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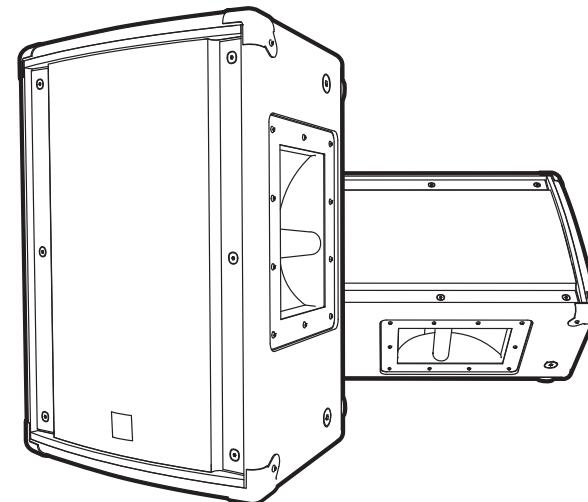
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Quality and Innovation Since 1963
Printed in Canada



SERVICE MANUAL

E10P



SMT Disclaimer

Due to the complex nature of the use of SMT installed components in Yorkville equipment, we highly caution all service technicians in attempting to repair or replace SMT factory installed components.

Many of these components may be glued prior to initial soldering.

Replacing SMT components requires expensive specialized de-soldering equipment and training.

Yorkville Sound will repair and replace defective SMT components to ensure proper quality assurance and installation is maintained.

IMPORTANT SAFETY INSTRUCTIONS



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

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

The DO NOT STACK symbol is intended to alert the user that the product shall not be vertically stacked because of the nature of the product.

La symbole NE PAS EMPILER est pour alerter l'utilisateur que le produit ne doit pas être empilé verticalement en raison de la nature du produit.



SEPARATE
COLLECTION
WEEE



CAUTION: HOT SURFACE
ATTENTION: SURFACE CHAUE



DO NOT
PUSH OR PULL



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

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

FOLLOW ALL INSTRUCTIONS

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

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

NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE

PERSONNEL. THIS DEVICE IS FOR INDOOR USE ONLY!

**INSTALLED BATTERY PACKS SHALL NOT BE EXPOSED TO EXCESSIVE HEAT
SUCH AS SUNSHINE, FIRE OR THE LIKE.**

SUIVEZ TOUTES LES INSTRUCTIONS

Instructions relatives au risque de feu, choc électrique, ou blessures aux personnes

AVIS: AFIN DE REDUIRE LES RISQUE DE CHOC ELECTRIQUE, N'ENLEVEZ PAS LE COUVERT (OU LE PANNEAU ARRIERE) NE CONTIENT AUCUNE PIECE REPARABLE PAR L'UTILISATEUR.

CONSULTEZ UN TECHNICIEN QUALIFIE POUR L'ENTRETIEN CE PRODUIT EST POUR L'USAGE À L'INTÉRIEUR SEULEMENT. LES PACKS BATTERIES INSTALLEÉS NE DOIVENT PAS ÊTRE EXPOSÉS À UNE CHALEUR EXCESSIVE TELLE QUE LE ENSOLEILLEMENT, LE FEU OU SIMILAIRES.

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

Clean only with dry cloth.

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

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

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

Power Sources

Your unit should be connected to a power source only of the voltage specified in the owners manual or as marked on the unit. This unit has a polarized plug. Do not use with an extension cord or receptacle unless the plug can be fully inserted. Precautions should be taken so that the grounding scheme on the unit is not defeated. An apparatus with CLASS I construction shall be connected to a Mains socket outlet with a protective earthing connection. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

Hazards

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

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

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

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

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

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

Power Cord

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

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

Service

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

IMPORTANT SAFETY INSTRUCTIONS



The Lightning Flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons



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

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

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

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

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

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING:

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.

To completely disconnect this apparatus from the ac mains, disconnect the power supply cord plug from the ac receptacle.

The mains plug of the power supply cord or appliance coupler shall remain readily accessible.



Le symbole représentant un éclair avec une flèche à l'intérieur d'un triangle équilatéral est utilisé pour prévenir l'utilisateur de la présence d'une tension électrique dangereuse non isolée à l'intérieur de l'appareil. Cette tension est d'un niveau suffisamment élevé pour représenter un risque d'électrocution



Le symbole représentant un point d'exclamation à l'intérieur d'un triangle équilatéral, signale à l'utilisateur la présence d'instructions importantes relatives au fonctionnement et à l'entretien de l'appareil dans cette notice d'installation

1. Lisez ces instructions.

2. Conservez ces instructions.

3. Respectez tous les avertissements.

4. Suivez toutes les instructions.

5. N'utilisez pas l'appareil près de l'eau.

6. Nettoyez uniquement avec chiffon sec.

7. Ne bloquez pas les ouvertures de ventilation. Installer en suivant les instructions du fabricant.

8. Ne pas installer près des sources de chaleur telles que radiateurs, bouches de chaleur, four ou autres appareils (y compris les amplificateurs) produisant de la chaleur.

9. N'annulez pas l'objectif sécurité de la fiche polarisée ou de la tige de mise à la terre. Une fiche polarisée possède deux lames avec une plus grande que l'autre. Une prise avec mise à la terre possède deux lames et une troisième tige. La lame large ou la troisième tige sont fournies pour votre sécurité. Si la fiche n'entre pas dans votre prise, consultez un électricien pour remplacer la prise obsolète.

10. Protéger le cordon d'alimentation des piétinements ou pincements en particulier près des fiches, des prises de courant et au point de sortie de l'appareil.

11. Utilisez uniquement les accessoires spécifiés par le fabricant.

12. Utilisez uniquement avec un chariot, stand, trépied ou une table spécifiée par le fabricant, ou vendus avec l'appareil.

13. Débranchez l'appareil durant un orage ou lorsqu'il reste inutilisé pendant de longues périodes de temps.

14. Confiez toute réparation à un technicien qualifié. Une réparation est nécessaire lorsque l'appareil a été endommagé de quelque façon que ce soit; comme lorsque le cordon d'alimentation ou la fiche est endommagé, lorsque le liquide a été renversé ou des objets sont tombés à l'intérieur, lorsque l'appareil a été exposé à la pluie ou l'humidité, ne fonctionne pas normalement, ou est tombé.

AVERTISSEMENT:

• Pour réduire les risques d'incendie ou de choc électrique, ne pas exposer cet appareil à la pluie ou à l'humidité et ne placez pas d'objets contenant des liquides, tels que des vases, sur l'appareil.

• Pour isoler totalement cet appareil de l'alimentation secteur, débranchez totalement son cordon d'alimentation du réceptacle CA.

• La prise du cordon d'alimentation ou du prolongateur, si vous en utilisez un comme dispositif de débranchement, doit rester facilement accessible.



CAUTION

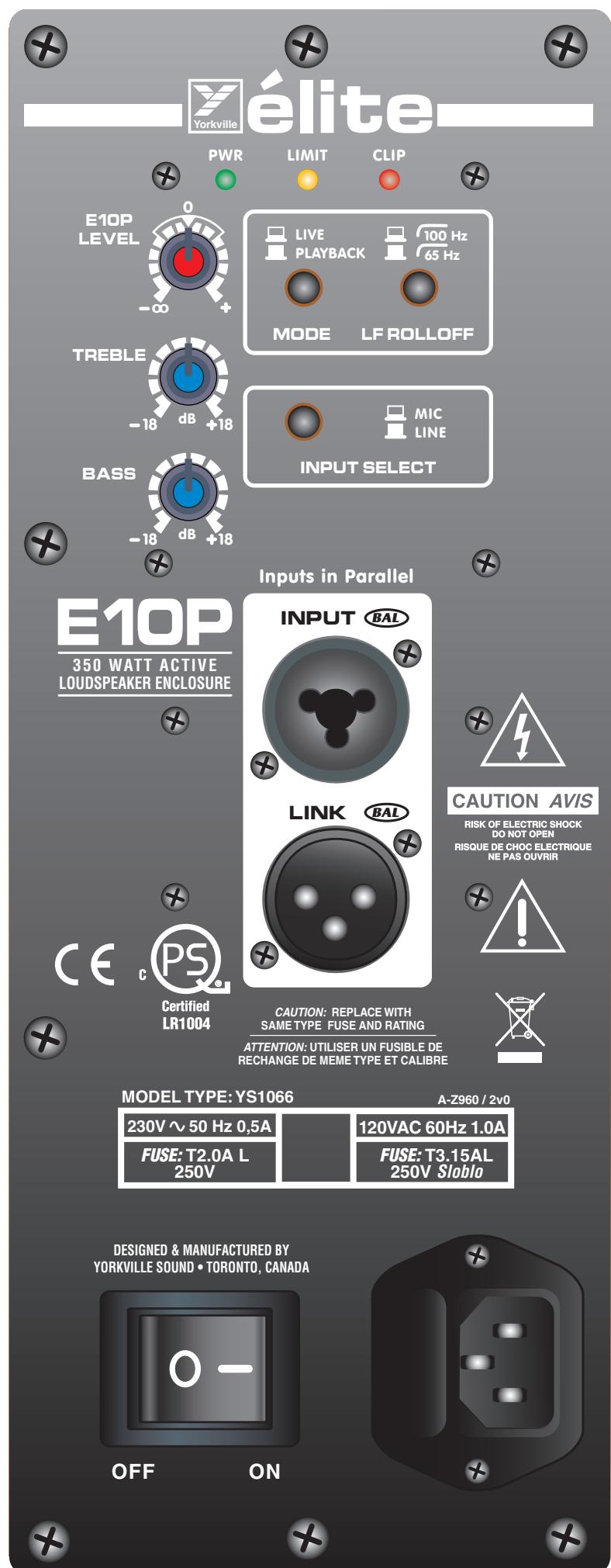
TO PREVENT ELECTRIC SHOCK HAZARD,
DO NOT CONNECT TO MAINS POWER SUPPLY
WHILE GRILLE IS REMOVED.



AVIS

POUR PRÉVENIR LES RISQUES D'ÉLECTROCUSSION,
NE PAS RACCORDER A L'ALIMENTATION ÉLECTRIQUE ALORS
QUE LA GRILLE EST RETIRÉE.







Specifications

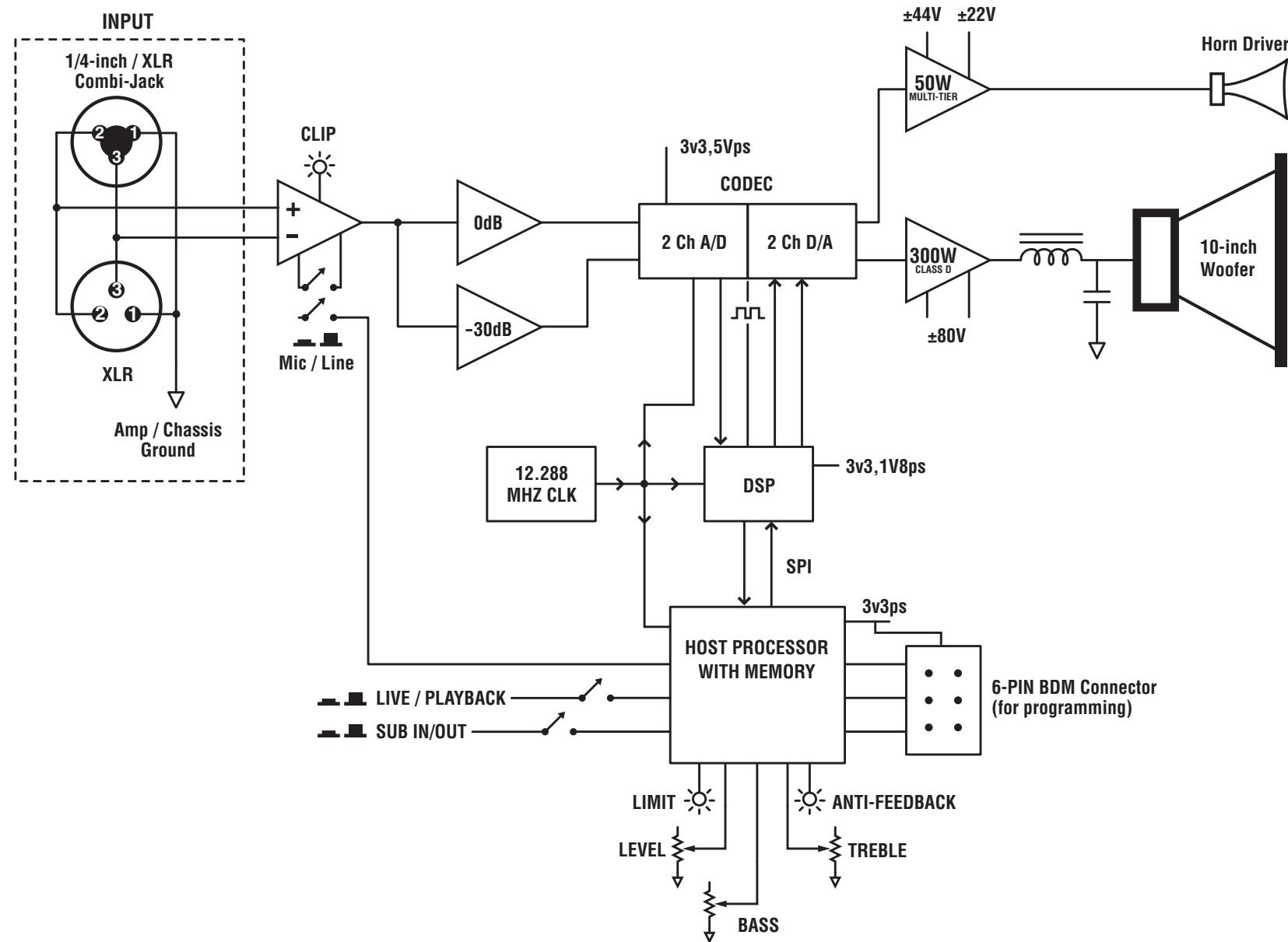
Model:	E10p
System Type:	powered loudspeaker
Active or Passive:	Active
Program Power (Watts):	350
Biamp Operation Only:	Internally biamped
Frequency Response (Hz +/- 3db):	65 to 20k
Crossover Frequency (Hz):	1500
Driver Configuration:	2 way
HF Driver(s):	1 inch
HF Program Power (Watts):	50
HF Impedance (ohms):	8
HF Dispersion (°H x °V):	100 x 25
LF Driver(s):	10 inch
LF Program Power(Watts):	300
LF Impedance(ohms):	4-ohms
LF Protection:	excursion and RMS
Total Power (Watts):	350
HF Power Amplifier (Watts):	50
HF Processing:	peak and average limiting
LF Power Amplifier (Watts):	300
LF Processing:	peak and average limited, boost limited with multi slope curve
Cooling Scheme:	convection
Power Cable:	removable IEC
Power Switch:	yes
Power Consumption (typ/max):	120 va/200va
Inputs - 1/4-inch Jacks:	1 combi w xlr
Inputs - XLR:	1 combi w 1/4 inch
Input Impedance (Bal/UnBal):	4k ohms / 2k ohms
Input Sensitivity (Vrms Sine):	Line in 1.4 w control at center 0.35 at max Mic in -50 dBv @ max
Level Controls:	1, curve changes in mic or line mode
EQ Controls:	Bass and Treble
Limiter:	peak and average on horn and woofer, boost limited with multi slope curve
LED Indicators:	power, clip, limit
Other Controls / Features:	Dynamic 75 Hz boost, tone control frequencies and slopes differ in live/rec mode, sub/no sub switch, live recorded eq mode switch
Corners:	8
Feet:	4
Flying Hardware:	4 Flypoints - 2 Top + 2 Bottom + Pull back
Included Hardware:	1/4-20
Bar Handles:	1
Pole Mount Adapter (1 3/8-inch/3.5cm):	yes
Enclosure Materials:	15mm (5/8inch) 11-ply Russian Birch
Port(s):	1, located on rear
Grille:	Perforated Metal
Covering / Finish:	Black Ozite (Carpet)
Optional Covering / Finishes:	Black Ultrathane Paint (E10PB)
Processor (optional):	Internally biamped
Dimensions (DWH xbackW, inches):	12 x 13 x 18.5 x 5.5
Dimensions (DWH xbackW, cm):	30 x 33 x 45 x 14
Weight (lbs/kg):	34/15.5

Spécifications

Modèle:	E10p
Type de Système:	Enceinte amplifiée à haut-parleur
Actif ou Passif:	Actif
Puissance nominale (Watts):	350
Opération en mode de Biamplication Seulement:	Biamplication interne
Réponse en Fréquence (Hz +/- 3db):	65 to 20k
Fréquence de coupure(Hz):	1500
Configuration de Drivers:	2 voix
Driver(s) Hautes Fréquences:	1 pouce
Puissance Nominale pour les HF (Watts):	50
Impédance HF (ohms):	8
Dispersion HF (°H x °V):	100 x 25
Driver(s) Basses Fréquences :	10 pouces
Puissance Nominale BF (Watts):	300
Impédance BF (ohms):	4 ohms
Protection BF :	excursion et RMS
Puissance Totale (Watts):	350
Amplificateur De Puissance HF (Watts):	50
Processing HF :	Limitation de Pointe et de moyenne
Amplificateur de Puissance BF (Watts):	300
Processing LF :	Limitation de Pointe et de moyenne, Limiteur boost avec multiple pente d'atténuation
Système de refroidissement:	Convection
Cordon d'Alimentation:	IEC amovible
Commutateur de mise en marche:	Oui
Consommation de Puissance (typ/max):	120 va/200va
Entrées – Prises 1/4-pouce :	1 combi avec xlr
Entrées - XLR:	1 combi avec 1/4 pouce
Impédance d'Entrée (Sym/Asym):	4k ohms / 2k ohms
Sensibilité d'entrée (Vrms Sine):	Entrée ligne 1.4 avec contrôle au centre 0.35 au max Entrée Mic -50 dBv @ max
Contrôles de Niveau:	1, courbe change selon le mode utilisé (mic ou line)
Contrôles d'Égalisation:	Graves et Aiguës
Limiteur:	Pointe et moyenne sur le pavillon et le woofer, Limiteur boost avec multiple pente d'atténuation
DEL Indicatrices:	Alimentation, clip, limit
Autres Contrôles / Caractéristiques:	Dynamique boost 75 Hz, fréquence des contrôles de tonalité et courbe de réponse Diffèrent en mode live/rec, sélecteur sub/sans sub, Sélecteur d'égalisation pour modes Live/préenregistré
Coussins:	8
Pieds:	4
Quincaillerie de suspension:	4 point de suspension - 2 dessus + 2 dessous + tire
Quincaillerie incluse:	1/4/2020
Poignés:	1
Adaptateur pour montage sur pôle (1 3/8-	Oui
Matériau de construction:	Contreplaqué de bouleau Russe 15 mm (5/8 pouce) 11-plie
Évent(s):	1, situé à l'arrière
Grille:	Métal Perforé
Recouvrement / Finition:	Ozite Noire (tapis)
Recouvrement optionnel / Finitions:	Peinture Ultra thane Noire (E10PB)
Processeur (optionnel):	Bi amplifié (interne)
Dimensions (PLH x arrière L, pouces):	12 x 13 x 18.5 x 5.5
Dimensions (PLH x arrière L, cm):	30 x 33 x 45 x 14
Poids (livres/kg):	34/15.5

E10P Block Diagram

DESIGNED & MANUFACTURED BY YORKVILLE SOUND



M1311 Parts Reference List 8/27/2018

REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
C1		4N7 50V 5%CAP	1206 SMT NPO	D6	MBRA340T3 40V 3A SHTKY 403D SMT	R43	W125 4K7 5%	0805 SMT RES
C2	100N 25V 10%CAP	0805 SMT X7R	D7	MMBZ5231B 5V1 0W35 5% SMT ZEN	R44	W125 4K7 5%	0805 SMT RES	
C3	100N 25V 10%CAP	0805 SMT X7R	D8	MM3Z18VT1G 18V0 0W2 5% SMT ZEN	R45	W125 10K00 0.1%	0805 SMT RES	
C4	680P 50V 5%CAP	SMT COG	D9	ES1H 500V 1A0 D214 SMT SMC	R46	W125 330R 0.5%	0805 SMT RES	
C5	680P 50V 5%CAP	SMT COG	D10	ES1H 500V 1A0 D214 SMT SMC	R47	W100 200R 1%	0805 SMT RES	
C6	_4N7 50V 5%CAP	1206 SMT NPO	D48	ES3D 200V 3A0 D214 SMT SMC	R48	W250 10R 5%	1206 SMT RES	
C7	680P 50V 5%CAP	SMT COG	D49	CDSF4148 75V 0A15 1005 SMT	R49	W250 10R 5%	1206 SMT RES	
C8	10U 25V 20%CAP	5X5.4 SMT EL	D50	CDSF4148 75V 0A15 1005 SMT	R50	W250 10R 5%	1206 SMT RES	
C9	680P 50V 5%CAP	SMT COG	D51	ES3D 200V 3A0 D214 SMT SMC	R51	W250 10R 5%	1206 SMT RES	
C10	10U 25V 20%CAP	5X5.4 SMT EL	D52	ES3D 200V 3A0 D214 SMT SMC	R52	W100 475K 1%	0805 SMT RES	
C11	_1N 50V 5%CAP	0805 SMT NPO	D53	ES3D 200V 3A0 D214 SMT SMC	R53	W100 475K 1%	0805 SMT RES	
C12	_1N 50V 5%CAP	0805 SMT NPO	D54	ES3D 200V 3A0 D214 SMT SMC	R54	W125 4K7 5%	0805 SMT RES	
C13	270P 50V 5%CAP	0805 SMT NPO	D55	ES3D 200V 3A0 D214 SMT SMC	R55	W125 1K800 0.1%	0805 SMT RES	
C14	270P 50V 5%CAP	0805 SMT NPO	D56	ES3D 200V 3A0 D214 SMT SMC	R56	W125 33K 5%	0805 SMT RES	
C15	33U 25V 20%CAP	6.3X5.5 SMT EL	D57	ES3D 200V 3A0 D214 SMT SMC	R57	W250 22R 5%	1206 SMT RES	
C16	_1U 50V 20%CAP	4.3X3.9 SMT ELC	D58	ES3D 200V 3A0 D214 SMT SMC	R58	W125 1K800 0.1%	0805 SMT RES	
C17	33U 25V 20%CAP	6.3X5.5 SMT EL	D59	ES3D 200V 3A0 D214 SMT SMC	R59	W125 1M 5%	0805 SMT RES	
C18	_4U7 25V 20%CAP	4X5.5 SMT ELC	D60	ES3D 200V 3A0 D214 SMT SMC	R60	W100 274K 1%	0805 SMT RES	
C20	47P 50V 5%CAP	0805 SMT NPO	D61	ES3D 200V 3A0 D214 SMT SMC	R61	2487 7.0 AMP SLO-BLO T&R FUSE		
C21	100N 25V 10%CAP	0805 SMT X7R	D62	ES3D 200V 3A0 D214 SMT SMC	R62	W250 10R 5%	1206 SMT RES	
C22	10N 50V 5%CAP	1206 SMT NPO	D63	ES3D 200V 3A0 D214 SMT SMC	R63	W125 1K800 0.1%	0805 SMT RES	
C23	100U 25V 20%CAP	8X5.4 SMT ELE	J1	4100 XLR MALE PCB MT VERT	R64	W125 1K02 0.1%	0805 SMT RES	
C24	680U 6V3 20%CAP	8X10 SMT ELE	J3	6509 1/4" XLR PCB MT VERT COMBO NEUTRIK	R65	W100 18K2 1%	0805 SMT RES	
C26	100N 25V 10%CAP	0805 SMT X7R	L1	3759 _4UH COIL 14AWG ZOBEL VERTICAL	R66	W100 475R 1%	0805 SMT RES	
C27	100N 25V 10%CAP	0805 SMT X7R	L2	6562 _192UH CHOKE 74T20AWG/77256MAGNTKS	R68	W250 10R 5%	1206 SMT RES	
C28	10U 25V 20%CAP	5X5.4 SMT EL	L3	8.2UH COIL 1210 SMT	R98	2487 7.0 AMP SLO-BLO T&R FUSE		
C29	100N 25V 10%CAP	0805 SMT X7R	L5	6492 1300UH COIL COMMON MODE 4AMP	R187	1W00 1K8 5%	2512 SMT RES	
C30	100N 25V 10%CAP	0805 SMT X7R	L56	120UH COIL A67.0R4 SMT	R220	W250 10R 5%	1206 SMT RES	
C31	100N 25V 10%CAP	0805 SMT X7R	LD2	5907 YEL 3MM LED 1V9 20MA,4SPCR T&R	S3	3522 DPDT MINI PC VERT SNP ALT		
C40	100N 100V 10%CAP	1206 SMT X7R	LD3	5908 GRN 3MM LED 1V9 20MA,4SPCR T&R	S4	3440 4PDT MINI VERT ALT SWITCH		
C45	100N 25V 10%CAP	0805 SMT X7R	LD4	5906 RED 3MM LED 1V9 20MA,4SPCR T&R	S8	3522 DPDT MINI PC VERT SNP ALT		
C48	100N 25V 10%CAP	0805 SMT X7R	P3	4388 100K B LIN 9MM DETENT KNURL P30	U1	SN74AC74DR DUAL FF/FLOP SMT IC		
C49	_2U2 100V 20%CAP	1812 SMT X7R	P4	4388 100K B LIN 9MM DETENT KNURL P30	U2	AK4620A VSOP-30 CODEC SMT IC		
C50	_2U2 100V 20%CAP	1812 SMT X7R	P5	4388 100K B LIN 9MM DETENT KNURL P30	U3	NE5532D DUAL OPAMP SMT SO-8		
C52	100N 25V 10%CAP	0805 SMT X7R	Q2	LM317S POS REG SMT TO263	U4	NE5532D DUAL OPAMP SMT SO-8		
C53	100N 25V 10%CAP	0805 SMT X7R	Q4	T810-600G-TR 8A TRIAC D2PAK SMT	U6	LM2671 3V3 REG 0A5 SMT SO8		
C54	100N 25V 10%CAP	0805 SMT X7R	Q5	12.288MHZ CRYSTAL 4-PIN SMT	U7	MC9S08GT60 MICROCNTRLR SMT QFP44		
C55	100N 25V 10%CAP	0805 SMT X7R	Q6	MMBTA14 NPN DARL SOT-23 SMT	U8	ADAU1701 28/56 DSP 2AD4DA SMT IC		
C57	_15P 50V 5%CAP	0603 SMT NPO	Q7	MMBTA14 NPN DARL SOT-23 SMT	W2	4148 06 CIR DUAL ROW HDR VT 0.1		
C60	100N 25V 10%CAP	0805 SMT X7R	Q8	MMBTA3906LT1 PNP SOT-23 SMT T&R	W3	4145 9PIN 3X3 POWER PIN HEADER		
C61	100U 6V3 20%CAP	6.3X5.4 SMT ELE	Q9	MMBT5401 PNP SOT-23 SMT	W4	3538 24 PIN BREAKAWAY LOCK .156		
C62	100N 25V 10%CAP	0805 SMT X7R	Q10	5190 MBS4992 TO92 8V5 DIAC T&R	W6	6535 26 SKT 25SQ 100 SIL BOT-ENTRY		
C63	5910 4700U 100V 10%CAP BLK 35X40MM 4PS	R1	W125 4K7 5% 0805 SMT RES	W7	2337 4 CIR XH-HEADER 0.098IN			
C64	_10U 25V 20%CAP	5X5.4 SMT EL	R2	W125 4K7 5% 0805 SMT RES	W8	2337 4 CIR XH-HEADER 0.098IN		
C65	100N 25V 10%CAP	0805 SMT X7R	R3	W125 4K7 5% 0805 SMT RES	W12	2329 12 CIR XH-HEADER 0.098IN		
C66	100N 25V 10%CAP	0805 SMT X7R	R4	W125 4K7 5% 0805 SMT RES	W13	2327 6 CIR XH-HEADER 0.098IN		
C67	100N 25V 10%CAP	0805 SMT X7R	R5	W100 200R 1% 0805 SMT RES	W14	2327 6 CIR XH-HEADER 0.098IN		
C68	100N 25V 10%CAP	0805 SMT X7R	R6	W100 200R 1% 0805 SMT RES	W15	2329 12 CIR XH-HEADER 0.098IN		
C69	_1U 50V 20%CAP	4.3X3.9 SMT ELC	R7	W125 4K7 5% 0805 SMT RES	W16	3949 G/Y 18AWG STRANDED GRN BASE YEL STR		
C70	_10U 25V 20%CAP	5X5.4 SMT EL	R8	W100 200R 1% 0805 SMT RES	W17	3958 BLK 18AWG 36STD WIRE DOU/INS		
C71	100N 25V 10%CAP	0805 SMT X7R	R9	W125 4K7 5% 0805 SMT RES	W18	3957 WHT 18AWG 36STD WIRE DOU/INS		
C72	100N 25V 10%CAP	0805 SMT X7R	R10	W100 15K0 1% 0805 SMT RES	W21	3941 BLK 18AWG TR64 PREFUSED WIRE		
C73	_47U 16V 20%CAP	6X5.4 SMT ELE	R11	W100 15K0 1% 0805 SMT RES	W22	3941 BLK 18AWG TR64 PREFUSED WIRE		
C74	100N 25V 10%CAP	0805 SMT X7R	R12	W100 200R 1% 0805 SMT RES	W23	3941 BLK 18AWG TR64 PREFUSED WIRE		
C75	100N 25V 10%CAP	0805 SMT X7R	R13	W125 1K02 0.1% 0805 SMT RES	W24	3941 BLK 18AWG TR64 PREFUSED WIRE		
C76	100N 25V 10%CAP	0805 SMT X7R	R14	W125 18K00 0.1% 0805 SMT RES	W25	3941 BLK 18AWG TR64 PREFUSED WIRE		
C77	_47U 16V 20%CAP	6X5.4 SMT ELE	R15	W125 10K00 0.1% 0805 SMT RES	W26	3941 BLK 18AWG TR64 PREFUSED WIRE		
C78	100N 25V 10%CAP	0805 SMT X7R	R16	FUSE SLOW 7A 125V SMT 6125	W27	3941 BLK 18AWG TR64 PREFUSED WIRE		
C79	100N 25V 10%CAP	0805 SMT X7R	R17	FUSE SLOW 7A 125V SMT 6125	W28	3941 BLK 18AWG TR64 PREFUSED WIRE		
C80	_47U 16V 20%CAP	6X5.4 SMT ELE	R18	W125 18K00 0.1% 0805 SMT RES	W29	3941 BLK 18AWG TR64 PREFUSED WIRE		
C81	100N 25V 10%CAP	0805 SMT X7R	R19	W125 10K00 0.1% 0805 SMT RES	W30	4147 6 PIN POWER PIN HEADER MALE POLZED		
C82	_3N3 25V 5%CAP	0805 SMT NPO	R20	W125 1K800 0.1% 0805 SMT RES	W31	3941 BLK 18AWG TR64 PREFUSED WIRE		
C83	100N 25V 10%CAP	0805 SMT X7R	R21	W125 1M 5% 0805 SMT RES	W32	3949 G/Y 18AWG STRANDED GRN BASE YEL STR		
C84	_47U 16V 20%CAP	6X5.4 SMT ELE	R22	W125 1K800 0.1% 0805 SMT RES	W33	3949 G/Y 18AWG STRANDED GRN BASE YEL STR		
C85	100N 25V 10%CAP	0805 SMT X7R	R23	W125 330R 0.5% 0805 SMT RES	X1	4599 22AWG SOLID SC WIR T&R JMP		
C86	100N 25V 10%CAP	0805 SMT X7R	R24	W100 2K32 1% 0805 SMT RES				
C102	5242 100N 250V 20%CAP BLK 'X'2' 15MM AC	R25	W125 33K 5% 0805 SMT RES					
C104	5912 2200U 63V 20%CAP RADIAL ELECT BULK	R26	W250 10R 5% 1206 SMT RES					
C105	5887 2200U 50V 20%CAP BLK 18X27MM EL	R27	W125 1K02 0.1% 0805 SMT RES					
C106	5266 680N 250V 20%CAP BLK 'X'2' 27MM AC	R28	W125 30K 0.5% 0805 SMT RES					
C111	5887 2200U 50V 20%CAP BLK 18X27MM EL	R29	W125 1K800 0.1% 0805 SMT RES					
C112	6451 _4N7 250V 20%CAP BLK 'Y' 10MM AC	R30	W125 330R 0.5% 0805 SMT RES					
C115	5912 2200U 63V 20%CAP RADIAL ELECT BULK	R31	W125 10K00 0.1% 0805 SMT RES					
C118	_2N2 50V 10%CAP	0603 SMT COG	R33	W100 2K32 1% 0805 SMT RES				
C123	5910 4700U 100V 10%CAP BLK 35X40MM 4PS	R35	W125 1K02 0.1% 0805 SMT RES					
D1	MM3Z10VT1G 10V0 0W2 5% SMT ZEN	R36	W125 330R 0.5% 0805 SMT RES					
D2	MM3Z10VT1G 10V0 0W2 5% SMT ZEN	R37	W125 47R 5% 0805 SMT RES					
D3	CDSF4148 75V 0A15 1005 SMT	R40	W100 475R 1% 0805 SMT RES					
D4	CDSF4148 75V 0A15 1005 SMT	R41	W100 2K32 1% 0805 SMT RES					
D5	CDSF4148 75V 0A15 1005 SMT	R42	W100 100R 1% 0805 SMT RES					

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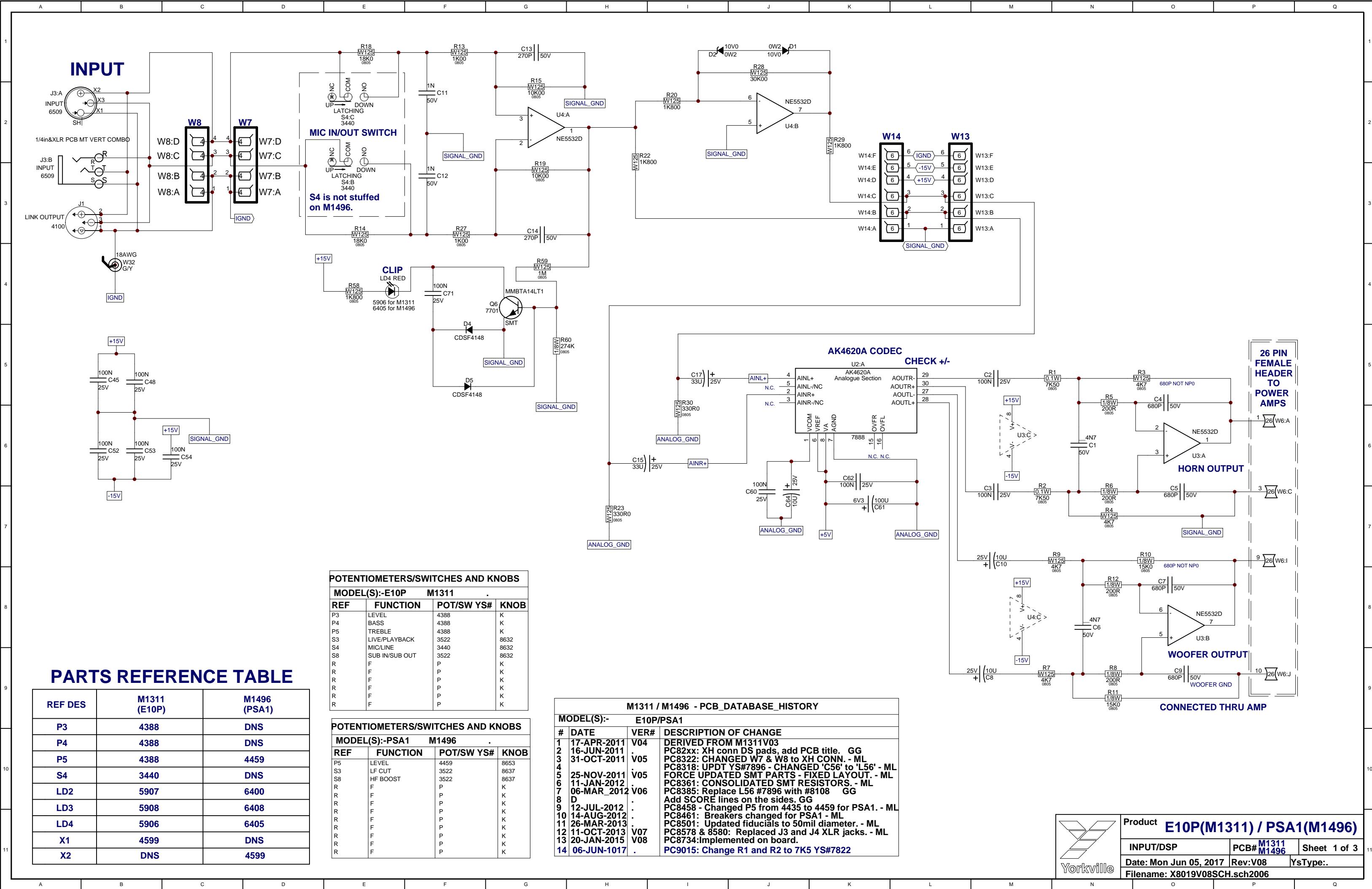
REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
C1		100N 50V 5%CAP 0805 SMT X7R	Q21		MJB41C NPN D2PAK SMT TS	R81		W250 0R 1206 SMT RES
C2		122P 50V 5%CAP 0805 SMT NPO	R1		W125 470R 5% 0805 SMT RES	R82		W250 0R 1206 SMT RES
C3		4N7 50V 5%CAP 1206 SMT NPO	R2		47K 5% THERMISTOR NTC 0603 SMT	R83		W250 0R 1206 SMT RES
C4		10N 50V 5%CAP 1206 SMT NPO	R3		W250 0R 1206 SMT RES	R84		W250 0R 1206 SMT RES
C5		10N 50V 5%CAP 1206 SMT NPO	R4		W125 100K 5% 0805 SMT RES	R85		W250 0R 1206 SMT RES
C6		47P 50V 5%CAP 0805 SMT NPO	R5		W125 560R 5% 0805 SMT RES	R86		W250 0R 1206 SMT RES
C7		1U 25V 20%CAP 1206 SMT X7R	R6		_10K 5% THERMISTOR NTC 0805 SMT	R87		W250 0R 1206 SMT RES
C8		100N 100V 10%CAP 1206 SMT X7R	R7		W125 47R 5% 0805 SMT RES	R88		W250 0R 1206 SMT RES
C9		100N 100V 10%CAP 1206 SMT X7R	R8		W250 10R 5% 1206 SMT RES	R89		W250 0R 1206 SMT RES
C10		470P 50V 5%CAP 0603 SMT NPO	R9		W125 10K 5% 0805 SMT RES	R90		W250 0R 1206 SMT RES
C11		470P 50V 5%CAP 0603 SMT NPO	R10		W125 1K5 5% 0805 SMT RES	R91		W125 47R 5% 0805 SMT RES
C12		1U 25V 20%CAP 1206 SMT X7R	R11		W125 10K 5% 0805 SMT RES	R98		W125 10K 5% 0805 SMT RES
C13		2U2 200V 20%CAP 3025 SMT CER	R12		W125 1K02 0.1% 0805 SMT RES	R99		W125 47R 5% 0805 SMT RES
C14		2U2 200V 20%CAP 3025 SMT CER	R13		W250 1M0 1% 1206 SMT RES	U1		33078 DUAL OPAMP SMT SO-8
C15		2U2 200V 20%CAP 3025 SMT CER	R14		W125 1M 5% 0805 SMT RES	U2		33078 DUAL OPAMP SMT SO-8
C16		2U2 100V 20%CAP 1812 SMT X7R	R15		W125 1M 5% 0805 SMT RES	U3		IRS20124S H/L FET DRIVER SMT SO14
C17		2U2 100V 20%CAP 1812 SMT X7R	R16		W125 2K2 5% 0805 SMT RES	U4		TLC555 TIMER SMT SO8 IC
C18		100N 50V 5%CAP 0805 SMT X7R	R17		W125 1M 5% 0805 SMT RES	U5		LM311 COMPARATOR IC SMT SO-8
C19		10N 50V 5%CAP 1206 SMT NPO	R18		W125 4K7 5% 0805 SMT RES	W1		26 PIN 25SQ 100 PIN SIL SMT
C20		100N 50V 5%CAP 0805 SMT X7R	R19		W125 10K 5% 0805 SMT RES			
C21		100N 50V 5%CAP 0805 SMT X7R	R20		W250 100R 5% 1206 SMT RES			
C22		100N 50V 5%CAP 0805 SMT X7R	R21		W125 560R 5% 0805 SMT RES			
C23		4U7 25V 20%CAP 4X5.5 SMT ELC	R22		W125 1K5 5% 0805 SMT RES			
C24		4N7 50V 5%CAP 1206 SMT NPO	R23		W125 150K 5% 0805 SMT RES			
C25		10P 50V 5%CAP 0402 SMT NPO	R24		W125 100K 5% 0805 SMT RES			
C26		10U 25V 20%CAP 5X5.4 SMT EL	R25		W125 10K 5% 0805 SMT RES			
C27		100N 50V 5%CAP 0805 SMT X7R	R26		W125 33K 5% 0805 SMT RES			
C28		47U 35V 20%CAP 6.3MM SMT ELE	R27		W125 270R 5% 0805 SMT RES			
C29		1U 50V 20%CAP 3.3MM SMT ELE	R28		W125 4K7 5% 0805 SMT RES			
C30		1U 50V 20%CAP 3.3MM SMT ELE	R29		W125 39K 5% 0805 SMT RES			
C31		100N 100V 10%CAP 1206 SMT X7R	R30		W250 10R 5% 1206 SMT RES			
C32		100N 100V 10%CAP 1206 SMT X7R	R31		W125 10K 5% 0805 SMT RES			
C33		100N 100V 10%CAP 1206 SMT X7R	R32		W125 3K92 1% 0805 SMT RES			
C34		1U 25V 20%CAP 1206 SMT X7R	R33		W125 20K 5% 0805 SMT RES			
C35		470P 50V 5%CAP 0603 SMT NPO	R34		W125 20K 5% 0805 SMT RES			
C36		100P 50V 10%CAP 0805 SMT NPO	R35		W125 20K 5% 0805 SMT RES			
C37		1N 50V 5%CAP 0805 SMT NPO	R36		W125 20K 5% 0805 SMT RES			
C38		1N 50V 5%CAP 0805 SMT NPO	R37		W125 3K92 1% 0805 SMT RES			
D2		CDSU4148 100V 0A15 0603 SMT	R38		W250 10R 5% 1206 SMT RES			
D3		CDSU4148 100V 0A15 0603 SMT	R39		W250 22R 5% 1206 SMT RES			
D4		MM3Z15VT1G 15V0 0W2 5% SMT ZEN	R40		W250 22R 5% 1206 SMT RES			
D5		CDSU4148 100V 0A15 0603 SMT	R41		W125 100K 5% 0805 SMT RES			
D6		MURA240T3 400V 2A 403D SMT	R42		W125 100K 5% 0805 SMT RES			
D8		MBRA340T3 40V 3A SHTKY 403D SMT	R43		W125 47R 5% 0805 SMT RES			
D9		MBRA340T3 40V 3A SHTKY 403D SMT	R44		W125 4K7 5% 0805 SMT RES			
D10		MM3Z15VT1G 15V0 0W2 5% SMT ZEN	R45		W100 100R 1% 0805 SMT RES			
D12		MM3Z12VT1G 12V0 0W2 5% SMT ZEN	R46		W125 470R 5% 0805 SMT RES			
D14		MM3Z10VT1G 10V0 0W2 5% SMT ZEN	R47		W125 1K5 5% 0805 SMT RES			
D15		MM3Z18VT1G 18V0 0W2 5% SMT ZEN	R48		W125 33K 5% 0805 SMT RES			
D16		1N914 DIODE SOT23 SMT	R49		W125 10K 5% 0805 SMT RES			
D17		MM3Z12VT1G 12V0 0W2 5% SMT ZEN	R50		W125 1K5 5% 0805 SMT RES			
D18		1N914 DIODE SOT23 SMT	R51		W125 1K5 5% 0805 SMT RES			
D19		1N914 DIODE SOT23 SMT	R52		W125 1K5 5% 0805 SMT RES			
D20		1N914 DIODE SOT23 SMT	R53		W125 560R 5% 0805 SMT RES			
D21		1N914 DIODE SOT23 SMT	R54		W125 270R 5% 0805 SMT RES			
D22		1N914 DIODE SOT23 SMT	R55		W500 2K2 5% 2010 SMT RES			
D23		1N914 DIODE SOT23 SMT	R56		W500 2K2 5% 2010 SMT RES			
D24		MM3Z15VT1G 15V0 0W2 5% SMT ZEN	R57		W250 100R 5% 1206 SMT RES			
D25		MURA240T3 400V 2A 403D SMT	R58		W500 2K2 5% 2010 SMT RES			
D26		MURA240T3 400V 2A 403D SMT	R59		W500 2K2 5% 2010 SMT RES			
Q1		MMBT5401 PNP SOT-23 SMT	R60		W250 100R 5% 1206 SMT RES			
Q2		MMBT5401 PNP SOT-23 SMT	R61		W125 470R 5% 0805 SMT RES			
Q3		MJD243T4G NPN DPAK3 SMT TS	R62		W125 470R 5% 0805 SMT RES			
Q4		MMBT3904 NPN SOT-23 SMT	R63		W250 0R27 5% 1206 SMT RES			
Q5		IRFS4227PBF NCH MFET D2PAK SMT TS	R64		W250 0R27 5% 1206 SMT RES			
Q6		IRFS4227PBF NCH MFET D2PAK SMT TS	R65		W250 0R27 5% 1206 SMT RES			
Q7		MC7815BDTG POS REG SMT DPAK3	R66		W250 0R27 5% 1206 SMT RES			
Q8		MC79M15CDTG NEG REG SMT DPAK3	R67		PTC RESETTABLE 1.5A 6V 1812L SMT			
Q9		MMBF4391LT1 NCH JFET SOT-23 SMT T&R	R68		W250 0R 1206 SMT RES			
Q10		IRF530NS NCH MFET D2PAK SMT TS	R69		W250 0R 1206 SMT RES			
Q11		IRF9530NS PCH MFET D2PAK SMT TS	R70		W250 0R 1206 SMT RES			
Q12		MJD243T4G NPN DPAK3 SMT TS	R72		W250 0R 1206 SMT RES			
Q13		MJD243T4G NPN DPAK3 SMT TS	R73		W250 0R 1206 SMT RES			
Q14		MMBF4391LT1 NCH JFET SOT-23 SMT T&R	R74		W250 0R 1206 SMT RES			
Q15		MJB41C NPN D2PAK SMT TS	R75		W125 10K 5% 0805 SMT RES			
Q16		MJB42C NPN D2PAK SMT TS	R76		W250 0R 1206 SMT RES			
Q17		MMBT5401 PNP SOT-23 SMT	R77		W250 0R 1206 SMT RES			
Q18		MMBT5401 PNP SOT-23 SMT	R78		W250 0R 1206 SMT RES			
Q19		MJD253T4G NPN DPAK3 SMT TS	R79		W125 10K 5% 0805 SMT RES			
Q20		MJB42C NPN D2PAK SMT TS	R80		W250 0R 1206 SMT RES			

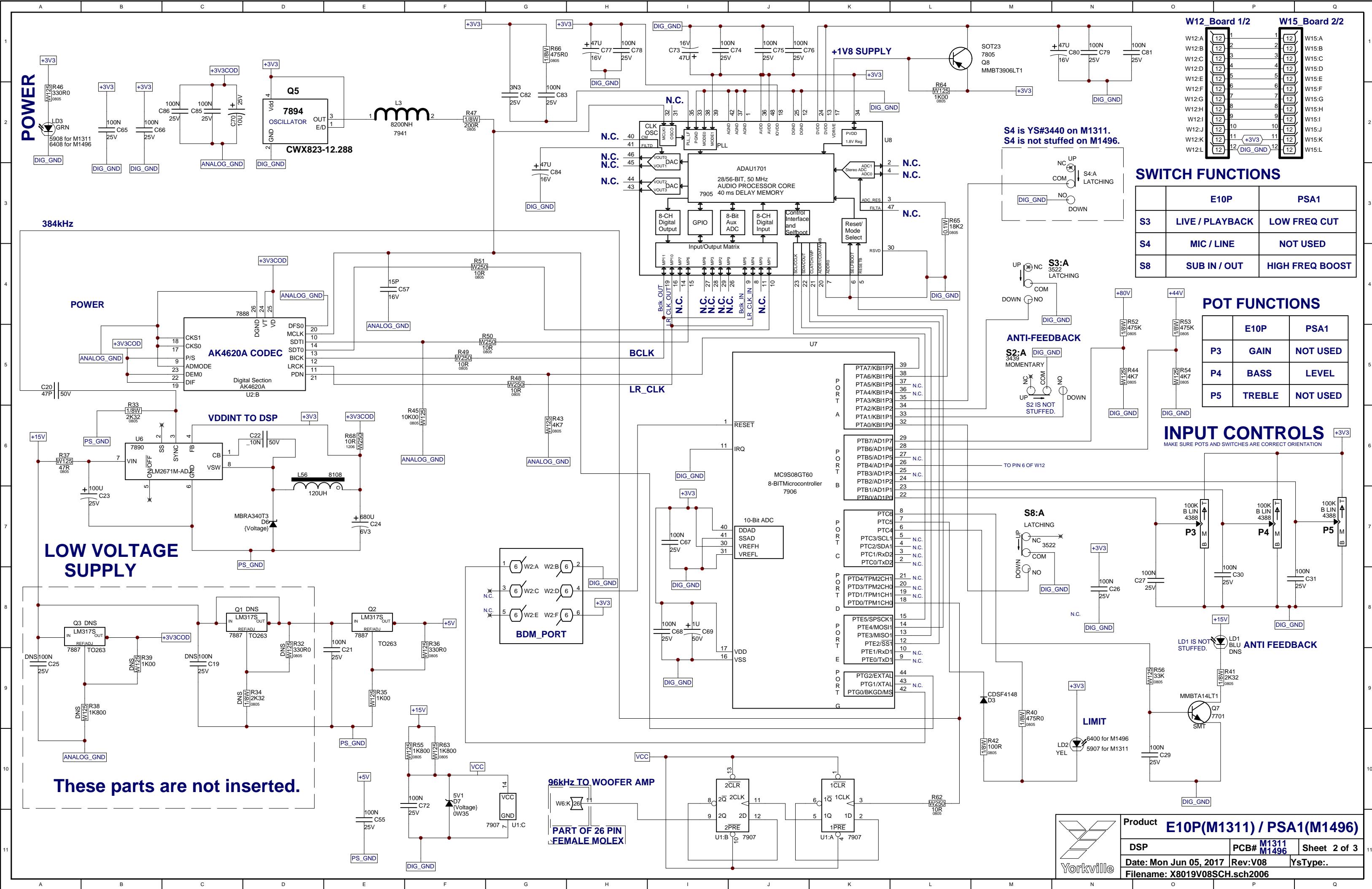
M1501-59 03 Parts Reference List 10/26/2020

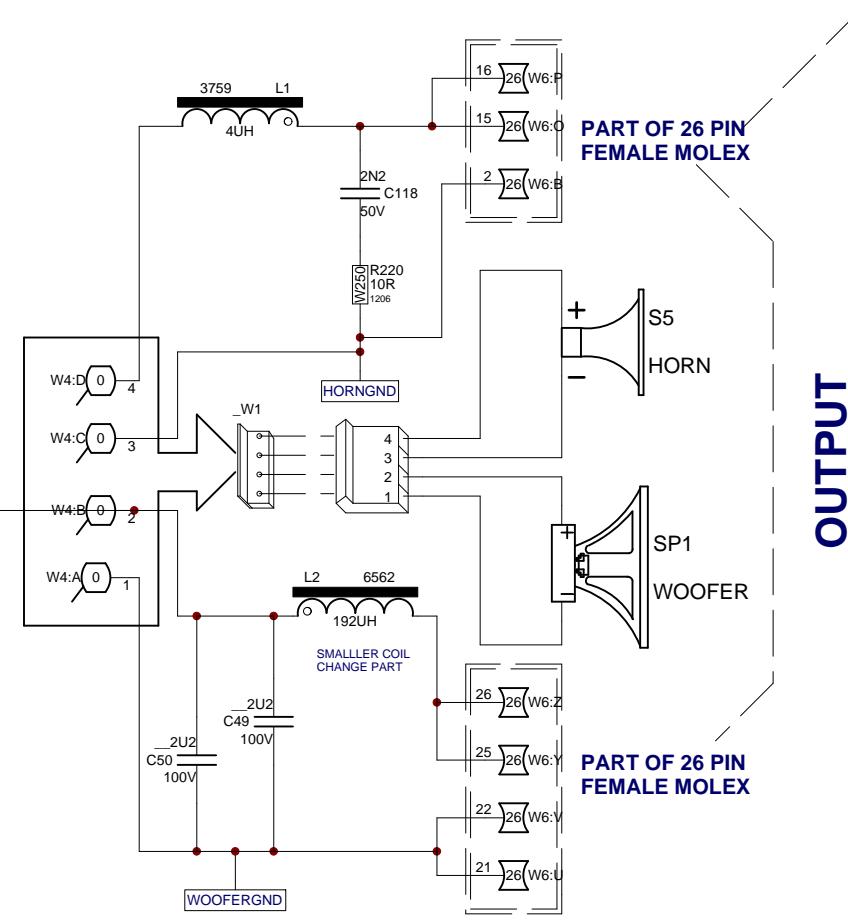
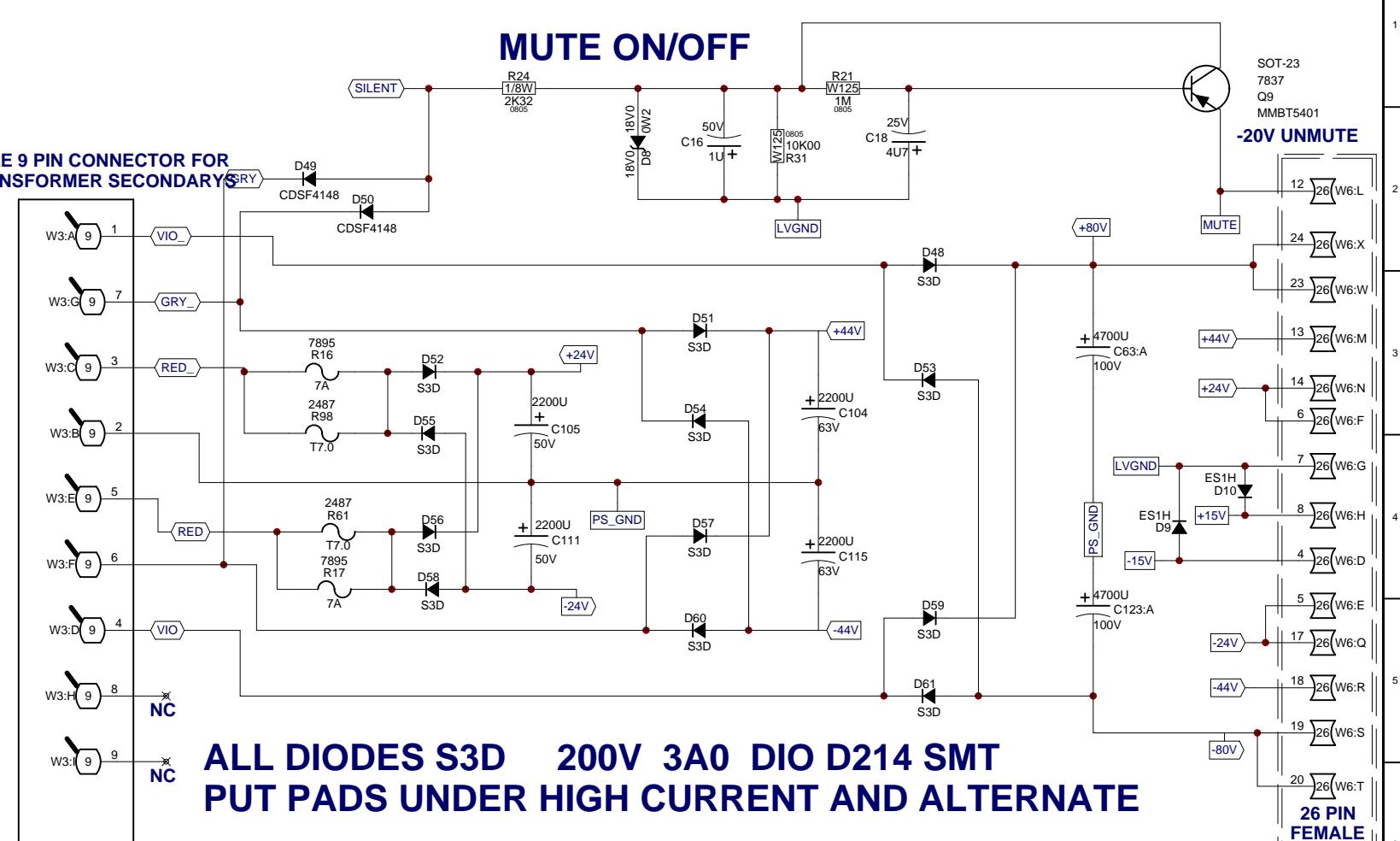
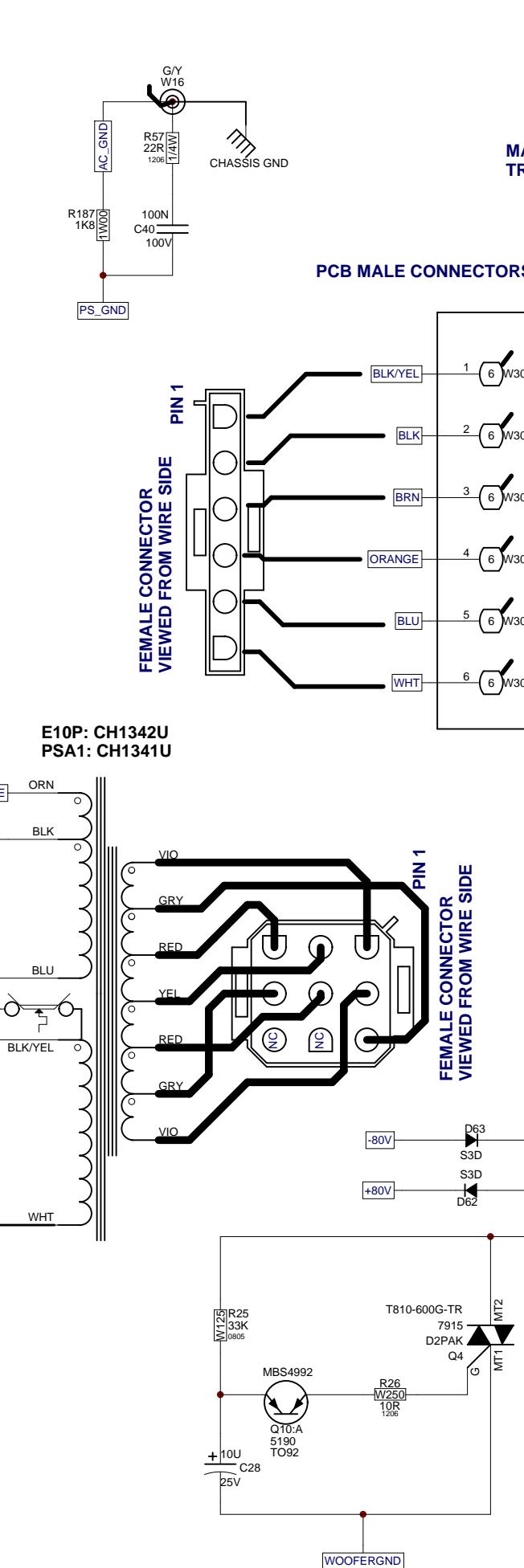
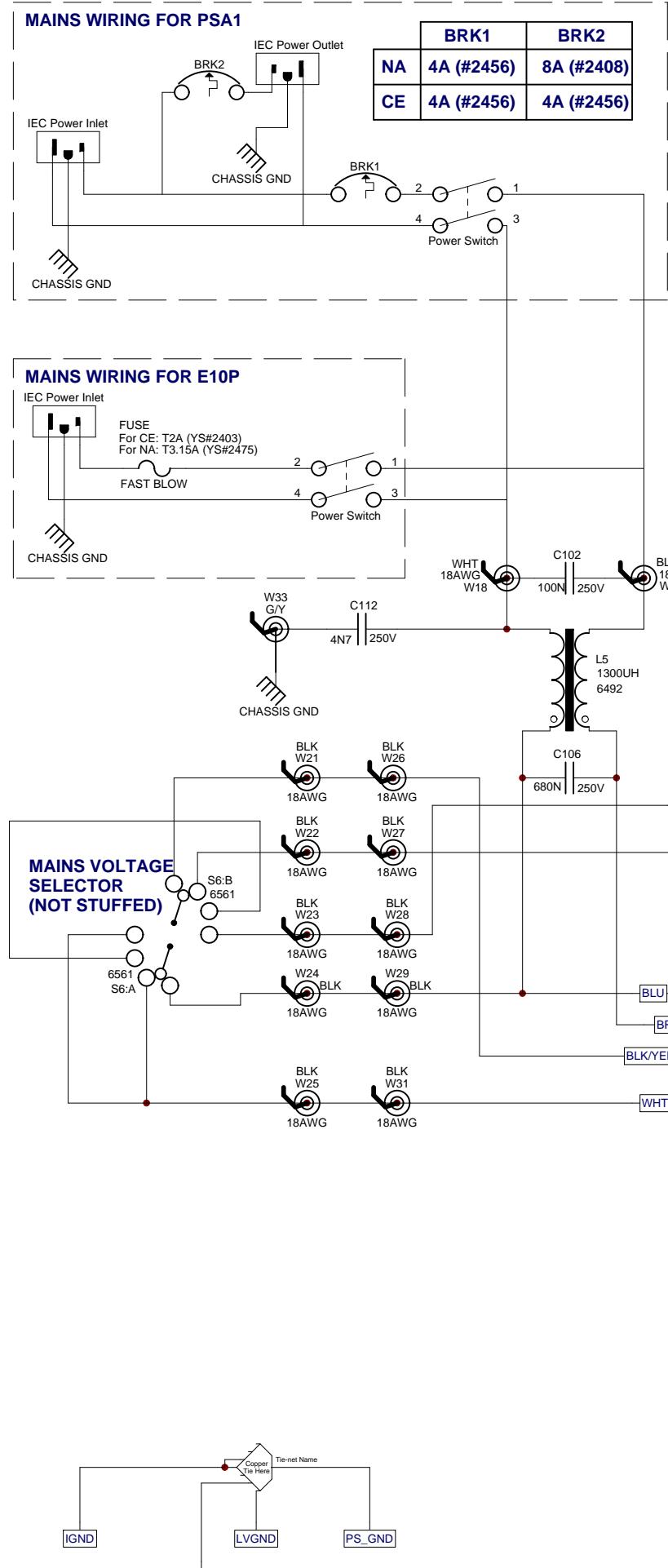
REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
C1		470P 50V 5%CAP 0603 SMT NPO	R10		W125 3K32 1% 0805 SMT RES	U3		IRS20957S DIG AUDIO DRVR SMT SOIC
C2		.10U 16V 20%CAP 0805 SMT X5R	R11		W125 3K32 1% 0805 SMT RES	U5		TL071CDR OPAMP JFET 3MHZ SO-8 SMT
C3		.10U 16V 10%CAP 0805 SMT X6S	R12		1W00 4R7 5% 2512 SMT RES	U13		OPA1652 DUAL OPAMP SMT SO8
C4		.10N 50V 10%CAP 0805 SMT X7R	R13		W100 7K50 1% 0805 SMT RES	W1		26 PIN 25SQ 100 PIN SIL SMT
C5		.10U 16V 10%CAP 1206 SMT X7R	R14		1W00 4R7 5% 2512 SMT RES	ZD1		MMBZ5246B 16V0 0W35 5% SMT ZEN3
C6		.10U 16V 20%CAP 0805 SMT X5R	R15		W125 3K32 1% 0805 SMT RES	ZD6		MM3Z15VT1G 15V0 0W2 5% SMT ZEN
C7		4N7 50V 10%CAP 0805 SMT X7R	R16		1W00 1K 5% 2512 SMT RES	ZD7		MM3Z15VT1G 15V0 0W2 5% SMT ZEN
C8		4N7 50V 10%CAP 0805 SMT X7R	R18		W250 100R 5% 1206 SMT RES	ZD8		MMBZ5246B 16V0 0W35 5% SMT ZEN3
C9		100N 450V 10%CAP 1206 SMT X7T	R19		W500 2K2 5% 2010 SMT RES			
C10		47P 100V 5%CAP 0805 SMT NPO	R20		W125 3K32 1% 0805 SMT RES			
C11		.1U 25V 20%CAP 1206 SMT X7R	R21		W125 3K32 1% 0805 SMT RES			
C12		.10U 25V 10%CAP 1210 SMT X7R	R22		W125 150K 5% 0805 SMT RES			
C13		100N 450V 10%CAP 1206 SMT X7T	R23		W125 33K 5% 0805 SMT RES			
C14		2U2 200V 20%CAP 3025 SMT CER	R24		W100 100K0 1% 0805 SMT RES			
C15		2U2 200V 20%CAP 3025 SMT CER	R25		W125 91K 5% 0805 SMT RES			
C16		2U2 100V 20%CAP 1812 SMT X7R	R26		W125 0R 5% 0805 SMT RES			
C17		2U2 100V 20%CAP 1812 SMT X7R	R27		W125 0R 5% 0805 SMT RES			
C18		100N 50V 5%CAP 0805 SMT X7R	R28		W125 3K32 1% 0805 SMT RES			
C19		.1U 25V 20%CAP 1206 SMT X7R	R29		W250 0R 1206 SMT RES			
C21		100N 50V 5%CAP 0805 SMT X7R	R31		1W00 47K 5% 2512 SMT RES			
C23		.10U 25V 10%CAP 1210 SMT X7R	R32		W750 0R 1% 6A 2010 SMT JMP			
C25		.10U 16V 20%CAP 5X5.4 SMT NP	R34		W125 0R 5% 0805 SMT RES			
C26		.10U 16V 20%CAP 5X5.4 SMT NP	R35		W100 10K0 1% 0805 SMT RES			
C27		.10U 25V 20%CAP 5X5.4 SMT EL	R38		1W00 33K 5% 2512 SMT RES			
C28		.10U 25V 20%CAP 5X5.4 SMT EL	R39		1W00 4R7 5% 2512 SMT RES			
C29		100N 100V 10%CAP 1206 SMT X7R	R40		1W00 4R7 5% 2512 SMT RES			
C32		100N 450V 10%CAP 1206 SMT X7T	R41		1W00 15K 5% 2512 SMT RES			
C37		47P 100V 5%CAP 0805 SMT NPO	R42		W100 1K0 1% 0805 SMT RES			
C61		.1N 50V 5%CAP 0805 SMT NPO	R43		W500 2K2 5% 2010 SMT RES			
C64		.47P 100V .5%CAP 0805 SMT NPO	R44		W500 220R 1% 1210 SMT RES			
C69		100N 50V 5%CAP 0805 SMT X7R	R45		1W00 0R27 1% 75PPM 2010 SMT RES			
D1		BAS21L 250V 200MA SOT23 SMT	R46		W500 220R 1% 1210 SMT RES			
D2		MURA240T3 400V 2A DIO 403D SMT	R47		W100 1K0 1% 0805 SMT RES			
D3		MURA240T3 400V 2A DIO 403D SMT	R48		1W00 0R27 1% 75PPM 2010 SMT RES			
D4		5237B .8V2 0W2 SOT-23 SMT ZEN	R49		1W00 0R27 1% 75PPM 2010 SMT RES			
D5		MMBZ5231B 5V1 0W35 5% SMT ZEN	R50		1W00 0R27 1% 75PPM 2010 SMT RES			
D6		MMBZ5231B 5V1 0W35 5% SMT ZEN	R51		W500 220R 1% 1210 SMT RES			
D7		MM3Z18VT1G 18V0 0W2 5% SMT ZEN	R52		W500 220R 1% 1210 SMT RES			
D8		BAV21WS 200V 0A2 SOD323 SMT	R53		W500 2K2 5% 2010 SMT RES			
D9		BAV21WS 200V 0A2 SOD323 SMT	R54		W500 2K2 5% 2010 SMT RES			
D10		BAS21L 250V 200MA SOT23 SMT	R55		W500 2K2 5% 2010 SMT RES			
D11		MM3Z15VT1G 15V0 0W2 5% SMT ZEN	R56		W100 100R 1% 0805 SMT RES			
D12		MURA240T3 400V 2A DIO 403D SMT	R60		W750 0R 1% 6A 2010 SMT JMP			
D13		BAV21WS 200V 0A2 SOD323 SMT	R61		W250 0R 1206 SMT RES			
D14		BAV21WS 200V 0A2 SOD323 SMT	R61_2T		W125 0R 5% 0805 SMT RES			
D15		MM3Z18VT1G 18V0 0W2 5% SMT ZEN	R63		1W00 0R 5% 2512 SMT RES			
D17		BAV21WS 200V 0A2 SOD323 SMT	R64		W250 0R 1206 SMT RES			
D30A		CDSF4148 75V 0A15 100S SMT	R66		W100 100K0 1% 0805 SMT RES			
D36		BAS21L 250V 200MA SOT23 SMT	R72		W100 221R 1% 0805 SMT RES			
D42		BAS21L 250V 200MA SOT23 SMT	R76		W250 0R 1206 SMT RES			
M1501		W250 0R 1206 SMT RES	R79		W125 3K32 1% 0805 SMT RES			
P6		10K 25% ACP KAP TRIM POT SMT T&R	R82		W250 0R 1206 SMT RES			
PCB1	X8025BLANK	2 OZ 1SD 107.5SQIN 08PER ALUM 1.5MM	R87		W250 0R 1206 SMT RES			
Q2		MMBTF4391LT1 NCH JFET SOT-23 SMT T&R	R97_2T		W125 0R 5% 0805 SMT RES			
Q3		MMBTF4391LT1 NCH JFET SOT-23 SMT T&R	R99		1W00 1K 5% 2512 SMT RES			
Q4		MJD243T4G NPN DPAK3 SMT TS	R106_2		W250 0R 1206 SMT RES			
Q5		IRFS4227PBF NCH MFET D2PAK SMT TS	R107_2		W250 0R 1206 SMT RES			
Q6		IRFS4227PBF NCH MFET D2PAK SMT TS	R109		W125 1M 5% 0805 SMT RES			
Q7		MC7815BDTG POS REG SMT DPAK3	R112		W125 470R 5% 0805 SMT RES			
Q8		MC79M15CDTG NEG REG SMT DPAK3	R113		W100 10K0 1% 0805 SMT RES			
Q10		IRF530NS NCH MFET D2PAK SMT TS	R114		W125 1K62 1% 0805 SMT RES			
Q11		2SC4027 NPN DPAK3 SMT TR	R116		PTC RESETTABLE 1.5A 6V 1812L SMT			
Q12		2SC4027 NPN DPAK3 SMT TR	R117		W125 1K50 1% 0805 SMT RES			
Q13		STB13007DT4 NPN D2PAK SMT	R118		W100 2K74 1% 0805 SMT RES			
Q14		MMBF4391LT1 NCH JFET SOT-23 SMT T&R	R119		W125 470R 5% 0805 SMT RES			
Q15		STB13007DT4 NPN D2PAK SMT	R120		W125 14K0 1% 0805 SMT RES			
Q16		2SA1552 NPN DPAK3 SMT TR	R121		W100 10K0 1% 0805 SMT RES			
Q17		MMBTA64LT1G PNP DARL SOT-23 SMT	R125		W100 15K0 1% 0805 SMT RES			
Q18		2SA1552 NPN DPAK3 SMT TR	R126		W125 17K8 1% 0805 SMT RES			
Q19		STB13007DT4 NPN D2PAK SMT	R127		W125 470R 5% 0805 SMT RES			
Q20		STB13007DT4 NPN D2PAK SMT	R130		W125 8K25 1% 0805 SMT RES			
Q21		IRF9530NS PCH MFET D2PAK SMT TS	R131		W125 47R 5% 0805 SMT RES			
R1		W100 2K74 1% 0805 SMT RES	R132		W125 47R 5% 0805 SMT RES			
R2		.47K 5% THERMISTOR NTC 0603 SMT	R134		W100 221R 1% 0805 SMT RES			
R4		W100 10K0 1% 0805 SMT RES	R136		W500 2K2 5% 2010 SMT RES			
R5		W100 1K0 1% 0805 SMT RES	R138		W100 100R 1% 0805 SMT RES			
R6		W500 2K2 5% 2010 SMT RES	R141		W500 2K2 5% 2010 SMT RES			
R7		W125 1M 5% 0805 SMT RES	TP1		TEST POINT MINIATURE SMT			
R8		W250 10R 5% 1206 SMT RES	TP2		TEST POINT MINIATURE SMT			
R9		W125 348R0 1% 0805 SMT RES	U1		LM393D DUAL COMPARATOR SMT SO-8			

M1310 Parts Reference List 8/29/2018

REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
C1		4N7 50V 5%CAP 1206 SMT NPO	D7		MMBZ5231B 5V1 0W35 5% SMT ZEN	R34		W125 33K 5% 0805 SMT RES
C2	100N 50V 5%CAP	0805 SMT X7R	D8		MM3Z18VT1G 18V0 0W2 5% SMT ZEN	R35		W125 1K02 0.1% 0805 SMT RES
C3	100N 50V 5%CAP	0805 SMT X7R	D9		ES1H 500V 1A0 D214 UPGT 8814	R36		W125 330R 0.5% 0805 SMT RES
C4	180P 50V 5%CAP	0805 SMT NPO	D10		ES1H 500V 1A0 D214 UPGT 8814	R37		W125 47R 5% 0805 SMT RES
C5	180P 50V 5%CAP	0805 SMT NPO	D11		MM3Z18VT1G 18V0 0W2 5% SMT ZEN	R38		W125 33K 5% 0805 SMT RES
C6	_4N7 50V 5%CAP	1206 SMT NPO	D48		ES3D 200V 3A0 D214 SMT SMC	R39		W100 100K 5% 2512 SMT RES
C7	680P 50V 5%CAP	0805 SMT COG	D49		CDSF4148 75V 0A15 1005 SMT	R40		W100 475R 1% 0805 SMT RES
C8	_10U 25V 20%CAP	5X5.4 SMT EL	D50		CDSF4148 75V 0A15 1005 SMT	R42		W100 100R 1% 0805 SMT RES
C9	680P 50V 5%CAP	0805 SMT COG	D51		ES3D 200V 3A0 D214 SMT SMC	R43		W125 4K7 5% 0805 SMT RES
C10	_10U 25V 20%CAP	5X5.4 SMT EL	D52		ES3D 200V 3A0 D214 SMT SMC	R44		W125 4K7 5% 0805 SMT RES
C11	_1N 50V 5%CAP	0805 SMT NPO	D53		ES3D 200V 3A0 D214 SMT SMC	R45		W125 10K00 0.1% 0805 SMT RES
C12	_1N 50V 5%CAP	0805 SMT NPO	D54		ES3D 200V 3A0 D214 SMT SMC	R46		W125 330R 0.5% 0805 SMT RES
C13	270P 50V 5%CAP	0805 SMT NPO	D55		ES3D 200V 3A0 D214 SMT SMC	R47		W100 200R 1% 0805 SMT RES
C14	270P 50V 5%CAP	0805 SMT NPO	D56		ES3D 200V 3A0 D214 SMT SMC	R48		W250 10R 5% 1206 SMT RES
C15	_33U 25V 20%CAP	6.3X5.5 SMT EL	D57		ES3D 200V 3A0 D214 SMT SMC	R49		W250 10R 5% 1206 SMT RES
C16	_1U 50V 20%CAP	4.3X3.9 SMT ELC	D58		ES3D 200V 3A0 D214 SMT SMC	R50		W250 10R 5% 1206 SMT RES
C17	_33U 25V 20%CAP	6.3X5.5 SMT EL	D59		ES3D 200V 3A0 D214 SMT SMC	R51		W250 10R 5% 1206 SMT RES
C18	_4U7 25V 20%CAP	4X5.4 SMT ELC	D60		ES3D 200V 3A0 D214 SMT SMC	R52		W100 475K 1% 0805 SMT RES
C20	_47P 50V 5%CAP	0805 SMT NPO	D61		ES3D 200V 3A0 D214 SMT SMC	R53		W100 475K 1% 0805 SMT RES
C21	100N 50V 5%CAP	0805 SMT X7R	D62		ES3D 200V 3A0 D214 SMT SMC	R54		W125 4K7 5% 0805 SMT RES
C22	10N 50V 5%CAP	1206 SMT NPO	D63		ES3D 200V 3A0 D214 SMT SMC	R55		W125 1K800 0.1% 0805 SMT RES
C23	100U 25V 20%CAP	8X5.4 SMT ELE	HW1	M1607BLANK	FR4 ONLY 217.23SQIN 168PER YS#4100	R57		W250 22R 5% 1206 SMT RES
C24	680U 6V3 20%CAP	8X11 SMT ELE	HW2	3822	HEATSHRINK 1-1/4"ID BLACK	R58		W125 1K800 0.1% 0805 SMT RES
C26	100N 50V 5%CAP	0805 SMT X7R	HW3	3841	5.5" NYLON CABLE TIE	R59		W125 1M 5% 0805 SMT RES
C27	100N 50V 5%CAP	0805 SMT X7R	HW4	3841	5.5" NYLON CABLE TIE	R60		W100 274K 1% 0805 SMT RES
C28	_10U 25V 20%CAP	5X5.4 SMT EL	J1	4100	XLR MALE PCB MT VERT	R62		W250 10R 5% 1206 SMT RES
C30	100N 50V 5%CAP	0805 SMT X7R	J3	6509	1/4& XLR PCB MT VERT COMBO NEUTRIK	R63		W125 1K800 0.1% 0805 SMT RES
C31	100N 50V 5%CAP	0805 SMT X7R	L1		_4.7UH 20% COIL 12MM SMT	R64		W125 1K02 0.1% 0805 SMT RES
C40	100N 100V 10%CAP	1206 SMT X7R	L2	6562	_192UH CHOKE 74T20AWG/77256MAGNTKS	R65		W100 18K2 1% 0805 SMT RES
C45	100N 50V 5%CAP	0805 SMT X7R	L3		_8.2UH COIL 1210 SMT	R66		W100 475R 1% 0805 SMT RES
C48	100N 50V 5%CAP	0805 SMT X7R	L5	6492	1300UH COIL COMMON MODE 4AMP	R67		W125 1M 5% 0805 SMT RES
C49	_2U2 100V 20%CAP	1812 SMT X7R	L56		1200UH COIL 0R4 10MMSSQ SMT	R68		W250 10R 5% 1206 SMT RES
C50	_2U2 100V 20%CAP	1812 SMT X7R	LDD2	5907	YEL 3MM LED 1V9 20MA.4SPCER T&R	R75		W125 33K 5% 0805 SMT RES
C52	100N 50V 5%CAP	0805 SMT X7R	LDD3	5908	GRN 3MM LED 1V9 20MA.4SPCER T&R	R78		W125 4K7 5% 0805 SMT RES
C53	100N 50V 5%CAP	0805 SMT X7R	LDD4	5906	RED 3MM LED 1V9 20MA.4SPCER T&R	R79		W125 4K7 5% 0805 SMT RES
C54	100N 50V 5%CAP	0805 SMT X7R	P3	4388	100K B LIN 9MM DETENT KNURL P30	R80		W125 33K 5% 0805 SMT RES
C55	100N 50V 5%CAP	0805 SMT X7R	P4	4388	100K B LIN 9MM DETENT KNURL P30	R81		W125 4K7 5% 0805 SMT RES
C57	_15P 50V 5%CAP	0603 SMT NPO	P5	4388	100K B LIN 9MM DETENT KNURL P30	R82		W125 4K7 5% 0805 SMT RES
C60	100N 50V 5%CAP	0805 SMT X7R	PCB1	M1310BLANK	_2_OZ 2SD 65.32 SQIN 01PER E10P	R83		W125 33K 5% 0805 SMT RES
C61	100U 6V3 20%CAP	6.3X5.4 SMT ELE	Q1		MMBF4391LT1 NCH JFET SOT-23 SMT T&R	R84		W125 33K 5% 0805 SMT RES
C62	100N 50V 5%CAP	0805 SMT X7R	Q2		LM317S POS REG SMT TO263	R85		W125 33K 5% 0805 SMT RES
C63	5910	4700U 100V 10%CAP BLK 35X40MM 4PS	Q4		T810-600G-TR 8A TRIAC D2PAK SMT	R86		W125 33K 5% 0805 SMT RES
C64	_10U 25V 20%CAP	5X5.4 SMT EL	Q5		12.288MHZ CRYSTAL 4-PIN SMT	R87		W125 33K 5% 0805 SMT RES
C65	100N 50V 5%CAP	0805 SMT X7R	Q6		MMBTA14 NPN DARL SOT-23 SMT	R88		W125 33K 5% 0805 SMT RES
C66	100N 50V 5%CAP	0805 SMT X7R	Q8		MMBT3906LT1 PNP SOT-23 SMT T&R	R89		W125 33K 5% 0805 SMT RES
C67	100N 50V 5%CAP	0805 SMT X7R	Q9		MMBT5401 PNP SOT-23 SMT	R90		W125 33K 5% 0805 SMT RES
C68	100N 50V 5%CAP	0805 SMT X7R	Q10	5190	MBS4992 TO92 8V5 DIAC T&R	R91		W125 4K7 5% 0805 SMT RES
C69	_1U 50V 20%CAP	4.3X3.9 SMT ELC	R1		W125 4K7 5% 0805 SMT RES	R92		W125 4K7 5% 0805 SMT RES
C70	_10U 25V 20%CAP	5X5.4 SMT EL	R2		W125 4K7 5% 0805 SMT RES	R93		W125 4K7 5% 0805 SMT RES
C71	100N 50V 5%CAP	0805 SMT X7R	R3		W125 11K0 1% 0805 SMT RES	R94		W125 4K7 5% 0805 SMT RES
C72	100N 50V 5%CAP	0805 SMT X7R	R4		W125 11K0 1% 0805 SMT RES	R95		W125 4K7 5% 0805 SMT RES
C73	_47U 16V 20%CAP	6X5.4 SMT ELE	R5		W100 200R 1% 0805 SMT RES	R96		W125 4K7 5% 0805 SMT RES
C74	100N 50V 5%CAP	0805 SMT X7R	R6		W100 200R 1% 0805 SMT RES	R187		W100 1K8 5% 2512 SMT RES
C75	100N 50V 5%CAP	0805 SMT X7R	R7		W125 4K7 5% 0805 SMT RES	R220		W250 10R 5% 1206 SMT RES
C76	100N 50V 5%CAP	0805 SMT X7R	R8		W100 200R 1% 0805 SMT RES	S3	3522	DPDT MINI PC VERT SNP ALT
C77	_47U 16V 20%CAP	6X5.4 SMT ELE	R9		W125 4K7 5% 0805 SMT RES	S4	3440	4PDT MINI PC VERT ALT SWITCH
C78	100N 50V 5%CAP	0805 SMT X7R	R10		W100 12K1 1% 0603 SMT RES	S8	3522	DPDT MINI PC VERT SNP ALT
C79	100N 50V 5%CAP	0805 SMT X7R	R11		W100 12K1 1% 0603 SMT RES	U1		SN74AC74DR DUAL FF/FLOP SMT IC
C80	_47U 16V 20%CAP	6X5.4 SMT ELE	R12		W100 200R 1% 0805 SMT RES	U2		AK4620A VSOP-30 CODEC SMT IC
C81	100N 50V 5%CAP	0805 SMT X7R	R13		W125 1K02 0.1% 0805 SMT RES	U3		NE5532D DUAL OPAMP SMT SO-8
C82	_3N3 25V 5%CAP	0805 SMT NPO	R14		W125 18K00 0.1% 0805 SMT RES	U4		NE5532D DUAL OPAMP SMT SO-8
C83	100N 50V 5%CAP	0805 SMT X7R	R15		W125 10K00 0.1% 0805 SMT RES	U6		LM2671 3V3 REG 0A5 SMT SO8
C84	_47U 16V 20%CAP	6X5.4 SMT ELE	R16		FUSE SLOW 7A 125V SMT 6125	U7		MC9S08GT60 MICROCNTRLER SMT QFP44
C85	100N 50V 5%CAP	0805 SMT X7R	R17		FUSE SLOW 7A 125V SMT 6125	U8		ADAU1401 28/56 DSP 2AD4DA SMT IC
C86	100N 50V 5%CAP	0805 SMT X7R	R18		W125 18K00 0.1% 0805 SMT RES	W1	6535	HEADER SIL (FEMALE) 26 SOCKET
C102	5242	100N 250V 20%CAP BLK X'2' 15MM AC	R19		W125 10K00 0.1% 0805 SMT RES	W2		06 CIR DUAL ROW HDR VT 0.1SPC SMT
C104	5670	3300U 63V 20%CAP 18X40MM CUT55MM EL	R20		W125 1K800 0.1% 0805 SMT RES	W3	4145	9PIN 3X3 POWER PIN HEADER
C105	5680	3300U 35V 20%CAP BLK 16X35.5MM EL	R21		W125 1M 5% 0805 SMT RES	W4	3538	24 PIN BREAKAWAY LOCK .156
C106	5266	680N 250V 20%CAP BLK X'2' 27MM AC	R22		W125 1K800 0.1% 0805 SMT RES	W7	2369	3 CIR PH-HEADER 2MM
C111	5860	3300U 35V 20%CAP BLK 16X35.5MM EL	R23		W125 330R 0.5% 0805 SMT RES	W7	2369	3 CIR PH-HEADER 2MM
C112	6451	_4N7 250V 20%CAP BLK Y' 10MM AC	R24		W100 2K32 1% 0805 SMT RES	W12	2329	12 CIR XH-HEADER 0.098IN
C115	5670	3300U 63V 20%CAP 18X40MM CUT55MM EL	R25		W125 33K 5% 0805 SMT RES	W13	2327	6 CIR XH-HEADER 0.098IN
C118	_2N2 50V 10%CAP	0603 SMT COG	R26		W250 10R 5% 1206 SMT RES	W14	2327	6 CIR XH-HEADER 0.098IN
C123	5910	4700U 100V 10%CAP BLK 35X40MM 4PS	R27		W125 1K02 0.1% 0805 SMT RES	W15	2329	12 CIR XH-HEADER 0.098IN
D1	MM3Z10VT1G 10V0 0W2 5% SMT ZEN	R28		W125 30K 0.5% 0805 SMT RES	W30	4147	6 PIN POWER PIN HEADER MALE POLZED	
D2	MM3Z10VT1G 10V0 0W2 5% SMT ZEN	R29		W125 1K800 0.1% 0805 SMT RES	W34	4147	6 PIN POWER PIN HEADER MALE POLZED	
D3	CDSF4148 75V 0A15 1005 SMT	R30		W125 330R 0.5% 0805 SMT RES				
D4	CDSF4148 75V 0A15 1005 SMT	R31		W125 10K00 0.1% 0805 SMT RES				
D5	CDSF4148 75V 0A15 1005 SMT	R32		W100 100K 5% 2512 SMT RES				
D6	MBRA340T3 40V 3A SHTKY 403D SMT	R33		W100 2K32 1% 0805 SMT RES				







Product **E10P(M1311) / PSA1(M1496)**
 POWER SUPPLY PCB# **M1311 M1496** Sheet 3 of 3
 Date: Mon Jun 05, 2017 Rev:V08 YsType::
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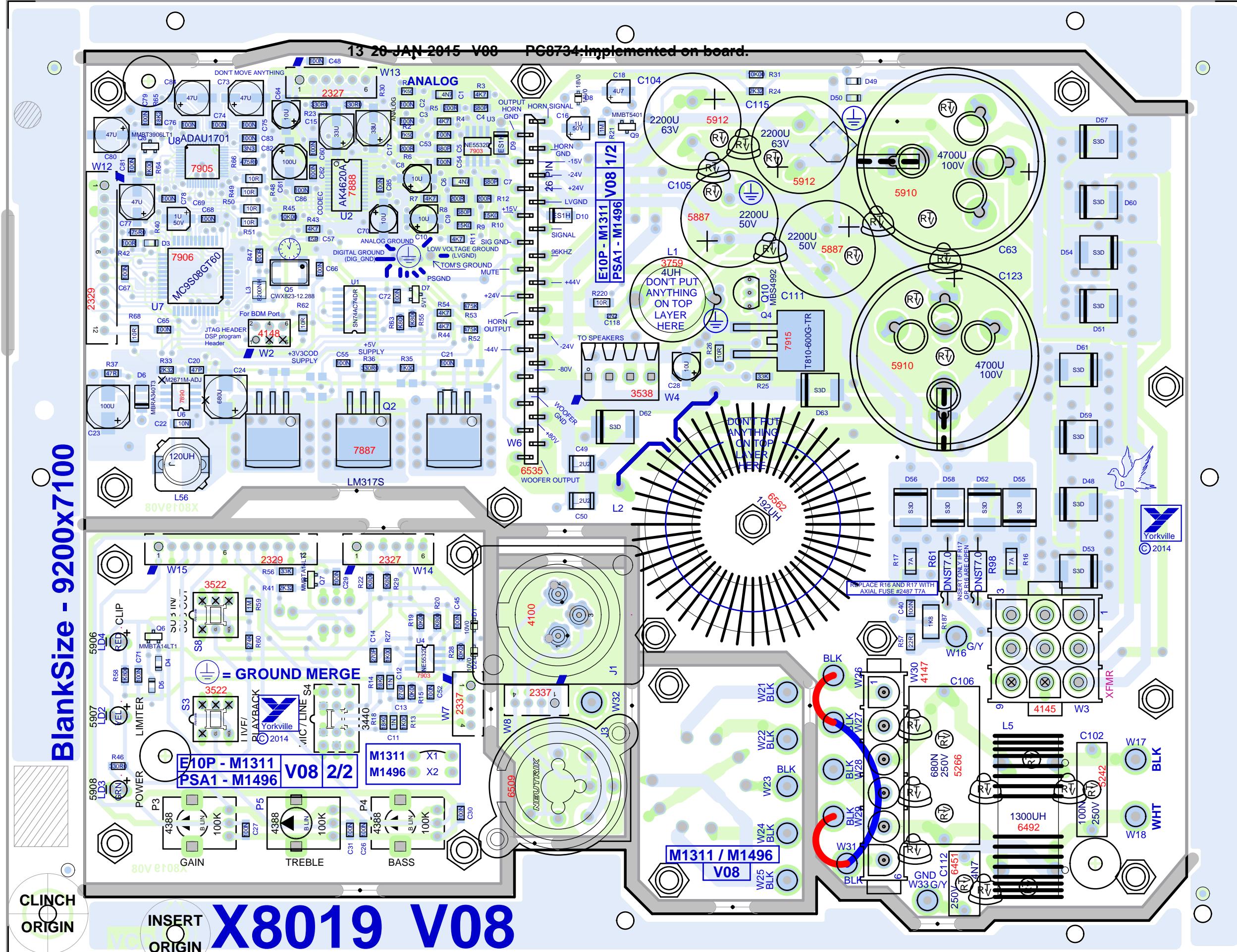
BlankSize - 9200x7100

X8019 V08

SEE PRODUCTION NOTES

1

E10P





SEE LAYOUT DIAGRAM



M1311 V08

PRODUCTION NOTES

1. B.A. STUFF X1 FIRST.
2. B.A. ADD RTV BETWEEN C106, C112 AND W30 THE POWER CONNECTOR
3. B.A. ADD RTV UNDER J3 XLR.
4. B.A. DO NOT STUFF S2 AND LD1.
5. B.A. ADD YS#3822 1.25" HEATSHRINK AROUND J3
6. B.A. DO NOT STUFF S6
7. B.A. FOR N.A. BOARDS ADD 18AWG JUMPER FROM W26 TO W27 AND FROM W29 TO W31
8. B.A. FOR CE BOARDS ADD 18AWG JUMPER FROM W27 TO W31
9. PCBSA: DO NOT BREAK OUT BOARD BEFORE TESTING
10. PCBSA: ADD M1607 CLIP TO YS#4100 XLR WITH RTV AS SHOWN.

X8019 PARTS REFERENCE TABLE

REF DES	M1311 (E10P)	M1496 (PSA1)
P3	4388	DNS
P4	4388	DNS
P5	4388	4459
S4	3440	DNS
LD2	5907	6400
LD3	5908	6408
LD4	5906	6405
X1	4599	DNS
X2	DNS	4599



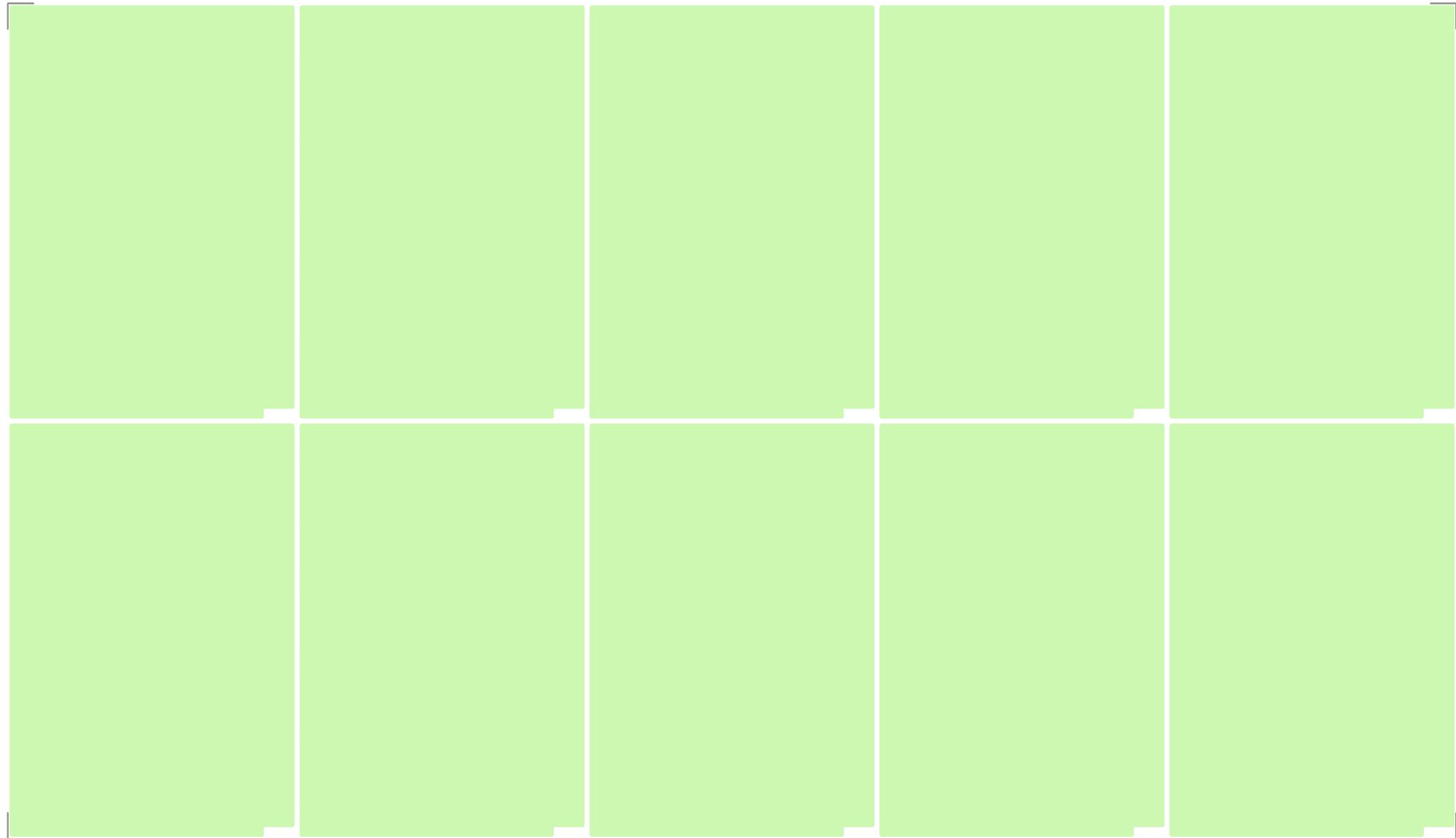
↑ SEE PRODUCTION NOTES ↑

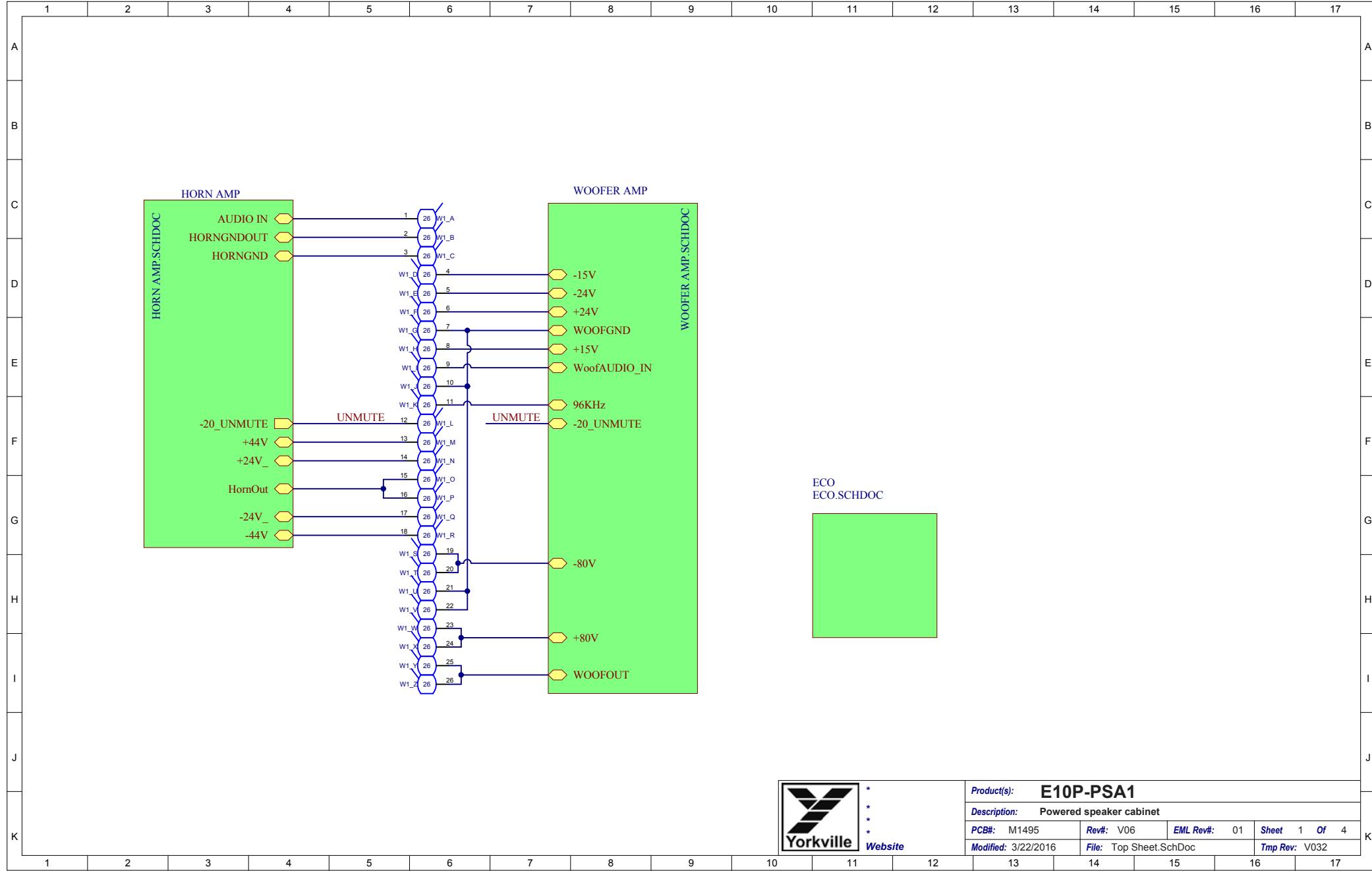
POTENTIOMETERS/SWITCHES AND KNOBS			
MODEL(S):-E10P		M1311	
REF	FUNCTION	POT/SW YS#	KNOB
P3	LEVEL	4388	K
P4	BASS	4388	K
P5	TREBLE	4388	K
S3	LIVE/PLAYBACK	3522	8632
S4	MIC/LINE	3440	8632
S8	SUB IN/SUB OUT	3522	8632
R	F	P	K
R	F	P	K
R	F	P	K
R	F	P	K
R	F	P	K

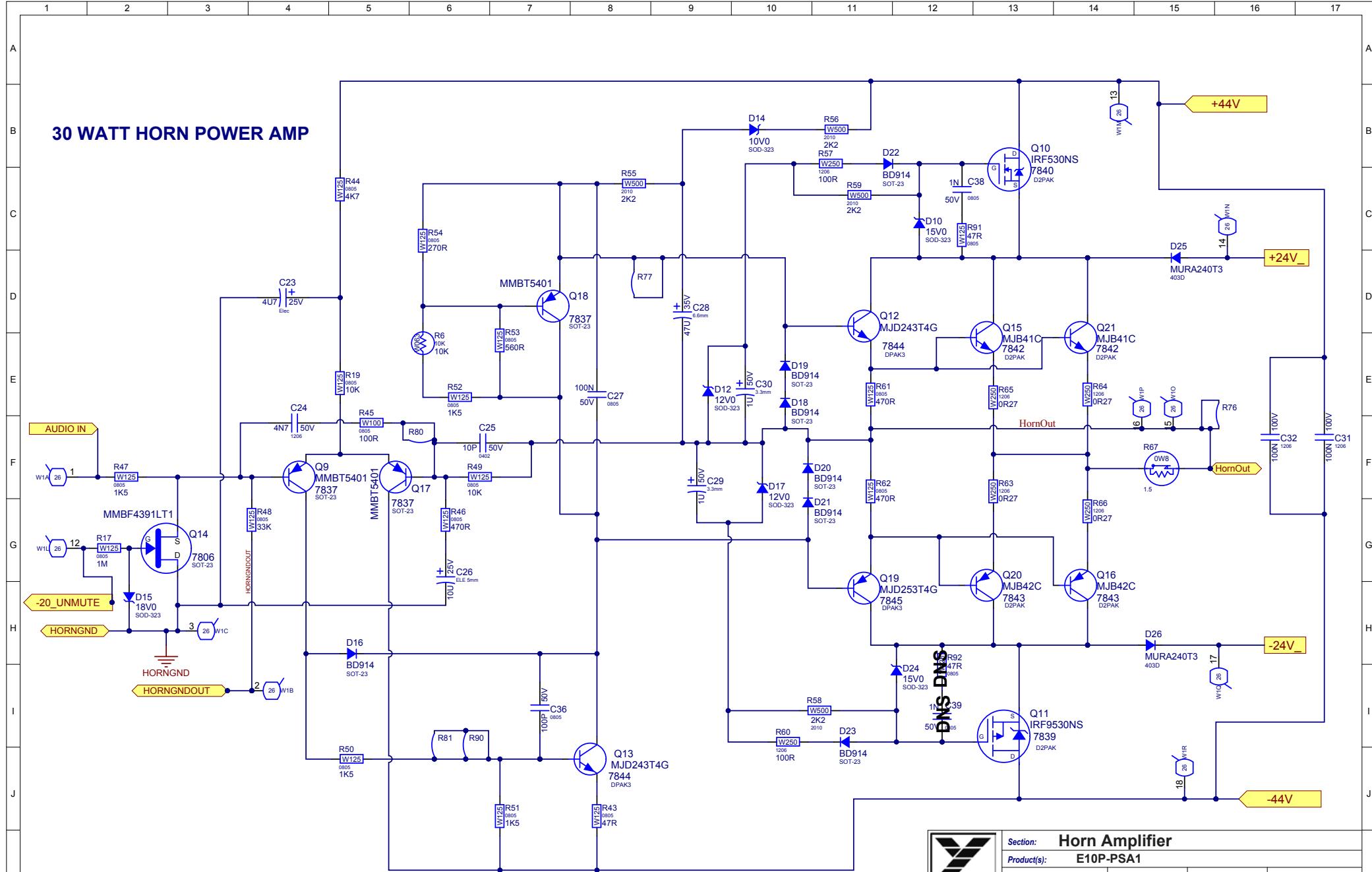
M1311 - PCB_DATABASE_HISTORY			
MODEL(S):- E10P			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	17-APR-2011	V04	DERIVED FROM M1311V03. PC 8242
2	16-JUN-2011	.	PC82xx: XH conn DS pads, add PCB title. GG
3	31-OCT-2011	V05	PC8322: CHANGED W7 & W8 TO XH CONN. - ML
4	.	.	PC8318: UPDT YS#7896 - CHANGED 'C56' to 'L56' - ML
5	25-NOV-2011	V05	FORCE UPDATED SMT PARTS - FIXED LAYOUT. - ML
6	11-JAN-2012	.	PC8361: CONSOLIDATED SMT RESISTORS. - ML
7	06-MAR_2012	V06	PC8385: Replace L56 #7896 with #8108 GG
8	D	.	Add SCORE lines on the sides GG
9	12-JUL-2012	.	PC8458 - Changed P5 from 4435 to 4459 for PSA1. - ML
10	14-AUG-2012	.	PC8461: Breakers changed for PSA1 - ML
11	26-MAR-2013	.	PC8501: Updated fiducials to 50mil diameter. - ML
12	11-OCT-2013	V07	PC8578 & 8580: Replaced J3 and J4 XLR jacks. - ML
13	20-JAN-2015	V08	PC8734: Implemented on board.
14	06-JUN-1017	.	PC9015: Change R1 and R2 to 7K5 YS#7822

M1312 E10P Shield

BlankSize=11300x6520







Horn Amplifier

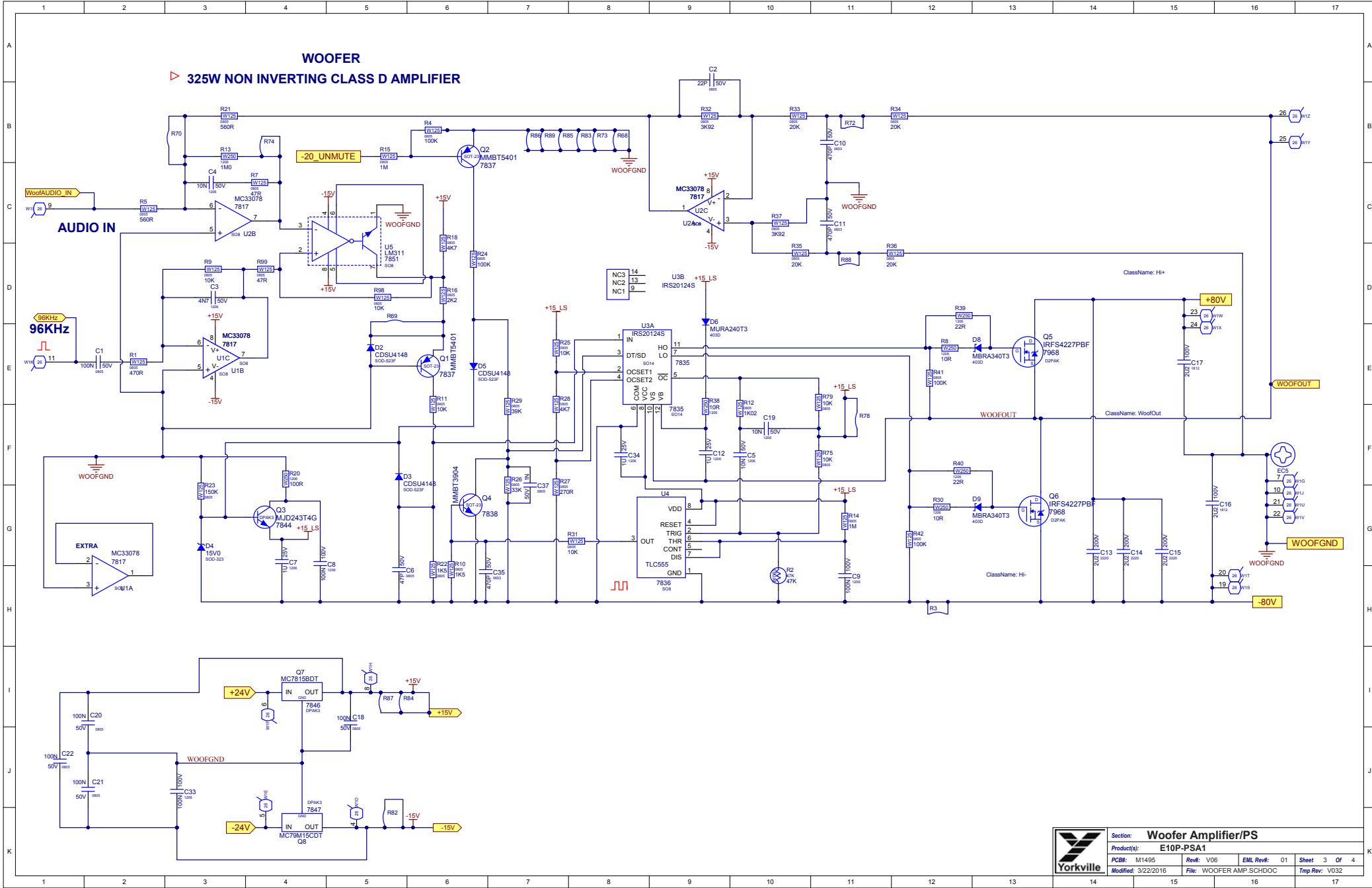
Product(s): E10P-PSA1

M1405 Date# 1/06

File#: HORN 4M

EMI Part #: 01 Sheet 3 of 4

SCHDOC Temp Rev# 1000



DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	2015-06-24	V05	8782	Translate V04 PCAD to AD. PC#8782 added C38,39. Moved D10,14,R58.
2	.	.	.	Moved D4 up 6mil. Changed all D0704 footprints to SOD-523F.
3	2015-08-27	V06	8817	Add 47R 0805 #7854 in series with C38 and C39 GG
4	.	.	.	Replace all #7613 with #5979 GG
5	.	.	.	Increase board width by 10mil each side GG
6	22-MAR-2016	.	8818	#7613 100n 25V replaced with #5979 100n 50V
7
8
9
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11
12
13

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1
2
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13

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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13

POTENTIOMETERS AND KNOBS

PINOUT DIAGRAMS



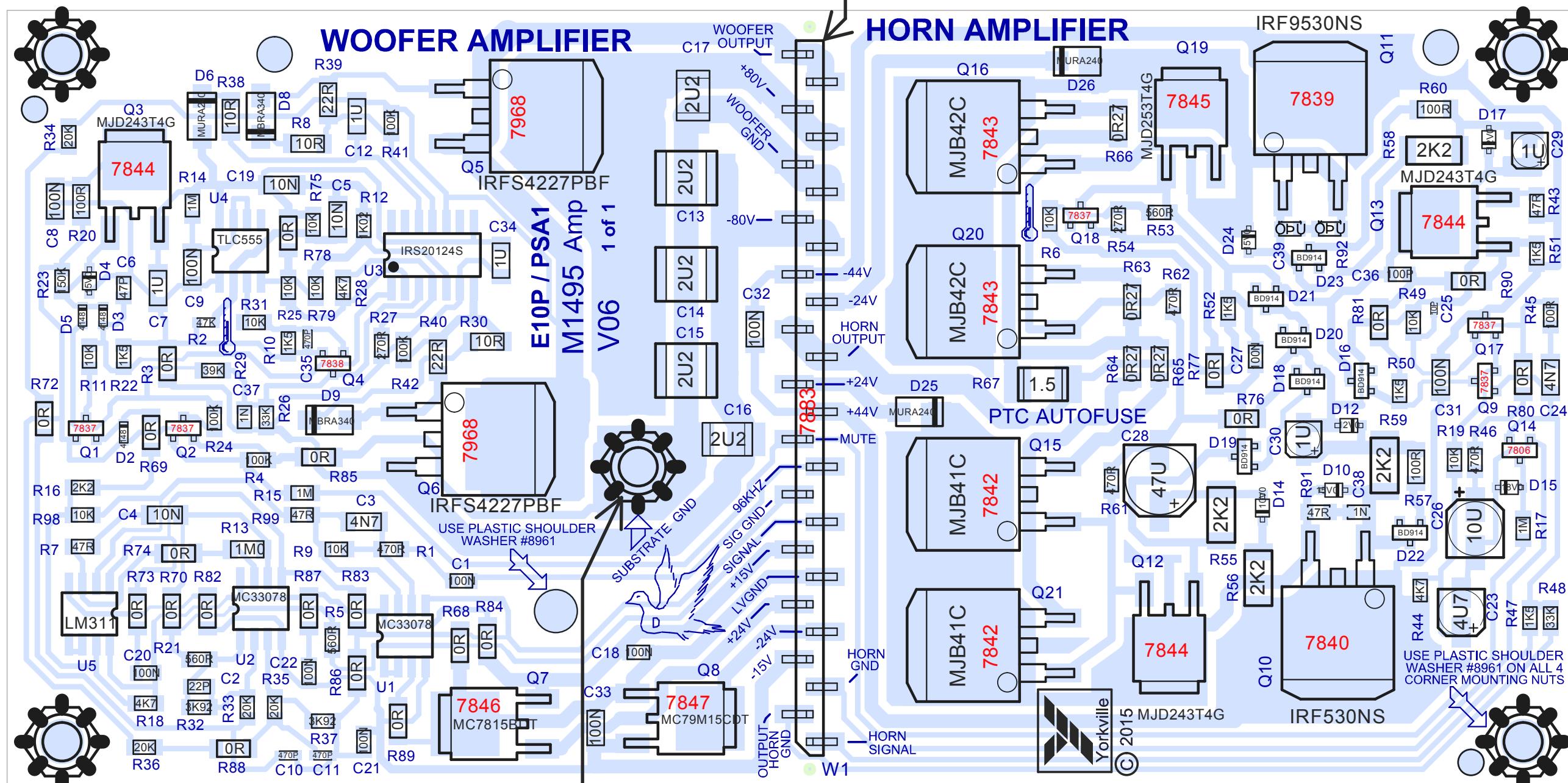
Section: Design Information And History

Product(s): E10P-PSA1

PCB#: M1495 Rev#: V06 EML_Rev#: 01 Sheet 4 Of 4

Modified: 3/22/2016 File: History.SchDoc Temp Rev: V032

HAND PLACE W1 BEFORE REFLOW OVEN



M1495 V06

8701 + 8877 SEE NOTE 1.

E10P / PSA1

PANEL INFO

BlankSize - 6250x11750

of boards per panel: 4

Step & Repeat: X4@2.820Y1@0.0

PCB ASSEMBLY DOCUMENTATION

SPECIAL PRODUCTION NOTES

1. PLACE GROUNDING SCREW (#8877) AND NUT (#8701) IN SUBSTRATE GND HOLE AFTER REFLOW OVEN.

PCB HARDWARE

SCREWS AND BOLTS



8877



8701

A
B
C
D
E
F
G
H
I
J
K

THIS SHEET CONTAINS SPECIAL PRODUCTION NOTES AND A LIST OF PCB HARDWARE PARTS REQUIRED FOR THE BUILD.

Section: Assembly Documentation			
Product(s): E10P / PSA1			
PCB#:	Rev#:	EML Rev#:	Sheet 1 Of *
M1495	V06	01	
Modified: 8/28/2015	File: Assembly.SchDoc		Tmp Rev: V032

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

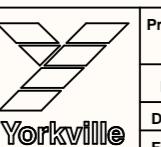
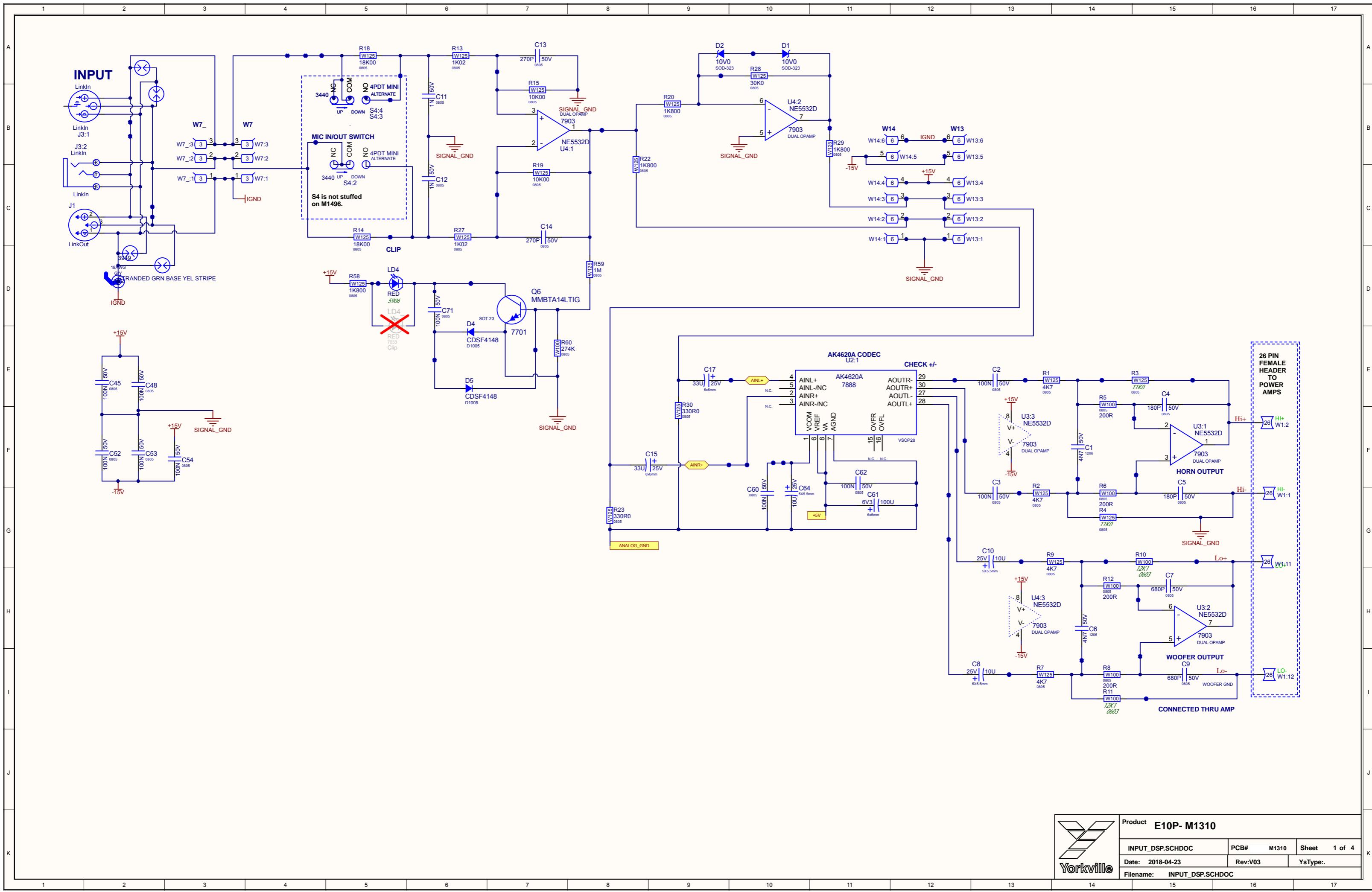
#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	2015-06-24	V05	8782	Translate V04 PCAD to AD. PC#8782 added C38,39. Moved D10,14,R58.
2	.	.	.	Moved D4 up 6mil. Changed all D0704 footprints to SOD-523F.
3	2015-08-27	V06	8817	Add 47R 0805 #7854 in series with C38 and C39 GG
4	.	.	.	Replace all #7613 with #5979 GG
5	.	.	.	Increase board width by 10mil each side GG
6	.	.	.	
7	.	.	.	
8	.	.	.	
9	.	.	.	
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11	.	.	.	
12	.	.	.	
13	.	.	.	
#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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POTENTIOMETERS AND KNOBS

PINOUT DIAGRAMS

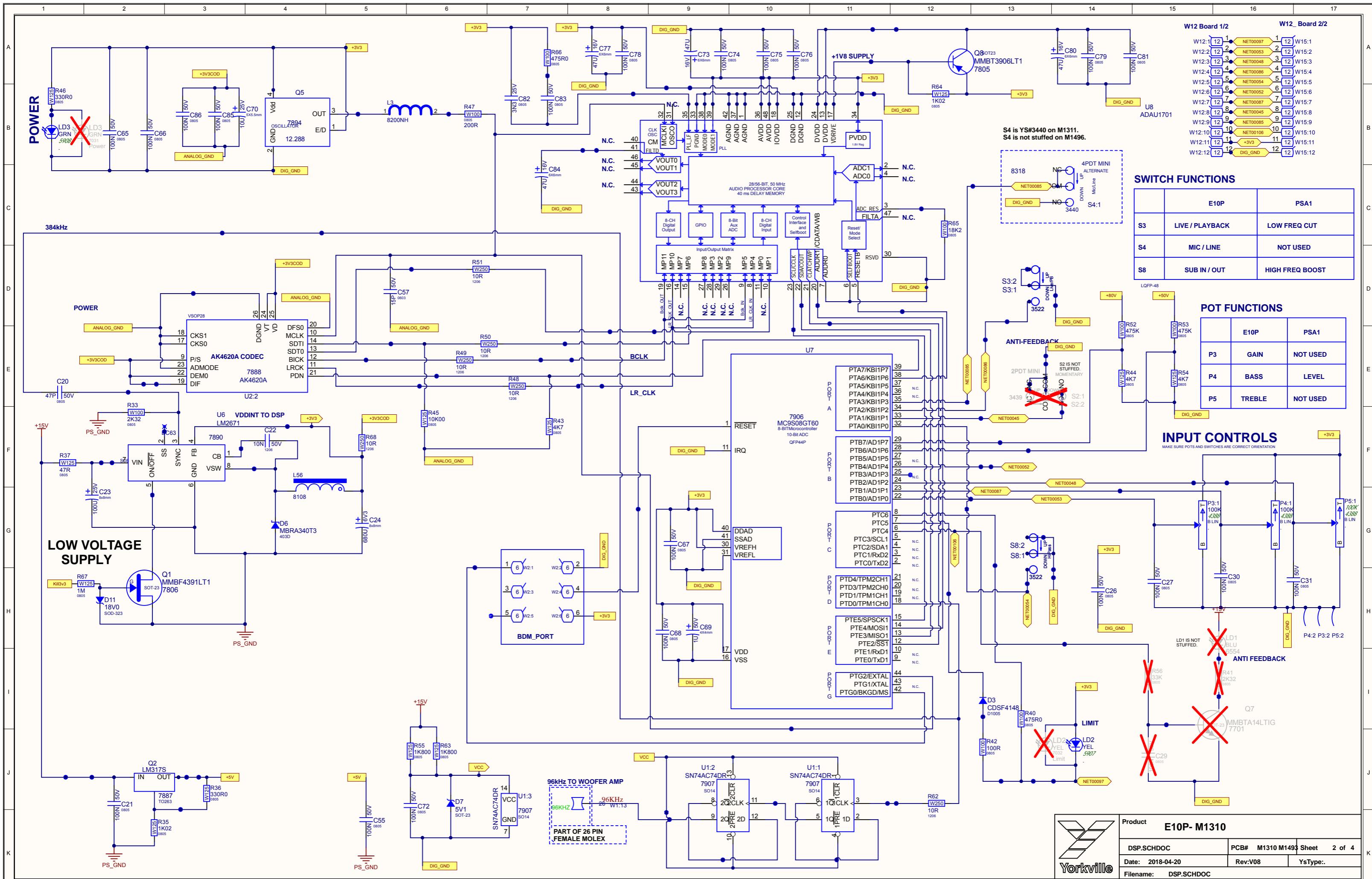


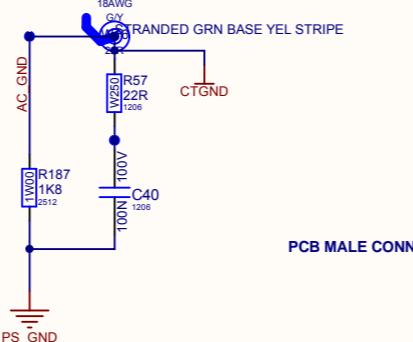
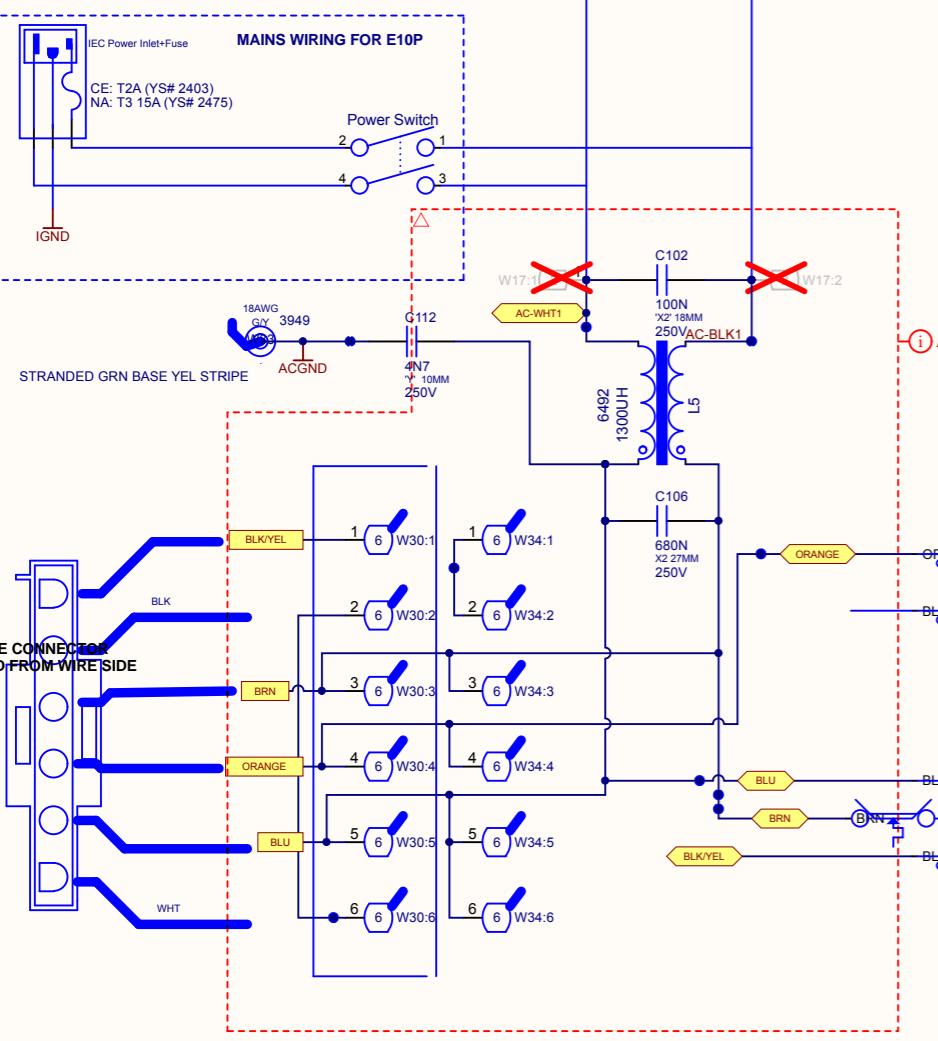
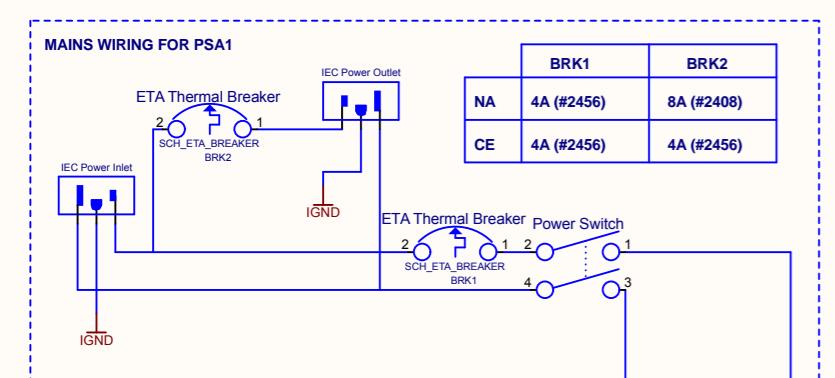
Section: Design Information And History
 Product(s): E10P / PSA1
 PCB#: M1495 Rev#: V06 EML Rev#: 01 Sheet 4 Of 4
 Modified: 8/28/2015 File: History.SchDoc Tmp Rev: V032



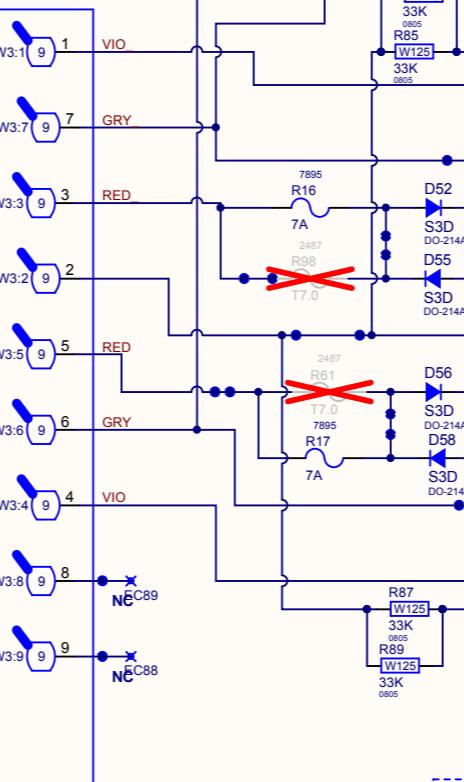
Product E10P- M1310

INPUT_DSP.SCHDOC	PCB#	M1310	Sheet	1 of 4
Date: 2018-04-23	Rev:V03			YsType::
Filename: INPUT_DSP.SCHDOC				

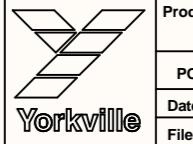
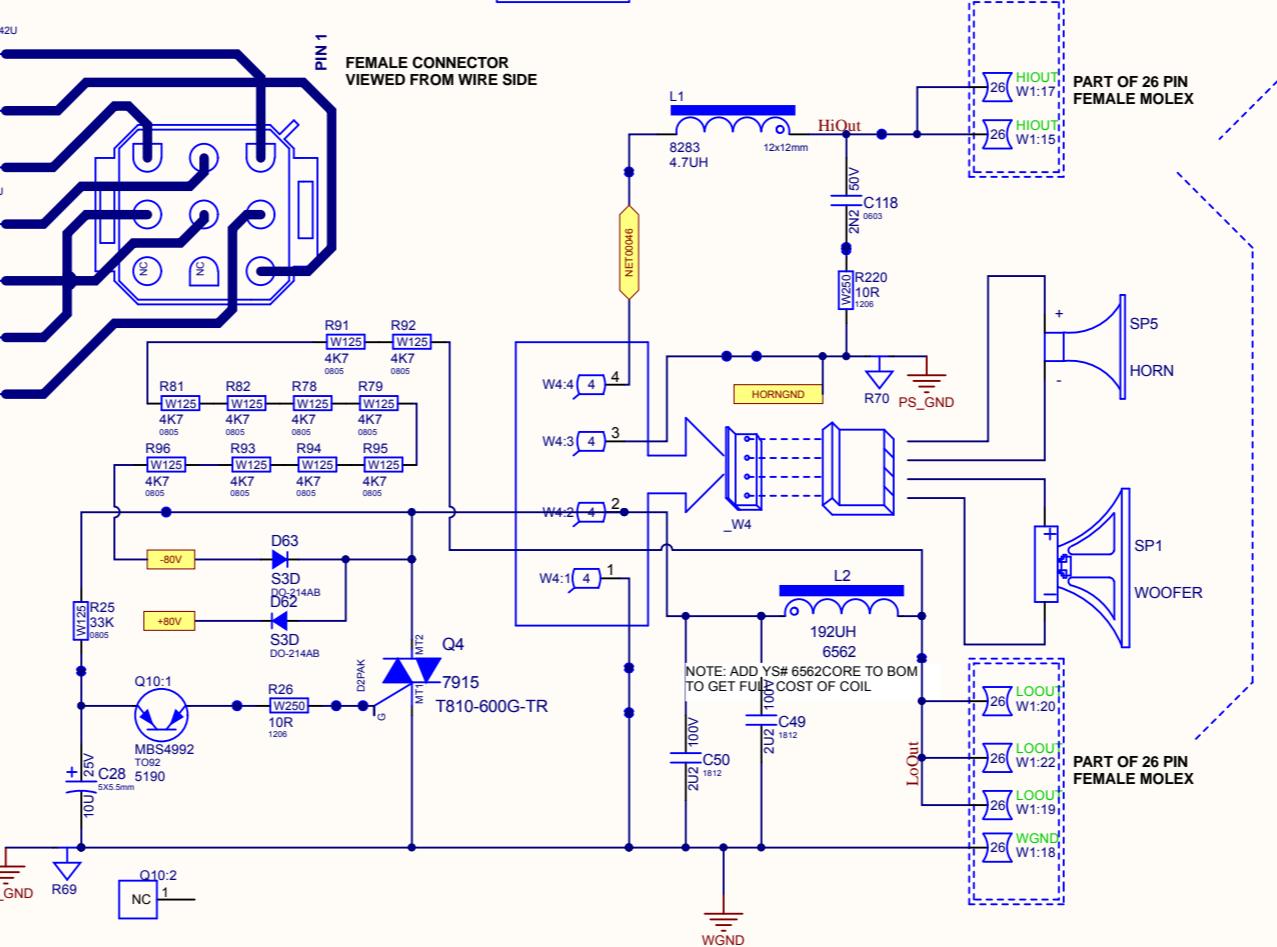




MALE 9 PIN CONNECTOR FOR TRANSFORMER SECONDARYS



**ALL DIODES S3D 200V 3A0 DIO D214 SMT
PUT PADS UNDER HIGH CURRENT AND ALTERNATE**



uct	E10P- M1310		
WER SUPPLY.SCHDOC	PCB# E10P- M1310	Sheet	3 of 4
: 2019-07-23	Rev:V03	YsType:..	
Name: POWER SUPPLY.SCHDOC			
15	16	17	

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	04-OCT-2017	V02	.	RELEASED VERSION 2.
2	12-OCT-2017	.	.	Created new variant list showing parts with different values.
3	18-APR-2018	V03	9162	Added bleeder resistors to +/-24v and woofer output.
4	.	.	9163	Add more vias to 80V net
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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POTENTIOMETERS AND KNOBS

POTENTIOMETERS/SWITCHES AND KNOBS

PINOUT DIAGRAMS

THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.



tion: Design Information And History

duct(s): E10P

Rev#: V03 EML Rev#: 01 Sheet 4 of 10

modified: 2019-07-24 File: M1310_History.SchDoc Tmp Rev: V031

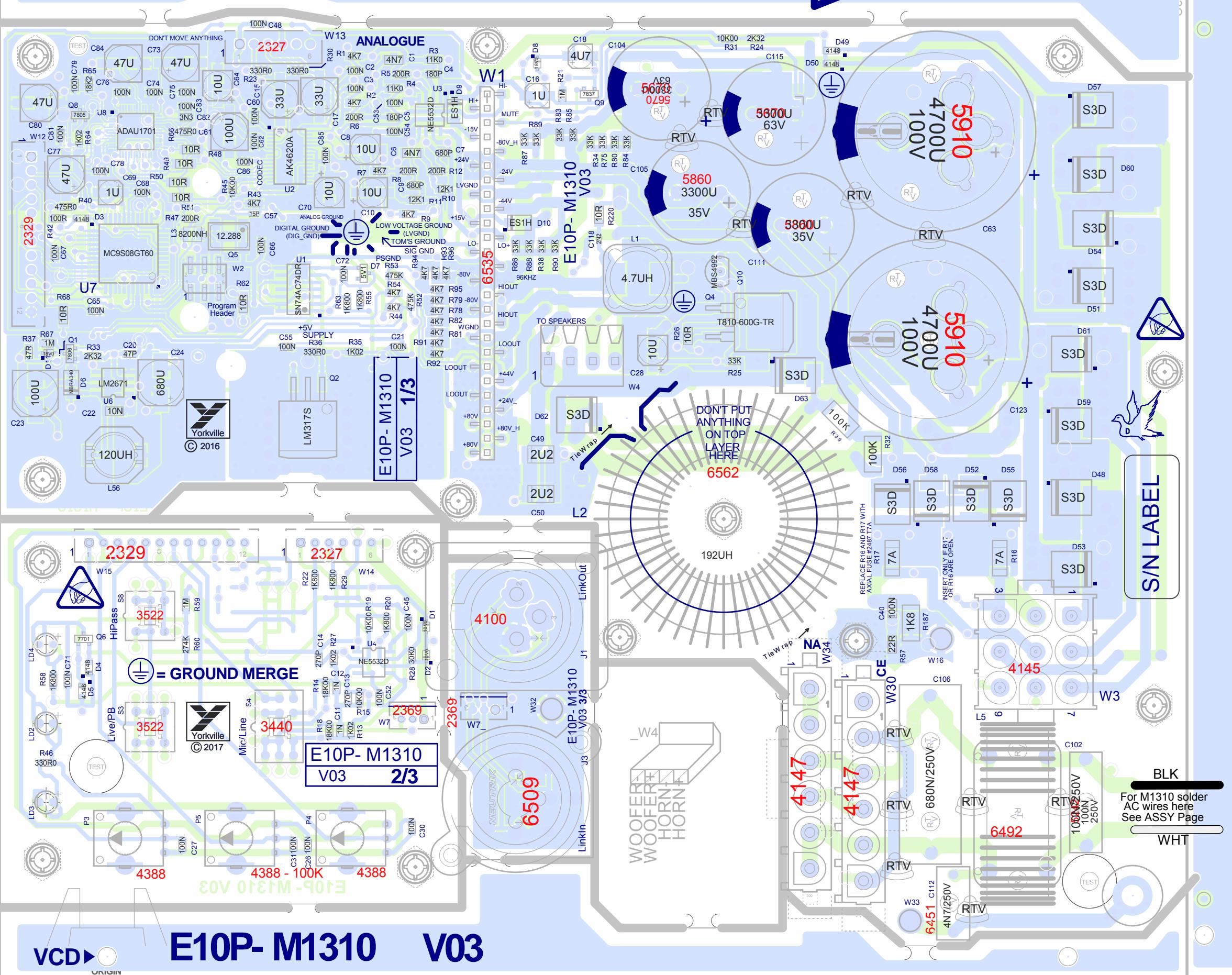
BlankSize - 233.0mmX180.0mm(9170x7090)

2oz Copper

Into Wave

E10P- M1310 V03

-79mil(2mm) Rad ~ 4 PLACES



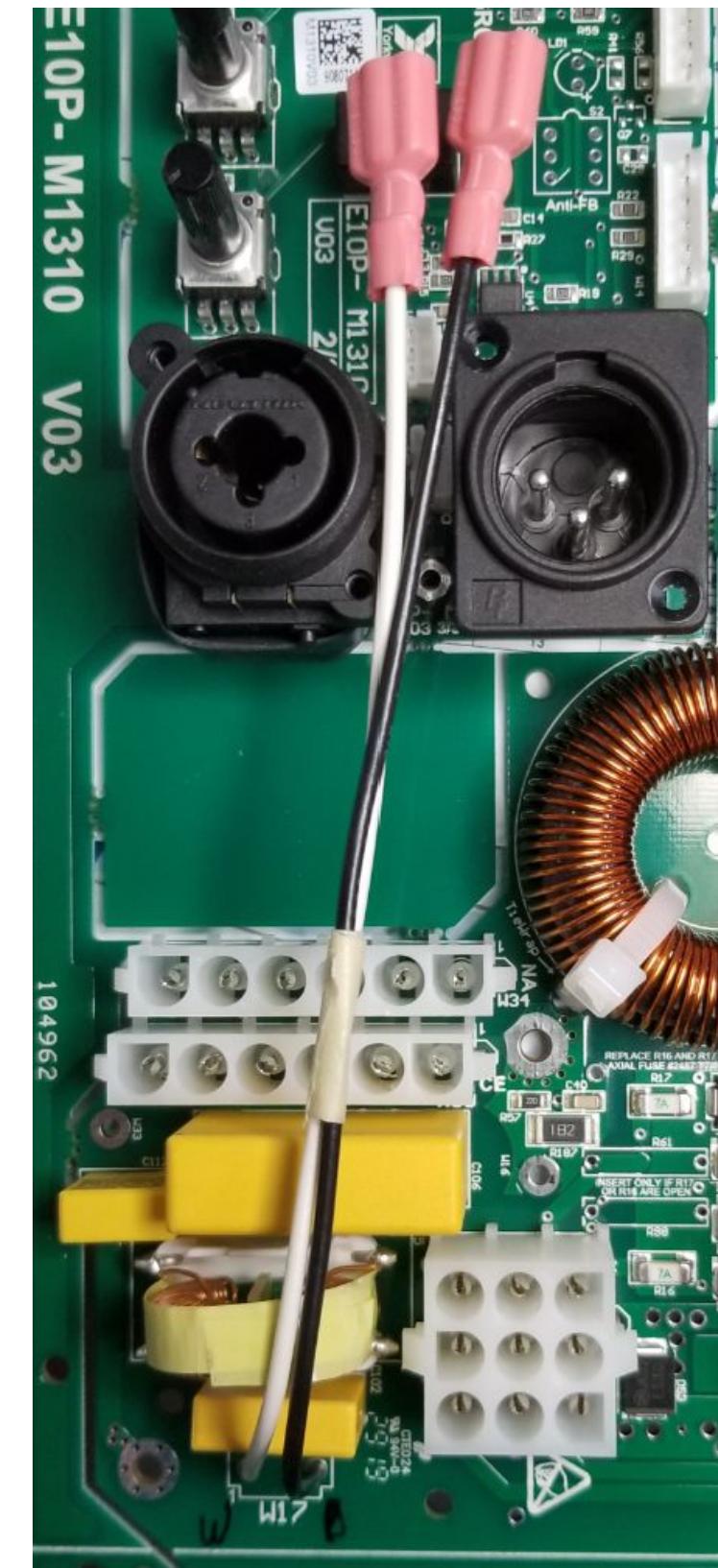
PCB ASSEMBLY DOCUMENTATION

SPECIAL PRODUCTION NOTES

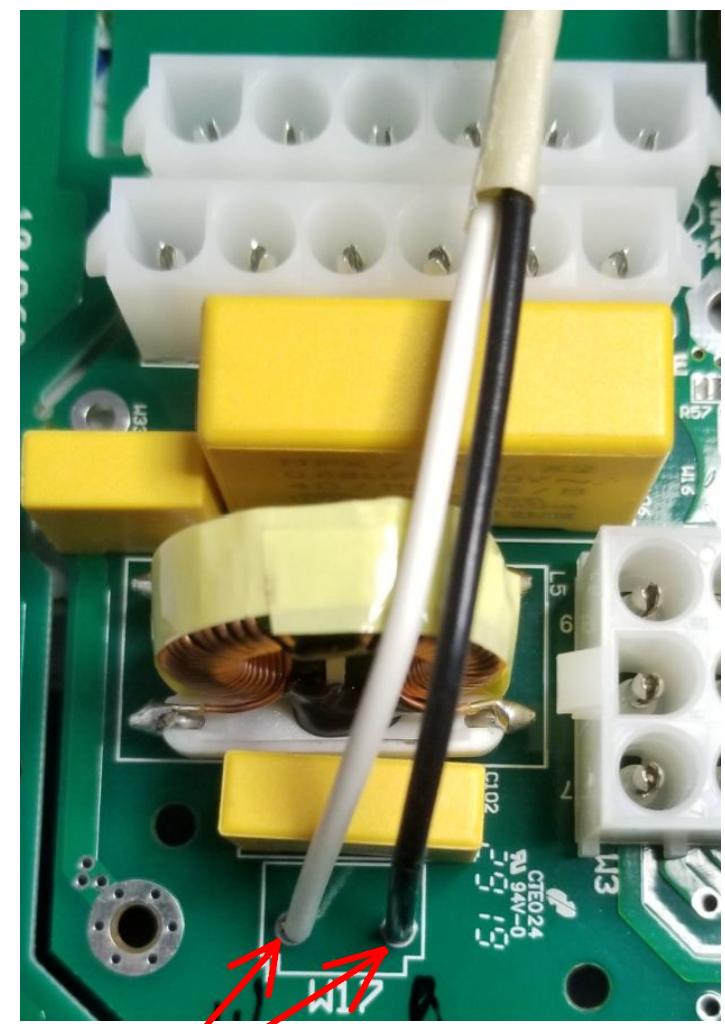
- ADD RTV BETWEEN C106, C112 AND W30 THE POWER CONNECTOR
- ADD YS#3822 1.25" HEATSHRINK AROUND J3
- PCBSA: DO NOT BREAK OUT BOARD BEFORE TESTING
- PCBSA: ADD M1607 CLIP TO YS#4100 XLR WITH RTV AS SHOWN.



RefDes	M1310
C29	DNS
LD1	DNS
LD2	5907
LD3	5908
LD4	5906
P3	Place Part
P4	Place Part
P5	4388 - 100K
Q7	DNS
R3	11K0
R4	11K0
R10	12K1
R11	12K1
R41	DNS
R56	DNS
R61	DNS
R98	DNS
S2	DNS
S4	Place Part
W17	DNS



PCB HARDWARE



SOLDER AC WIRES HERE

THIS SHEET CONTAINS SPECIAL PRODUCTION NOTES AND A LIST OF PCB HARDWARE PARTS REQUIRED FOR THE BUILD.

Assembly Documentation			
Section:	E10P	Product(s):	File: Assembly_M1310.SchDoc
PCB#:	M1310	Rev:	V03
Modified:	2020-01-10	EML Rev#:	01

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	04-OCT-2017	V02	.	RELEASED VERSION 2.
2	12-OCT-2017	.	.	Created new variant list showing parts with different values.
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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POTENTIOMETERS AND KNOBS

POTENTIOMETERS/SWITCHES AND KNOBS

PINOUT DIAGRAMS

THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.



tion: Design Information And History

duct(s): E10P

Rev#: V03 EML Rev#: 01 Sheet 4 of 10

modified: 2020-01-10 File: M1310_History.SchDoc Tmp Rev: V031

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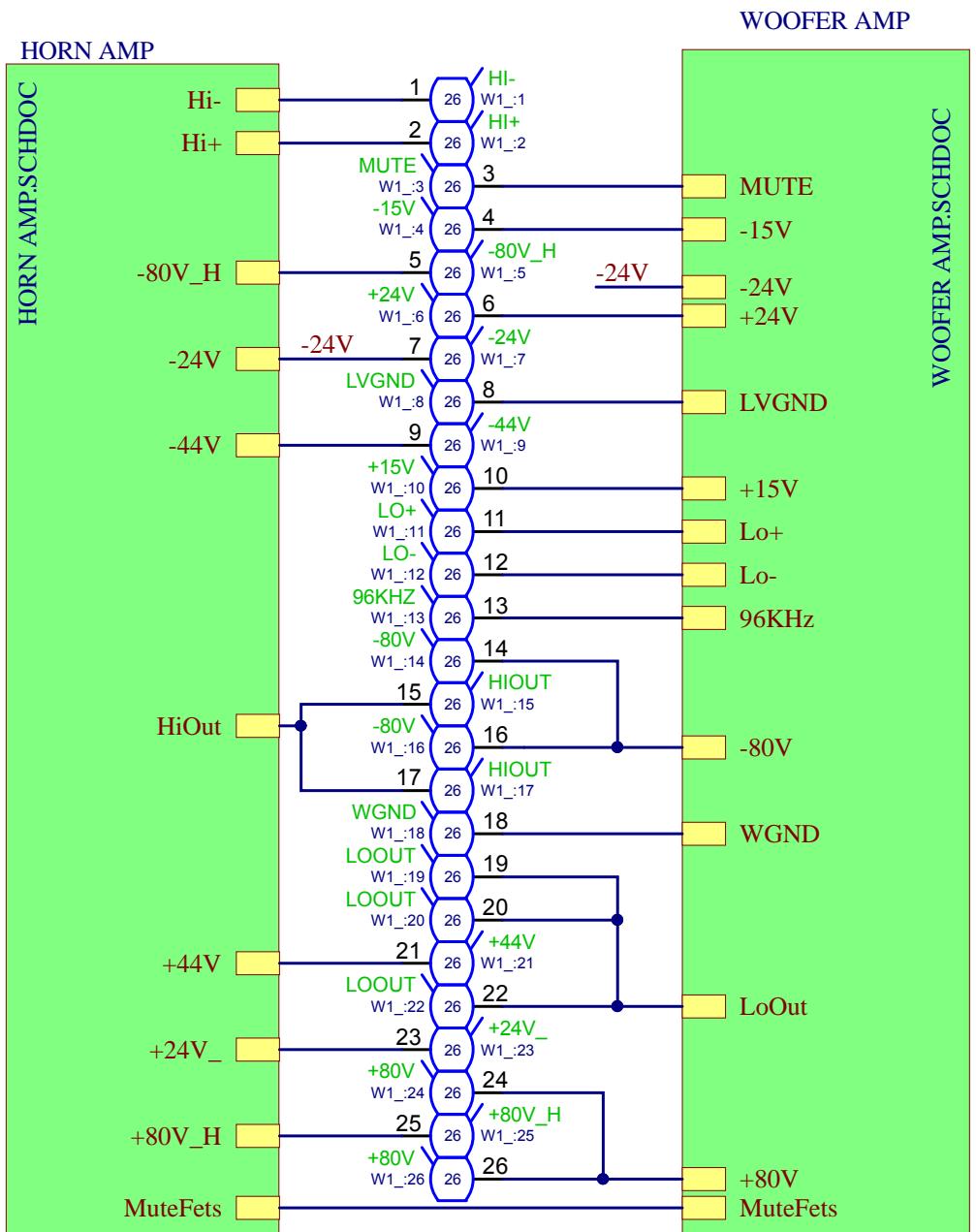
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* * * *

Product(s): EF10P-E10P

Description: Powered speaker cabinet

PCB#: M1501

Rev#: V05

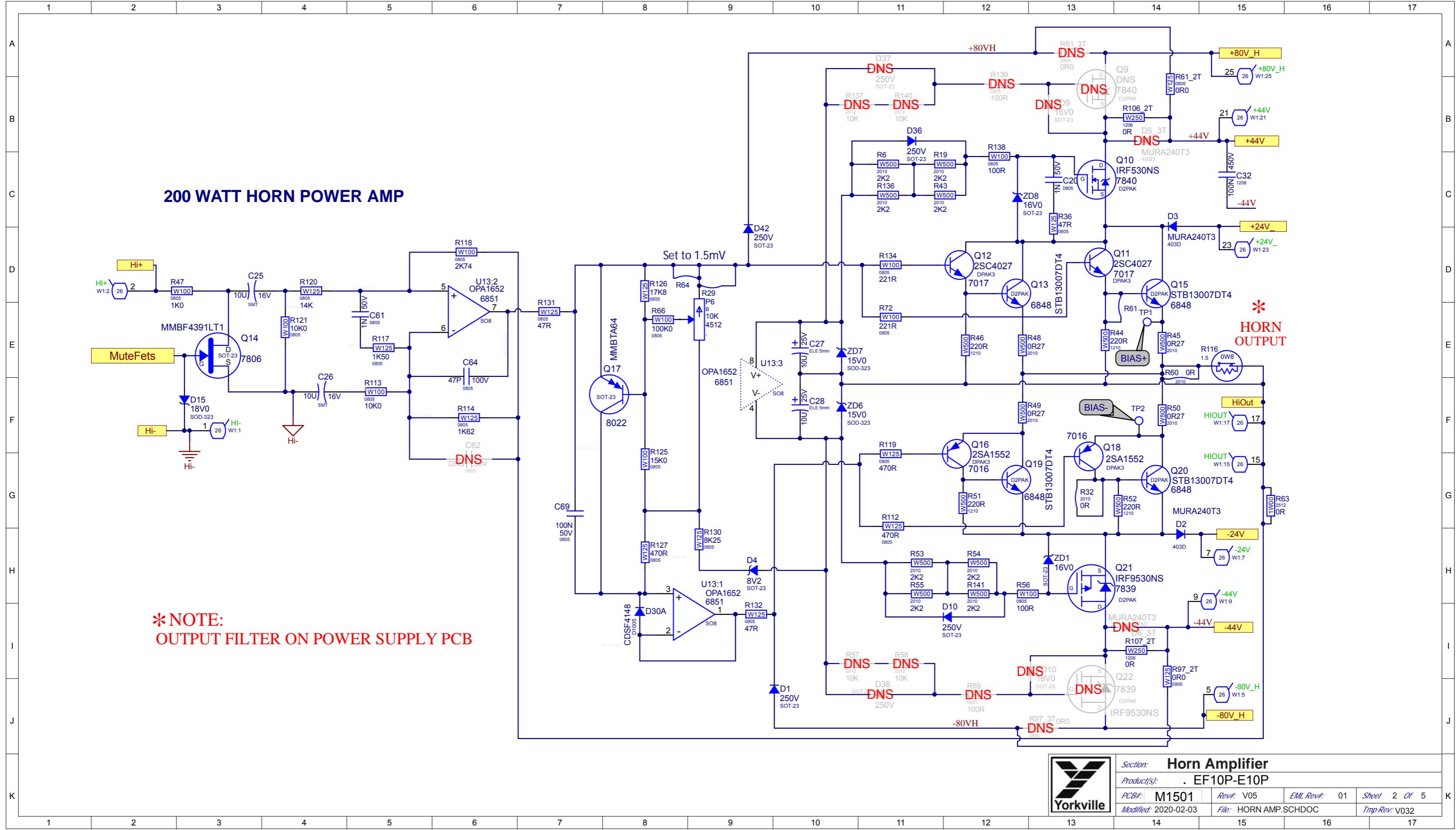
EM Rev#: 01

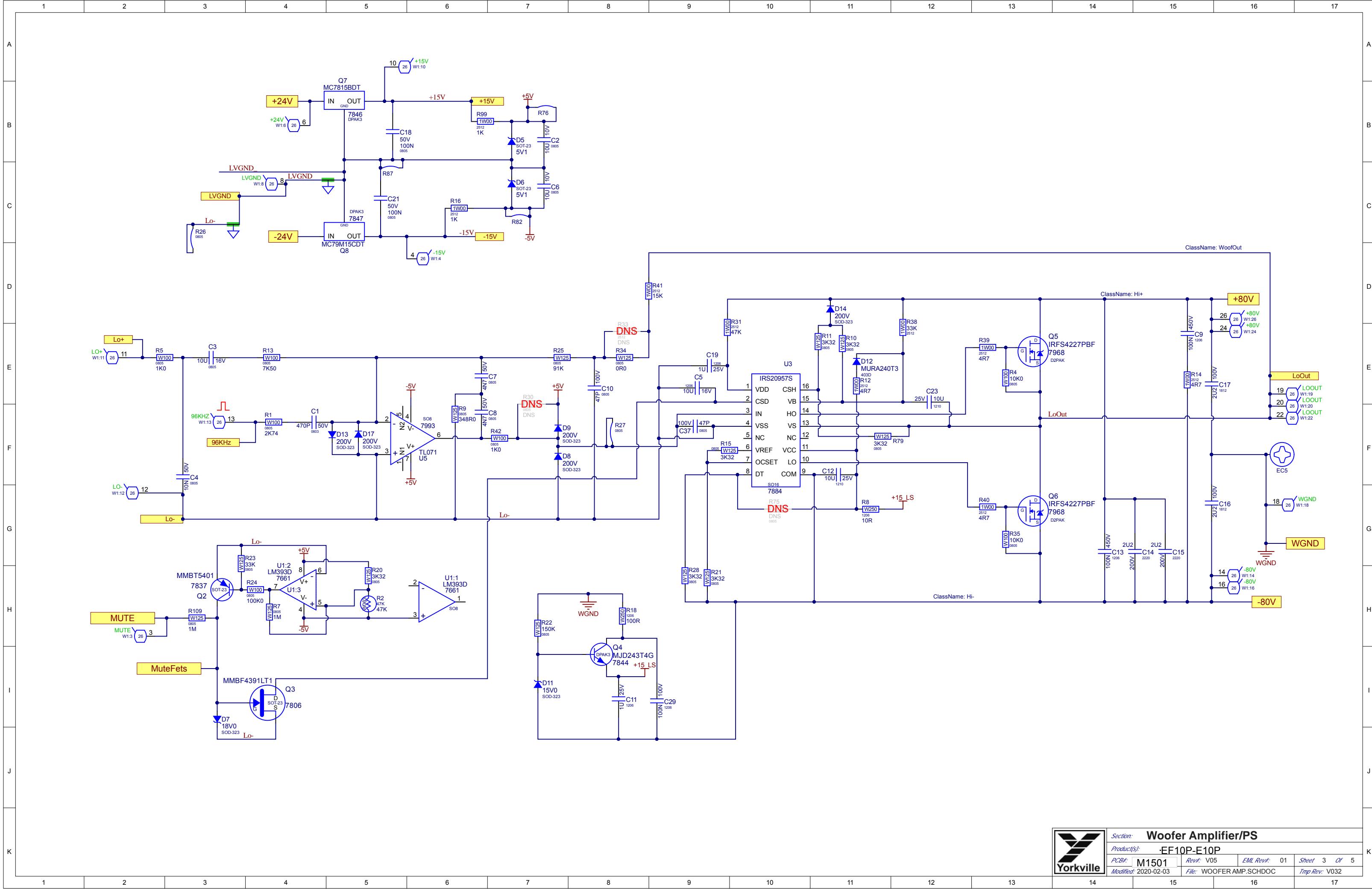
Sheet 1 Of 5

Modified: 2020-02-03

File: Top Sheet.SchDoc

Tmp Rev: V032





DESIGN HISTORY AND INFORMATION

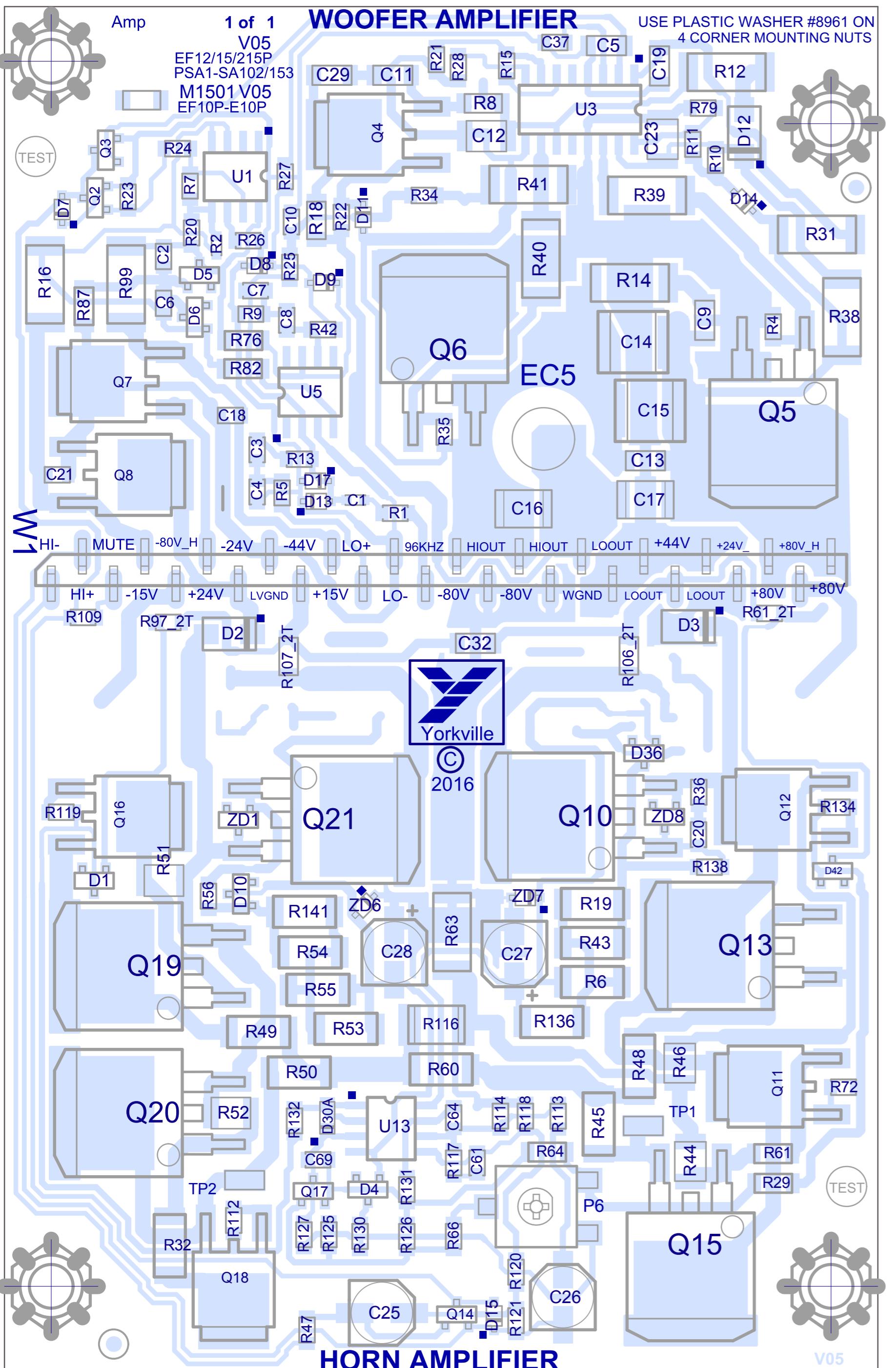
CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	OCT-4-2017	V02	.	RELEASED VERSION 2.
2	APR-27-2018	V03	9129	MOVED R61_3T AWAY FROM 80V CONNECTOR PAD
3	Aug-08-2019	V04	9449	C12&C23 to 10U/25V. Change VBE res to center trim pot. Add D4 to cut turn off noise.
4	FEB-03-2020	V05	9508	Added 1N cap and 47R resistor between gate and source of Q10
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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POTENTIOMETERS AND KNOBS

PINOUT DIAGRAMS

THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.



PCB ASSEMBLY DOCUMENTATION

SPECIAL PRODUCTION NOTES

1-Place Connector (#7883) on all boards on panel BEFORE Reflow Oven.

PCB HARDWARE

SCREWS AND BOLTS

THIS SHEET CONTAINS SPECIAL PRODUCTION NOTES AND A LIST OF PCB HARDWARE PARTS REQUIRED FOR THE BUILD.



Section: Assembly	
Product(s): .M1498/M1501	
PCB#:	Rev: V05
Modified: 2020-02-03	EMI Rev#: 01 File: Assembly.SchDoc Tmp Rev: V032

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	OCT-4-2017	V02	.	RELEASED VERSION 2.
2	APR-27-2018	V03	9129	MOVED R61_3T AWAY FROM 80V CONNECTOR PAD
3	Aug-08-2019	V04	9449	C12&C23 to 10U/25V. Change VBE res to center trim pot. Add D4 to cut turn off noise.
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POTENTIOMETERS AND KNOBS

PINOUT DIAGRAMS

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



PROPOSAL FOR CHANGE

REJECTED The Proposal for Change has been reviewed and considered but will *not* be implemented.

DATE

PRIORITY	NORM	X-JOB	PC No.	7640	TEMP
P	N	X	O	►	TO
DATE EXECUTED:					

PCBSA #57

Wiring #55

T&R #70

WACM #52

P/Engineering #25

Sales #10

PCBM #58

Metal Fab #50

Finishing #65

Board & Test #53

LAB #20

Service #09

Auto Insertion #59

W/Shop #60

Chas Screening #51

QC #65

MODEL

PCB/CHAS

VERSION

TASK ORDER

E10P

M1311

APPROVAL

SL

BW

TW

PM

SL

TW

PM

TW

ORIGINATOR

FROM

Tom Wood

DEPT

LAB

DATE

Aug 20 2008

UPON COMPLETION

UPON COMPLETION

DESCRIPTION OF CHANGE

DOCUMENT UPDATE/CORRECTION

PROGRAM UPDATE/CORRECTION

1) = 200R U8 P32
 Q5 p3 - mmm [47 P44
 BN2 U2 P20
 PCP1263CT-ND diode
 ELJ-FASR2HF panasonic

This replaces R 68,67,47
 with short. Adds S92
 inductor and 200R resistor
 resistor in series with
 clock line.

REASON FOR CHANGE

Reduce EMI # 7708 200R 0.1W #

Update units coming in for SERVICE?

Will the current test fixtures be affected?

YES **NO**

Update FINISHED units in warehouse?

YES **NO**

UPDATE WIP?

If yes, what is the estimated cost of fixture?

Before serial number

Electrical compliance affected?

By doing this change, are units currently out in field compatible?

YES **NO** **MAYBE**

PART	DESCRIPTION	OLD	NEW	DMA	COST/UNIT	TOTAL

PO **PRIORITY** Priority will be given to these PC's and will be implemented by the date required.

XO **X-JOB** These PC's will be collected and implemented in the future when or if other PCs are being executed for the product.

NO **NORM** These PC's will be collected and processed normally, executed when time and manpower permits.

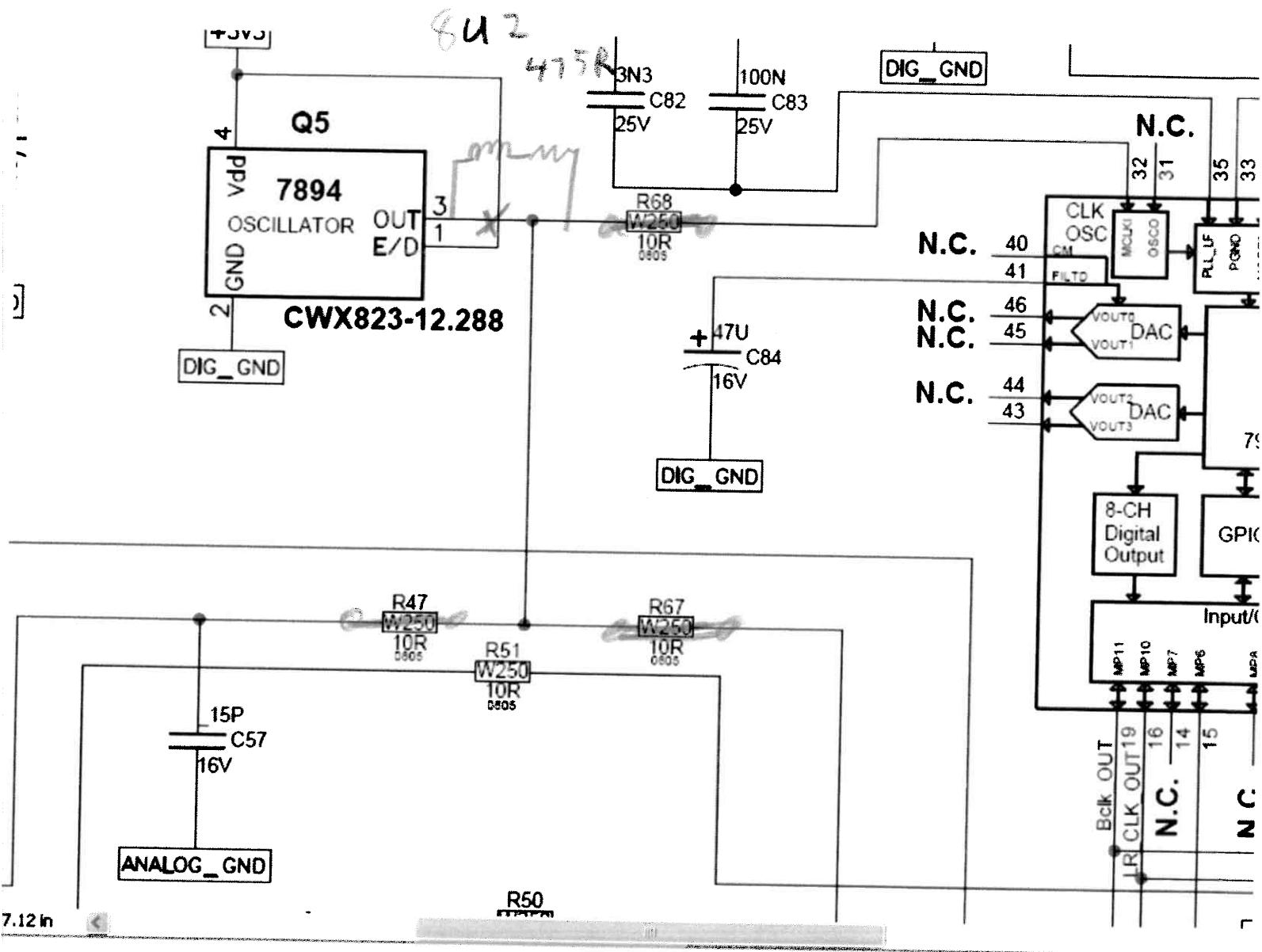
TO **TEMP** Temporary changes will be made for the stated run only!

NOTICE: ORIGINAL PCs MUST NOT GO OUT INTO PRODUCTION

FORM-Proposal-for-Change-00-5v0.ai

Peter Atshin Pete Andrew George Henry Adele Carl L. James

PC 7640



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



PROPOSAL FOR CHANGE

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DATE

PCBSA #57

Wiring #55

T&R #70

WACM #52

P/Engineering #25

Sales #10

PCBM #58

Metal Fab #50

Finishing #65

Board & Test #53

LAB #20

Service #09

Auto Insertion #59

W/Shop #60

Chas Screening #51

QC #65

MODEL	PCB/CHAS	VERSION	TASK ORDER
E10P	X8019-59	4-00	
PSA1	M1311		

PRIORITY	NORM	X-JOB	PC No.	8361	TEMP
P	N	X	O	►	TO

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

SL	SHAHIN
BW	LAB
TW	DEC 7, 2011
PM	

ORIGINATOR

FROM SHAHIN
DEPT LAB
DATE DEC 7, 2011

UPON COMPLETION
UPON COMPLETION

DESCRIPTION OF CHANGE

DOCUMENT UPDATE/CORRECTION

PROGRAM UPDATE/CORRECTION

- R33, R24 2L2 → 2L32 (#7632)
- R45, R31 10k → 10k0 (#7928)
- R46 270uR → 330uR (#7897)
- R58 1k5 → 1k8 (#7829)

Completed Jan 25/2012

- MM2 updated
- Layout updated
- Schem updated
- Viewer updated

V04
&
V05
ML

REASON FOR CHANGE

Reduce number of parts to allow board to fit on SMT machine.

Update units coming in for SERVICE?

YES X NO

Update FINISHED units in warehouse?

YES X NO

UPDATE WIP?

Will the current test fixtures be affected?

YES X NO

Electrical compliance affected?

If yes, what is the estimated cost of fixture?

Before serial number

By doing this change, are units currently out in field compatible?

YES X NO MAYBE

PART	DESCRIPTION	OLD	NEW	DMA	COST/UNIT	TOTAL

PRIORITY Priority will be given to these PC's and will be implemented by the date required.

X-JOB These PC's will be collected and implemented in the future when or if other PCs are being executed for the product

NORM These PC's will be collected and processed normally, executed when time and manpower permits.

TEMP Temporary changes will be made for the stated run only!

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



PROPOSAL FOR CHANGE

RE	REJECTED The Proposal for Change has been reviewed and considered but will <i>not</i> be implemented.	DATE
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PRIORITY	NORM	X-JOB	PC No.	TEMP
P	NO	XO	► 8578	TO
DATE REQUIRED:				

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

MODEL	PCB/CHAS	VERSION	TASK ORDER
E10P	M1496	V06	
PSA1	M1311	V06	
	X8019	V06	

APPROVAL	
SL	
BW	<i>P.W.</i>
TW	<i>P.W.</i>
PM	<i>P.W.</i>
Demand	

ORIGINATOR	
FROM	Mike Lebon
DEPT	PENG
DATE	Aug 26, 2013
Originator's Signature	<i>Yannick</i>
Designer's Signature	<i>Yannick</i>
OPEN/CLOSED	

DESCRIPTION OF CHANGE	DOCUMENT UPDATE/CORRECTION	PROGRAM UPDATE/CORRECTION
<ul style="list-style-type: none"> - Change XLR Male jack from 3453 to 4100. <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <i>Completed 16-OCT-13 → New layout V07 → MNL updated M.L.</i> </div>		

REASON FOR CHANGE
XLR 3453 is obsolete. YS#4100 is closest substitute.

Update units coming in for SERVICE?	Will a model or prototype be needed?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Update FINISHED units in warehouse?	Will the current test fixtures be affected?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
UPDATE WIP?	If yes, what is the estimated cost of fixture?	
Electrical compliance affected?	Before serial number	

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

PART	DESCRIPTION	OLD	NEW	D	M	A	COST/UNIT	TOTAL

PO	PRIORITY Priority will be given to these PC's and will be implemented by the date required.	XO	X-JOB These PC's will be collected and implemented in the future when or if other PCs are being executed for the product.
NO	NORM These PC's will be collected and processed normally, executed when time and manpower permits.	TO	TEMP Temporary changes will be made for the stated run only!

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PROPOSAL FOR CHANGE

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

REJECTED	The Proposal for Change has been reviewed and considered but will <i>not</i> be implemented.	DATE
-----------------	--	------

PRIORITY	NORM	X-JOB	PC No.	TEMP
P ✓	NO	XO	►	8580
DATE REQUIRED:				TO

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

MODEL	PCB/CHAS	VERSION	TASK ORDER
PSA1	M1496	V06	
E10P	M1311	V06	

APPROVAL		ORIGINATOR	
SL		FROM	Peter Mahoney
BW		DEPT	P. ENG
TW	<i>TM</i>	DATE	Sep 3, 2013
PM	<i>pm</i>	Originator's Signature	UPON COMPLETION
Designer		Designer's Signature	UPON COMPLETION

DESCRIPTION OF CHANGE

Find a suitable replacement that holds the jack with more tension.

Replace Belton Combo XLR connector YS# 3416 with Neutrik NCJ6FI-V-0 YS# 6509

DOCUMENT UPDATE/CORRECTION

PROGRAM UPDATE/CORRECTION

*Completed 16-oct-13
→ New lay V07
→ MML updated*

REASON FOR CHANGE

Combo xlr does not hold the 1/4 inch jack with enough tension causing the jack to rattle or become unplugged.

- Update units coming in for SERVICE?
- Update FINISHED units in warehouse?
- UPDATE WIP?
- Electrical compliance affected?

Will a model or prototype be needed? YES NO

Will the current test fixtures be affected? YES NO

If yes, what is the estimated cost of fixture?

Before serial number

By doing this change, are units currently out in field compatible?

YES NO MAYBE

PART	DESCRIPTION	OLD	NEW	D	M	A	COST/UNIT	TOTAL

PO **PRIORITY** Priority will be given to these PC's and will be implemented by the date required.

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Fax: (905) 837-8746

www.yorkville.com
