



SERVICE MANUAL

Series 1 and 2

M810 / M1610

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

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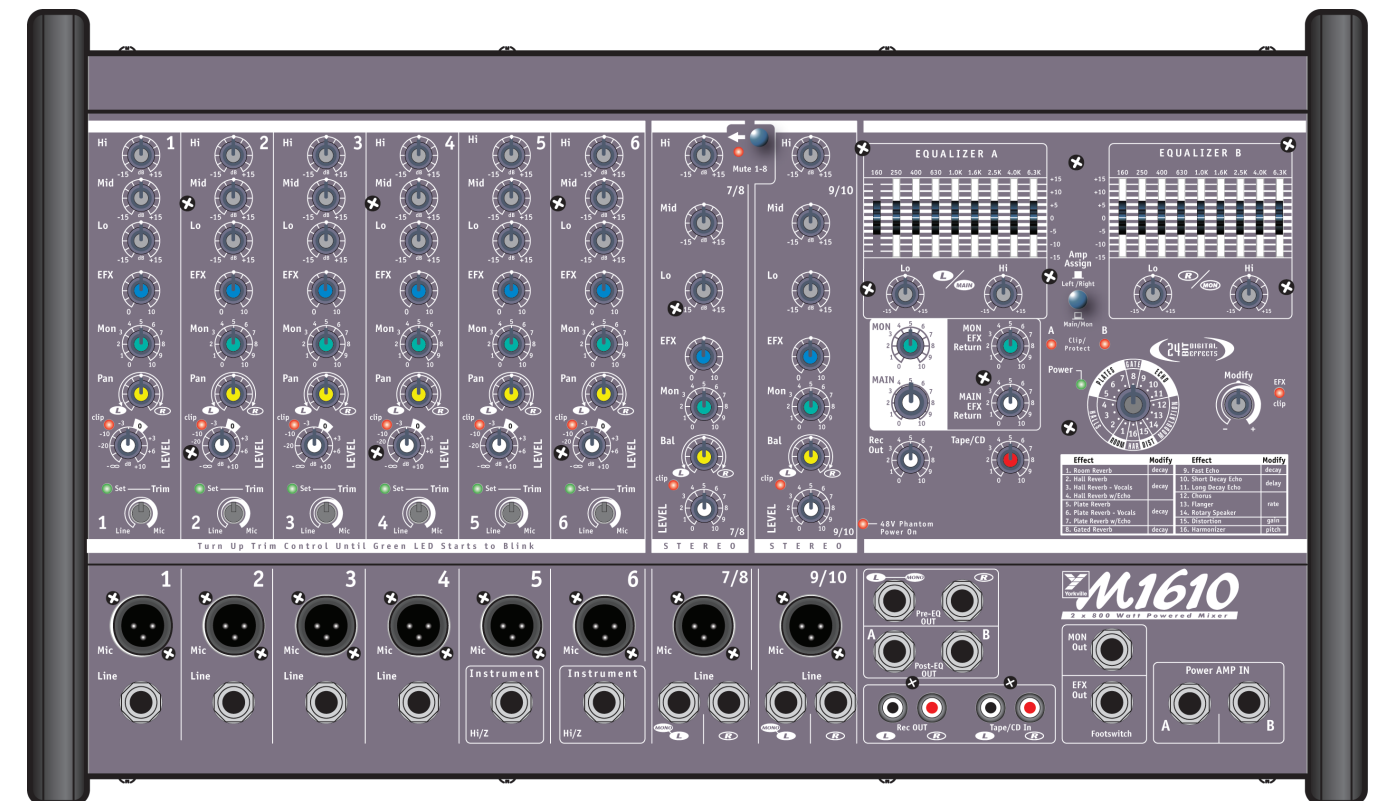
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Quality and Innovation Since 1963
Printed in Canada



IMPORTANT SAFETY INSTRUCTIONS



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

CAUTION:

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

NO USER SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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

AVIS:

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

NE CONTIENT AUCUNE PIECE REPARABLE PAR L'UTILISATEUR.

CONSULTEZ UN TECHNICIEN QUALIFIE POUR L'ENTRETIEN

Read Instructions

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

Packaging

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

Warning

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

Power Sources

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

Hazards

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

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

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

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

Power Cord

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

Service

The unit should be serviced only by qualified service personnel.

Veillez Lire le Manuel

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

Emballage

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

Attention:

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

Alimentation

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

Risque

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

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

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

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

Cordon d'Alimentation

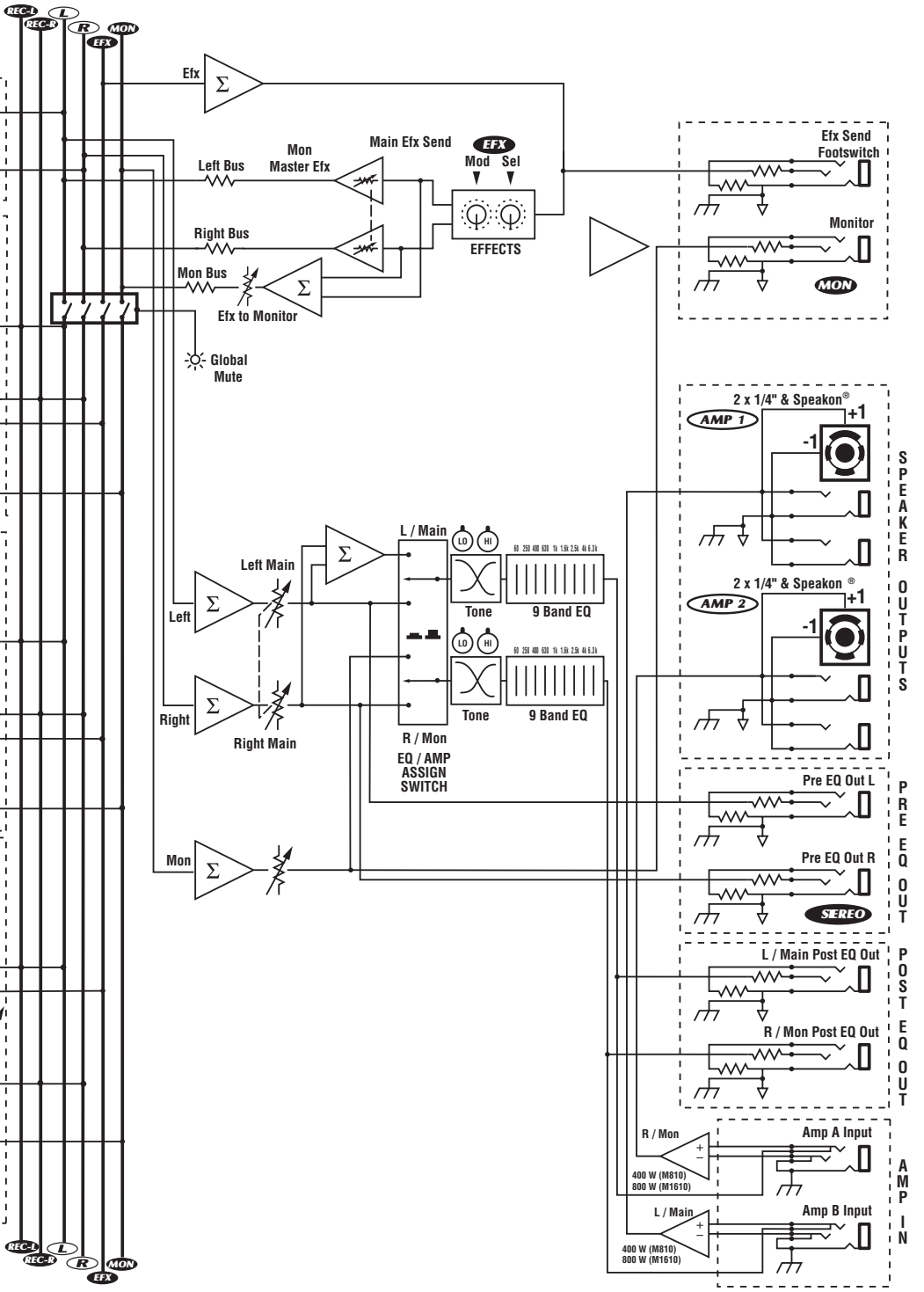
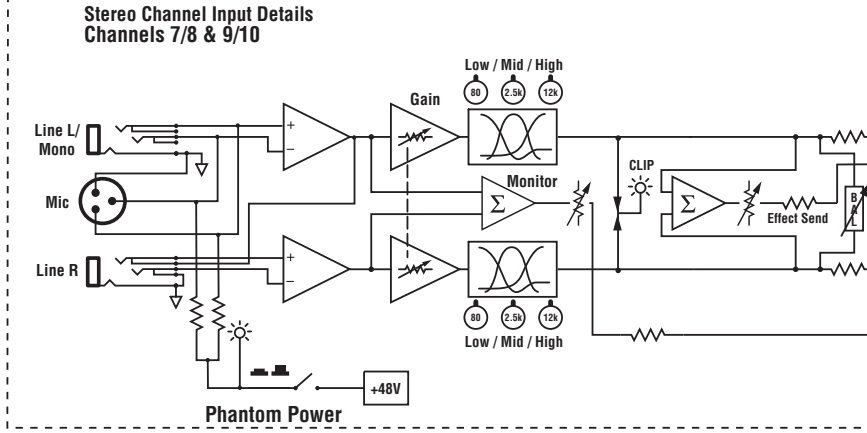
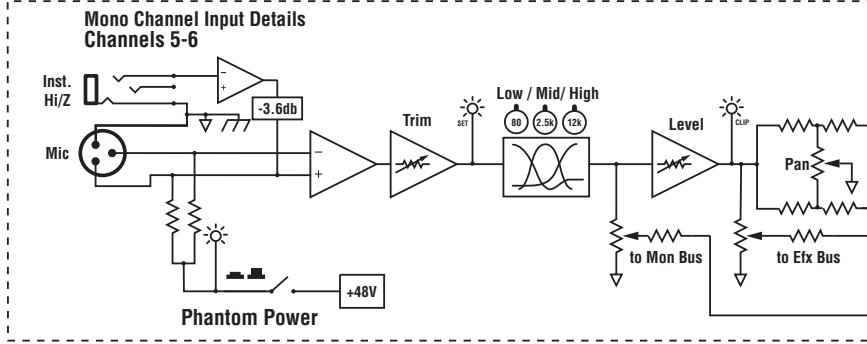
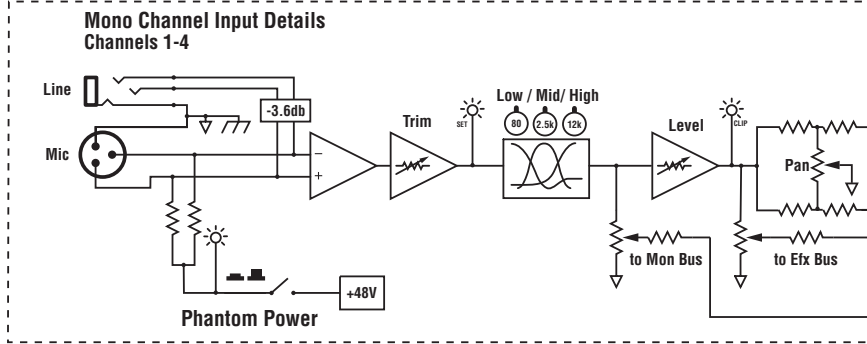
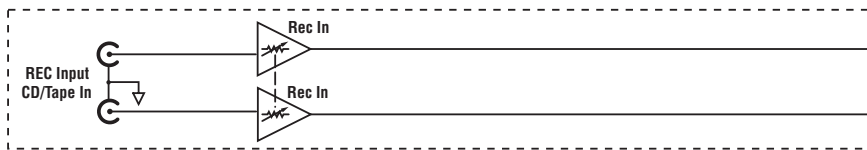
Évitez d'endommager le cordon d'alimentation. N'UTILISEZ PAS L'APPAREIL si le cordon d'alimentation est endommagé.

Service

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

Block Diagram for M810 / M1610

DESIGNED & MANUFACTURED BY YORKVILLE SOUND



m810 Parts List 7/8/2004

| YS # | Description | Qty. | YS # | Description | Qty. | YS # | Description | Qty. | YS # | Description | Qty. |
|--------|-------------------------------------|------|------|--------------------------------------|------|----------|-------------------------------------|------|--------|-------------------------------------|------|
| 3507 | *28 PIN X .6" I.C DEEP SOCKET* | 1 | 5318 | 220N 50V 10%CAP T&R BEAD X7R | 1 | 2019 | 1/8W 100R0 1%FLAME PROOF T&R RES | 12 | 8632 | ROUND PUSH BUTTON 1/4" GREY | 2 |
| 3550 | 44PIN I.C PLCC SOCKET | 1 | 5233 | 330N 63V 5%CAP T&R RAD .2"FLM | 8 | 4602 | 1/8W 100R 5% T&R RES | 28 | 8733 | 5/16-18X2-1/2 GRD 5 HEX BOLT JS500 | 1 |
| 3557 | 84 PIN I.C PLCC SOCKET | 1 | 5234 | 470N 63V 10%CAP T&R RAD .2"FLM | 2 | 4921 | 1/4W 100R 5% 2"U T&R RES | 18 | 3663 | SNAP IEC PWR SOC W/250TAB FOR .060 | 1 |
| 3571 | *28 PIN X .6" I.C SOCKET* | 1 | 5240 | 680N 63V 10%CAP T&R RAD .2"FLM | 1 | 4984 | 1/4W 150R 5%MINI T&R RES | 3 | 3859 | 1/2 PLASTIC HEX SPACER #4 | 15 |
| 6994 | 44PIN I.C PLCC CRYSTAL CODEC | 1 | 5266 | 680N 250V 20%CAP BLK X2 30MM AC | 1 | 2023 | 1/8W 220R0 1%FLAME PROOF T&R RES | 8 | 8657 | 6-32 X 3/8" HEX SPACER ALUMINUM | 7 |
| 6940 | 16MHZ CRYSTAL VERT 2-PIN .25"CASE | 1 | 5257 | .2U2 63V 20%CAP T&R RAD .2"EL | 12 | 4977 | 1/4W 220R 5%MINI T&R RES | 12 | 8682 | #4 TEFLON WASHER .125ID .281OD .031 | 6 |
| 5906 | RED 3MM LED 1V9 20MA .4SPCER T&R | 13 | 5258 | .4U7 63V 20%CAP T&R 8X7MM .2"EL | 20 | 2024 | 1/8W 249R 2%FLAME PROOF T&R RES | 4 | 8482 | 3/8 1D FLAT WASHER | 16 |
| 5908 | GRN 3MM LED 1V9 20MA .4SPCER T&R | 7 | 5282 | .10U 63V 20%CAP T&R 5X7MM .2"NP | 35 | 5010 | 1/4W 330R9 5% 10PIN SIP RES | 1 | 8818 | 3/4 OD X 3/8 ID X .080 THICK WASHER | 2 |
| 6419 | BRIDGE 35A 400V WIRE LEAD G13504 | 2 | 5945 | .10U 63V 20%CAP T&R RAD .2"EL | 3 | 2028 | 1/8W 475R 1%FLAME PROOF T&R RES | 2 | 3511 | #6 FLAT WASHER NYLON | 15 |
| 6425 | BAV21 200V 0A25 DIODE T&R | 12 | 5260 | .22U 50V 20%CAP T&R RAD .2"EL | 1 | 4980 | 1/4W 470R 5%MINI T&R RES | 30 | 8485 | #6 SPLIT WASHER ZINC | 1 |
| 6825 | 1N4148 75V 0A45 DIODE T&R | 94 | 5631 | .22U 50V 20%CAP T&R 6X7MM .2"EL | 14 | 4799 | 1/4W 562R 1% T&R RES | 4 | 3524 | NYLON SHWASHER ID385 OD750 T060 | 4 |
| 6438 | 1N4007 400V 1A0 DIODE T&R | 1 | 5961 | .33U 16V 20%CAP T&R RAD .2"NP | 20 | 4922 | 1/4W 620R 5% 2"U T&R RES | 8 | 3577 | FIBER WASHER .625OD .380ID .03 | 4 |
| 6934 | MR854 400V 3A0 DIODE FASREC | 12 | 5879 | 100U 16V 20%CAP T&R 8X7MM .2"EL | 16 | 5019 | 1/4W 620R 5%MINI T&R RES | 14 | 3440 | 4PDT MINI VERT ALT SWITCH | 1 |
| 6439 | 1N5225B 3V0 0W5 ZENER 5% T&R | 4 | 5618 | 470U 25V 20%CAP BLK 10X15MM EL | 1 | 2030 | 1/8W 681R 1%FLAME PROOF T&R RES | 16 | 3522 | DPDT MINI PC VERT SNP ALT | 2 |
| 6440 | 1N750ARL 4V7 0W5 ZENER 5% T&R | 2 | 5896 | 4700U 80V 20%CAP BLK 25X50MM ELS | 6 | 4923 | 1/4W 680R 5% 2"U T&R RES | 4 | 3587 | DPDT ROKR SW QUIK 250"AC/PWR ON-OFF | 1 |
| 6436 | 1N753ARL 6V2 0W5 ZENER 5% T&R | 1 | 5903 | 12000U 35V 20%CAP RAD 25X45MM ELS | 2 | 4924 | 1/4W 750R 5% 2"U T&R RES | 6 | CH1259 | M808 POWER TRFRM TRD | 1 |
| 6437 | 1N5237B 8V2 0W5 ZENER 5% T&R | 3 | 4581 | ROT GRY 18MM 4BIT ENCODER P23 | 2 | 2031 | 1/8W 820R 5%FLAME PROOF T&R RES | 4 | | | |
| 6461 | 1N5240BRL 10V0 0W5 ZENER 5% T&R | 2 | 4431 | .10K 5C R/A 12MM STEREO P34 | 2 | 4925 | 1/4W 820R 5% 2"U T&R RES | 2 | | | |
| 6450 | 1N5242B 12V0 0W5 ZENER 5% T&R | 4 | 4432 | .10K B LIN 9MM P32 | 6 | 2033 | 1/8W 1K 2%FLAME PROOF T&R RES | 4 | | | |
| 6486 | 1N5244B 14V0 0W5 ZENER 5% T&R | 2 | 4434 | .10K B LIN 9MM DETENT P32 | 20 | 4981 | 1/4W 1K 5%MINI T&R RES | 17 | | | |
| 6824 | 1N5246B 16V0 0W5 ZENER 5% T&R | 10 | 4438 | .10K B LIN 12MM STEREO DETENTP34 | 4 | 6110 | 1/4W 1K0 1%MINI MF T&R RES | 2 | | | |
| 6465 | 1N5250B 20V0 0W5 ZENER 5% T&R | 1 | 4426 | .20K 4B LIN 9MM P32 | 1 | 4585 | 1/4W 1K2 5%MINI T&R RES | 25 | | | |
| 6475 | 1N5262B 51V0 0W5 ZENER 5% T&R | 1 | 4447 | .20K 15A AUD 12MM STEREO P34 | 1 | 4988 | 1/4W 1K5 5%MINI T&R RES | 25 | | | |
| 6738 | MC7805CT TO220 P 5V0 REG V1 | 1 | 4435 | .50K B LIN 9MM P32 | 15 | 6113 | 1/4W 2K 5%MINI T&R RES | 4 | | | |
| 6871 | MC7915CT TO220 N 15V0 REG V2 | 1 | 4435 | .50K B LIN 9MM DETENT P32 | 10 | 6104 | 1/4W 2K2 5%MINI T&R RES | 6 | | | |
| 6872 | MC7815CT TO220 P 15V0 REG V1 | 1 | 4437 | .50K B LIN 12MM STEREO P34 | 2 | 6114 | 1/4W 2K49 1%MINI MF T&R RES | 3 | | | |
| 5101 | BC550C T092 NPN TRAN T&R TB | 17 | 4439 | .50K B LIN 12MM STEREO DETENTP34 | 2 | 6124 | 1/4W 3K 5%MINI T&R RES | 4 | | | |
| 5102 | BC560C T092 PNP TRANSISTOR T&R TB | 38 | 4441 | .50K 4B LIN 12MM STEREO P34 | 2 | 6136 | 1/4W 3K3 5%MINI T&R RES | 4 | | | |
| 5103 | MPSA06 T092 NPN TRANSISTOR T&R TA | 4 | 4443 | 100K 5C R/A 9MM P32 | 8 | 5028 | 1/4W 3K74 1% T&R RES | 4 | | | |
| 5104 | MPSA56 T092 PNP TRAN T&R TA | 2 | 3998 | .20K 1B LIN 20MM DETENT S04 | 18 | 4850 | 1/4W 3K9 5% T&R RES | 2 | | | |
| 5107 | 2N5551 T092 NPN TRNSISTR DARL T&RTA | 4 | 4520 | .10K TRIM POT | 2 | 4774 | 1/4W 4K12 1% T&R RES | 4 | | | |
| 5108 | 2N5401 T092 PNP TRNSISTR DARL T&RTA | 4 | 2408 | 8.0 AMP CIRCUIT BREAKER | 1 | 4943 | 1/4W 4K7 5% 2"U T&R RES | 2 | | | |
| 5105 | MPSA13 T092 NPN TRNSISTR DARL T&RTA | 5 | 3820 | .4UH COIL 14AWG ZOBEL HORIZONTAL | 2 | 4982 | 1/4W 4K7 5%MINI T&R RES | 49 | | | |
| 5106 | MPSA63 T092 PNP TRNSISTR DARL T&RTA | 2 | 3489 | CLIP 250X032 18-22AWG DISCO/INSL | 1 | 6128 | 1/4W 4K99 1%MINI MF T&R RES | 42 | | | |
| 6774 | BD139 T0126 NPN TRAN TG | 1 | 3490 | CLIP 250X032 14-16AWG DISCO/INSL | 11 | 6121 | 1/4W 6K98 1%MINI MF T&R RES | 4 | | | |
| 6873 | MJE340 T0126 NPN TRANSISTOR TG | 2 | 3601 | RING TERMINAL 16AWG WIRE & #8 SCREW | 1 | 4926 | 1/4W 7K5 5% 2"U T&R RES | 18 | | | |
| 6874 | MJE350 T0126 PNP TRANSISTOR TG | 2 | 3682 | 250 MALE PCB TAB REEL | 11 | 4990 | 1/4W 8K2 5%MINI T&R RES | 2 | | | |
| 6779 | MJH11018(2)T0218 NPN TRAN DARL TI | 4 | 3528 | 1/4" JCK PCB MT HORZ GOLD TR | 2 | 4983 | 1/4W 10K 5%MINI T&R RES | 109 | | | |
| 6802 | MJH11017(2)T0218 PNP TRAN DARL TI | 4 | 3921 | 1/4" JCK PCB MT VERT STER TR SWIT | 16 | 5031 | 1.0W 10K0 5% T&R | 8 | | | |
| 6916 | TIP107 TO220 PNP TRAN DARL TE | 1 | 3924 | 1/4" JCK PCB MT VERT 2XTIP HICURNT | 4 | 6116 | 1/4W 10K0 1%MINI MF T&R RES | 80 | | | |
| 6953 | IRF4905 TO220 PCH MFET | 4 | 3466 | RCA DUAL PCB MT VERT GOLD 24MM | 2 | 4630 | 1/2W 15K 5% T&R RES | 4 | | | |
| 6954 | IRF3205 NCH MFET TN | 4 | 3628 | SPKON 4C PCB MT VERT 250TAB GRY #4 | 2 | 4979 | 1/4W 15K 5%MINI T&R RES | 28 | | | |
| 6804 | MC33079P IC QUAD OP AMP | 4 | 4010 | XLR FEMLE PCB MT VERT 24MM AA-SERIES | 8 | 4954 | 1/4W 18K 5% 2"U T&R RES | 12 | | | |
| 6882 | TL072CP IC FET DUAL OP AMP | 15 | 3451 | EYELET SMALL 0.089 OD PLATED | 47 | 6125 | 1/4W 18K 5%MINI T&R RES | 2 | | | |
| 6889 | TL074CN IC QUAD O/A T/ ONLY | 11 | 3856 | FAN 80MM X 80MM 39CFM 12VDC 200MA | 2 | 6123 | 1/4W 20K0 1%MINI MF T&R RES | 5 | | | |
| 6745 | LM13600N IC XCONDUCTANCE AMP | 4 | 3894 | AAVID 5972-B H/S W/TAB B.O. | 5 | 4777 | 1/4W 21K5 1% T&R RES | 2 | | | |
| 6943 | 74HC374N IC OCTAL DTYPE LATCH | 1 | 3501 | B52200F006 COMP WASH #4 SMALL | 3 | 6118 | 1/4W 22K 5%MINI T&R RES | 19 | | | |
| 6962 | 74HC30 IC 8-INPUT NAND GATE | 1 | 3719 | DUAL XSISTOR T0218 SPRING YEL PLTD | 4 | 6129 | 1/4W 27K 5%MINI T&R RES | 7 | | | |
| 6992 | 1365-102 IC DIGITAL REVERB ASIC | 1 | 3977 | QUAD XSISTOR T0220SPRING YELLOWZINC | 3 | 6122 | 1/4W 33K 5%MINI T&R RES | 15 | | | |
| 6993 | 1250-101 IC SRAM 32KX8 | 1 | 8889 | RUBBER GROMMET #2183-034-BLK | 1 | 4868 | 1/4W 36K 5% T&R RES | 4 | | | |
| 7003 | 27C512 PROM IC YS M1610 16X16 PRG | 1 | 3810 | 4" NYLON CABLE TIE | 8 | 4927 | 1/4W 47K 5% 2"U T&R RES | 4 | | | |
| 812-UP | EPROM 27C512 - BLANK | 1 | 8397 | GREY STYLE 2 KNOB | 2 | 6119 | 1/4W 47K 5%MINI T&R RES | 26 | | | |
| 6467 | 10K 10% THERMISTOR NTC T0-92 | 2 | 8637 | ROUND PUSH BUTTON 1/4" BLK 24MM | 1 | 4928 | 1/4W 56K 5% 2"U T&R RES | 14 | | | |
| 5405 | 27P 200V 5%CAP T&R RAD CER.2"NPO | 2 | 9915 | RED SOFT GRAY RIB KNOB 0-DEG | 8 | 4848 | 1/4W 62K 5% T&R RES | 4 | | | |
| 5408 | 47P 100V 10%CAP T&R BEAD NPO | 33 | 9916 | GRY SOFT GRAY RIB KNOB 0-DEG | 28 | 6139 | 1/4W 62K 5%MINI T&R RES | 6 | | | |
| 5199 | 100P 100V 2%CAP T&R RAD CER.2"NPO | 8 | 9917 | GRN SOFT GRAY RIB KNOB 0-DEG | 9 | 4586 | 1/4W 82K 5%MINI T&R RES | 4 | | | |
| 5412 | 220P 100V 10%CAP T&R BEAD NPO | 14 | 9918 | BLU SOFT GRAY RIB KNOB 0-DEG | 10 | 4929 | 1/4W 82K 5% 2"U T&R RES | 14 | | | |
| 5416 | 470P 50V 10%CAP T&R BEAD NPO | 6 | 9919 | YEL SOFT GRAY RIB KNOB 0-DEG | 8 | 4942 | 1/4W 100K 5% 2"U T&R RES | 1 | | | |
| 5422 | 1N 50V 10%CAP T&R BEAD NPO | 20 | 9920 | WHT SOFT GRAY RIB KNOB 0-DEG | 9 | 6120 | 1/4W 100K 5%MINI T&R RES | 1 | | | |
| 5273 | 1N5 200V 5%CAP T&R RAD CER.2"NPO | 16 | 3426 | 8' 3/16 SJT AC LINE CORD REMOVE-CSA | 1 | 4991 | 1/4W 133K 1%MINI T&R RES | 12 | | | |
| 5208 | 2N2 400V 5%CAP T&R RAD .2"FLM | 5 | 3638 | 12 CIR CABLE HOLDER .098 | 1 | 4796 | 1/4W 180K 5%MINI T&R RES | 4 | | | |
| 5274 | 2N2 200V 5%CAP T&R RAD CER.2"NPO | 6 | 8701 | 4-40 KEPS NUT ZINC | 3 | 6126 | 1/4W 220K 5%MINI T&R RES | 12 | | | |
| 5275 | 3N3 100V 5%CAP T&R RAD .2"FLM | 2 | 8800 | 6-32 KEPS NUT ZINC | 15 | 6127 | 1/4W 470K 5%MINI T&R RES | 5 | | | |
| 5276 | 3N3 200V 5%CAP T&R RAD CER.2"NPO | 4 | 8841 | 10-32 KEPS NUT ZINC | 7 | 4948 | 1/4W 1M 5% 2"U T&R RES | 2 | | | |
| 5209 | 4N7 250V 5%CAP T&R RAD .2"FLM | 4 | 8797 | 5/16-18 KEPS NUT JS500 | 1 | 4951 | 1/4W 4M7 5% 2"U T&R RES | 7 | | | |
| 6451 | 4N7 250V 20%CAP BLK Y 10MM AC | 1 | 3796 | ELASTOMER PAD TSIL 1.0X0.8 | 8 | 6132 | 1/4W 8M2 5%MINI T&R RES | 6 | | | |
| 5204 | 10N 100V 10%CAP T&R RAD .2"FLM | 5 | 3580 | 12 CIR WAFER WLCK VT 0.1" | 1 | 4809 | 1/4W 10M 5% T&R RES | 2 | | | |
| 5205 | 15N 100V 10%CAP T&R RAD .2"FLM | 4 | 3818 | EMI SUPPRESSION FERRITE BEAD T&R | 2 | 4751 | 1/4W 22M 5% T&R RES | 10 | | | |
| 5207 | 18N 100V 5%CAP T&R RAD .2"FLM | 6 | 4597 | 22AWG STRAN TC WIR JMP | 15 | 3519 28" | 12C-26AWG RIB 1 WLCK HDR 098 | 1 | | | |
| 5210 | 22N 100V 10%CAP T&R RAD .2"FLM | 27 | 4599 | 22AWG SOLID SC WIR T&R JMP | 237 | 3736 | RELAY 1C 10AMP DC24 017MA PC-S | 2 | | | |
| 5840 | 22N 400V 10%CAP BLK RAD POLY FLM | 2 | 4749 | 5.0W 0R15 5% BLK RES | 8 | 8865 | 4-40 X 5/16 PAN PH MS JS500 | 33 | | | |
| 6435 | 22N 275V 20%CAP BLK X2 15MM AC | 1 | 2006 | 1.0W 1R 5%FLAME PROOF T&R RES | 4 | 8729 | #4 X 3/8 FLAT QUAD TYPE A JS500 BLK | 4 | | | |
| 5222 | 33N 100V 10%CAP T&R RAD .2"FLM | 10 | 4911 | 1/4W 2R2 5% T&R RES | 4 | 8842 | #4 X 5/16 PAN QUAD TYPE A JS500 BLK | 18 | | | |
| 5224 | 47N 100V 10%CAP T&R RAD .2"FLM | 6 | 4748 | 2.0W 3R9 5% T&R | 2 | 8831 | 6-32 X 1/4 PAN PH TAPTITE ZN | 1 | | | |
| 5226 | 68N 100V 5%CAP T&R RAD .2"FLM | 2 | 2008 | 1.0W 10R 5%FLAME PROOF T&R RES | 4 | 8832 | 6-32 X 1/4 PAN PH TAPTITE JS500 | 28 | | | |
| 5212 | 100N 63V 5%CAP T&R RAD .2"FLM | 35 | 4605 | 1/8W 10R 5% T&R RES | 4 | 8801 | 6-32 X 3/8 PAN PH TAPTITE JS500 | 1 | | | |
| 5228 | 100N 100V 5%CAP T&R RAD .2"FLM | 1 | 2013 | 1/8W 22R1 1%FLAME PROOF T&R RES | 4 | 8823 | 6-32 X 1 PAN PH TAPTITE JS500 | 3 | | | |
| 5314 | 100N 50V 10%CAP T&R BEAD X7R | 12 | 4709 | 5.0W 22R 5% BLK RES | 1 | 8809 | 10-32 X 1/4 PAN PH TAPTITE JS500 | 8 | | | |
| 5229 | 150N 63V 10%CAP T&R RAD .2"FLM | 2 | 2016 | 1/8W 39R 2%FLAME PROOF T&R RES | 4 | 8833 | 10-32 X 7/8 HEX CAP GRD 5 JS500 | 7 | | | |
| 5231 | 220N 63V 10%CAP T&R RAD .2"FLM | 2 | 6134 | 1/4W 47R 5%MINI T&R RES | 6 | 8893 | 10-32 X 1 FLAT PHILIPS TT JS500 BLK | 10 | | | |

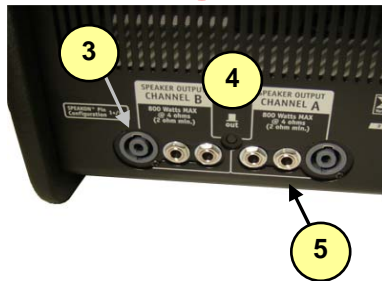
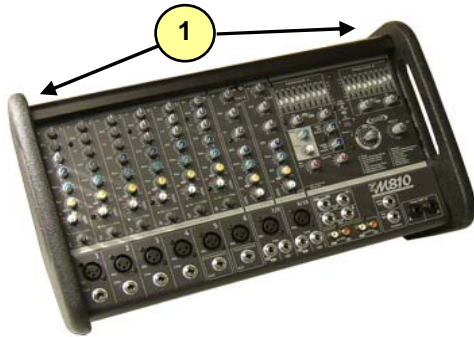
m1610 Parts List 7/8/2004

| YS # | Description | Qty. | YS # | Description | Qty. | YS # | Description | Qty. | YS # | Description | Qty. |
|--------|-------------------------------------|------|------|-------------------------------------|------|------|-------------------------------------|------|--------|-------------------------------------|------|
| 3507 | *28 PIN X 6" I.C DEEP SOCKET* | 1 | 5314 | 100N 50V 10%CAP T&R BEAD X7R | 12 | 2013 | 1/8W 22R1 1%FLAME PROOF T&R RES | 2 | 8829 | 6-32 X 3/8 FLAT PH TAPTITE BO#4 HEA | 3 |
| 3550 | 44PIN I.C PLCC SOCKET | 1 | 5229 | 150N 63V 10%CAP T&R RAD .2"FLM | 2 | 4709 | 5.0W 22R 5% BLK RES | 1 | 8761 | 6-32 X 1/2 PAN PHIL MS ZINC CLEAR | 16 |
| 3557 | 84 PIN I.C PLCC SOCKET | 1 | 5231 | 220N 63V 10%CAP T&R RAD .2"FLM | 2 | 2016 | 1/8W 39R 2%FLAME PROOF T&R RES | 4 | 8823 | 6-32 X 1 PAN PH TAPTITE JS500 | 3 |
| 3571 | *28 PIN X 6" I.C SOCKET* | 1 | 5318 | 220N 50V 10%CAP T&R BEAD X7R | 1 | 6134 | 1/4W 47R 5%MINI T&R RES | 6 | 8809 | 10-32 X 1/4 PAN PH TAPTITE JS500 | 8 |
| 44PIN | I.C PLCC CRYSTAL CODEC | 1 | 5233 | 330N 63V 5%CAP T&R RAD .2"FLM | 8 | 2019 | 1/8W 100R0 1%FLAME PROOF T&R RES | 24 | 8833 | 10-32 X 7/8 HEX CAP GRD 5 JS500 | 6 |
| 6940 | 16MHZ CRYSTAL VERT 2-PIN .25"CASE | 1 | 5234 | 470N 63V 10%CAP T&R RAD .2"FLM | 2 | 4602 | 1/8W 100R 5% T&R RES | 28 | 8893 | 10-32 X 1 FLAT PHILIPS TT JS500 BLK | 10 |
| 5906 | RED 3MM LED 1V9 20MA .4SPCER T&R | 13 | 5240 | 680N 63V 10%CAP T&R RAD .2"FLM | 1 | 4921 | 1/4W 100R 5% 2"U T&R RES | 18 | 8632 | ROUND PUSH BUTTON 1/4" GREY | 2 |
| 5908 | GRN 3MM LED 1V9 20MA .4SPCER T&R | 7 | 5257 | _2U2 63V 20%CAP T&R RAD .2"EL | 12 | 4984 | 1/4W 150R 5%MINI T&R RES | 3 | 8736 | 5/16-18X2-3/4 GRD 5 HEX BOLT JS500 | 1 |
| 6419 | BRIDGE 35A 400V WIRE LEAD GI3504 | 3 | 5258 | _4U7 63V 20%CAP T&R 8X7MM .2"EL | 20 | 2023 | 1/8W 220R0 1%FLAME PROOF T&R RES | 8 | 3663 | SNAP IEC PWR SOC W/250TAB FOR .060 | 1 |
| 6425 | BAV21 200V 0A25 DIODE T&R | 20 | 5282 | _10U 16V 20%CAP T&R 5X7MM .2"NP | 35 | 4977 | 1/4W 220R 5%MINI T&R RES | 12 | 8608 | NYLON SPACER .200 OD .145 ID .110 L | 16 |
| 6825 | 1N4148 75V 0A45 DIODE T&R | 90 | 5945 | _10U 63V 20%CAP T&R RAD .2"EL | 3 | 2024 | 1/8W 249R 2%FLAME PROOF T&R RES | 4 | 3859 | 1/2 PLASTIC HEX SPACER #4 | 5 |
| 6438 | 1N4007 400V 1A0 DIODE T&R | 1 | 5260 | _22U 50V 20%CAP T&R RAD .2"EL | 1 | 5010 | 1/4W 330RX9 5% 10PIN SIP RES | 1 | 8657 | 6-32 X 3/8" HEX SPACER ALUMINUM | 17 |
| 6934 | MR854 400V 3A0 DIODE FASREC | 20 | 5631 | _22U 50V 20%CAP T&R 6X7MM .2"EL | 14 | 2028 | 1/8W 475R 1%FLAME PROOF T&R RES | 2 | 8682 | #4 TEFLON WASHER .125ID .28IOD .031 | 6 |
| 6733 | BAT85 30V 0A2 DIODE SCHTKYT&R | 4 | 5961 | _33U 16V 20%CAP T&R RAD .2"NP | 24 | 4980 | 1/4W 470R 5%MINI T&R RES | 30 | 8482 | 3/8 1D FLAT WASHER | 21 |
| 6439 | 1N5225B 3V0 0W5 ZENER 5% T&R | 4 | 5879 | 100U 16V 20%CAP T&R 8X7MM .2"EL | 16 | 4799 | 1/4W 562R 1% T&R RES | 4 | 8818 | 3/4 OD X 3/8 ID X .080 THICK WASHER | 2 |
| 6440 | 1N750ARL 4V7 0W5 ZENER 5% T&R | 2 | 5618 | 470U 25V 20%CAP BLK 10X15MM EL | 1 | 4922 | 1/4W 620R 5% 2"U T&R RES | 8 | 3511 | #6 FLAT WASHER NYLON | 15 |
| 6436 | 1N753ARL 6V2 0W5 ZENER 5% T&R | 1 | 5896 | 4700U 80V 20%CAP BLK 25X50MM ELS | 6 | 5019 | 1/4W 620R 5%MINI T&R RES | 14 | 8485 | #6 SPLIT WASHER ZINC | 4 |
| 6437 | 1N5237B 8V2 0W5 ZENER 5% T&R | 3 | 5898 | 8200U 50V 20% CAPACITOR 25X50MM ELS | 4 | 2030 | 1/8W 681R 1%FLAME PROOF T&R RES | 16 | 3524 | NYLON SHWASHER ID385 OD750 T060 | 1 |
| 6461 | 1N5240BRL 10V0 0W5 ZENER 5% T&R | 2 | 5903 | 12000U 35V 20%CAP RAD 25X45MM ELS | 2 | 4923 | 1/4W 680R 5% 2"U T&R RES | 4 | 3577 | FIBER WASHER 625OD .38IOD .03 | 4 |
| 6450 | 1N5242B 12V0 0W5 ZENER 5% T&R | 4 | 4581 | ROT GRY 18MM 4BIT ENCODER P23 | 2 | 4924 | 1/4W 750R 5% 2"U T&R RES | 6 | 3440 | 4PDT MINI VERT ALT SWITCH | 1 |
| 6486 | 1N5244B 14V0 0W5 ZENER 5% T&R | 4 | 4431 | _10K 5C R/A 12MM STEREO P34 | 2 | 2031 | 1/8W 820R 5%FLAME PROOF T&R RES | 4 | 3522 | DPDT MINI PC VERT SMD ALT | 2 |
| 6824 | 1N5246B 16V0 0W5 ZENER 5% T&R | 20 | 4432 | _10K B LIN 9MM P32 | 6 | 4925 | 1/4W 820R 5% 2"U T&R RES | 2 | 3587 | DPDT ROKR SW QUIK 250AC/PWR ON-OFF | 1 |
| 6465 | 1N5250B 20V0 0W5 ZENER 5% T&R | 1 | 4434 | _10K B LIN 9MM DETENT P32 | 20 | 2033 | 1/8W 1K 2%FLAME PROOF T&R RES | 4 | CH1258 | M1610 POWER TRFMR TRD | 1 |
| 6475 | 1N5262B 51V0 0W5 ZENER 5% T&R | 1 | 4438 | _10K B LIN 12MM STEREO DETENTP34 | 4 | 4981 | 1/4W 1K 5%MINI T&R RES | 17 | | | |
| 6738 | MC7805CT TO220 P 5V0 REG V1 | 1 | 4426 | _20K 4B LIN 9MM P32 | 1 | 6110 | 1/4W 1K0 1%MINI MF T&R RES | 2 | | | |
| 6871 | MC7915CT TO220 P 15V0 REG V2 | 1 | 4447 | _20K 15A AUD 12MM STEREO P34 | 1 | 4585 | 1/4W 1K2 5%MINI T&R RES | 21 | | | |
| 6872 | MC7815CT TO220 P 15V0 REG V1 | 1 | 4433 | _50K B LIN 9MM P32 | 15 | 4988 | 1/4W 1K5 5%MINI T&R RES | 25 | | | |
| 5101 | BC550C TO92 NPN TRAN T&R TB | 17 | 4436 | _50K B LIN 9MM DETENT P32 | 10 | 6105 | 1/4W 1K8 5%MINI T&R RES | 4 | | | |
| 5102 | BC560C TO92 PNP TRANSISTOR T&R TB | 38 | 4437 | _50K B LIN 12MM STEREO P34 | 2 | 6113 | 1/4W 2K 5%MINI T&R RES | 4 | | | |
| 5103 | MPSA06 TO92 NPN TRANSISTOR T&R TA | 4 | 4439 | _50K B LIN 12MM STEREO DETENTP34 | 2 | 6104 | 1/4W 2K2 5%MINI T&R RES | 6 | | | |
| 5104 | MPSA56 TO92 PNP TRAN T&R TA | 2 | 4441 | _50K 4B LIN 12MM STEREO P34 | 2 | 6114 | 1/4W 2K49 1%MINI MF T&R RES | 3 | | | |
| 5107 | 2N5551 TO92 NPN TRNSISTR DARL T&RTA | 4 | 4443 | 100K 5C R/A 9MM P32 | 8 | 6124 | 1/4W 3K 5%MINI T&R RES | 4 | | | |
| 5108 | 2N5401 TO92 PNP TRNSISTR DARL T&RTA | 4 | 3998 | _20K 1B LIN 20MM DETENT S04 | 18 | 5028 | 1/4W 3K74 1% T&R RES | 4 | | | |
| 5105 | MPSA13 TO92 NPN TRNSISTR DARL T&RTA | 5 | 4520 | _10K TRIM POT | 2 | 4850 | 1/4W 3K9 5% T&R RES | 2 | | | |
| 5106 | MPSA63 TO92 PNP TRNSISTR DARL T&RTA | 2 | 3606 | 12.0 AMP CIRCUIT BREAKER | 1 | 4774 | 1/4W 4K12 1% T&R RES | 4 | | | |
| 6774 | BD139 TO126 NPN TRAN TG | 1 | 3820 | _4UH COIL 14AWG ZOBEL HORIZONTAL | 2 | 4943 | 1/4W 4K7 5% 2"U T&R RES | 2 | | | |
| 6808 | MJE15032 TO220 NPN TRAN TE | 2 | 3489 | CLIP 250X032 18-22AWG DISCOINSL | 1 | 4982 | 1/4W 4K7 5%MINI T&R RES | 49 | | | |
| 6809 | MJE15033 TO220 PNP TRAN TE | 2 | 3490 | CLIP 250X032 14-16AWG DISCOINSL | 11 | 6128 | 1/4W 4K99 1%MINI MF T&R RES | 42 | | | |
| 6873 | MJE340 TO126 NPN TRANSISTOR TG | 2 | 3601 | RING TERMINAL 16AWG WIRE & #8 SCREW | 1 | 6141 | 1/4W 5K6 5%MINI T&R RES | 4 | | | |
| 6874 | MJE350 TO126 PNP TRANSISTOR TG | 2 | 3682 | 250 MALE PCB TAB REEL | 13 | 6121 | 1/4W 6K98 1%MINI MF T&R RES | 4 | | | |
| 6916 | TIP107 TO220 PNP TRAN DARL TE | 1 | 3528 | 1/4" JCK PCB MT HORZ GOLD TR | 2 | 4926 | 1/4W 7K5 5% 2"U T&R RES | 18 | | | |
| 6953 | IRF4905 TO220 PCH MFET | 8 | 3921 | 1/4" JCK PCB MT VERT STER RT SWT | 16 | 4990 | 1/4W 8K2 5%MINI T&R RES | 2 | | | |
| 6954 | IRF3205 NCH MFET | 8 | 3924 | 1/4" JCK PCB MT VERT 2XTIP HICURNT | 4 | 4983 | 1/4W 10K 5%MINI T&R RES | 109 | | | |
| 6909 | MJ21196 TO24 NPN TRANSISTOR TH | 4 | 3466 | RCA DUAL PCB MT VERT GOLD 24MM | 2 | 5031 | 1.0W 10K0 5% T&R | 16 | | | |
| 6910 | MJ21195 TO3 PNP TRANSISTOR TH | 4 | 3628 | SPKON 4C PCB MT VERT 250TAB GRY #4 | 2 | 6116 | 1/4W 10K0 1%MINI MF T&R RES | 80 | | | |
| 6804 | MC33079P IC QUAD OP AMP | 4 | 4010 | XLR FEML PCB MT VERT 24MM AA-SERIES | 8 | 4630 | 1/2W 15K 5% T&R RES | 6 | | | |
| 6882 | TL072CP IC FET DUAL OP AMP | 15 | 3451 | EYELET SMALL .089 OD PLATED | 63 | 4979 | 1/4W 15K 5%MINI T&R RES | 30 | | | |
| 6889 | TL074CN IC QUAD O/A T.I ONLY | 11 | 3856 | FAN 80MM X 80MM 39CFM 12VDC 200MA | 2 | 4954 | 1/4W 18K 5% 2"U T&R RES | 12 | | | |
| 6745 | LM13600N IC XCONDUCTANCE AMP | 4 | 3894 | AAVID 5972-B H/5 W/TAB B.O. | 5 | 6125 | 1/4W 18K 5%MINI T&R RES | 2 | | | |
| 6443 | 74HC374N IC OCTAL DTYPE LATCH | 1 | 3501 | B52200F006 COMP WASH #4 SMALL | 3 | 6123 | 1/4W 20K0 1%MINI MF T&R RES | 5 | | | |
| 6962 | 74HC30 IC 8-INPUT NAND GATE | 1 | 3977 | QUAD XSISTOR TO220SPRING YELLOWZINC | 6 | 4777 | 1/4W 21K5 1% T&R RES | 2 | | | |
| 6992 | 1365-102 IC DIGITAL REVERB ASIC | 1 | 8889 | RUBBER GROMMET #2183-034-BLK | 1 | 6118 | 1/4W 22K 5%MINI T&R RES | 17 | | | |
| 6993 | 1250-101 IC SRAM 32KX8 | 1 | 3810 | 4" NYLON CABLE TIE | 10 | 6129 | 1/4W 27K 5%MINI T&R RES | 7 | | | |
| 7003 | 27C512 PROM IC YS M1610 16X16 PRG | 1 | 8397 | GREY STYLE 2 KNOB | 2 | 6122 | 1/4W 33K 5%MINI T&R RES | 15 | | | |
| 6981/2 | LEPROM 27C512 - BLANK | 1 | 8637 | ROUND PUSH BUTTON 1/4" BLK 24MM | 1 | 4868 | 1/4W 36K 5% T&R RES | 4 | | | |
| 6487 | 10K 10% THERMISTOR NTC TO-92 | 2 | 9915 | RED SOFT GRAY RIB KNOB 0-DEG | 8 | 4927 | 1/4W 47K 5% 2"U T&R RES | 4 | | | |
| 5405 | 27P 200V 5%CAP T&R RAD CER.2"NPO | 2 | 9916 | GRY SOFT GRAY RIB KNOB 0-DEG | 28 | 6119 | 1/4W 47K 5%MINI T&R RES | 26 | | | |
| 5408 | 47P 100V 10%CAP T&R BEAD NPO | 33 | 9917 | GRN SOFT GRAY RIB KNOB 0-DEG | 9 | 4928 | 1/4W 56K 5% 2"U T&R RES | 14 | | | |
| 5199 | 100P 100V 2%CAP T&R RAD CER.2"NPO | 8 | 9918 | BLU SOFT GRAY RIB KNOB 0-DEG | 10 | 4848 | 1/4W 62K 5% T&R RES | 4 | | | |
| 5412 | 220P 100V 10%CAP T&R BEAD NPO | 14 | 9919 | YEL SOFT GRAY RIB KNOB 0-DEG | 8 | 6139 | 1/4W 62K 5%MINI T&R RES | 6 | | | |
| 5416 | 470P 50V 10%CAP T&R BEAD NPO | 6 | 9920 | WHT SOFT GRAY RIB KNOB 0-DEG | 9 | 4929 | 1/4W 82K 5% 2"U T&R RES | 14 | | | |
| 5422 | _1N 50V 10%CAP T&R BEAD NPO | 20 | 3426 | 8' 3/16 SJT AC LINE CORD REMOVE-CSA | 1 | 4942 | 1/4W 100K 5% 2"U T&R RES | 1 | | | |
| 5273 | _1N5 200V 5%CAP T&R RAD CER.2"NPO | 16 | 3638 | 12 CIR CABLE HOLDER .098 | 1 | 6120 | 1/4W 100K 5%MINI T&R RES | 1 | | | |
| 5208 | _2N2 400V 5%CAP T&R RAD .2"FLM | 5 | 8701 | 4-40 KEPS NUT ZINC | 3 | 4991 | 1/4W 133K 1%MINI T&R RES | 16 | | | |
| 5274 | _2N2 200V 5%CAP T&R RAD CER.2"NPO | 6 | 8760 | 6-32 KEPS NUT TIN PLATED | 16 | 4796 | 1/4W 180K 5%MINI T&R RES | 4 | | | |
| 5275 | _3N3 100V 5%CAP T&R RAD .2"FLM | 2 | 8800 | 6-32 KEPS NUT ZINC | 11 | 6126 | 1/4W 220K 5%MINI T&R RES | 12 | | | |
| 5276 | _3N3 200V 5%CAP T&R RAD CER.2"NPO | 4 | 8841 | 10-32 KEPS NUT ZINC | 6 | 6127 | 1/4W 470K 5%MINI T&R RES | 5 | | | |
| 5209 | _4N7 250V 5%CAP T&R RAD .2"FLM | 4 | 8797 | 5/16-18 KEPS NUT JS500 | 1 | 4948 | 1/4W 1M 5% 2"U T&R RES | 2 | | | |
| 6451 | _4N7 250V 20%CAP BLK 'Y' 10MM AC | 1 | 3796 | ELASTOMER PAD TSIL 1.0X0.8 | 6 | 4951 | 1/4W 4M7 5% 2"U T&R RES | 7 | | | |
| 5204 | 10N 100V 10%CAP T&R RAD .2"FLM | 5 | 8581 | CUSTOM PBL TRANSISTOR SPACER | 6 | 6132 | 1/4W 8M2 5%MINI T&R RES | 6 | | | |
| 5205 | 15N 100V 10%CAP T&R RAD .2"FLM | 4 | 3580 | 12 CIR WAFER WLCK VT 0.1" | 1 | 4809 | 1/4W 10M 5% T&R RES | 2 | | | |
| 5207 | 18N 100V 5%CAP T&R RAD .2"FLM | 6 | 3818 | EMI SUPPRESSION FERRITE BEAD T&R | 2 | 4751 | 1/4W 22M 5% T&R RES | 10 | | | |
| 5210 | 22N 100V 10%CAP T&R RAD .2"FLM | 27 | 4597 | 22AWG STRAN TC WIR JMP | 15 | 3519 | 28" 12C-26AWG RIB 1 WLCK HDR 098 | 1 | | | |
| 5840 | 22N 400V 10%CAP BLK RAD POLY FLM | 2 | 4599 | 22AWG SOLID SC WIR JMP | 239 | 3722 | RELAY 1A 30AMP DC24 036MA PC-C | 2 | | | |
| 6435 | 22N 275V 20%CAP BLK 'X2' 15MM AC | 1 | 4745 | 5.0W 0R1 5% BLK RES | 8 | 8865 | 4-40 X 5/16 PAN PH MS JS500 | 33 | | | |
| 5222 | 33N 100V 10%CAP T&R RAD .2"FLM | 10 | 2006 | 1.0W 1R 5%FLAME PROOF T&R RES | 4 | 8729 | #4 X 3/8 FLAT QUAD TYPE A JS500 BLK | 4 | | | |
| 5224 | 47N 100V 10%CAP T&R RAD .2"FLM | 6 | 4911 | 1/4W 2R2 5% T&R RES | 4 | 8842 | #4 X 5/16 PAN QUAD TYPE A JS500 BLK | 18 | | | |
| 5226 | 68N 100V 5%CAP T&R RAD .2"FLM | 2 | 4748 | 2.0W 3R9 5% T&R | 2 | 8831 | 6-32 X 1/4 PAN PH TAPTITE ZN | 1 | | | |
| 5212 | 100N 63V 5%CAP T&R RAD .2"FLM | 35 | 2008 | 1.0W 10R 5%FLAME PROOF T&R RES | 4 | 8832 | 6-32 X 1/4 PAN PH TAPTITE JS500 | 28 | | | |
| 5228 | 100N 100V 5%CAP T&R RAD .2"FLM | 1 | 4605 | 1/8W 10R 5% T&R RES | 4 | 8801 | 6-32 X 3/8 PAN PH TAPTITE JS500 | | | | |



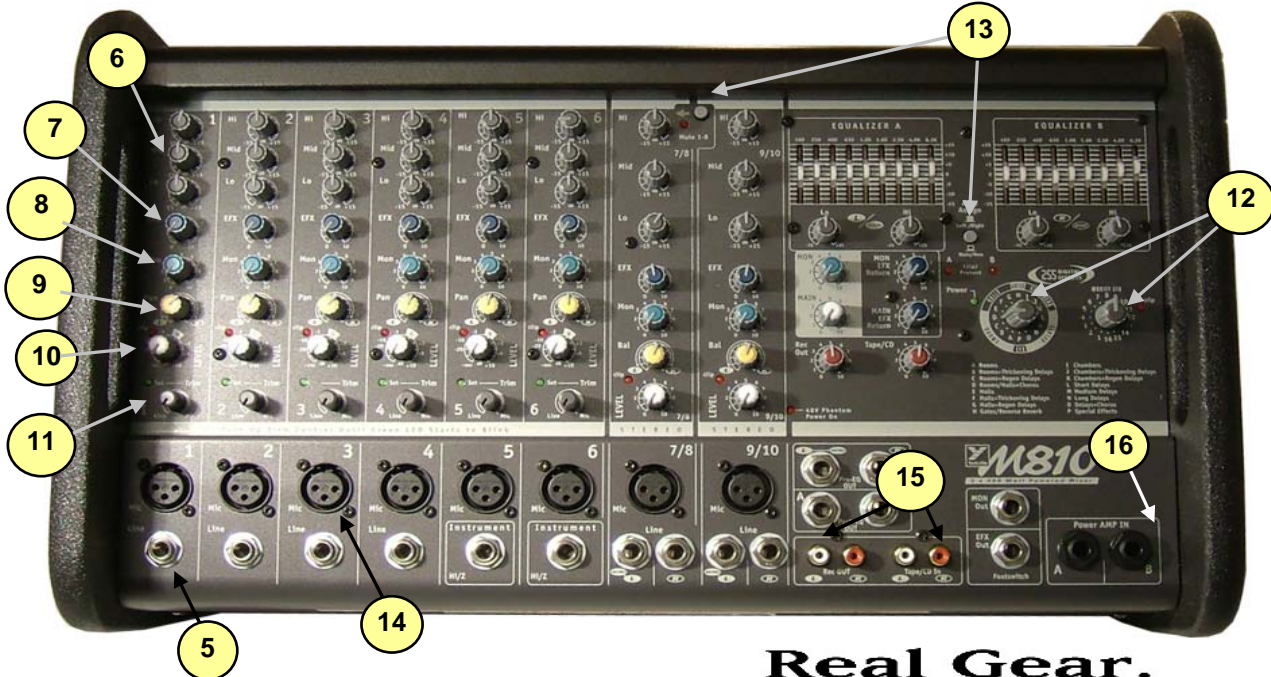
m810/m1610 Powered Wedge Mixer

| # | Part# | Description |
|--------------------|----------------|---|
| Labeled Components | | |
| 1 | M810WS/M1610WS | PAIR OF SIDE GABLES BLACK FOR M810/M1610 |
| 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 |



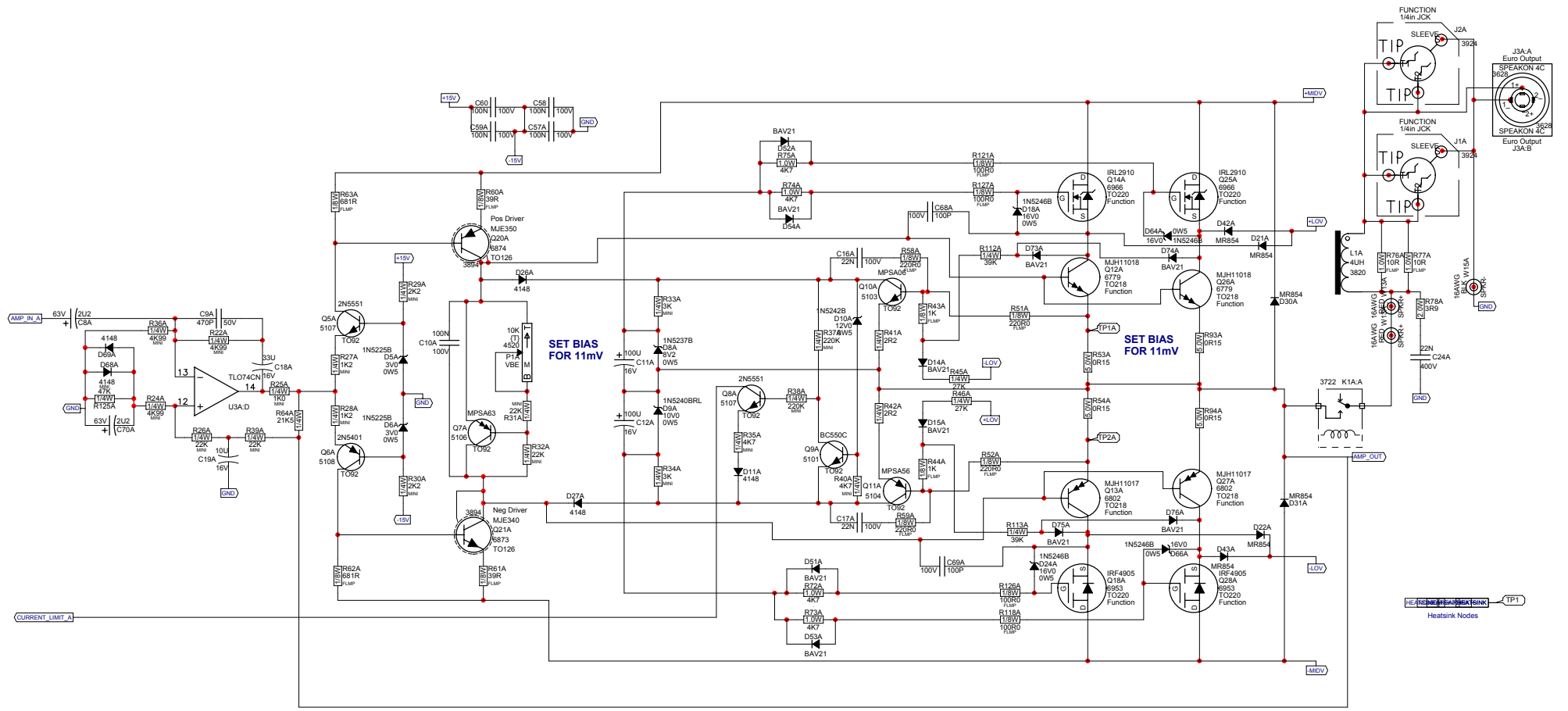
Series 2 EFX section

EURO PWR CORD



* gables only available when product is in production

**Real Gear.
Real People.**



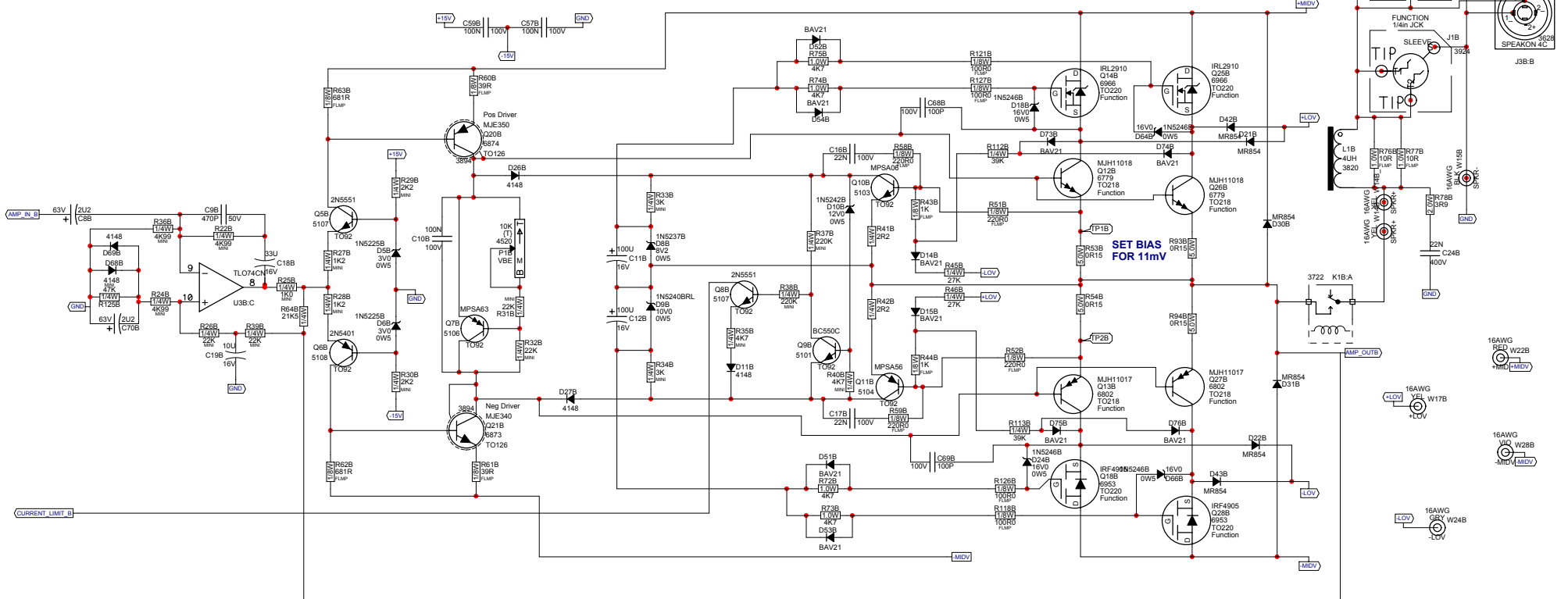
SET BIAS FOR 11mV

SET BIAS FOR 11mV

Heatsink Nodes



| | | |
|----------------------------------|------------|-------------------|
| Product M810 Amp A | | |
| Channel A | PCB# M1194 | Sheet 2 of 5 |
| Date: Wed Jun 28, 2006 | Rev: 7V00 | YsType: (Company) |
| Filename: M1194-7V00sch.2002 | | |

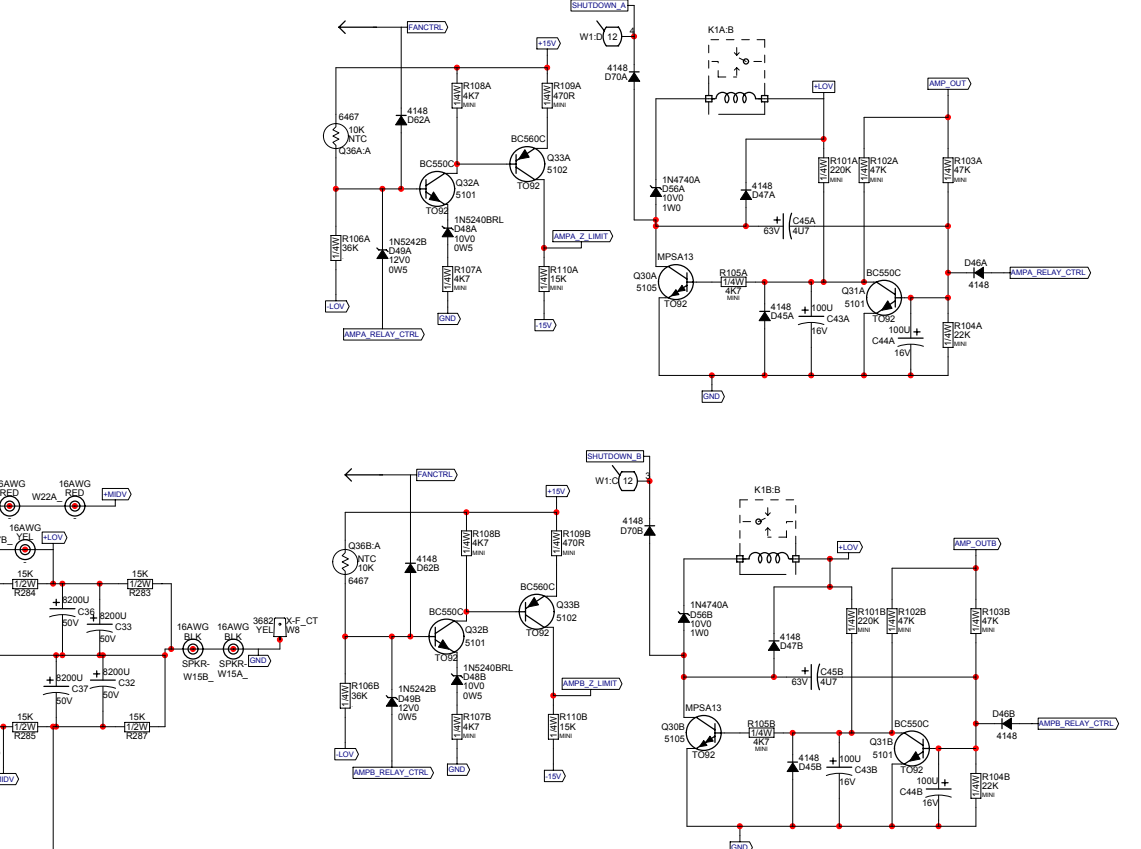
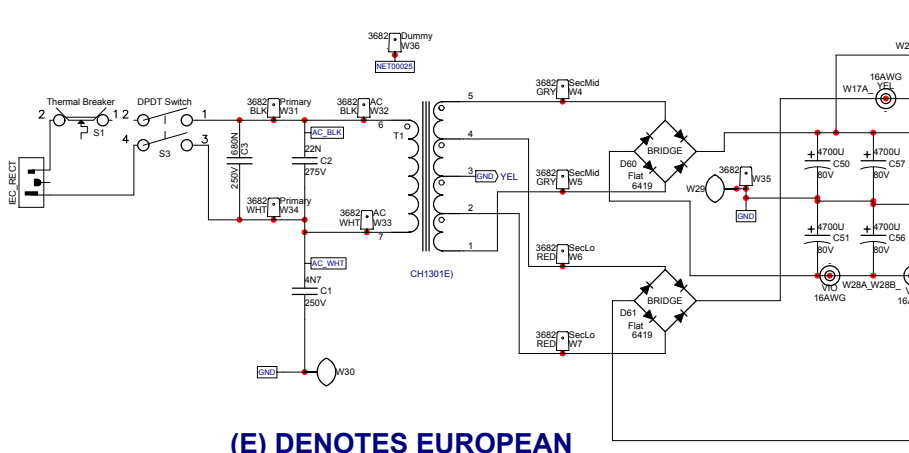
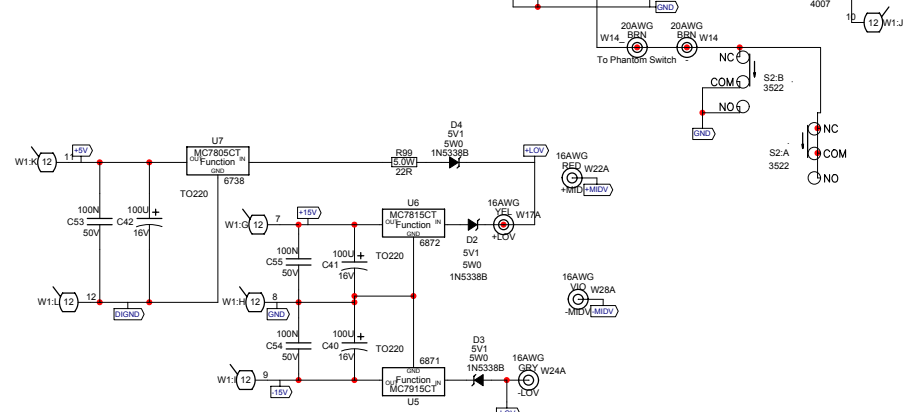
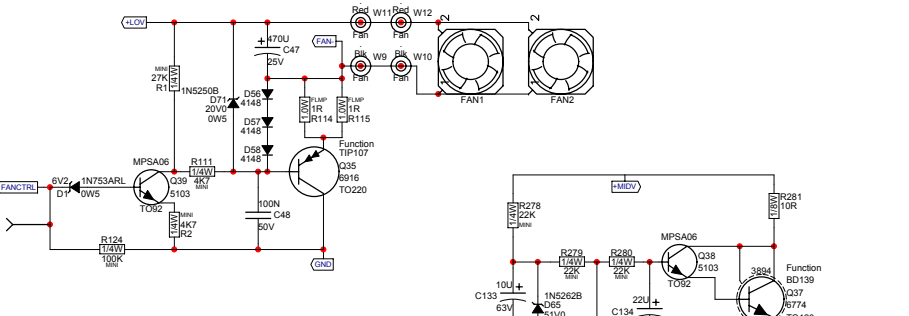


SET BIAS
FOR 11mV



| | | |
|-------------------------------------|-------------------|--------------------------|
| Product M810 Amp B | | |
| Channel B | PCB# M1194 | Sheet 3 of 5 |
| Date: Wed Jun 28, 2006 | Rev: 7V00 | YsType: (Company) |
| Filename: M1194-7V00sch.2002 | | |

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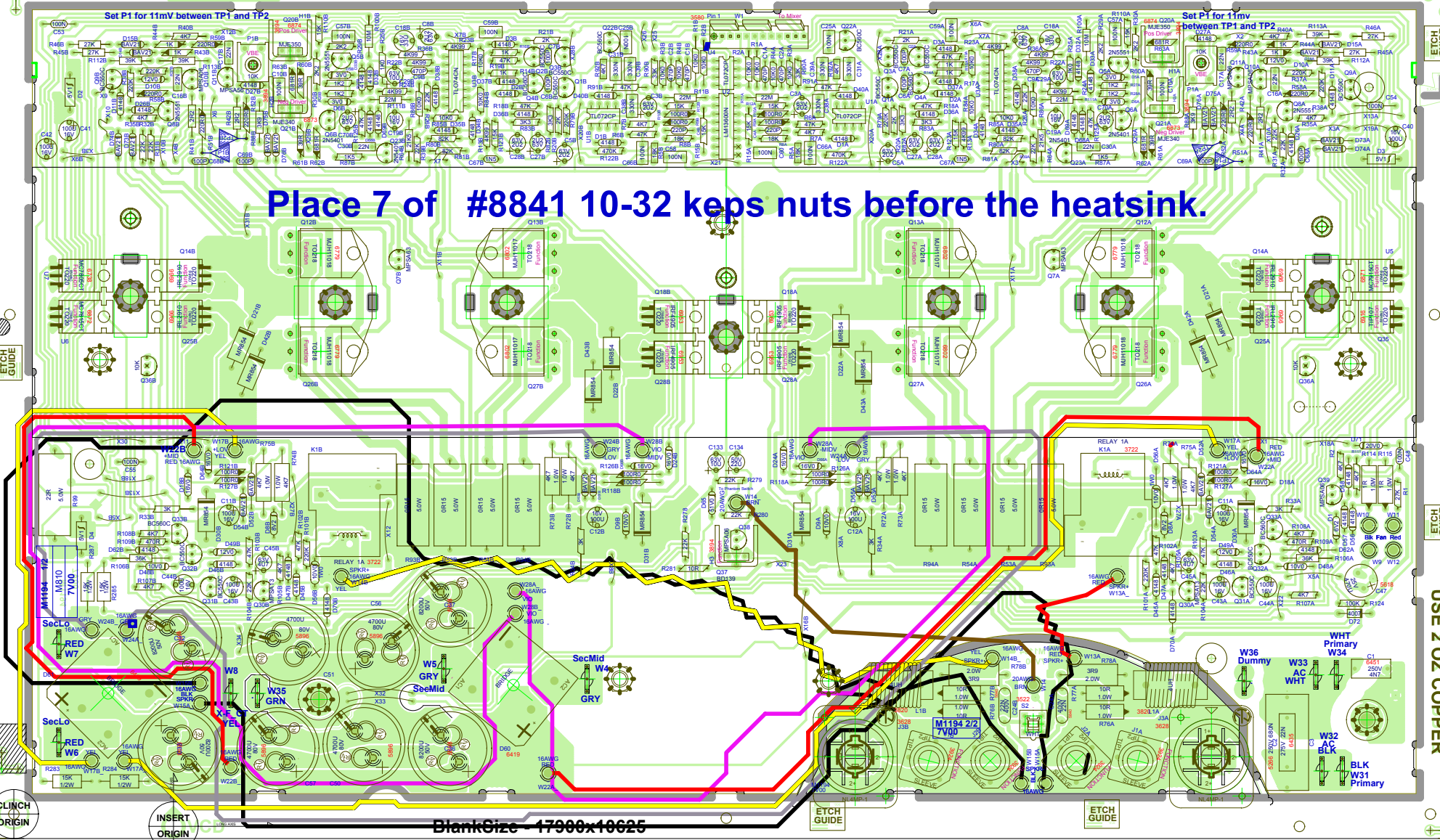


(E) DENOTES EUROPEAN



| | | |
|------------------------------|------------|-------------------|
| Product M810 | | |
| Power Supply | PCB# M1194 | Sheet 4 of 5 |
| Date: Wed Jun 28, 2006 | Rev: 7V00 | YsType: (Company) |
| Filename: M1194-7V00sch.2002 | | |

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



ETCH GUIDE

ETCH GUIDE

CLINCH ORIGIN

INSERT ORIGIN

ETCH GUIDE

ETCH GUIDE

USE 2 OZ COPPER



SEE LAYOUT DIAGRAM



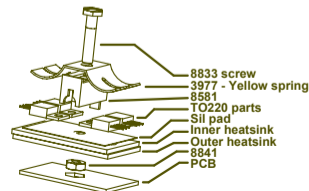
| M1194.PCB_DATABASE_HISTORY | | | | # | DATE | VER# | DESCRIPTION OF CHANGE |
|----------------------------|---------------|------|--|-----------------------|-------------|------|---|
| MODEL(S):- M810 | | | | 24 | . | . | 35V AND C36&C37#58964700/80V->#5898 8200U/50V |
| | | | | 25 | . | . | UPDATED 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

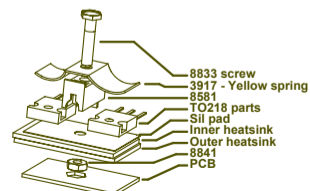
PRODUCTION NOTES

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

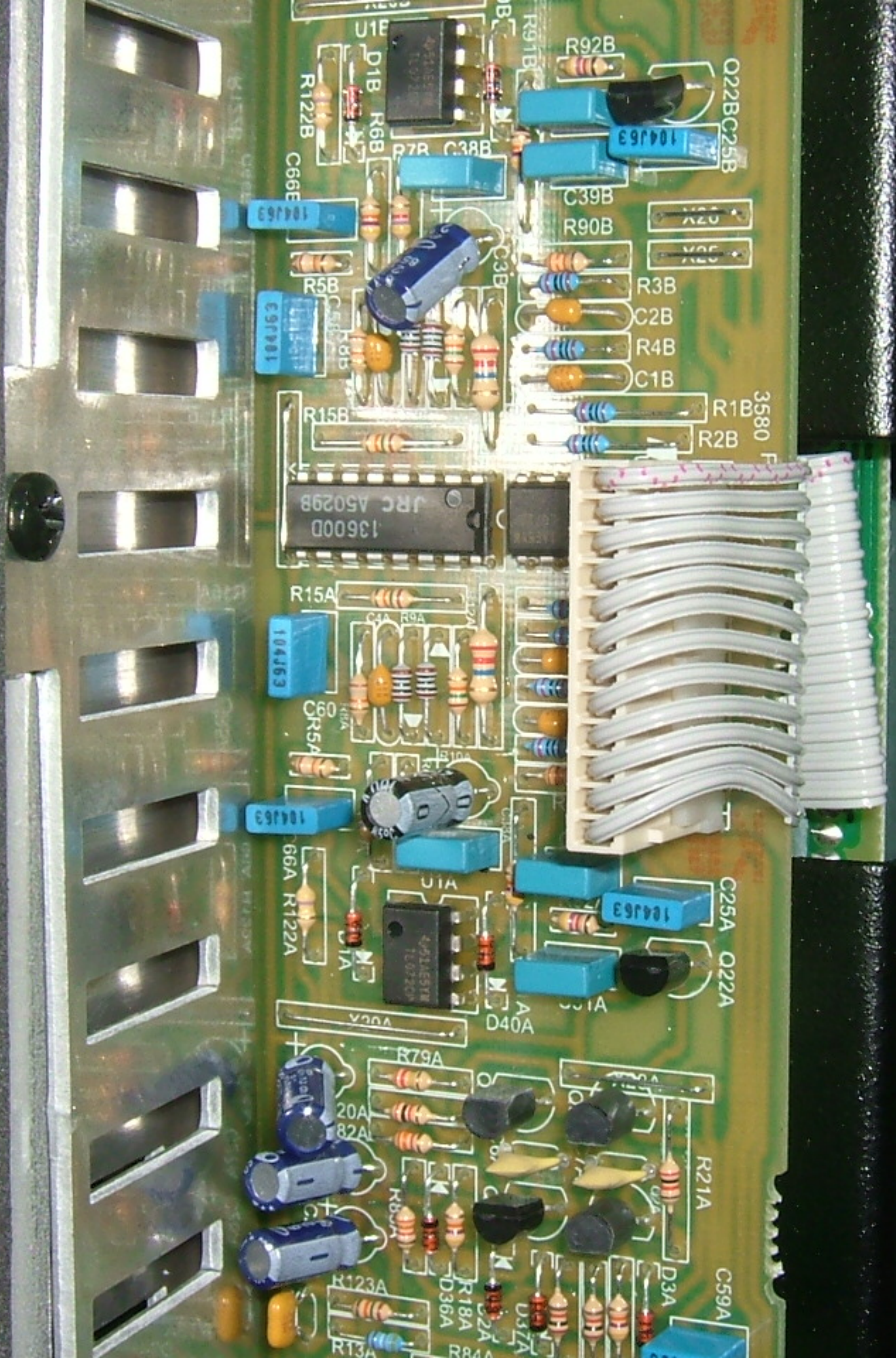
O DELAYS & CHORUS

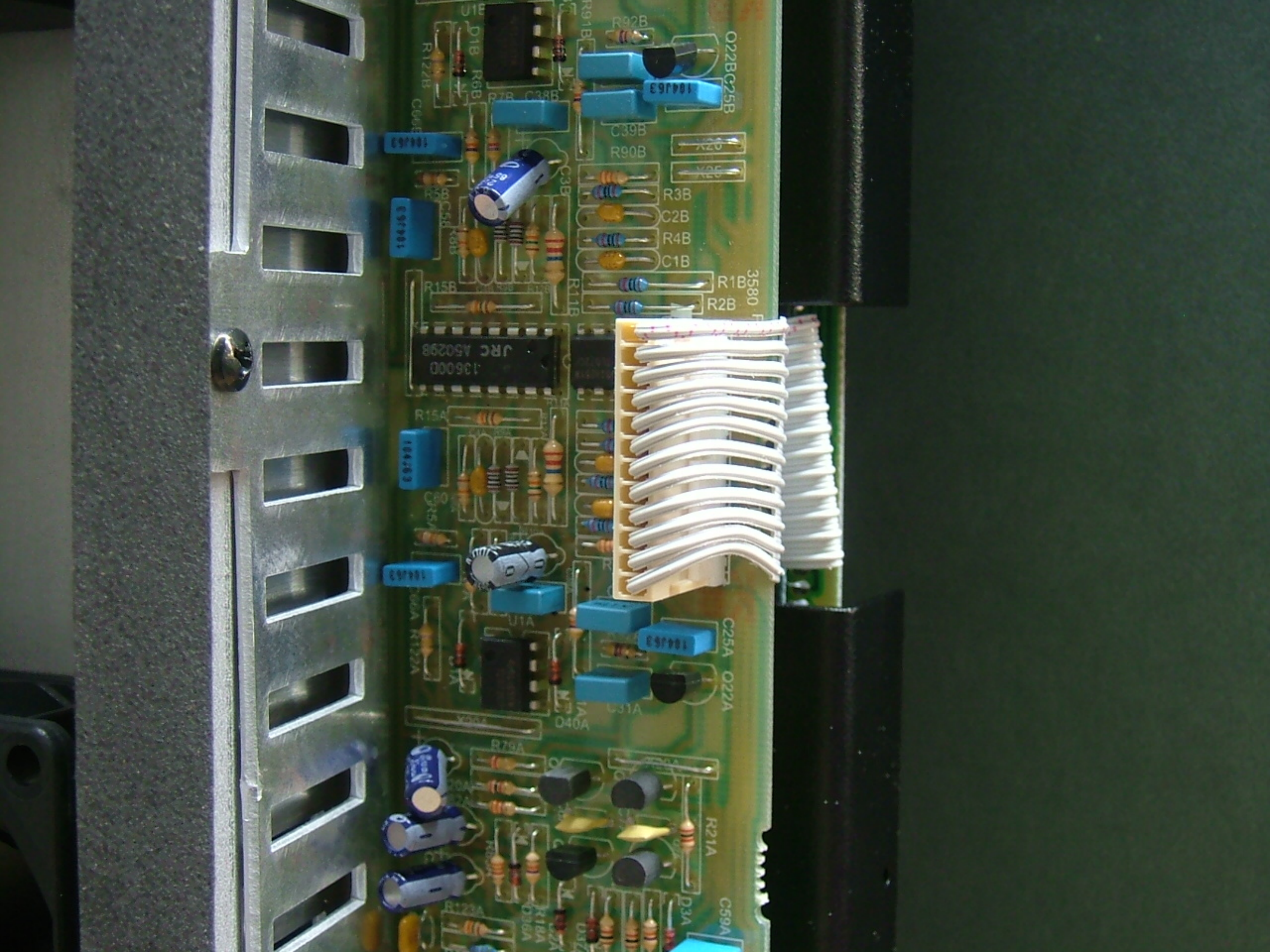
- 1 50ms doubling delay + slow chorus
- 2 80ms slap delay + medium chorus
- 3 100ms slap delay + medium chorus
- 4 150ms regen delay + slow chorus
- 5 175ms regen delay + medium chorus
- 6 200ms regen delay + slow chorus
- 7 225ms regen delay + medium chorus
- 8 250ms regen delay + slow chorus
- 9 275ms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





O22BG25B

E91P01

R92B

R91B

C39B

R90B

X20

X25

R3B

C2B

R4B

C1B

3580

R1B

R2B

JRC A50298
136000

R15A

104J53

C38A

D40A

E91P01

R122A

104J53

C25A O22A

E91P01

C31A

D40A

R79A

R21A

C59A

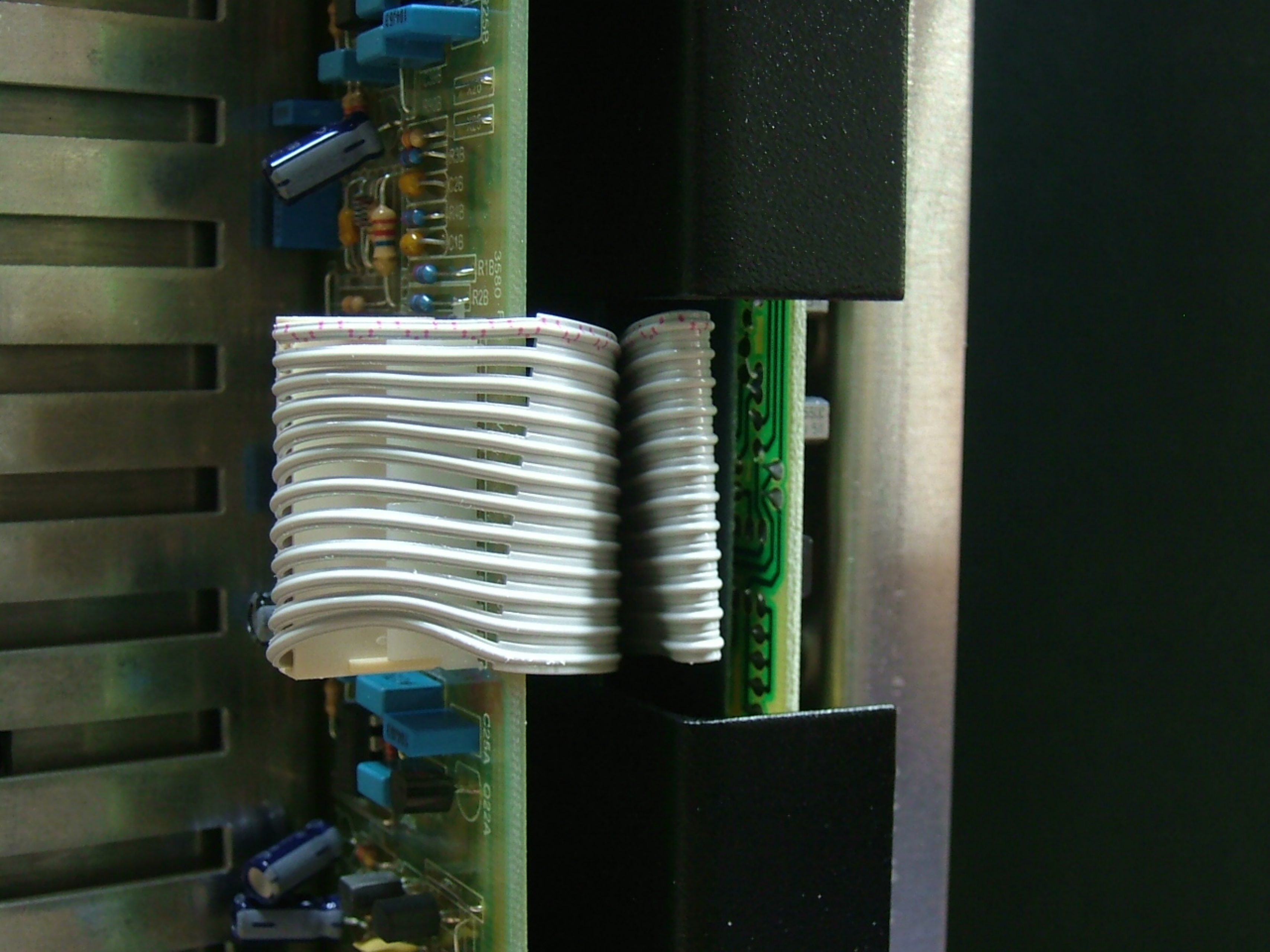
D3A

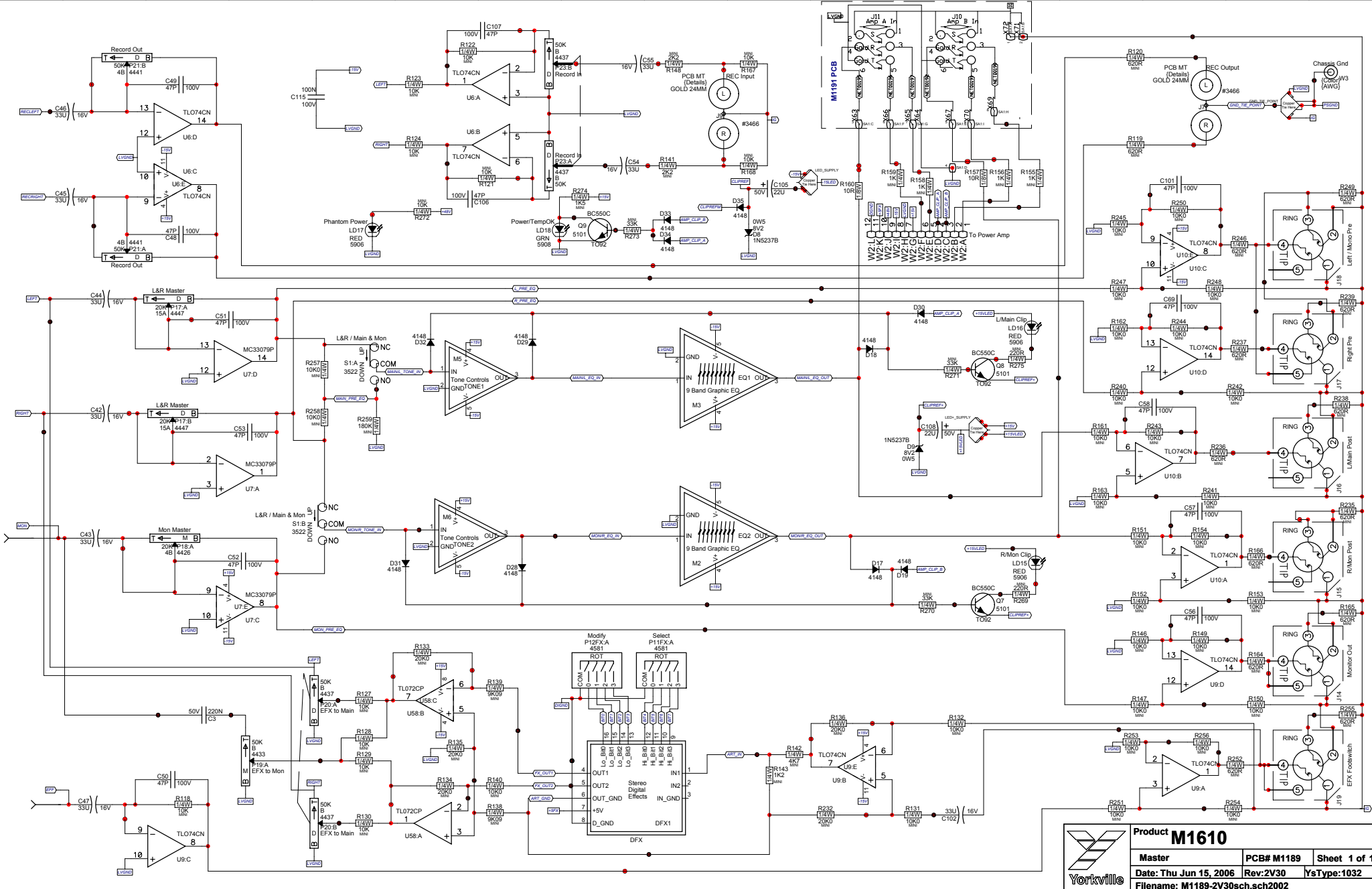
D37A

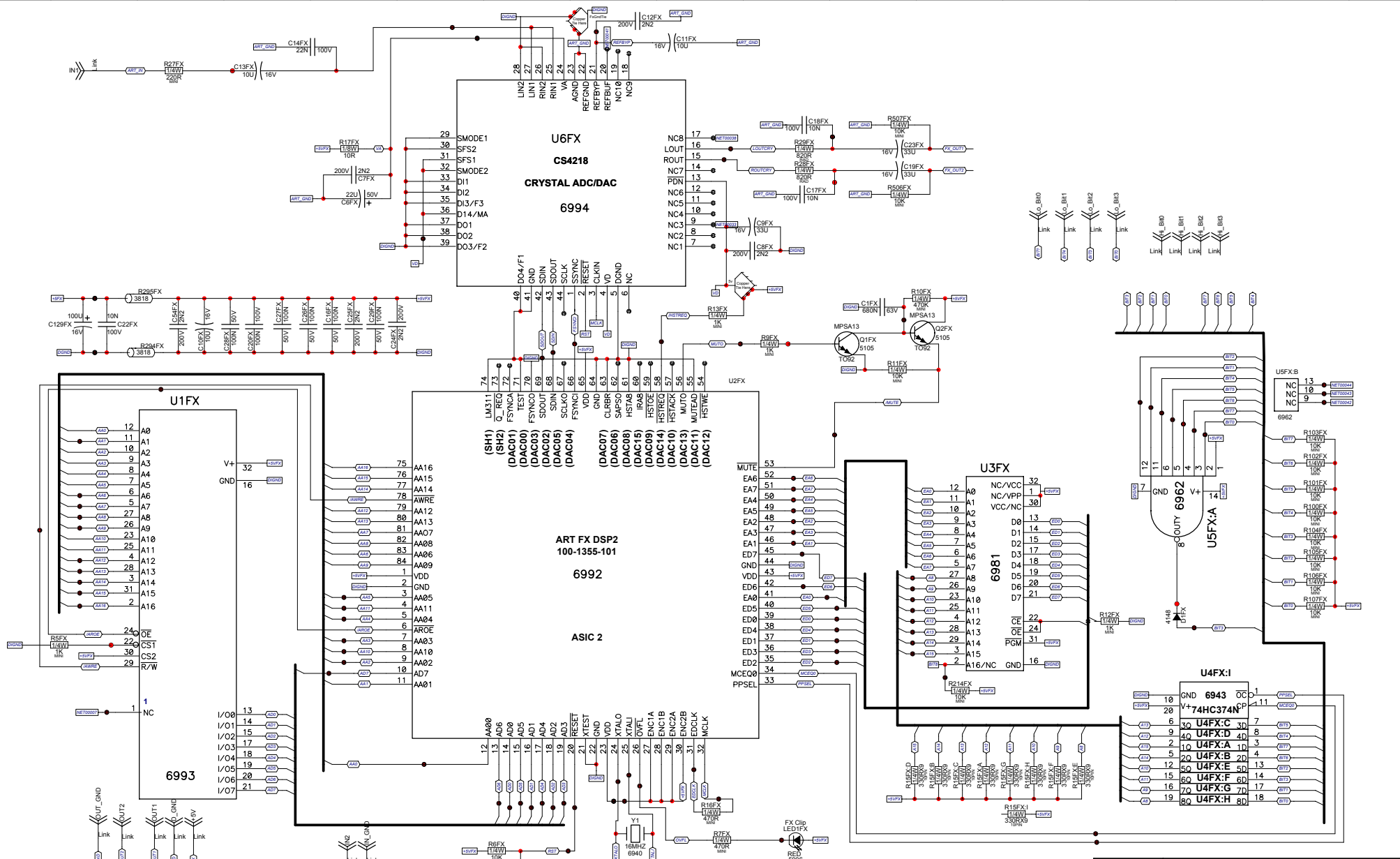
R18A

D36A

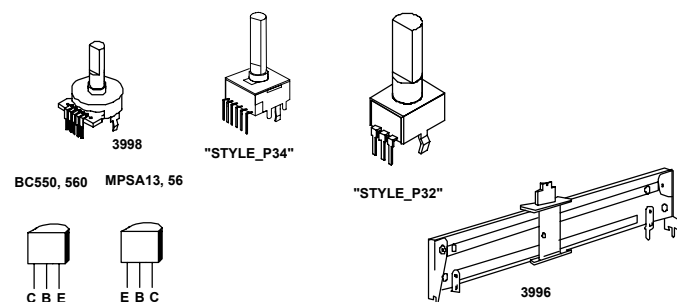
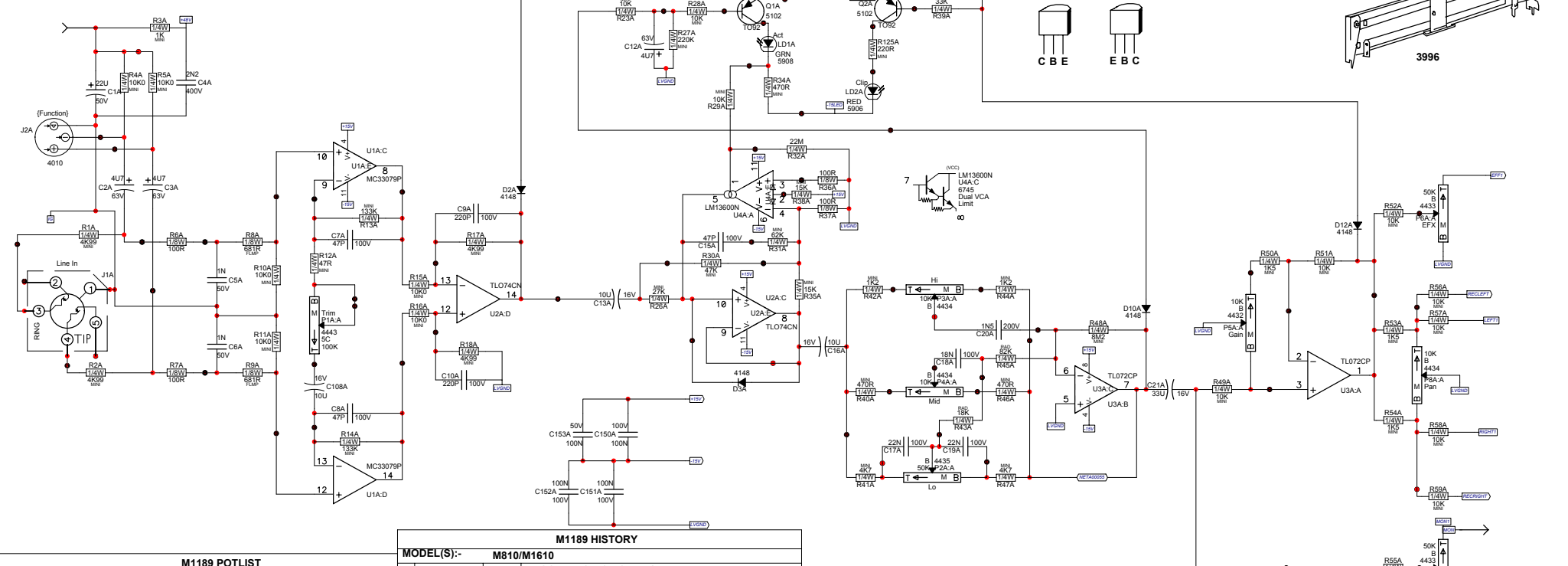
R123A







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



| M1189 POTLIST | | | |
|----------------------------|---------------------|-------|-----------|
| M1610 | | | |
| MODEL(S):- | FUNCTION | PART# | NOB (NEW) |
| P25-34 L&R | Graphic EQ | 3988 | N/A |
| P1A,1B,1C,1D,1E,1F | Trim | 4443 | 9915 P32 |
| P9G,9H | Mon Send | 4443 | 9917 P32 |
| P6A,5B,5C,5D,5E,5F | Level | 4432 | 9920 P32 |
| P15G,15H,6A,6B,6C,6D,6E,6F | FX Send | 4433 | 9918 P32 |
| P7A,7B,7C,7D,7E,7F | Mon Send | 4433 | 9917 P32 |
| P3A-F,4A-F | 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 |
| P17,20 | Master, FX2 Main | 4437 | 9920 P34 |
| P21,23 | Rec Out | 4437 | 9920 P34 |
| P13G,13H,14G,14H | Stereo Hi, Mid | 4438 | 9916 P34 |
| P12G,12H | Stereo Lo | 4439 | 9916 P34 |
| P11FX,12FX | FX Select, Modify | 4581 | 8398 P23 |
| P23 | Tape/CD | 4437 | 9915 P34 |
| P18,19 | Monitor, FX2 Mon | 4433 | 9917 P34 |
| R | P | K | P32 |
| R | F | K | N |
| R | F | K | N |
| R | F | K | N |
| R | F | K | N |
| R | F | K | N |
| R | F | K | N |
| R | F | K | N |
| 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 | . |
| | | 11 | . |
| | | 12 | . |
| | | 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#6816 |
| | | 5 | PC#7091 |
| | | 6 | PC#6989 |

Product **M1610**

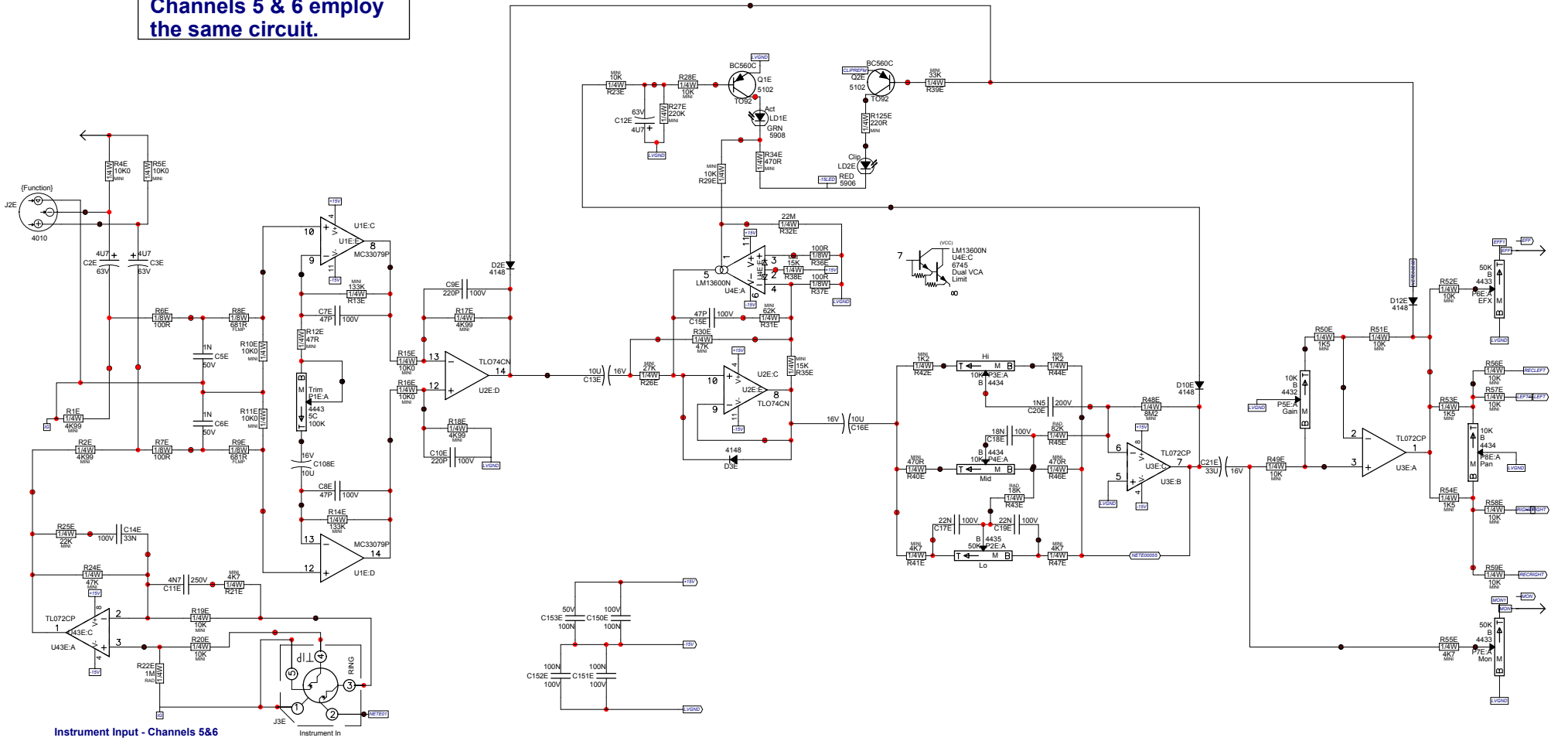
Mono Ch1 PCB# M1189 Sheet 3 of 16

Date: Thu Jun 15, 2006 Rev:2V30 YsType:1032

Filename: M1189-2V30sch.sch2002

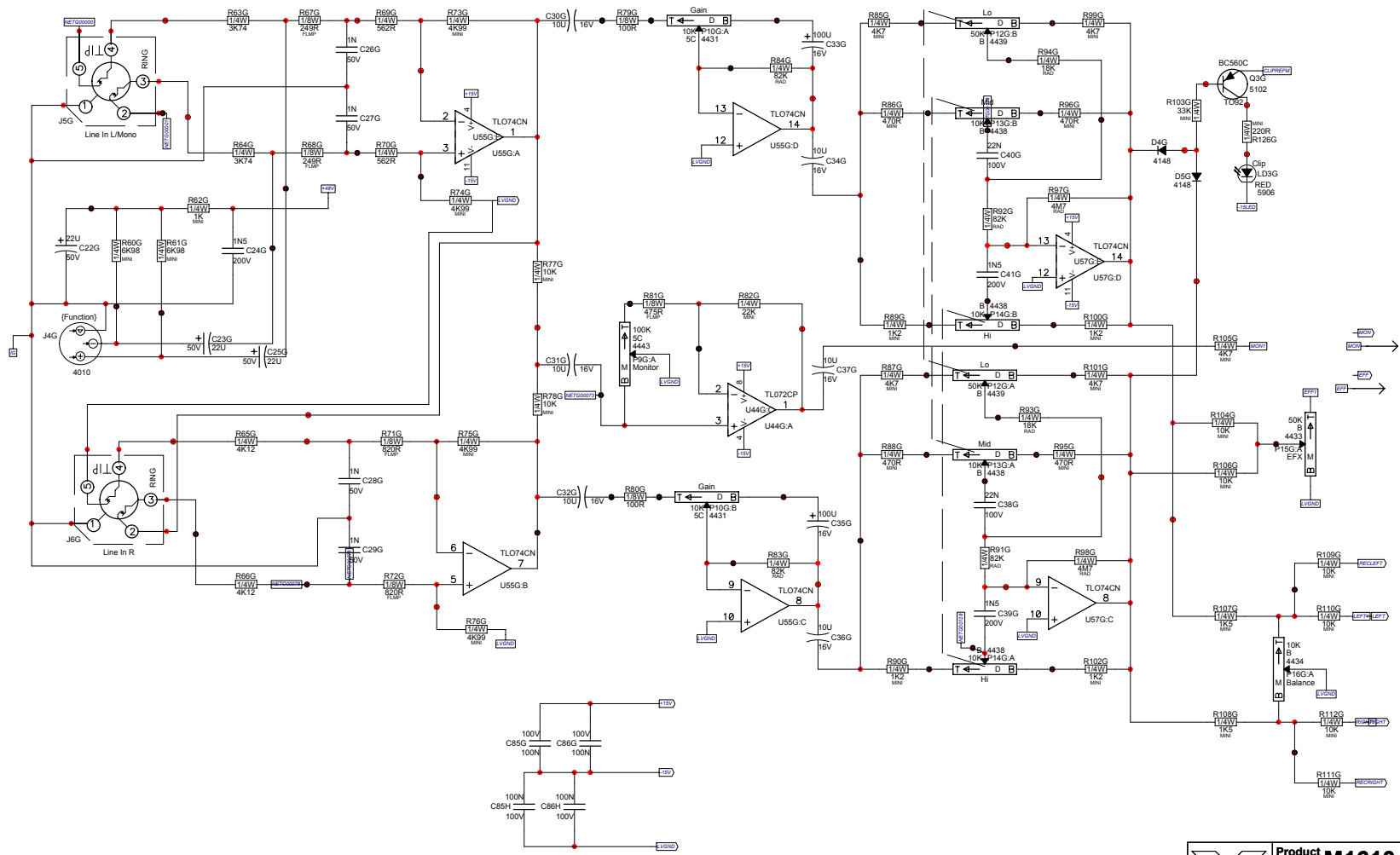
*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

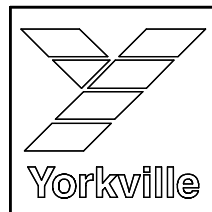
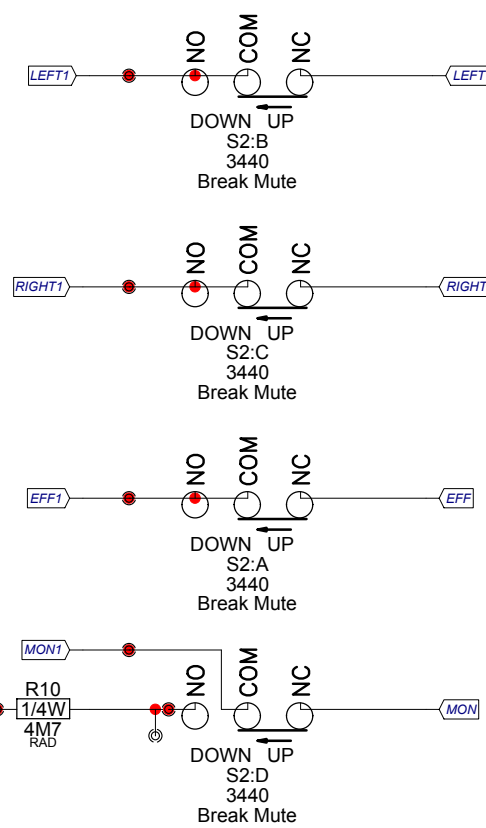
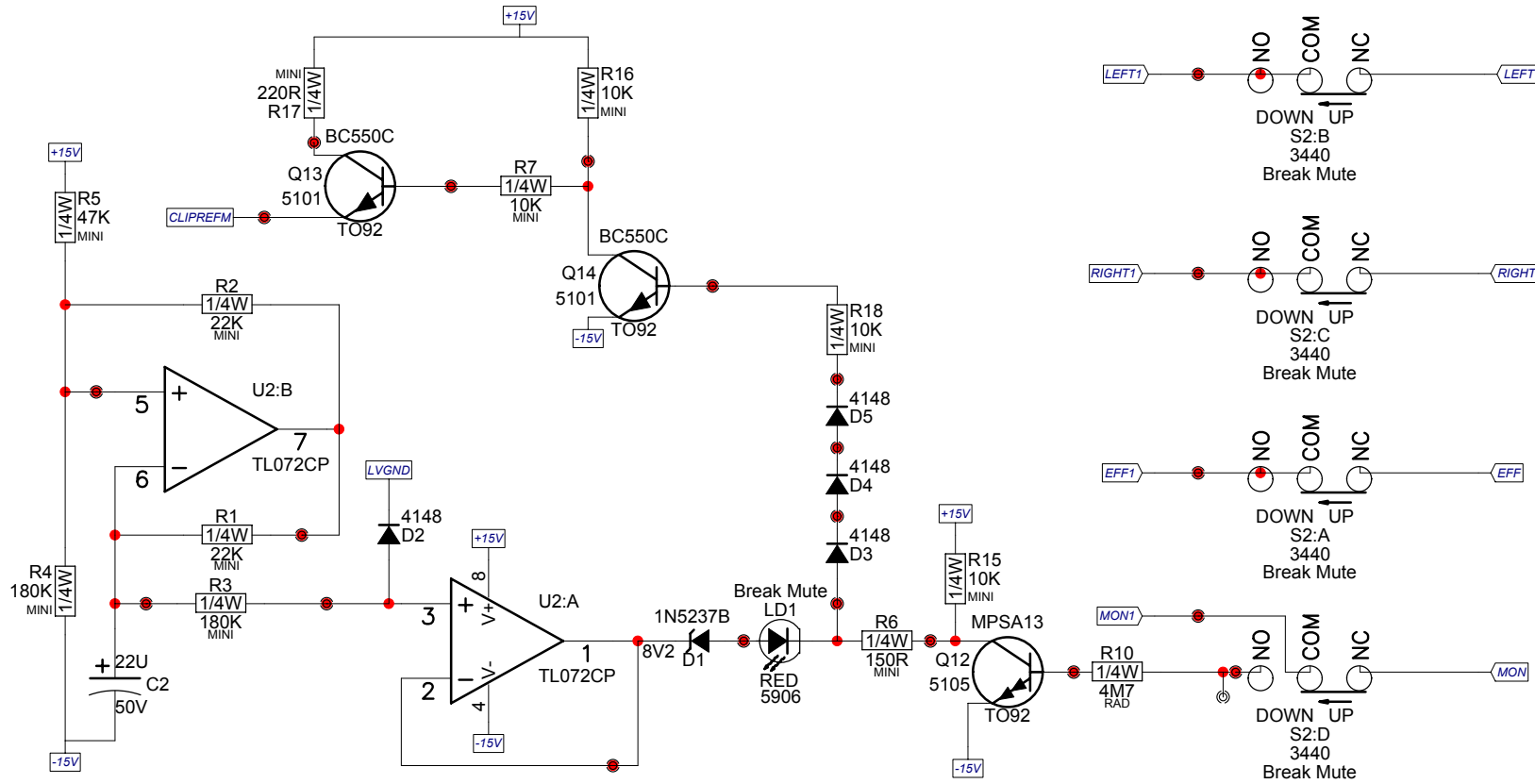
Only Channel 5 is shown.
Channels 5 & 6 employ
the same circuit.



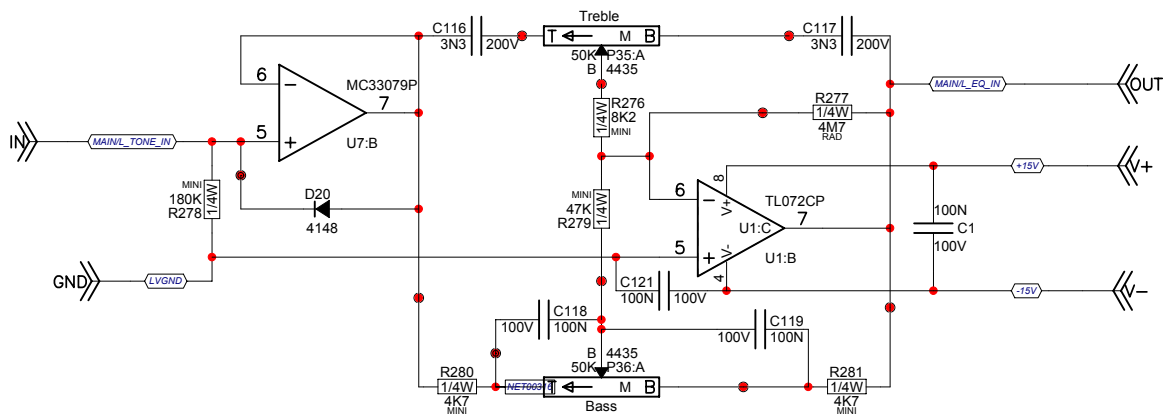
Instrument Input - Channels 5&6

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

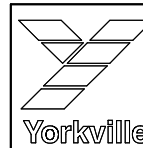
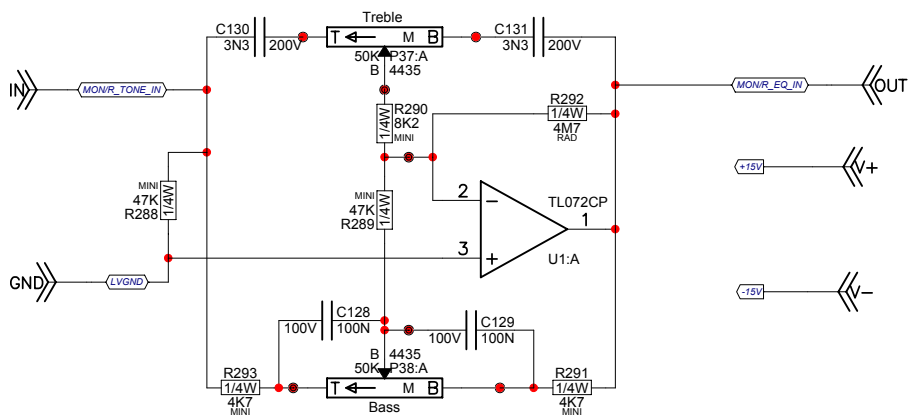




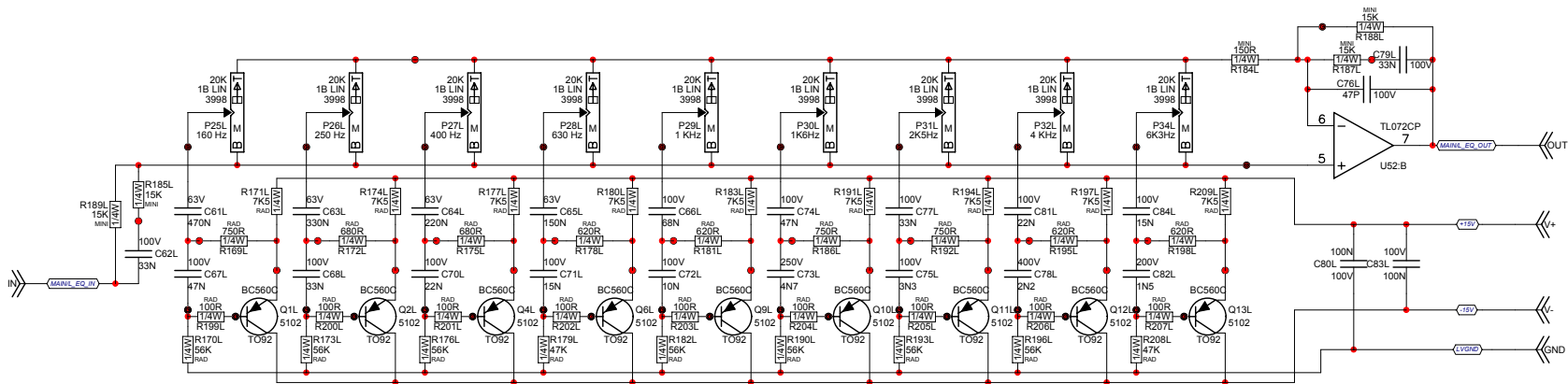
| | | |
|---------------------------------|------------|----------------|
| Product M1610 | | |
| BreakMute | PCB# M1189 | Sheet 11 of 16 |
| Date: Thu Jun 15, 2006 | Rev: 2V30 | YsType: 1032 |
| Filename: M1189-2V30sch.sch2002 | | |



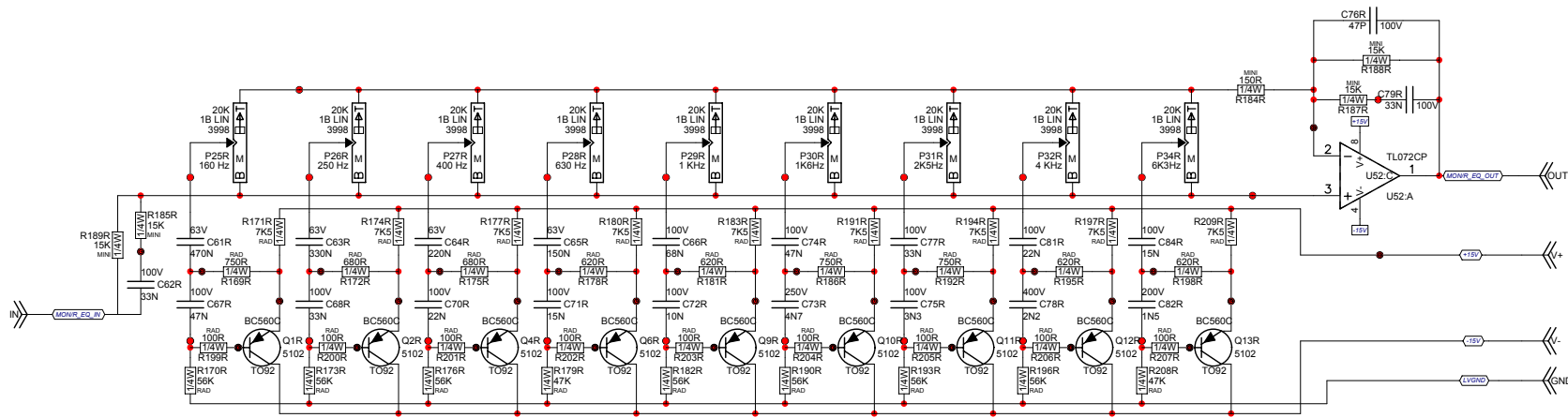
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|---------------------------------|------------|----------------|
| Product M1610 | | |
| TONE1 | PCB# M1189 | Sheet 13 of 16 |
| Date: Thu Jun 15, 2006 | Rev: 2V30 | YsType: 1032 |
| Filename: M1189-2V30sch.sch2002 | | |



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



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



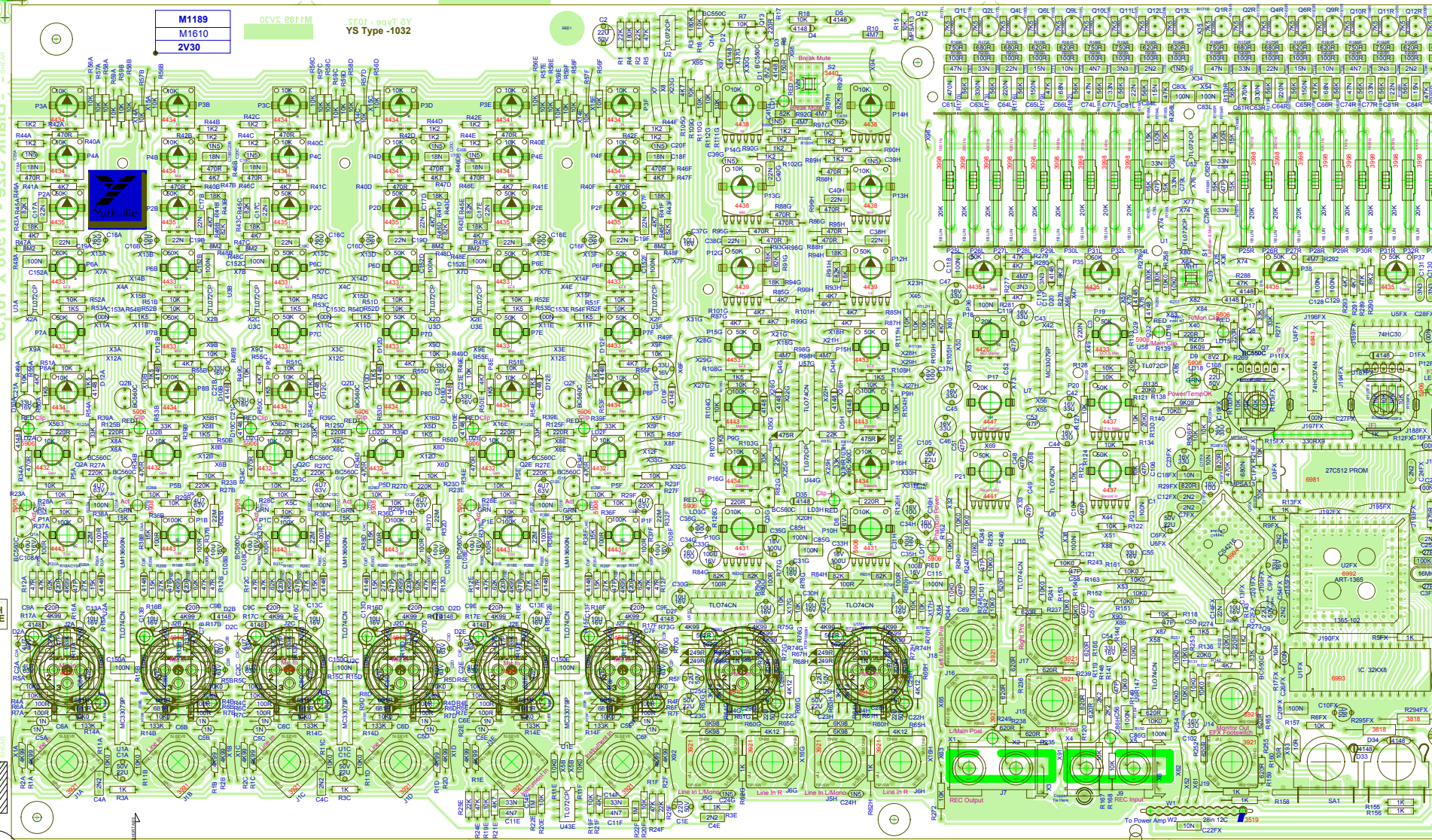
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|---------------------------------|------------|----------------|
| Product M1610 | | |
| EQ2 | PCB# M1189 | Sheet 16 of 16 |
| Date: Thu Jun 15, 2006 | Rev: 2V30 | YsType: 1032 |
| Filename: M1189-2V30sch.sch2002 | | |

| |
|-------|
| M1189 |
| M1610 |
| 2V30 |

0EV5 8B11M

SP01 - 09V1T 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



SEE LAYOUT DIAGRAM



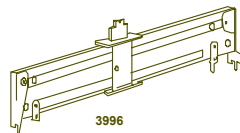
PRODUCTION NOTES

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 |

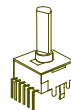
*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY



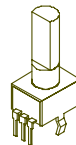
3996



"STYLE_P23"



"STYLE_P34"



"STYLE_P32"



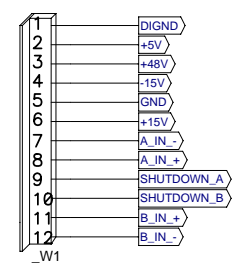
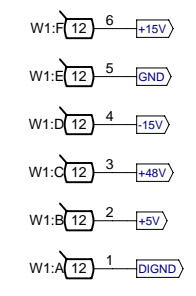
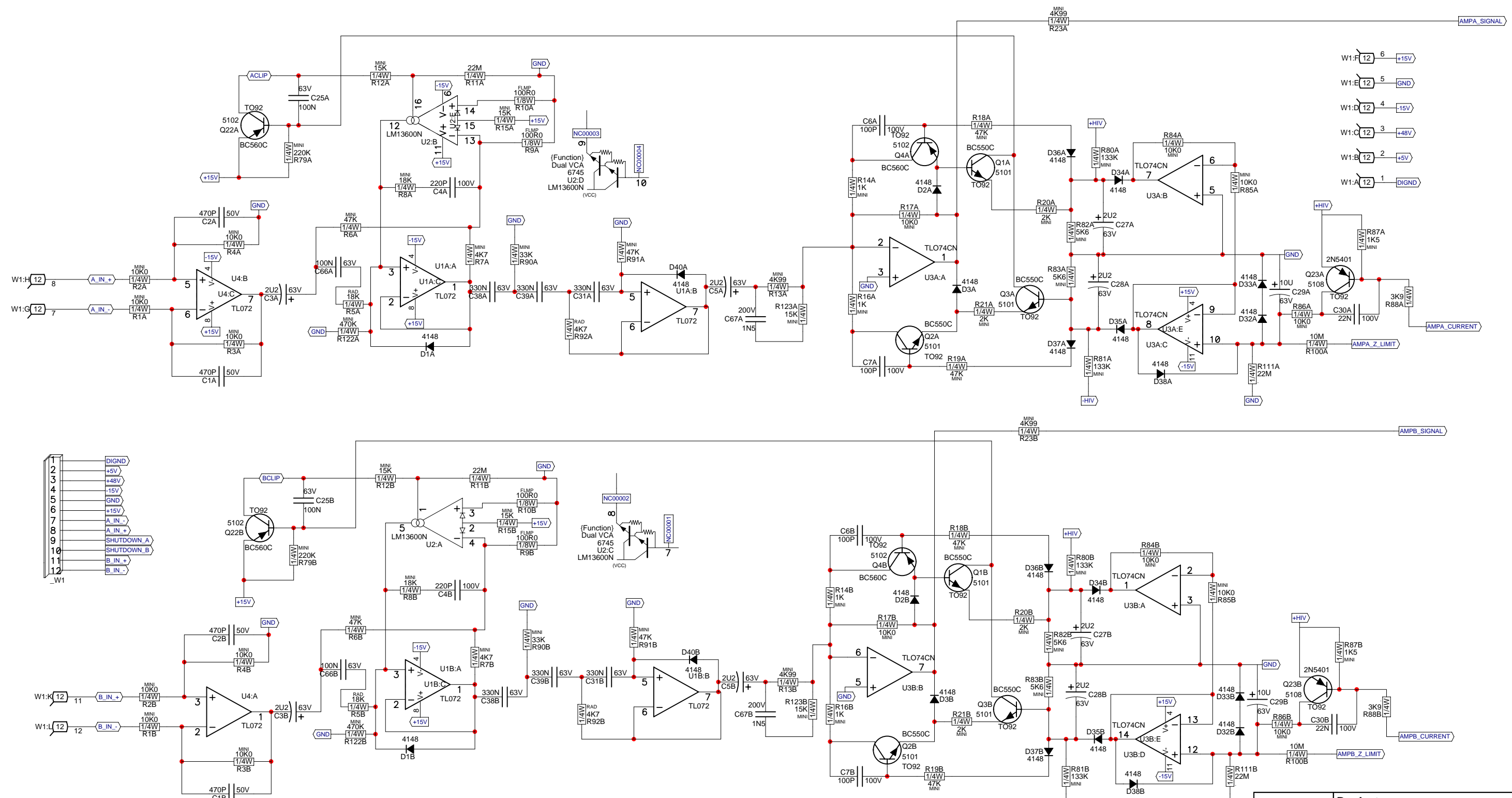
MPSA13, 56

E B C

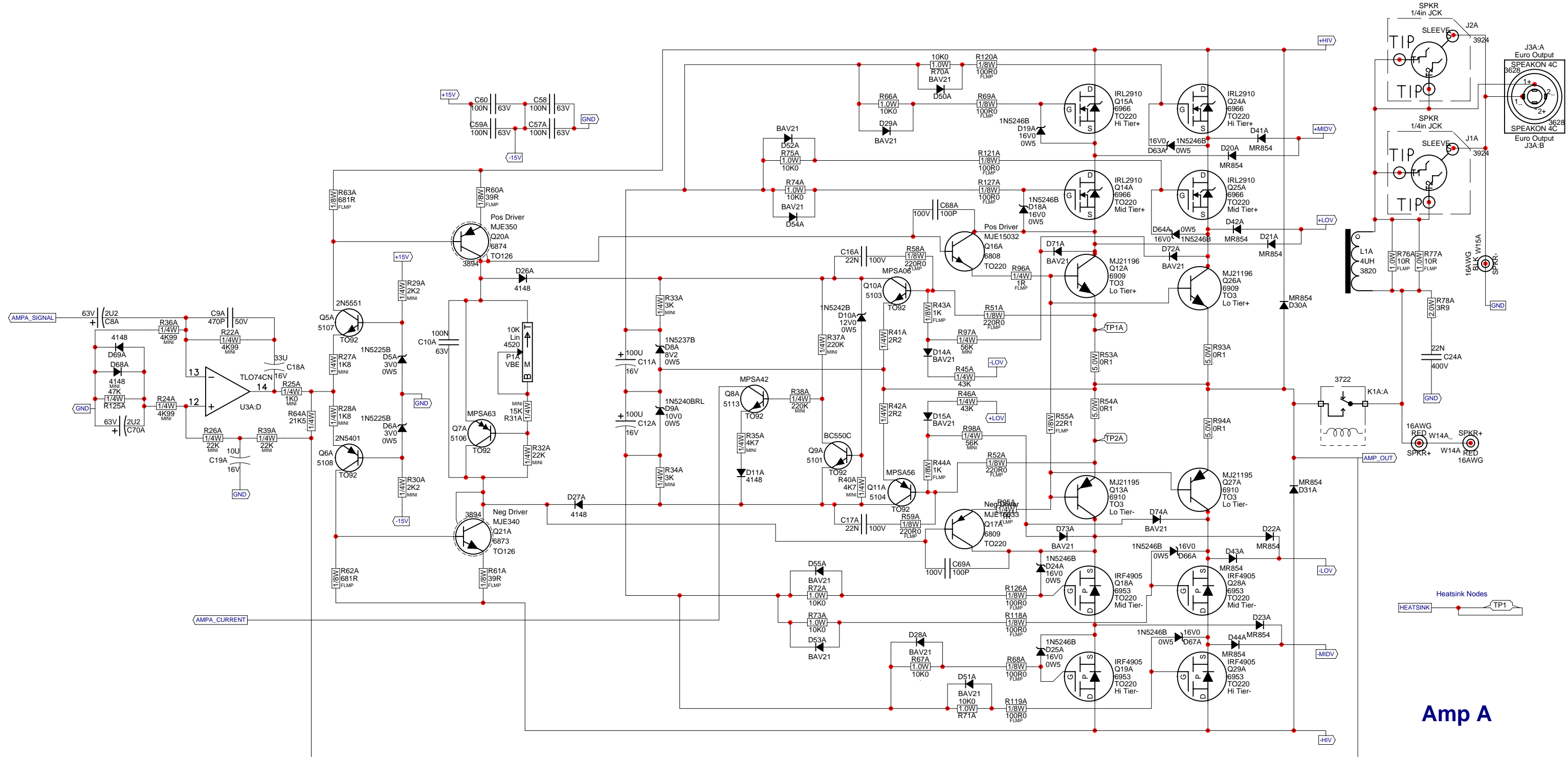


BC550, 560

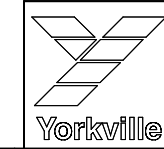
C B E



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

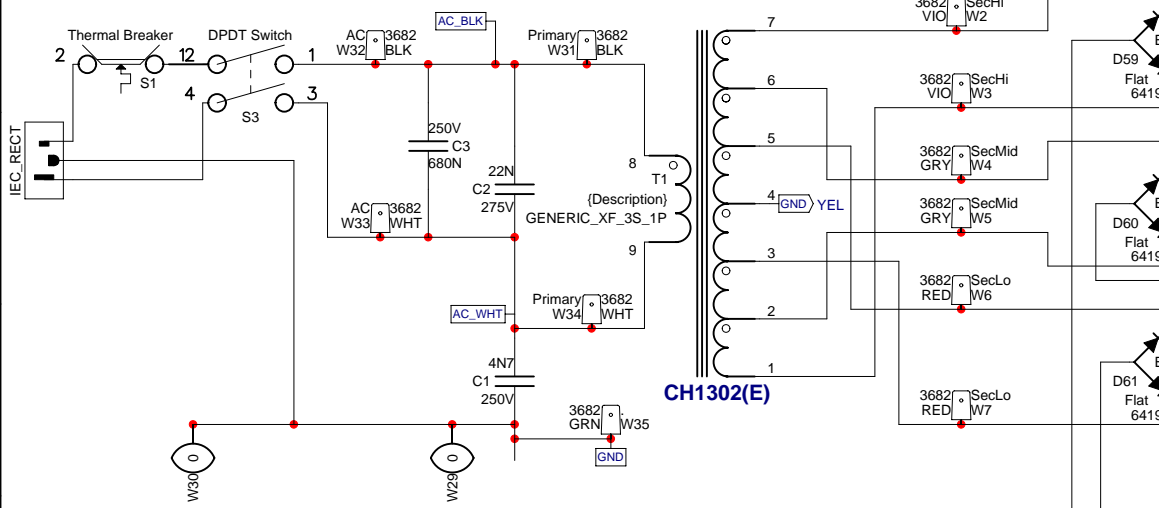
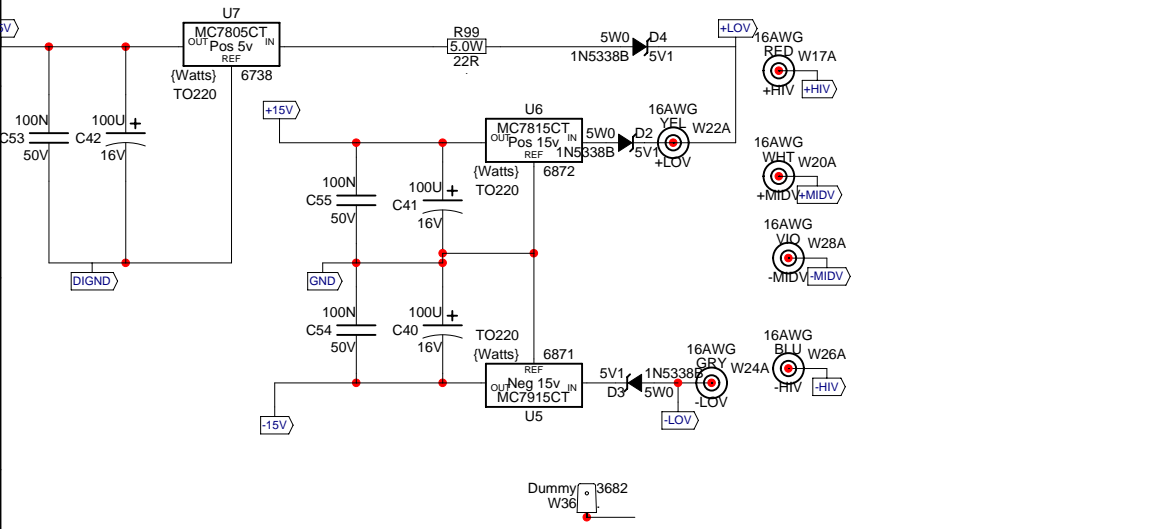
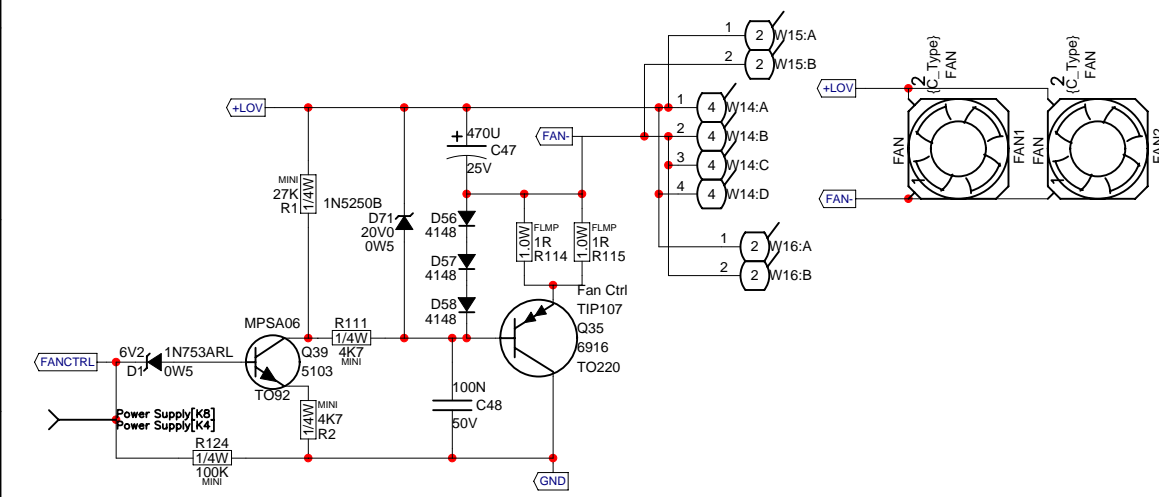


Amp A

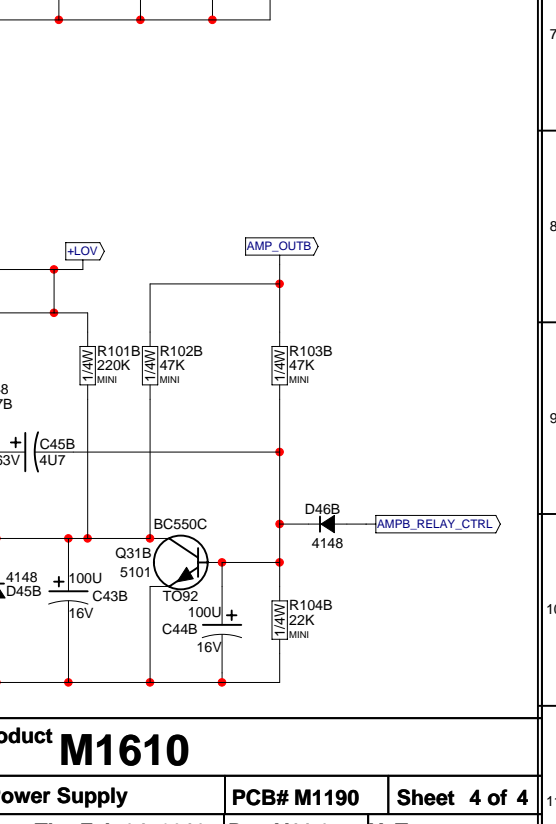
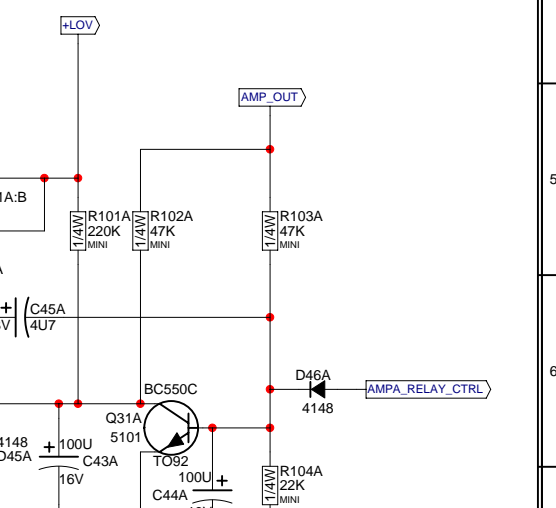
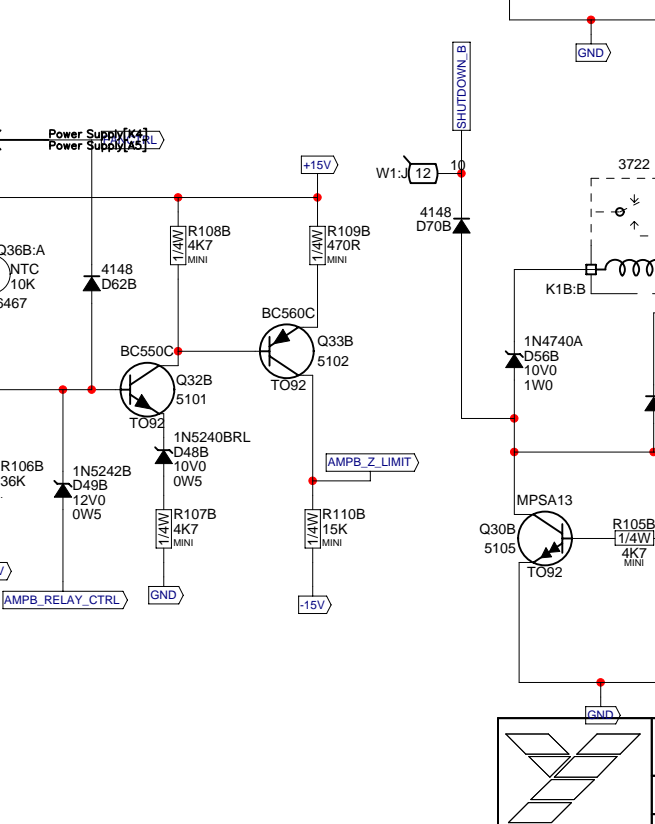
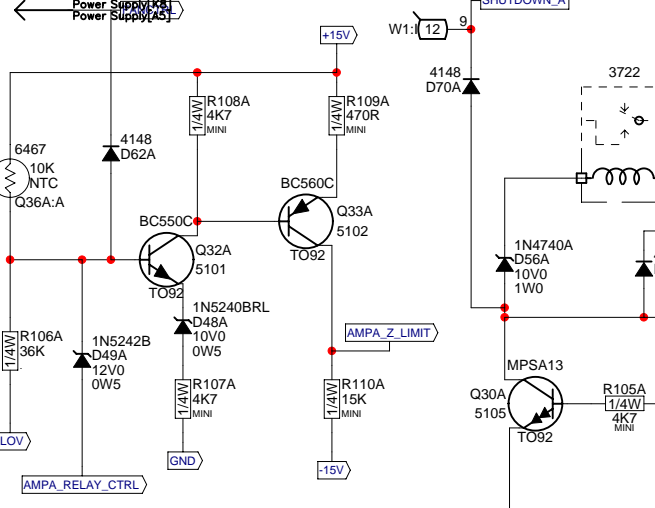
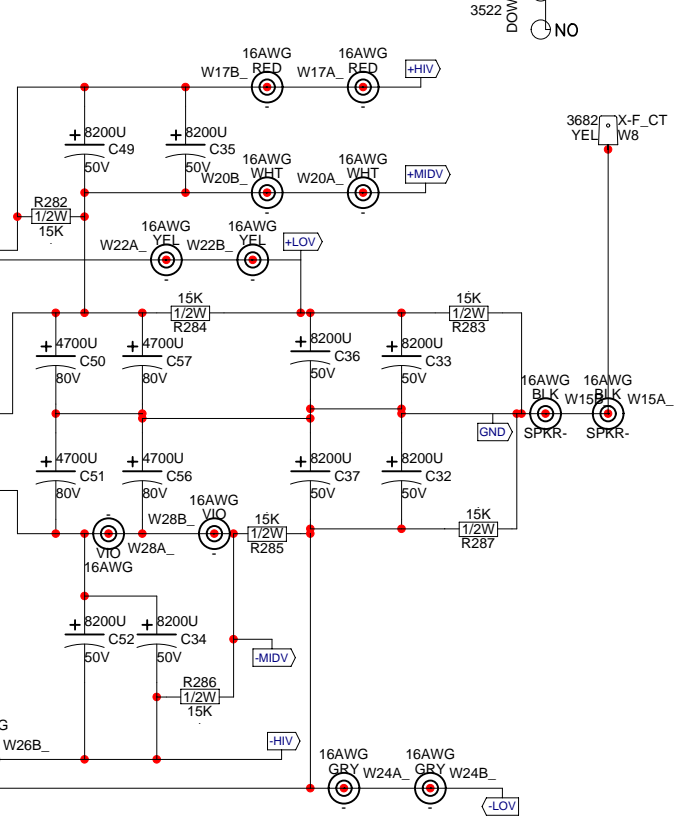
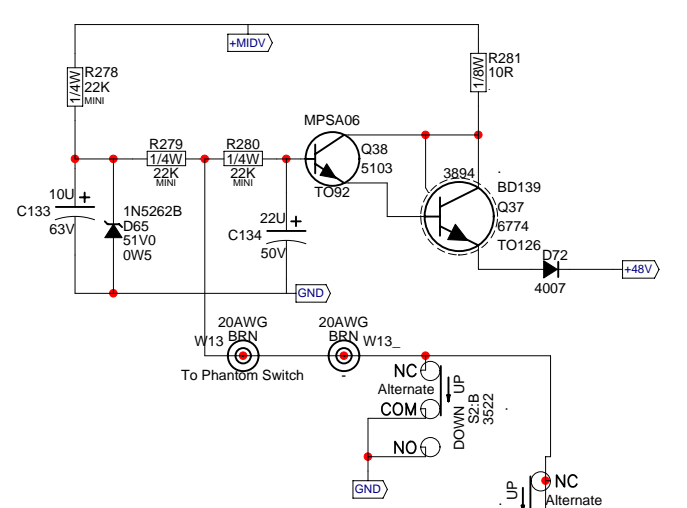


| | | |
|---------------------------------|------------|--------------|
| Product M1610 | | |
| Channel A | PCB# M1190 | Sheet 2 of 4 |
| Date: Thu Feb 04, 2010 | Rev:V11.0 | YsType:.. |
| Filename: M1190V1100sch.sch2002 | | |

| 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

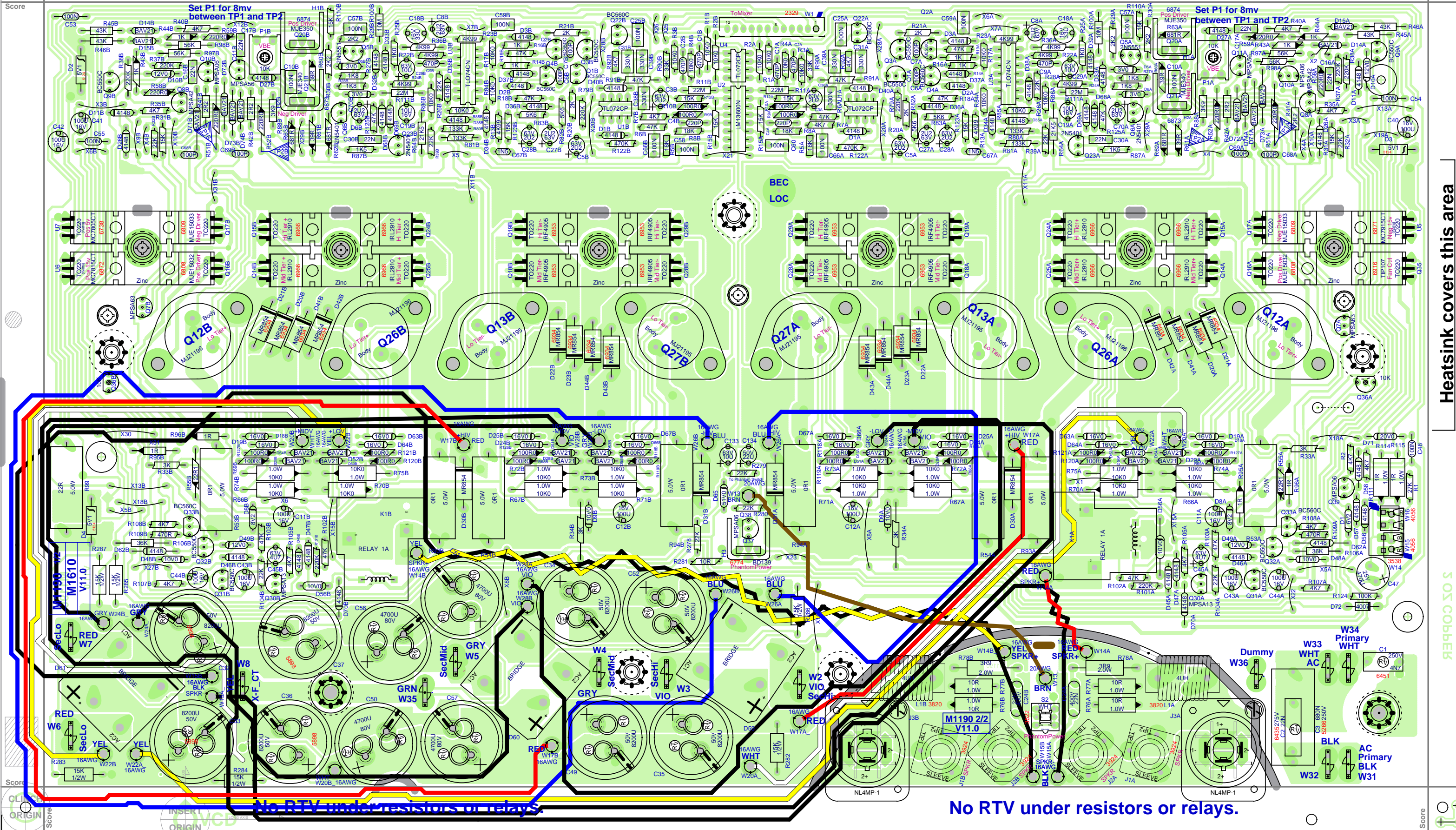


Product **M1610**

Power Supply PCB# M1190 Sheet 4 of 4

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

Filename: M1190V1100sch.sch2002



Heatsink covers this area

50% COPPER

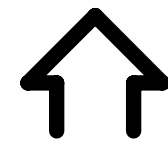
No RTV under resistors or relays

No RTV under resistors or relays

SEE LAYOUT DOCUMENTATION

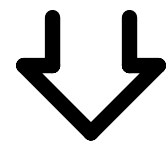
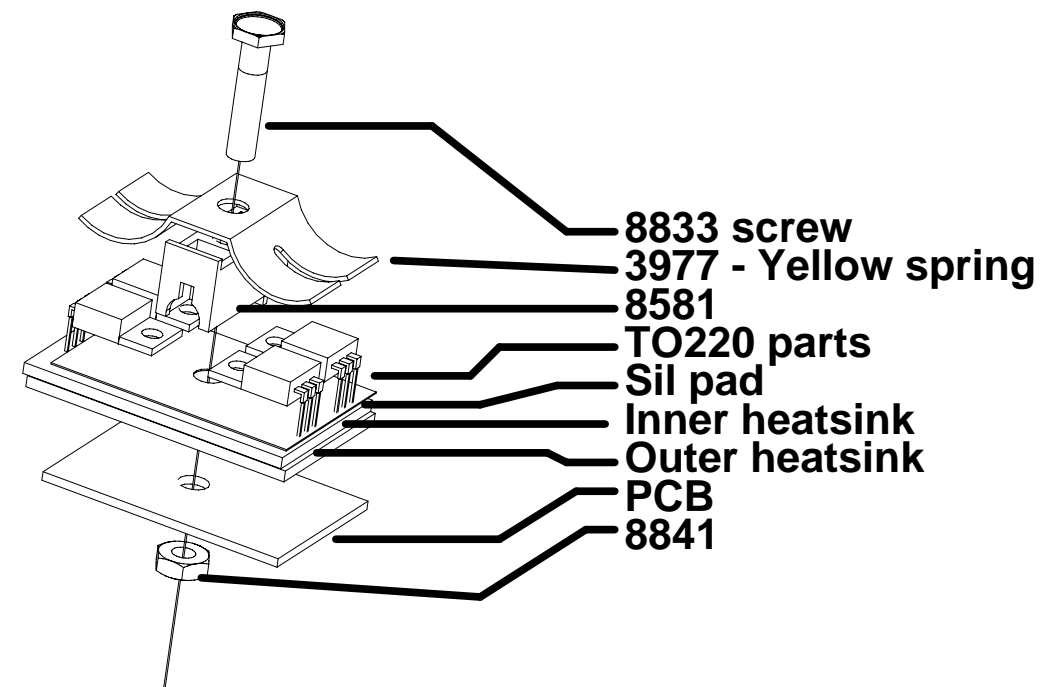
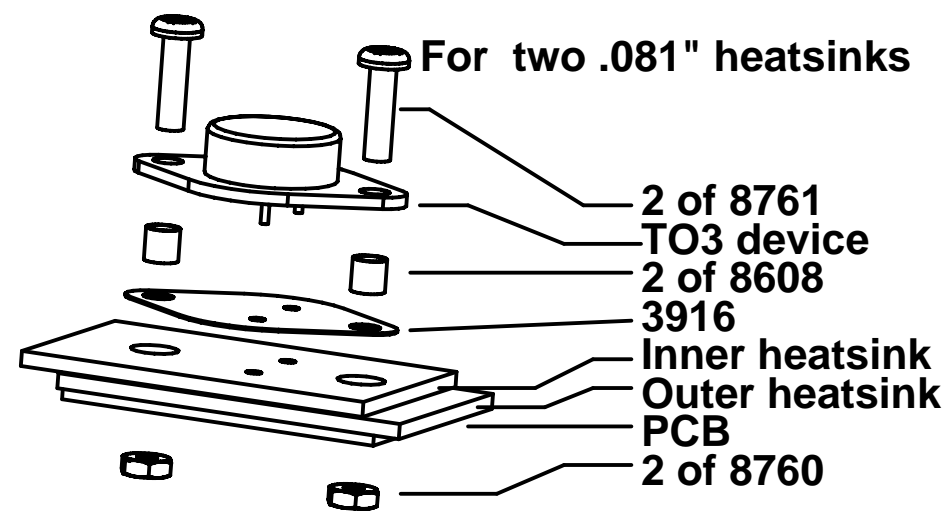


SEE LAYOUT DIAGRAM

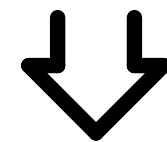


M1190 PRODUCTION NOTES

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



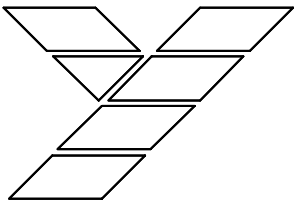
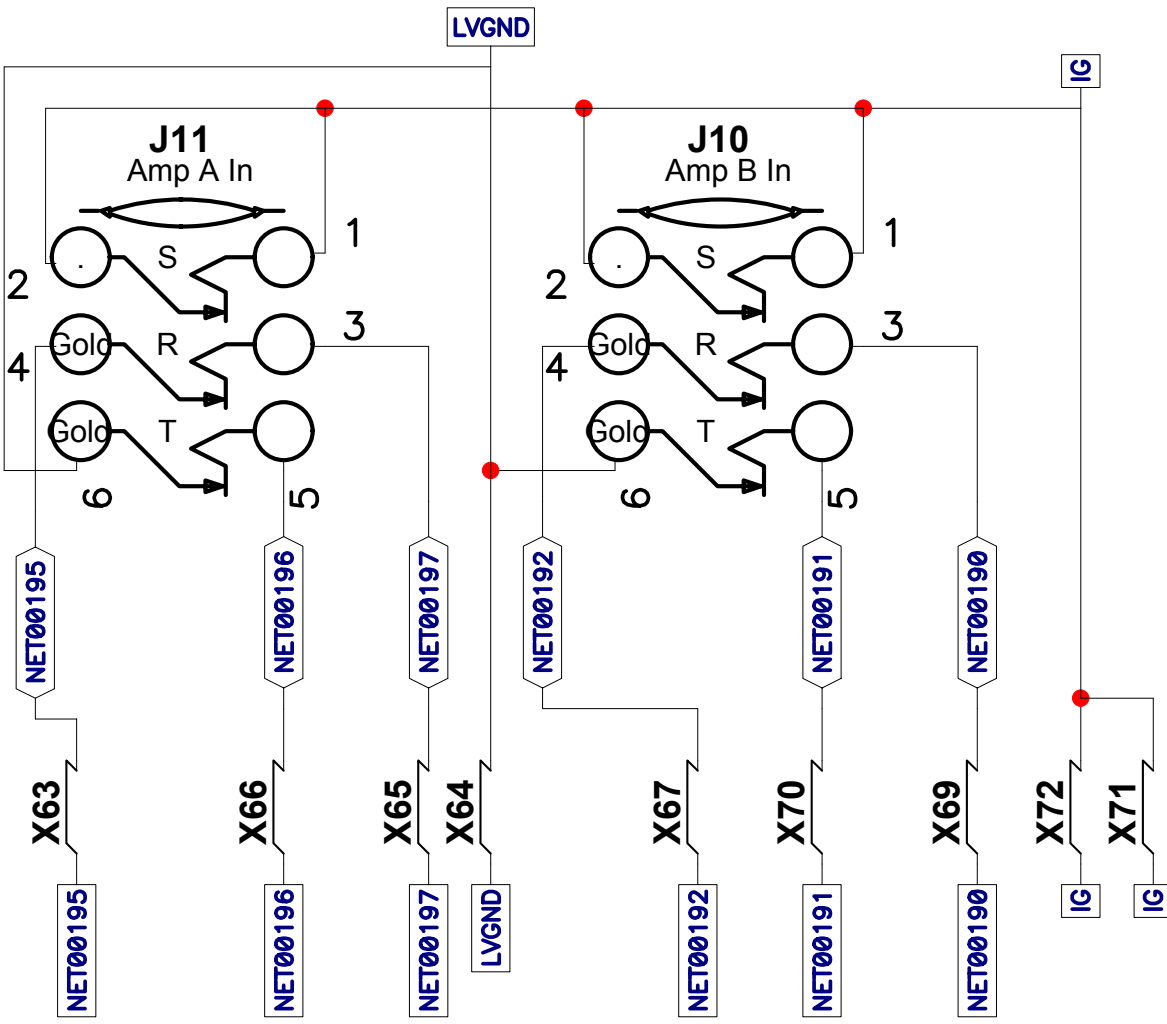


SEE PPRODUCTION NOTES



| 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 | | | 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 flipp |
| 8 | DEC-14-2004 | 3.00 | PC#6809 Remove D17,D16,D12,D13, R47,R48,R49,R50,C14 | 36 | 03-FEB-2010 | . | PC7942,PC7980: Update #4xTO220-MTG GG |
| 9 | FEB-07-2005 | 4.00 | C15 (All A/B) R45,R46 A/B 36K->43K, D10 16V->12V | 37 | 04-FEB-2010 | 11.00 | PC7983: Change D2,D3,D4 #5124 span to .525 GG |
| 10 | D | V | D9 A/B 14V->10V0, D8 A/B 12V->8V2. ADD R95 A/B | 38 | D | V | N |
| 11 | D | V | ADD R96 A/B, R97 A/B, R98 A/B, D71 A/B, D72 A/B | 39 | D | V | N |
| 12 | D | V | D73 A/B, D74 A/B, X1 ,X2 ,X3 ,X4 X5 AND X6 | 40 | D | V | N |
| 13 | D | V | RECREATED MASK LAYER TO FIX TESTPADS | 41 | D | V | N |
| 14 | MAR-30-2005 | 5.00 | CHANGE IRF3205 #6954 TO IRL2910 #6966 | 42 | D | V | N |
| 15 | MAR-13-2005 | 5.10 | PLACE MICA UNDER MIDDLE TIER MOSFETS | 43 | D | V | N |
| 16 | . | . | Force update parts to fix pad orientation | 44 | D | V | N |
| 17 | 21 Apr, 2005 | 5.11 | PC#6919:GT:MOVED R95B AVOID HEATSINK COLLISION | 45 | D | V | N |
| 18 | JUN-08-2005 | 6.00 | XFORMER -> CH1302/E, ADDED 2x#4599,SWAPPED W8 & | 46 | D | V | N |
| 19 | . | . | W35,R106A&B #6122 33K->#4868 36K, D56A&B #6440 | 47 | D | V | N |
| 20 | . | . | 4V7/0.5W->#6484 10V/1W, C32&C33 #5903 12000UF/35V -> | 48 | D | V | N |
| 21 | . | . | #5898 8200UF/50V, C36&C37 #5896 4700UF/80V->#5898 | 49 | D | V | N |
| 22 | . | . | C25A&B #5224 47N/100V->#5212 100N/63V | 50 | D | V | N |
| 23 | . | . | | | | | |

| 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

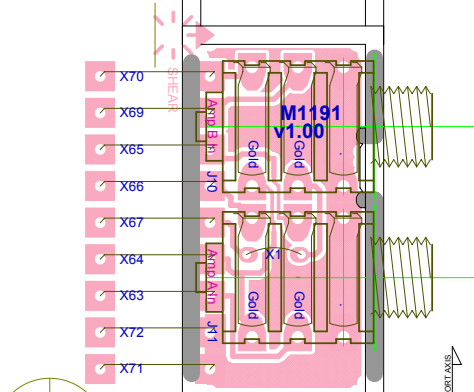
SHEAR

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 3/19/2010

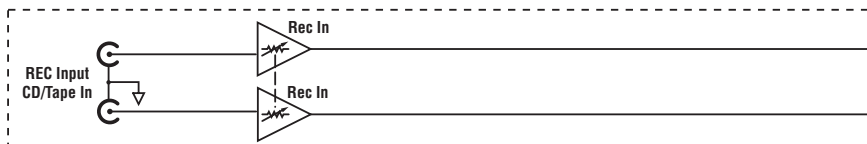
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|------|----------------------------------|------|------|-------------------------------------|------|------|-------------------------------------|------|-----------|--------------------------------------|------|
| 5906 | RED 3MM LED 1V9 20MA.4SPCER T&R | 13 | 5898 | 8200U 50V 20%CAP 25X50MM ELS | 4 | 2030 | 1/8W 681R 1%FLAME PROOF T&R RES | 16 | 7693 | 1N 50V 5%CAP 0805 SMT NPO | 2 |
| 5908 | GRN 3MM LED 1V9 20MA.4SPCER T&R | 7 | 6578 | ROT BIN 18MM 4BIT ENCODER P23 | 1 | 4924 | 1/4W 750R 5% 2'U T&R RES | 6 | 7766 | 15P 50V 5%CAP 0603 SMT NPO | 1 |
| 6419 | BRIDGE 35A 400V WIRE LEAD G13504 | 2 | 4431 | 10K 5C R/A 12MM STEREO P34 | 2 | 2031 | 1/8W 820R 5%FLAME PROOF T&R RES | 4 | 7781 | W063 49R9 1% 0603 SMT RES | 1 |
| 6425 | BAV21 200V 0A25 DIODE T&R | 20 | 4432 | 10K B LIN 9MM P32 | 6 | 2033 | 1/8W 1K 2%FLAME PROOF T&R RES | 4 | 7786 | CD4052B IC DUAL CHANNEL MUX SMT | 1 |
| 6438 | 1N4007 1000V 1A0 DIODE T&R | 1 | 4434 | 10K B LIN 9MM DETENT P32 | 21 | 4981 | 1/4W 1K 5%MINI T&R RES | 13 | 7818 | LM1117 REGULATOR 3V3 SOT-223 | 1 |
| 6825 | 1N4148 75V 0A45 DIODE T&R | 89 | 4438 | 10K B LIN 12MM STEREO DETENTP34 | 4 | 6110 | 1/4W 1K0 1%MINI MF T&R RES | 2 | 7853 | W250 100R 5% 1206 SMT RES | 1 |
| 6934 | MR854 400V 3A0 DIODE FASREC | 12 | 4426 | 20K 4B LIN 9MM P32 | 1 | 4585 | 1/4W 1K2 5%MINI T&R RES | 25 | 7882 | W063 0R 1% 1206 SMT RES | 1 |
| 5124 | 1N5338B 5V1 5W0 ZENER 5% T&R | 11 | 4447 | 20K 15A AUD 12MM STEREO P34 | 1 | 4988 | 1/4W 1K5 5%MINI T&R RES | 25 | 7912 | FV-1 SPIN SEMI REVERB CHIP IC | 1 |
| 6436 | 1N753ARL 6V2 0W5 ZENER 5% T&R | 1 | 4433 | 50K B LIN 9MM P32 | 15 | 6113 | 1/4W 2K 5%MINI T&R RES | 4 | 7913 | 32KHZ CRYSTAL SMT 4-PIN FSRLF | 1 |
| 6437 | 1N5237B 8V2 0W5 ZENER 5% T&R | 5 | 4435 | 50K B LIN 9MM DETENT P32 | 10 | 6104 | 1/4W 2K2 5%MINI T&R RES | 6 | 7932 | 07 PIN 25SQ 100 PIN SMT SIL | 1 |
| 6439 | 1N5225B 3V0 0W5 ZENER 5% T&R | 4 | 4437 | 50K B LIN 12MM STEREO P34 | 2 | 4864 | 1/4W 2K7 5% T&R RES | 2 | 7933 | 08 PIN 25SQ 100 PIN SMT SIL | 1 |
| 6450 | 1N5242B 12V0 0W5 ZENER 5% T&R | 4 | 4439 | 50K B LIN 12MM STEREO DETENTP34 | 2 | 6124 | 1/4W 3K 5%MINI T&R RES | 4 | 7966 | _2N7 100V 10%CAP 0805 SMT X7R | 2 |
| 6461 | 1N5240BRL 10V0 0W5 ZENER 5% T&R | 4 | 4441 | 50K 4B LIN 12MM STEREO P34 | 1 | 6136 | 1/4W 3K3 5%MINI T&R RES | 4 | 7934-PROG | 24LC32A SER EEPROM MIX2-U3 YS DFX | 1 |
| 6465 | 1N5250B 20V0 0W5 ZENER 5% T&R | 1 | 4443 | 100K 5C R/A 9MM P32 | 8 | 4814 | 1/4W 3K6 5% T&R RES | 1 | 7935-PROG | 24LC32A SER EEPROM MIX2-U4 YS DFX | 1 |
| 6475 | 1N5262B 51V0 0W5 ZENER 5% T&R | 1 | 3998 | 20K 1B LIN 20MM DETENT S04 | 18 | 5028 | 1/4W 3K74 1% T&R RES | 4 | 3663 | SNAP IEC PWR SOC W/250TAB FOR .060 | 1 |
| 6484 | 1N4740A 10V0 1W0 ZENER 5% T&R | 2 | 4520 | 10K TRIM POT | 2 | 4850 | 1/4W 3K9 5% T&R RES | 2 | 2335 | NYLON STANDOFF NUT #4 500MIL | 9 |
| 6738 | MC7805CT TO220 P 5V0 REG 36V | 1 | 2408 | 8.00 AMP CIRCUIT BREAKER | 1 | 4774 | 1/4W 4K12 1% T&R RES | 4 | 2342 | NYLON STANDOFF NUT #4 530MIL BLK | 6 |
| 6824 | 1N5246B 16V0 0W5 ZENER 5% T&R | 8 | 3820 | _4UH 0CK 14AWG ZOBEL HORIZONTAL | 2 | 4681 | 1.0W 4K7 5% T&R RES | 8 | 8657 | 6-32 X 3/8" HEX SPACER ALUMINUM | 7 |
| 6871 | MC7915CT TO220 N 15V0 REG V2 | 1 | 8497 | M1610/M810 GABLE | 2 | 4943 | 1/4W 4K7 5% 2'U T&R RES | 2 | 8482 | 3/8 1D FLAT WASHER | 16 |
| 6872 | MC7815CT TO220 P 15V0 REG V1 | 1 | 3489 | CLIP 25X032 18-22AWG DISCO/INSL | 1 | 4982 | 1/4W 4K7 5%MINI T&R RES | 49 | 8818 | 3/4 OD X 3/8 ID X .080 THICK WASHNER | 2 |
| 5101 | BC550C TO92 NPN TRAN T&R TB | 17 | 3490 | CLIP 25X032 14-16AWG DISCO/INSL | 11 | 6128 | 1/4W 4K99 1%MINI MF T&R RES | 42 | 8485 | #6 SPLIT WASHER ZINC | 2 |
| 5102 | BC560C TO92 NPN TRAN T&R TB | 38 | 3601 | RING TERMINAL 16AWG WIRE & #8 SCREW | 1 | 6121 | 1/4W 6K98 1%MINI MF T&R RES | 4 | 3524 | NYLON SHWASHER ID395 OD750 T060 | 4 |
| 5103 | MPSA06 TO92 NPN TRAN T&R TA | 4 | 3450 | 1/4" JCK PCB MT ALL-GOLD SKT | 2 | 4926 | 1/4W 7K5 5% 2'U T&R RES | 18 | 3577 | FIBER WASHER .625OD .380ID .03 | 4 |
| 5104 | MPSA56 TO92 PNP TRAN T&R TA | 2 | 3921 | 1/4" JCK PCB MT VERT STER RT SWT | 16 | 4990 | 1/4W 8K2 5%MINI T&R RES | 2 | 3440 | 4PDT MINI VERT ALT SWITCH | 1 |
| 5105 | MPSA13 TO92 NPN DARL T&R TA | 3 | 3924 | 1/4" JCK PCB MT VERT 2XTIP HICURNT | 4 | 4983 | 1/4W 10K 5%MINI T&R RES | 96 | 3522 | DPDT MINI PC VERT SWP ALT | 2 |
| 5106 | MPSA63 TO92 PNP DARL T&R TA | 2 | 3466 | RCA DUAL PCB MT VERT GOLD 24MM | 2 | 6116 | 1/4W 10K0 1%MINI MF T&R RES | 80 | 3587 | DPDT ROKR SW QUIK 250'AC/PWR ON-OFF | 1 |
| 5107 | 2N5551 TO92 NPN TRAN T&R TA | 4 | 3628 | SPKON 4C PCB MT VERT 250TAB GRY #4 | 2 | 4630 | 1/2W 10K 5% T&R RES | 4 | 3682 | 250 MALE PCB TAB REEL | 11 |
| 5108 | 2N5401 TO92 PNP TRAN T&R TA | 4 | 4010 | XLR FEML PCB MT VERT 24MM AA-SERIES | 8 | 4979 | 1/4W 15K 5%MINI T&R RES | 28 | 3029 | PATCH 12 22AWG 16.0 XH | 1 |
| 6774 | BD139 TO126 NPN TRAN TG | 1 | 3451 | EYELET SMALL 0.089 OD PLATED | 43 | 4954 | 1/4W 18K 5% 2'U T&R RES | 12 | CH1301 | M810 POWER TRFMR TRD | 1 |
| 6805 | 2SD2560 TO3P NPN TRAN DARL | 4 | 3856 | FAN 80MM X 80MM 39CFM 12VDC 200MA | 2 | 6125 | 1/4W 18K 5%MINI T&R RES | 2 | | | |
| 6812 | ZSB1647 TO3P PNP TRAN DARL | 4 | 3894 | AAVID 5972-B H/S W/TAB B.O. | 5 | 6123 | 1/4W 20K0 1%MINI MF T&R RES | 5 | | | |
| 6873 | MJE340 TO126 NPN TRAN TG | 2 | 3501 | B52200F006 COMP WASH #4 SMALL | 5 | 4777 | 1/4W 21K5 1% T&R RES | 2 | | | |
| 6874 | MJE350 TO126 PNP TRAN TG | 2 | 3719 | DUAL XSISTOR SPRING, ZINC CLEAR | 4 | 6118 | 1/4W 22K 5%MINI T&R RES | 19 | | | |
| 6916 | TIP107 TO220 PNP TRAN DARL TE | 1 | 3977 | QUAD XSISTOR SPRING, ZINC YELLOW | 3 | 4833 | 1/4W 27K 5% T&R RES | 4 | | | |
| 6953 | IRF4905 TO220 PCH MFET | 4 | 8889 | RUBBER GROMMET #2183-034-BLK | 1 | 6129 | 1/4W 27K 5%MINI T&R RES | 7 | | | |
| 6966 | IRL2910 NCH MFET 100V TN | 4 | 3801 | 5/8" BUMPER BUTTON BLACK | 1 | 6122 | 1/4W 33K 5%MINI T&R RES | 13 | | | |
| 6745 | LM13600N IC XCONDUCTANCE AMP | 4 | 3810 | 4" NYLON CABLE TIE | 8 | 4868 | 1/4W 36K 5% T&R RES | 2 | | | |
| 6804 | MC33079P IC QUAD OP AMP | 4 | 2329 | 12 CIR XH-HEADER 0.098IN | 2 | 4853 | 1/4W 39K 5% T&R RES | 4 | | | |
| 6882 | TL072CP IC FET DUAL OP AMP | 15 | 4056 | 2 CIR XH-HEADER 0.098IN | 2 | 4927 | 1/4W 47K 5% 2'U T&R RES | 4 | | | |
| 6889 | TL074CN IC QUAD O/A T.I ONLY | 11 | 6397 | KNOB STYLE 2 GREY | 1 | 6119 | 1/4W 47K 5%MINI T&R RES | 26 | | | |
| 6467 | _10K 10% THERMISTOR TO-92 NTC | 2 | 8632 | KNOB ROUND PUSHBUTTON 1/4" GREY | 2 | 4928 | 1/4W 56K 5% 2'U T&R RES | 14 | | | |
| 5199 | 100P 100V 2%CAP T&R RAD CER.2NPO | 8 | 8637 | ROUND PUSHBUTTON 1/4" BLK 24MM | 1 | 6139 | 1/4W 62K 5%MINI T&R RES | 6 | | | |
| 5408 | 47P 100V 10%CAP T&R BEAD NPO | 33 | 9915 | KNOB 0-DEG RED SOFT GRAY RIB | 2 | 4586 | 1/4W 82K 5%MINI T&R RES | 4 | | | |
| 5412 | 220P 100V 10%CAP T&R BEAD NPO | 14 | 9916 | KNOB 0-DEG GRY SOFT GRAY RIB | 29 | 4929 | 1/4W 82K 5% 2'U T&R RES | 14 | | | |
| 5208 | _2N2 400V 5%CAP T&R RAD 2FLM | 5 | 9917 | KNOB 0-DEG GRN SOFT GRAY RIB | 9 | 6120 | 1/4W 100K 5%MINI T&R RES | 1 | | | |
| 5273 | _1N5 200V 5%CAP T&R RAD CER.2NPO | 16 | 9918 | KNOB 0-DEG BLU SOFT GRAY RIB | 10 | 4991 | 1/4W 133K 1%MINI T&R RES | 12 | | | |
| 5275 | _3N3 100V 5%CAP T&R RAD 2FLM | 6 | 9919 | KNOB 0-DEG YEL SOFT GRAY RIB | 8 | 4796 | 1/4W 180K 5%MINI T&R RES | 4 | | | |
| 5416 | 470P 50V 10%CAP T&R BEAD NPO | 6 | 9920 | KNOB 0-DEG WHT SOFT GRAY RIB | 9 | 6126 | 1/4W 220K 5%MINI T&R RES | 14 | | | |
| 5422 | _1N 50V 10%CAP T&R BEAD NPO | 20 | 9921 | KNOB 0-DEG GRY W/O COVERING | 6 | 6127 | 1/4W 470K 5%MINI T&R RES | 2 | | | |
| 5204 | _10N 100V 10%CAP T&R RAD 2FLM | 2 | 3426 | 8' 3/16 SUT AC LINE CORD REMOV-B-CA | 1 | 4948 | 1/4W 1M 5% 2'U T&R RES | 2 | | | |
| 5205 | _15N 100V 10%CAP T&R RAD 2FLM | 4 | 8701 | 4-40 KEPS NUT ZINC | 5 | 4951 | 1/4W 4M7 5% 2'U T&R RES | 7 | | | |
| 5207 | _18N 100V 5%CAP T&R RAD 2FLM | 6 | 8800 | 6-32 KEPS NUT ZINC | 6 | 6132 | 1/4W 8M2 5%MINI T&R RES | 6 | | | |
| 5209 | _4N7 250V 5%CAP T&R RAD 2FLM | 4 | 8841 | 10-32 KEPS NUT TIN PLATED | 7 | 4809 | 1/4W 10M 5% T&R RES | 2 | | | |
| 5210 | _22N 100V 10%CAP T&R RAD 2FLM | 26 | 8797 | 5/16-18 KEPS NUT JS500 | 1 | 4751 | 1/4W 22M 5% T&R RES | 10 | | | |
| 5222 | _33N 100V 10%CAP T&R RAD 2FLM | 10 | 4022 | ELASTOMER PAD -2-T0218 / 4-T0220 | 7 | 3722 | RELAY 1A 30AMP DC24 036MA PC-C | 2 | | | |
| 5224 | _47N 100V 10%CAP T&R RAD 2FLM | 4 | 8581 | CUSTOM PBL TRANSISTOR SPACER | 7 | 9010 | 16GA COLD ROLLED STEEL 4'X8' SHEET | 4 | | | |
| 5840 | 22N 400V 10%CAP BLK RAD POLY FLM | 2 | 4597 | 22AWG STRAN TC WIR JMP | 15 | 9020 | 18GA COLD ROLLED STEEL 4'X8' SHEET | 3.2 | | | |
| 6435 | 22N 275V 20%CAP BLK X2 15MM AC | 1 | 4599 | 22AWG SOLID SC WIR T&R JMP | 232 | 9070 | 18GA ELECTRO GALV STEEL 4'X8' SHEET | 1.6 | | | |
| 6451 | _4N7 250V 20%CAP BLK Y 10MM AC | 1 | 4749 | 5.0W 0R15 5% BLK RES | 8 | 9150 | .081" 48X96 UTILITY ALUMINUM | 1.45 | | | |
| 5212 | 100N 63V 5%CAP T&R RAD 2FLM | 37 | 2006 | 1.0W 1R 5%FLAME PROOF T&R RES | 2 | 9155 | .081" 48X96 UTILITY ALUM SPV 1 SIDE | 1.23 | | | |
| 5226 | 68N 100V 5%CAP T&R RAD 2FLM | 2 | 4911 | 1/4W 2R2 5% T&R RES | 4 | 9250 | .040" 48X96 5052H32 ALUM VINYL LAMI | 2.3 | | | |
| 5229 | 150N 63V 10%CAP T&R RAD 2FLM | 2 | 4748 | 2.0W 3R9 5% T&R | 2 | 9640 | .025" FISHPAPER (FLAT 48" SHEETS) | 1.1 | | | |
| 5231 | 220N 63V 10%CAP T&R RAD 2FLM | 2 | 2008 | 1.0W 10R 5%FLAME PROOF T&R RES | 4 | 8842 | #4 X 5/16 PAN QUAD TYPE A JS500 BLK | 18 | | | |
| 5233 | 330N 63V 5%CAP T&R RAD 2FLM | 8 | 4605 | 1/8W 10R 5% T&R RES | 3 | 8865 | 4-40 X 5/16 PAN PH MS JS500 | 5 | | | |
| 5234 | 470N 63V 10%CAP T&R RAD 2FLM | 2 | 4709 | 5.0W 22R 5% BLK RES | 1 | 8729 | #4 X 3/8 FLAT QUAD TYPE A JS500 BLK | 4 | | | |
| 5314 | 100N 50V 10%CAP T&R BEAD X7R | 7 | 2016 | 1/8W 39R 2%FLAME PROOF T&R RES | 4 | 8902 | 4-40 X 3/4 PAN PHIL MS B/O & WAX | 15 | | | |
| 5318 | 220N 50V 10%CAP T&R BEAD X7R | 1 | 6134 | 1/4W 47R 5%MINI T&R RES | 6 | 8831 | 6-32 X 1/4 PAN PH TAPTITE ZINC | 2 | | | |
| 5257 | _2U2 63V 20%CAP T&R RAD 2EL | 12 | 2019 | 1/8W 100R0 1%FLAME PROOF T&R RES | 12 | 8832 | 6-32 X 1/4 PAN PH TAPTITE JS500 | 24 | | | |
| 5258 | _4U7 63V 20%CAP T&R 8X7MM 2EL | 20 | 4602 | 1/8W 100R 5% T&R RES | 29 | 8801 | 6-32 X 3/8 PAN PH TAPTITE JS500 | 4 | | | |
| 5266 | 680N 250V 20%CAP BLK X2 30MM AC | 4 | 4921 | 1/4W 100R 5% 2'U T&R RES | 18 | 8829 | 6-32 X 3/8 FLAT PH TAPTITE BOIC HEA | 3 | | | |
| 7769 | _1U 50V 20%CAP 4.3X3.9 SMT ELC | 5 | 4984 | 1/4W 150R 5%MINI T&R RES | 3 | 8823 | 6-32 X 1 PAN PH TAPTITE JS500 | 3 | | | |
| 5260 | _22U 50V 20%CAP T&R RAD 2EL | 1 | 2023 | 1/8W 220R0 1%FLAME PROOF T&R RES | 8 | 8809 | 10-32 X 1/4 PAN PH TAPTITE JS500 | 8 | | | |
| 5282 | _10U 16V 20%CAP T&R 5X7MM 2NP | 32 | 4977 | 1/4W 220R 5%MINI T&R RES | 11 | 8833 | 10-32 X 7/8 IND HEX M/S BLACK OXIDE | 7 | | | |
| 5631 | _22U 50V 20%CAP T&R 6X7MM 2EL | 12 | 2024 | 1/8W 249R 2%FLAME PROOF T&R RES | 4 | 8893 | 10-32 X 1 FLAT PHILIPS TT JS500 BLK | 10 | | | |
| 5945 | _10U 63V 20%CAP T&R RAD 2EL | 3 | 4980 | 1/4W 470R 5%MINI T&R RES | 28 | 8733 | 5/16-18X2-1/2 GRD 5 HEX BOLT JS500 | 1 | | | |
| 5961 | _33U 16V 20%CAP T&R RAD 2 | 17 | 2028 | 1/8W 475R 1%FLAME PROOF T&R RES | 2 | 7613 | 100N 25V 10%CAP 0805 SMT X7R | 5 | | | |
| 7810 | _47U 16V 20%CAP 6X5.4 SMT ELE | 2 | 4799 | 1/4W 562R 1% T&R RES | 4 | 7621 | 0.1W 1K0 1% 0805 SMT RES | 4 | | | |
| 5618 | 470U 25V 20%CAP BLK 10X15MM EL | 1 | 4922 | 1/4W 620R 5% 2'U T&R RES | 8 | 7624 | 0.1W 100R 1% 0805 SMT RES | 1 | | | |
| 5879 | 100U 16V 20%CAP T&R 8X7MM 2EL | 15 | 5019 | 1/4W 620R 5%MINI T&R RES | 14 | 7625 | 0.1W 10K0 1% 0805 SMT RES | 5 | | | |

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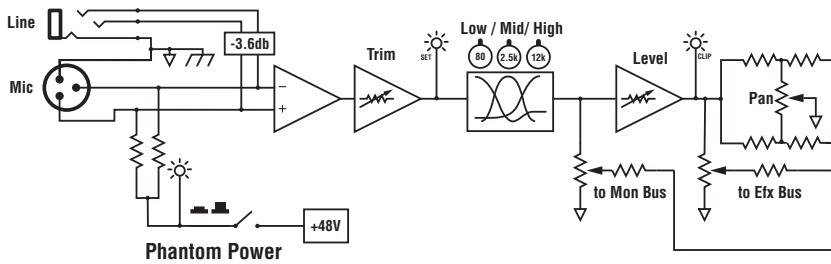
| YS # | Description | Qty. | YS # | Description | Qty. | YS # | Description | Qty. | YS # | Description | Qty. |
|------|----------------------------------|------|------|-------------------------------------|------|------|-------------------------------------|------|----------|-------------------------------------|------|
| 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 620R 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 50K 10M R/A 12MM STEREO P34 | 2 | 5019 | 1/4W 620R 5%MINI T&R RES | 14 | 7624 | 0.1W 10K 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% 1206 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 | 1N5240BR 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 FSRLL | 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 |
| 6882 | MC7815CT TO220 P 15V0 REG V1 | 1 | 3820 | 1/4UH 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 .380ID .05 | 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 250C/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 TRANSTOR TH | 4 | 2329 | 12 CIR XH-HEADER 0.098IN | 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 GRV 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 TRANSTOR 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 50S2H32 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

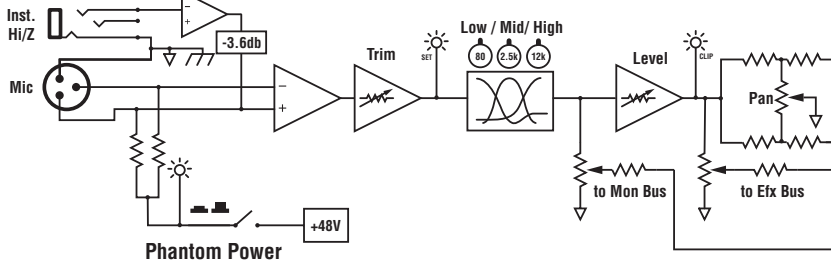
DESIGNED & MANUFACTURED BY YORKVILLE SOUND



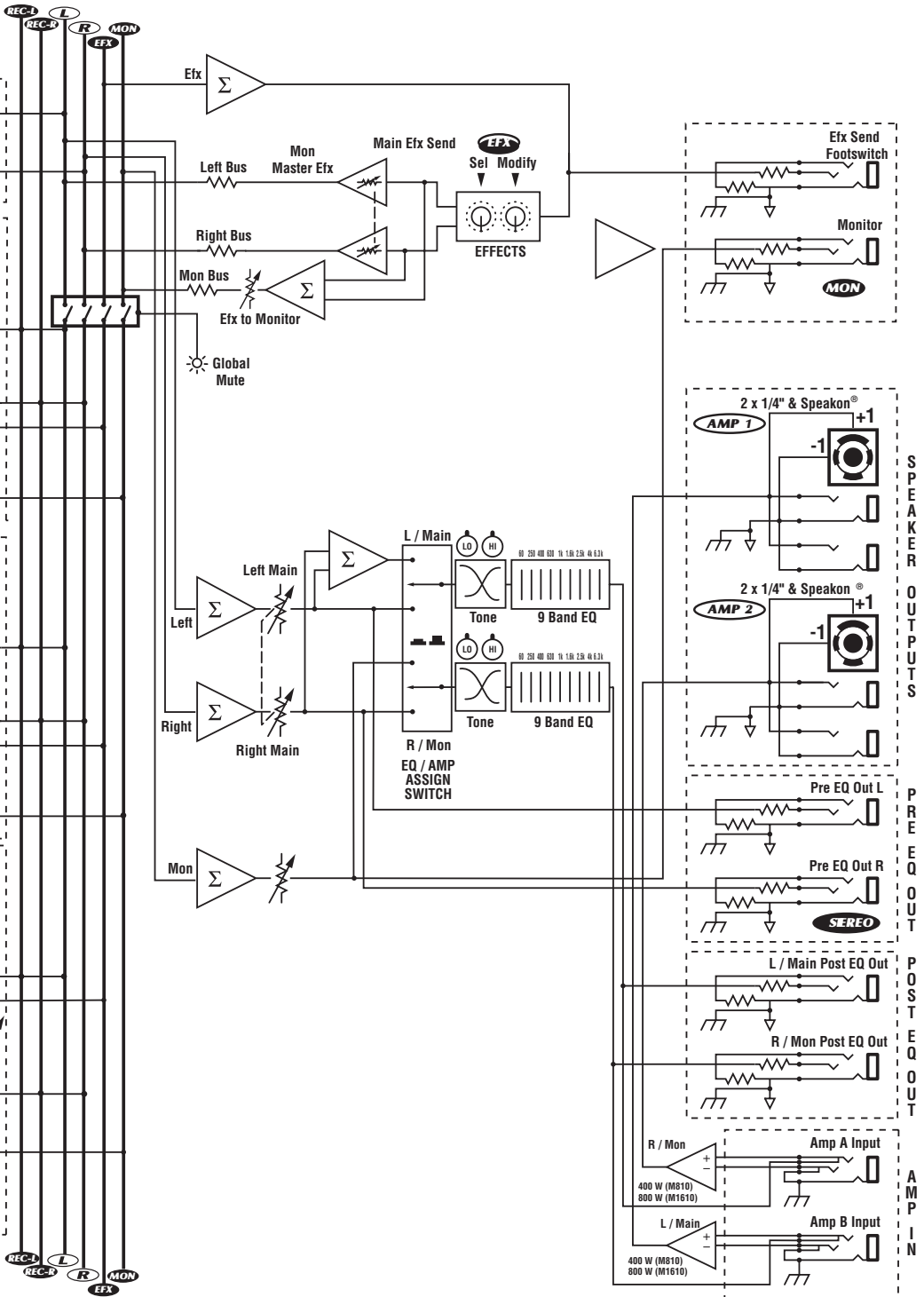
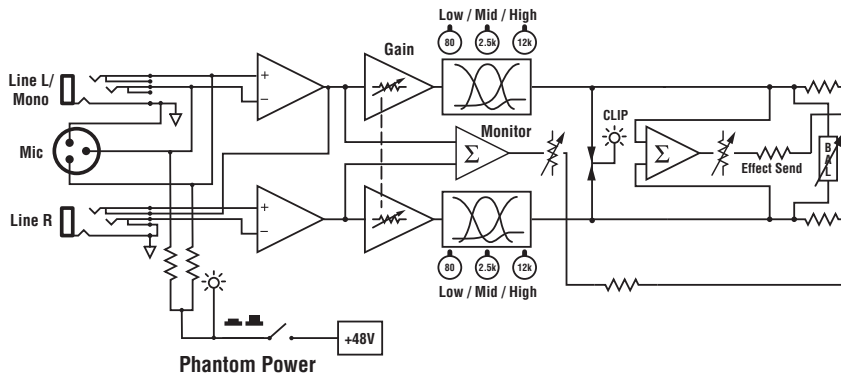
Mono Channel Input Details Channels 1-4

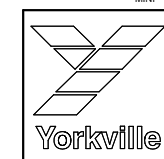
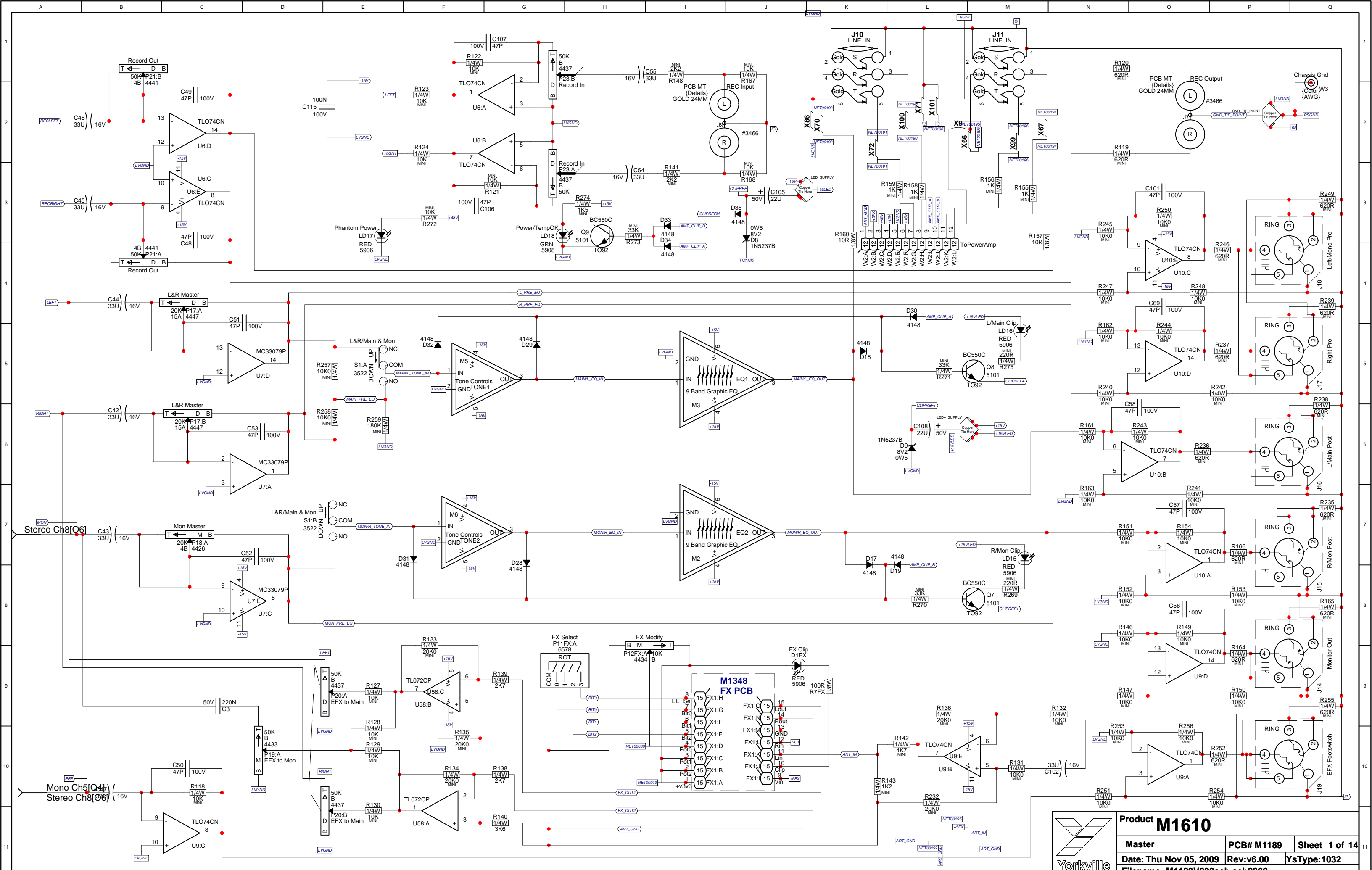


Mono Channel Input Details Channels 5-6

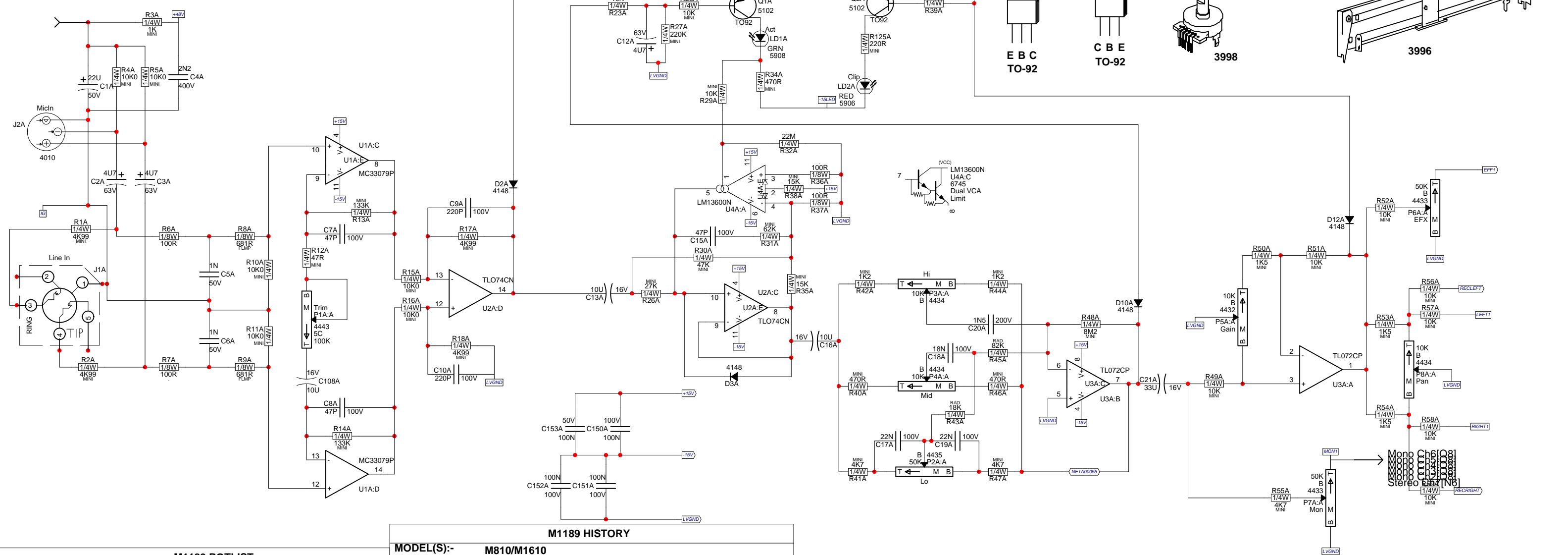


Stereo Channel Input Details Channels 7/8 & 9/10

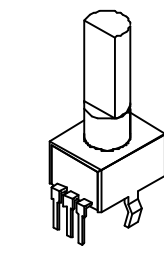
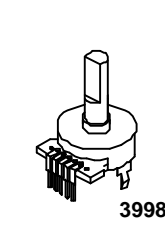
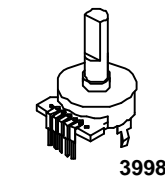
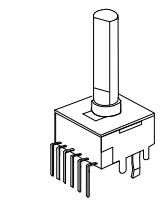
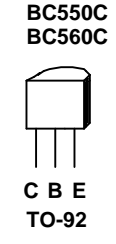
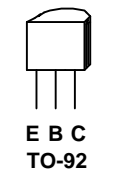




**Only Channel 1 is shown.
Channels 1 - 4 employ the
same circuit.**



- 2N5401
- 2N5551
- MPSA06
- MPSA13
- MPSA43
- MPSA56
- MPSA63



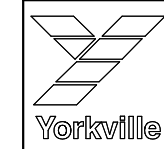
| M1189 POTLIST | | | | |
|----------------------------|---------------------|----------|-------|-----|
| MODEL(S):- | M1610 | FUNCTION | PART# | NOB |
| P25-34 L&R | Graphic EQ | 3998 | N/A | S04 |
| P1A,1B,1C,1D,1E,1F | Trim | 4443 | 9915 | P32 |
| P9G,9H | Mon Send | 4443 | 9917 | P32 |
| P5A,5B,5C,5D,5E,5F | 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 | DATE | DESCRIPTION OF CHANGE |
| 1 | v1.00p3 | 31 Dec, 2003 | Moved D3 anode to cathode of LD1 |
| 2 | 1.00 | 2 Feb, 2004 | Change break mute flash rate |
| 3 | 1.01 | 17 Feb, 2004 | Move C7a-f, R13a-f to make room for AA series xlr. |
| 4 | V | D | Change hole sizes for AA series xlr. |
| 5 | V | D | Changed U1FX SRAM to 32kX8 |
| 6 | 1.02 | 24 Feb, 2004 | Changed 3925 XLRs to 4010 AA series |
| 7 | 2.00 | 7-APR-2004 | PC#6675 Moved C150(A,C,E) to avoid hitting ICs |
| 8 | V | D | Removed routing from board - slots done on drill now |
| 9 | 2.00 | 15-APR-2004 | PC#6677 Chg X41 to C3(220n 50V), set gerber so TIE4 gets output properly |
| 10 | V | D | PC#6679 Chg. C21(A,B,C,D,E,F) from 470nF to 33uF |
| 11 | V | D | PC#6686 MOVED C23FX AWAY FROM SPACER |
| 12 | 2.00 | 6-MAY-2004 | Fixed silk screen on U6FX and U2FX |
| 13 | 2.00 | Aug 4, 2004 | |
| 1 | 2.10 | AUG-16-2004 | PC#6718 CHANGE R140 TO 10K0 (6116), R138&R139 TO 9K09 (6112) |
| 2 | V | D | PC#6771 :#3571->#3507 SKT FOR #6993 SRAM (GT) |
| 3 | 2.11 | NOV-23-2004 | GT:PC#6792:P17 FROM 50K#4441 TO 20KA #4447 |
| 4 | 2.20 | JAN-05-2005 | Updated 3921 jacks for clinch. |
| 5 | 2.20 | 21 Apr, 2005 | AH, PC#6816, ADD A HOLE FOR FEEDING GROUND WIRE |
| 6 | V | 4 Aug 2005 | N |
| 7 | V | D | N |
| 8 | 2.30 | 14 JUN 2006 | AH, PC#7091, UPDTAE #5322 CHANGE DRILL SIZE TO 40 |
| 9 | V | D | PC#6989, STRENGTHEN RCA JACK SECTION BREAKAWAY |
| 10 | V | D | #4581 UPDATED, PROPER DRILLING ORDER |
| 11 | 3.00 | 11-JAN-2008 | PC#7325, FORCE UPDATE PARTS FOR NEW PAD TYPE |
| 12 | V | D | PC#7330, REMOVE EXTRA PADS FROM U1FX AND U3FX |
| 13 | 4.00 | 2008/02/20 | New DFX, solder updates, add amp in jacks, link for tie4 |

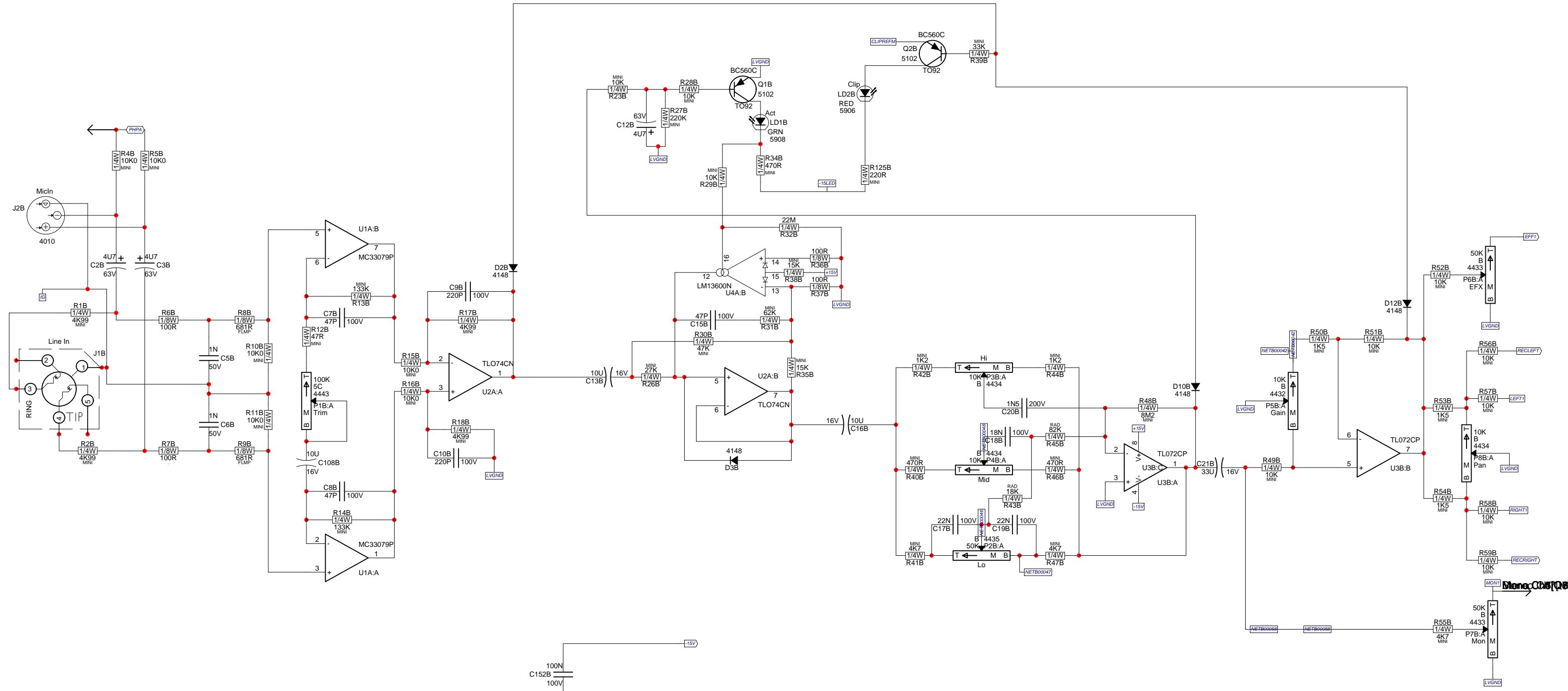
| # | DATE | VER# | DESCRIPTION OF CHANGE |
|----|------------|------|---|
| 1 | 2008/03/19 | 5.00 | Corrected Amp in jack swap. |
| 2 | 2008/03/25 | . | Added copper pour to encoder and pot legs. Rotated thief pads on stereo channel pots. |
| 3 | . | . | Added scoring tooling holes. |
| 4 | 2008/04/18 | . | Changed XLR jacks to minimum outline. |
| 5 | 2008/06/19 | 6.00 | 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 | . | . | N |
| 9 | . | . | N |
| 10 | D | V | N |
| 11 | D | V | N |
| 12 | D | V | N |
| 13 | D | V | N |

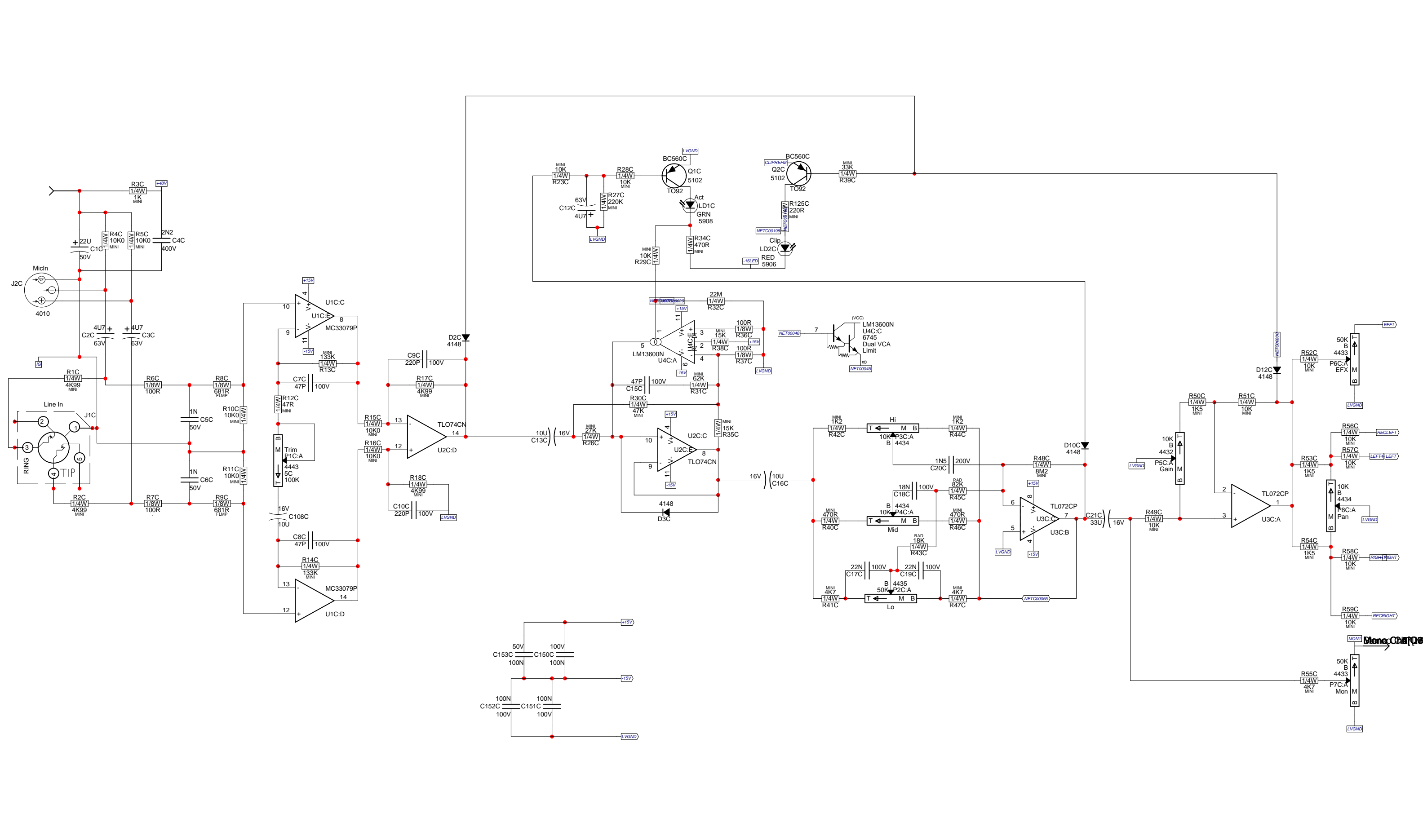
| M1189 PENDING CHANGES | | |
|-----------------------|-------|----------------|
| MODEL(S):- | M1610 | PENDING CHANGE |
| # | PC# | |
| 1 | PC | X |
| 2 | PC | X |
| 3 | PC | X |
| 4 | PC | X |
| 5 | PC | X |
| 6 | PC | X |

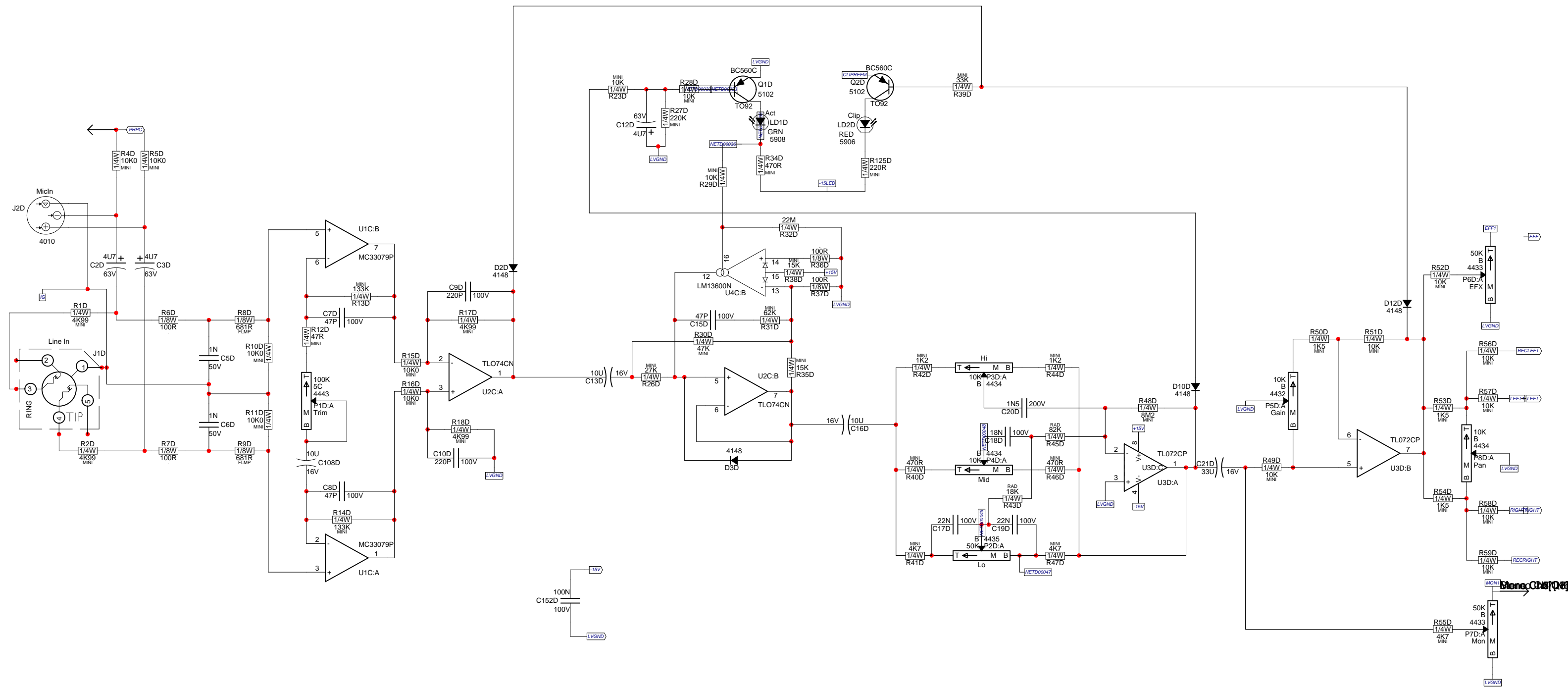
| M1189 DRILL HISTORY | | | |
|---------------------|------------|-------------|--|
| MODEL(S):- | M810/M1610 | DATE | DESCRIPTION OF CHANGE |
| # | VER# | | |
| 1 | V01 | 24-FEB-2004 | N |
| 2 | V02 | 21-APR-2005 | N |
| 3 | V03 | 4-AUG-2005 | PC#6818, ADDING A HOLE FOR FEEDING GREEN GND |
| 4 | V04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



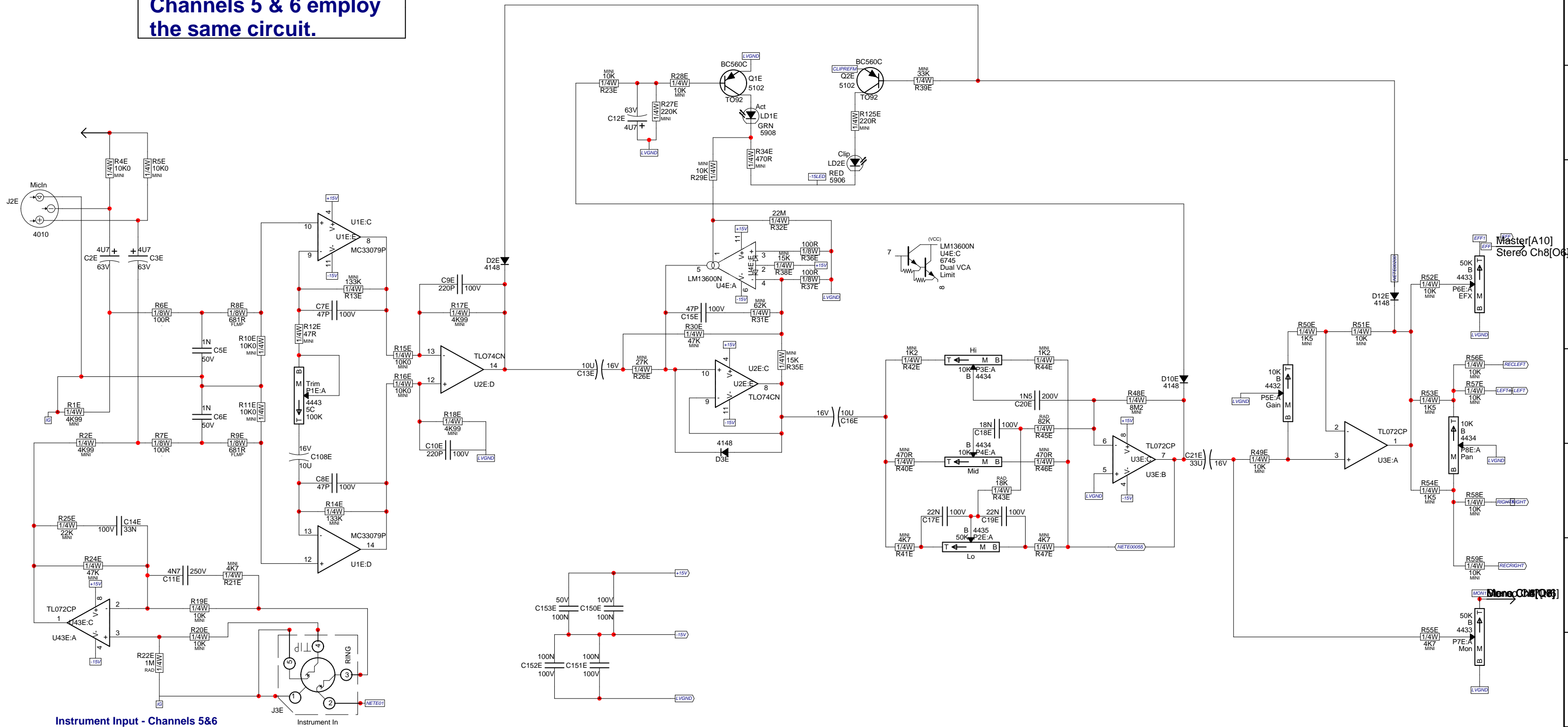
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|--------------------------------|------------|---------------|
| Product M1610 | | |
| Mono Ch1 | PCB# M1189 | Sheet 2 of 14 |
| Date: Thu Nov 05, 2009 | Rev:v6.00 | YsType:1032 |
| Filename: M1189V600sch.sch2002 | | |







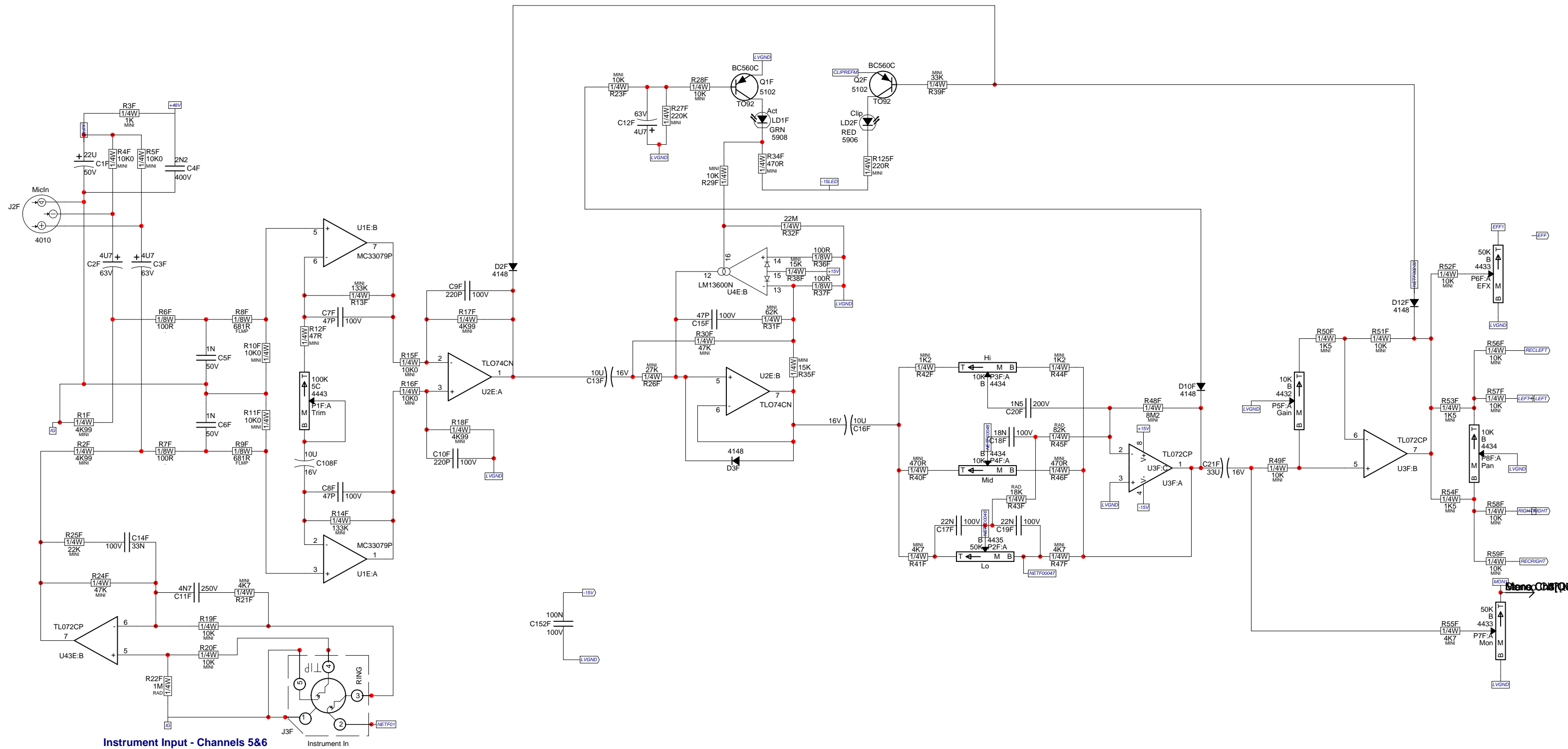
**Only Channel 5 is shown.
Channels 5 & 6 employ
the same circuit.**



Instrument Input - Channels 5&6

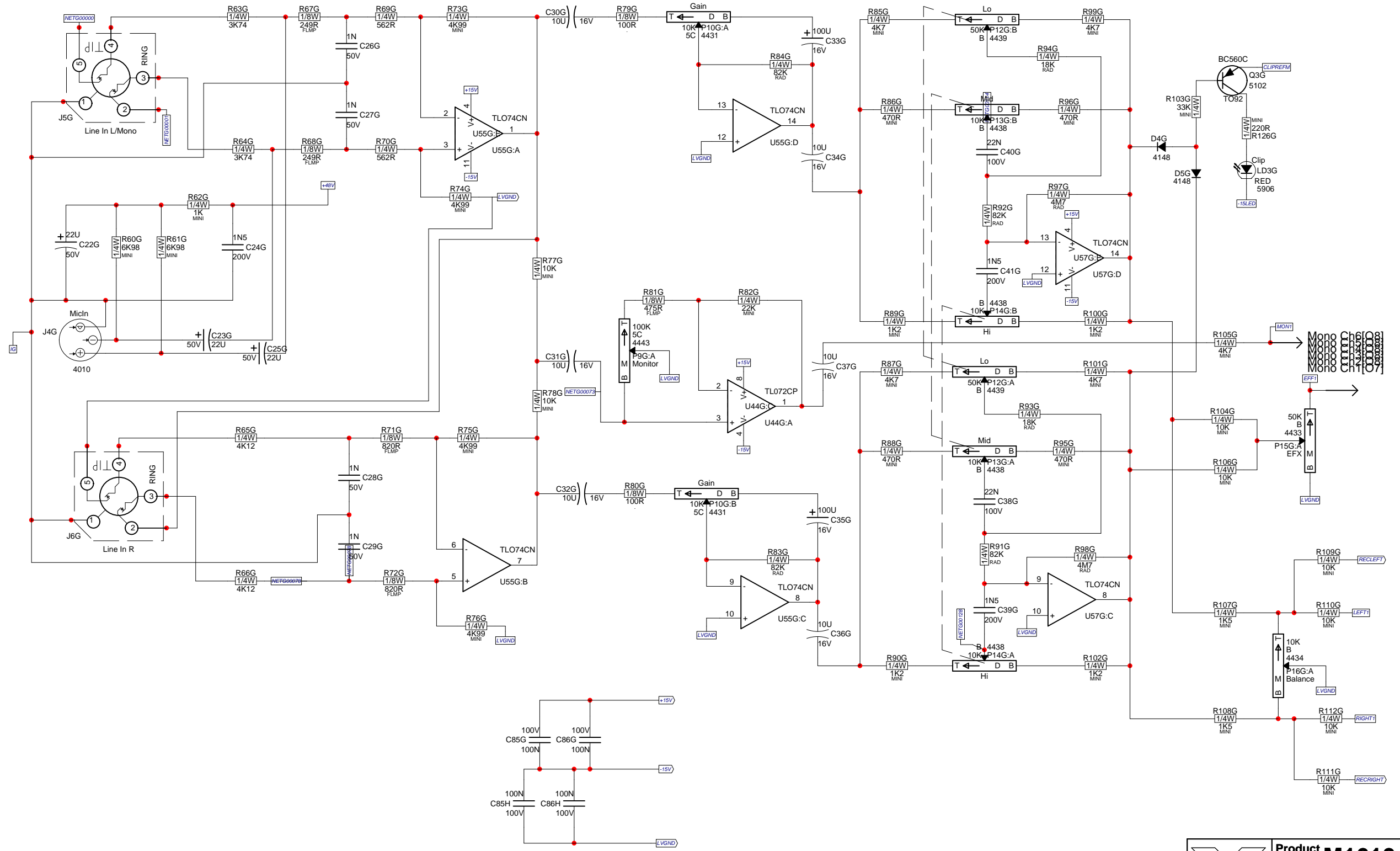
Instrument In

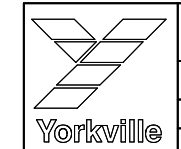
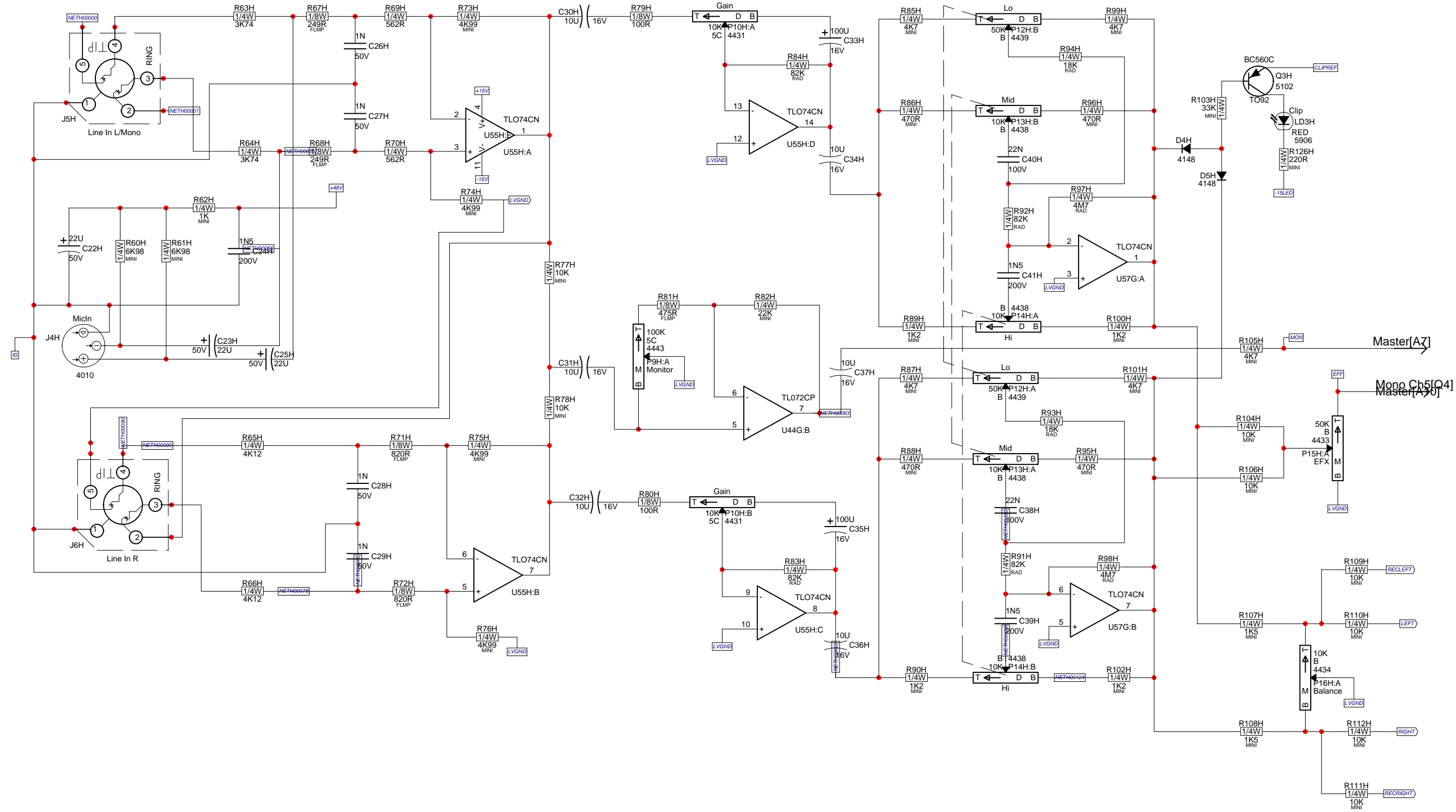




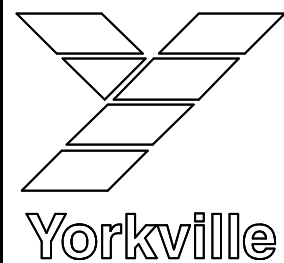
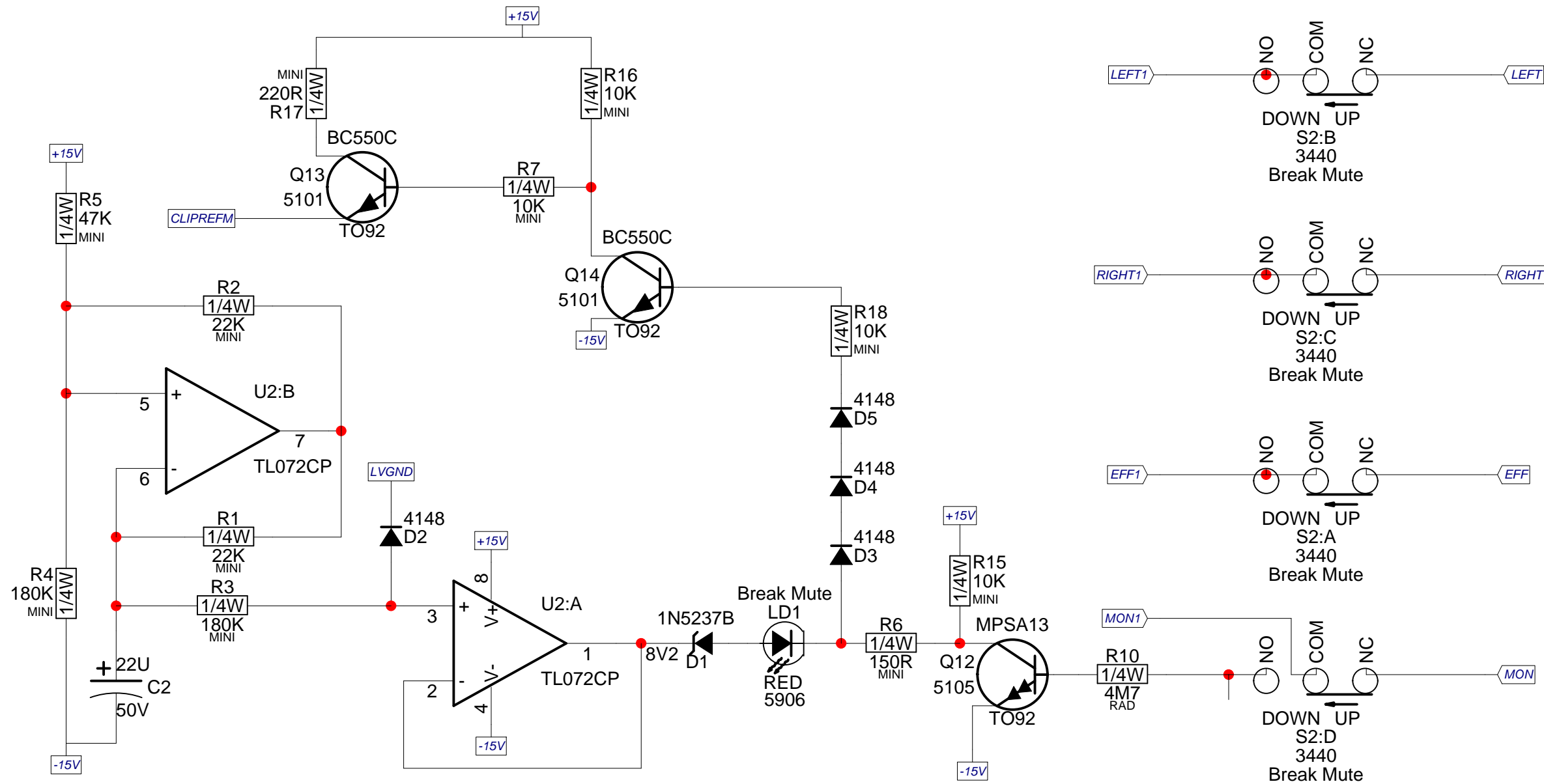
Instrument Input - Channels 5&6

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

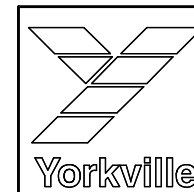
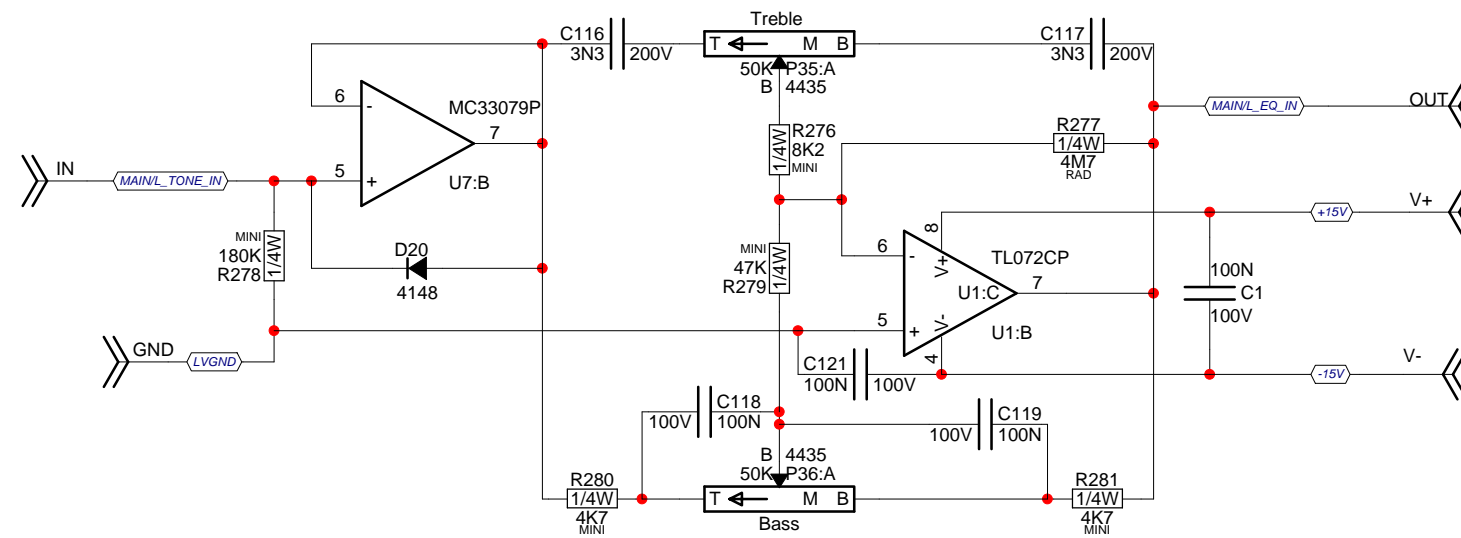




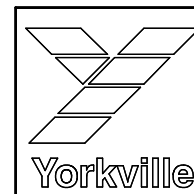
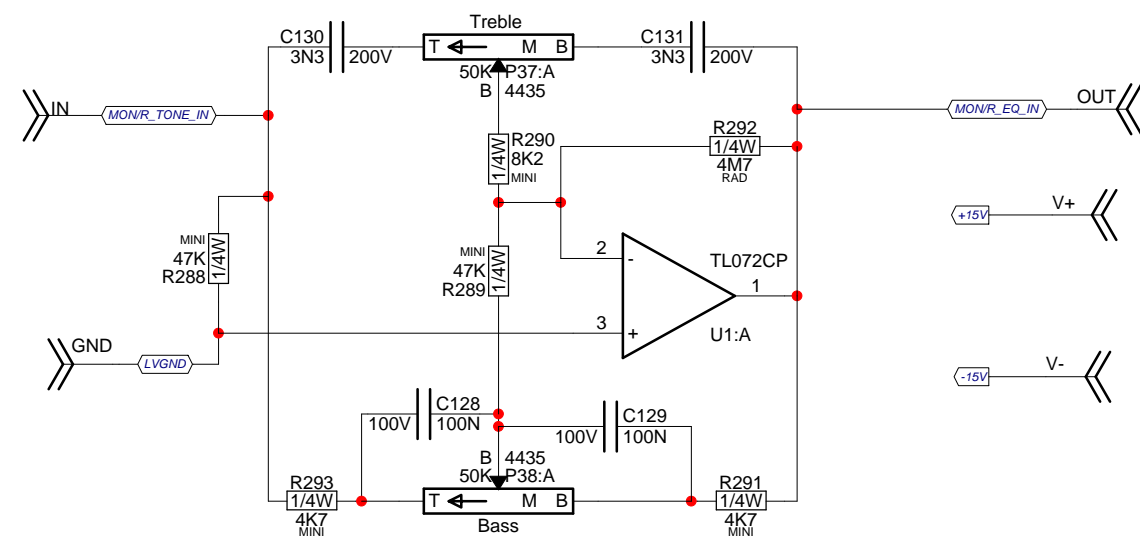
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| Product M1610 | | |
| Stereo Ch8 | PCB# M1189 | Sheet 9 of 14 |
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| Product M1610 | | |
| BreakMute | PCB# M1189 | Sheet 10 of 14 |
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| Product M1610 | | |
| TONE1 | PCB# M1189 | Sheet 11 of 14 |
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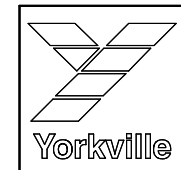
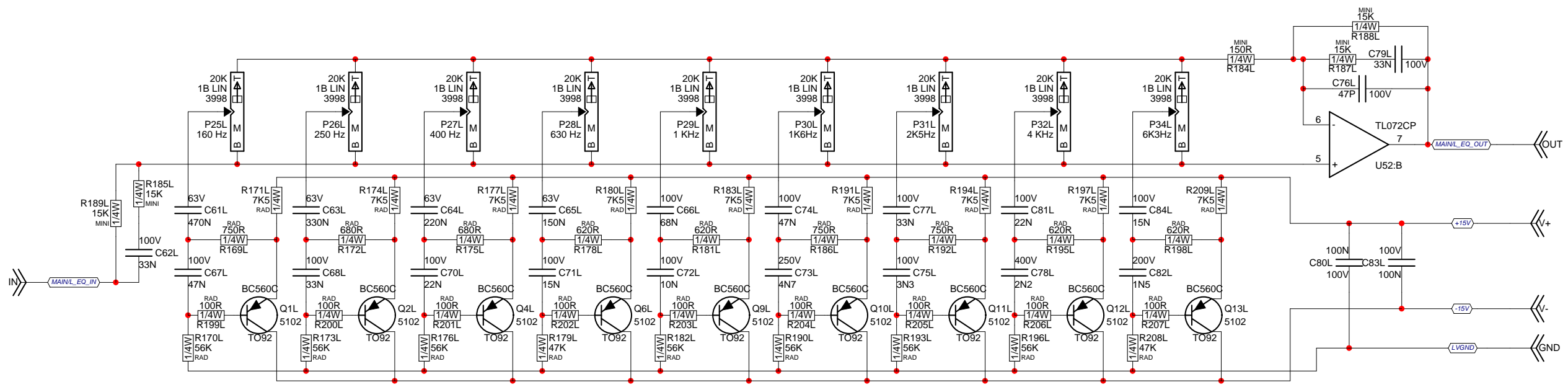


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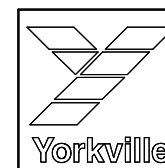
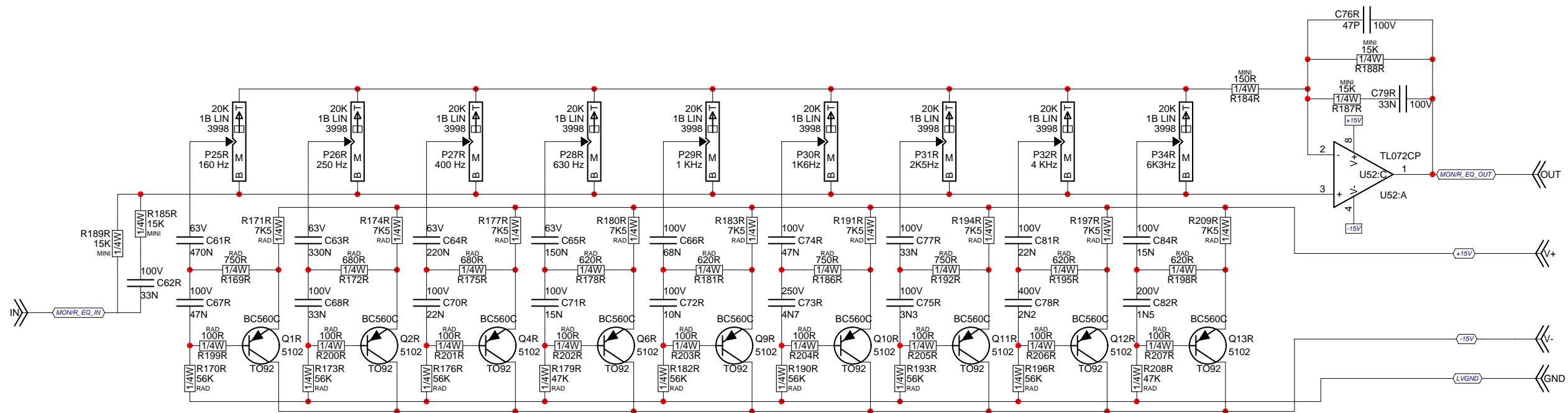
TONE2 PCB# M1189 Sheet 12 of 14

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| Product M1610 | | |
| EQ1 | PCB# M1189 | Sheet 13 of 14 |
| Date: Thu Nov 05, 2009 | Rev:v6.00 | YsType:1032 |
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| Product M1610 | | |
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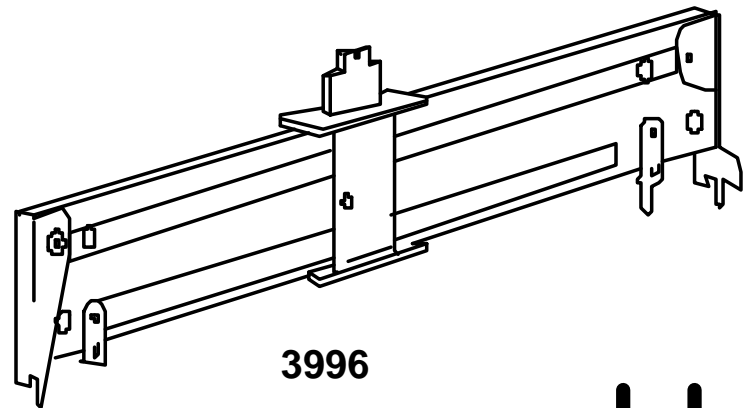


SEE LAYOUT DIAGRAM

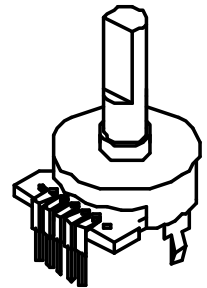


M1189 PRODUCTION NOTES

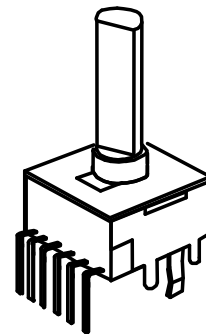
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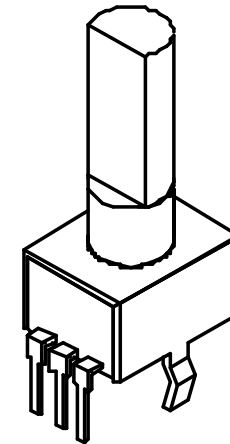
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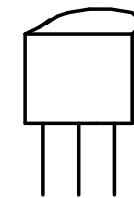


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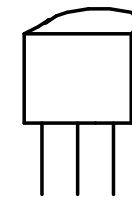
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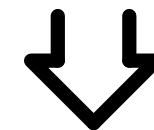
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TO-92

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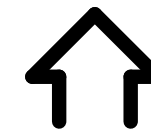
C B E
TO-92

SEE PRODUCT HISTORY

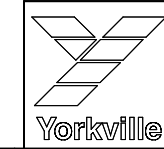
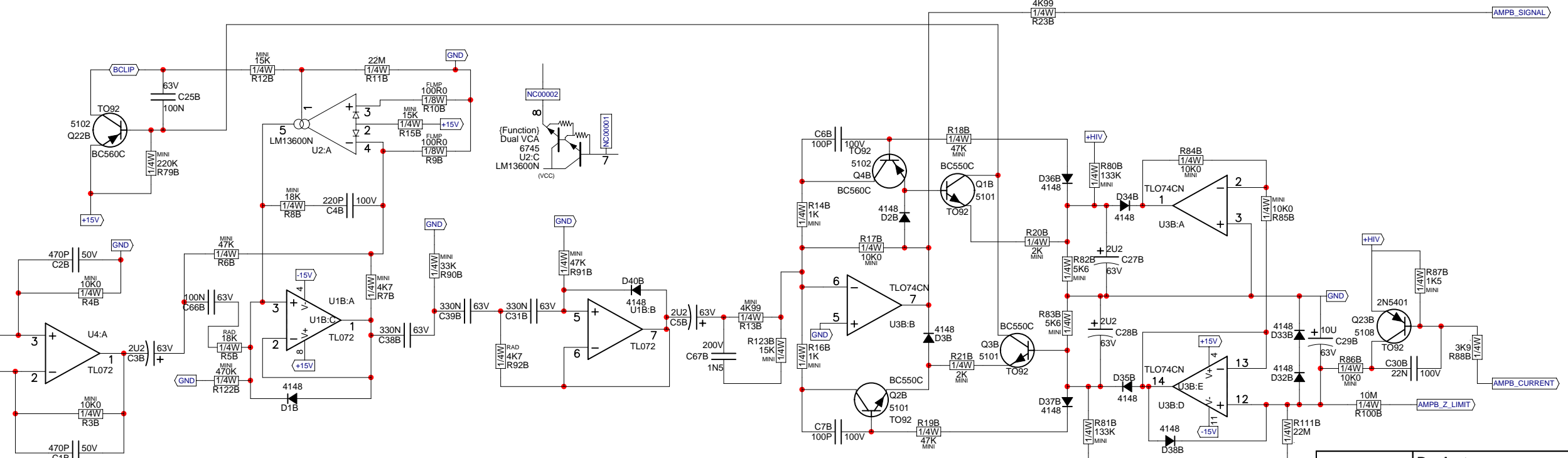
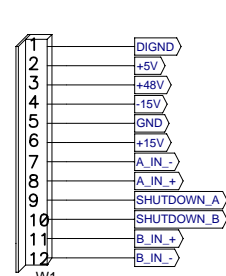
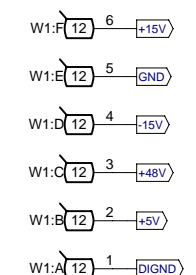
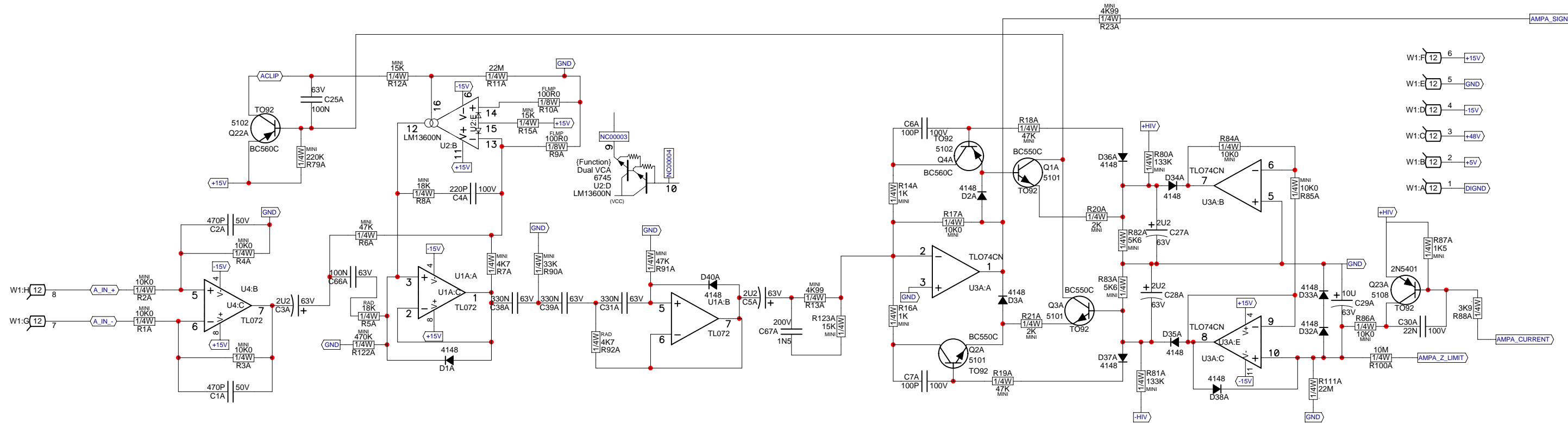




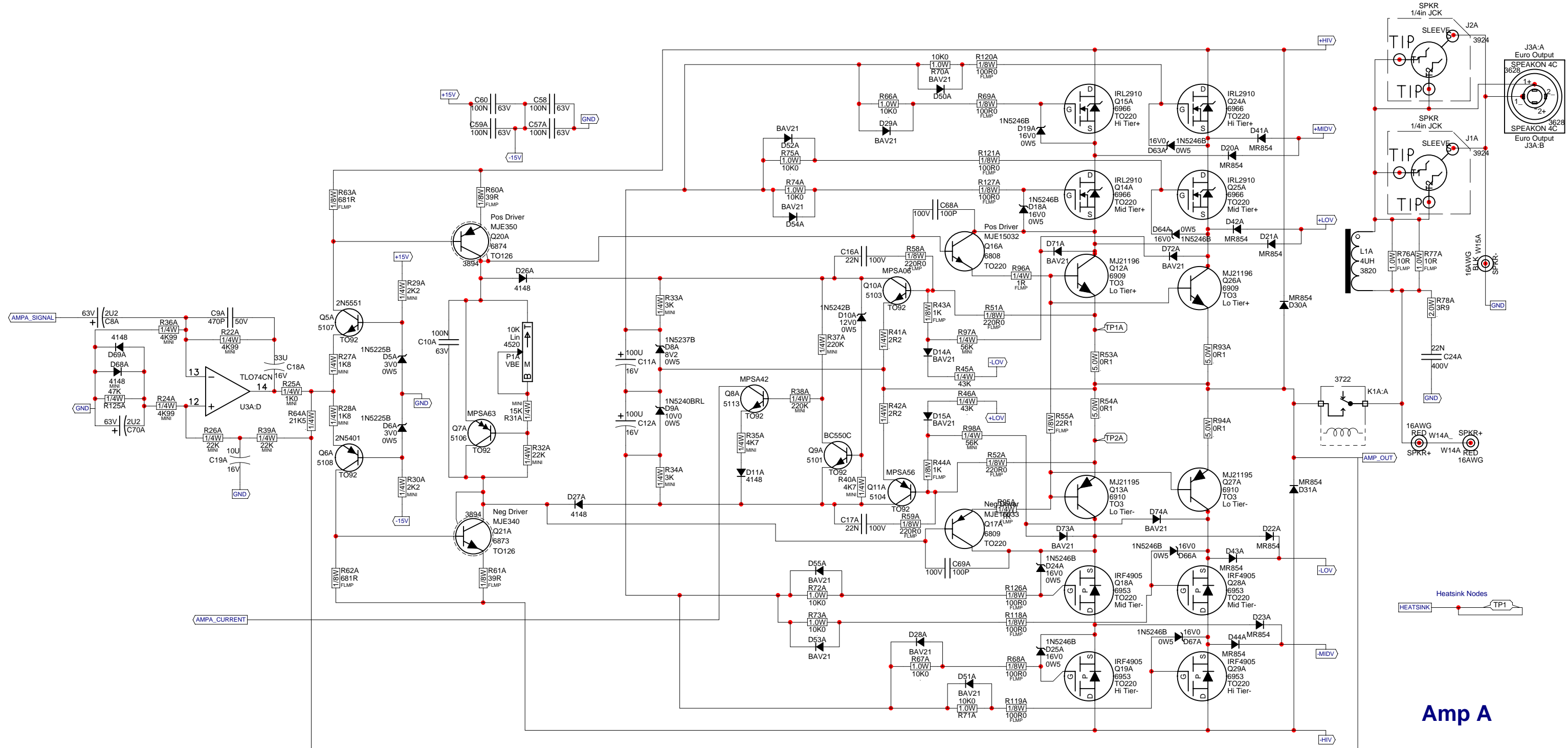
SEE PRODUCTION NOTES



| 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 | M1189 PENDING CHANGES 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 M1189 DRILL HISTORY MODEL(S):- M810/M1610 <table border="1"> <thead> <tr> <th>#</th> <th>DATE</th> <th>VER#</th> <th>DESCRIPTION OF CHANGE</th> </tr> </thead> <tbody> <tr><td>1</td><td>24-FEB-2004</td><td>V01</td><td>N</td></tr> <tr><td>2</td><td>21-APR-2005</td><td>V02</td><td>N</td></tr> <tr><td>3</td><td>4-AUG-2005</td><td>V03</td><td>N</td></tr> <tr><td>4</td><td>2008/02/20</td><td>V04</td><td>N</td></tr> <tr><td>5</td><td>2008/04/18</td><td>V05</td><td>N</td></tr> <tr><td>6</td><td>D</td><td>V</td><td>N</td></tr> </tbody> </table> | | | | | # | PC# | PENDING CHANGE | 1 | PC | X | 2 | PC | X | 3 | PC | X | 4 | PC | X | 5 | PC | X | 6 | PC | X | # | 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 |
| # | PC# | PENDING CHANGE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | PC | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | PC | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | PC | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | PC | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | PC | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | PC | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| # | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

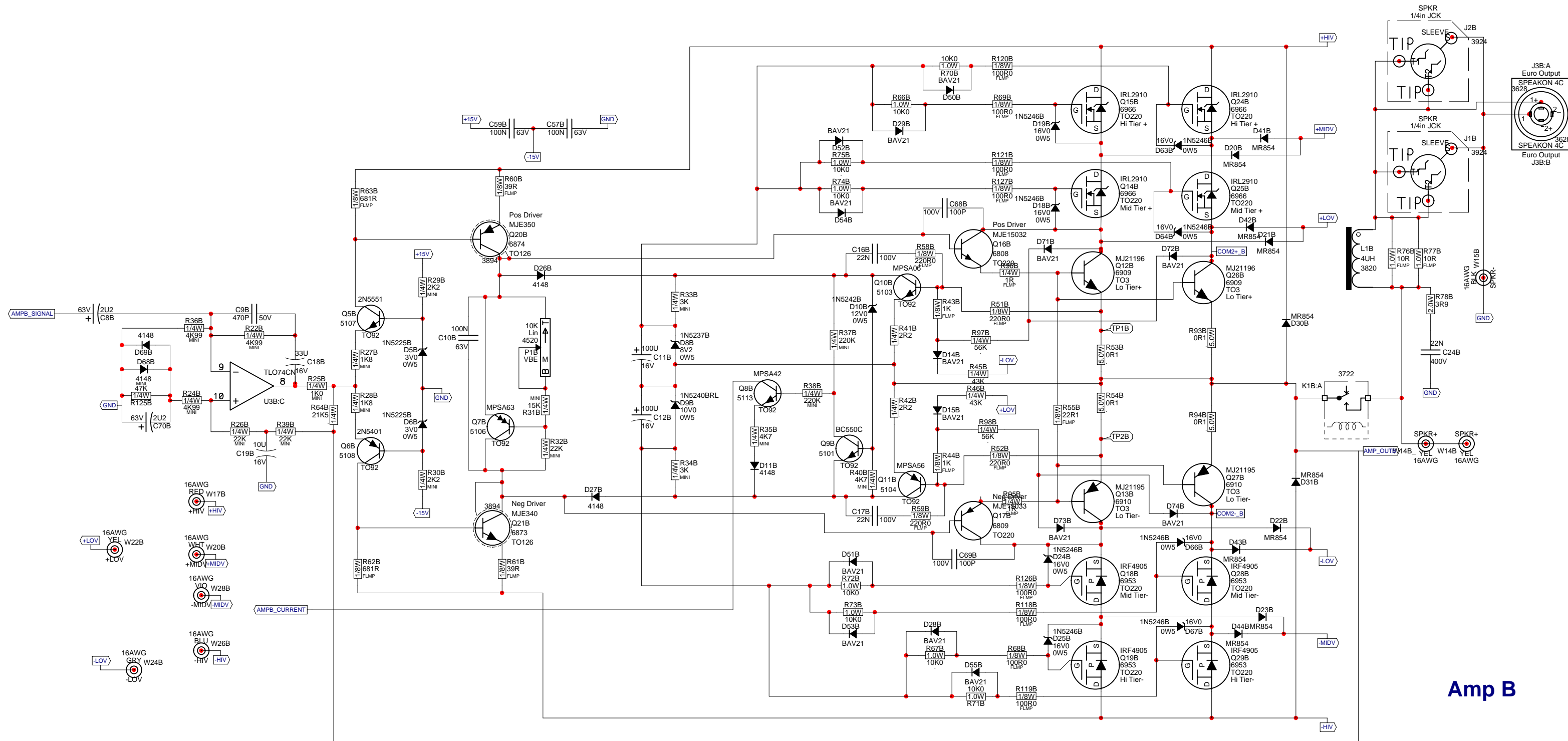


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| Product M1610 | | |
| Ampln | PCB# M1190 | Sheet 1 of 4 |
| Date: Thu Feb 04, 2010 | Rev:V11.0 | YsType:.. |
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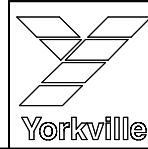


Amp A

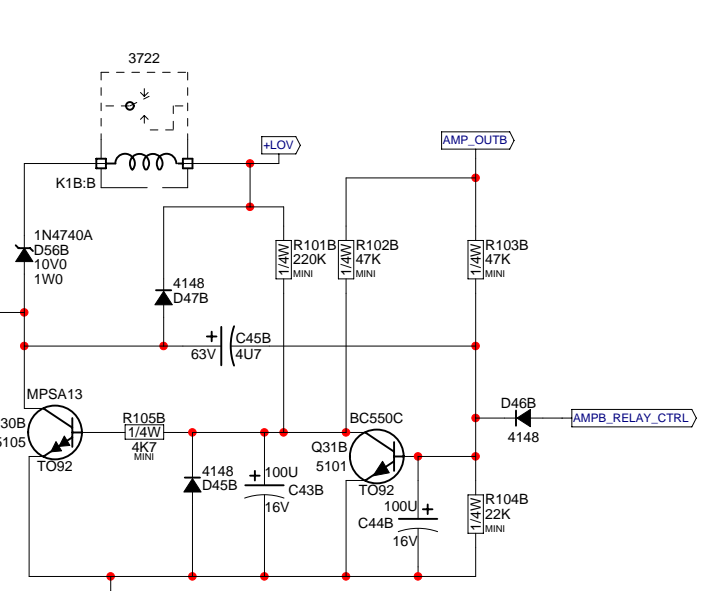
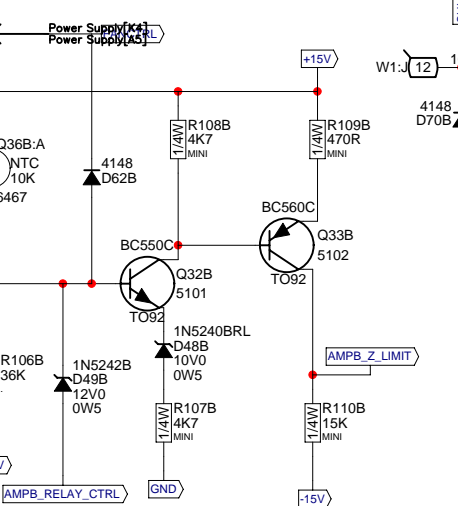
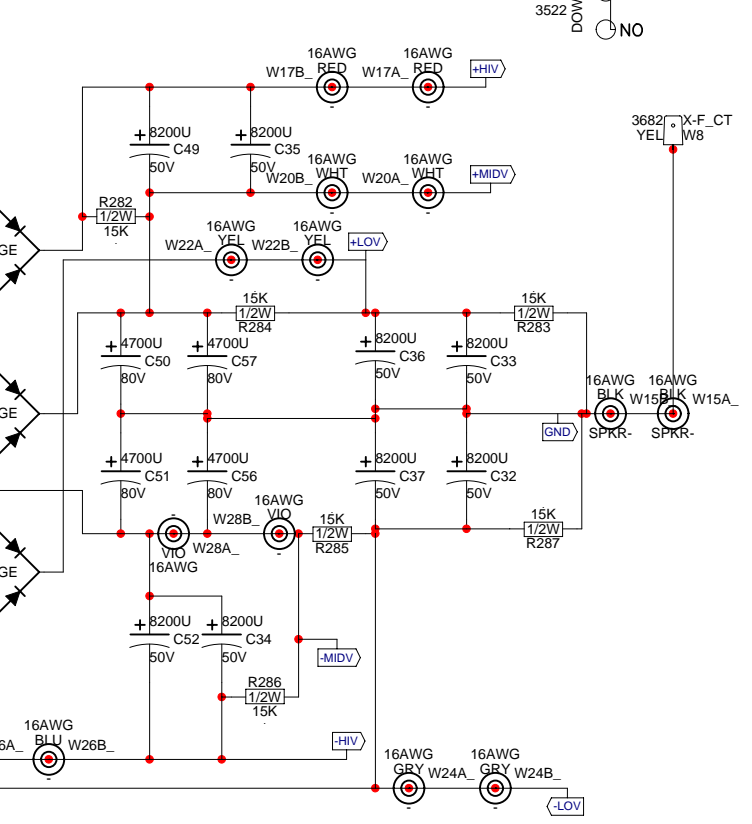
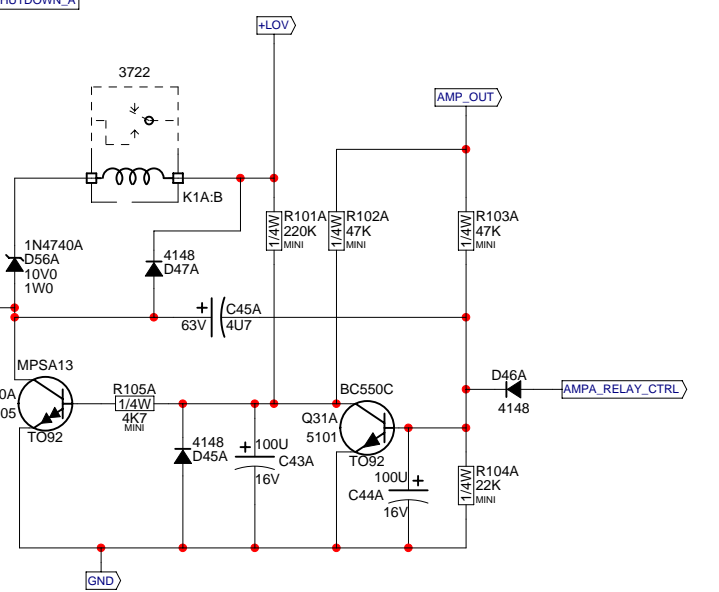
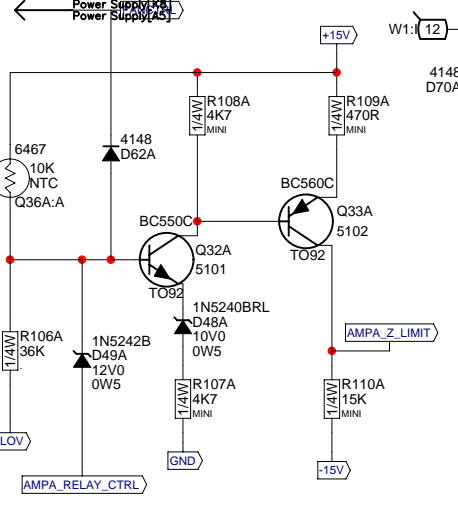
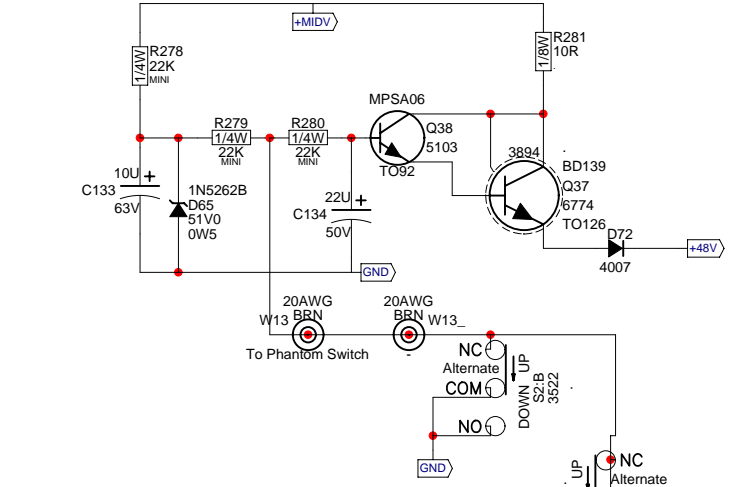
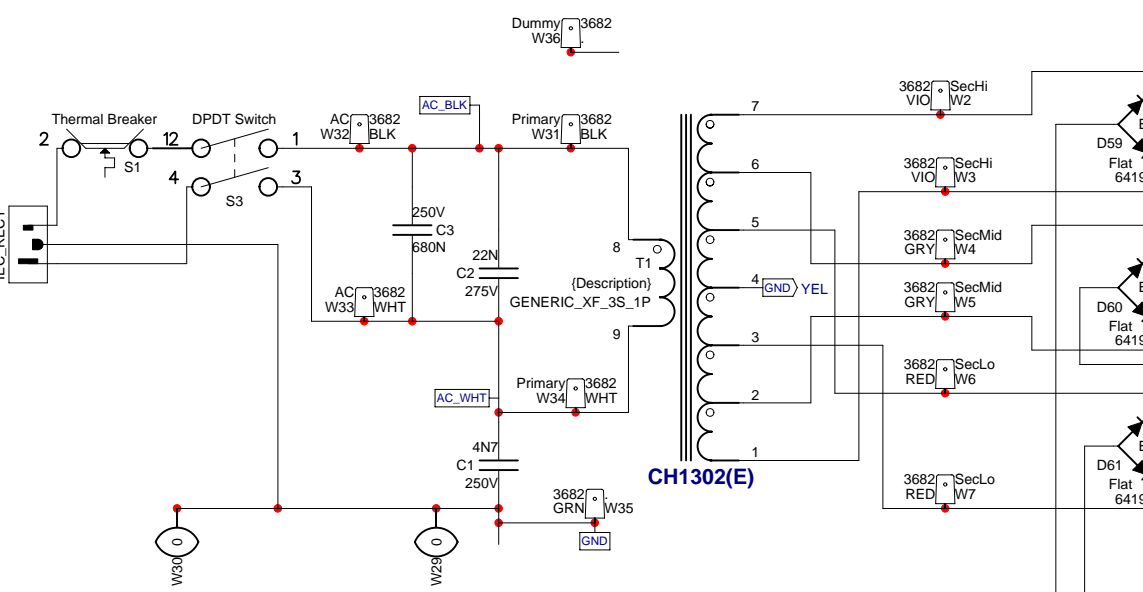
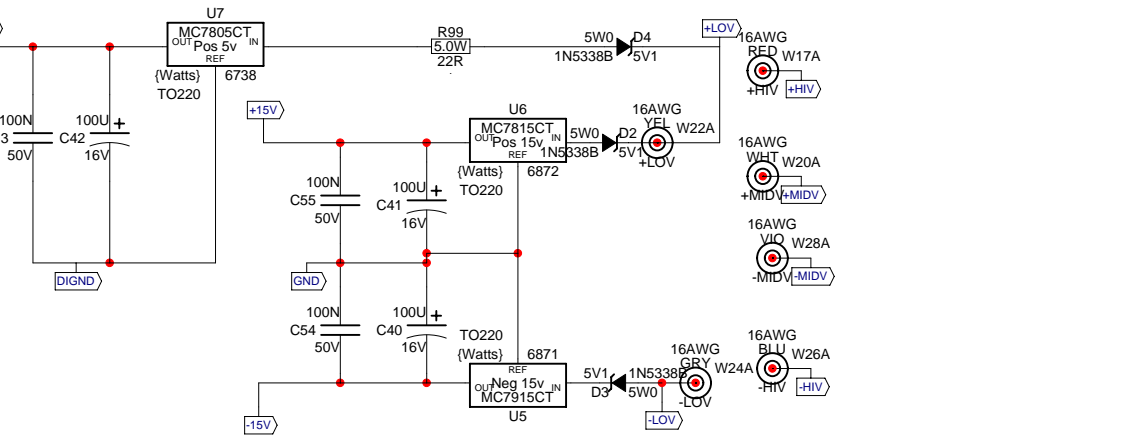
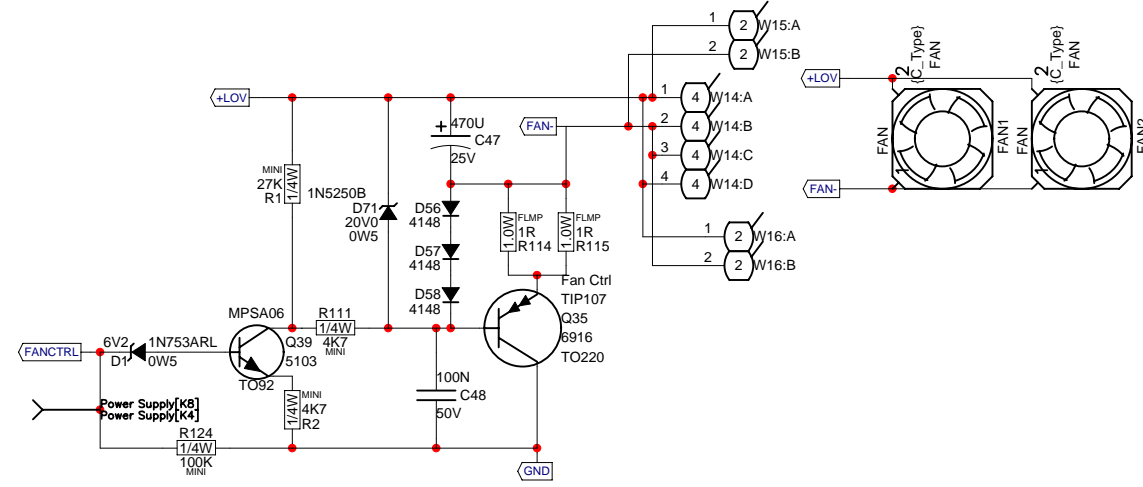
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|--|---------------------------------|------------|--------------|
| | Product M1610 | | |
| | Channel A | PCB# M1190 | Sheet 2 of 4 |
| | Date: Thu Feb 04, 2010 | Rev: V11.0 | YsType:.. |
| | Filename: M1190V1100sch.sch2002 | | |



Amp B

| | | | |
|---|---------------------------------|------------|--------------|
|  | Product M1610 | | |
| | 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 XFORMER -> CH1302/E, ADDED 2x#4599,SWAPPED W48 |
| 17 | JUN-08-2005 | 6.00 | 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 | |



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Product **M1610**

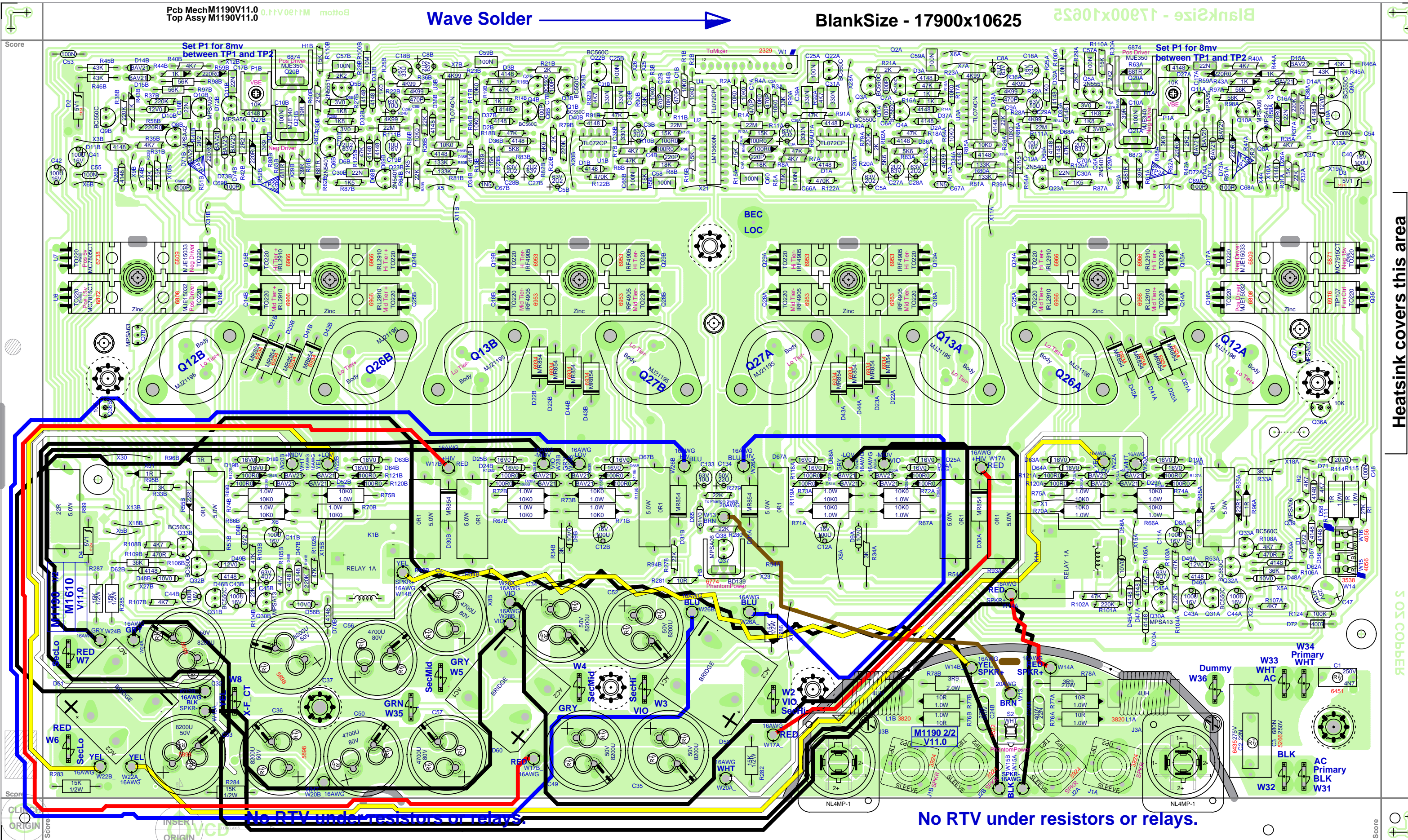
Power Supply PCB# M1190 Sheet 4 of 4

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

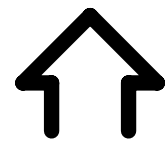


Heatsink covers this area

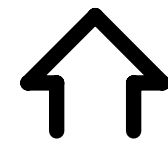
No RTV under resistors or relays.

No RTV under resistors or relays.

SEE LAYOUT DOCUMENTATION

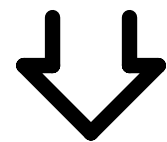
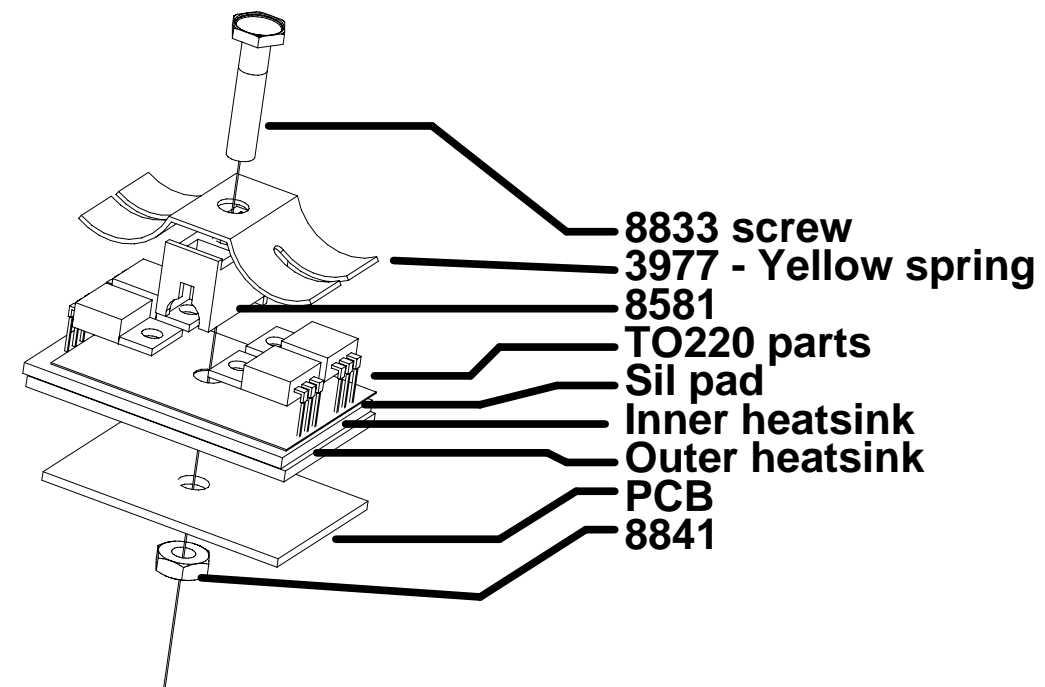
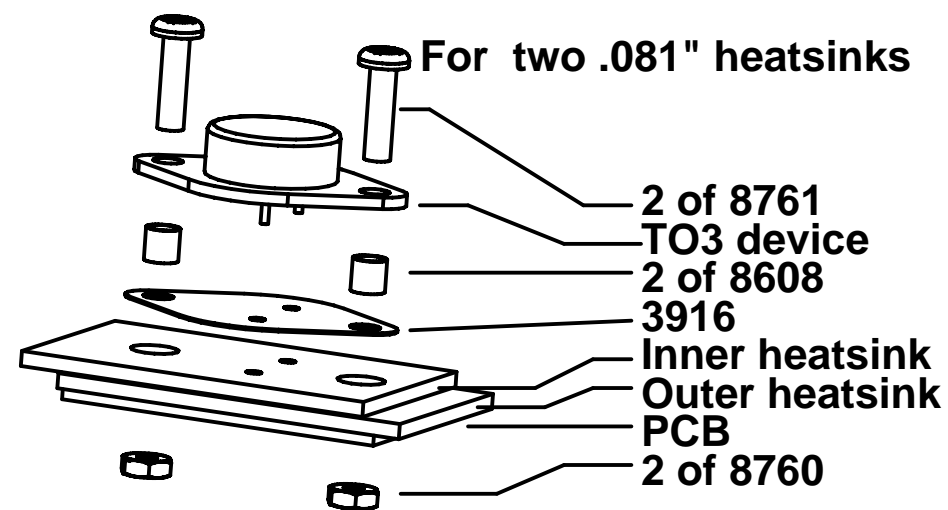


SEE LAYOUT DIAGRAM

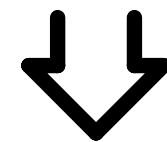


M1190 PRODUCTION NOTES

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



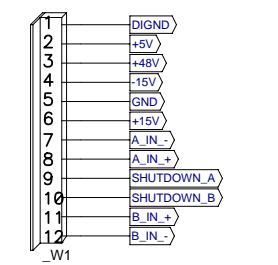
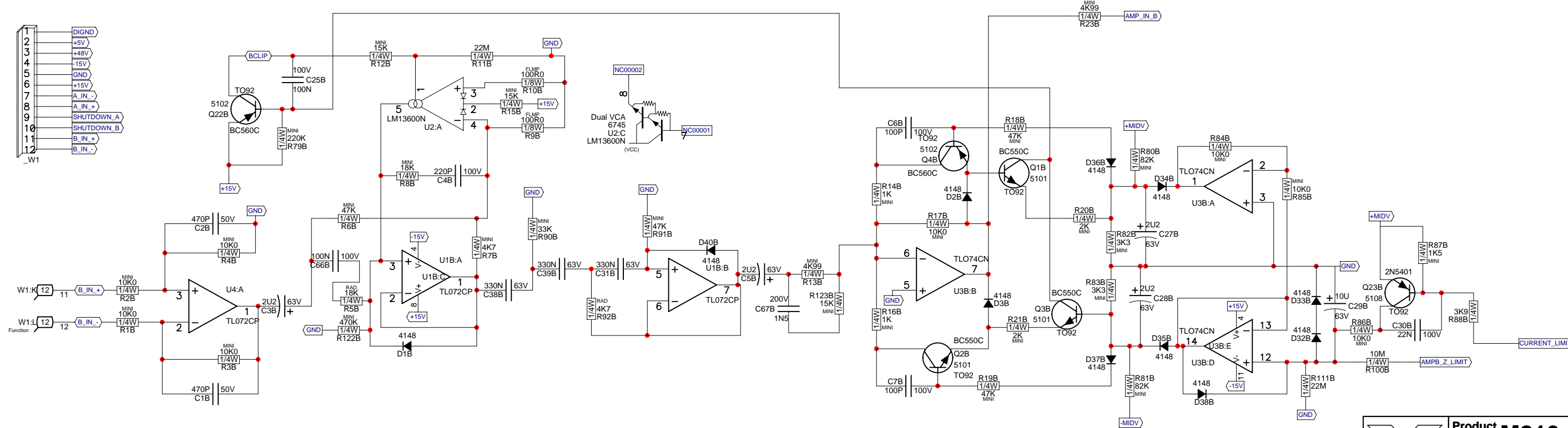
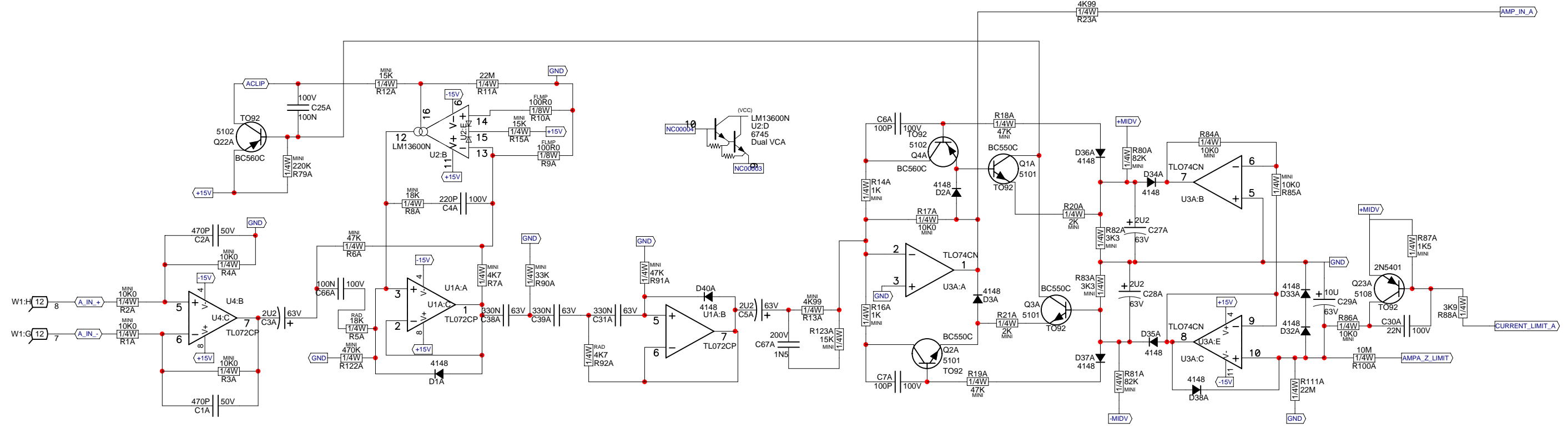


SEE PPRODUCTION NOTES

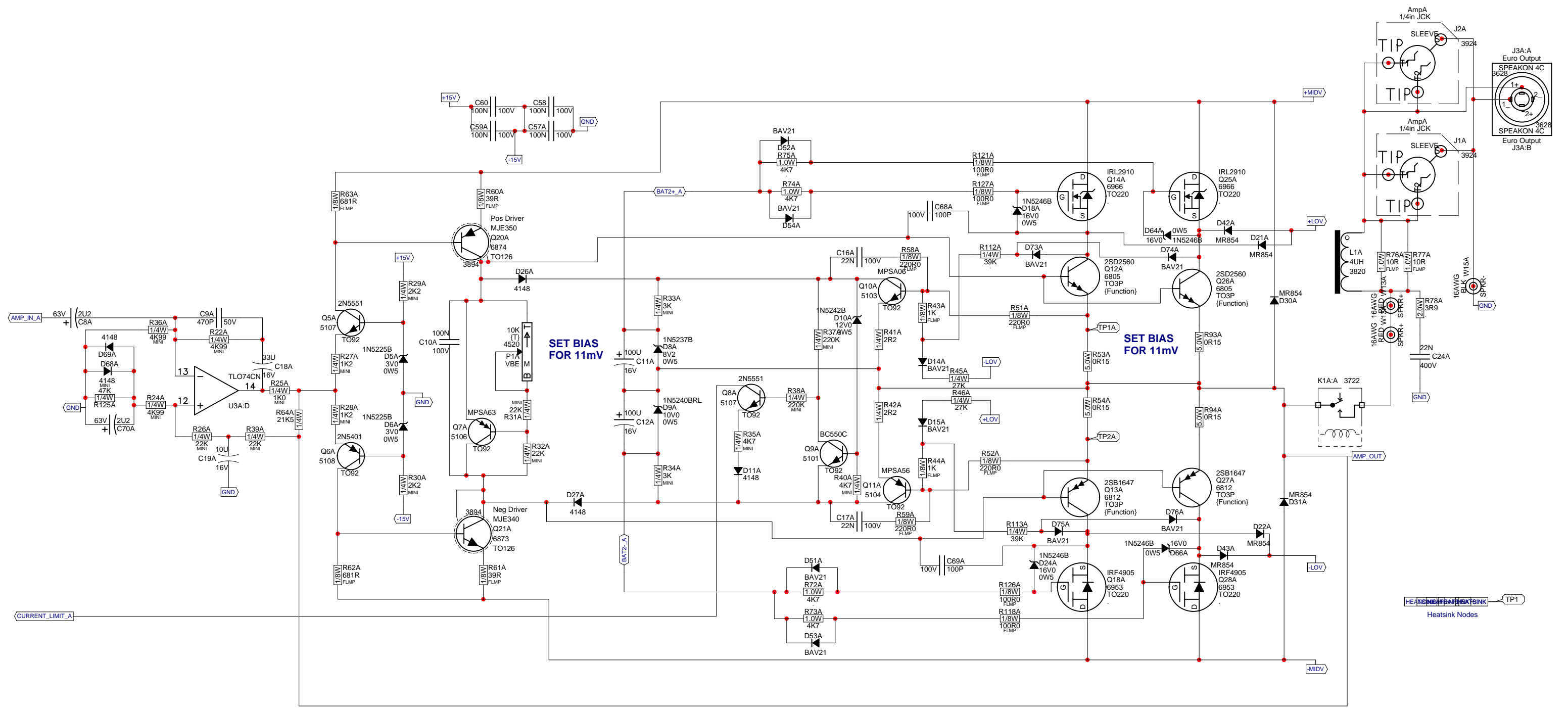


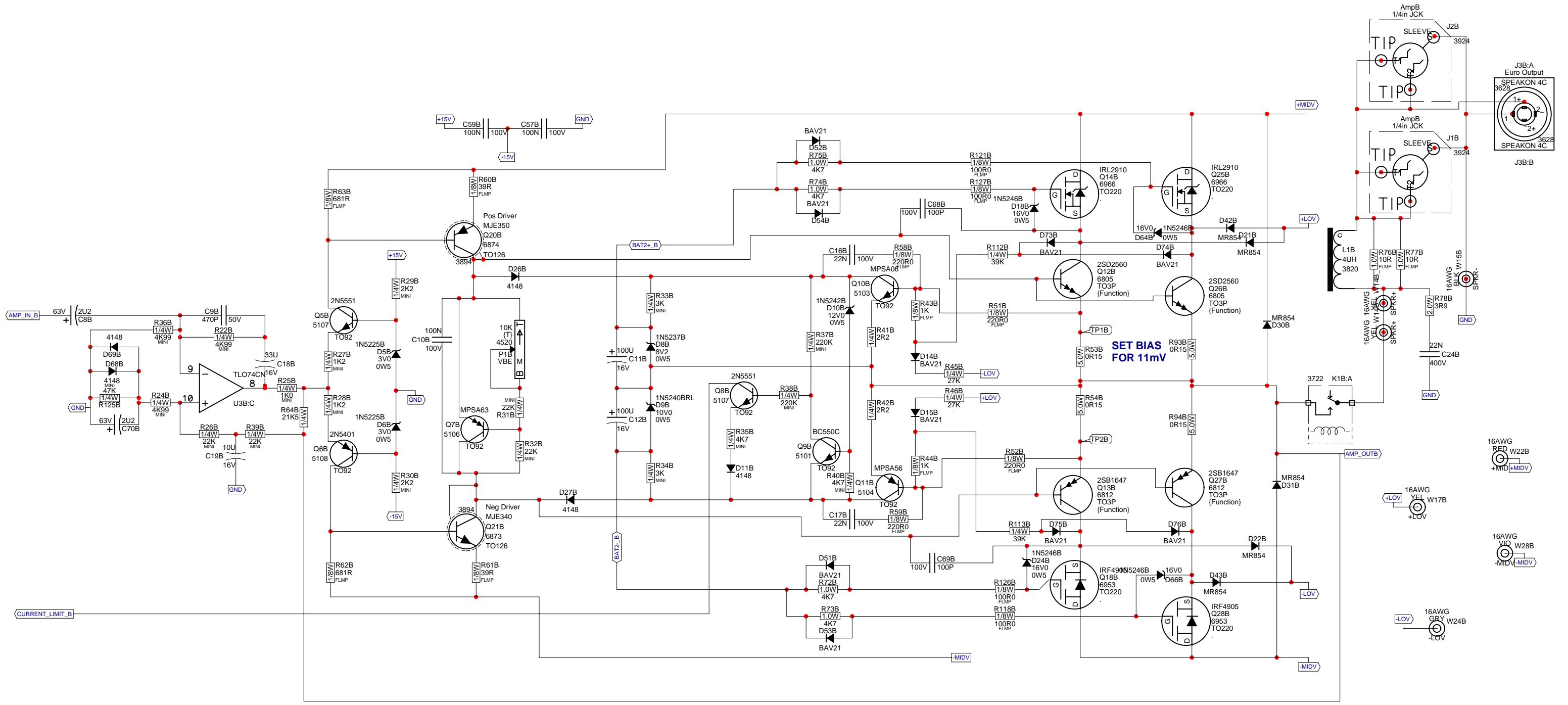
| M1190.PCB_DATABASE_HISTORY | | | | # | DATE | VER# | DESCRIPTION OF CHANGE |
|----------------------------|--------------|------|--|----|-------------|-------|---|
| MODEL(S):- M1610 | | | | 24 | . | . | R79A&B #6127 470K->#6127 220K |
| | | | | 25 | . | . | ADDED D4 #5124 5V1/5W, R97&R98 #2006 1R/1W->#5124 |
| | | | | 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 | | | 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 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 |



| | | | |
|--|---------------------------------|-------------|--------------|
| | Product M810-2 | | |
| | Ampln | PCB# M1194 | Sheet 1 of 4 |
| | Date: Fri Feb 05, 2010 | Rev: V10.00 | YsType:.. |
| | Filename: M1194V1000sch.sch2002 | | |

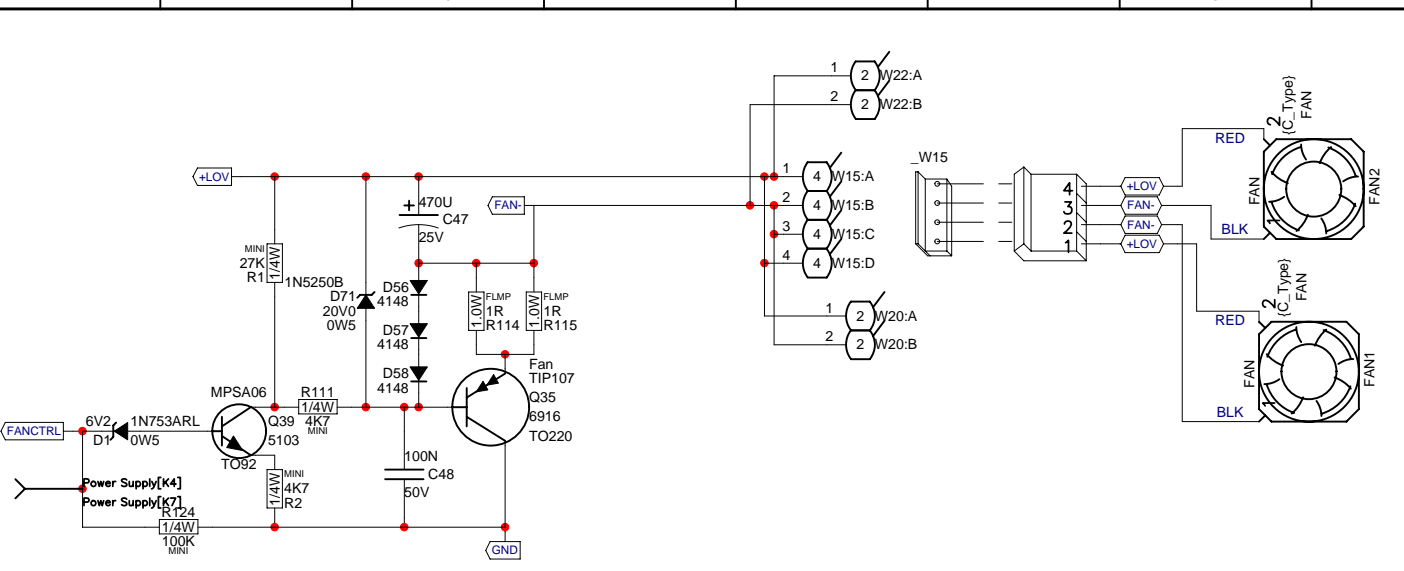




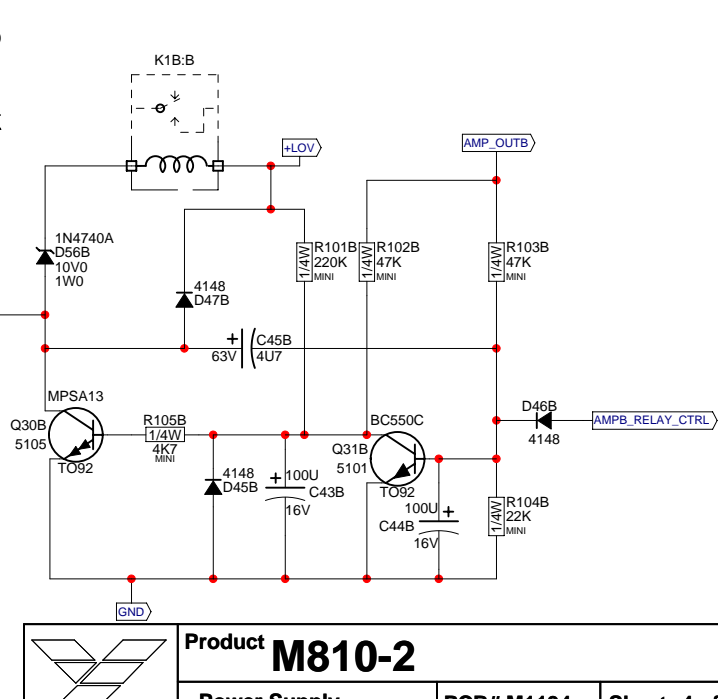
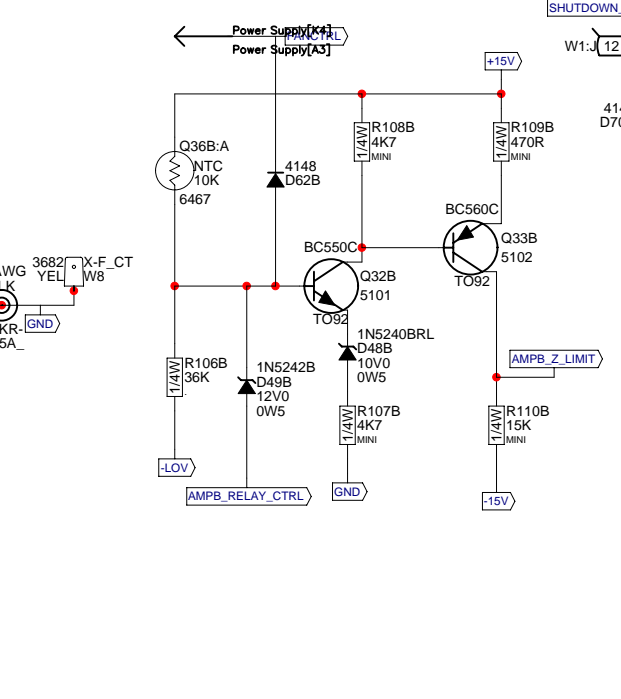
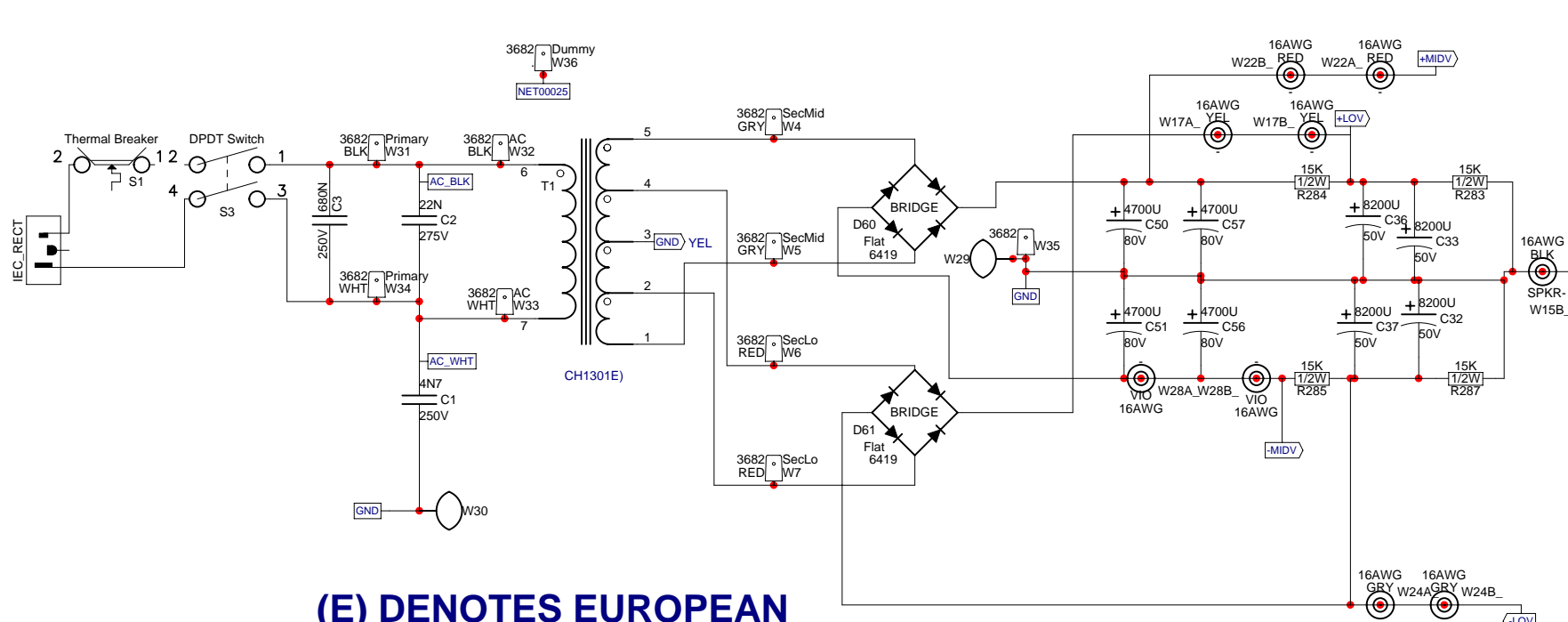
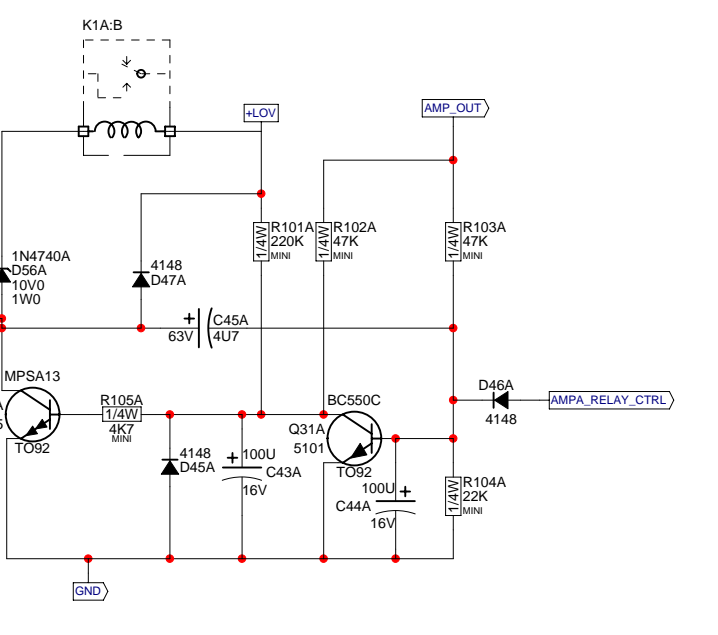
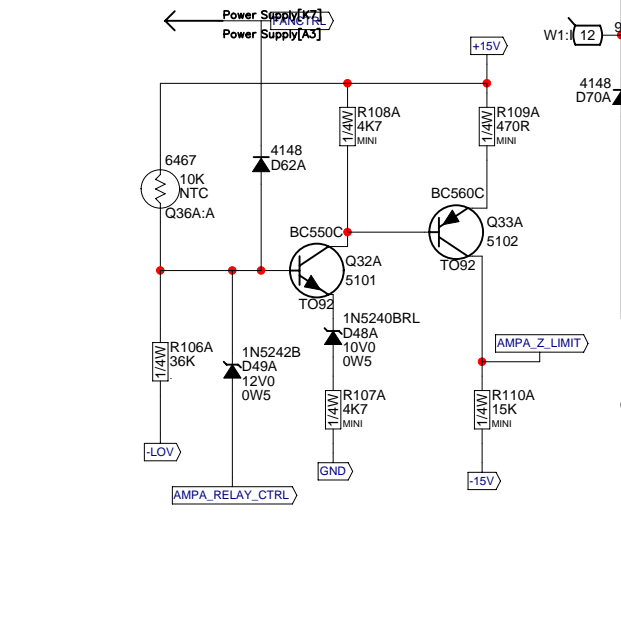
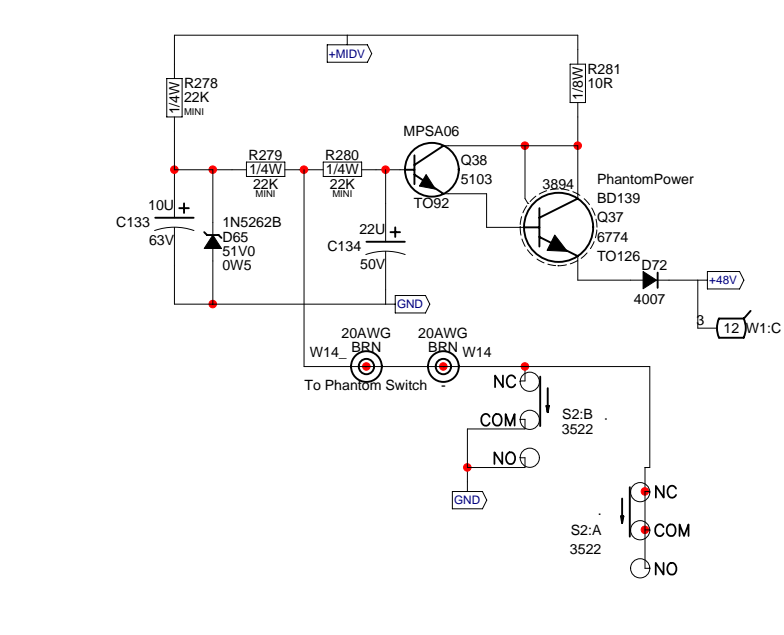
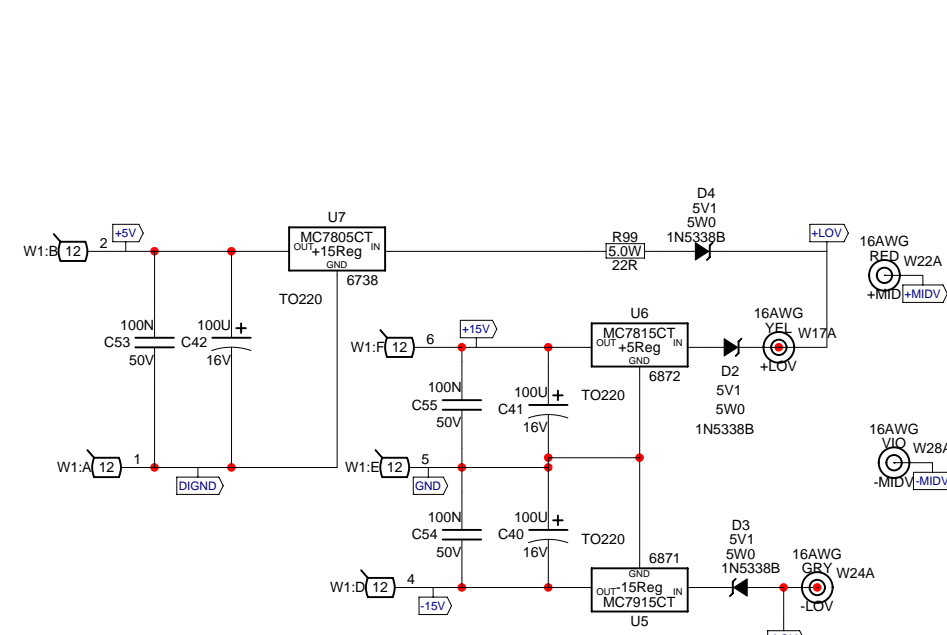
SET BIAS FOR 11mV



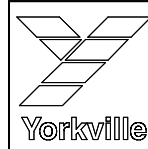
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|---------------------------------|-------------|--------------|
| Product M810-2 Amp B | | |
| Channel B | PCB# M1194 | Sheet 3 of 4 |
| Date: Fri Feb 05, 2010 | Rev: V10.00 | YsType:.. |
| Filename: M1194V1000sch.sch2002 | | |

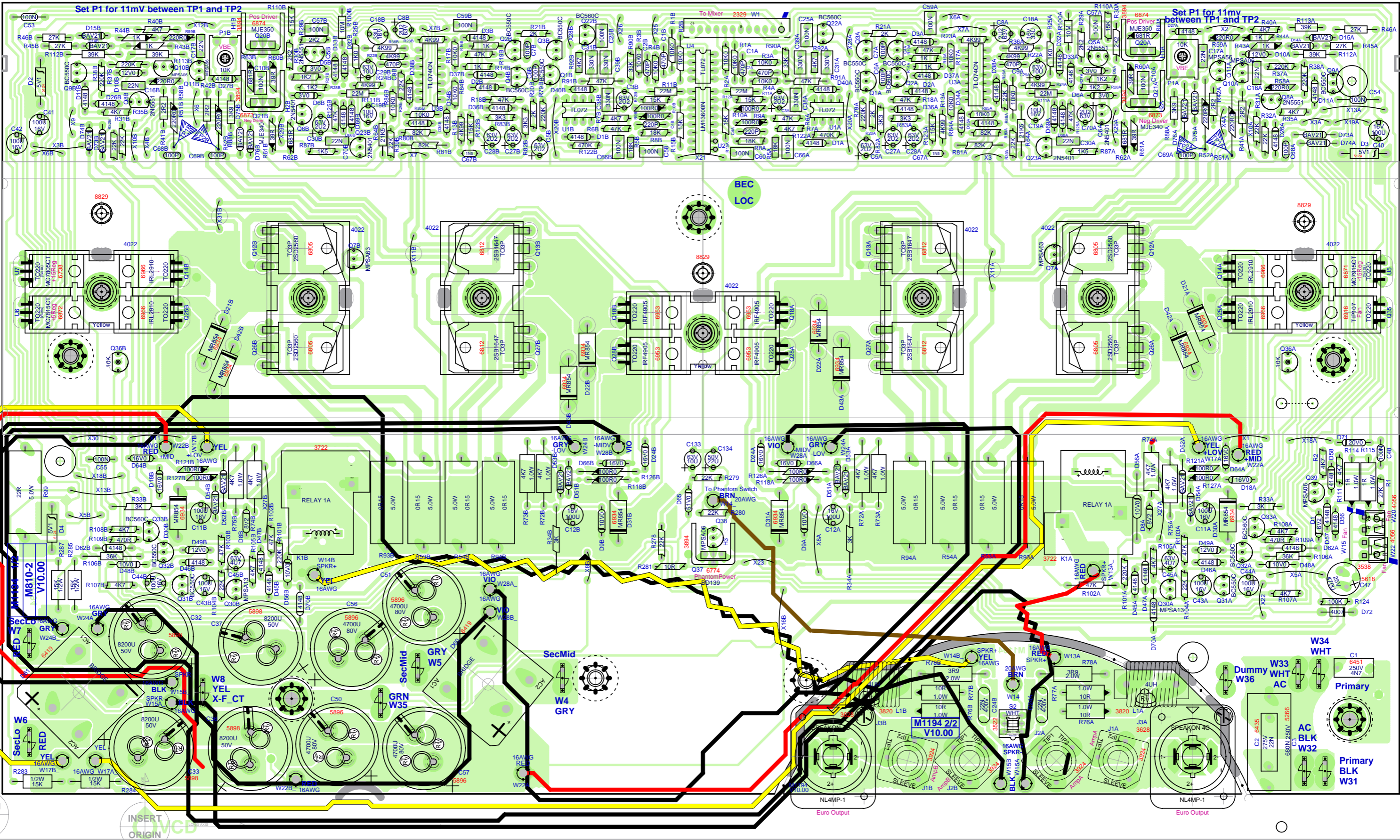


| M1194.PCB_DATABASE_HISTORY | | | # | DATE | VER# | DESCRIPTION OF CHANGE |
|----------------------------|---------------|------|----|-------------|-------|--|
| MODEL(S):- M810 | | | 24 | | | 35V AND C36&C37#58964700/80V->#5898 8200U/50V |
| 1 | 10 Jan, 2004 | 1.00 | 25 | | | UPDATED BIAS NOTE TO READ 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 |
| 16 | | | 40 | 05-FEB-2010 | 10.00 | PC7983: Enlarge D2,D3,D4 span to .550 |
| 17 | | | 41 | | | GG |
| 18 | | | 42 | | | V |
| 19 | MAR-24-2005 | 5.00 | 43 | | | V |
| 20 | APR-13-2005 | 5.10 | 44 | | | V |
| 21 | JUN-29-2005 | 6.00 | 45 | | | V |
| 22 | | | 46 | | | V |
| 23 | | | 47 | | | V |
| | | | 48 | | | V |
| | | | 49 | | | V |
| | | | 50 | | | V |



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Product M810-2
Power Supply **PCB# M1194** **Sheet 4 of 4**
Date: Fri Feb 05, 2010 **Rev:V10.00** **YsType:..**
Filename: M1194V1000sch.sch2002



Set P1 for 11mV between TP1 and TP2

Set P1 for 11mV between TP1 and TP2

BEC LOC



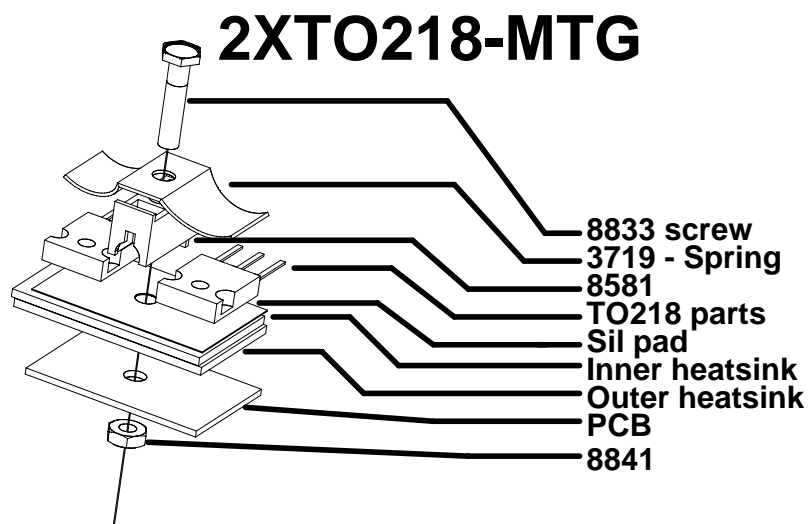
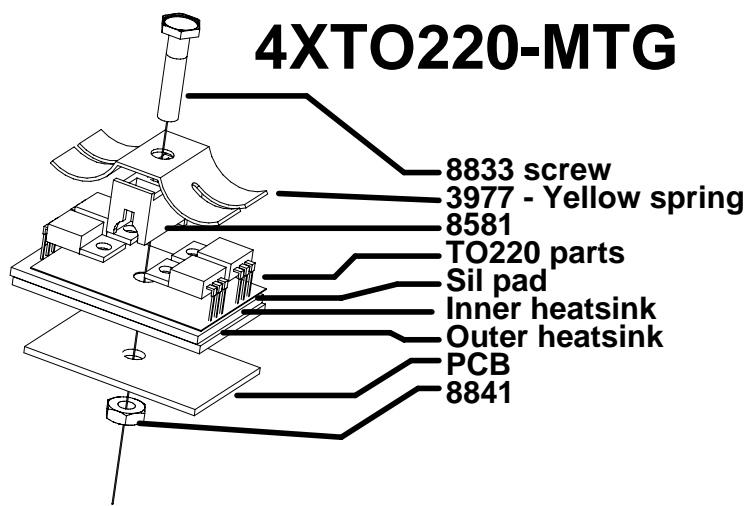


SEE LAYOUT DIAGRAM

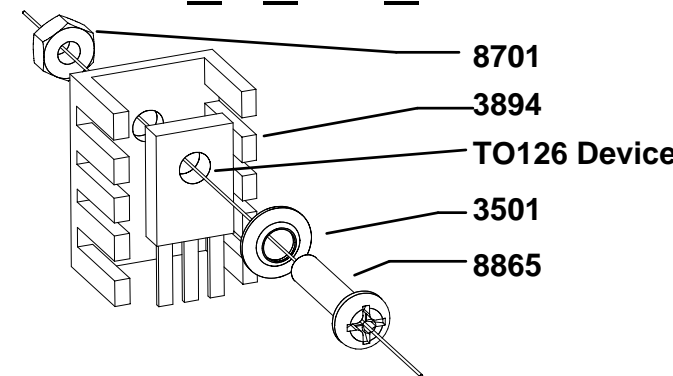


M1194 PRODUCTION NOTES

1. Use three 8829 screws to align and attach the heatsinks to the board.
2. When assembling heatsinks to Q20(A&B),Q21(A&B),Q37, ensure heatsinks are straight and sit flat against board. Add a very small amount of RTV between heatsink and board if necessary. This prevents the heatsink from shorting other components.
3. Add grease under middle tier mosfets.
4. No RTV under stones.



TO126_V_HS_MTG





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 |
| MODEL(S):- M810 | | | | 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 | D | V | N |
| 16 | . | . | REMOVE D16,D17,R47,R48,R49, R50 (ALL A/B) | 42 | D | V | N |
| 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 |
| | | | | 50 | D | V | N |

| 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 | 2008/09/23 | 13 | Solder updates, several PCs. New drill and route. | *PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY | | |
| 8 | D | V | N | | | |
| 9 | D | V | N | | | |
| 10 | D | V | N | | | |
| 11 | D | V | N | | | |
| 12 | D | V | N | | | |
| 13 | D | V | N | | | |

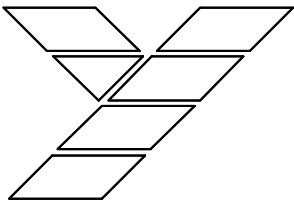
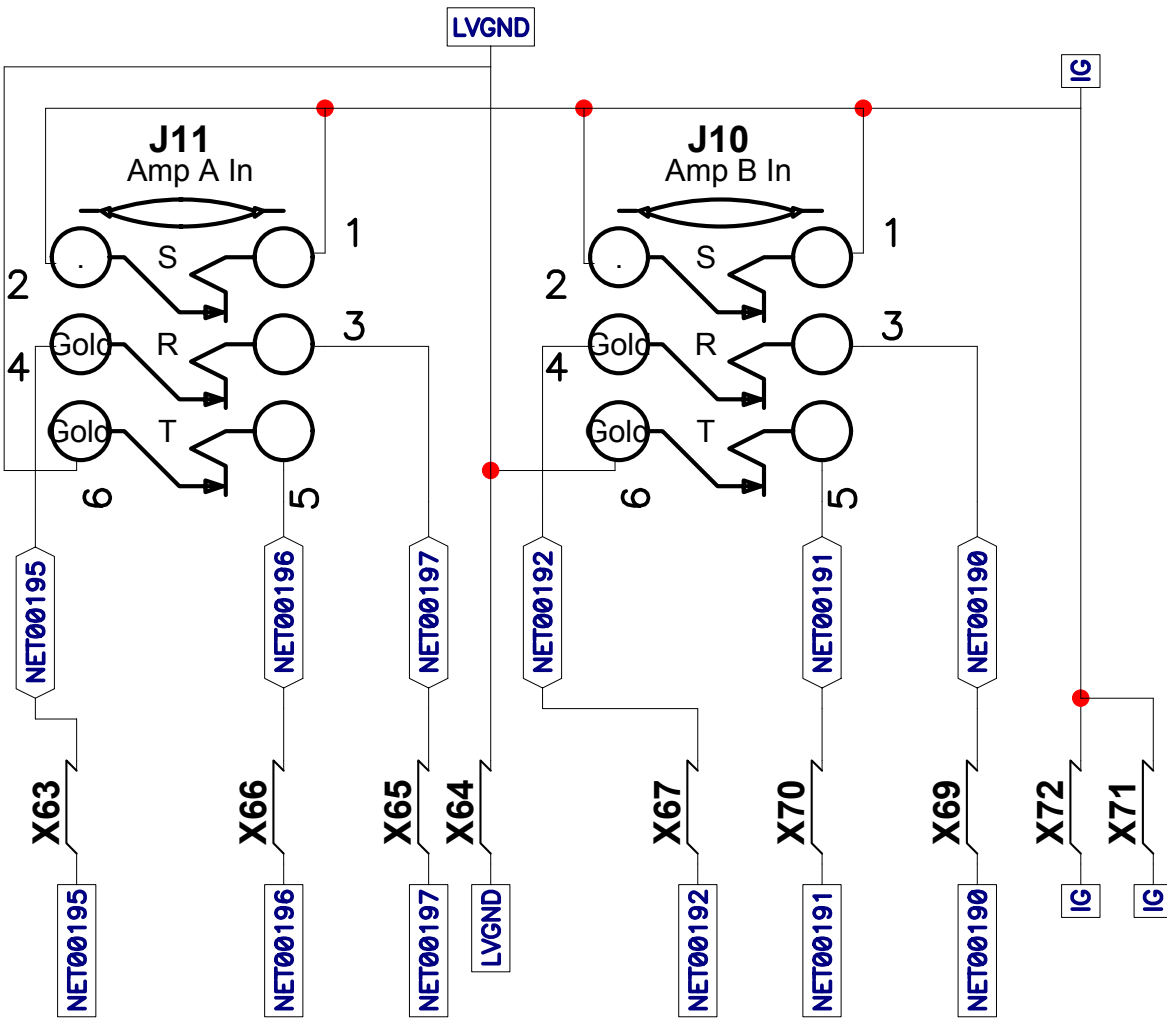


M810/M1610

Series 2



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



Yorkville

Product **M1610**

Amp in Jacks

PCB# M1191

Sheet 1 of 2

Date: Tue Feb 10, 2004

Rev:V1.00

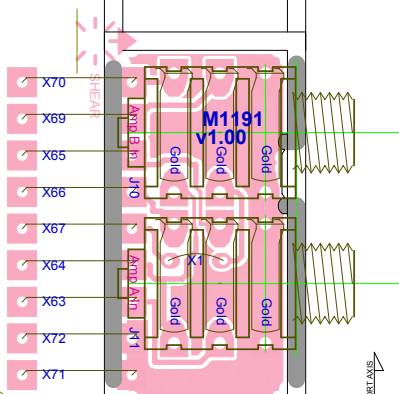
Filename: m1191 sch .sch2002

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

SHEAR OFF THIS SIDE SECOND

ETCH GUIDE

BlankSize = 16.750 x 9.000



CLINCH ORIGIN

ETCH GUIDE

INSERT ORIGIN

LONG AXIS

Top Assy M1191v1.00









SHEAR OFF THIS SIDE FIRST

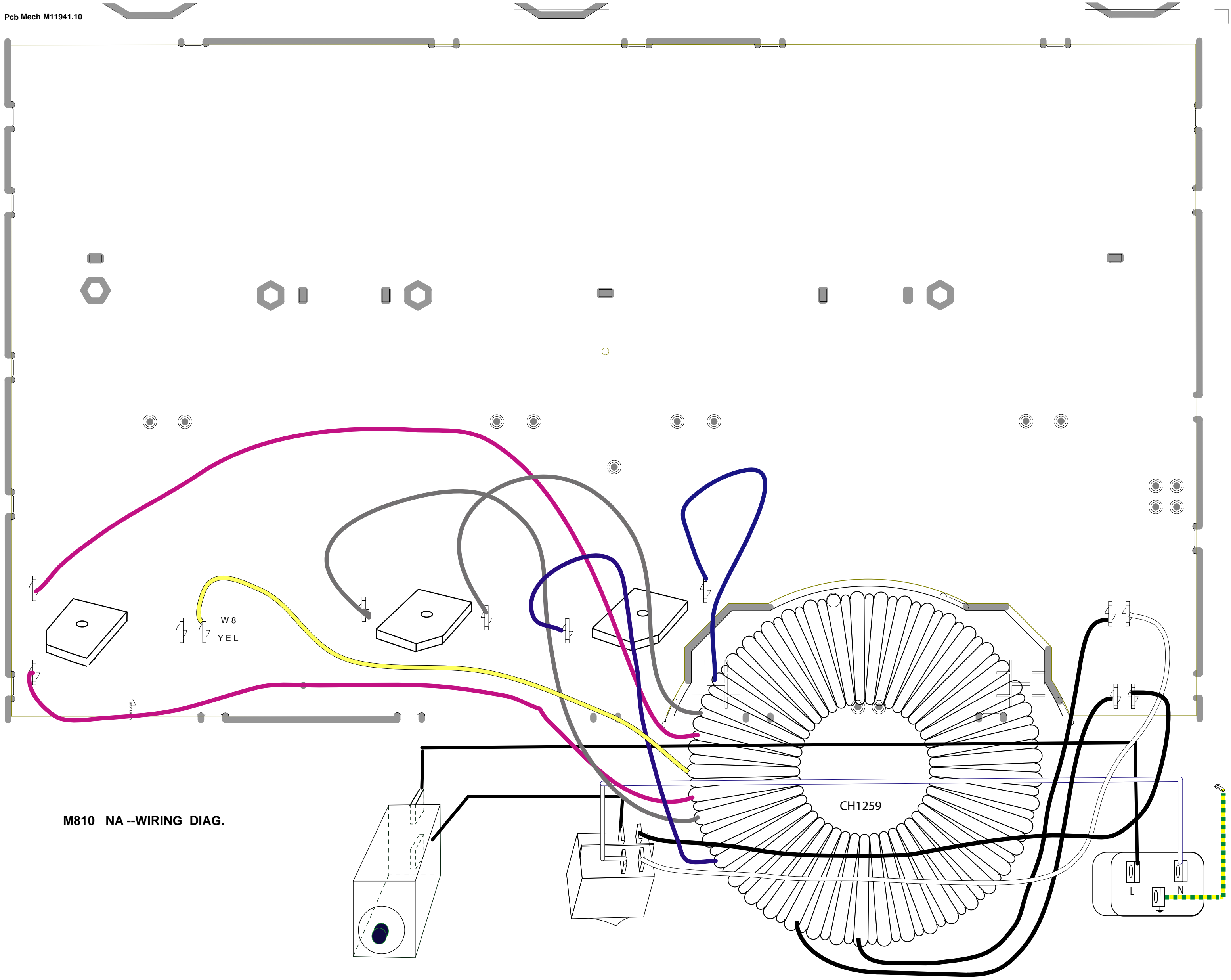
FEED THIS SIDE INTO SHEARER FIRST

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.



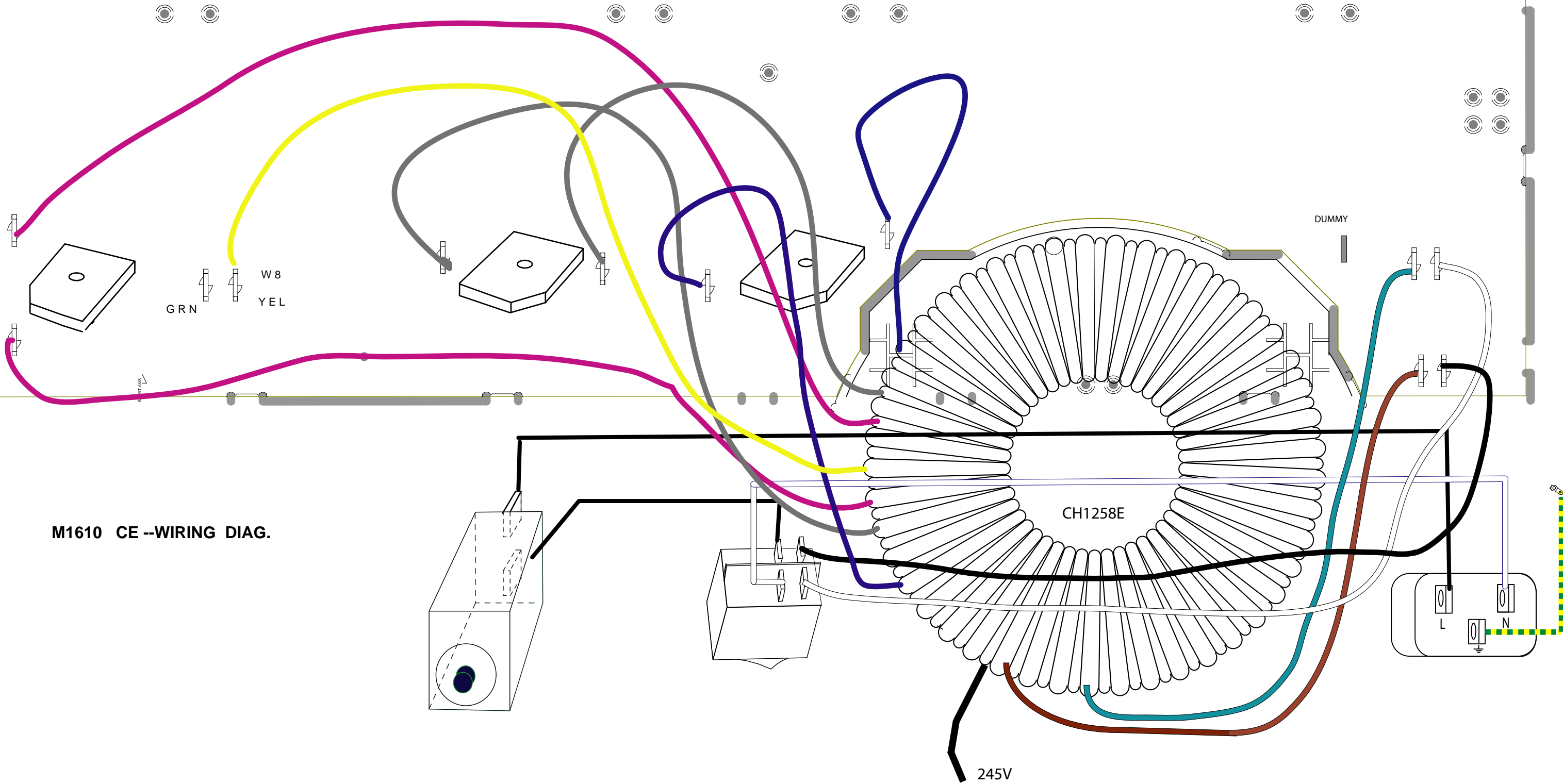
-  YS#9920 White Knob (qty: 9)
-  YS#9921 Gray Knob, no cover (qty: 6)
-  YS#9915 Red Knob (qty: 2)
-  YS#9916 Gray Knob (qty: 29)
-  YS#9918 Blue Knob (qty: 10)
-  YS#9917 Green Knob (qty: 9)
-  YS#9919 Yellow Knob (qty: 8)
-  YS#8397 Large Gray Knob (qty: 1)



M810 NA --WIRING DIAG.

CH1259

L
N
GND



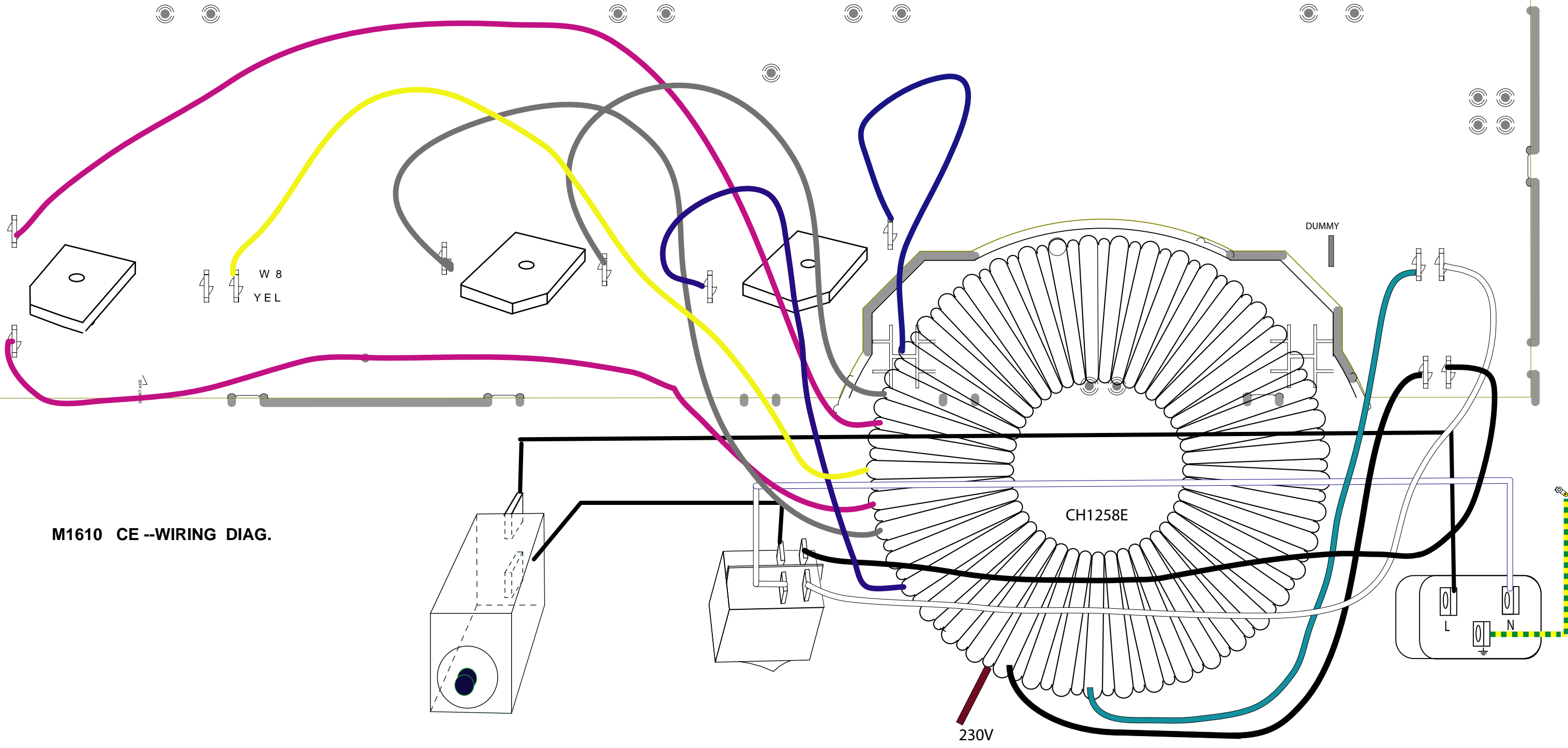
M1610 CE --WIRING DIAG.

CH1258E

DUMMY

245V

SHOWN AS 230V OPERATION



M1610 CE --WIRING DIAG.

CH1258E

230V

DUMMY

W 8
YEL

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