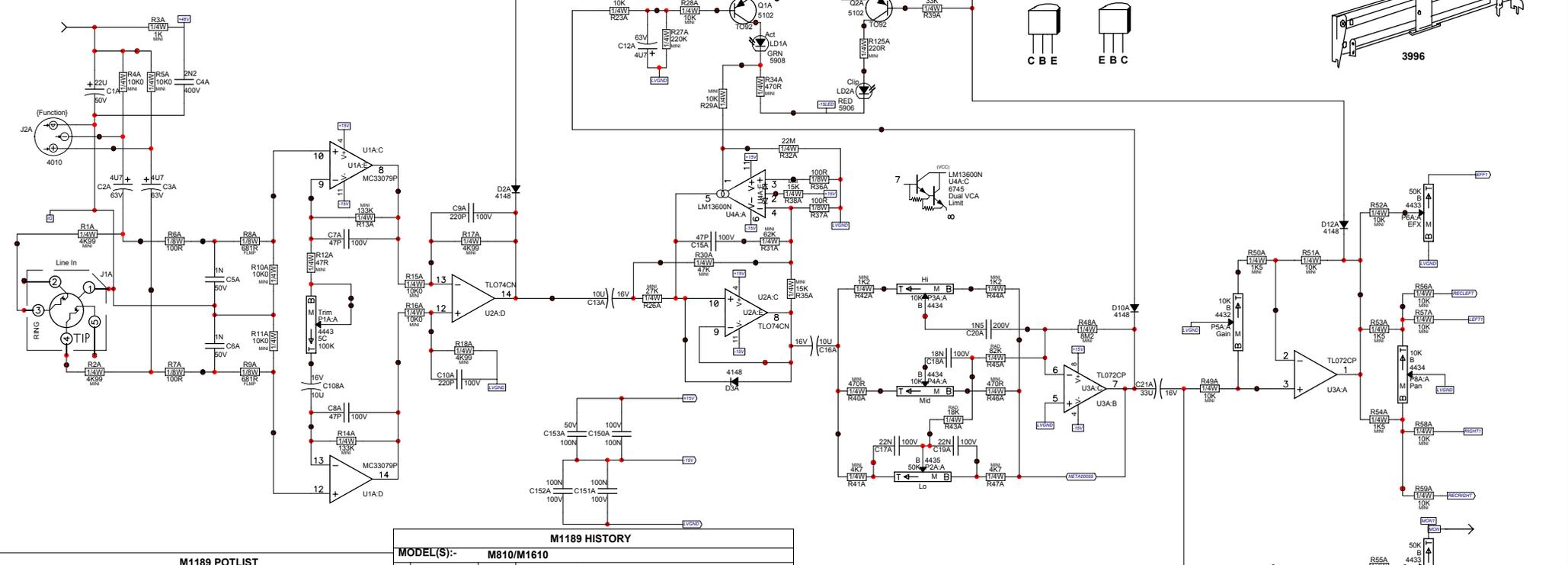
D33A







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



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

M1189 HISTORY			
MODEL(S):-	M810/M1610	#	DATE
		1	31 Dec 2003
		2	17 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

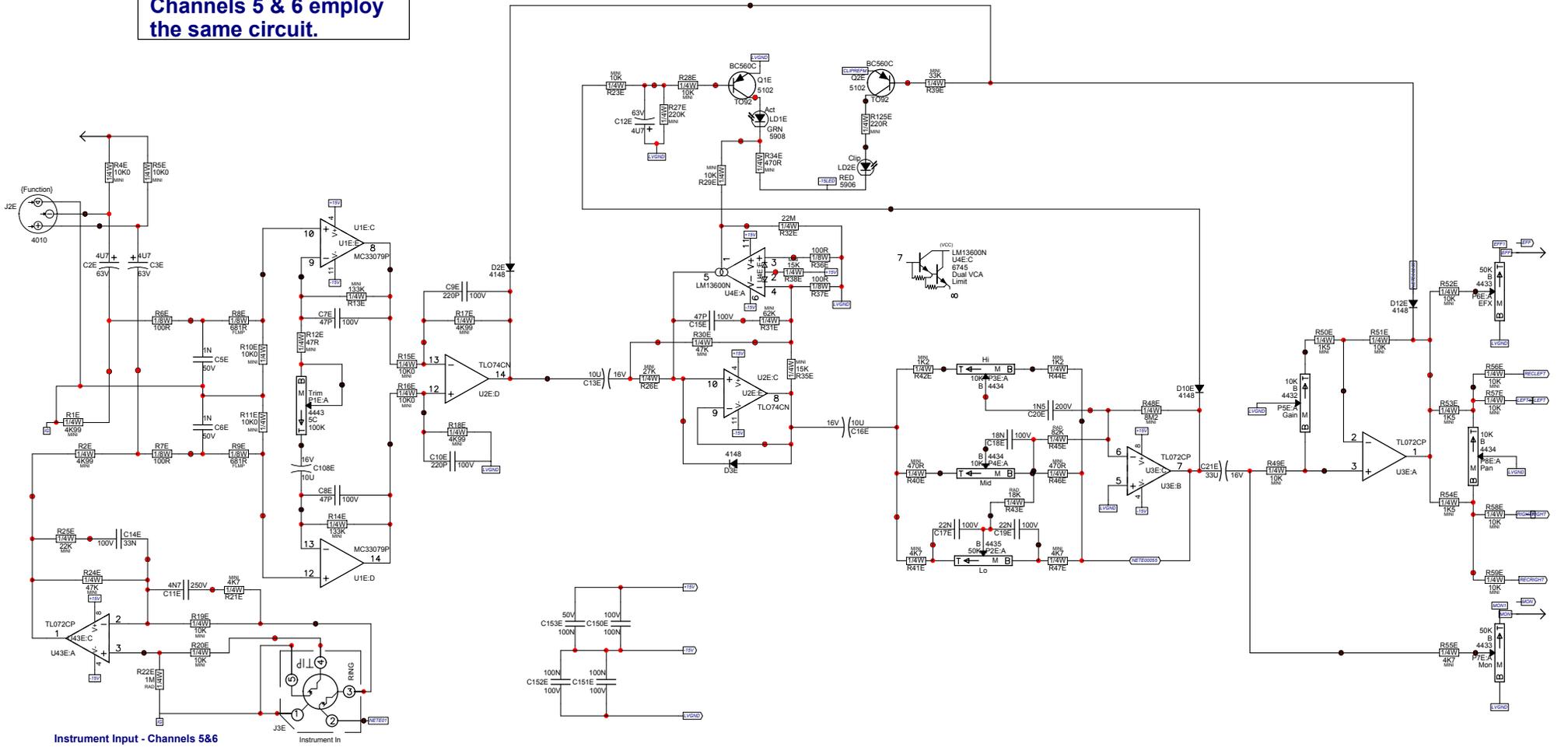
M1189 DRILL HISTORY			
MODEL(S):-	M810/M1610	#	DATE
		1	24-FEB-2004
		2	21-APR-2005
		3	4-AUG-2005
		4	D
		5	D
		6	D

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**

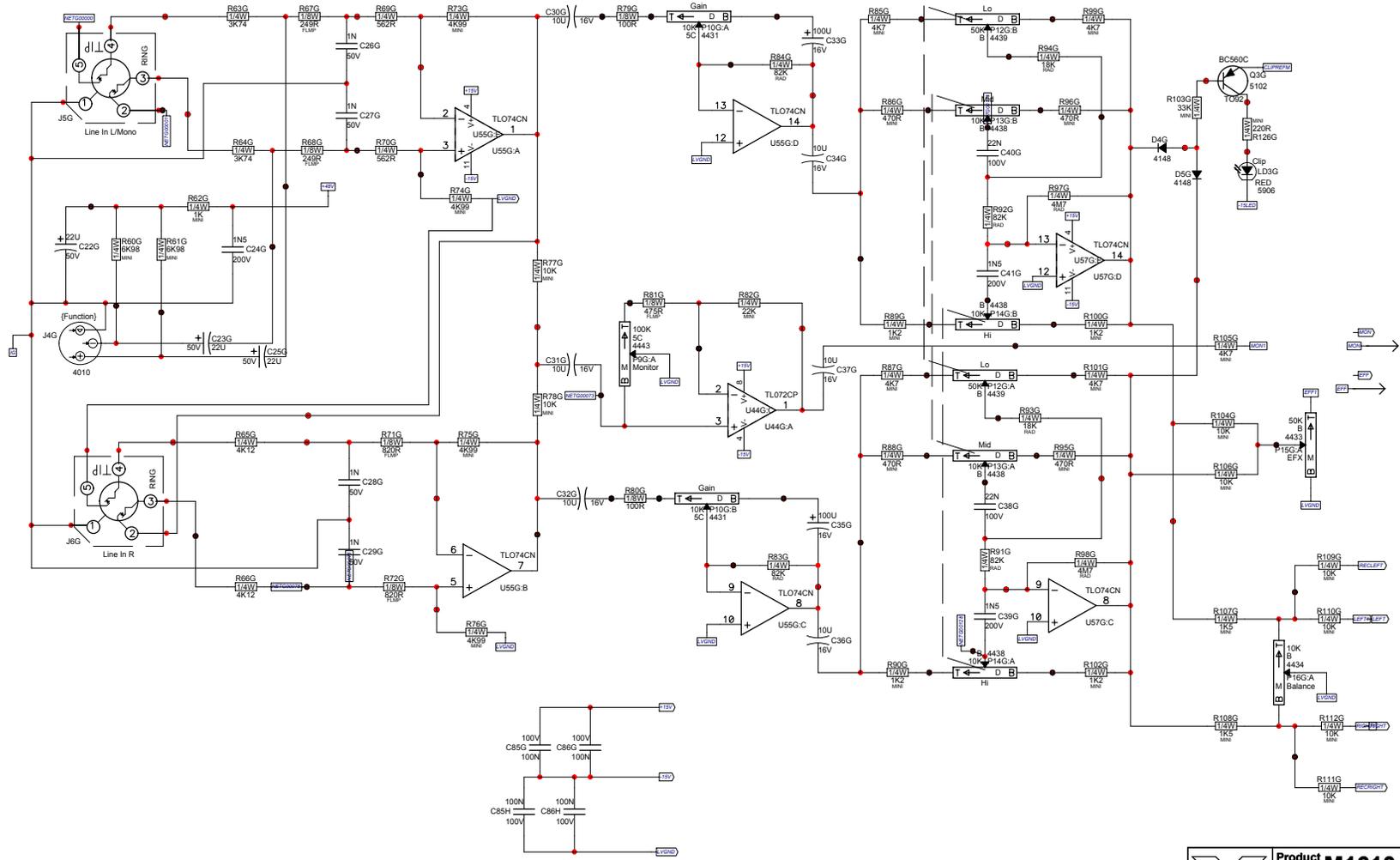
Mono Ch1	PCB# M1189	Sheet 3 of 16
Date: Thu Jun 15, 2006	Rev:2V30	YsType:1032
Filename: M1189-2V30sch.sch2002		

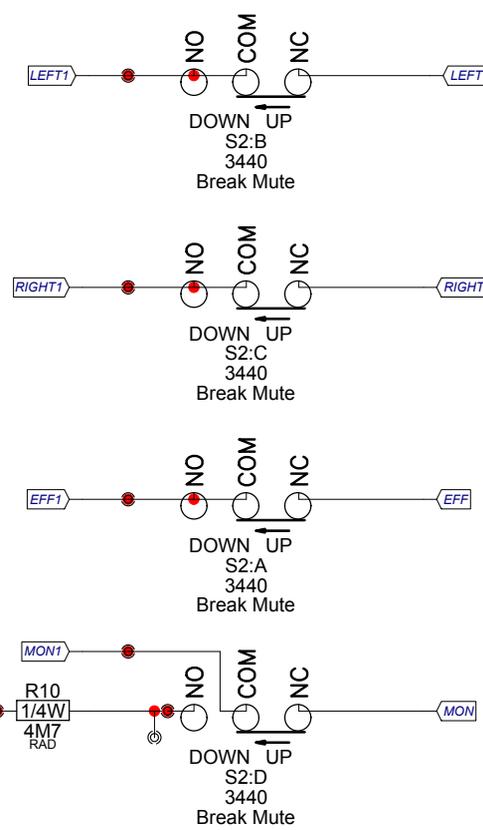
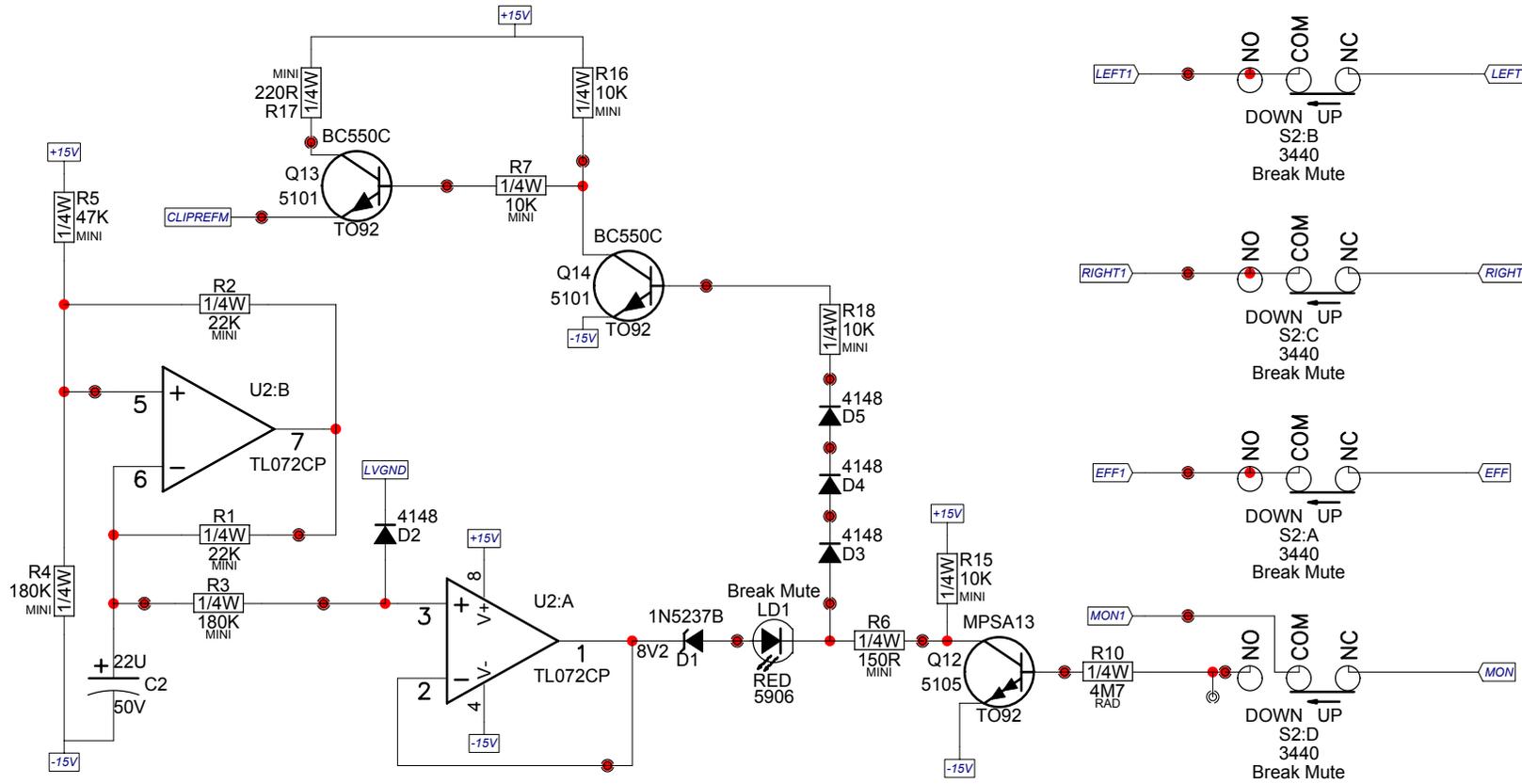
Only Channel 5 is shown.  
Channels 5 & 6 employ  
the same circuit.

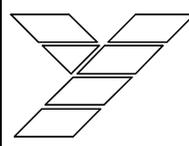


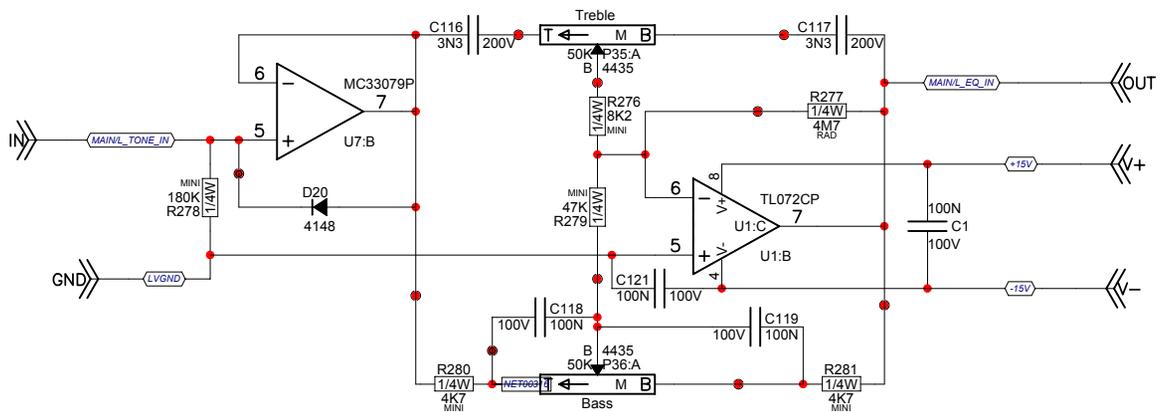
Instrument Input - Channels 5&6

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

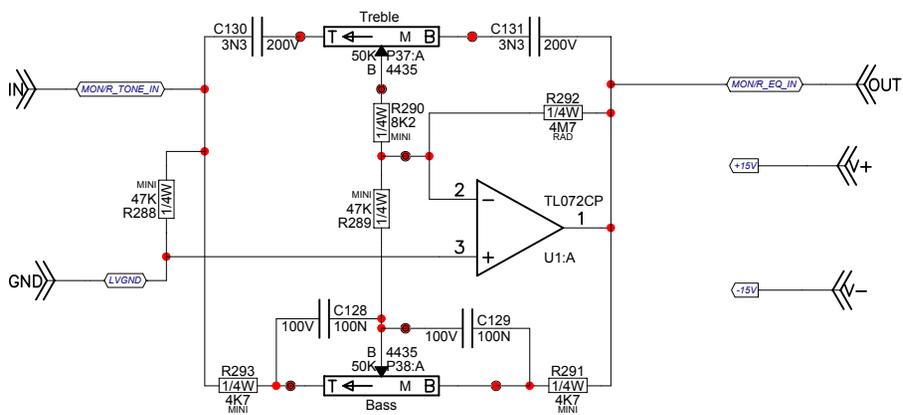




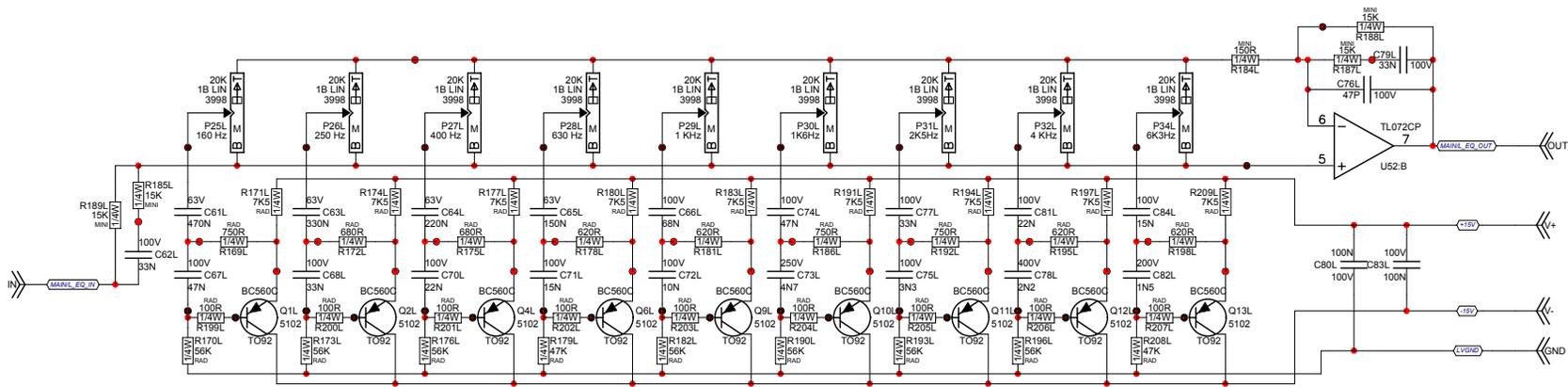
 <b>Yorkville</b>	<b>Product M1610</b>		
	<b>BreakMute</b>	<b>PCB# M1189</b>	<b>Sheet 11 of 16</b>
	<b>Date: Thu Jun 15, 2006</b>	<b>Rev: 2V30</b>	<b>YsType: 1032</b>
	<b>Filename: M1189-2V30sch.sch2002</b>		



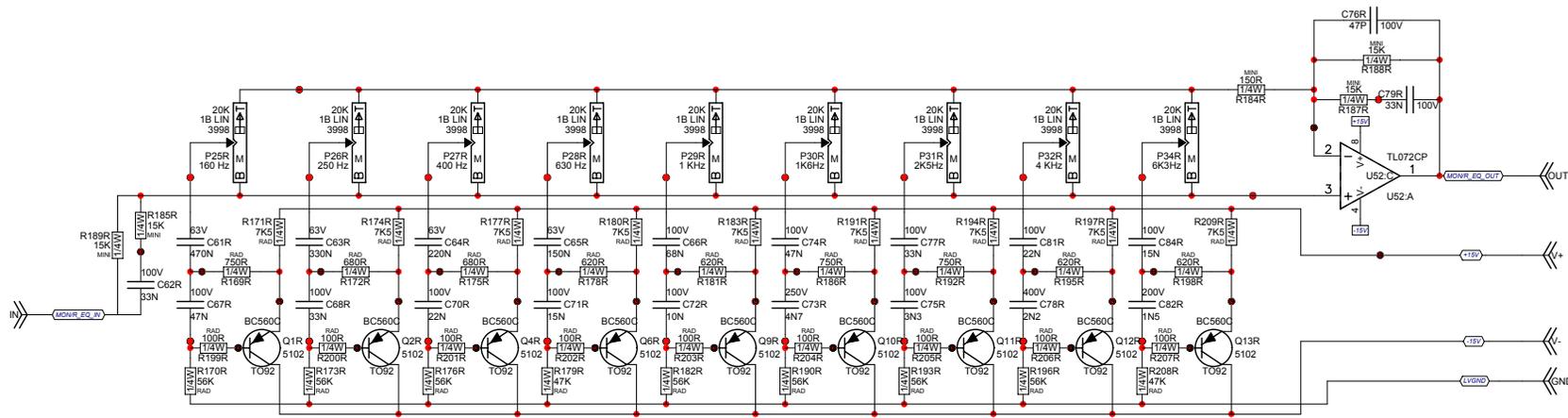
Product <b>M1610</b>		
TONE1	PCB# M1189	Sheet 13 of 16
Date: Thu Jun 15, 2006	Rev: 2V30	YsType: 1032
Filename: M1189-2V30sch.sch2002		



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



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



Product <b>M1610</b>		
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 - 09VY 2V  
YS Type -1032

Blank Size - 17900 x 10750  
05V0T x 006V1 - 0512 XnsB12



ETCH GUIDE

ETCH GUIDE

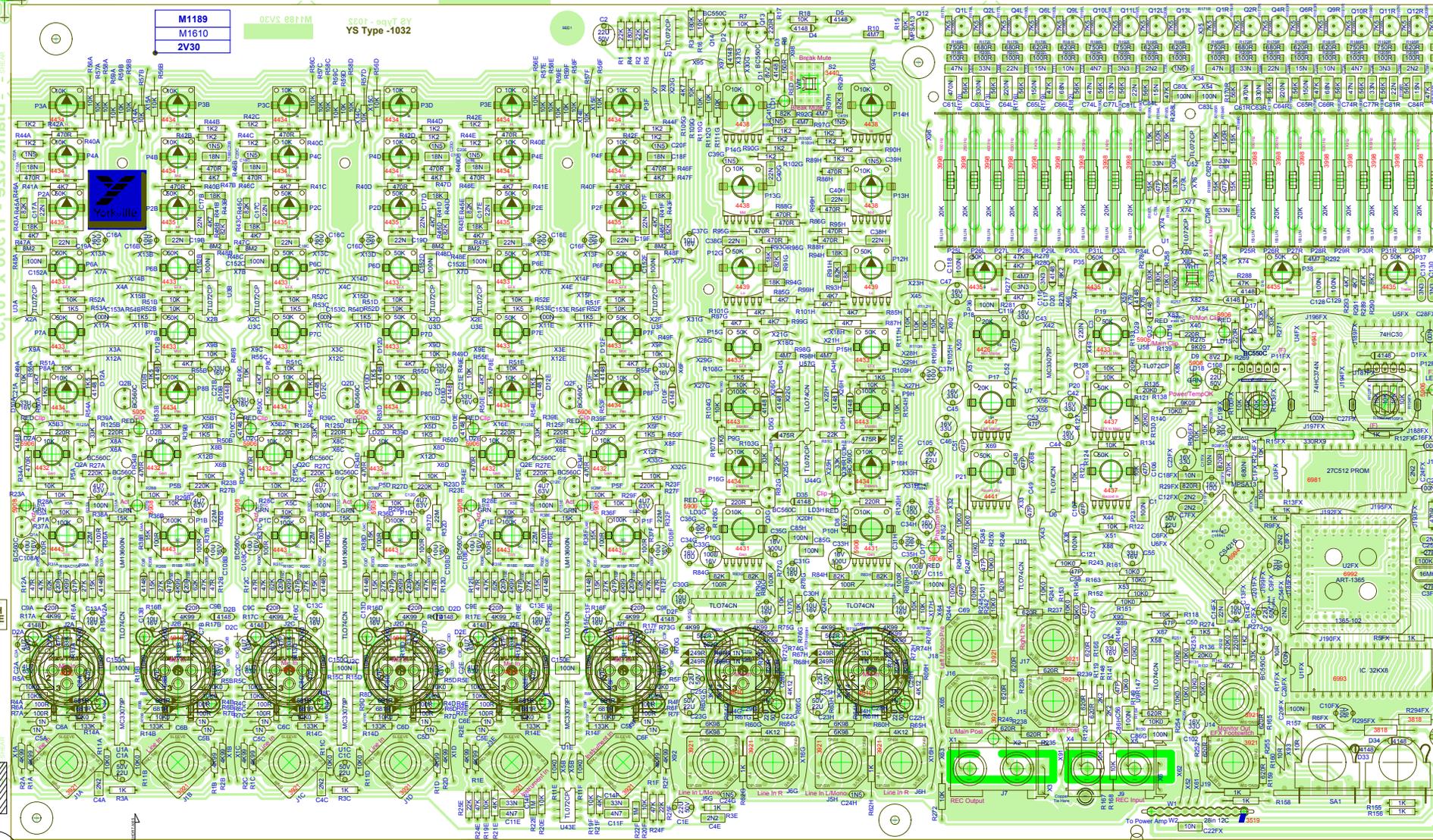
CLINCH ORIGIN

INSERT ORIGIN

ETCH GUIDE

ETCH GUIDE

SEE LAYOUT DOCUMENTATION



To Power Amp WZ  
86N 12C  
5519  
100N C22FX



SEE LAYOUT DIAGRAM



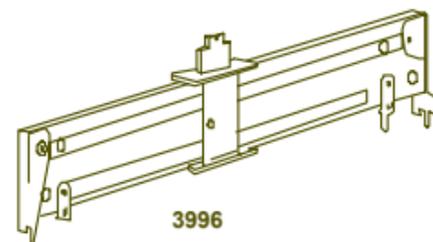
### PRODUCTION NOTES

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

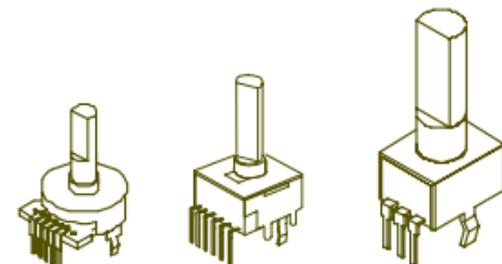
M1189 HISTORY				M1189 POTLIST					
MODEL(S):- M1610				MODEL(S):- M1610					
#	DATE	VER#	DESCRIPTION OF CHANGE	REF	FUNCTION	PART#	NOB	(NEW)	
1	31 Dec, 2003	v1.00p3	Moved D3 anode to cathode of LD1	P25-34 L&R	Graphic EQ	3998	N/A	N	
2	2 Feb, 2004	1.00	Change break mute flash rate	P1A,1B,1C,1D,1E,1F	Trim	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"



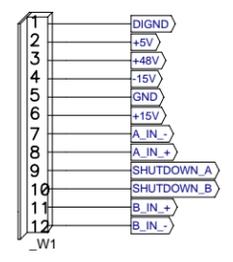
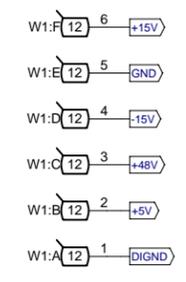
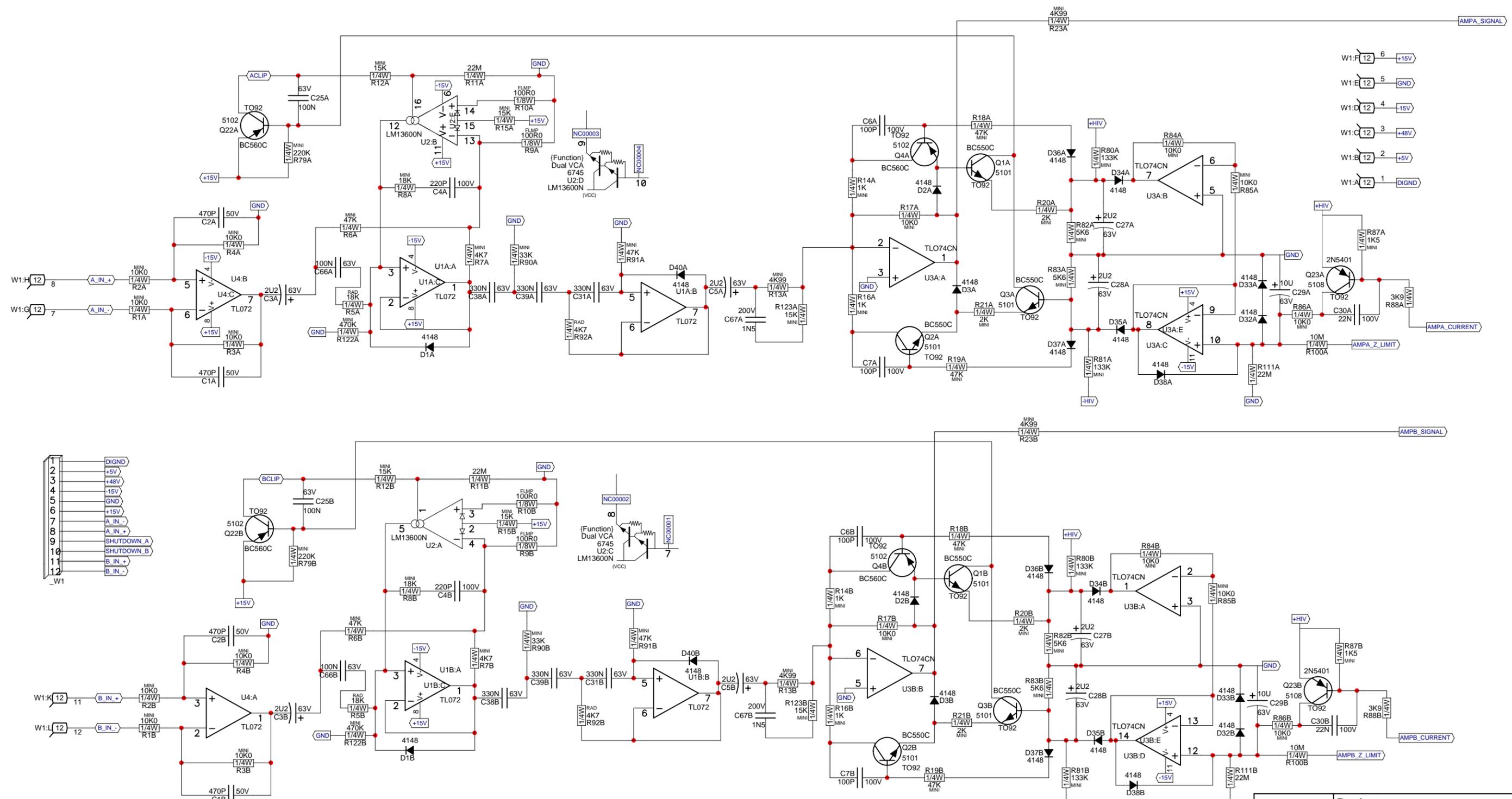
MPSA13, 56

E B C

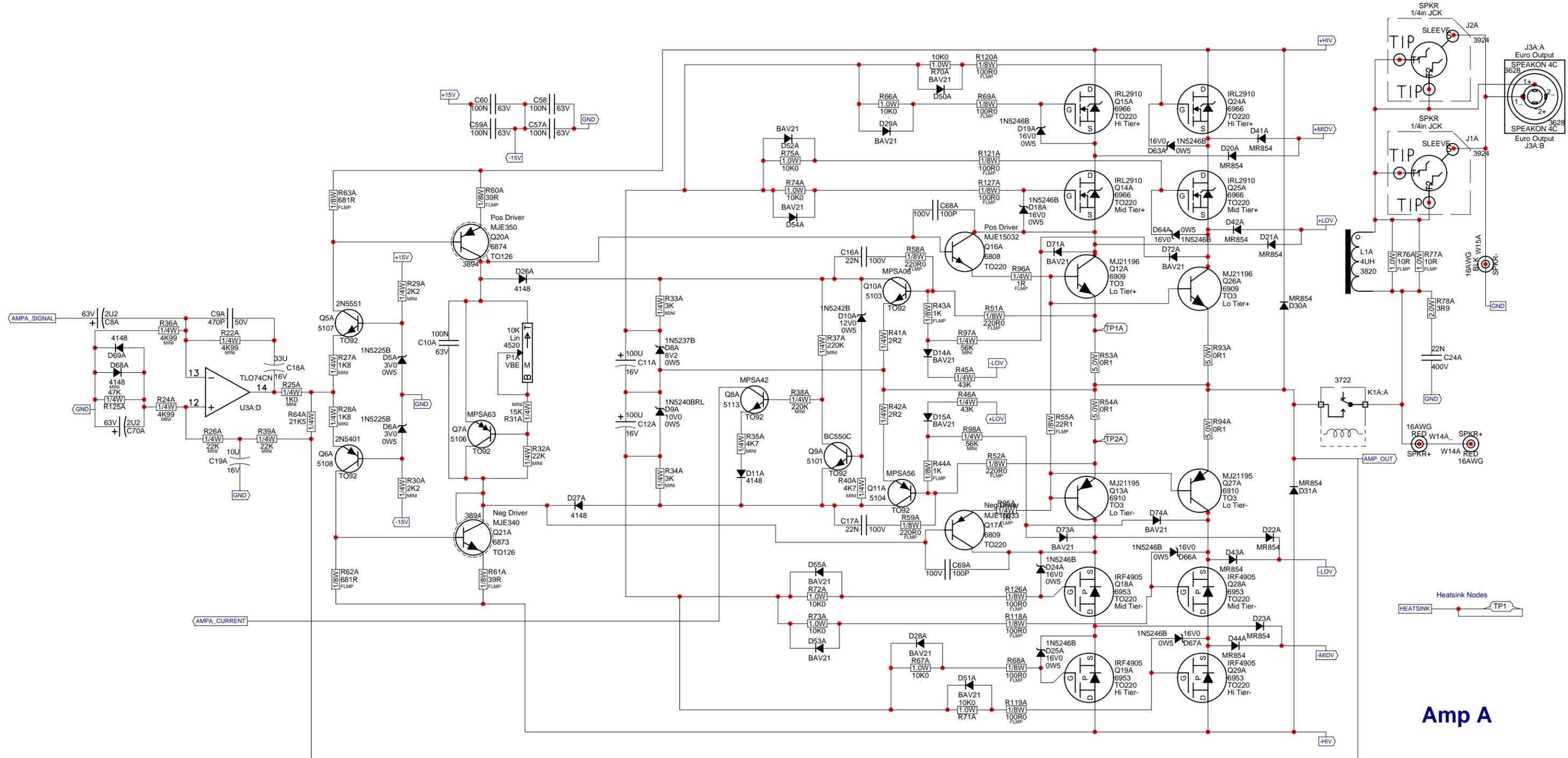


BC550, 560

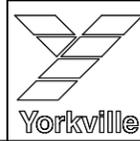
C B E

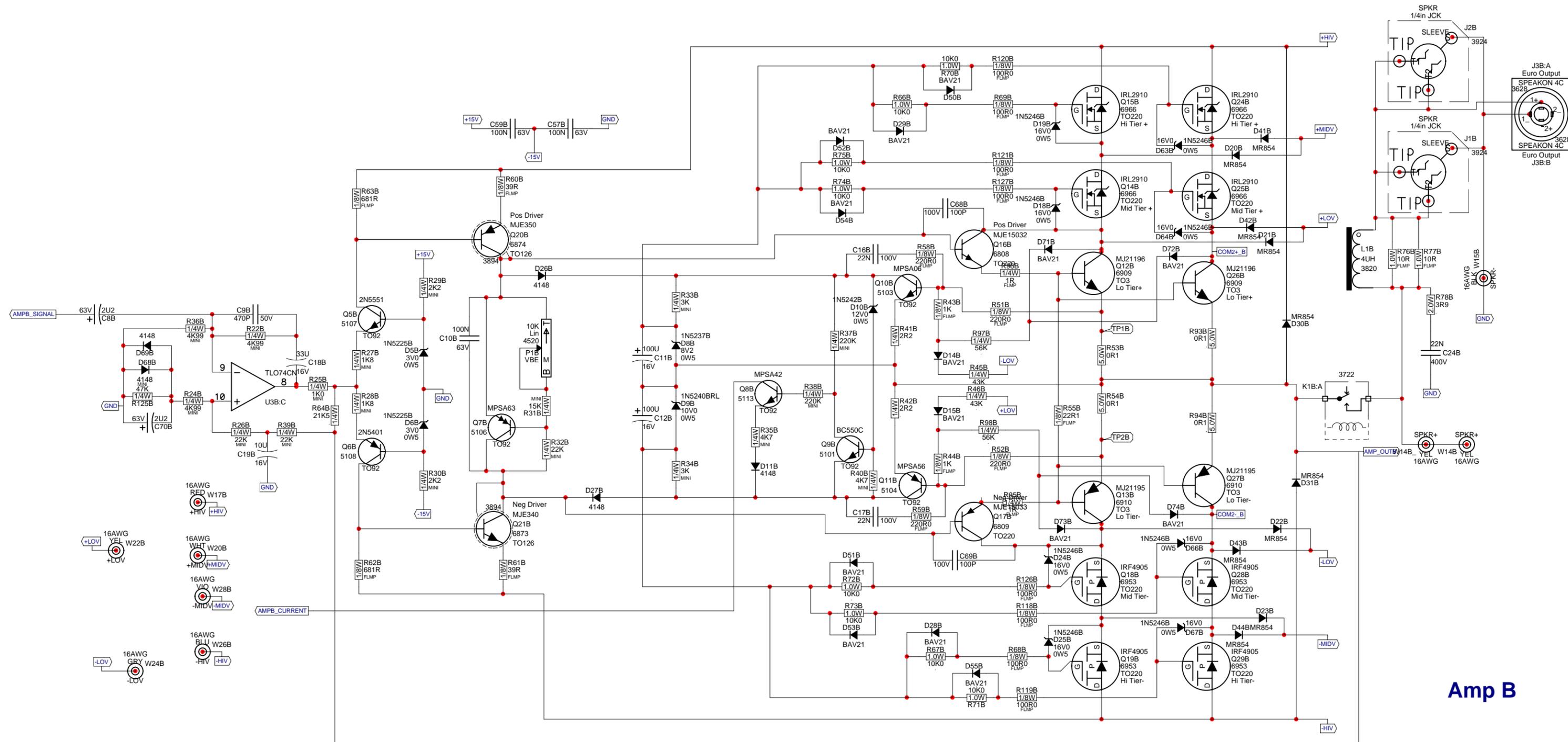


	<b>Product M1610</b>		
	Ampln	PCB# M1190	Sheet 1 of 4
	Date: Thu Feb 04, 2010	Rev:V11.0	YsType:.
	Filename: M1190V1100sch.sch2002		



**Amp A**

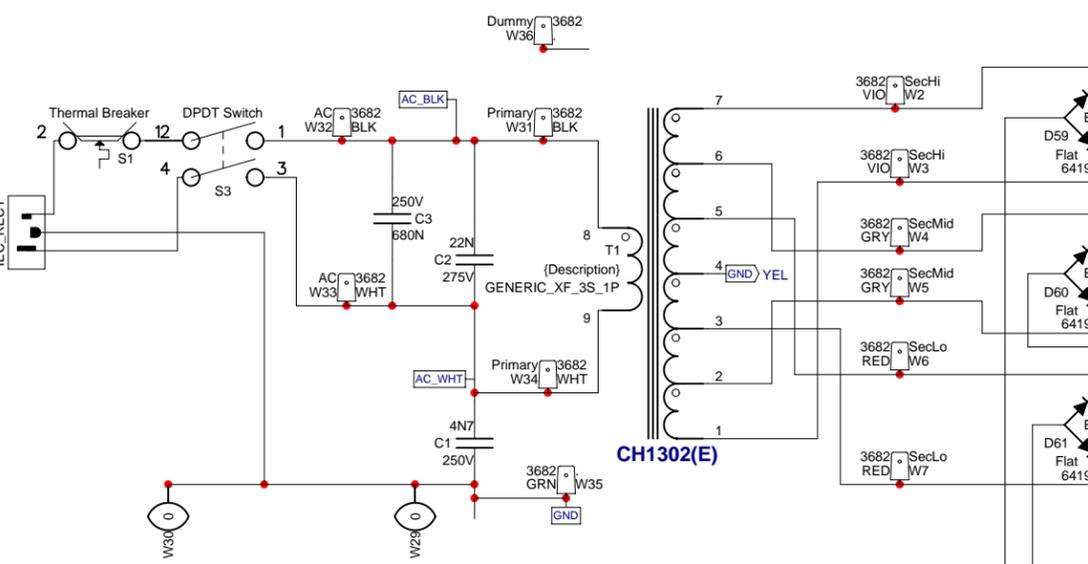
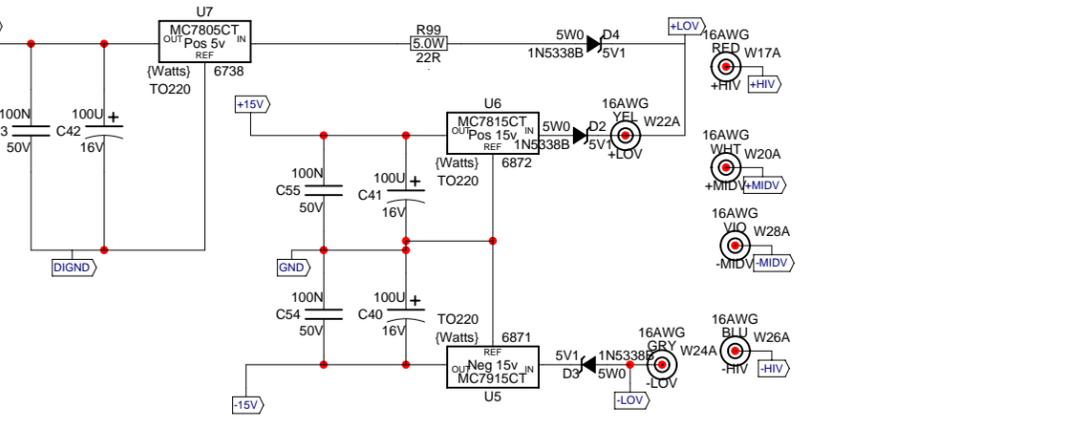
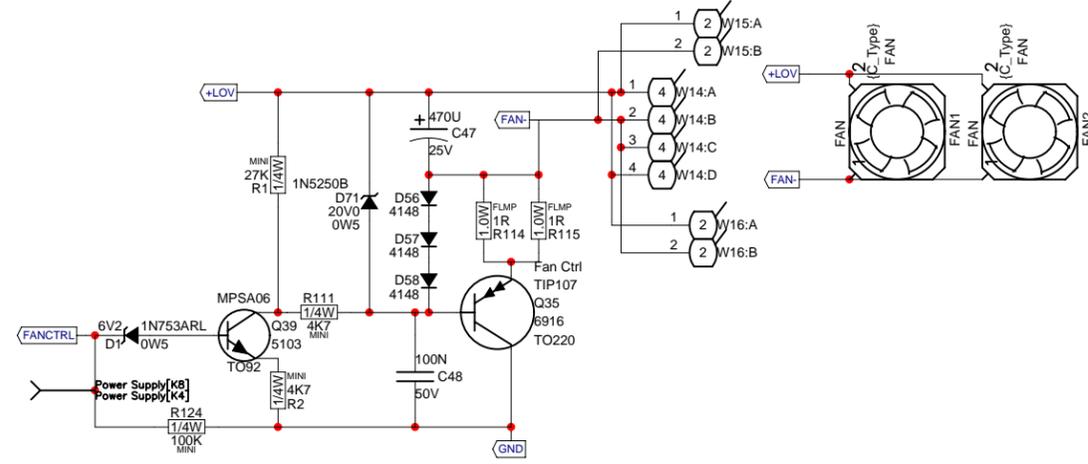
	<b>Product M1610</b>		
	<b>Channel A</b>	<b>PCB# M1190</b>	<b>Sheet 2 of 4</b>
	<b>Date: Thu Feb 04, 2010</b>	<b>Rev:V11.0</b>	<b>YsType:..</b>
	<b>Filename: M1190V1100sch.sch2002</b>		



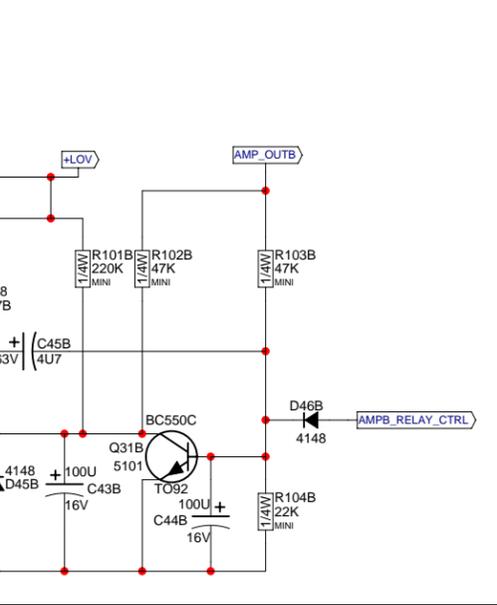
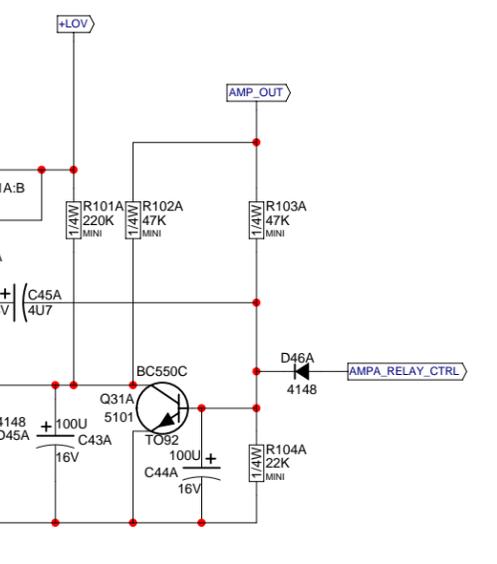
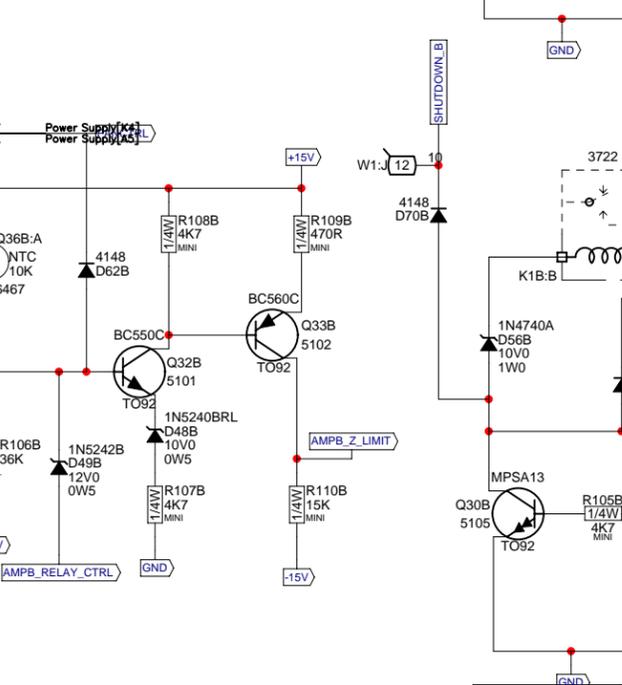
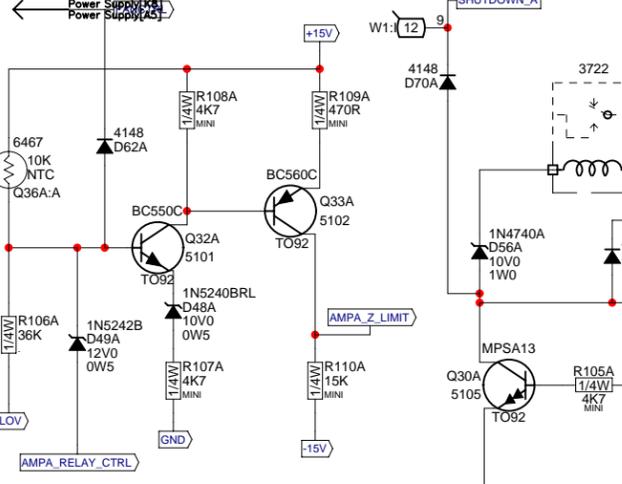
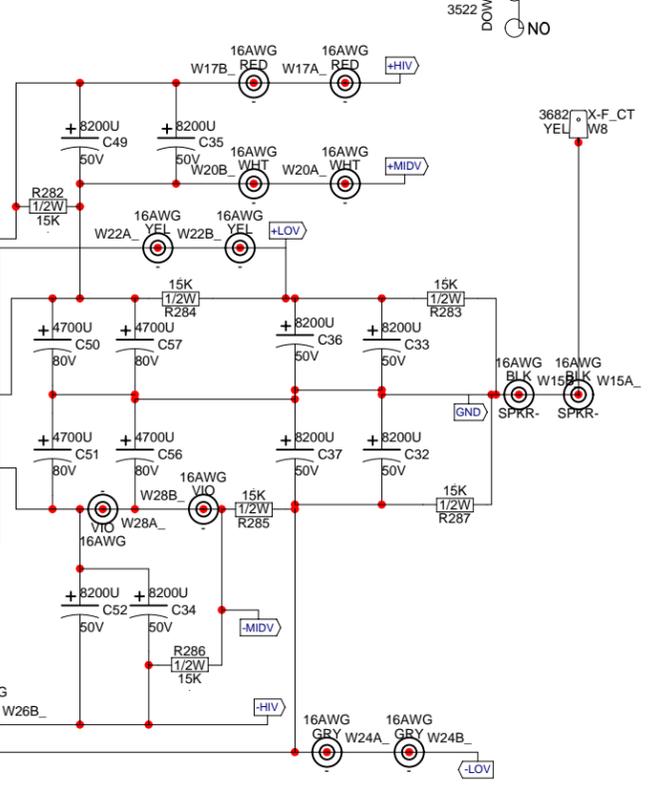
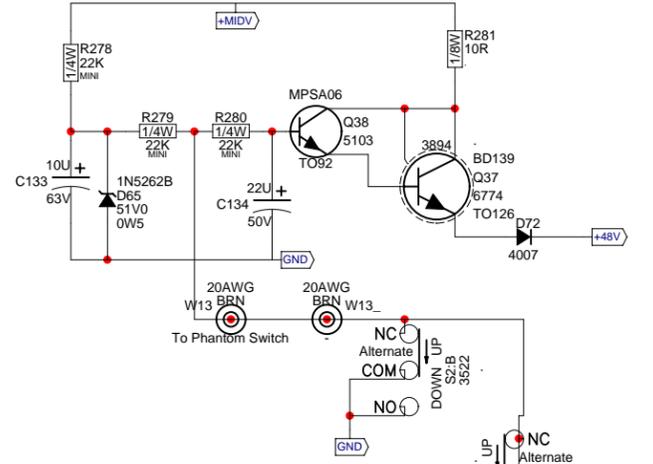
Amp B

	<b>Product M1610</b>		
	Channel B	PCB# M1190	Sheet 3 of 4
	Date: Thu Feb 04, 2010	Rev:V11.0	YsType:..
	Filename: M1190V1100sch.sch2002		

M1190.PCB_DATABASE_HISTORY			
MODEL(S):-	M1610	#	DATE
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 p...
5	6-MAY-2004	2.00	PC#6684 R83(A,B)->5K6,R5(A,B)6K8->18K, D16&D17(A,B) 4148->BAT85,R47&R48(A,B)22R1->100R
6	D	V	ADDED D71, D72
7	D	V	GT:PC#6787: Fixed AC clearance, and W2&W3 tab label
8	DEC-14-2004	3.00	PC#6809 Remove D17,D16,D12,D13, R47,R48,R49,R50,C36
9	FEB-07-2005	4.00	C15 (All A/B) R45,R46 A/B 36K->43K, D10 16V->12V D9 A/B 14V->10V0, D8 A/B 12V->8V2, ADD R95 A/B
10	D	V	ADD R96 A/B, R97 A/B, R98 A/B, D71 A/B, D72 A/B
11	D	V	D73 A/B, D74 A/B, X1, X2, X3, X4 X5 AND X6
12	D	V	RECREATED MASK LAYER TO FIX TESTPADS
13	D	V	CHANGE IRF3205 #6954 TO IRL2910 #6966
14	MAR-30-2005	5.00	PLACE MICA UNDER MIDDLE TIER MOSFETS
15	MAR-13-2005	5.10	Force update parts to fix pad orientation
16	21 Apr, 2005	5.11	PC#6919:GT:MOVED R95B AVOID HEATSINK COLLISION
17	JUN-08-2005	6.00	XFORMER -> CH1302/E, ADDED 2x#4599,SWAPPED W48 W35,R106A&B #6122 33K->#4868 36K, D56A&B #6440 47 4V7/0.5W->#6484 10V/1W, C32&C33 #5903 1200UF/35V48 #5898 8200UF/50V, C36&C37 #5896 4700UF/80V->#5898 49 C25A&B #5224 47N/100V->#5212 100N/63V
18	D	V	
19	D	V	
20	D	V	
21	D	V	
22	D	V	
23	D	V	



(E) DENOTES EUROPEAN



Product **M1610**

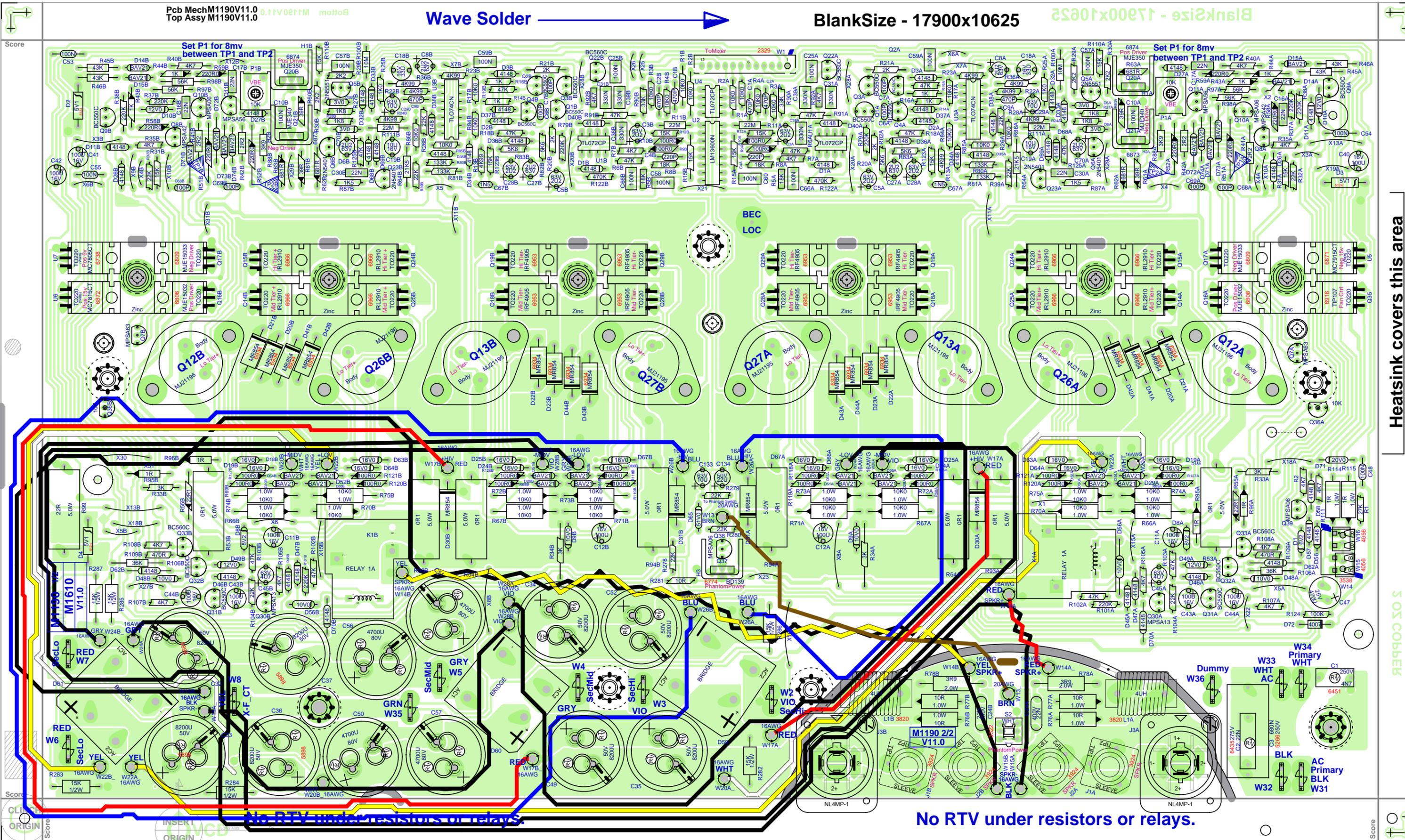
Power Supply PCB# M1190 Sheet 4 of 4

Date: Thu Feb 04, 2010 Rev:V11.0 YsType:..

Filename: M1190V1100sch.sch2002

Set P1 for 8mv  
between TP1 and TP2

Set P1 for 8mv  
between TP1 and TP2



Heatsink covers this area

50% COPPER

No RTV under resistors or relays.

No RTV under resistors or relays.

SEE LAYOUT DOCUMENTATION

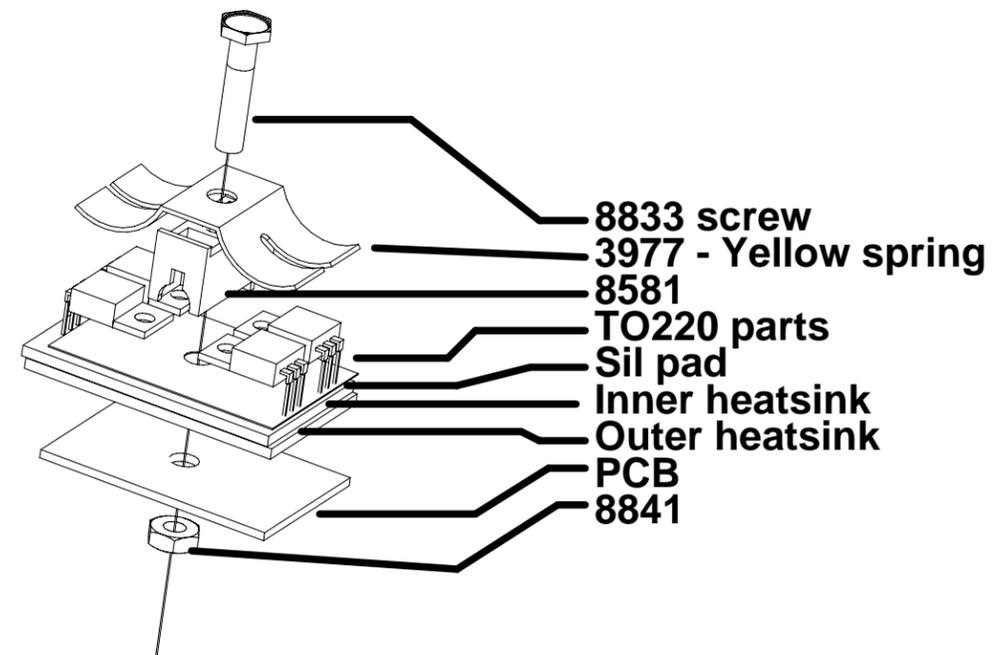
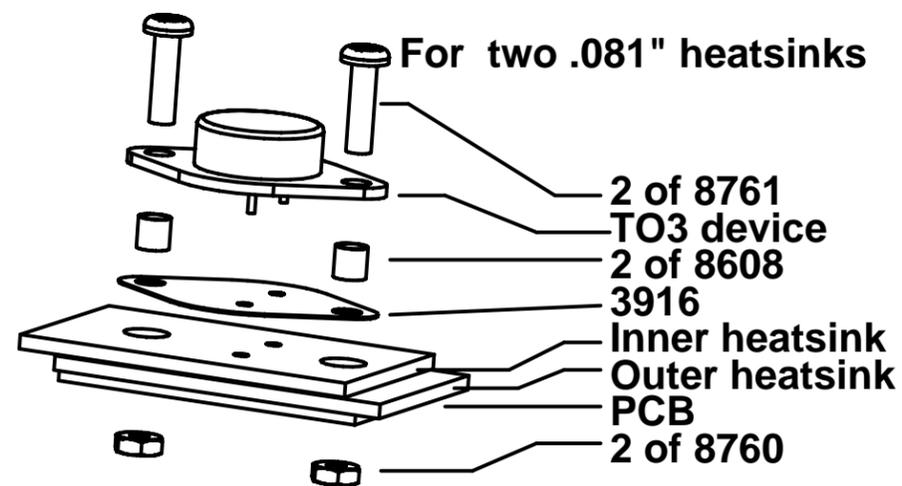


SEE LAYOUT DIAGRAM

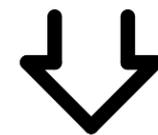


# M1190 PRODUCTION NOTES

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 LAYOUT HISTORY



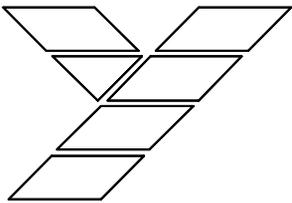
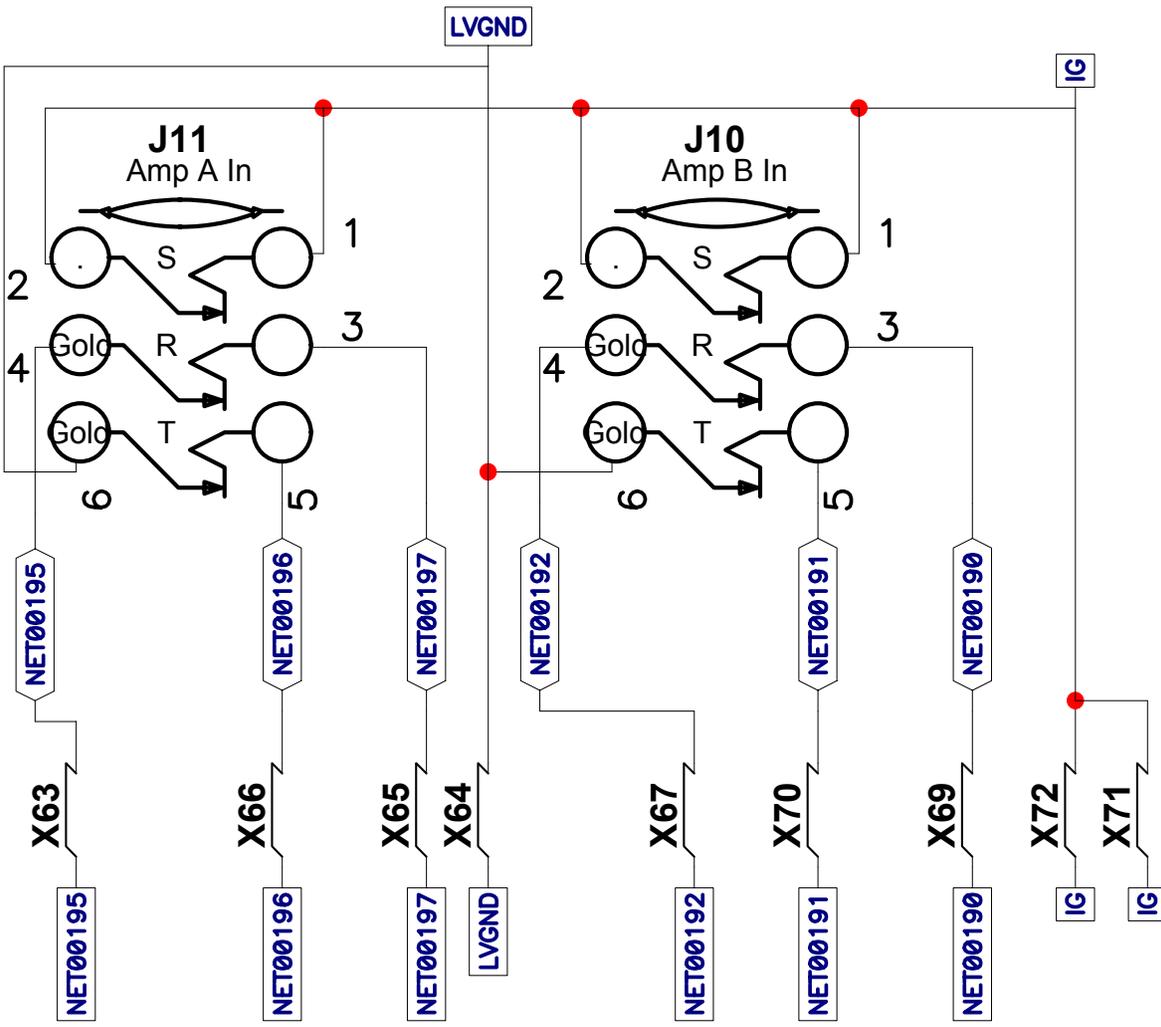


# SEE PPRODUCTION NOTES



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
#	DATE	VER#	DESCRIPTION OF CHANGE	28	Jun-15-2006	7.00	AH, PC#7021, SPACE BETWEEN R96 AND R53
1	7 Jan, 2004	1.00	Rationalize wire refdes	29	.	.	PC#6983, WIDEN TRACE BETWEEN C32 AND C37
2	24 Feb, 2004	1.00	Add speakon jacks to output section	30	.	.	PC#7091, ENLARGE HOLE SIZE FOR #3522
3	10 Mar, 2004	1.00	Enlarge cutouts for 8841 nuts	31	2008/04/25	8.00	Swap c37 with c51; c57 with c36. Moved x11b & x31b to
4	21-APR-2004	1.00	PC#6681 Modify route to let grn wire pass board near pwr cap	32	.	.	middle of HS slots. Solder updates, part updates.
5	6-MAY-2004	2.00	PC#6684 R83(A,B)->5K6,R5(A,B)6K8->18K, D16&D17(A,B) 4148->BAT85,R47&R48(A,B)22R1->100R0	33	.	.	Changed Q8a&b from 5107 to 5113 - MPSA42
6			ADDED D71, D72	34	2008/05/29	9.00	PC#7590 - PS hum fix. Moved K1B away from X15B.
7				35	2009/11/09	10.00	PCs 7875, 7876 - Ribbon cable change - XTR screws flipp
8	DEC-14-2004	3.00	GT:PC#6787: Fixed AC clearance, and W2&W3 tab label	36	03-FEB-2010	.	PC7942,PC7980: Update #4xTO220-MTG GG
9	FEB-07-2005	4.00	PC#6809 Remove D17,D16,D12,D13, R47,R48,R49,R50,C14	37	04-FEB-2010	11.00	PC7983: Change D2,D3,D4 #5124 span to .525 GG
10	D	V	C15 (All A/B) R45,R46 A/B 36K->43K, D10 16V->12V	38	D	V	N
11	D	V	D9 A/B 14V->10V0, D8 A/B 12V->8V2. ADD R95 A/B	39	D	V	N
12	D	V	ADD R96 A/B, R97 A/B, R98 A/B, D71 A/B, D72 A/B	40	D	V	N
13	D	V	D73 A/B, D74 A/B, X1 ,X2 ,X3 ,X4 X5 AND X6	41	D	V	N
14	MAR-30-2005	5.00	RECREATED MASK LAYER TO FIX TESTPADS	42	D	V	N
15	MAR-13-2005	5.10	CHANGE IRF3205 #6954 TO IRL2910 #6966	43	D	V	N
16	.	.	PLACE MICA UNDER MIDDLE TIER MOSFETS	44	D	V	N
17	21 Apr, 2005	5.11	Force update parts to fix pad orientation	45	D	V	N
18	JUN-08-2005	6.00	PC#6919:GT:MOVED R95B AVOID HEATSINK COLLISION	46	D	V	N
19	.	.	XFORMER -> CH1302/E, ADDED 2x#4599,SWAPPED W8 &	47	D	V	N
20	.	.	W35,R106A&B #6122 33K->#4868 36K, D56A&B #6440	48	D	V	N
21	.	.	4V7/0.5W->#6484 10V/1W, C32&C33 #5903 12000UF/35V ->	49	D	V	N
22	.	.	#5898 8200UF/50V, C36&C37 #5896 4700UF/80V->#5898	50	D	V	N
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



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

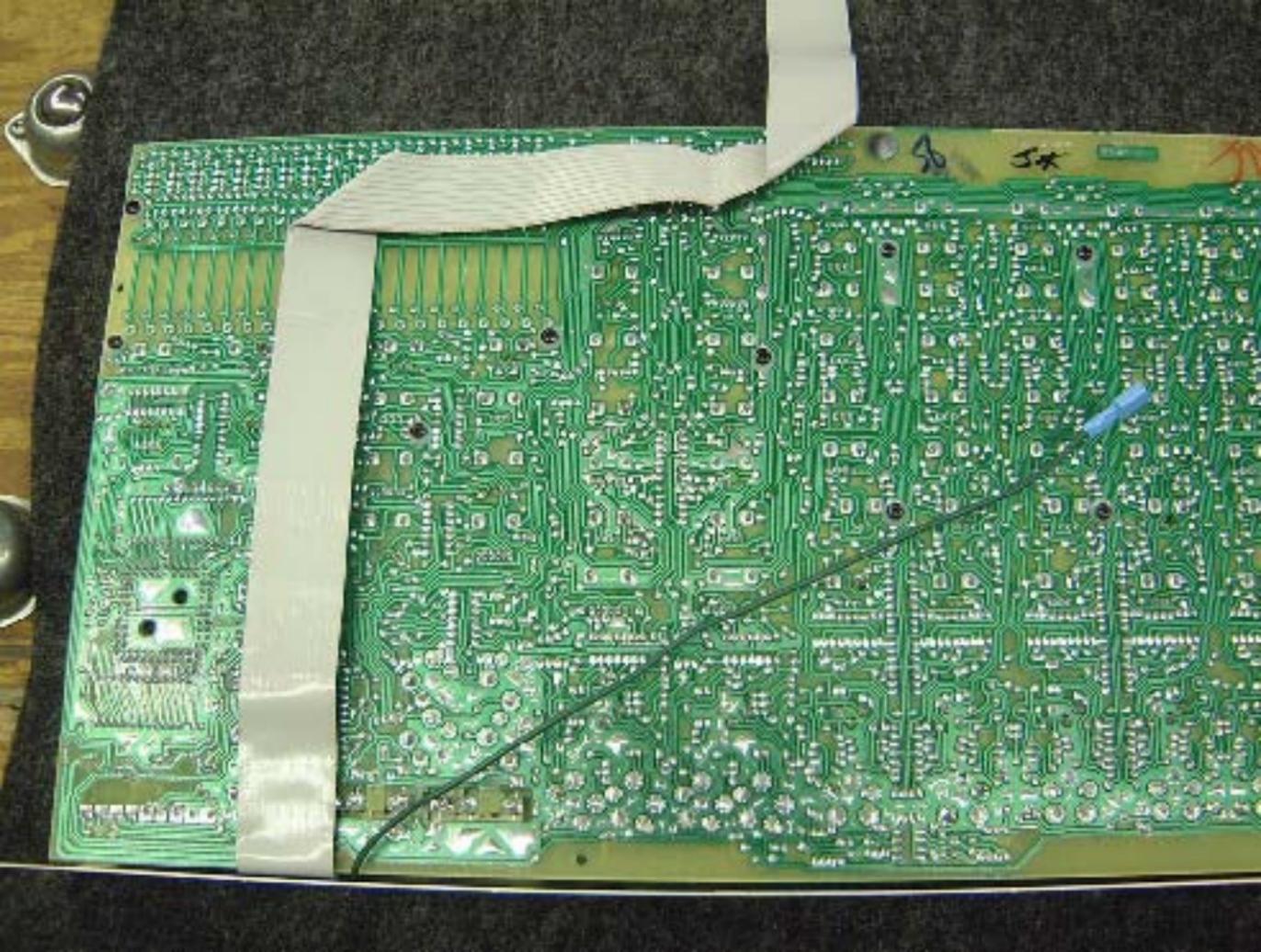
INSERT ORIGIN

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.





M810-2 Parts List 6/15/2011

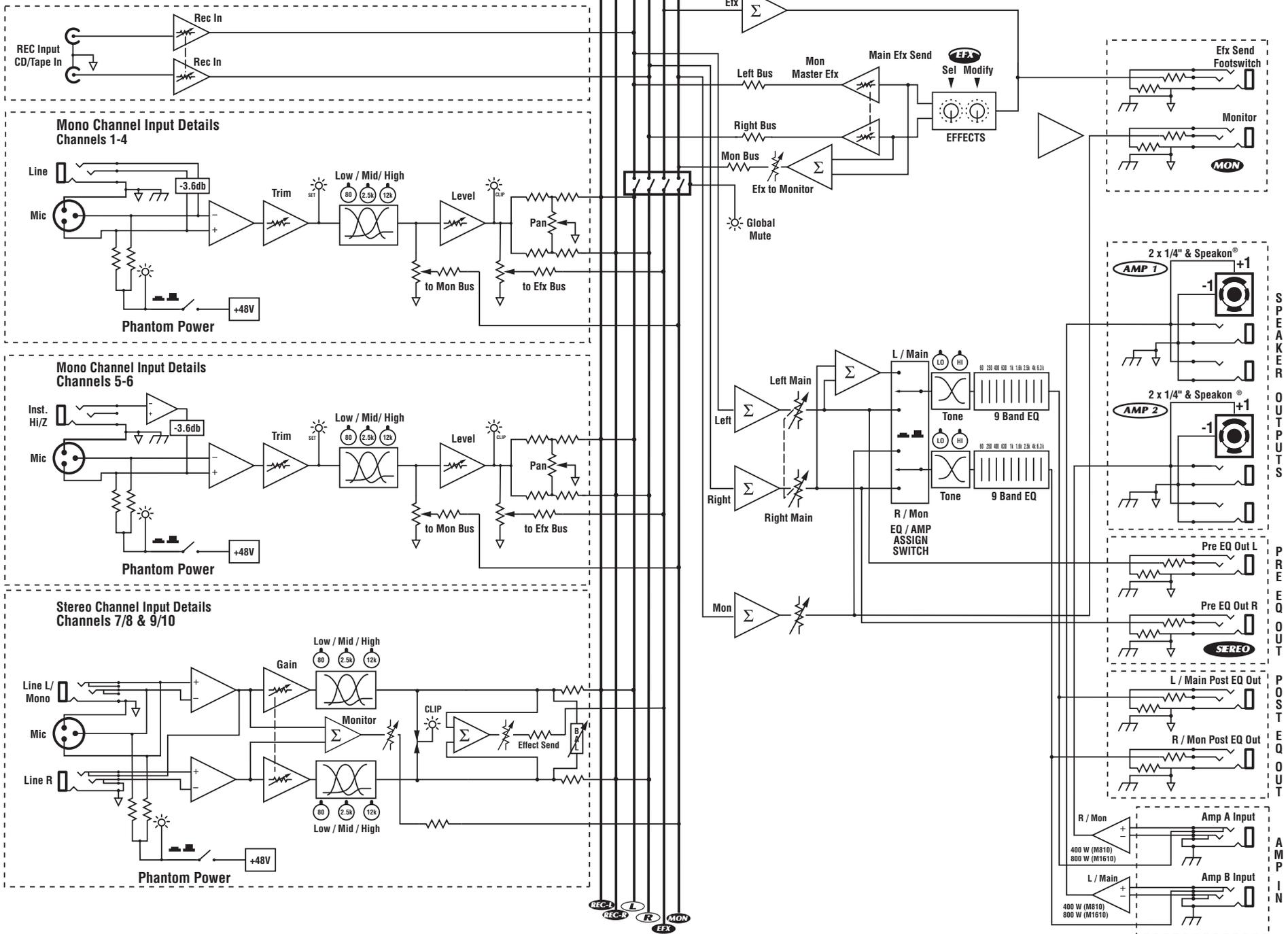
YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
5906	RED 3MM LED 1V9 20MA.4SPCER T&R	13	4432	.10K B LIN 9MM P32	6	4981	1/4W 1K 5%MINI T&R RES	13	7781	0W063 49R9 1% 0603 SMT RES	1
5908	GRN 3MM LED 1V9 20MA.4SPCER T&R	7	4434	.10K B LIN 9MM DETENT P32	21	6110	1/4W 1K0 1%MINI MF T&R RES	2	7624	0W100 100R 1% 0805 SMT RES	1
6419	BRIDGE 35A 400V WIRE LEAD G13504	2	3998	.20K 1B LIN 20MM DETENT S04	18	4585	1/4W 1K2 5%MINI T&R RES	25	7853	0W250 100R 5% 1206 SMT RES	1
6425	BAV21 200V 0A25 DIODE T&R	20	4426	.20K 4B LIN 9MM P32	1	4988	1/4W 1K5 5%MINI T&R RES	25	7621	0W100 1K0 1% 0805 SMT RES	4
6438	1N4007 1000V 1A0 DIODE T&R	1	4433	.50K B LIN 9MM P32	15	6113	1/4W 2K 5%MINI T&R RES	4	7625	0W100 10K0 1% 0805 SMT RES	5
6825	1N4148 75V 0A45 DIODE T&R	89	4435	.50K B LIN 9MM DETENT P32	8	6104	1/4W 2K2 5%MINI T&R RES	6	7634	0W100 20K5 1% 0805 SMT RES	2
6934	MR854 400V 3A0 DIODE FASREC	12	4443	100K 5C R/A 9MM P32	8	4864	1/4W 2K7 5% T&R RES	2	3663	SNAP IEC PWR SOC VW.250TAB FOR .060	1
5124	1N5338B 5V1 5W0 ZENER 5% T&R	3	4431	.10K 5C R/A 12MM STEREO P34	2	6124	1/4W 3K 5%MINI T&R RES	4	2335	NYLON STANDOFF NUT #4 500MIL	9
6436	1N753ARL 6V2 0W5 ZENER 5% T&R	1	4438	.10K B LIN 12MM STEREO DETENTP34	4	6136	1/4W 3K3 5%MINI T&R RES	4	2342	NYLON STANDOFF NUT #4 530MIL BLACK	6
6437	1N5237B 8V2 0W5 ZENER 5% T&R	5	4447	.20K 15A AUD 12MM STEREO P34	1	4814	1/4W 3K6 5% T&R RES	1	8657	6-32 X 3/8" HEX SPACER ALUMINUM	7
6439	1N5225B 3V0 0W5 ZENER 5% T&R	4	4437	.50K B LIN 12MM STEREO P34	2	5028	1/4W 3K74 1% T&R RES	4	8482	3/8" 1D FLAT WASHER	20
6450	1N5242B 12V0 0W5 ZENER 5% T&R	4	4439	.50K B LIN 12MM STEREO DETENTP34	2	4850	1/4W 3K9 5% T&R RES	2	3524	NYLON SHWASHER I3885 OD750 T060	4
6461	1N5240BRL 10V0 0W5 ZENER 5% T&R	4	4441	.50K 4B LIN 12MM STEREO P34	1	4774	1/4W 4K12 1% T&R RES	4	8485	#6 SPLIT WASHER ZINC	2
6465	1N5250B 20V0 0W5 ZENER 5% T&R	1	4520	.10K TRIM POT	2	4681	1.0W 4K7 5% T&R RES	8	3577	FIBER WASHER .625OD .380ID .03	4
6475	1N5262B 51V0 0W5 ZENER 5% T&R	1	2408	.800 AMP CIRCUIT BREAKER	1	4943	1/4W 4K7 5% .2U T&R RES	2	8818	3/4 OD X 3/8 ID X .080 THICK WASHER	2
6484	1N4740A 10V0 1W0 ZENER 5% T&R	2	3820	.4UH COIL 14AWG ZOBEL HORIZONTAL	2	4982	1/4W 4K7 5%MINI T&R RES	49	3440	4PDT MINI VERT ALT SWITCH	1
6738	MC7805CT TO220 P 5V0 REG 36V	1	8497	M1610/M810 GABLE	2	6128	1/4W 4K99 1%MINI MF T&R RES	42	3522	DPDT MINI PC VERT SNP ALT	2
6824	1N5246B 16V0 0W5 ZENER 5% T&R	8	3489	CLIP 250X032 18-22AWG DISCO/INSL	1	6121	1/4W 6K98 1%MINI MF T&R RES	4	3587	DPDT ROKR SW QUIK 250'AC/PWR ON-OFF	1
6871	MC7915CT TO220 N 15V0 REG V2	1	3490	CLIP 250X032 14-16AWG DISCO/INSL	11	4926	1/4W 7K5 5% .2U T&R RES	18	3682	250 MALE PCB TAB REEL	11
6872	MC7915CT TO220 P 15V0 REG V1	1	3601	RING TERMINAL 16AWG WIRE & #8 SCREW	1	4990	1/4W 8K2 5%MINI T&R RES	2	CH1301	M810 POWER TRFM TRD	1
5101	BC550C TO92 NPN TRAN T&R TB	17	3450	1/4" JCK PCB MT ALL-GOLD SKT	2	4983	1/4W 10K 5%MINI T&R RES	96			
5102	BC560C TO92 PNP TRAN T&R TB	38	3921	1/4" JCK PCB MT VERT STER TRT SWT	16	6116	1/4W 10K0 1%MINI MF T&R RES	80			
5103	MPSA06 TO92 NPN TRAN T&R TA	4	3924	1/4" JCK PCB MT VERT 2XTP HICURNT	4	4630	1/2W 15K 5% T&R RES	4			
5104	MPSA56 TO92 PNP TRAN T&R TA	2	3466	RCA DUAL PCB MT VERT GOLD 24MM	2	4979	1/4W 15K 5%MINI T&R RES	28			
5105	MPSA13 TO92 NPN DARL T&R TA	3	3628	SPKON 4C PCB MT VERT 250TAB GRY #4	2	4954	1/4W 18K 5% .2U T&R RES	12			
5106	MPSA63 TO92 PNP DARL T&R TA	2	4010	XLR FEML PCB MT VERT 24MM AA-SERIES	8	6125	1/4W 18K 5%MINI T&R RES	2			
5107	2N5551 TO92 NPN TRAN T&R TA	4	3451	EYELET SMALL 0.089 OD PLATED	43	6123	1/4W 20K0 1%MINI MF T&R RES	5			
5108	2N5401 TO92 PNP TRAN T&R TA	4	3856	FAN 80MM X 80MM 39CFM 12VDC 200MA	2	4777	1/4W 21K5 1% T&R RES	2			
6774	BD139 TO126 NPN TRAN TG	1	3894	AAVID 5972-Z H/S W/TAB B.O.	5	6118	1/4W 22K 5%MINI T&R RES	19			
6805	2S20360 TO3P NPN TRAN DARL	4	3501	B52200F006 COMP WASH #4 SMALL	5	4833	1/4W 27K 5% T&R RES	4			
6812	2SB1647 TO3P PNP TRAN DARL	4	3719	DUAL XSISTOR SPRING, ZINC CLEAR	4	6129	1/4W 27K 5%MINI T&R RES	7			
6873	MJE340 TO126 NPN TRAN TG	2	3977	QUAD XSISTOR SPRING, ZINC YELLOW	3	6122	1/4W 33K 5%MINI T&R RES	13			
6874	MJE350 TO126 PNP TRAN TG	2	8889	RUBBER GROMMET #2183-034-BLK	1	4868	1/4W 36K 5% T&R RES	2			
6916	TIP107 TO220 PNP TRAN DARL TE	1	3801	5/8" BUMPER BUTTON BLACK	1	4853	1/4W 39K 5% T&R RES	4			
6953	IRF4905 TO220 PCH MFT	4	3810	4" NYLON CABLE TIE	8	4927	1/4W 47K 5% .2U T&R RES	4			
6966	IRL2910 NCH MFT 100V TN	4	8397	KNOB STYLE 2 GREY	1	6119	1/4W 47K 5%MINI T&R RES	26			
6745	LM13600N IC XCONDUCTANCE AMP	4	8632	KNOB ROUND PUSHBUTTON 1/4" GREY	2	4928	1/4W 56K 5% .2U T&R RES	14			
6804	MC33079P IC QUAD OP AMP	4	8637	ROUND PUSH BUTTON 1/4" BLK 24MM	1	6139	1/4W 62K 5%MINI T&R RES	6			
6882	TL072CP IC FET DUAL OP AMP	15	9915	KNOB 0-DEG RED SOFT GRAY RIB	2	4586	1/4W 82K 5%MINI T&R RES	4			
6889	TL074CN IC QUAD OJA T.I ONLY	11	9916	KNOB 0-DEG GRY SOFT GRAY RIB	29	4929	1/4W 82K 5% .2U T&R RES	14			
6467	.10K 10% THERMISTOR TO-92 NTC	2	9917	KNOB 0-DEG GRN SOFT GRAY RIB	9	6120	1/4W 100K 5%MINI T&R RES	1			
5199	100P 100V 2%CAP T&R RAD CER.2NPO	8	9918	KNOB 0-DEG BLU SOFT GRAY RIB	10	4991	1/4W 133K 1%MINI T&R RES	12			
5408	47P 100V 10%CAP T&R BEAD NPO	33	9919	KNOB 0-DEG YEL SOFT GRAY RIB	8	4796	1/4W 180K 5%MINI T&R RES	4			
5412	220P 100V 10%CAP T&R BEAD NPO	14	9920	KNOB 0-DEG WHT SOFT GRAY RIB	9	6126	1/4W 220K 5%MINI T&R RES	14			
5208	.2N2 400V 5%CAP T&R RAD 2FLM	5	9921	KNOB 0-DEG GRY W/O COVERING	6	6127	1/4W 470K 5%MINI T&R RES	2			
5273	.1N5 200V 5%CAP T&R RAD CER.2NPO	16	3426	8' 3/16 SUT AC LINE CORD REMOVE-CSA	1	4948	1/4W 1M 5% .2U T&R RES	2			
5275	.3N3 100V 5%CAP T&R RAD 2FLM	6	8701	4-40 KEPS NUT ZINC	5	4951	1/4W 4M7 5% .2U T&R RES	7			
5416	470P 50V 10%CAP T&R BEAD NPO	6	8800	6-32 KEPS NUT ZINC	6	6132	1/4W 8M2 5%MINI T&R RES	6			
5422	.1N 50V 10%CAP T&R BEAD NPO	20	8841	10-32 KEPS NUT TIN PLATED	7	4809	1/4W 10M 5% T&R RES	2			
5204	.10N 100V 10%CAP T&R RAD 2FLM	2	8797	5/16-18 KEPS NUT JS500	1	4751	1/4W 22M 5% T&R RES	10			
5205	.15N 100V 10%CAP T&R RAD 2FLM	4	4022	ELASTOMER PAD -4-TO220 1X1.850	7	3722	RELAY 1A 30AMP DC24 036MA PC-C	2			
5207	.18N 100V 5%CAP T&R RAD 2FLM	6	8581	CUSTOM PBL TRANSISTOR SPACER	7	8729	#4 X 3/8 FLAT QUAD TYPE A JS500 BLK	4			
5209	.4N7 250V 5%CAP T&R RAD 2FLM	4	4597	22AWG STRAN TC WIR JMP	15	8842	#4 X 5/16 PAN QUAD TYPE A JS500 BLK	18			
5210	.22N 100V 10%CAP T&R RAD 2FLM	26	4599	22AWG SOLID SC WIR T&R JMP	232	8865	4-40 X 5/16 PAN PH MS JS500	5			
5222	.33N 100V 10%CAP T&R RAD 2FLM	10	4749	5.0W 0R15 5% BLK RES	8	8902	4-40 X 3/4 PAN PH MS B/O & WAX	15			
5224	.47N 100V 10%CAP T&R RAD 2FLM	4	2006	1.0W 1R 5%FLAME PROOF T&R RES	2	8822	6-32 X 1/4 PAN PH MS ZN C/W SPLIT_W	4			
5840	.22N 400V 10%CAP BLK RAD POLY FLM	2	4911	1/4W 2R2 5% T&R RES	4	8831	6-32 X 1/4 PAN PH TAPTITE ZN	2			
6435	.22N 275V 20%CAP BLK X2 15MM AC	1	4748	2.0W 3R9 5% T&R	2	8832	6-32 X 1/4 PAN PH TAPTITE JS500	20			
6451	.4N7 250V 20%CAP BLK Y 10MM AC	1	2008	1.0W 10R 5%FLAME PROOF T&R RES	4	8801	6-32 X 3/8 PAN PH TAPTITE JS500	4			
5212	100N 63V 5%CAP T&R RAD 2FLM	37	4605	1/8W 10R 5% T&R RES	3	8829	6-32 X 3/8 FLAT PH TAPTITE B0XC HEA	3			
5226	.68N 100V 5%CAP T&R RAD 2FLM	2	4709	5.0W 22R 5% BLK RES	1	8823	6-32 X 1 PAN PH TAPTITE JS500	3			
5229	150N 63V 10%CAP T&R RAD 2FLM	2	2016	1/6W 39R 2%FLAME PROOF T&R RES	4	8809	10-32 X 1/4 PAN PH TAPTITE JS500	8			
5231	220N 63V 5%CAP T&R RAD 2FLM	2	6134	1/4W 47R 5%MINI T&R RES	6	8833	10-32 X 7/8 IND HEX M/S BLACK OXIDE	7			
5233	330N 63V 5%CAP T&R RAD 2FLM	8	2019	1/8W 100R0 1%FLAME PROOF T&R RES	12	8893	10-32 X 1 FLAT PHILIPS TT JS500 BLK	10			
5234	470N 63V 10%CAP T&R RAD 2FLM	2	4602	1/8W 100R 5% T&R RES	29	8733	5/16-18X2-1/2 GRD 5 HEX BOLT JS500	1			
5314	100N 50V 10%CAP T&R BEAD X7R	7	4921	1/4W 100R 5% .2U T&R RES	18	7766	.15P 50V 5%CAP 0603 SMT NPO	1			
5318	220N 50V 10%CAP T&R BEAD X7R	1	4984	1/4W 150R 5%MINI T&R RES	3	7693	.1N 50V 5%CAP 0805 SMT NPO	2			
5257	.2U2 63V 20%CAP T&R RAD 2EL	12	2023	1/6W 220R0 1%FLAME PROOF T&R RES	8	7966	.2N7 100V 10%CAP 0805 SMT X7R	2			
5258	.4U7 63V 20%CAP T&R RAD 8X7MM 2EL	20	4977	1/4W 220R 5%MINI T&R RES	11	7613	100N 25V 10%CAP 0805 SMT X7R	5			
5266	.680N 250V 20%CAP BLK X2 30MM AC	2024	2024	1/6W 249R 2%FLAME PROOF T&R RES	4	4769	.1U 50V 20%CAP 4.3X3.9 SMT ELC	5			
5260	.22U 50V 20%CAP T&R RAD 2EL	1	4980	1/4W 470R 5%MINI T&R RES	28	7810	.47U 16V 20%CAP 6X5.4 SMT ELE	2			
5282	.10U 16V 20%CAP T&R 5X7MM 2NP	32	2028	1/6W 475R 1%FLAME PROOF T&R RES	2	7818	LM1117 REGULATOR 3V3 SMT SOT223	1			
5631	.22U 50V 20%CAP T&R 6X7MM 2EL	12	4799	1/4W 562R 1% T&R RES	4	7912	FV-1 SPIN SEMI REVERB SMT IC	1			
5945	.10U 63V 20%CAP T&R RAD 2EL	3	4922	1/4W 620R 5% .2U T&R RES	8	7786	CD4052B DUAL 4CH MUX SMT IC	1			
5961	.33U 16V 20%CAP T&R RAD 2IN NP	17	5019	1/4W 620R 5%MINI T&R RES	14	7934-PROG	24LC32A SER EEPROM MIX2-U3 YS DFX	1			
5618	470U 25V 20%CAP BLK 10X15MM EL	1	4923	1/4W 680R 5% .2U T&R RES	4	7935-PROG	24LC32A SER EEPROM MIX2-U4 YS DFX	1			
5879	100U 16V 20%CAP T&R 8X7MM 2EL	15	2030	1/6W 681R 1%FLAME PROOF T&R RES	16	7932	07 PIN 25SQ 100 PIN SIL SMT	1			
5896	4700U 80V 20%CAP BLK 25X50MM ELS	4	4924	1/4W 750R 5% .2U T&R RES	6	7933	08 PIN 25SQ 100 PIN SIL SMT	1			
5898	8200U 50V 20%CAP 25X50MM ELS	4	2031	1/6W 820R 5%FLAME PROOF T&R RES	4	7913	32KHZ CRYSTAL 4-PIN FSRFLF SMT	1			
6578	ROT BIN 18MM 4BIT ENCODER P23	1	2033	1/6W 1K 2%FLAME PROOF T&R RES	4	7882	0W063 0R 1% 1206 SMT RES	1			

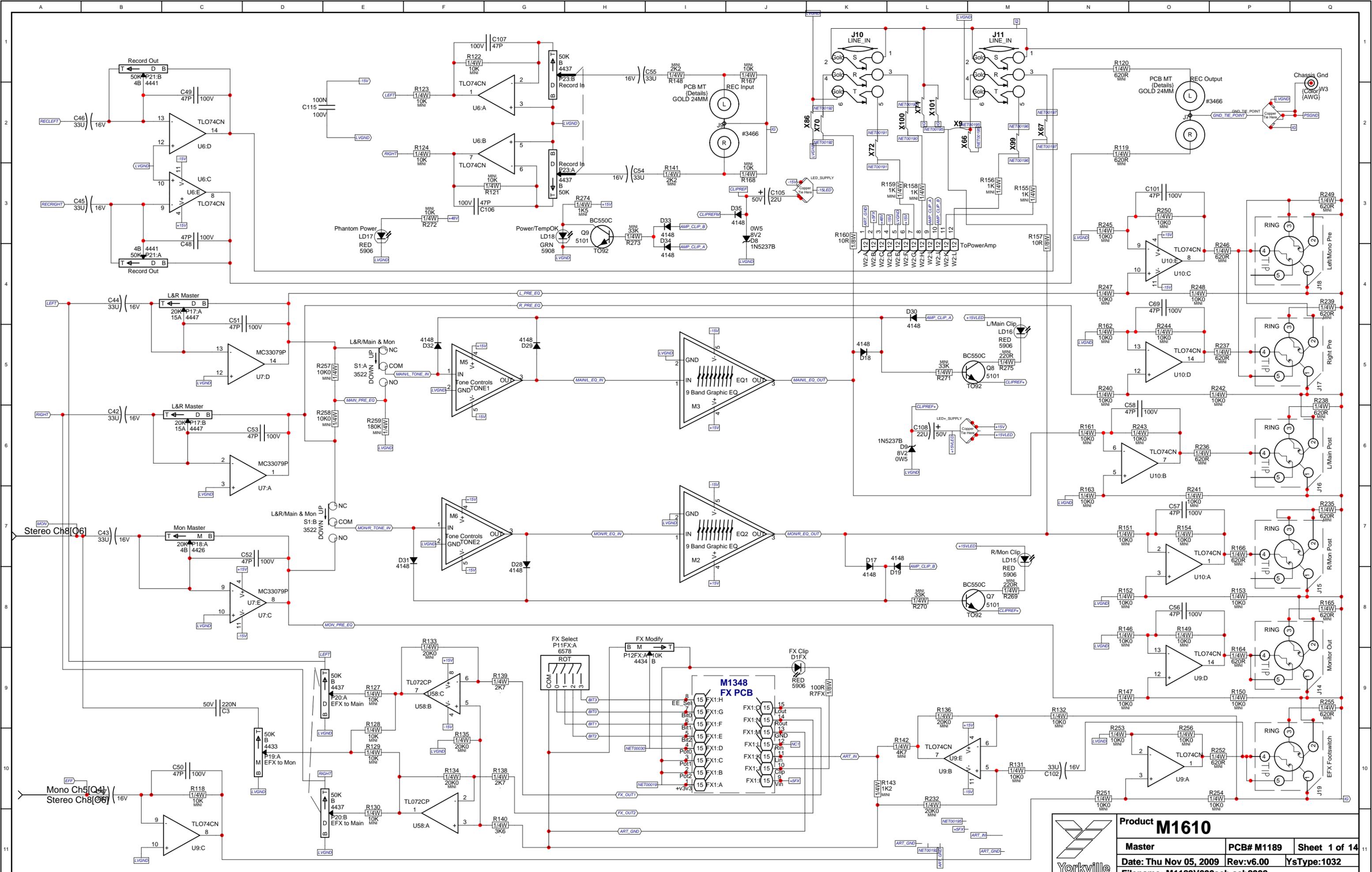
M1610-2 Parts List 3/19/2010

YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
5906	RED 3MM LED 1V9 20MA 4SPCER T&R	13	5879	100U 16V 20%CAP T&R 8X7MM .2EL	15	4980	1/4W 470R 5%MINI T&R RES	28	8893	10-32 X 1 FLAT PHILIPS TT JS500 BLK	10
5908	GRN 3MM LED 1V9 20MA 4SPCER T&R	7	5896	4700U 80V 20%CAP BLK 25X50MM ELS	4	2028	1/8W 475R 1%FLAME PROOF T&R RES	2	8733	5/16-18X2-1/2 GRD 5 HEX BOLT JS500	1
6419	BRIDGE 35A 400V WIRE LEAD GI3504	3	5898	8200U 50V 20%CAP 25X50MM ELS	8	4799	1/4W 562R 1% T&R RES	4	7613	100N 25V 10%CAP 0805 SMT X7R	5
6425	BAV21 200V 0A25 DIODE T&R	28	6578	ROT BIN 18MM 4BIT ENCODER P34	1	4922	1/4W 820R 5% 2U T&R RES	8	7621	0.1W 1K0 1% 0805 SMT RES	4
6438	1N4007 1000V 1A0 DIODE T&R	1	4431	10K 5R/A 12MM STEREO P34	2	5019	1/4W 820R 5%MINI T&R RES	14	7624	0.1W 100K 1% 0805 SMT RES	1
6825	1N4148 75V 0A45 DIODE T&R	89	4432	10K B LIN 9MM P32	6	4923	1/4W 680R 5% 2U T&R RES	4	7625	0.1W 10K0 1% 0805 SMT RES	5
6934	MR854 400V 3A0 DIODE FASREC	20	4434	10K B LIN 9MM DETENT P32	21	2030	1/8W 681R 1%FLAME PROOF T&R RES	16	7634	0.1W 20K5 1% 0805 SMT RES	2
5124	1N5338B 5V1 5V0 ZENER 5% T&R	3	4438	10K B LIN 12MM STEREO DETENTP34	4	4924	1/4W 750R 5% 2U T&R RES	6	7693	1N 50V 5%CAP 0805 SMT NPO	2
6436	1N753ARL 6V2 0W5 ZENER 5% T&R	1	4426	20K 4B LIN 9MM P32	1	2031	1/8W 820R 5%FLAME PROOF T&R RES	4	7766	15P 50V 5%CAP 0603 SMT NPO	1
6437	1N5237B 8V2 0W5 ZENER 5% T&R	5	4447	20K 15A AUD 12MM STEREO P34	1	2033	1/8W 1K 2%FLAME PROOF T&R RES	4	7781	W063 49R 1% 0603 SMT RES	1
6439	1N5225B 3V0 0W5 ZENER 5% T&R	4	4433	50K B LIN 9MM P32	15	4981	1/4W 1K 5%MINI T&R RES	13	7786	CD4052B IC DUAL 4CHANNEL MUX SMT	1
6450	1N5242B 12V0 0W5 ZENER 5% T&R	4	4435	50K B LIN 9MM DETENT P32	10	6110	1/4W 1K0 1%MINI MF T&R RES	2	7818	LM117 REGULATOR 3V3 SOT-223	1
6461	1N5240BRL 10V0 0W5 ZENER 5% T&R	4	4437	50K B LIN 12MM STEREO P34	2	4585	1/4W 1K2 5%MINI T&R RES	21	7853	W250 100R 5% 1206 SMT RES	1
6465	1N5250B 20V0 0W5 ZENER 5% T&R	1	4439	50K B LIN 12MM STEREO DETENTP34	2	4988	1/4W 1K5 5%MINI T&R RES	25	7882	W063 0R 1% 1206 SMT RES	1
6475	1N5262B 51V0 0W5 ZENER 5% T&R	1	4441	50K 4B LIN 12MM STEREO P34	1	6105	1/4W 1K8 5%MINI T&R RES	4	7912	FV-1 SPIN SEMI REVERB CHIP IC	1
6484	1N4740A 10V0 1W0 ZENER 5% T&R	2	4443	100K 5C R/A 9MM P32	8	6113	1/4W 2K 5%MINI T&R RES	4	7913	32KHZ CRYSTAL SMT 4-PIN FSRFL	1
6738	MC7805CT TO220 P 5V0 REG 36V	1	3998	20K 1B LIN 20MM DETENT S04	18	6104	1/4W 2K2 5%MINI T&R RES	6	7932	07 PIN 25SQ 100 PIN SMT SIL	1
6824	1N5246B 16V0 0W5 ZENER 5% T&R	16	4520	10K TRIM POT	2	4864	1/4W 2K7 5% T&R RES	2	7933	08 PIN 25SQ 100 PIN SMT X7R	1
6871	MC7915CT TO220 N 15V0 REG V2	1	3606	12.00 AMP CIRCUIT BREAKER	1	6124	1/4W 3K 5%MINI T&R RES	4	7966	2N7 100V 10%CAP 0805 SMT X7R	2
6872	MC7815CT TO220 P 15V0 REG V1	1	3820	4UH COIL 14AWG ZOBEL HORIZONTAL	2	4814	1/4W 3K6 5% T&R RES	1	934-PROG	24LC32A SER EEPROM MIX2-U3 YS DFX	1
5101	BC550C TO92 NPN TRAN T&R TB	17	8497	M1610M810 GABLE	2	5028	1/4W 3K74 1% T&R RES	4	935-PROG	24LC32A SER EEPROM MIX2-U4 YS DFX	1
5102	BC560C TO92 PNP TRAN T&R TB	38	3489	CLIP 250X032 18-22AWG DISCO/INSL	1	4850	1/4W 3K9 5% T&R RES	2	3663	SNAP IEC PWR SOC W/250TAB FOR .060	1
5103	MPSA06 TO92 NPN TRAN T&R TA	4	3490	CLIP 250X032 14-16AWG DISCO/INSL	11	4774	1/4W 4K12 1% T&R RES	4	8608	NYLON SPACER 200 OD .145 ID .110 L	16
5104	MPSA56 TO92 PNP TRAN T&R TA	2	3601	RING TERMINAL 16AWG WIRE & #8 SCREW	1	4943	1/4W 4K7 5% 2U T&R RES	2	2335	NYLON STANDOFF NUT #4 500MIL	9
5105	MPSA13 TO92 NPN DARL T&R TA	3	3450	1/4" JCK PCB MT ALL-GOLD SKT	2	4982	1/4W 4K7 5%MINI T&R RES	49	2342	NYLON STANDOFF NUT #4 530MIL BLK	6
5106	MPSA63 TO92 PNP DARL T&R TA	2	3921	1/4" JCK PCB MT VERT STER RT SWT	16	6128	1/4W 4K99 1%MINI MF T&R RES	42	8657	6-32 X 3/8" HEX SPACER ALUMINUM	7
5107	2N5551 TO92 NPN TRAN T&R TA	2	3924	1/4" JCK PCB MT VERT 2XTIP HICURNT	4	6141	1/4W 5K6 5%MINI T&R RES	4	8482	3/8 1D FLAT WASHER	21
5108	2N5401 TO92 PNP TRAN T&R TA	4	3466	RCA DUAL PCB MT VERT GOLD 24MM	2	6121	1/4W 6K98 1%MINI MF T&R RES	4	8818	3/4 OD X 3/8 ID X .080 THICK WASHER	2
5113	MPSA42 TO92 NPN TRAN T&R TA	2	3628	SPKON 4C PCB MT VERT 250TAB GRV #4	2	4926	1/4W 7K5 5% 2U T&R RES	18	8485	#6 SPLIT WASHER ZINC	2
6774	BD139 TO126 NPN TRAN TG	1	4010	XLR FEML PCB MT VERT 24MM AA-SERIES	8	4990	1/4W 8K2 5%MINI T&R RES	2	3524	NYLON SH/WASHER ID385 OD750 T060	4
6808	MJE15032 TO220 NPN TRAN TE	2	3451	EYELET SMALL 0.089 OD PLATED	59	4983	1/4W 10K 5%MINI T&R RES	96	3577	FIBER WASHER .625OD .380D .03	4
6809	MJE15033 TO220 PNP TRAN TE	2	3866	FAN 80MM X 80MM 39CFM 12VDC 200MA	2	5031	1.0W 10K0 5% T&R RES	16	3440	4PDT MINI VERT ALT SWITCH	1
6873	MJE340 TO126 NPN TRAN TG	2	3894	AAVID 5972-B H/S W/TAB B.O.	5	6116	1/4W 10K0 1%MINI MF T&R RES	80	3522	DPDT MINI PC VERT SPM ALT	2
6874	MJE350 TO126 PNP TRAN TG	2	3501	B52200F006 COMP WASH #4 SMALL	3	4630	1/2W 15K 5% T&R RES	6	3587	DPDT ROKR SW QUIK 250AC/PWR ON-OFF	1
6916	TIP107 TO220 PNP TRAN DARL TE	1	3977	QUAD XSISTOR SPRING, ZINC YELLOW	6	4979	1/4W 15K 5%MINI T&R RES	30	3682	250 MALE PCB TAB REEL	13
6953	IRF4905 TO220 PCH MFET	8	8889	RUBBER GROMMET #2183-034-BLK	1	4954	1/4W 18K 5% 2U T&R RES	12	3029	PATCH 12 22AWG 16.0 XH	1
6966	IRL2910 NCH MFET 100V TN	8	3801	5/8" BUMPER BUTTON BLACK	1	6125	1/4W 18K 5%MINI T&R RES	2	H1302	M1610 POWER TRFMR TRD	1
6909	MJ21196 TO3 NPN TRAN TH	4	3810	4" NYLON CABLE TIE	10	6123	1/4W 20K0 1%MINI MF T&R RES	5			
6910	MJ21195 TO3 PNP TRANSISTOR TH	4	2329	12 CIR XH-HEADER .098IN	2	4777	1/4W 21K5 1% T&R RES	2			
6745	LM13600N IC XCONDUCTANCE AMP	4	4056	2 CIR XH-HEADER 0.098IN	2	6118	1/4W 22K 5%MINI T&R RES	17			
6804	MC33079P IC QUAD OP AMP	4	8397	KNOB STYLE 2 GREY	1	6129	1/4W 27K 5%MINI T&R RES	7			
6882	TL072CP IC FET DUAL OP AMP	15	8632	KNOB ROUND PUSHBUTTON 1/4" GREY	2	6122	1/4W 33K 5%MINI T&R RES	13			
6889	TL074CN IC QUAD O/A T.I. ONLY	11	8637	ROUND PUSH BUTTON 1/4" BLK 24MM	1	4868	1/4W 36K 5% T&R RES	2			
6467	10K 10% THERMISTOR TO-92 NTC	2	9915	KNOB O-DEG RED SOFT GRAY RIB	2	4878	1/4W 43K 5% T&R RES	4			
5199	100P 100V 2%CAP T&R RAD CER.2NPO	8	9916	KNOB O-DEG GRY SOFT GRAY RIB	29	4927	1/4W 47K 5% 2U T&R RES	4			
5408	47P 100V 10%CAP T&R BEAD NPO	33	9917	KNOB O-DEG GRN SOFT GRAY RIB	9	6119	1/4W 47K 5%MINI T&R RES	26			
5412	220P 100V 10%CAP T&R BEAD NPO	14	9918	KNOB O-DEG BLU SOFT GRAY RIB	10	4835	1/4W 56K 5% T&R RES	2			
5208	2N2 400V 5%CAP T&R RAD .2FLM	5	9919	KNOB O-DEG YEL SOFT GRAY RIB	8	4928	1/4W 56K 5% 2U T&R RES	14			
5273	1N5 200V 5%CAP T&R RAD CER.2NPO	16	9920	KNOB O-DEG WHT SOFT GRAY RIB	9	5018	1/4W 56K 5%MINI T&R RES	2			
5275	3N3 100V 5%CAP T&R RAD .2FLM	6	9921	KNOB O-DEG GRY W/O COVERING	6	6139	1/4W 62K 5%MINI T&R RES	6			
5416	470P 50V 10%CAP T&R BEAD NPO	6	3426	8 3/16 SJT AC LINE CORD REMOVE-CSA	1	4929	1/4W 82K 5% 2U T&R RES	14			
5422	1N 50V 10%CAP T&R BEAD NPO	20	8701	4-40 KEPS NUT ZINC	3	6120	1/4W 100K 5%MINI T&R RES	1			
5204	10N 100V 10%CAP T&R RAD .2FLM	2	8760	6-32 KEPS NUT TIN PLATED	16	4991	1/4W 133K 1%MINI T&R RES	16			
5205	15N 100V 10%CAP T&R RAD .2FLM	4	8800	6-32 KEPS NUT ZINC	13	4796	1/4W 180K 5%MINI T&R RES	4			
5207	18N 100V 5%CAP T&R RAD .2FLM	6	8841	10-32 KEPS NUT TIN PLATED	6	6126	1/4W 220K 5%MINI T&R RES	14			
5209	4N7 250V 5%CAP T&R RAD .2FLM	4	8797	5/16-18 KEPS NUT JS500	1	6127	1/4W 470K 5%MINI T&R RES	2			
5210	22N 100V 10%CAP T&R RAD .2FLM	26	3916	TO3 SIL-PAD REPLACES MICA	8	4948	1/4W 1M 5% 2U T&R RES	2			
5222	33N 100V 10%CAP T&R RAD .2FLM	10	4022	ELASTOMER PAD - 2-TO218 / 4-TO220	6	4951	1/4W 4M7 5% 2U T&R RES	7			
5224	47N 100V 10%CAP T&R RAD .2FLM	4	8581	CUSTOM PBL TRANSISTOR SPACER	6	6132	1/4W 8M2 5%MINI T&R RES	6			
5840	22N 400V 10%CAP BLK RAD POLY FLM	2	4597	22AWG STRAN TC WIR JMP	15	4809	1/4W 10M 5% T&R RES	2			
6435	22N 275V 20%CAP BLK X2 15MM AC	1	4599	22AWG SOLID SC WIR T&R JMP	232	4751	1/4W 22M 5% T&R RES	10			
6451	4N7 250V 20%CAP BLK Y 10MM AC	1	5299	24AWG SOLID SC WIR RAD JMP	1	3722	RELAY 1A 30AMP DC24 036MA PC-C	2			
5212	100N 63V 5%CAP T&R RAD .2FLM	37	4745	5.0W 0R1 5% BLK RES	8	9010	16GA COLD ROLLED STEEL 4X8 SHEET	4			
5226	68N 100V 5%CAP T&R RAD .2FLM	2	2006	1.0W 1R 5%FLAME PROOF T&R RES	2	9020	18GA COLD ROLLED STEEL 4X8 SHEET	3.2			
5229	150N 63V 10%CAP T&R RAD .2FLM	2	2007	1/4W 1R 5%FLAME PROOF T&R RES	4	9070	18GA ELECTRO GALV STEEL 4X8 SHEET	1.6			
5231	220N 63V 10%CAP T&R RAD .2FLM	2	4911	1/4W 2R2 5% T&R RES	4	9155	.081" 48X96 UTILITY ALUM SPV 1 SIDE	2.51			
5233	330N 63V 5%CAP T&R RAD .2FLM	8	4748	2.0W 3R9 5% T&R	2	9250	.040" 48X96 5052H32 ALUM VINYL LAMI	2.3			
5234	470N 63V 10%CAP T&R RAD .2FLM	2	2008	1.0W 10R 5%FLAME PROOF T&R RES	4	9640	.025" FISHPAPER ( FLAT 48" SHEETS )	1.1			
5314	100N 50V 10%CAP T&R BEAD X7R	7	4605	1/8W 10R 5% T&R RES	3	8842	#4 X 5/16 PAN QUAD TYPE A JS500 BLK	18			
5318	220N 50V 10%CAP T&R BEAD X7R	1	4709	5.0W 22R 5% BLK RES	1	8865	4-40 X 5/16 PAN PH MS JS500	3			
5257	2U2 63V 20%CAP T&R RAD .2EL	12	2013	1/8W 22R1 1%FLAME PROOF T&R RES	2	8729	#4 X 3/8 FLAT QUAD TYPE A JS500 BLK	4			
5258	4U7 63V 20%CAP T&R 8X7MM .2EL	20	2016	1/8W 39R 2%FLAME PROOF T&R RES	4	8902	4-40 X 3/4 PAN PHIL MS B/O & WAX	15			
7769	1U 50V 20%CAP 4.3X3.9 SMT ELC	5	6134	1/4W 47R 5%MINI T&R RES	6	8831	6-32 X 1/4 PAN PH TAPTITE ZN	2			
5260	22U 50V 20%CAP T&R RAD .2EL	1	2019	1/8W 100R0 1%FLAME PROOF T&R RES	20	8832	6-32 X 1/4 PAN PH TAPTITE JS500	24			
5282	10U 16V 20%CAP T&R 5X7MM .2NP	32	4602	1/8W 100R 5% T&R RES	29	8801	6-32 X 3/8 PAN PH TAPTITE JS500	4			
5631	22U 50V 20%CAP T&R 6X7MM .2EL	12	4921	1/4W 100R 5% 2U T&R RES	18	8829	6-32 X 3/8 FLAT PH TAPTITE BO&X HEA	3			
5945	10U 63V 20%CAP T&R RAD .2EL	3	4984	1/4W 150R 5%MINI T&R RES	3	8761	6-32 X 1/2 PAN PHIL MS ZINC CLEAR	16			
5961	33U 16V 20%CAP T&R RAD .2	17	2023	1/8W 220R0 1%FLAME PROOF T&R RES	8	8823	6-32 X 1 PAN PH TAPTITE JS500	3			
7810	47U 16V 20%CAP 6X5.4 SMT ELE	2	4977	1/4W 220R 5%MINI T&R RES	11	8809	10-32 X 1/4 PAN PH TAPTITE JS500	8			
5618	470U 25V 20%CAP BLK 10X15MM EL	1	2024	1/8W 249R 2%FLAME PROOF T&R RES	4	8833	10-32 X 7/8 IND HEX M/S BLACK OXIDE	6			

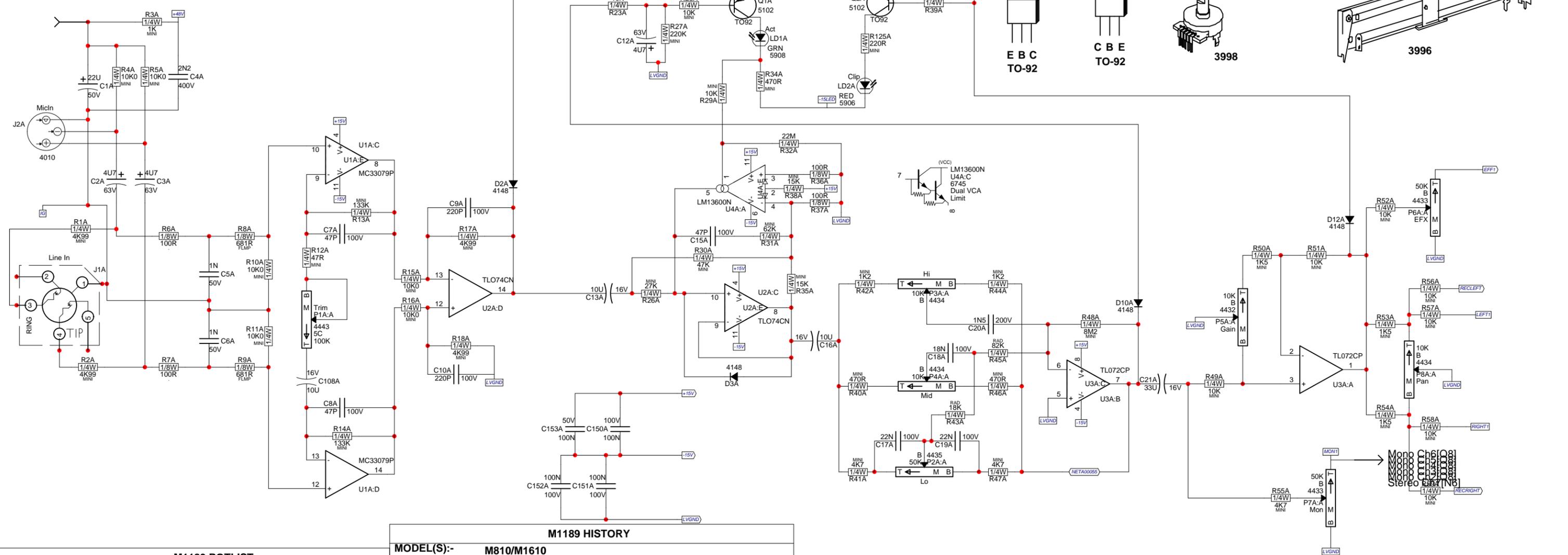
# Block Diagram for M810-2 / M1610-2

DESIGNED & MANUFACTURED BY YORKVILLE SOUND

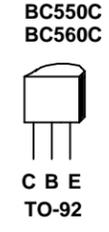
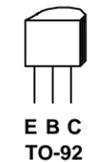




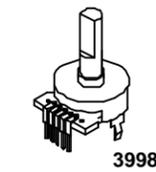
**Only Channel 1 is shown.  
Channels 1 - 4 employ the  
same circuit.**



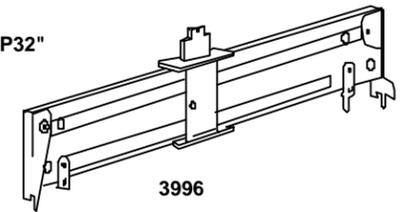
2N5401  
2N5551  
MPSA06  
MPSA13  
MPSA43  
MPSA56  
MPSA63



"STYLE\_P34"



"STYLE\_P32"



M1189 POTLIST				
MODEL(S):-	M1610	FUNCTION	PART#	NOB
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	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	D	V	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

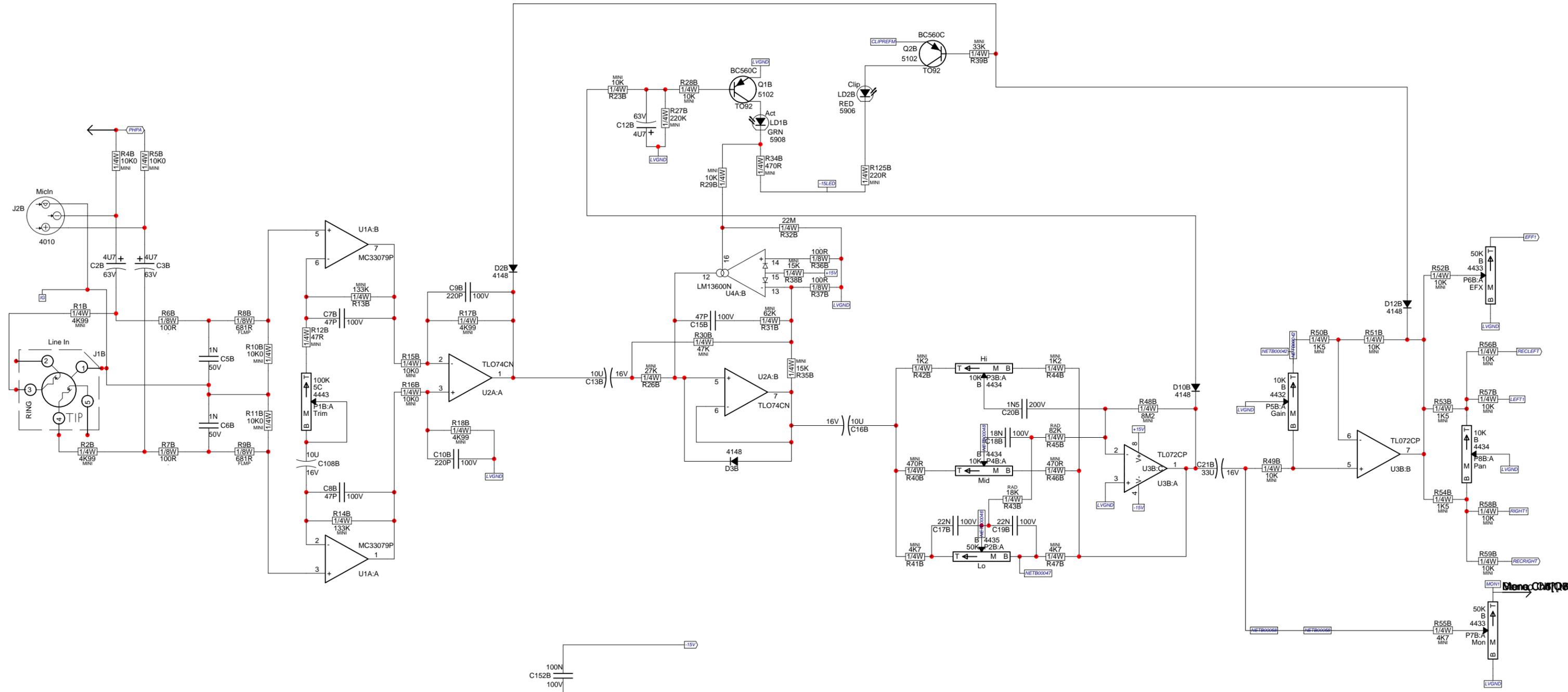
#	DATE	VER#	DESCRIPTION OF CHANGE
1	2008/03/19	5.00	Corrected Amp in jack swap.
2	2008/03/25	.	Added copper pour to encoder and pot legs. Rotated thief pads on stereo channel pots.
3	.	.	Added scoring tooling holes.
4	2008/04/18	.	Changed XLR jacks to minimum outline.
5	2008/06/19	.	PC#7868 - changed to standoff nuts. Add X102.
6	2009/09/18	6.00	PC#7876 - Ribbon cable change. Modified some pads on dual pots to prevent solder bridging. D1-->25mil
7	2009/09/24	6.00	PC#7878 - Make ampin jack breakouts smaller.
8	.	.	
9	.	.	
10	D	V	
11	D	V	
12	D	V	
13	D	V	

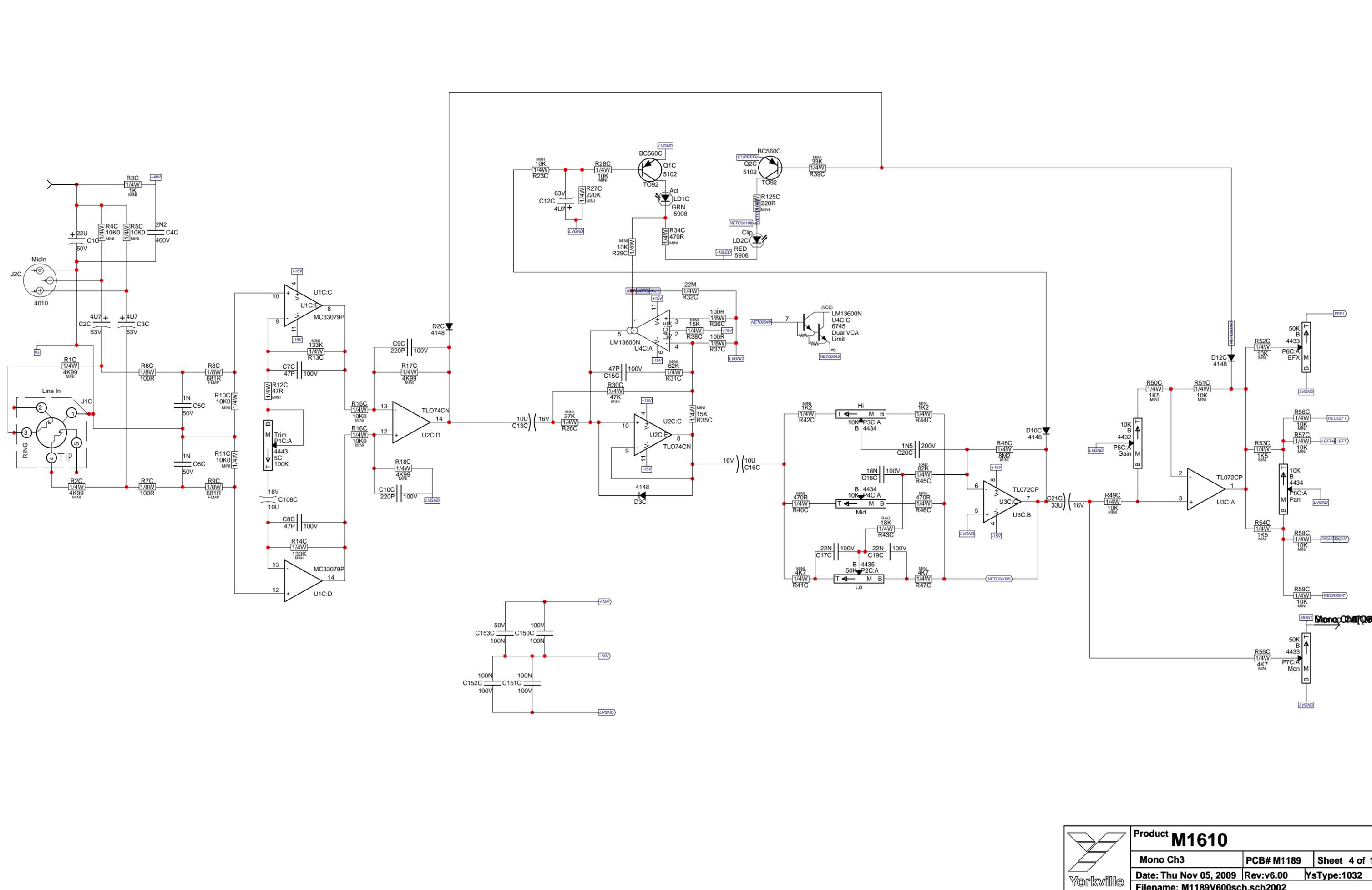
M1189 PENDING CHANGES		
MODEL(S):-	M1610	PENDING CHANGE
#	PC#	
1	PC	X
2	PC	X
3	PC	X
4	PC	X
5	PC	X
6	PC	X

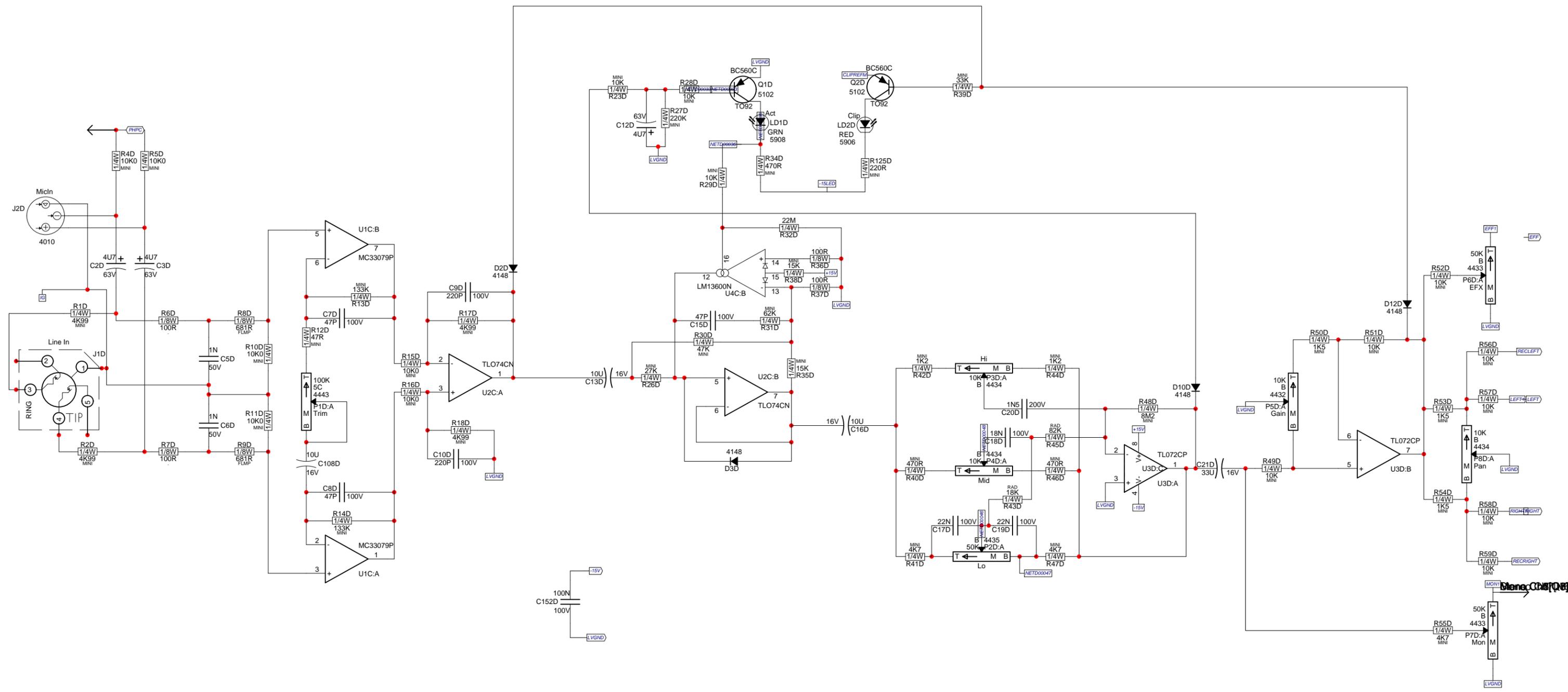
M1189 DRILL HISTORY			
MODEL(S):-	M810/M1610	VER#	DESCRIPTION OF CHANGE
#	DATE	VER#	DESCRIPTION OF CHANGE
1	24-FEB-2004	V01	N
2	21-APR-2005	V02	N
3	4-AUG-2005	V03	PC#6818, ADDING A HOLE FOR FEEDING GREEN GND
4	2008/02/20	V04	N
5	2008/04/18	V05	N
6	D	V	N



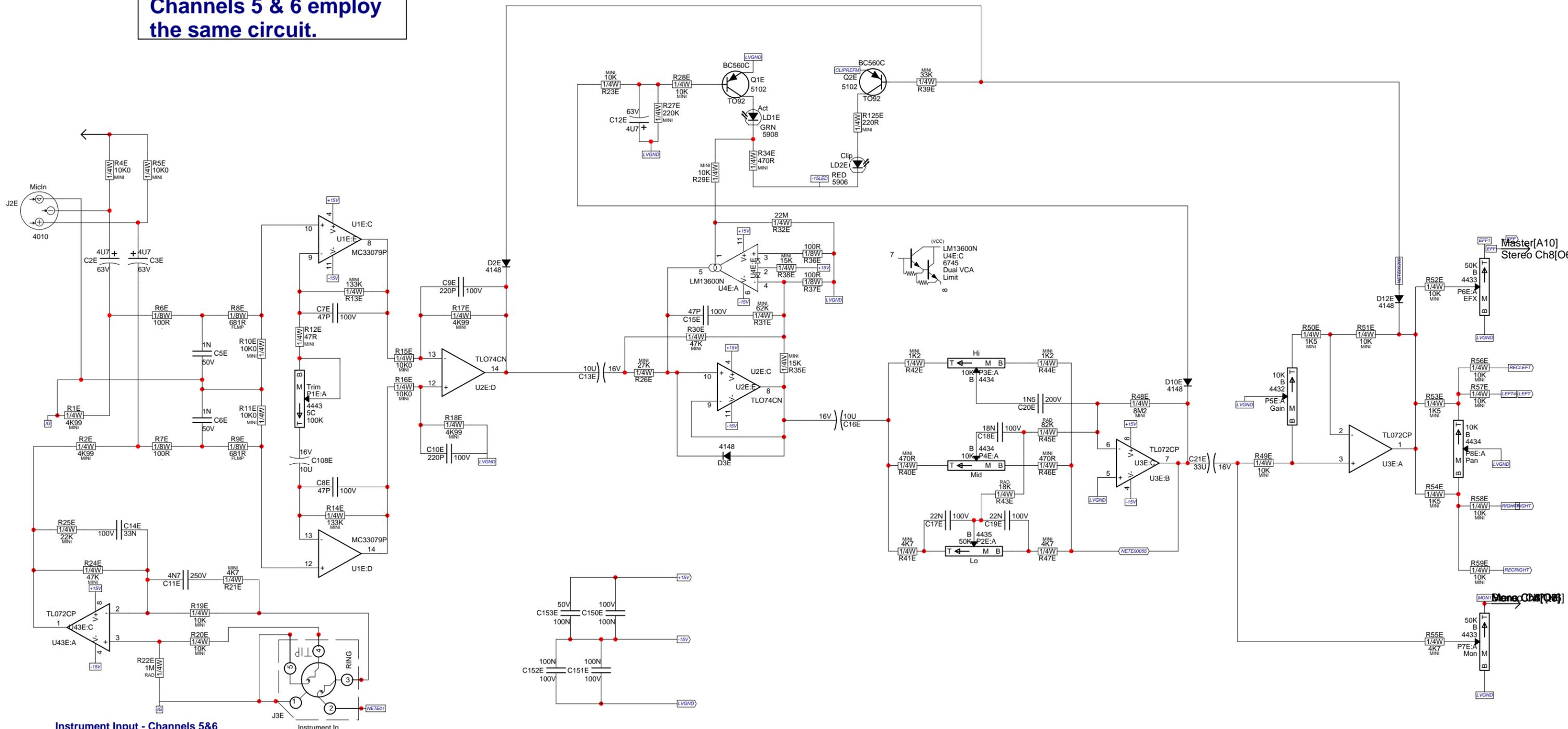
Product <b>M1610</b>		
Mono Ch1	PCB# M1189	Sheet 2 of 14
Date: Thu Nov 05, 2009	Rev:v6.00	YsType:1032
Filename: M1189V600sch.sch2002		

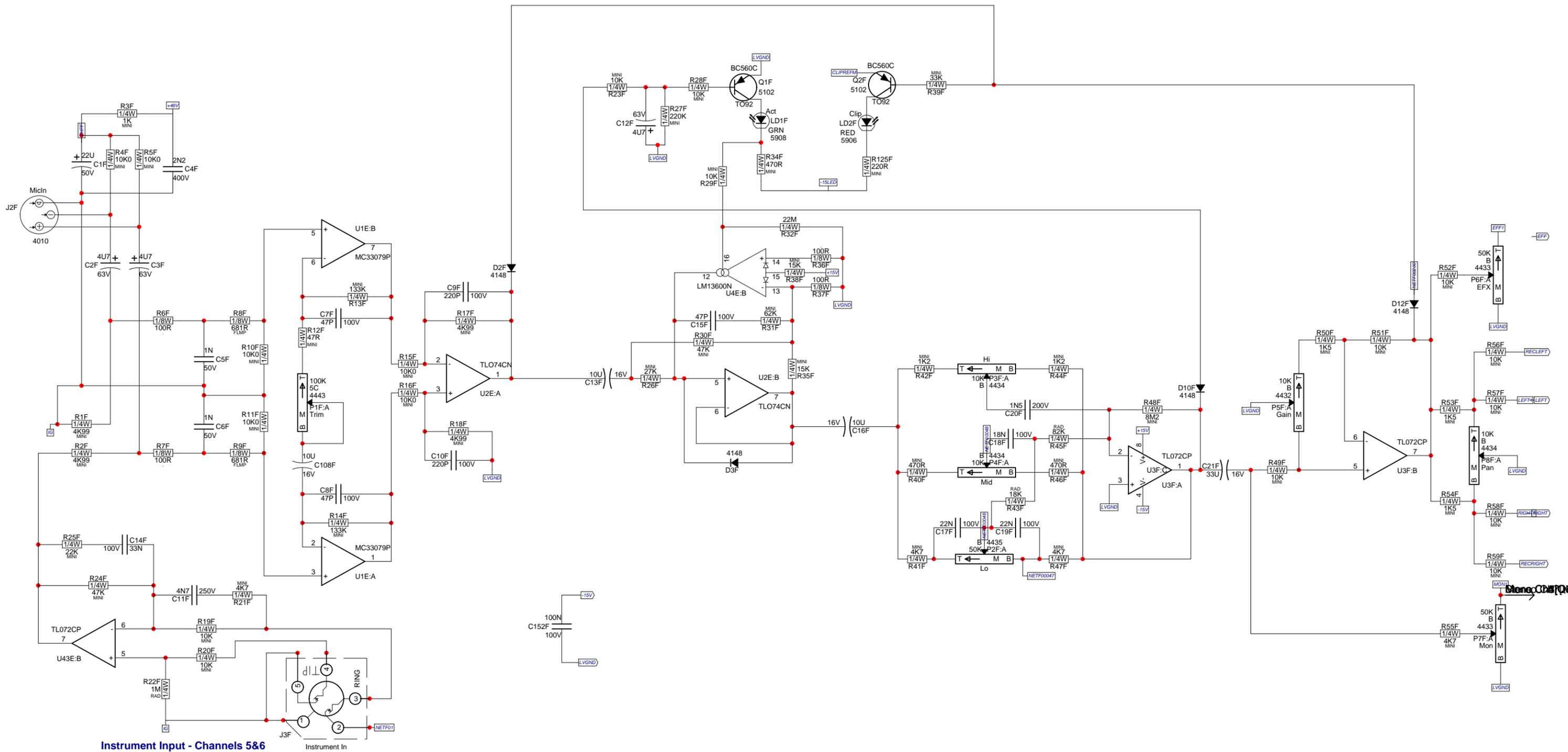






**Only Channel 5 is shown.  
Channels 5 & 6 employ  
the same circuit.**

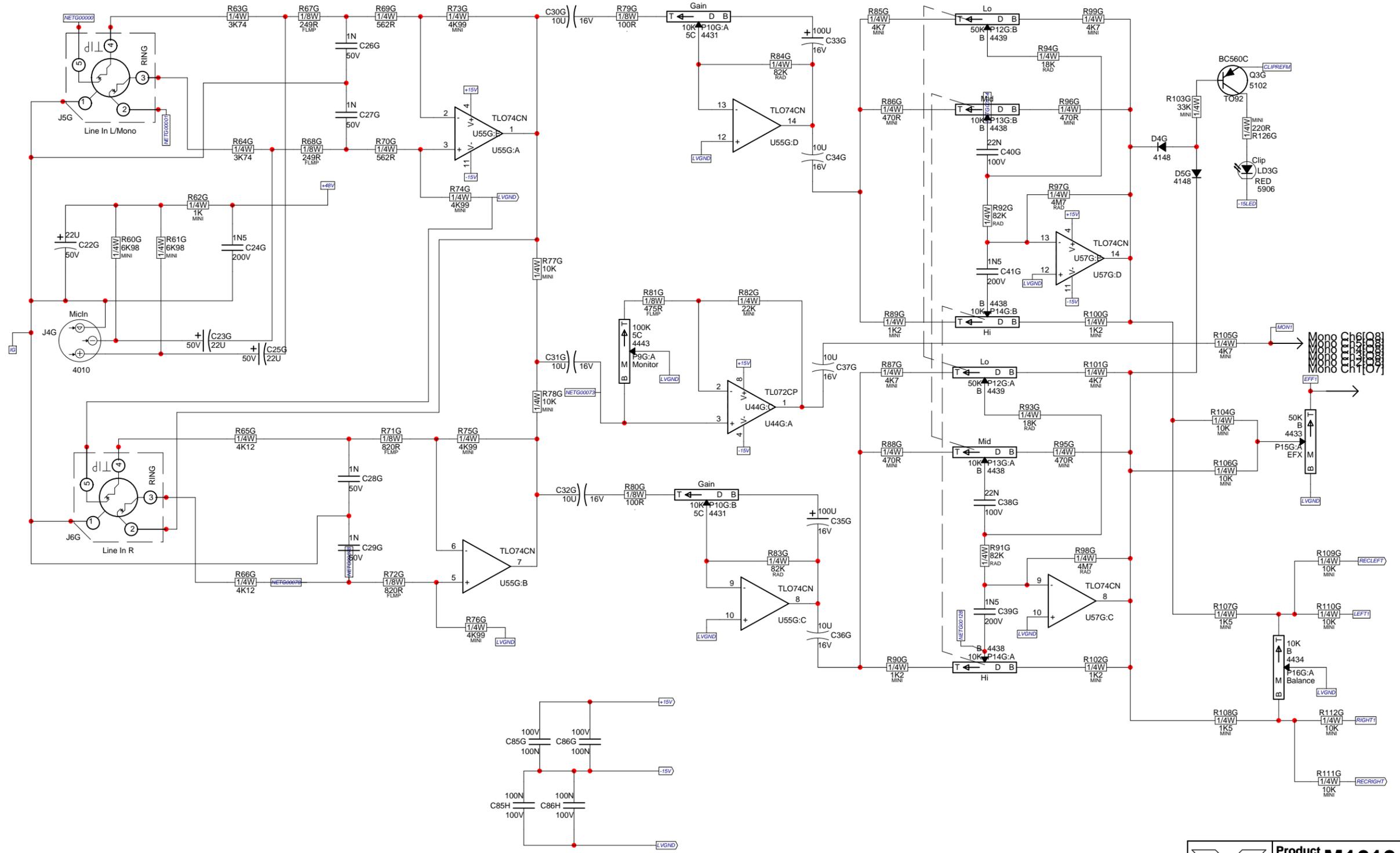


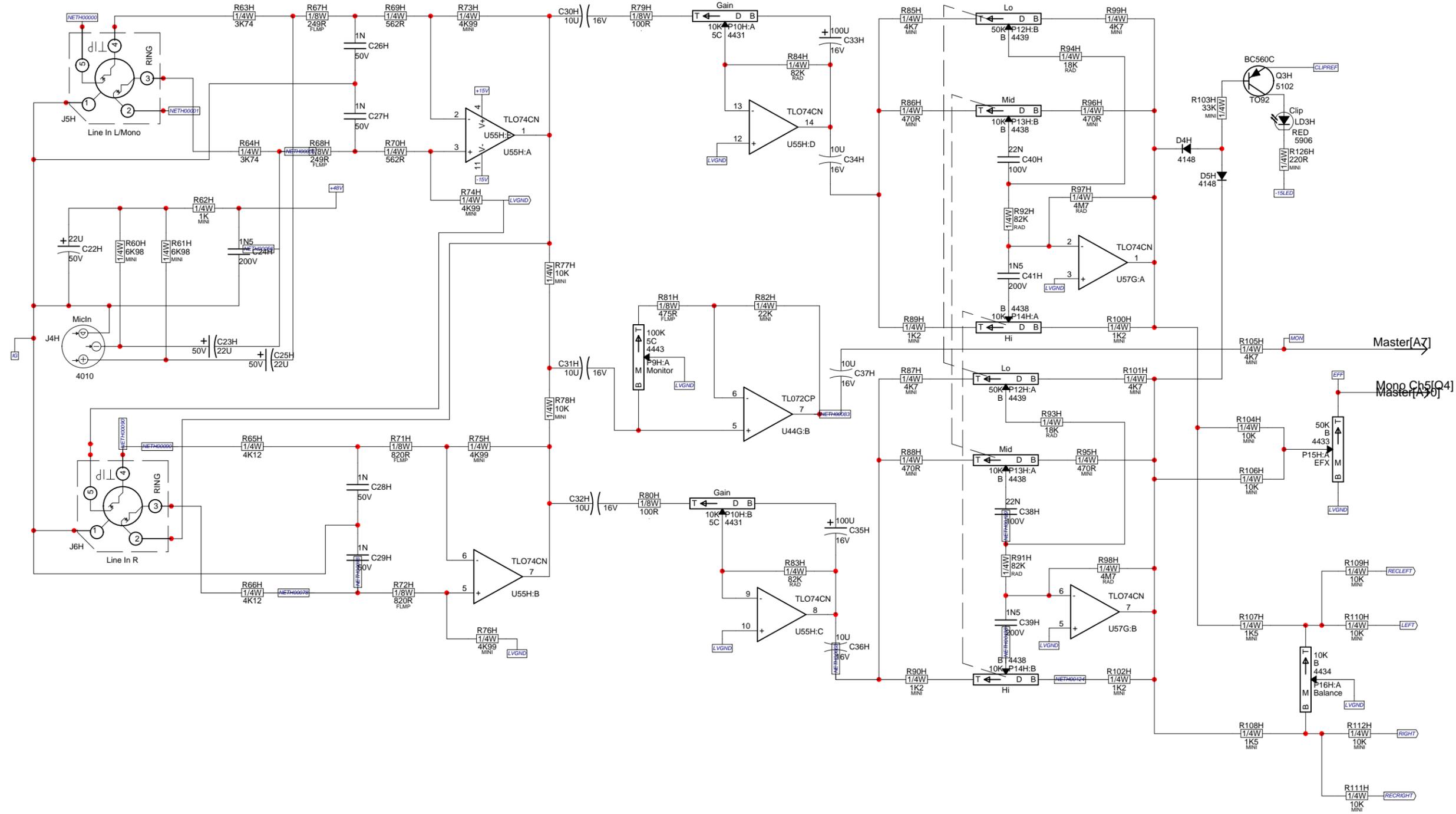


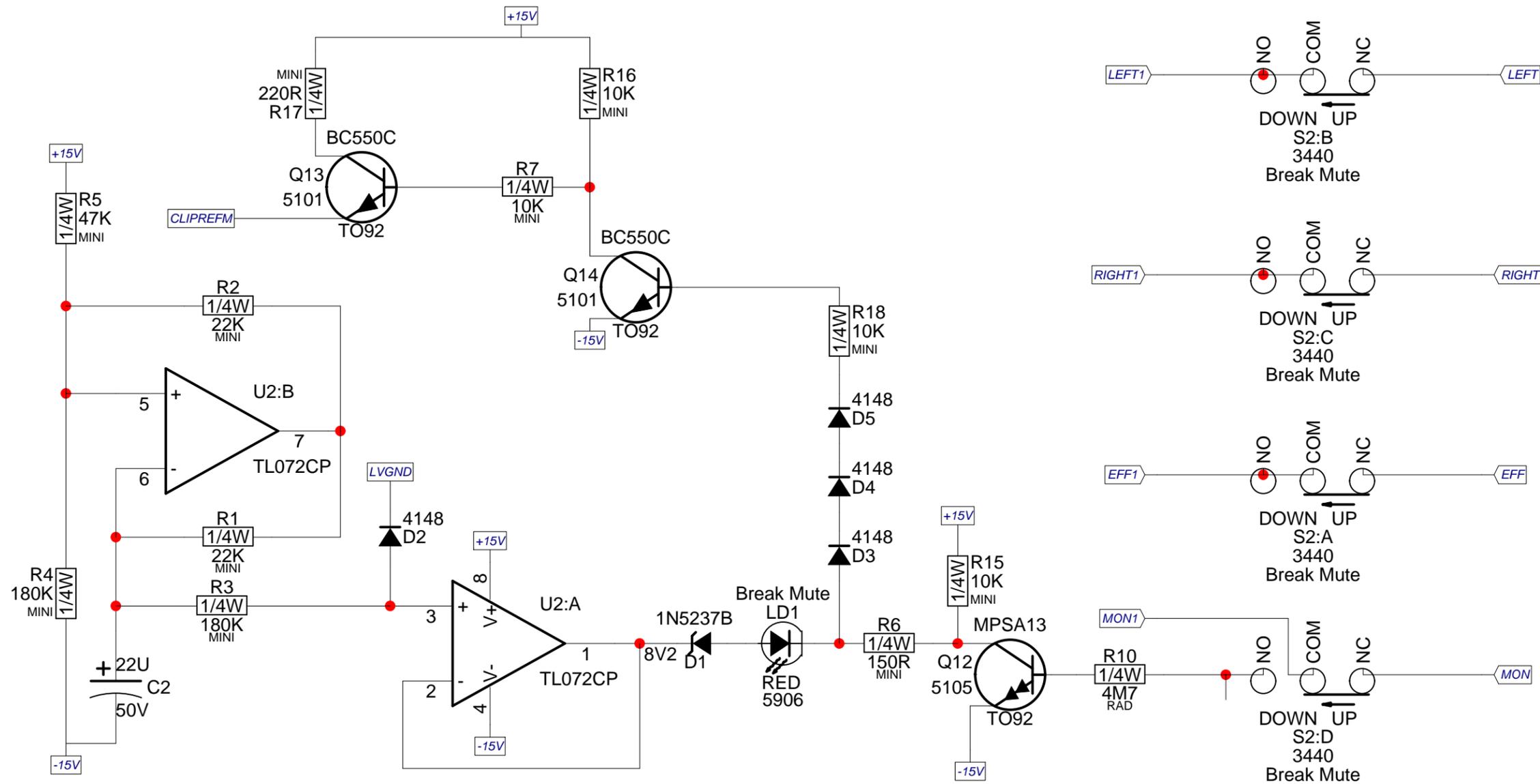
Instrument Input - Channels 5&6

Instrument In

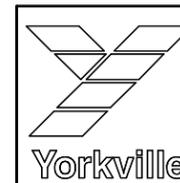
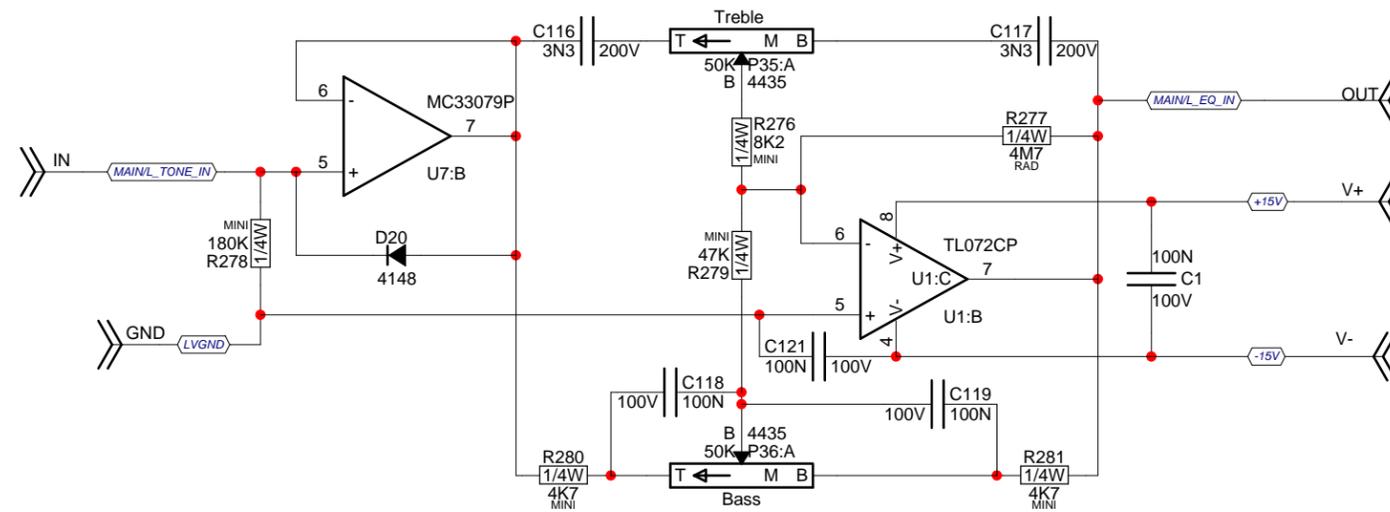
**Only channels 7&8 are shown.  
Channels 9&10 employ  
the same circuit.**



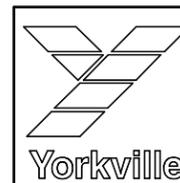
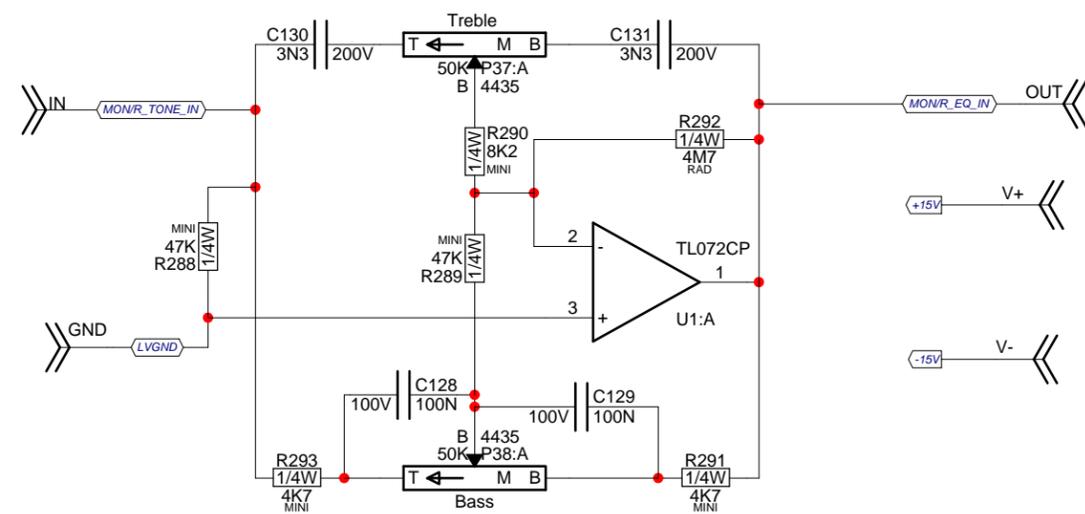




	<b>Product</b> <span style="font-size: 2em;"><b>M1610</b></span>		
	<b>BreakMute</b>	<b>PCB# M1189</b>	<b>Sheet 10 of 14</b>
	<b>Date: Thu Nov 05, 2009</b>	<b>Rev:v6.00</b>	<b>YsType:1032</b>
	<b>Filename: M1189V600sch.sch2002</b>		



Product <b>M1610</b>		
TONE1	PCB# M1189	Sheet 11 of 14
Date: Thu Nov 05, 2009	Rev:v6.00	YsType:1032
Filename: M1189V600sch.sch2002		

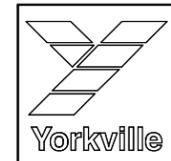
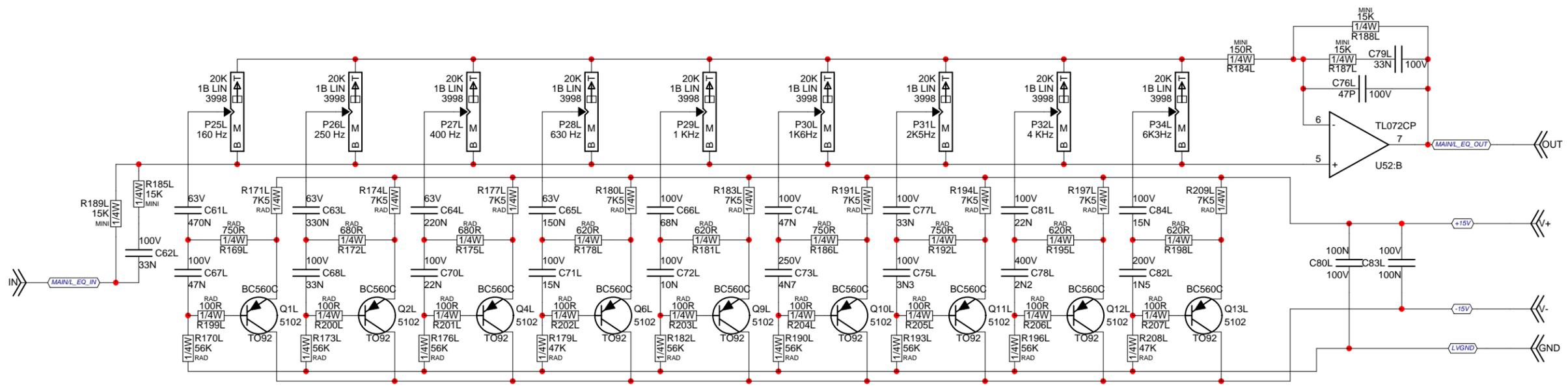


Product **M1610**

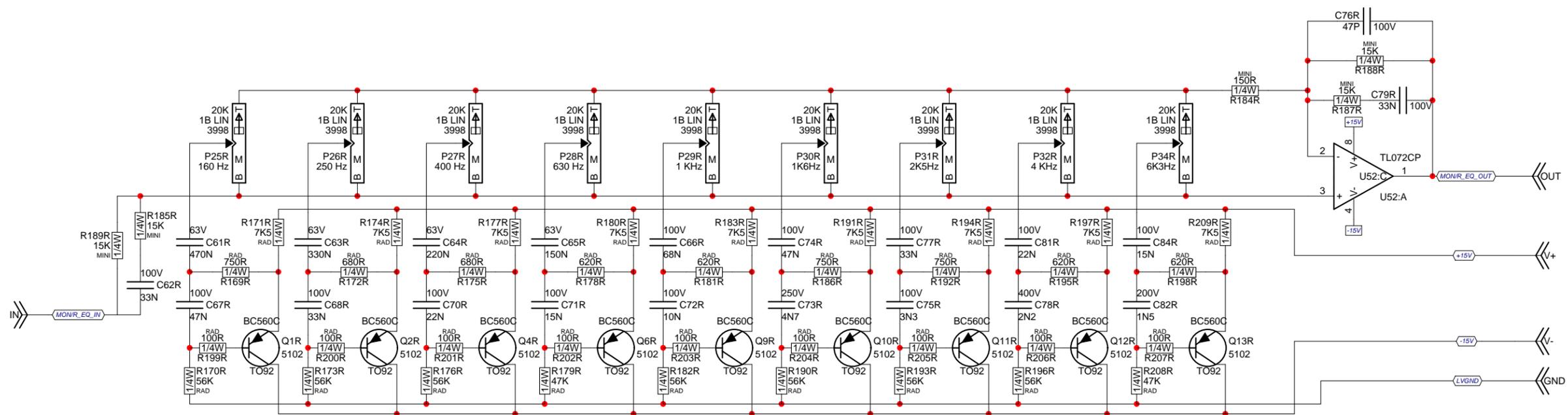
TONE2 PCB# M1189 Sheet 12 of 14

Date: Thu Nov 05, 2009 Rev:v6.00 YsType:1032

Filename: M1189V600sch.sch2002



Product <b>M1610</b>		
EQ1	PCB# M1189	Sheet 13 of 14
Date: Thu Nov 05, 2009	Rev:v6.00	YsType:1032
Filename: M1189V600sch.sch2002		



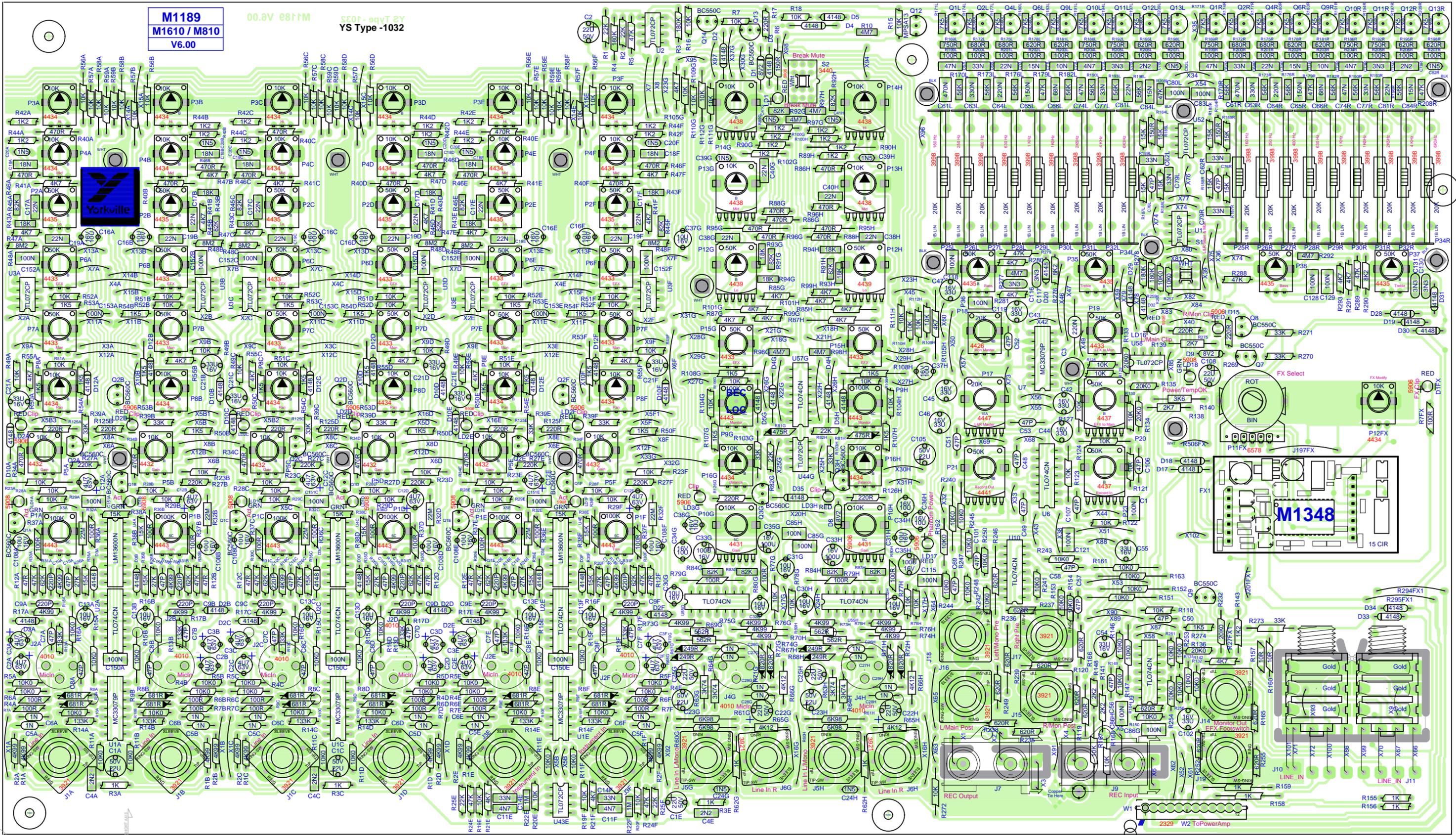
<b>Product M1610</b>		
<b>EQ2</b>	<b>PCB# M1189</b>	<b>Sheet 14 of 14</b>
<b>Date: Thu Nov 05, 2009</b>	<b>Rev:v6.00</b>	<b>YsType:1032</b>
<b>Filename: M1189V600sch.sch2002</b>		

**M1189**  
**M1610 / M810**  
**V6.00**

00.0V e8t1M  
YS Type -1032

BlankSize - 17900x10750

BlankSize - 17900x10750



SEE LAYOUT DOCUMENTATION

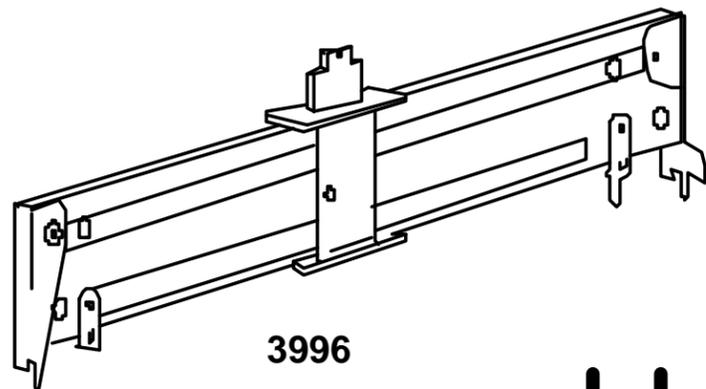


SEE LAYOUT DIAGRAM

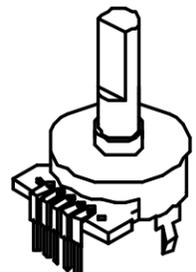


# M1189 PRODUCTION NOTES

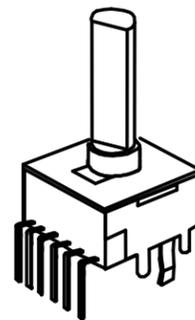
**1.PCBSA: BREAK OUT BOARD BEFORE TESTING.**



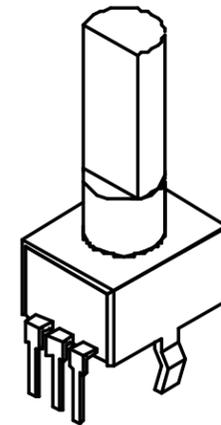
3996



"STYLE\_P23"

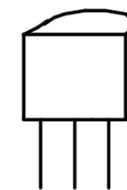


"STYLE\_P34"



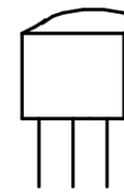
"STYLE\_P32"

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2N5551  
MPSA06  
MPSA13  
MPSA43  
MPSA56  
MPSA63



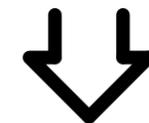
E B C  
TO-92

BC550C  
BC560C



C B E  
TO-92

SEE PRODUCT HISTORY





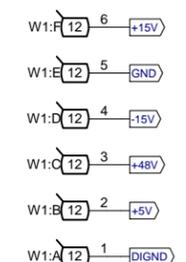
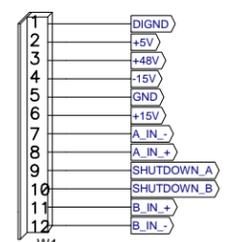
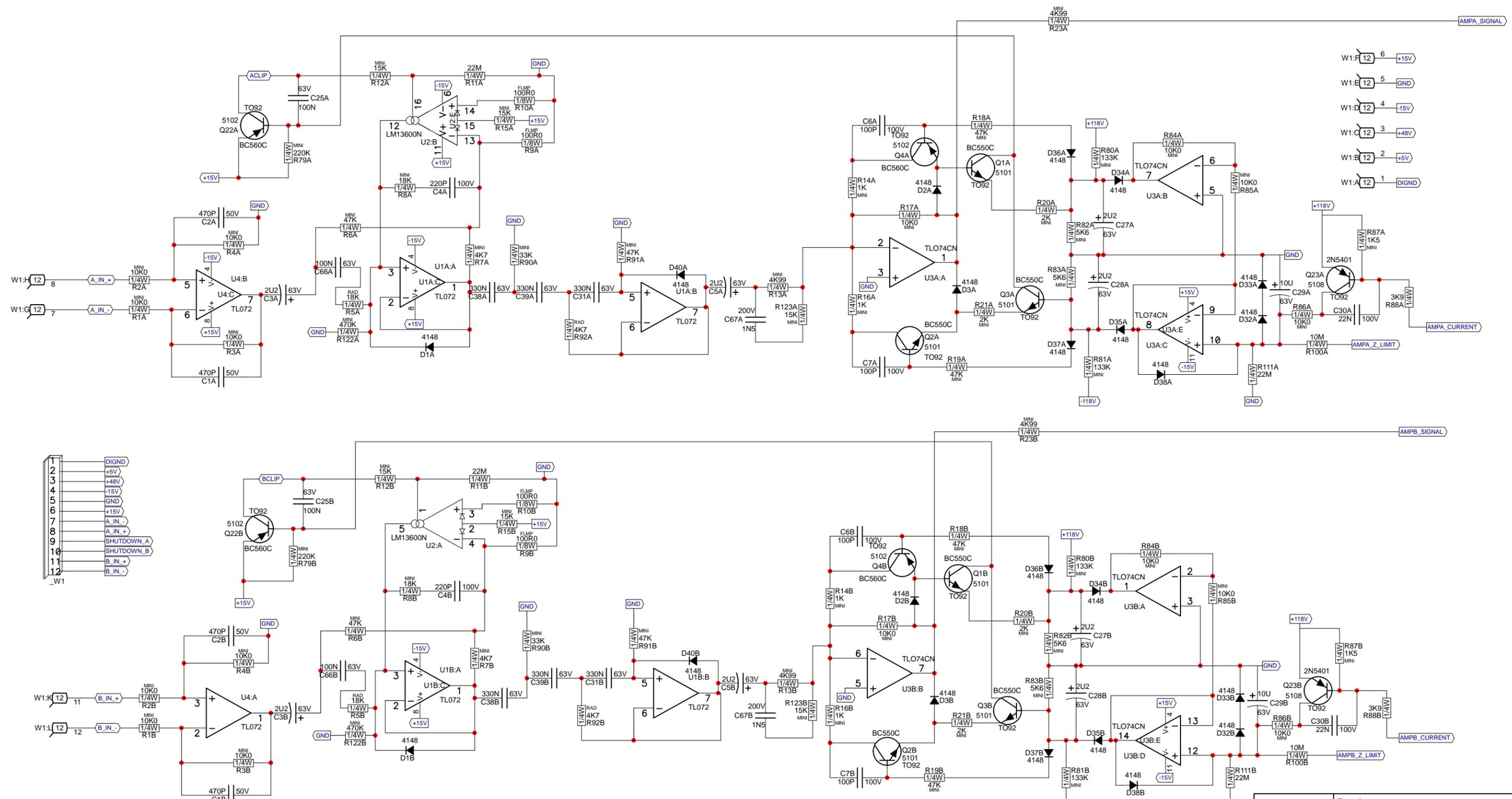
# SEE PRODUCTION NOTES



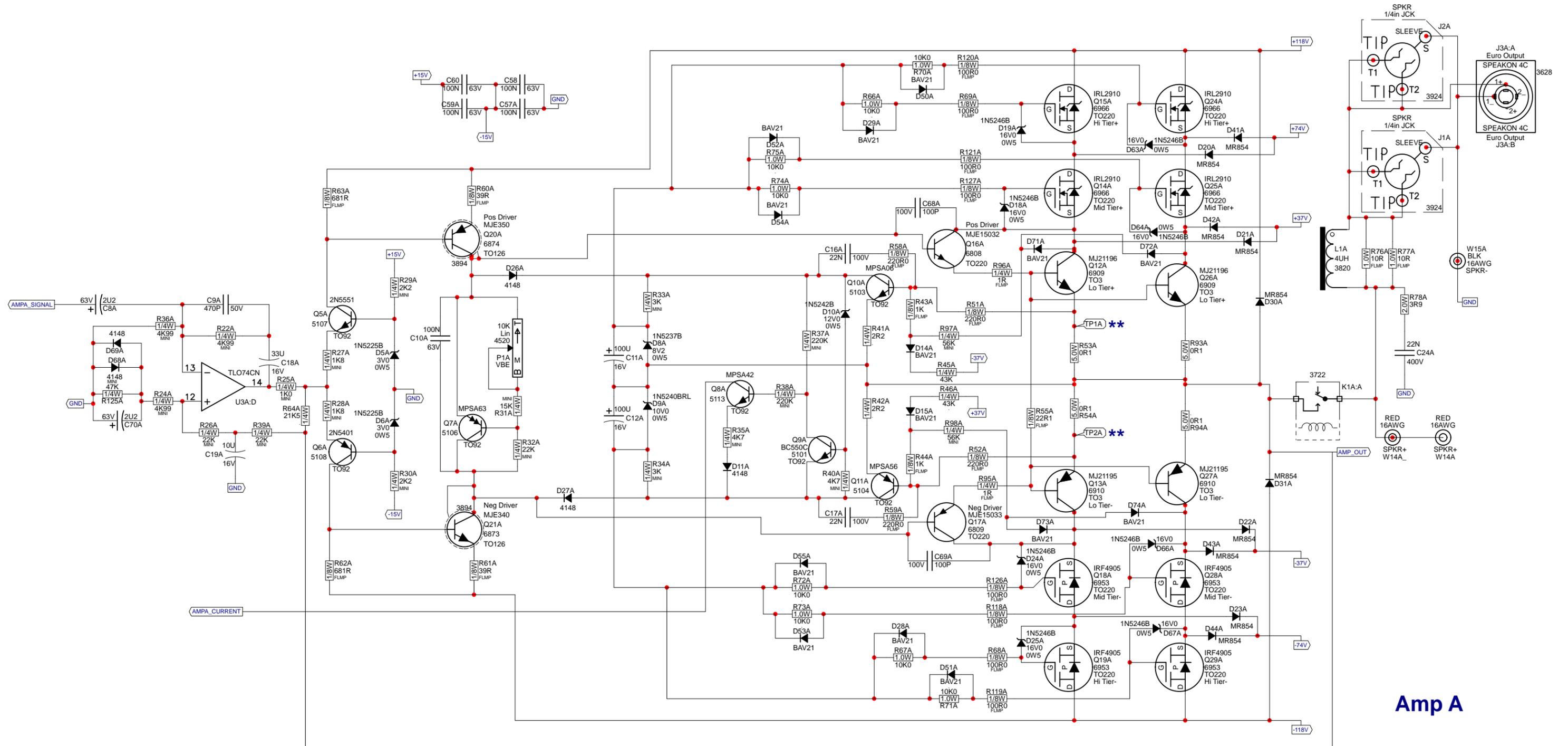
M1189 HISTORY				M1189 POTLIST																									
MODEL(S):- M1610				MODEL(S):- M1610																									
#	DATE	VER#	DESCRIPTION OF CHANGE	REF	FUNCTION	PART#	KNOB	{NEW}																					
1	31 Dec, 2003	v1.00p3	Moved D3 anode to cathode of LD1	P25-34 L&R	Graphic EQ	3998	N/A	N																					
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	P2A,2B,2C,2D,2E,2F	Lo	4435	9916	N																					
10	.	.	so TIE4 gets output properly	P35,36,37,38	Master Treble, Bass	4435	9916	N																					
11	.	.	PC#6679 Chg. C21(A,B,C,D,E,F) from 470nF to 33uF	P21	Record Out	4441	9920	N																					
12	6-MAY-2004	2.00	PC#6686 MOVED C23FX AWAY FROM SPACER	P20	FX2 Main	4437	9920	N																					
13	Aug 4, 2004	2.00	Fixed silk screen on U6FX and U2FX	P13G,13H,14G,14H	Stereo Hi, Mid	4438	9916	N																					
1	AUG-16-2004	2.10	PC#6718 CHANGE R140 TO 10K0 (6116),	P12G,12H	Stereo Lo	4439	9916	N																					
2	D	V	R138&R139 TO 9K09 (6112)	P11FX	FX Select	6587	8398	N																					
3	NOV-23-2004	.	PC#6771:#3571->#3507 SKT FOR #6993 SRAM (GT)	P23	Record In	4437	9915	N																					
4	JAN-05-2005	.	GT:PC#6792:P17 FROM 50KB #4441 TO 20KA #4447	P18	Monitor	4426	9917	N																					
5	21 Apr, 2005	2.11	Updated 3921 jacks for clinch.	P19	FX2 Mon	4433	9917	N																					
6	4 Aug 2005	2.20	AH, PC#6816, ADD A HOLE FOR FEEDING GREEN	P17	L&R Master	4447	9920	N																					
7	.	.	GROUND WIRE.	P12FX	FX Modify	4434	9918	N																					
8	14 JUN 2006	2.30	AH, PC#7091, UPDTAE #5322 CHANGE DRILL SIZE TO 40	<b>M1189 PENDING CHANGES</b> MODEL(S):- M1610 <table border="1"> <thead> <tr> <th>#</th> <th>PC#</th> <th>PENDING CHANGE</th> </tr> </thead> <tbody> <tr><td>1</td><td>PC</td><td>X</td></tr> <tr><td>2</td><td>PC</td><td>X</td></tr> <tr><td>3</td><td>PC</td><td>X</td></tr> <tr><td>4</td><td>PC</td><td>X</td></tr> <tr><td>5</td><td>PC</td><td>X</td></tr> <tr><td>6</td><td>PC</td><td>X</td></tr> </tbody> </table> *PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY					#	PC#	PENDING CHANGE	1	PC	X	2	PC	X	3	PC	X	4	PC	X	5	PC	X	6	PC	X
#	PC#	PENDING CHANGE																											
1	PC	X																											
2	PC	X																											
3	PC	X																											
4	PC	X																											
5	PC	X																											
6	PC	X																											
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 tie4																										
3	.	.	pads on stereo channel pots.																										
4	2008/04/18	.	Added scoring tooling holes.																										
5	20080619	.	Changed XLR jacks to minimum outline.																										
6	2009/09/18	6.00	PC#7868 - changed to standoff nuts. Add X102.																										
7	2009/09/24	6.00	PC#7876 - Ribbon cable change. Modified some pads on																										
8	.	.	dual pots to prevent solder bridging. D1--> 25MIL																										
9	.	.	PC#7878 - Make ampin jack breakouts smaller.																										
10	D	V	N																										
11	D	V	N																										
12	D	V	N																										
13	D	V	N																										

## 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

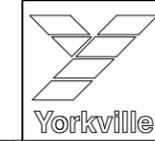


	<b>Product M1610-2</b>		
	Ampln	PCB# M1190	Sheet 1 of 5
	Date: Thu Jun 21, 2012	Rev: V14	YsType: .
	Filename: M1190V14SCH.sch2006		

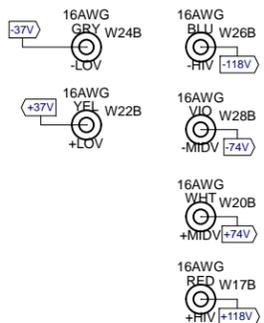
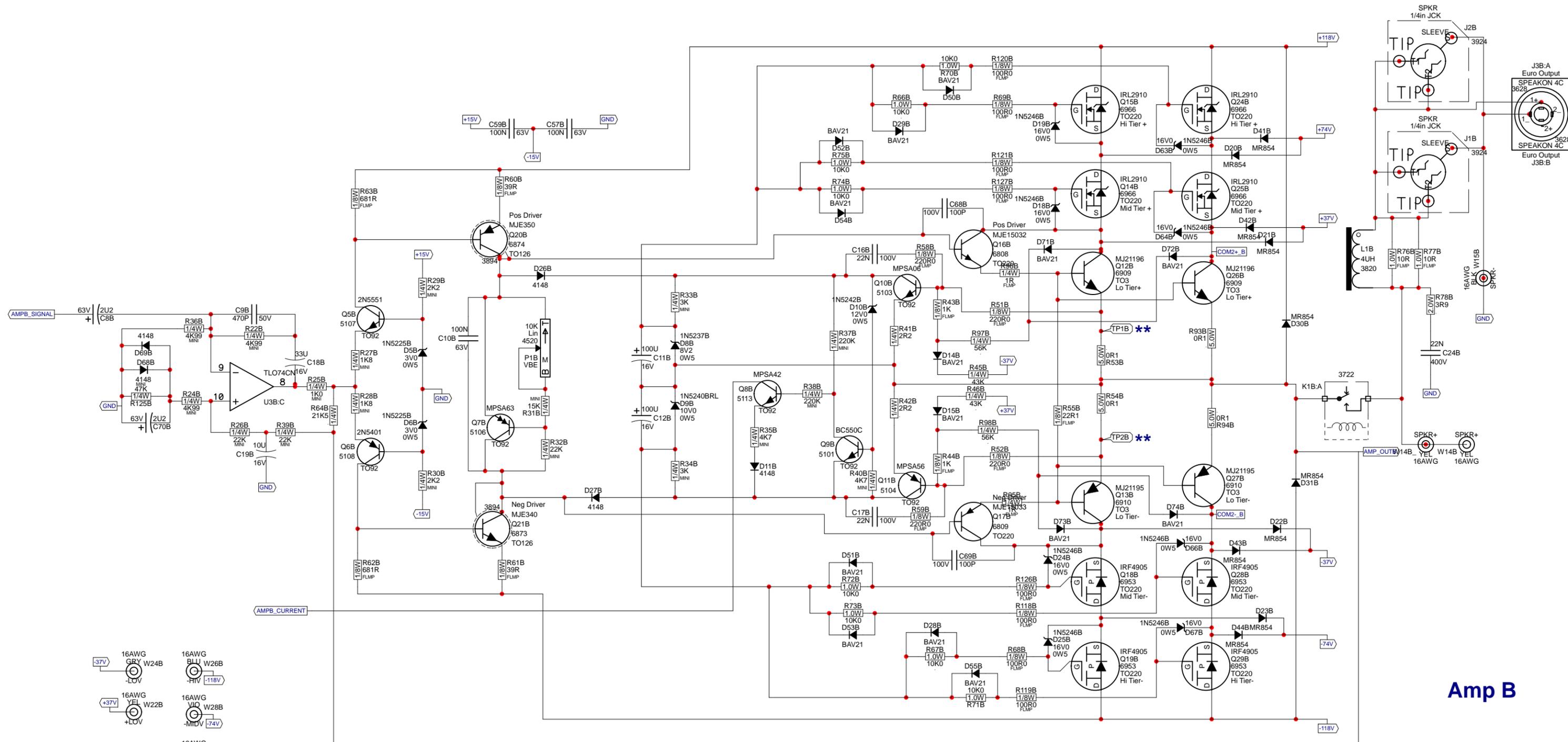


**Amp A**

**\*\* ADJUST P1A FOR 8mV ACCROSS TP1A AND TP2A.**

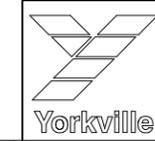


Product <b>M1610-2</b>		
Channel A	PCB# M1190	Sheet 2 of 5
Date: Thu Jun 21, 2012	Rev: V14	YsType: .
Filename: M1190V14SCH.sch2006		



**\*\* ADJUST P1B FOR 8mV ACCROSS TP1B AND TP2B.**

**Amp B**

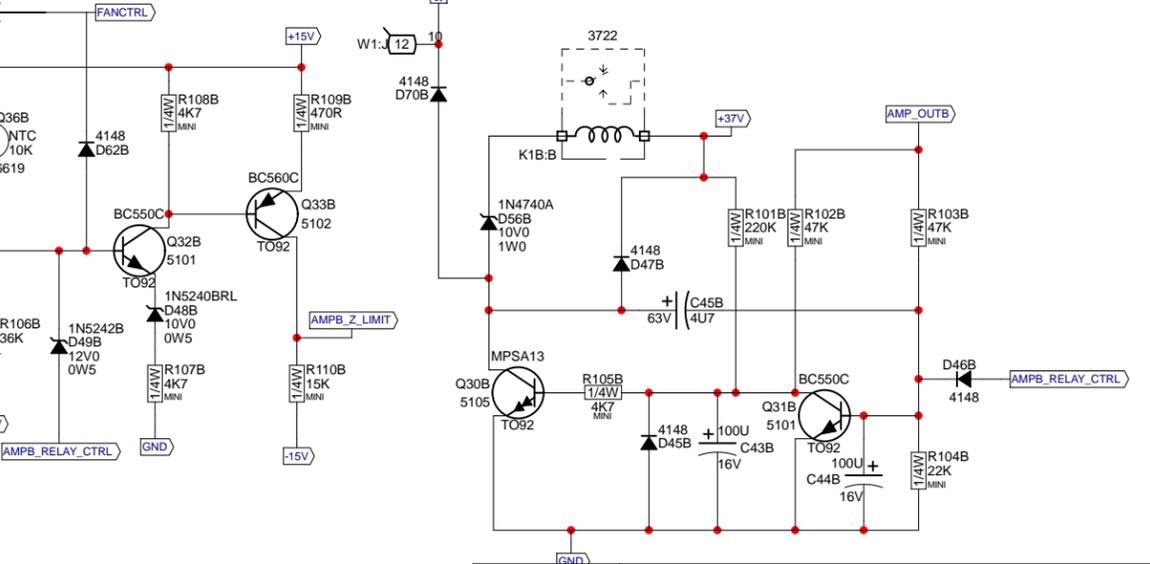
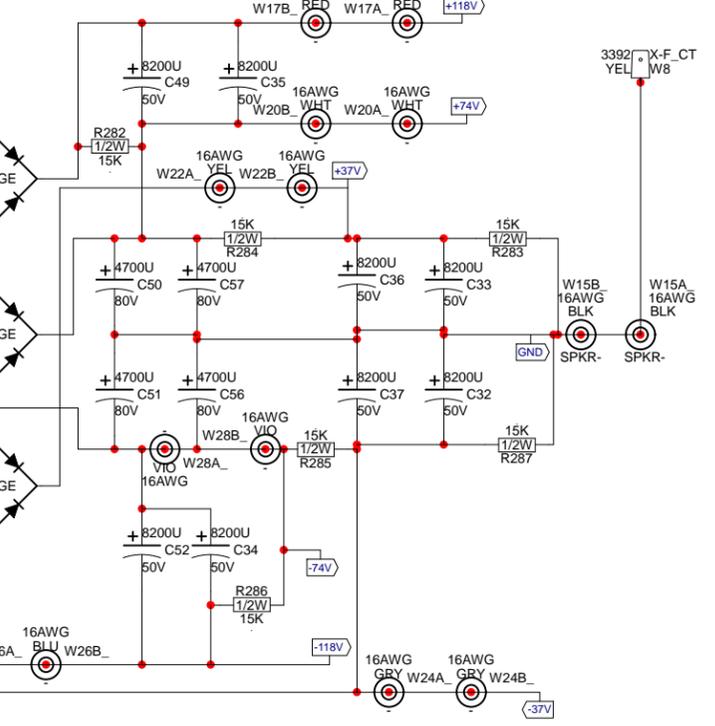
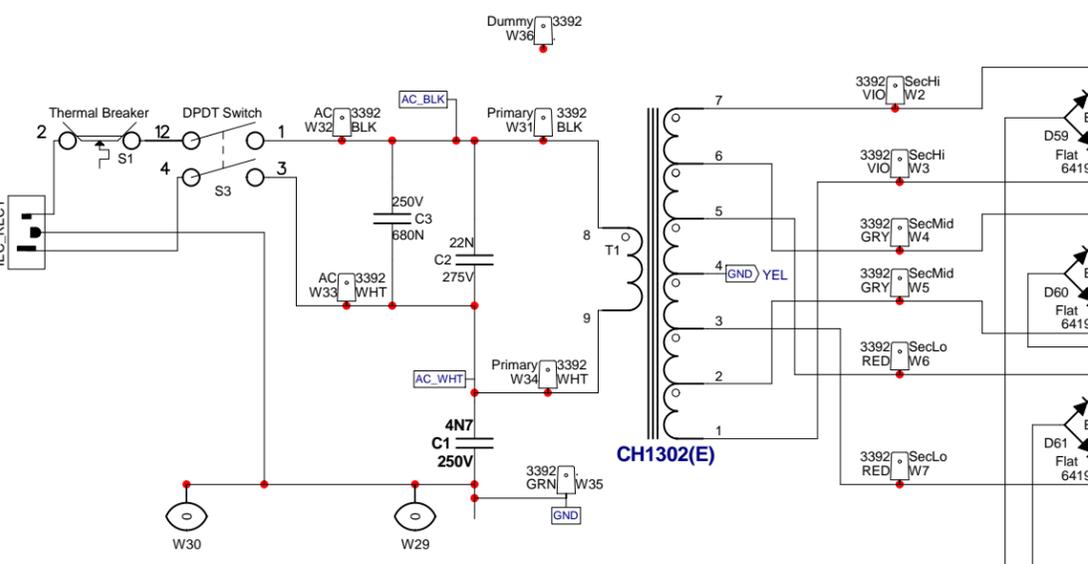
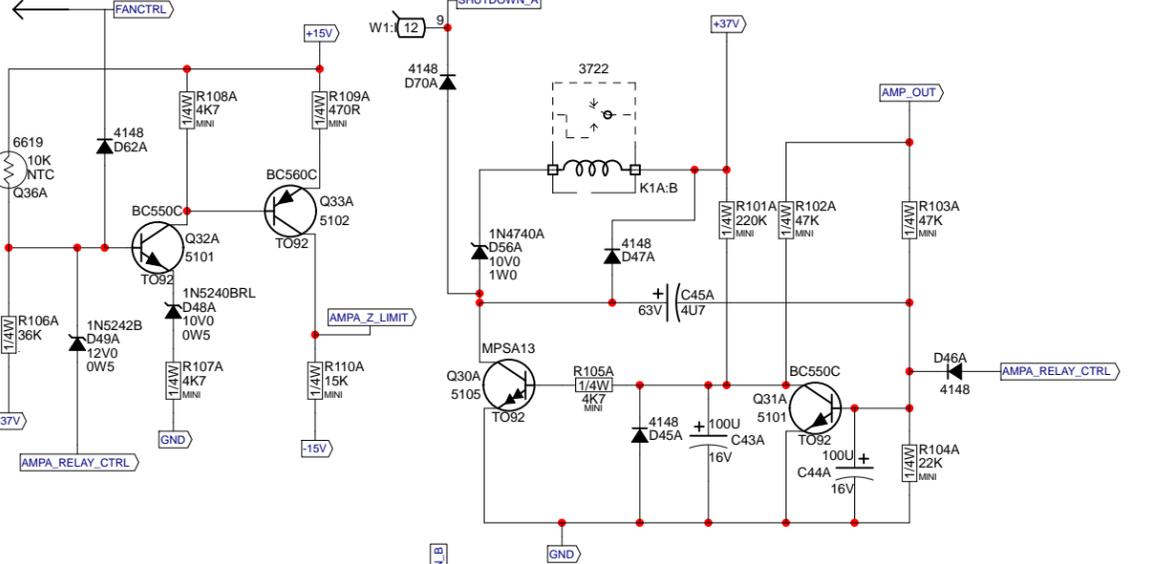
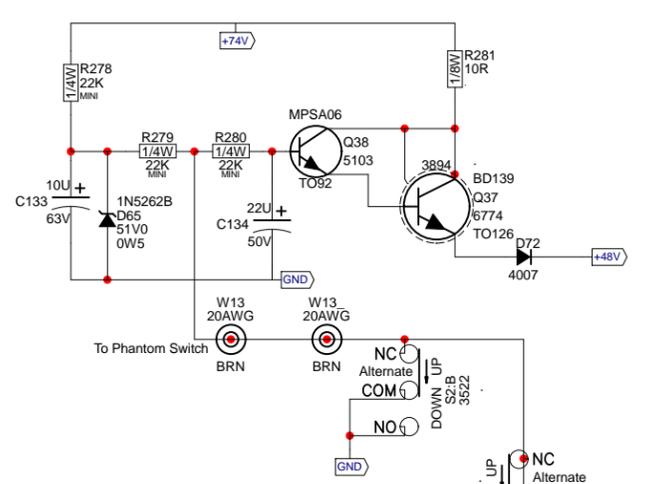
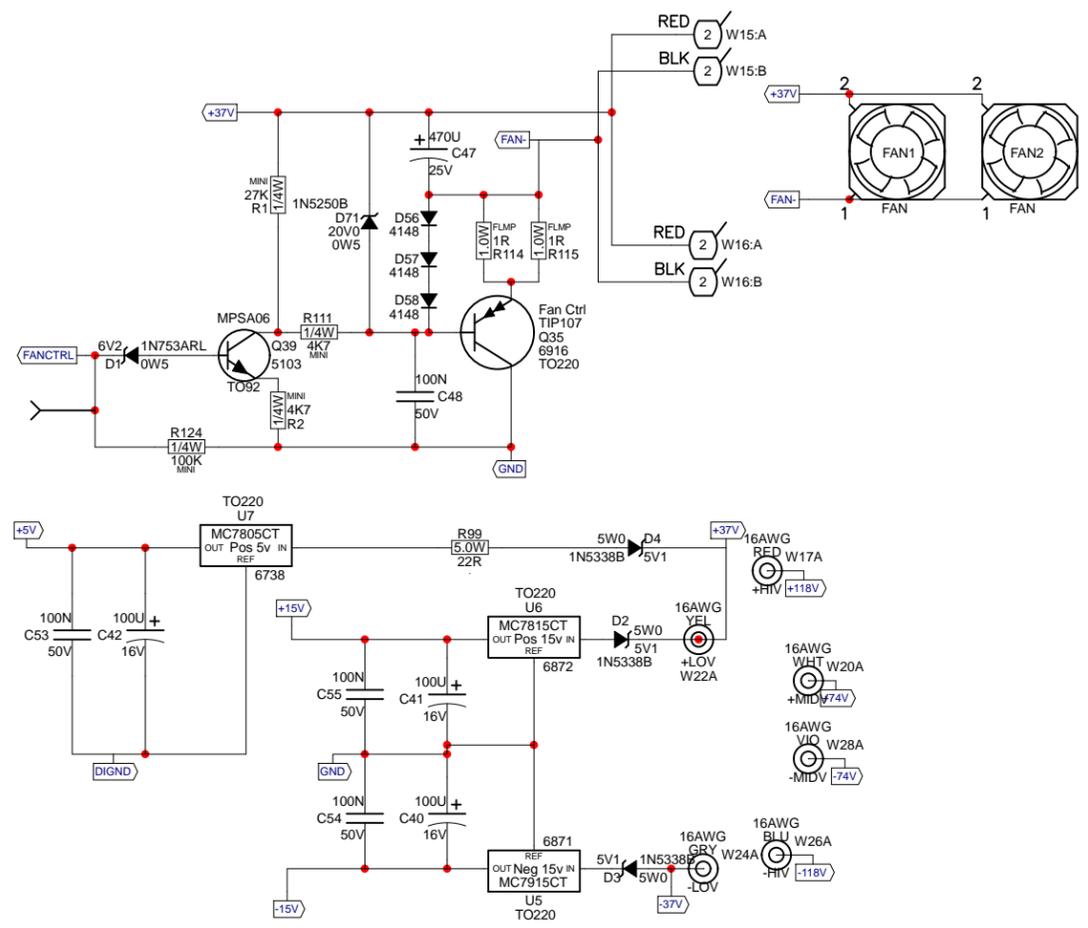


Product <b>M1610-2</b>		
Channel B	PCB# M1190	Sheet 3 of 5
Date: Thu Jun 21, 2012	Rev: V14	YsType: .
Filename: M1190V14SCH.sch2006		

M1190.PCB_DATABASE_HISTORY			
MODEL(S):-	M1610	#	DATE
1	7 Jan, 2004	1.00	
2	24 Feb, 2004	1.00	
3	10 Mar, 2004	1.00	
4	21-APR-2004	1.00	
5	6-MAY-2004	2.00	
6	D	V	
7	D	V	
8	DEC-14-2004	3.00	
9	FEB-07-2005	4.00	
10	D	V	
11	D	V	
12	D	V	
13	D	V	
14	MAR-30-2005	5.00	
15	MAR-13-2005	5.10	
16	D	V	
17	21 Apr, 2005	5.11	
18	JUN-08-2005	6.00	
19	.	.	
20	.	.	
21	.	.	
22	.	.	
23	.	.	

#	DATE	VER#	DESCRIPTION OF CHANGE	#	DATE	VER#	DESCRIPTION OF CHANGE
24	.	.	R79A&B #6127 470K->#6127 220K	24	.	.	ADDED D4 #5124 5V1/5W, R97&R98 #2006 1R/1W->#5124
25	.	.	Corrected the position of some test nodes.	26	.	.	Fixed BlankSize field
26	.	.		27	.	.	
27	.	.		28	Jun-15-2006	7.00	AH, PC#7021, SPACE BETWEEN R96 AND R53
28	.	.		29	.	.	PC#6983, WIDEN TRACE BETWEEN C32 AND C37
29	.	.		30	.	.	PC#7091, ENLARGE HOLE SIZE FOR #3522
30	.	.		31	.	.	PC#7091, ENLARGE HOLE SIZE FOR #3522
31	.	.		32	08/08/04/07	v8.0p0	Swap c37 with c51; c57 with c36. Moved x11b & x31b to
32	.	.		33	.	.	middle of HS slots. Solder updates, part updates.
33	.	.		34	2008/04/25	v8.00	Changed Q8a&b from 5107 to 5113 - MPSA42
34	.	.		35	2008/05/29	9.00	PC#7590 - PS hum fix. Moved K1B away from X15B.
35	.	.		36	2009/11/09	10.00	PCs 7875, 7876 - Ribbon cable change - XTR screws flipped.
36	.	.		37	04-FEB-2010	11.00	PC7942,PC7980: Update #4xTO220-MTG
37	.	.		38	10-JUN-2010	12.00	PC7983: Change D2,D3,D4 #5124 span to .525
38	.	.		39	15-MAY-2012	V13	PC#7806 Change transistor pattern. PT
39	.	.		40	15-MAY-2012	V13	PC8383 - New double sided PCB released. - ML
40	.	.		41	21-JUN-2012	V14	PC8423 - Changed NTC thermistors to YS#6619. - ML
41	.	.		42	.	V	Fixed BEC LOC short to heatsink. - ML
42	.	.		43	.	V	
43	.	.		44	.	V	
44	.	.		45	.	V	
45	.	.		46	.	V	
46	.	.		47	.	V	
47	.	.		48	.	V	
48	.	.		49	.	V	
49	.	.		50	.	V	



(E) DENOTES EUROPEAN

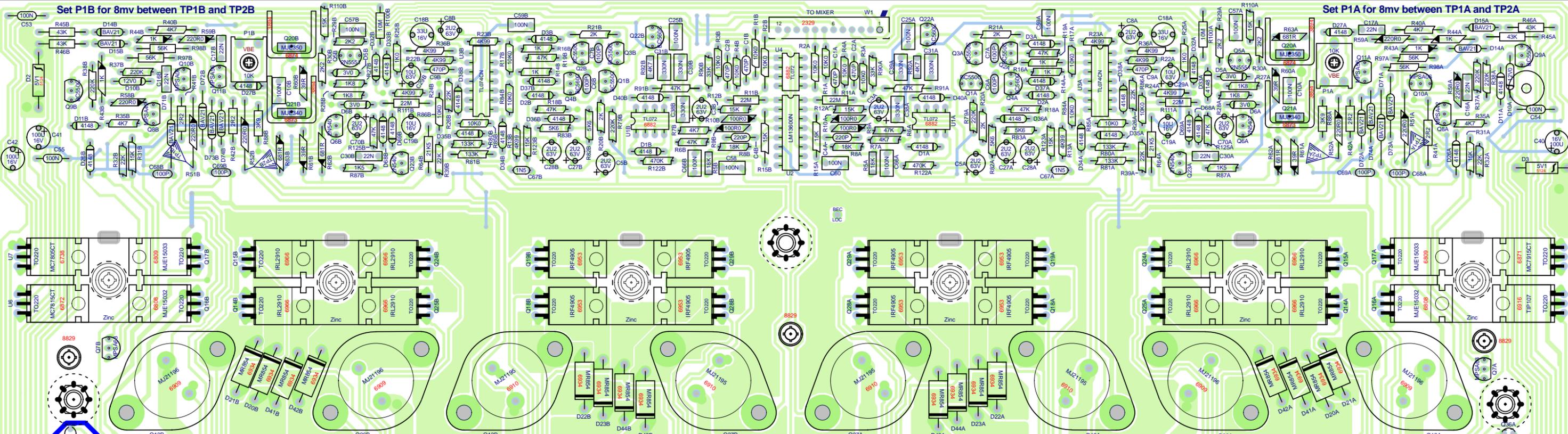
Product **M1610-2**

Power Supply PCB# M1190 Sheet 4 of 5

Date: Thu Jun 21, 2012 Rev:V14 YsType: .

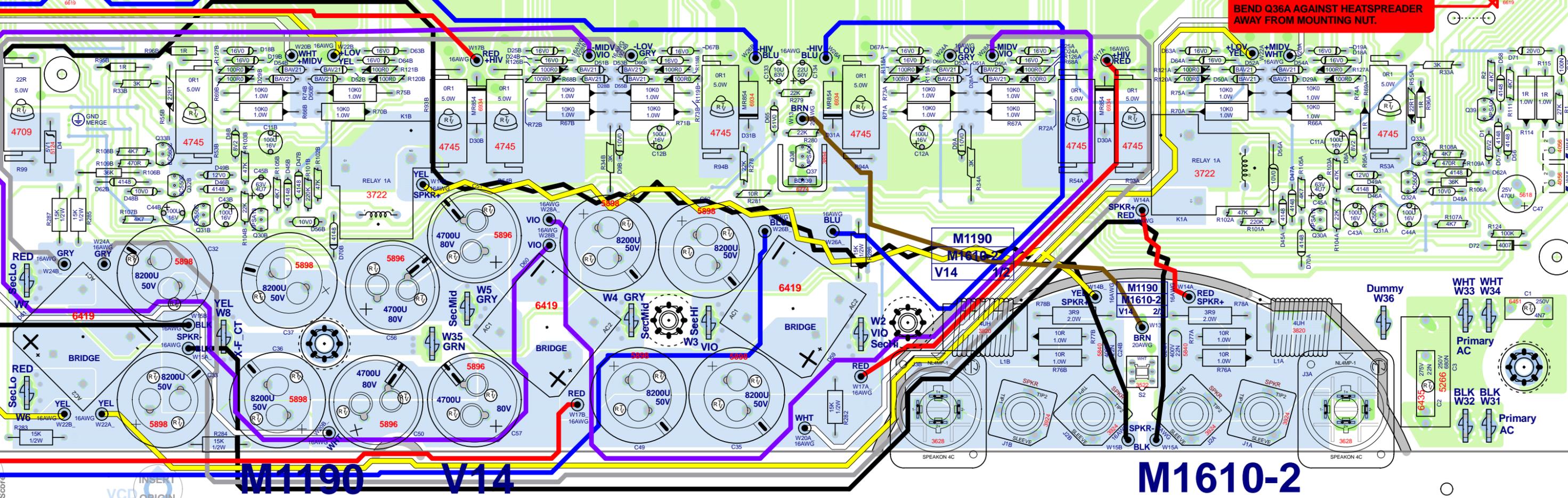
Filename: M1190V14SCH.sch2006

Score



Heatsink covers this area

BEND Q36A AGAINST HEATSPREADER AWAY FROM MOUNTING NUT.

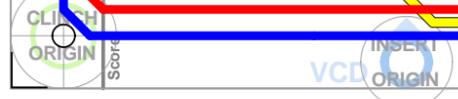


BlankSize - 17900x10600

M1190 V14

SEE LAYOUT DOCUMENTATION

M1610-2



Score

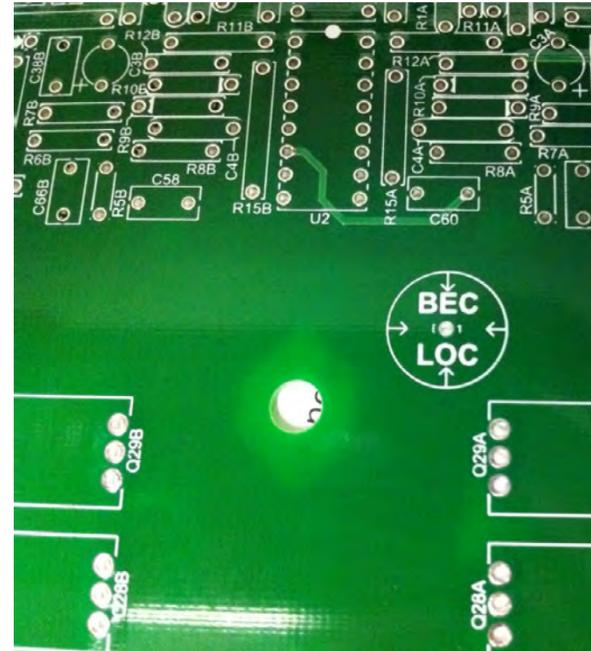
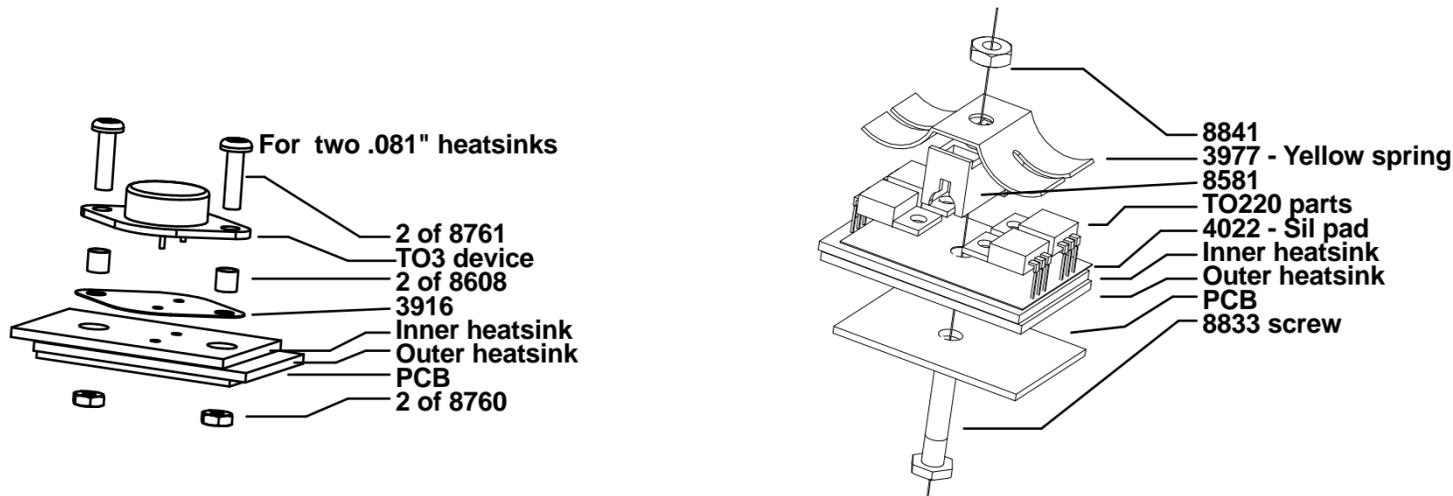


SEE LAYOUT DIAGRAM



# M1190 V1( PRODUCTION NOTES

1. PCBSA: Apply thermal grease evenly between the large inner and outer heatsinks.
2. PCBSA: Use three 8829 screws to align and attach the large heatsinks to the board.
3. PCBSA: When assembling heatsinks to Q20A, Q20B, Q21A, Q21B and Q37, ensure heatsinks are straight and sitting flat against board. Add a very small amount of RTV between heatsink and board if necessary. This prevents the heatsink from shorting other components.
4. PCBSA: Fill the open space around Q36B, Q7B, Q7A, Q36A with thermal grease after wave soldering.
5. PCBSA: Bend Q36A against heatspreader AWAY from the adjacent mounting nut.
6. PCBSA: Inspect tabs after solder wave and retouch if necessary for a solid solder joint. Advise PENG if soldering quality of the tabs is poor or not consistent.



SEE LAYOUT HISTORY



**Yorkville** **PROPOSAL FOR CHANGE**

**PRIORITY**  P  N  O **NORM**  N  O **X-JOB**  X  O **PC No.**  **TEMP**  T  O

**REJECTED** The Proposal for Change has been reviewed and considered but will *not* be implemented. **DATE** \_\_\_\_\_ **DATE REQUIRED:** \_\_\_\_\_

PCBSA #57    Wiring #55    T&R #70    WACM #52    P/Engineering #25    Sales #10  
 PCBM #58    Metal Fab #50    Finishing #65    Board & Test #53    LAB #20    Service #09  
 Auto Insertion #59    W/Shop #60    Chas Screening #51    QC #65

MODEL	PCB/CHAS	VERSION	TASK ORDER	APPROVAL	ORIGINATOR
M1190-2	M1190	V13		SL _____ BW _____ TW _____ PM _____ DESIGNER _____	FROM: MIKE LEBON DEPT: PENG DATE: _____ ORIGINATOR'S SIGNATURE: _____ DESIGNER'S SIGNATURE: _____

**DESCRIPTION OF CHANGE**     DOCUMENT UPDATE/CORRECTION     PROGRAM UPDATE/CORRECTION

DRILL OUT BEC LOC PAD WITH DRILL BIT TO BREAK THE VIA CONNECTION. FOR V13 ONLY.

**REASON FOR CHANGE**

HEATSINK SHORTS TO SUPPLY.

Update units coming in for SERVICE?     Will a model or prototype be needed?  YES  NO  
 Update FINISHED units in warehouse?     Will the current test fixtures be affected?  YES  NO  
 UPDATE WIP?     If yes, what is the estimated cost of fixture? \_\_\_\_\_  
 Electrical compliance affected?     Before serial number \_\_\_\_\_

By doing this change, are units currently out in field compatible?  YES  NO  MAYBE

PART	DESCRIPTION	OLD	NEW	D	M	A	COST/UNIT	TOTAL

**P** **PRIORITY** Priority will be given to these PC's and will be implemented by the date required.    **X** **X-JOB** These PC's will be collected and implemented in the future when or if other PC's are being executed for the product.  
**N** **NORM** These PC's will be collected and processed normally, executed when time and manpower permits.    **T** **TEMP** Temporary changes will be made for the stated run only!

**NOTICE: ORIGINAL PCs MUST NOT GO OUT INTO PRODUCTION**    FORM-Proposal-for-Change-01-5v0.ai

**MAKE A NEW COPY EVERYTIME. CHANGES ARE BEING MADE ALL THE TIME**

Carl L. James Henry Ariel Andrew George Pete Afshin Peter



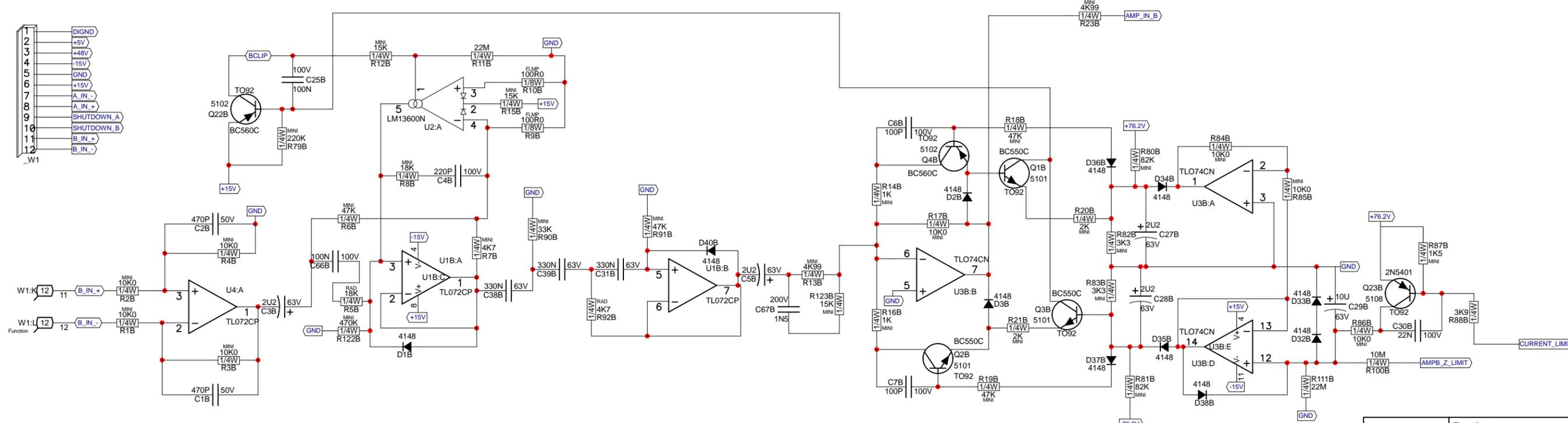
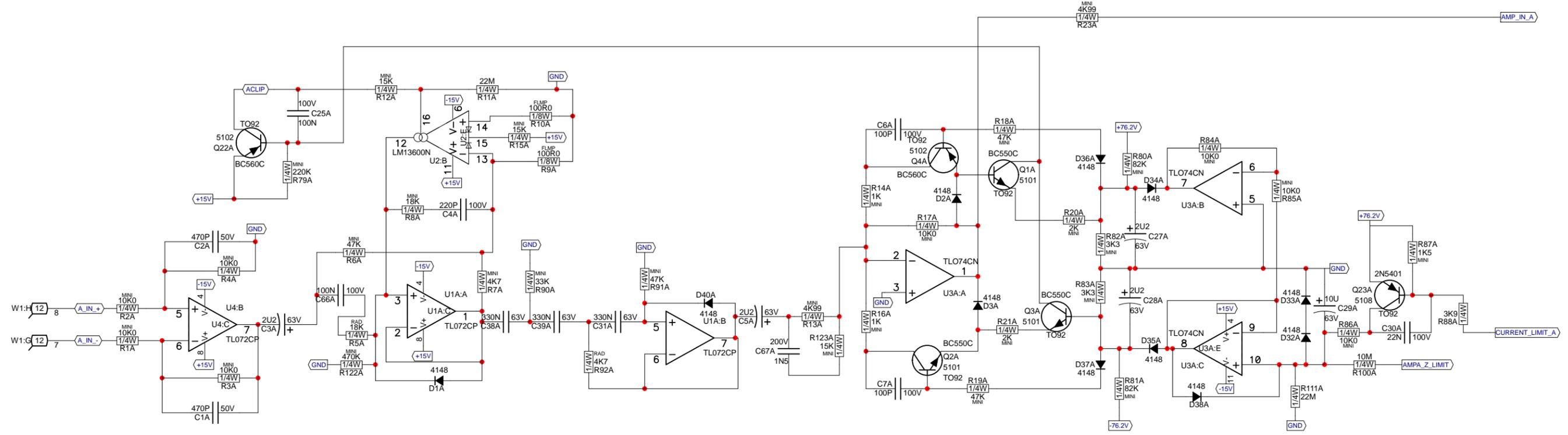
# SEE PPRODUCTION NOTES



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
#	DATE	VER#	DESCRIPTION OF CHANGE	28	Jun-15-2006	7.00	AH, PC#7021, SPACE BETWEEN R96 AND R53
1	7 Jan, 2004	1.00	Rationalize wire refdes	29	.	.	PC#6983, WIDEN TRACE BETWEEN C32 AND C37
2	24 Feb, 2004	1.00	Add speakon jacks to output section	30	.	.	PC#7091, ENLARGE HOLE SIZE FOR #3522
3	10 Mar, 2004	1.00	Enlarge cutouts for 8841 nuts	31	2008/04/25	8.00	Swap c37 with c51; c57 with c36. Moved x11b & x31b to
4	21-APR-2004	1.00	PC#6681 Modify route to let grn wire pass board near pwr caps	32	.	.	middle of HS slots. Solder updates, part updates.
5	6-MAY-2004	2.00	PC#6684 R83(A,B)->5K6,R5(A,B)6K8->18K, D16&D17(A,B) 4148->BAT85,R47&R48(A,B)22R1->100R0	33	.	.	Changed Q8a&b from 5107 to 5113 - MPSA42
6			ADDED D71, D72	34	2008/05/29	9.00	PC#7590 - PS hum fix. Moved K1B away from X15B.
7			GT:PC#6787: Fixed AC clearance, and W2&W3 tab label	35	2009/11/09	10.00	PCs 7875, 7876 - Ribbon cable change - XTR screws flipped.
8	DEC-14-2004	3.00	GT:PC#6787: Fixed AC clearance, and W2&W3 tab label	36	03-FEB-2010	.	PC7942,PC7980: Update #4xTO220-MTG GG
9	FEB-07-2005	4.00	PC#6809 Remove D17,D16,D12,D13, R47,R48,R49,R50,C14	37	04-FEB-2010	11.00	PC7983: Change D2,D3,D4 #5124 span to .525 GG
10	D	V	C15 (All A/B) R45,R46 A/B 36K->43K, D10 16V->12V	38	10-JUN-2010	12.00	PC#7806: Change transistor pattern to prevent solder shorts. PT
11	D	V	D9 A/B 14V->10V0, D8 A/B 12V->8V2. ADD R95 A/B	39	15-MAY-2012	V13	PC8383 - New double sided PCB released. - ML
12	D	V	ADD R96 A/B, R97 A/B, R98 A/B, D71 A/B, D72 A/B	40	15-MAY-2012	.	PC8423 - Changed NTC thermistors to YS#6619. - ML
13	D	V	D73 A/B, D74 A/B, X1 ,X2 ,X3 ,X4 X5 AND X6	41	21-JUN-2012	V14	Fixed BEC LOC short to heatsink. - ML
14	MAR-30-2005	5.00	RECREATED MASK LAYER TO FIX TESTPADS	42	D	V	N
15	MAR-13-2005	5.10	CHANGE IRF3205 #6954 TO IRL2910 #6966	43	D	V	N
16	.	.	PLACE MICA UNDER MIDDLE TIER MOSFETS	44	D	V	N
17	21 Apr, 2005	5.11	Force update parts to fix pad orientation	45	D	V	N
18	JUN-08-2005	6.00	PC#6919:GT:MOVED R95B AVOID HEATSINK COLLISION	46	D	V	N
19	.	.	XFORMER -> CH1302/E, ADDED 2x#4599,SWAPPED W8 &	47	D	V	N
20	.	.	W35,R106A&B #6122 33K->#4868 36K, D56A&B #6440	48	D	V	N
21	.	.	4V7/0.5W->#6484 10V/1W, C32&C33 #5903 12000UF/35V ->	49	D	V	N
22	.	.	#5898 8200UF/50V, C36&C37 #5896 4700UF/80V->#5898	50	D	V	N
23	.	.	C25A&B #5224 47N/100V->#5212 100N/63V				

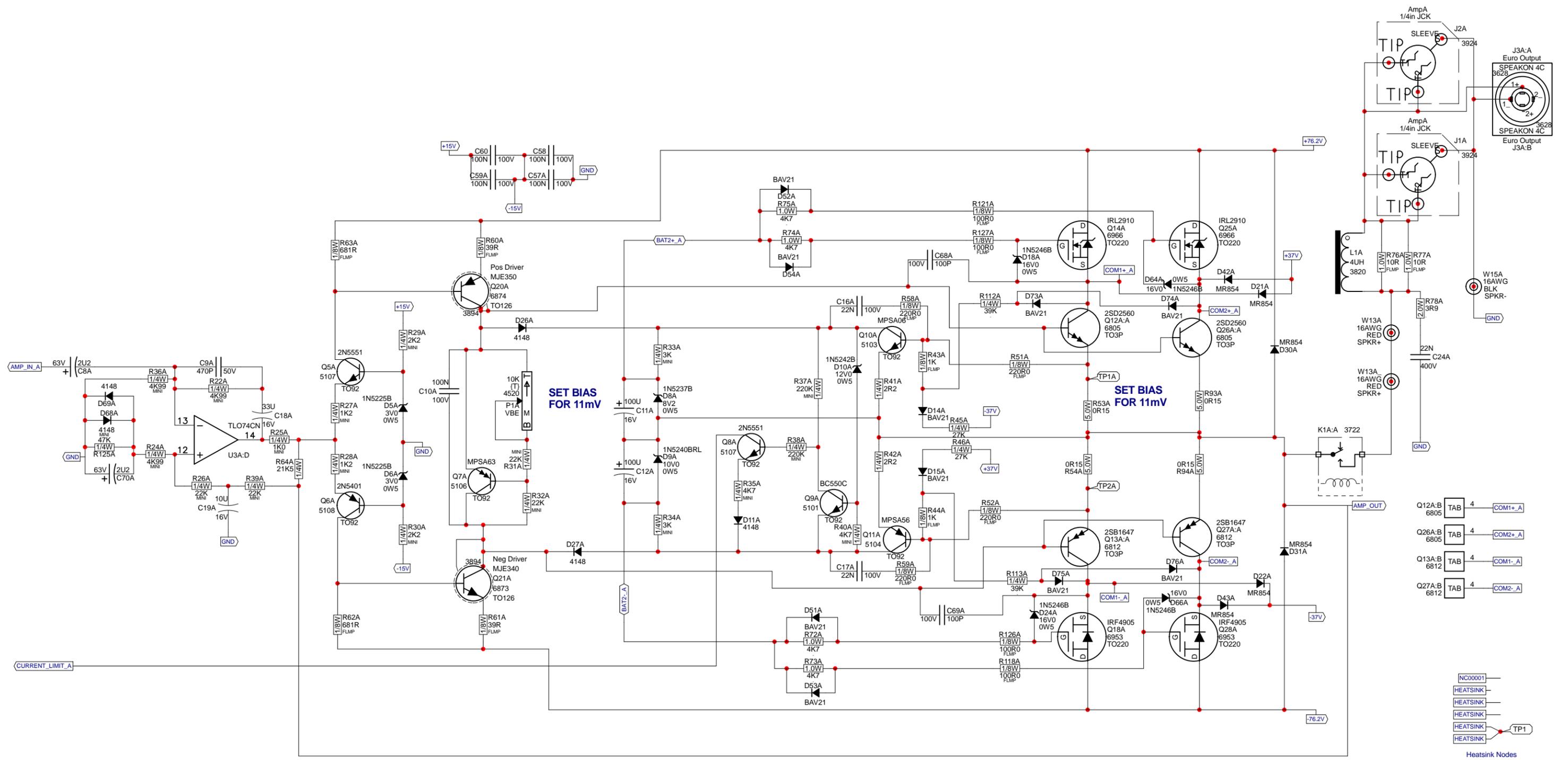
M1190 Drill History				M1190 PENDING CHANGES		
MODEL(S):- M1610				MODEL(S):- M1610		
#	DATE	VER#	DESCRIPTION OF CHANGE	#	PC#	PENDING CHANGE
1	5-MAY-2004	V03	Added notch to pass GRN wire from front	1	PC	X
2	6-MAY-2004	V04	To match V2.00 changes	2	PC	X
3	NOV-05-2004	V05	HG:PC#6730:REMOVED EXTRA ROUTING 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



- 1 DIGND
- 2 +5V
- 3 +48V
- 4 -15V
- 5 +15V
- 6 A\_IN\_+
- 7 A\_IN\_+
- 8 SHUTDOWN\_A
- 9 SHUTDOWN\_B
- 10 B\_IN\_+
- 11 B\_IN\_+
- 12 B\_IN\_+

	<b>Product M810-2</b>		
	Ampln	PCB# M1194	Sheet 1 of 5
	Date: Wed Jul 04, 2012	Rev: V11	YsType: .
	Filename: M1194V11SCH.sch2006		



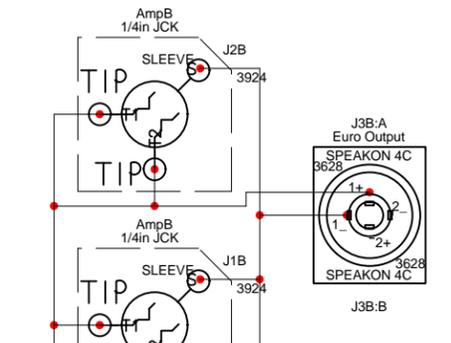
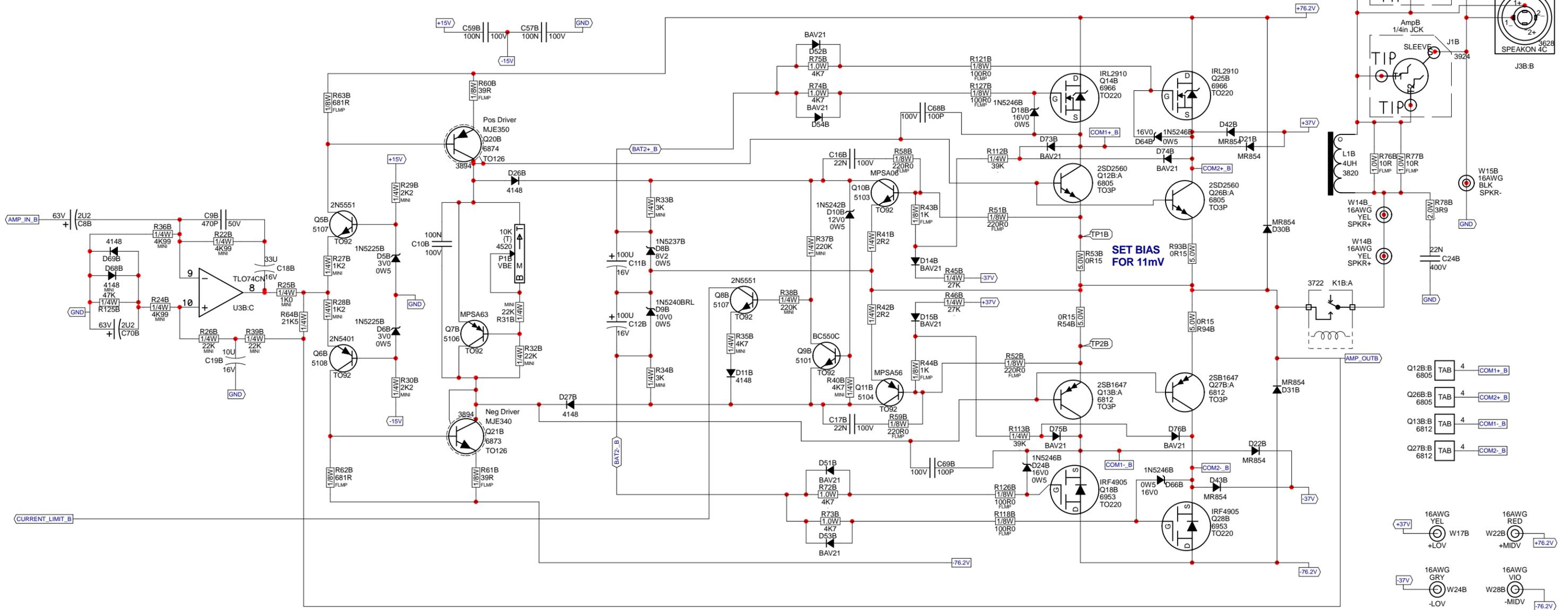
SET BIAS FOR 11mV

SET BIAS FOR 11mV

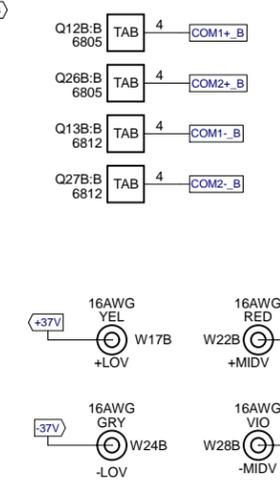
- Q12A:B 6805 TAB 4 COM1+ A
- Q26A:B 6805 TAB 4 COM2+ A
- Q13A:B 6812 TAB 4 COM1- A
- Q27A:B 6812 TAB 4 COM2- A

- NC00001
  - HEATSINK
  - HEATSINK
  - HEATSINK
  - HEATSINK
  - HEATSINK
  - TP1
- Heatsink Nodes

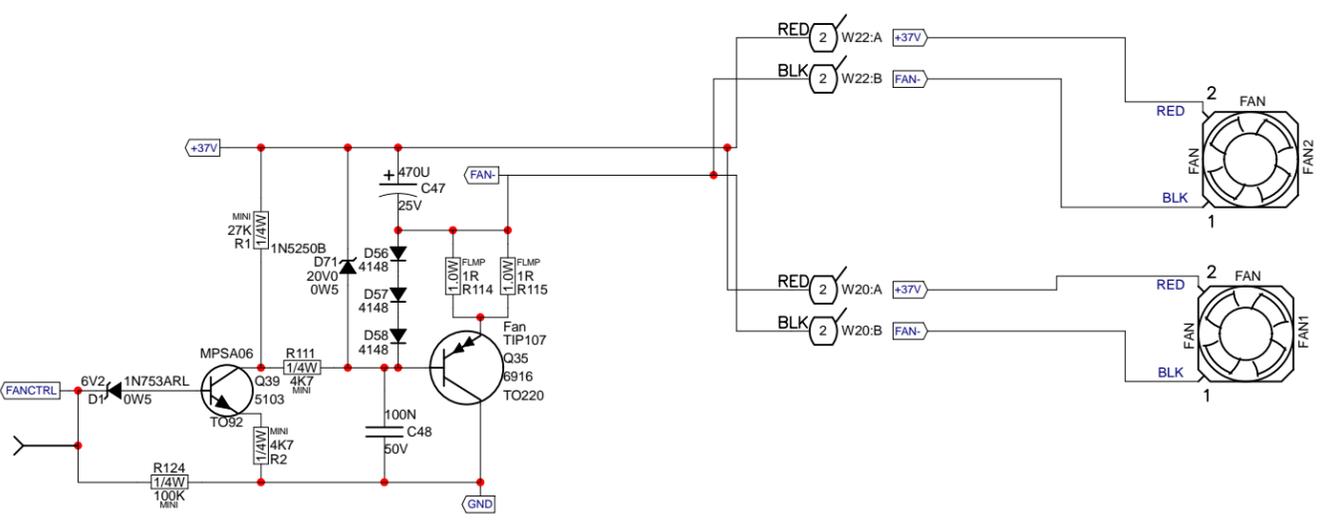




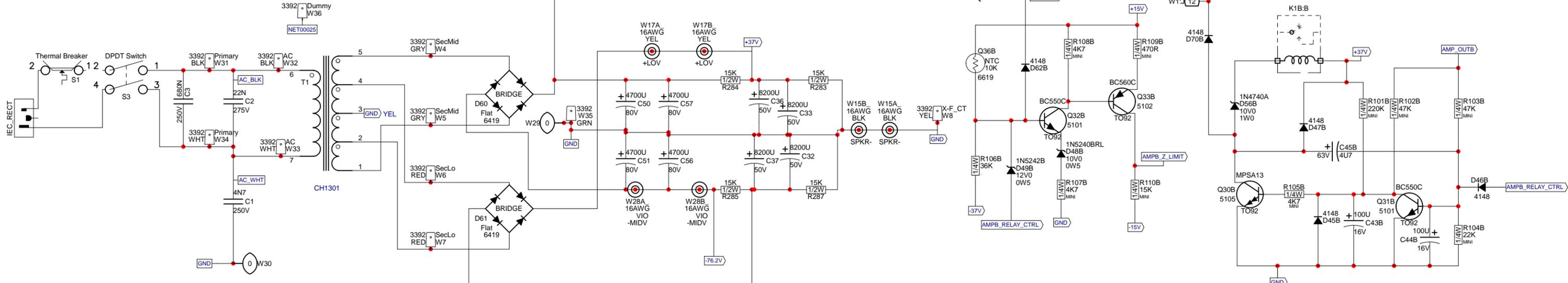
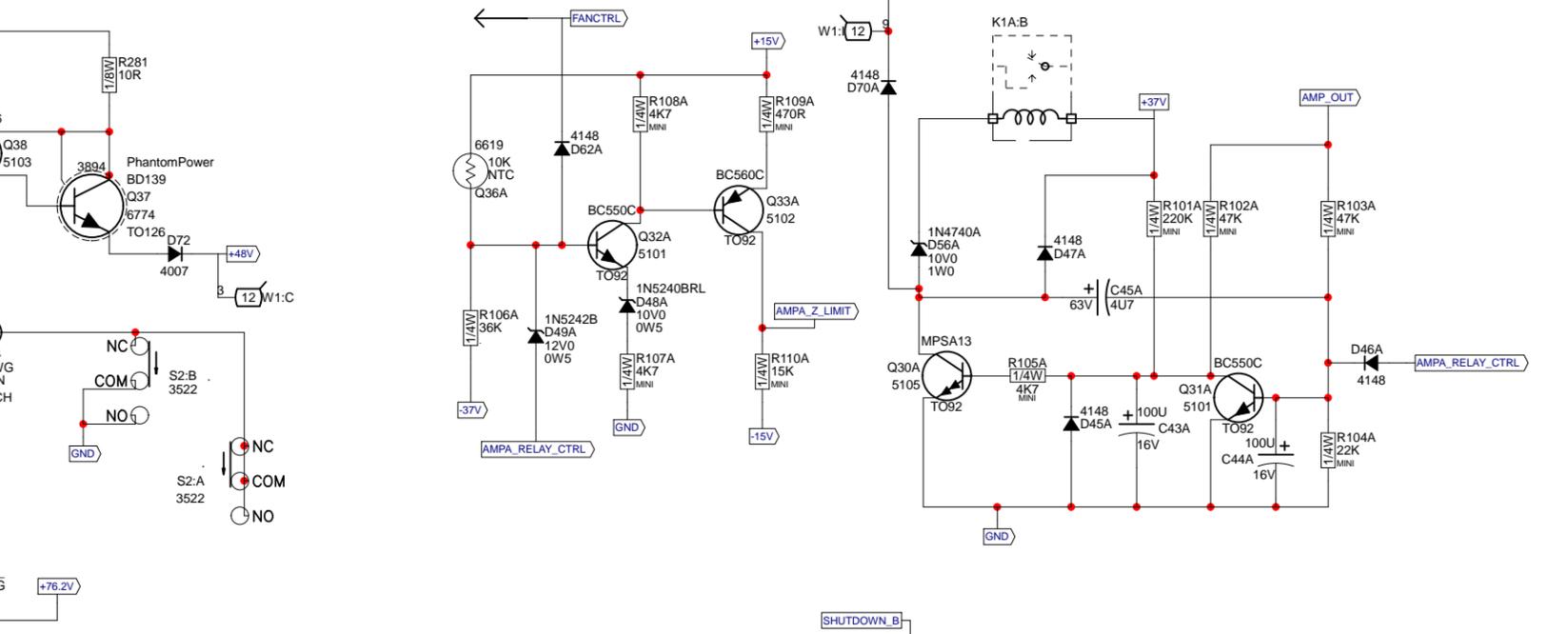
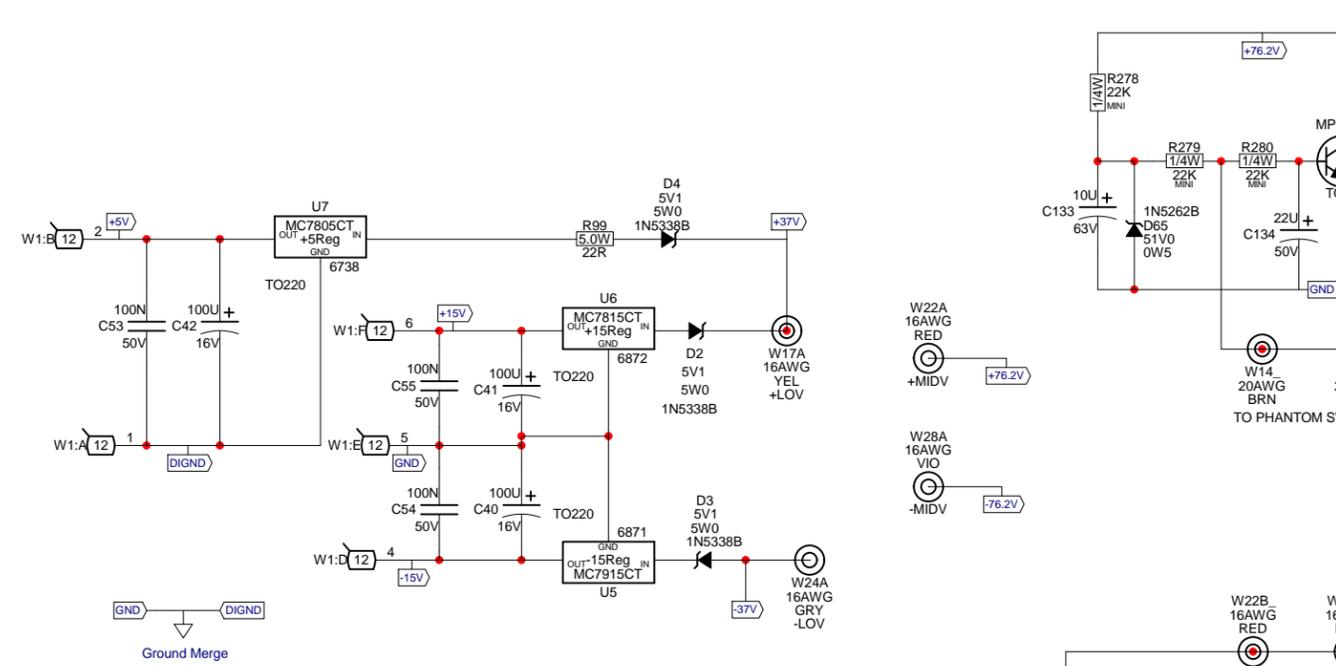
SET BIAS FOR 11mV



	<b>Product M810-2 Amp B</b>		
	Channel B	PCB# M1194	Sheet 3 of 5
	Date: Wed Jul 04, 2012	Rev: V11	YsType: .
	Filename: M1194V11SCH.sch2006		



M1194.PCB_DATABASE_HISTORY			#	DATE	VER#	DESCRIPTION OF CHANGE
MODEL(S):- M810			24			35V AND C36&C37#58964700/80V->#5898 8200U/50V
1	10 Jan, 2004	1.00	25			UPDATED BIAS NOTE TO READ 11mV, R45A/B&R46A/B
2	24 Feb, 2004	1.00	26			#4890 30K->#4833 27K, R112A/B&R113A/B #4868 36K->
3	10 Mar, 2004	1.00	27			#4853 39K, C25A/B #5224 47N/100V->#5212 100N/63V,
4	1-APR-2004	1.10	28			R79A/B #6127 470K->#6126 220K, SWAPPED W8 AND W35
5	15-APR-2004	1.20	29	19-JUN-2006	7.00	AH, PC#6983, WIDEN TRACE BETWEEN C32 AND C37
6	D	V	30			PC#7091, ENLARGE HOLE SIZE FOR #3522
7	21-APR-2004	1.20	31	2008/09/23	8.00	Complete force update of pcb. Moved Q7a,b closer to xtrs.
8	6-MAY-2004	2.00	32			Solder updates. Thickened traces to R74, R75. Added
9	JUN/17/2004	2.10	33			NO RTV note to 5watt resistors. Added breaks near caps
10			34			and jacks - PC##7349. Flipped xtr spring screws
11	13 Sept, 2004	2.11	35			- PC#7624 and added fan connector - PC#7628.
12	JAN-05-2005	4.00	36	26-FEB-2008		PC7706, CHANGE #6779 WITH #6805 NPN AND CHANGE
13			37			#6802 WITH #6812 PNP
14			38	2009/09/24	9.00	PCs 7875, 7876 - Ribbon cable change - XTR screws flipped.
15			39	03-FEB-2010		PC7942,PC7980: Update 4xTO220-MTG, 2xTO218-MTG GG
16			40	05-FEB-2010	10.00	PC7983: Enlarge D2,D3,D4 span to .525 GG
17			41	23-MAR-2012	V11	PC8383: CHANGED PCB TO DS / REMOVED EYELETS. - ML
18			42	03-JUN-2012		PC8423: Replaced thermistors from 6467 to 6619. - ML
19	MAR-24-2005	5.00	43			
20	APR-13-2005	5.10	44			
21			45			
22	JUN-29-2005	6.00	46			
23			47			
			48			
			49			
			50			



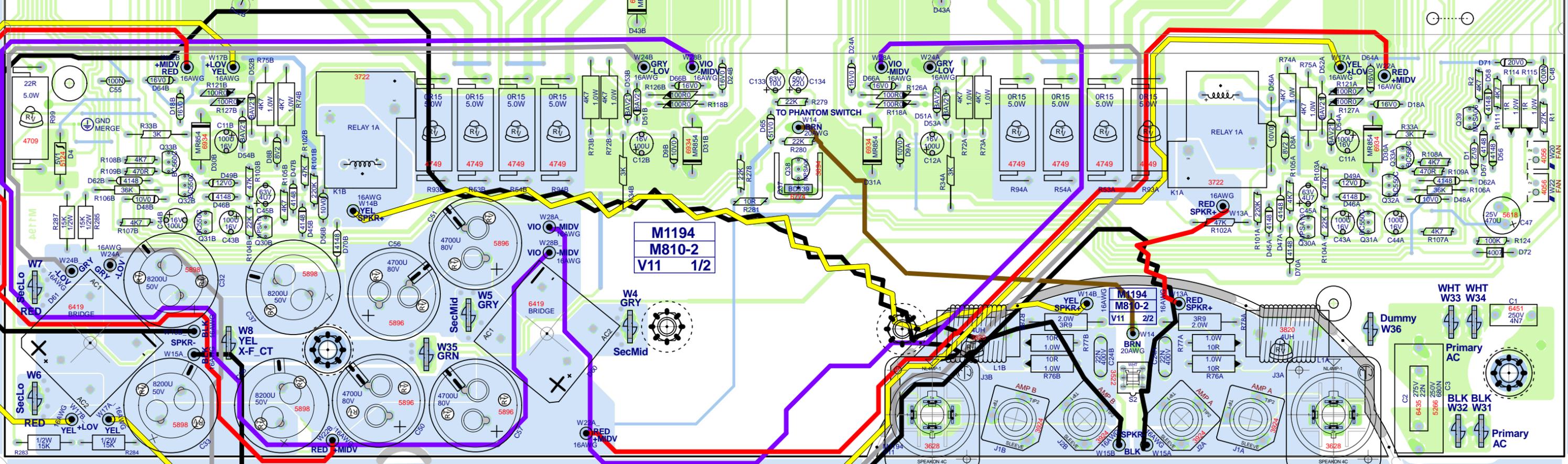
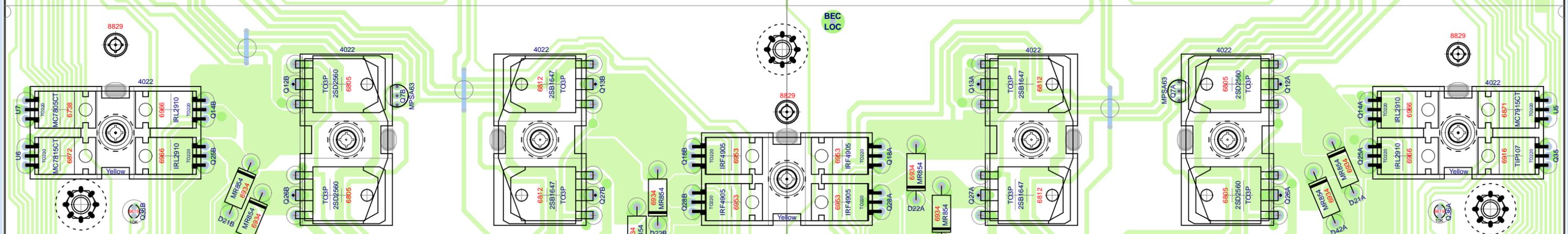
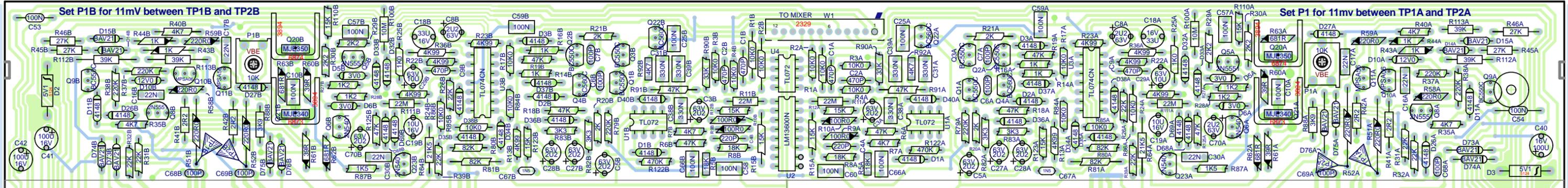
**USE CH1301E FOR EUROPEAN**

Product **M810-2**

Power Supply PCB# M1194 Sheet 4 of 5

Date: Wed Jul 04, 2012 Rev: V11 YsType: .

Filename: M1194V11SCH.2006



BlankSize - 17900x10625

M1194  
M810-2  
V11 1/2

M1194 V11

M810-2

M1194 V11

SEE LAYOUT DOCUMENTATION





SEE LAYOUT DIAGRAM

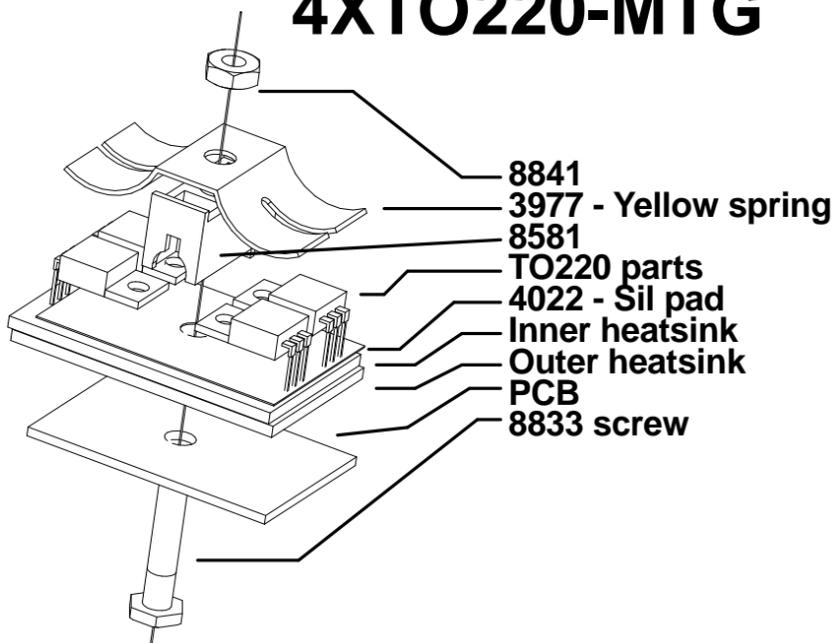


# M1194 V11

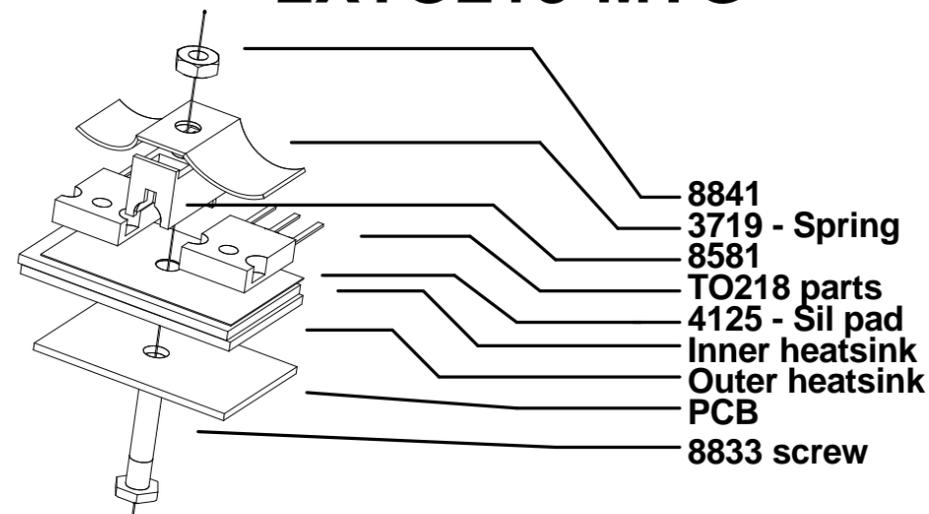
# PRODUCTION NOTES

- 1. PCBSA:** Apply thermal grease evenly between the large inner and outer heatsinks.
- 2. PCBSA:** Use three 8829 screws to align and attach the large heatsinks to the board.
- 3. PCBSA:** When assembling heatsinks to Q20A, Q20B, Q21A, Q21B and Q37, ensure heatsinks are straight and sitting flat against board. Add a very small amount of RTV between heatsink and board if necessary. This prevents the heatsink from shorting other components.
- 4. PCBSA:** Fill the open space around Q36B, Q7B, Q7A, Q36A with thermal grease after wave soldering.
- 5. PCBSA:** Inspect tabs after solder wave and retouch if necessary for a solid solder joint. Advise PENG if soldering quality of the tabs is poor or not consistent.

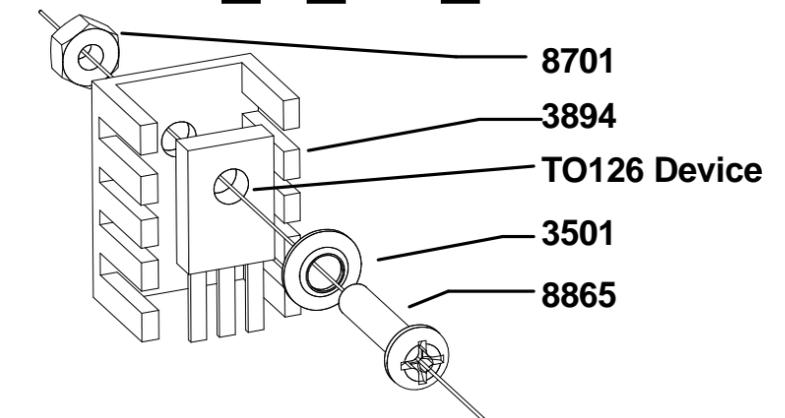
### 4XTO220-MTG



### 2XTO218-MTG



### TO126\_V\_HS\_MTG





# SEE LAYOUT DIAGRAM

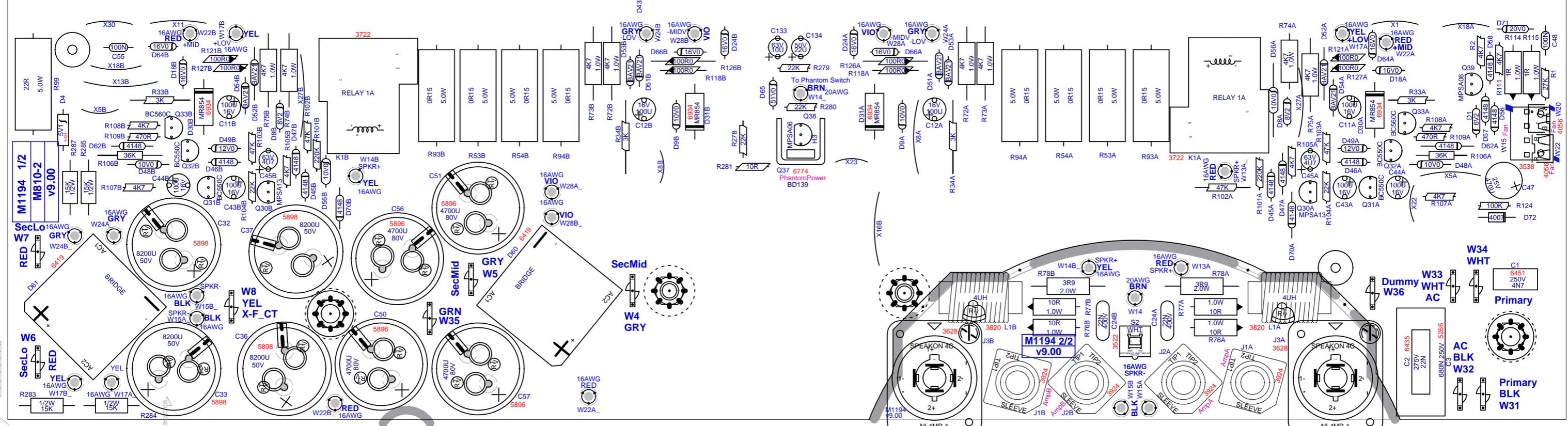
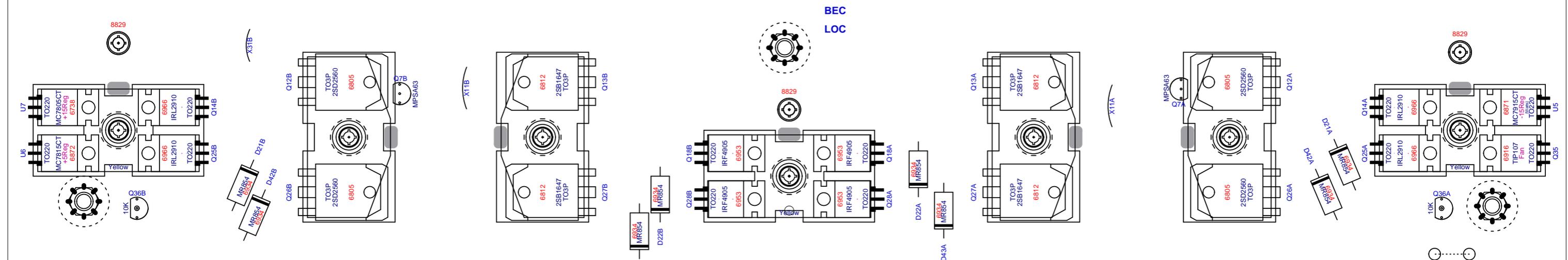
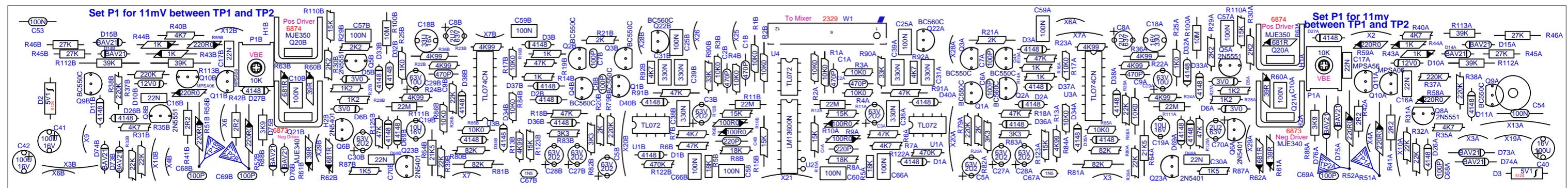


M1194.PCB_DATABASE_HISTORY				#	DATE	VER#	DESCRIPTION OF CHANGE
MODEL(S):- M810-2				25	.	.	UPDATED BIAS NOTE TO READ 11mV, R45A/B&R46A/B
#	DATE	VER#	DESCRIPTION OF CHANGE	26	.	.	#4890 30K->#4833 27K, R112A/B&R113A/B #4868 36K->
1	10 Jan, 2004	1.00	Rationalize wire refdes	27	.	.	#4853 39K, C25A/B #5224 47N/100V->#5212 100N/63V,
2	24 Feb, 2004	1.00	Add speakon jacks to output section	28	.	.	R79A/B #6127 470K->#6126 220K, SWAPPED W8 AND W35
3	10 Mar, 2004	1.00	Enlarge cutouts for 8841 nuts	29	19-JUN-2006	7.00	AH, PC#6983, WIDEN TRACE BETWEEN C32 AND C37
4	1-APR-2004	1.10	PC#6674 Change R31A,B 15k-->22k (4979-->6118)	30	.	.	PC#7091, ENLARGE HOLE SIZE FOR #3522
5	15-APR-2004	1.20	PC#6678 Chg. R5A,B 6k8->18k; R82A,B 5k6->3k3	31	2008/09/23	8.00	Complete force update of pcb. Moved Q7a,b closer to xtrs.
6			R83A,B 56k->3k3; R80A,B, R81A,B 133k->100k	32	.	.	Solder updates. Thickened traces to R74, R75. Added
7	21-APR-2004	1.20	PC#6681 Modified route to let grn wire pass near power caps	33	.	.	NO RTV note to 5watt resistors. Added breaks near caps
8	6-MAY-2004	2.00	PC#6685 R80&R81(A,B) 100K->82K, ADDED D71, D72	34	.	.	and jacks - PC##7349. Flipped xtr spring screws
9	JUN/17/2004	2.10	PC# 6707 Q12 (A+B) Q26 (A+B) TIP142 -> MJH11018	35	.	.	- PC#7624 and added fan connector - PC#7628.
10	.	.	Q13 (A+B) , Q27 (A+B) TIP147 -> MJH11017	36	26-FEB-2008	.	PC7706, CHANGE #6779 WITH #6805 NPN AND CHANGE
11	13 Sept, 2004	2.11	TC:PC#6763:Moved HS alignment hole to match HS	37	.	.	#6802 WITH #6812 PNP
12	JAN-05-2005	4.00	PC#6808 R72,R73,R74,R75 FROM 10K0 1W TO 4K7 1W	38	2009/09/24	9.00	PCs 7875, 7876 - Ribbon cable change - XTR screws flipped.
13	.	.	D8 A/B 12V0 TO 8V2, D9A/B 14V0 TO 10V0, D10A/B 16V0 -	39	03-FEB-2010	.	PC7942,PC7980: Update 4xTO220-MTG, 2xTO218-MTG GG
14	.	.	TO 12V0. ADD R112A/B, R113A/B (36K), D73A/B, D74A/B	40	05-FEB-2010	10.00	PC7983: Enlarge D2,D3,D4 span to .550 GG
15	.	.	D75A/B, D76A/B (BAV21). R45A/B, R46A/B 36K TO 30K	41	23-MAR-2012	V11	PC8383: CHANGED PCB TO DS / REMOVED EYELETS. - ML
16	.	.	REMOVE D16,D17,R47,R48,R49, R50 (ALL A/B)	42	03-JUN-2012	.	PC8423: Replaced thermistors from 6467 to 6619. - ML
17	.	.	ADD JUMPERS X1 TO X12	43	D	V	N
18	.	.	PC#6794: AC CLEARANCE FIX	44	D	V	N
19	MAR-24-2005	5.00	FIXED MASK SPREAD TO 30MIL	45	D	V	N
20	APR-13-2005	5.10	CHANGE IRF3205 #6954 TO IRL2910 #6966	46	D	V	N
21	.	.	PLACE MICA UNDER MIDDLE TIER MOSFETS	47	D	V	N
22	JUN-29-2005	6.00	PC#6920:GT:R106A/B #6122 33K->#4868 36K, D56A/B	48	D	V	N
23	.	.	#6440 4V7/0W5->#6484 10V1W, C32&C33#5903 12000U/	49	D	V	N
24	.	.	35V AND C36&C37#58964700/80V->#5898 8200U/50V	50	D	V	N

## DRILL & ROUTE HISTORY

## M1194 PENDING CHANGES

MODEL(S):- M810-2				MODEL(S):- M810-2		
#	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	2008/09/23	13	Solder updates, several PCs. New drill and route.	*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY		
8	23-MAR-2012	V15	PC8383: PCB converted to double sided.			
9	D	V	N			
10	D	V	N			
11	D	V	N			
12	D	V	N			
13	D	V	N			



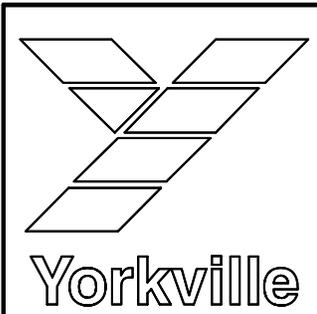
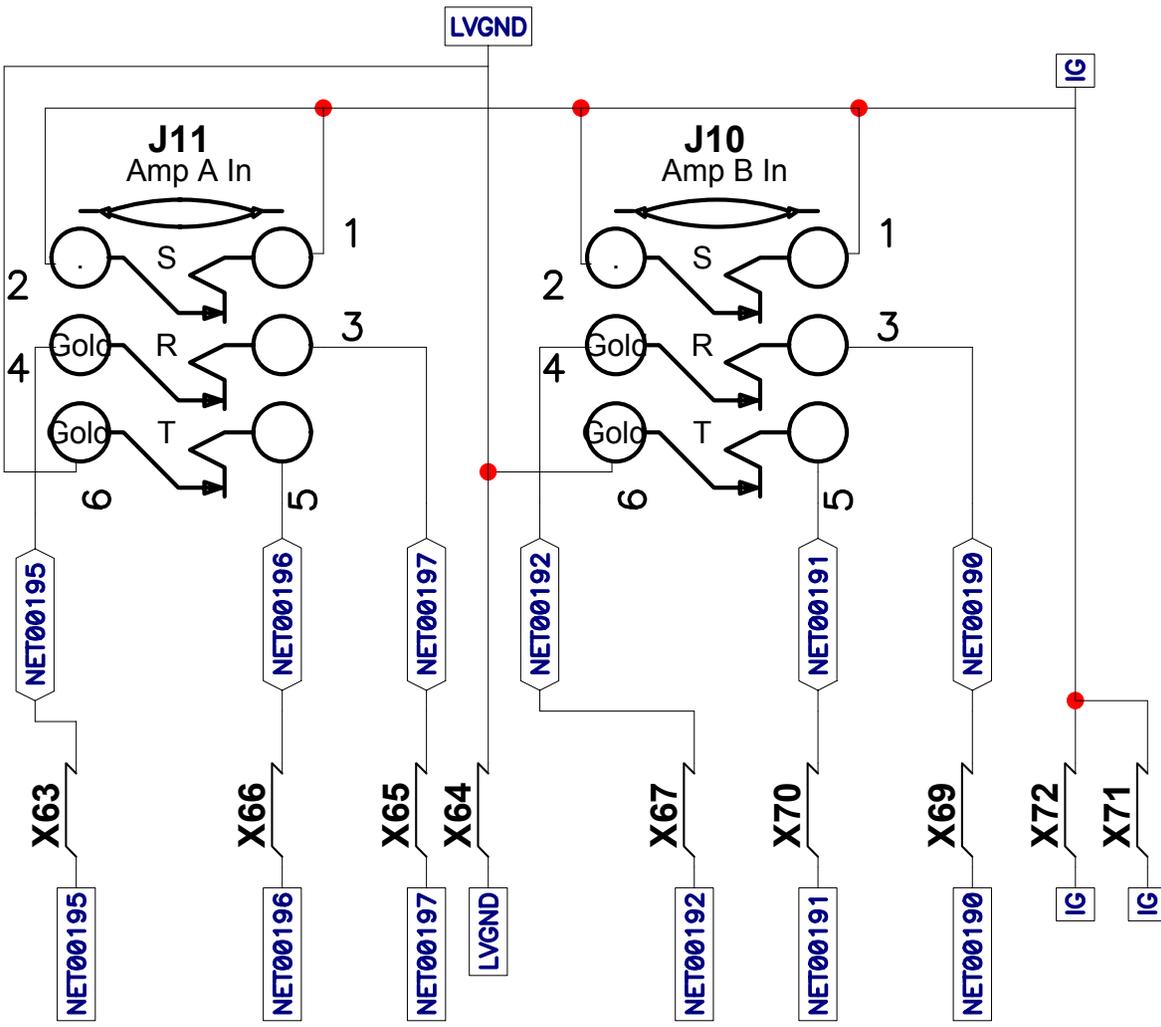


# M810/M1610

## *Series 2*



<b>Effect</b>	<b>Modify</b>	<b>Effect</b>	<b>Modify</b>
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



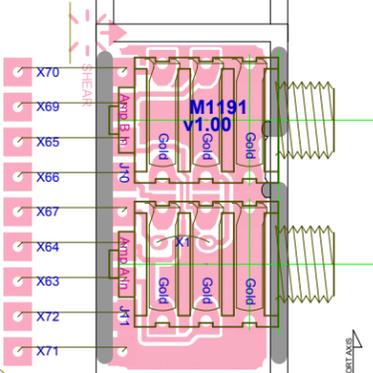
Product <b>M1610</b>		
Amp in Jacks	PCB# M1191	Sheet 1 of 2
Date: Tue Feb 10, 2004		Rev:V1.00
Filename: m1191 sch .sch2002		

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

SHEAR OFF THIS SIDE SECOND

ETCH GUIDE

BlankSize = 16.750 x 9.000



CLINCH ORIGIN

ETCH GUIDE

INSERT ORIGIN

Top Assy M1191v1.00

SHEAR OFF THIS SIDE FIRST

FEED THIS SIDE INTO SHEARER FIRST

# 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.



 YS#9920 White Knob (qty: 9)

 YS#9921 Gray Knob, no cover (qty: 6)

 YS#9915 Red Knob (qty: 2)

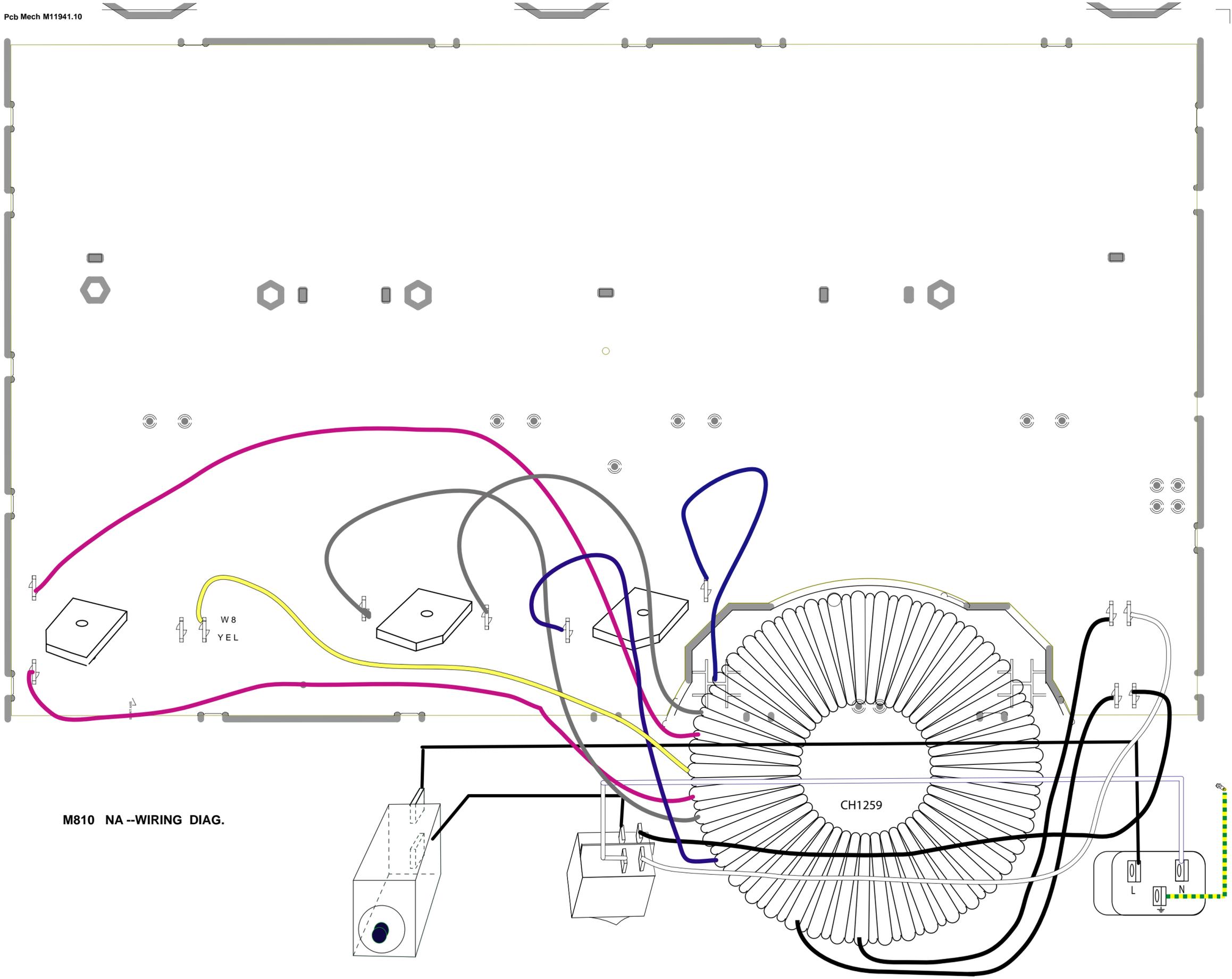
 YS#9916 Gray Knob (qty: 29)

 YS#9918 Blue Knob (qty: 10)

 YS#9917 Green Knob (qty: 9)

 YS#9919 Yellow Knob (qty: 8)

 YS#8397 Large Gray Knob (qty: 1)

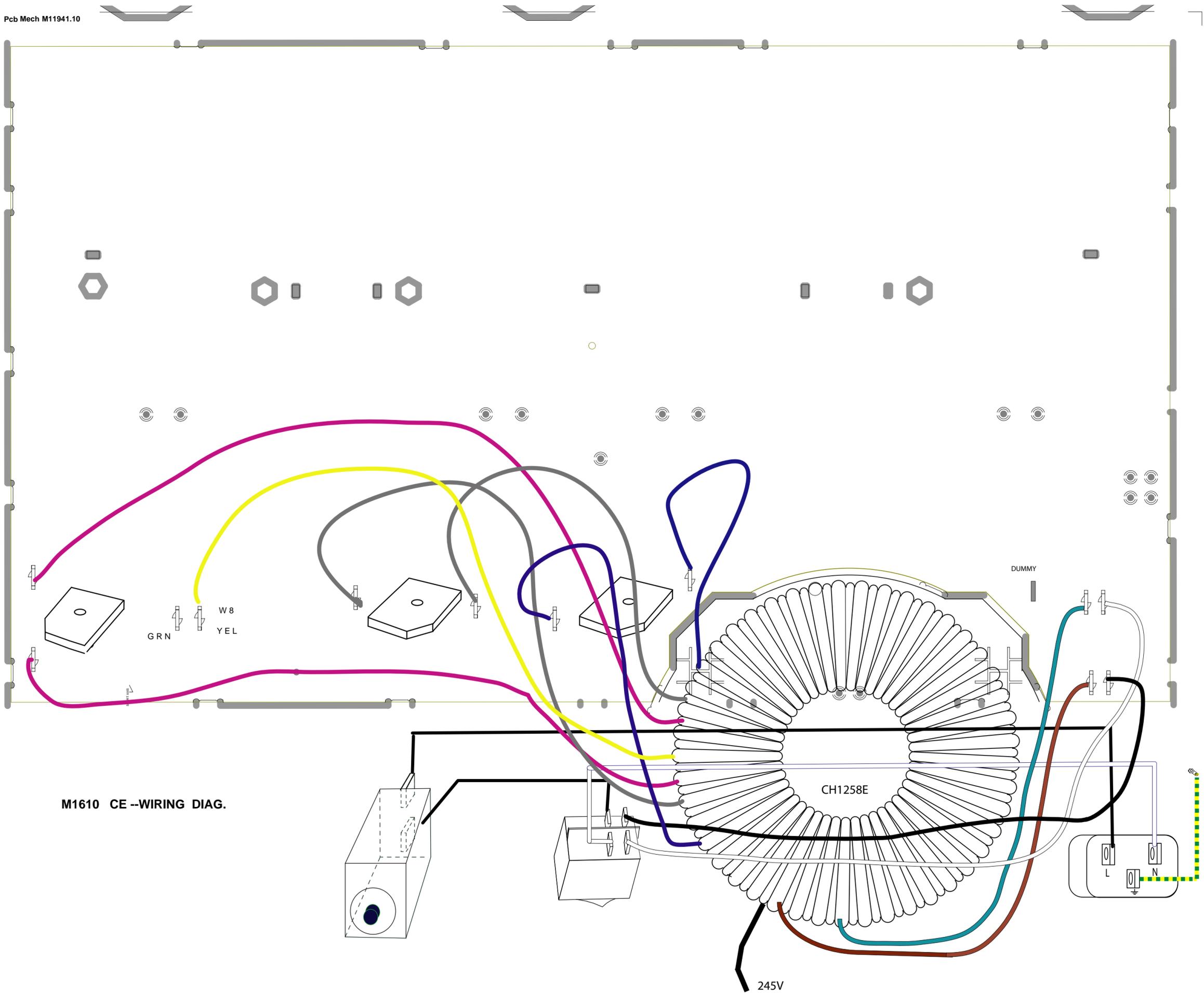


M810 NA --WIRING DIAG.

CH1259

W8  
YEL

L  
N  
GND



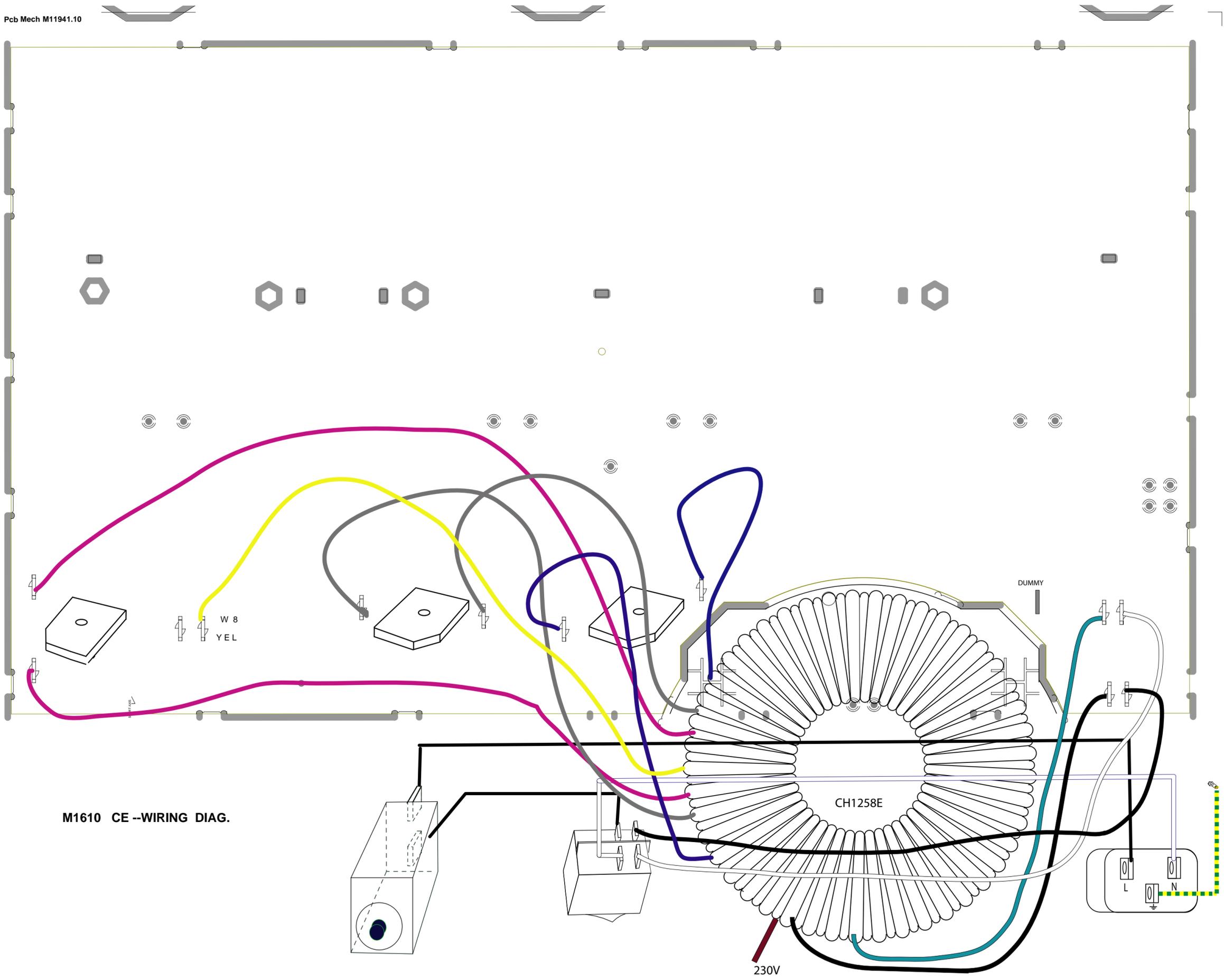
M1610 CE --WIRING DIAG.

CH1258E

DUMMY

245V

SHOWN AS 230V OPERATION



M1610 CE --WIRING DIAG.

CH1258E

DUMMY

W 8  
YEL

230V

L  
N

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