



SERVICE MANUAL

SB500H



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WORLD HEADQUARTERS

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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.

Quality and Innovation Since 1963
Printed in Canada

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. Installez 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.



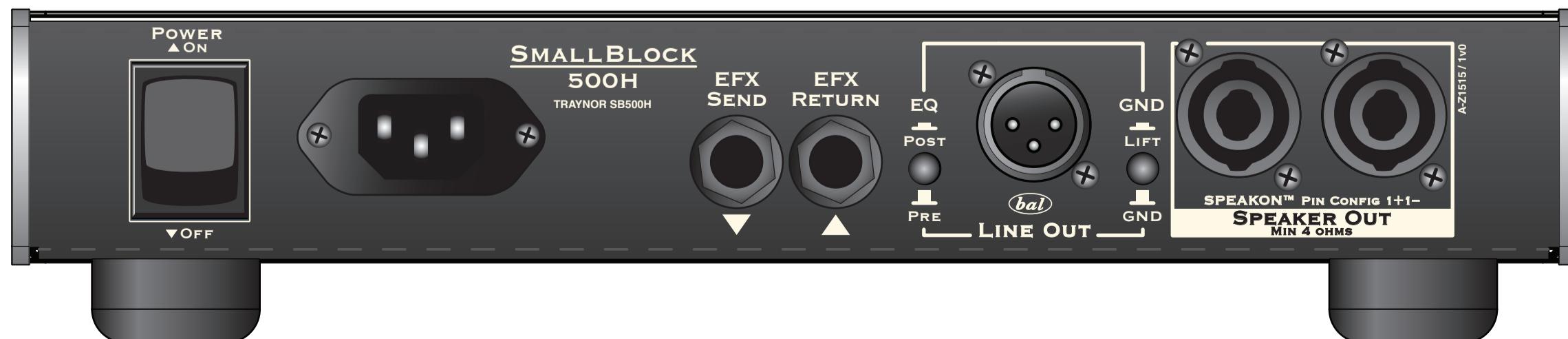
CAUTION

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.



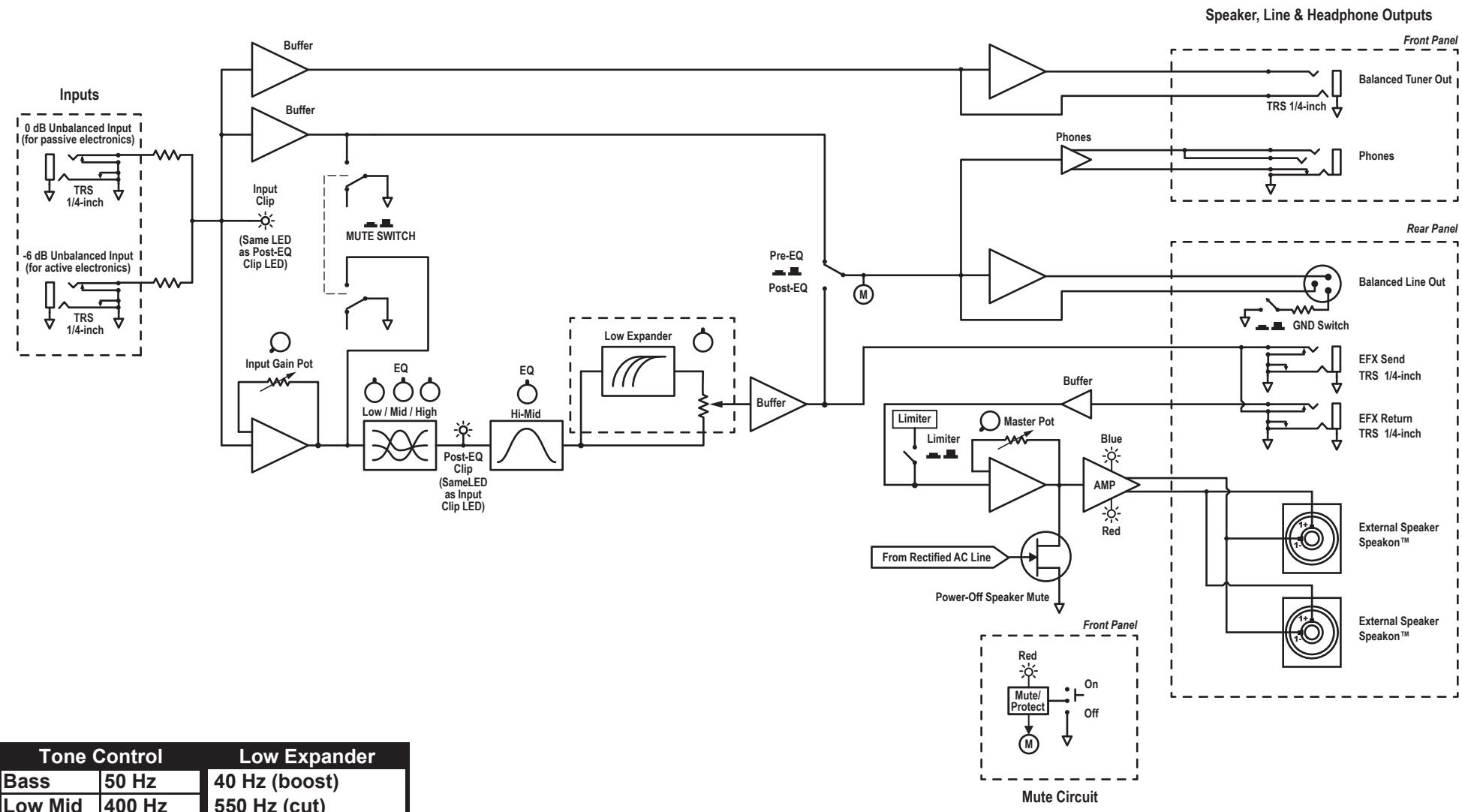
Specifications

Model:	SB500H
Type:	bass amp
Cabinet Impedance (ohms):	4 ohms
Power @ min. impedance (watts):	500 watts
Minimum Impedance (ohms):	4 ohms
Burst Power - 2 cycle:	600 watts
Input Channels:	2
Channel 1 - inputs:	passive 0 dB, active -6 dB
Channel 1 - controls:	Gain, Bass, Low Mid, High Mid, Treble, Low Expander
Channel 1 - switches:	Mute, Ground Lift, Line Out Pre/Post EQ, Limiter, EFX send/rtn, Master
Line Out (type / configuration):	Balanced Switchable Pre-EQ/Post-EQ, Ground Lift switch
Line Out Sensitivity (Vrms):	1 Vrms
LED Indicators:	red, blue / protect, power
Protection:	clip, thermal, overcurrent, clip.
External speaker output / location:	2 X Jack /Speakon™) / rear of unit
Other Features:	1/4-inch head phone jack, Tuner out, 1/4-inch EFX Loop (on rear)
Dimensions (DWH, inches):	9.5x12x2.5
Dimensions (DWH, cm):	22x30x6.5
Weight (lbs / kg):	3.5/1.6

Spécifications	
Modèle	SB500H
Type:	ampli pour basse
Impédance d'Enceinte (ohms):	4 ohms
Puissance @ min. impédance (watts):	500 watts
Impédance Minimum (ohms):	4 ohms
Puissance de Pointe - 2 cycles:	600 watts
Canaux d'entrée:	2
Canal 1 - entrées:	passive 0 dB, active -6 dB
Canal 1 - commandes:	Gain, Bass, Low Mid, High Mid, Treble, Low Expander
Canal 1 - sélecteurs:	Mute, Ground Lift, Line Out Pre/Post EQ, Limter, EFX send/rtn, Master
Sortie Ligne (type / configuration):	Symétrique commutable Pré-EQ/Post-EQ, sélecteur Ground Lift
Sortie Ligne Sensibilité (Vrms):	1 Vrms
DEL indicatrices:	rouge, bleue / protect, alimentation
Protection:	clip, thermique, surcharge de courant
Haut-parleur externe - sortie/emplacement:	2 X Prises Speakon™ / arrière de l'appareil
Autres Caractéristiques:	prise pour casque 1/4-pouce , sortie pour accordeur, boucle pour EFX 1/4-pouce (à l'arrière)
Dimensions (PLH, pouces):	9.5x12x2.5
Dimensions (PLH, cm):	22x30x6.5
Poids (livres / kg):	3.5/1.6

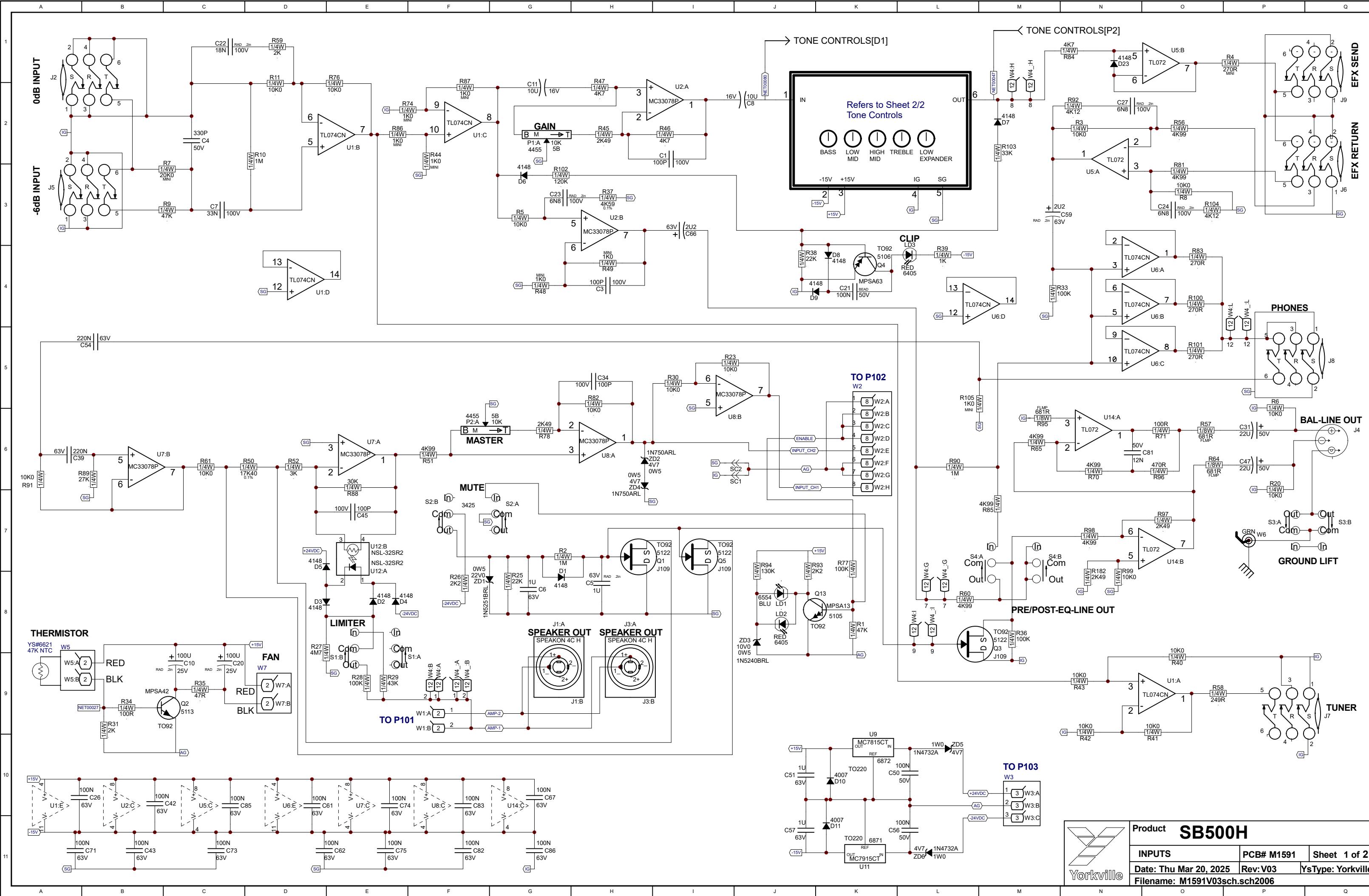
Block Diagram for Small Block 500H

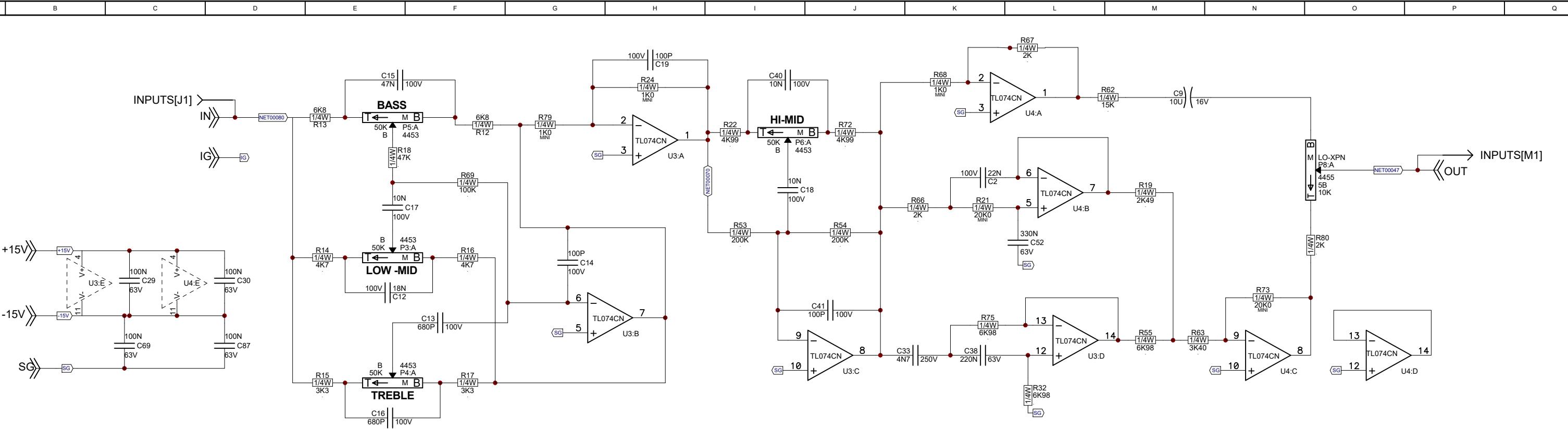
DESIGNED AND MANUFACTURED BY YORKVILLE SOUND
MODEL TYPE: YS1110



M1591 Parts Reference List 2/2/2016

REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
BUT1	8636	BUTTON 230X465 RND FLAT BLK (3425)	J4	3923	XLR MALE PCB MT HORZ MTHOLE-V SNAP	R59	4808	W250 2K 5% T&R RES
BUT2	8636	BUTTON 230X465 RND FLAT BLK (3425)	J5	4106	1/4" JCK PCB MT HORZ	R60	4639	W250 4K99 1% T&R RES
BUT3	8636	BUTTON 230X465 RND FLAT BLK (3425)	J6	3918	1/4" JCK PCB MT HORZ SLIM W/SCREW	R61	4800	W250 10K0 1% T&R RES
BUT4	8636	BUTTON 230X465 RND FLAT BLK (3425)	J7	4106	1/4" JCK PCB MT HORZ	R62	4830	W250 15K 5% T&R RES
C1	5410	100P 100V 10%CAP T&R BEAD NPO	J8	4106	1/4" JCK PCB MT HORZ	R63	6205	W250 3K40 1% T&R RES
C2	5210	_22N 100V 10%CAP T&R RAD .2FLM	J9	3918	1/4" JCK PCB MT HORZ SLIM W/SCREW	R64	2030	W167 681R 1%FLAME PROOF T&R RES
C3	5410	100P 100V 10%CAP T&R BEAD NPO	LD1	6554	BLUE 3MM LED 3V 20MA	R65	4639	W250 4K99 1% T&R RES
C4	5417	330P 50V 10%CAP T&R BEAD NPO	LD2	6405	RED 3MM LED 2V1 20MA DIFFUSD	R66	4808	W250 2K 5% T&R RES
C5	5256	_1U 63V 5%CAP T&R RAD .2FLM	LD3	6405	RED 3MM LED 2V1 20MA DIFFUSD	R67	4808	W250 2K 5% T&R RES
C6	5256	_1U 63V 5%CAP T&R RAD .2FLM	P1	4455	_10K 5B R/A 12MM 4PIN HORZ P40	R68	6110	W250 1K0 1%MINI MF T&R RES
C7	5222	_33N 100V 10%CAP T&R RAD .2FLM	P2	4455	_10K 5B R/A 12MM 4PIN HORZ P40	R69	4838	W250 100K 5% T&R RES
C8	5282	_10U 16V 20%CAP T&R 5X7MM .2NP	P3	4453	_50K B LIN 12MM 4PIN HORZ DT P40	R70	4639	W250 4K99 1% T&R RES
C9	5282	_10U 16V 20%CAP T&R 5X7MM .2NP	P4	4453	_50K B LIN 12MM 4PIN HORZ DT P40	R71	4852	W250 100R 5% T&R RES
C10	5267	100U 25V 20%CAP T&R RAD .2EL	P5	4453	_50K B LIN 12MM 4PIN HORZ DT P40	R72	4639	W250 4K99 1% T&R RES
C11	5282	_10U 16V 20%CAP T&R 5X7MM .2NP	P6	4453	_50K B LIN 12MM 4PIN HORZ DT P40	R73	6123	W250 20K0 1%MINI MF T&R RES
C12	5207	_18N 100V 5%CAP T&R RAD .2FLM	P8	4417	_10K 5B LIN 9MM HORIZONTAL P28	R74	6110	W250 1K0 1%MINI MF T&R RES
C13	5816	680P 100V 5%CAP T&R RAD CER.2NPO	Q1	5122	J109 TO92 NCH JFET T&R TC	R75	4801	W250 6K98 1% T&R RES
C14	5410	100P 100V 10%CAP T&R BEAD NPO	Q2	5113	MPSA42 TO92 NPN TRAN T&R TA	R76	4800	W250 10K0 1% T&R RES
C15	5224	_47N 100V 10%CAP T&R RAD .2FLM	Q3	5122	J109 TO92 NCH JFET T&R TC	R77	4838	W250 100K 5% T&R RES
C16	5816	680P 100V 5%CAP T&R RAD CER.2NPO	Q4	5106	MPSA63 TO92 PNP DARL BLK TA	R78	4883	W250 2K49 1% T&R RES
C17	5204	_10N 100V 10%CAP T&R RAD .2FLM	Q5	5122	J109 TO92 NCH JFET T&R TC	R79	6110	W250 1K0 1%MINI MF T&R RES
C18	5204	_10N 100V 10%CAP T&R RAD .2FLM	Q13	5105	MPSA13 TO92 NPN DARL T&R TA	R80	4808	W250 2K 5% T&R RES
C19	5410	100P 100V 10%CAP T&R BEAD NPO	R1	4834	W250 47K 5% T&R RES	R81	4639	W250 4K99 1% T&R RES
C20	5267	100U 25V 20%CAP T&R RAD .2EL	R2	4844	W250 1M 5% T&R RES	R82	4800	W250 10K0 1% T&R RES
C21	5314	100N 50V 10%CAP T&R BEAD X7R	R3	4800	W250 10K0 1% T&R RES	R83	4867	W250 270R 5% T&R RES
C22	5207	_18N 100V 5%CAP T&R RAD .2FLM	R4	4986	W250 270R 5%MINI T&R RES	R84	4827	W250 4K7 5% T&R RES
C23	5272	_6N8 100V 5%CAP T&R RAD .2FLM	R5	4800	W250 10K0 1% T&R RES	R85	4639	W250 4K99 1% T&R RES
C24	5272	_6N8 100V 5%CAP T&R RAD .2FLM	R6	4800	W250 10K0 1% T&R RES	R86	6110	W250 1K0 1%MINI MF T&R RES
C26	5212	100N 63V 5%CAP T&R RAD .2FLM	R7	6123	W250 20K0 1%MINI MF T&R RES	R87	6110	W250 1K0 1%MINI MF T&R RES
C27	5272	_6N8 100V 5%CAP T&R RAD .2FLM	R8	4800	W250 10K0 1% T&R RES	R88	4890	W250 30K 5% T&R RES
C29	5212	100N 63V 5%CAP T&R RAD .2FLM	R9	4834	W250 47K 5% T&R RES	R89	4833	W250 27K 5% T&R RES
C30	5212	100N 63V 5%CAP T&R RAD .2FLM	R10	4844	W250 1M 5% T&R RES	R90	4844	W250 1M 5% T&R RES
C31	5631	_22U 50V 20%CAP T&R 6X7MM .2EL	R11	4800	W250 10K0 1% T&R RES	R91	4800	W250 10K0 1% T&R RES
C33	5209	_4N7 250V 5%CAP T&R RAD .2FLM	R12	4828	W250 6K8 5% T&R RES	R92	4774	W250 4K12 1% T&R RES
C34	5410	100P 100V 10%CAP T&R BEAD NPO	R13	4828	W250 6K8 5% T&R RES	R93	4847	W250 2K2 5% T&R RES
C38	5231	220N 63V 5%CAP T&R RAD .2FLM	R14	4827	W250 4K7 5% T&R RES	R94	4847	W250 2K2 5% T&R RES
C39	5231	220N 63V 5%CAP T&R RAD .2FLM	R15	4826	W250 3K3 5% T&R RES	R95	2030	W167 681R 1%FLAME PROOF T&R RES
C40	5204	_10N 100V 10%CAP T&R RAD .2FLM	R16	4827	W250 4K7 5% T&R RES	R96	4821	W250 470R 5% T&R RES
C41	5410	100P 100V 10%CAP T&R BEAD NPO	R17	4826	W250 3K3 5% T&R RES	R97	4883	W250 2K49 1% T&R RES
C42	5212	100N 63V 5%CAP T&R RAD .2FLM	R18	4834	W250 47K 5% T&R RES	R98	4639	W250 4K99 1% T&R RES
C43	5212	100N 63V 5%CAP T&R RAD .2FLM	R19	4883	W250 2K49 1% T&R RES	R99	4800	W250 10K0 1% T&R RES
C45	5410	100P 100V 10%CAP T&R BEAD NPO	R20	4800	W250 10K0 1% T&R RES	R100	4867	W250 270R 5% T&R RES
C47	5631	_22U 50V 20%CAP T&R 6X7MM .2EL	R21	6123	W250 20K0 1%MINI MF T&R RES	R101	4867	W250 270R 5% T&R RES
C50	5314	100N 50V 10%CAP T&R BEAD X7R	R22	4639	W250 4K99 1% T&R RES	R102	4851	W250 120K 5% T&R RES
C51	5256	_1U 63V 5%CAP T&R RAD .2FLM	R23	4800	W250 10K0 1% T&R RES	R103	4840	W250 33K 5% T&R RES
C52	5233	330N 63V 5%CAP T&R RAD .2FLM	R24	6110	W250 1K0 1%MINI MF T&R RES	R104	4774	W250 4K12 1% T&R RES
C54	5231	220N 63V 5%CAP T&R RAD .2FLM	R25	4832	W250 22K 5% T&R RES	R105	6110	W250 1K0 1%MINI MF T&R RES
C56	5314	100N 50V 10%CAP T&R BEAD X7R	R26	4847	W250 2K2 5% T&R RES	R106	4883	W250 2K49 1% T&R RES
C57	5256	_1U 63V 5%CAP T&R RAD .2FLM	R27	4888	W250 4M7 5% T&R RES	S1	3425	DPDT PUSH SW PCMT BREAK B4 MAKE
C59	5257	_2U2 63V 20%CAP T&R RAD .2EL	R28	4838	W250 100K 5% T&R RES	S2	3425	DPDT PUSH SW PCMT BREAK B4 MAKE
C61	5212	100N 63V 5%CAP T&R RAD .2FLM	R29	4878	W250 43K 5% T&R RES	S3	3425	DPDT PUSH SW PCMT BREAK B4 MAKE
C62	5212	100N 63V 5%CAP T&R RAD .2FLM	R30	4800	W250 10K0 1% T&R RES	S4	3425	DPDT PUSH SW PCMT BREAK B4 MAKE
C66	5257	_2U2 63V 20%CAP T&R RAD .2EL	R31	4808	W250 2K 5% T&R RES	U1	6889	TL074CN IC QUAD O/A T.I. ONLY
C67	5212	100N 63V 5%CAP T&R RAD .2FLM	R32	4801	W250 6K98 1% T&R RES	U2	6840	MC33078P IC DUAL OP AMP
C69	5212	100N 63V 5%CAP T&R RAD .2FLM	R33	4838	W250 100K 5% T&R RES	U3	6804	MC33079P IC QUAD OP AMP
C71	5212	100N 63V 5%CAP T&R RAD .2FLM	R34	4852	W250 100R 5% T&R RES	U4	6804	MC33079P IC QUAD OP AMP
C73	5212	100N 63V 5%CAP T&R RAD .2FLM	R35	4817	W250 47R 5% T&R RES	U5	6882	TL072CP IC FET DUAL OP AMP
C74	5212	100N 63V 5%CAP T&R RAD .2FLM	R36	4838	W250 100K 5% T&R RES	U6	6804	MC33079P IC QUAD OP AMP
C75	5212	100N 63V 5%CAP T&R RAD .2FLM	R37	4793	W250 4K59 0.1%*** T&R RES	U7	6840	MC33078P IC DUAL OP AMP
C81	5301	_12N 50V 10%CAP T&R BEAD X7R	R38	4832	W250 22K 5% T&R RES	U8	6840	MC33078P IC DUAL OP AMP
C82	5212	100N 63V 5%CAP T&R RAD .2FLM	R39	4823	W250 1K 5% T&R RES	U9	6872	MC7815CT TO220 P 15V0 REG V1
C83	5212	100N 63V 5%CAP T&R RAD .2FLM	R40	4800	W250 10K0 1% T&R RES	U11	6871	MC7915CT TO220 N 15V0 REG V2
C85	5212	100N 63V 5%CAP T&R RAD .2FLM	R41	4800	W250 10K0 1% T&R RES	U12	6858	NSL-32SR2 OPTO-COUPLER LDR
C86	5212	100N 63V 5%CAP T&R RAD .2FLM	R42	4800	W250 10K0 1% T&R RES	U14	6882	TL072CP IC FET DUAL OP AMP
C87	5212	100N 63V 5%CAP T&R RAD .2FLM	R43	4800	W250 10K0 1% T&R RES	W1	2371	2 CIR WS-HEADER 0.156
D1	6825	1N4148 75V 0A45 DIODE T&R	R44	6110	W250 1K0 1%MINI MF T&R RES	W2	2372	8 CIR PH-HEADER 2MM
D2	6825	1N4148 75V 0A45 DIODE T&R	R45	4883	W250 2K49 1% T&R RES	W3	2369	3 CIR PH-HEADER 2MM
D3	6825	1N4148 75V 0A45 DIODE T&R	R46	4827	W250 4K7 5% T&R RES	W4	2329	12 CIR XH-HEADER 0.098IN
D4	6825	1N4148 75V 0A45 DIODE T&R	R47	4827	W250 4K7 5% T&R RES	W4.	2329	12 CIR XH-HEADER 0.098IN
D5	6825	1N4148 75V 0A45 DIODE T&R	R48	6110	W250 1K0 1%MINI MF T&R RES	W5	4056	2 CIR XH-HEADER 0.098IN
D6	6825	1N4148 75V 0A45 DIODE T&R	R49	6110	W250 1K0 1%MINI MF T&R RES	W6	3942	WHT 18AWG TR64 PREFUSED WIRE
D7	6825	1N4148 75V 0A45 DIODE T&R	R50	4784	W250 17K40 0.1%*** T&R RES	W7	4056	2 CIR XH-HEADER 0.098IN
D8	6825	1N4148 75V 0A45 DIODE T&R	R51	4639	W250 4K99 1% T&R RES	ZD1	6463	1N5251BRL 22V0 0W5 ZENER 5% T&R
D9	6825	1N4148 75V 0A45 DIODE T&R	R52	4804	W250 3K 5% T&R RES	ZD2	6440	1N750ARL 4V7 0W5 ZENER 5% T&R
D10	6438	1N4007 1000V 1A0 DIODE T&R	R53	4886	W250 200K 5% T&R RES	ZD3	6461	1N5240BRL 10V0 0W5 ZENER 5% T&R
D11	6438	1N4007 1000V 1A0 DIODE T&R	R54	4886	W250 200K 5% T&R RES	ZD4	6440	1N750ARL 4V7 0W5 ZENER 5% T&R
D23	6825	1N4148 75V 0A45 DIODE T&R	R55	4801	W250 6K98 1% T&R RES	ZD5	6459	1N4732A 4V7 1W0 ZENER 5% T&R
J1	6956	SPKON 4C PCB MT HORZ GRY #4	R56	4639	W250 4K99 1% T&R RES	ZD6	6459	1N4732A 4V7 1W0 ZENER 5% T&R
J2	4106	1/4" JCK PCB MT HORZ	R57	2030	W167 681R 1%FLAME PROOF T&R RES			
J3	6956	SPKON 4C PCB MT HORZ GRY #4	R58	4770	W250 249R 1% T&R RES			



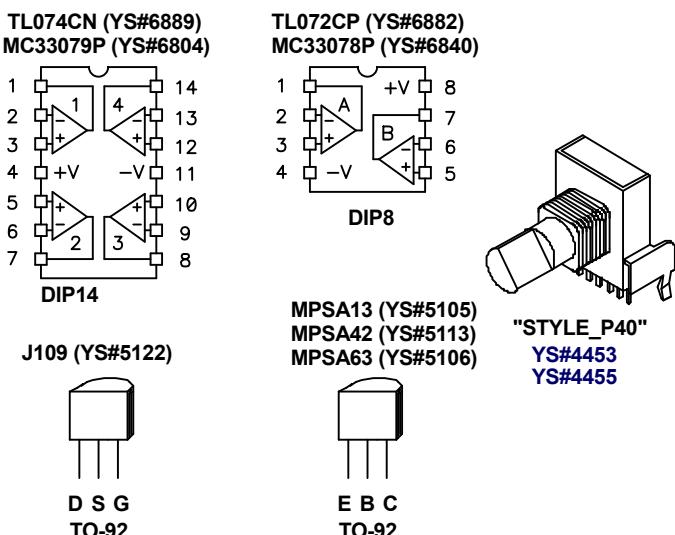


POTS AND KNOBS

M1591				
MODEL(S):- SB500H				
REF	FUNCTION	PART#	KNOB	STYLE
P1	GAIN	4455	10030	P40
P2	MASTER	4455	10030	P40
P3	LOW-MID	4453	10030	P40
P4	TREBLE	4453	10030	P40
P5	BASS	4453	10030	P40
P6	HI-MID	4453	10030	P40
P8	LOW-EXPANDER	4455	10030	P40
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N

M1591.PCB_DATABASE_HISTORY			
MODEL(S):- SB500H			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	MAY-21-2014	V01	FIRST PRODUCTION REVISION
2		V01	PC#8734; Tack on 1N4007 YS#6438 diodes to U9,U11.
3	NOV-23-2015	V02	PC#8734; IMPLEMENTED.
4	07-JUL-2023	.	PC9969 - Replace ICs U3,U4,U6 YS#6804 with YS#6889.
5	20-MAR-2025	V03	PC9971 - Replace R94 YS#4847 with YS#4894.
6		.	PC9973 - Replace LD1 with YS#6564 and R94 with 130K
7		.	PC10075 - Replace P8 with YS#4455
8	D	V	
9	D	V	
10	D	V	
11	D	V	
12	D	V	
13	D	V	

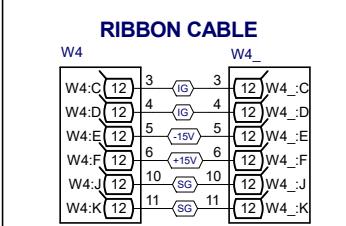
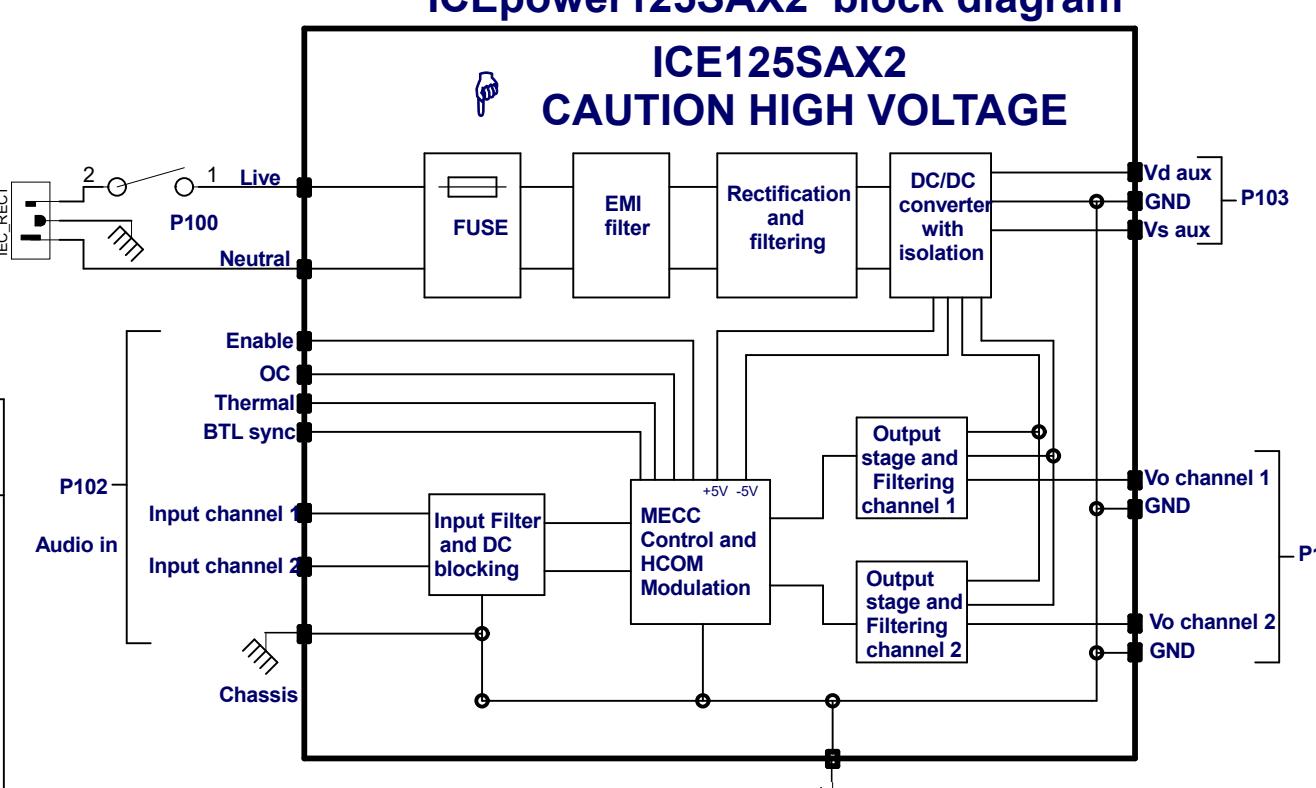
LEADS & PINS REFERENCE



MAINS VOLTAGE INPUT OPTIONS (NA<->CE)



PLACE JUMPER AT P200 FOR 115V (NA) OPERATION.
PLACE JUMPER AT P201 FOR 230V (CE) OPERATION.



Block Diagram

Important!
This module is not repairable
In case of failure it needs to be
replaced.
Please order Yorkville Sound part # 9705

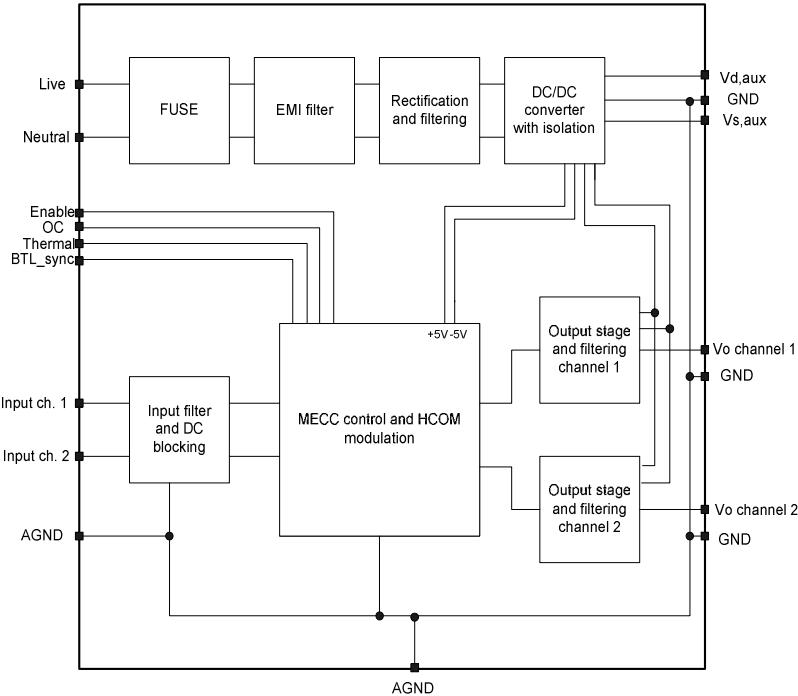


Figure 1: ICEpower125ASX2 block diagram

Connection Diagram

230V
Jumper

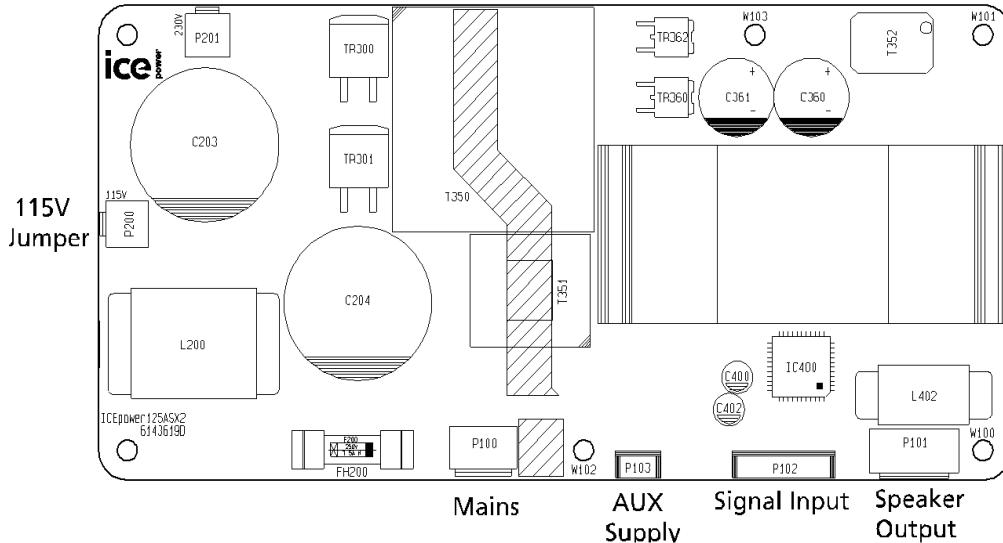


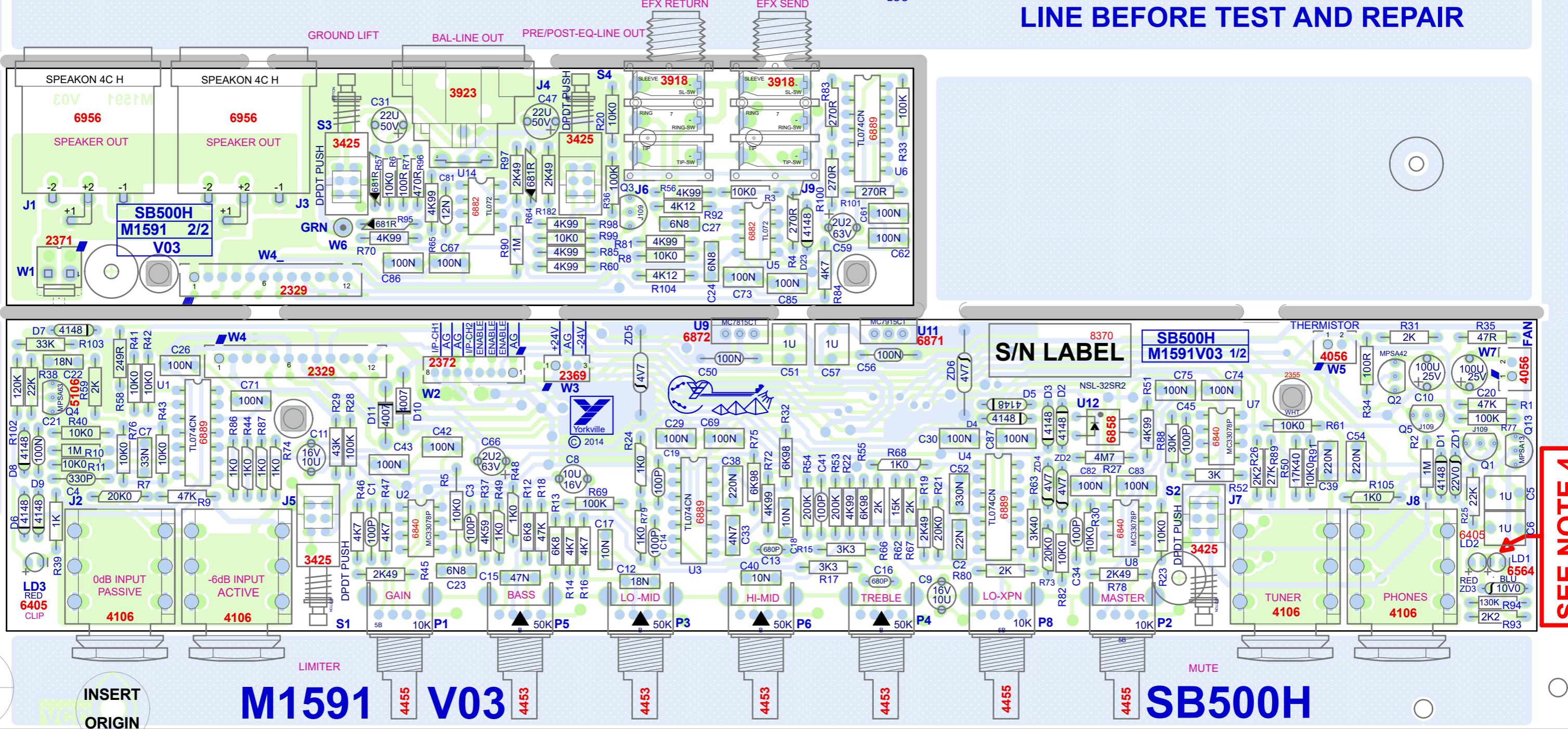
Figure 2: ICEpower125ASX2 connections

The connector interface of the ICEpower125ASX2 module has four industry standard connectors selected for long term reliability.

BlankSize - 11750x10200

StepAndRepeat - X1@0.000Y2@5.023

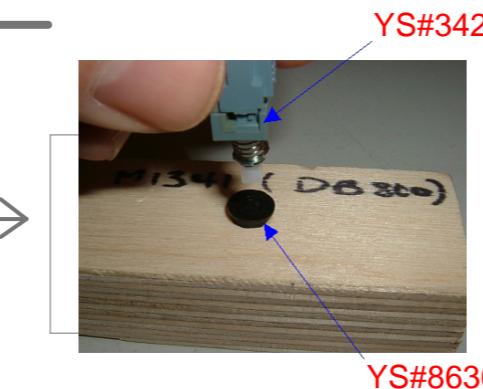
— BREAK PANEL ALONG THIS SCORE LINE BEFORE TEST AND REPAIR



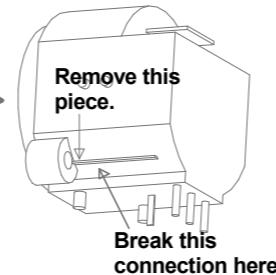
SEE LAYOUT DOCUMENTATION

M1591 V03 PRODUCTION NOTES

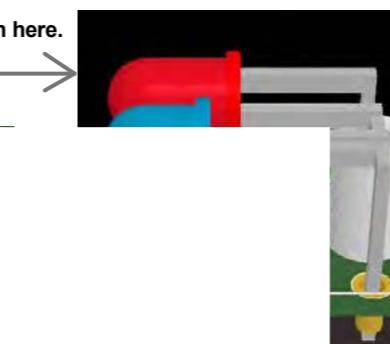
1 - INSERT PUSHBUTTON KNOB ON SWITCH S1,S2,S3 AND S4 BEFORE PLACING ONTO PCB.



2 - BREAK THE CONNECTION OF XLR J4 SEE PICTURE.



3 - MOUNT LD1 AND LD2 TOGETHER USING #8607 SPACER. SEE PICTURE FOR EXAMPLE.



4 - USE THE LED BENDING JIG TO BEND THE LEDS TO THE CORRECT LENGTH.

5 - BEND C31 AWAY FROM J4 XLR AND THEN RTV SEE PICTURE.



MAINS VOLTAGE INPUT OPTIONS (NA<->CE)

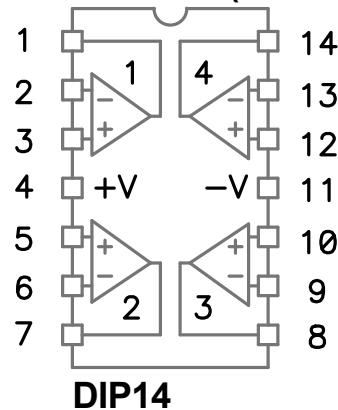


PLACE JUMPER AT P200 FOR 115V (NA) OPERATION.
PLACE JUMPER AT P201 FOR 230V (CE) OPERATION.

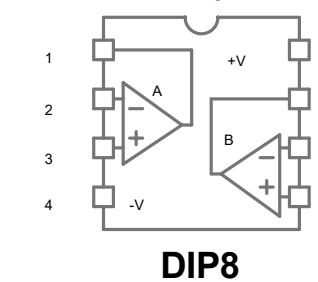
SEE LAYOUT DIAGRAM

LEADS & PINS REFERENCE

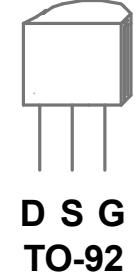
TLO74CN (YS#6889)
MC33079P (YS#6804)



TL072CP (YS#6882)
MC33078P (YS#6840)



J109 (YS#5122)



MPSA13 (YS#5105)
MPSA42 (YS#5113)
MPSA63 (YS#5106)

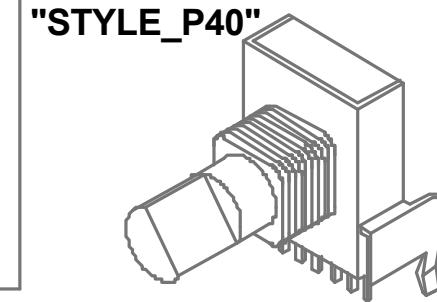


POTENTIOMETERS AND KNOBS

M1591

MODEL(S):- SB500H

REF	FUNCTION	PART#	KNOB	STYLE
P1	GAIN	4455	10030	P40
P2	MASTER	4455	10030	P40
P3	LOW-MID	4453	10030	P40
P4	TREBLE	4453	10030	P40
P5	BASS	4453	10030	P40
P6	HI-MID	4453	10030	P40
P8	LOW-EXPANDER	4455	10030	P40
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N



M1591 PCB DATABASE HISTORY

MODEL(S):- SB500H

#	DATE	VER#	DESCRIPTION OF CHANGE
1	MAY-21-2014	V01	FIRST PRODUCTION REVISION
2	.	V01	PC#8734: Tack on 1N4007 YS#6438 diodes to U9,U11.
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5	.	.	PC9971 - Replace R94 YS#4847 with YS#4894.
6	20-MAR-2025	V03	PC9973 - Replace LD1 with YS#6564 and R94 with 130K PC10075 - Replace P8 with YS#4455
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

Block Diagram

Important!
This module is not repairable
In case of failure it needs to be
replaced.
Please order Yorkville Sound part # 9705

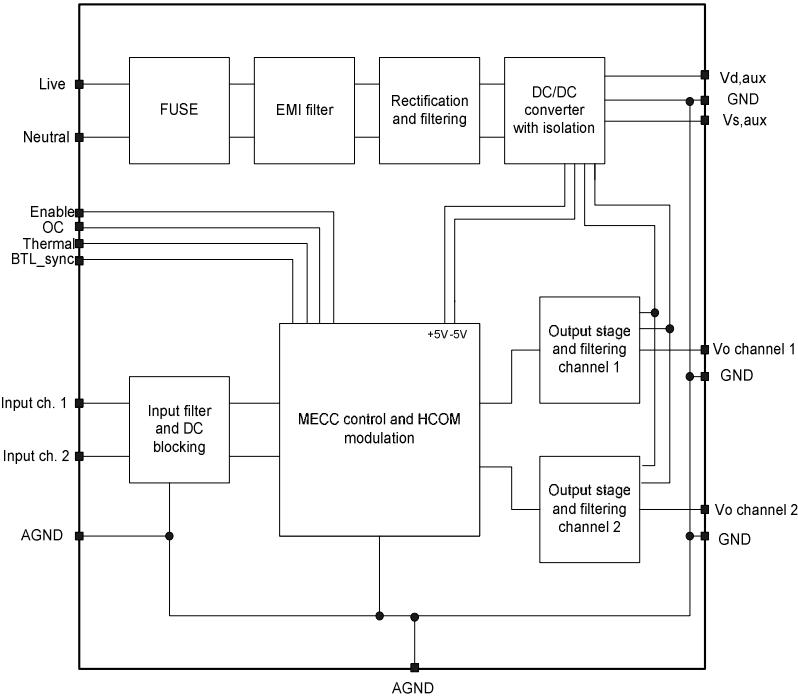


Figure 1: ICEpower125ASX2 block diagram

Connection Diagram

230V
Jumper

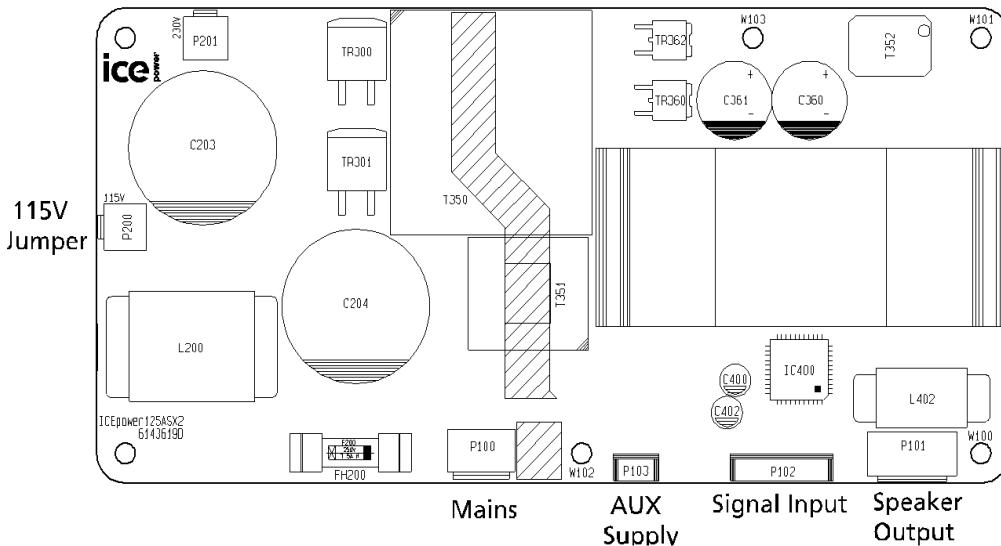


Figure 2: ICEpower125ASX2 connections

The connector interface of the ICEpower125ASX2 module has four industry standard connectors selected for long term reliability.



SMALL BLOCK

500H

Power Switch and Lamp – The power lamp illuminates blue when ready to use, red for standby, mute and protect.

Inputs and Clip LED – The 0dB input has been designed for bass guitars with single-coil pickups and the -6dB input for basses with active or extremely ‘hot’ pickups.

User Tip: Do not use both inputs at the same time to connect a second bassist or other musician.

Limiter – Press to engage the Limiter it can help prevent the amplifier from clipping.

Mute Button – The mute function disengages the preamp signal from all outputs except for the Tuner jack. When enabled the power light changes to the color red.

Gain Control – The Gain control sets the level of the signal before it's sent to the tone controls.

Tone Controls – With a range of ±15db, these tone controls cover the entire audio spectrum. The center position of each control denotes a neutral or nominal setting.

Master Volume Control – Increase or decrease signal going to the amp. The EFX Send, Return and phones signals are not affected.

Mute Pushbutton – The Mute disengages the preamp signal from all outputs except the Tuner and Phones jacks. When enabled, the power/status lamp changes color to red.

Low Expander Control - The Low Expander shapes the tone by contouring the gain of the mid frequencies while expanding the low frequency.

AUX Input – This 1/8-inch input jack is used to connect an external sound source from a digital audio player, a smart phone etc.

Phones Jack – Connect headphones here for practicing or recording.

Effects Send and Return – The Send provides a post-EQ signal. Both Send and Return signals are balanced. In addition to connecting external effects, the Return can be used as an auxiliary input and the Send can be used as an additional line out (not muted w/ Mute enabled)

Tuner Out Jack – Connect your instrument tuner here using a standard shielded (e.g. guitar) cable.

Line Out EQ Switch – Engaged, the audio signal to the Line Out is routed through the amp's tone controls (Post-EQ); disengaged, the signal bypasses the EQ and is sent directly to the Line Out (Pre-EQ).

Line Out XLR and Lift/GND Button – The Line Out allows the user to connect the Small Block preamp directly to a mixing console when performing live or recording.

Speaker Out – The amp's minimum load is 4 ohms, you can connect a total of one 4 ohm speaker cabinet or two 8 ohm cabinets in parallel.

To get the full Owner's Manual please visit our website at

<http://www.yorkville.com/manuals/> or, if you need a printed version call 905-837-8777

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www.yorkville.com

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Pickering, Ontario
L1W-3Y8 CANADA

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



SMALL BLOCK

500H

Interrupteur d'Alimentation et Voyant – Le voyant d'alimentation s'allume bleu lorsque que l'amplificateur est prêt pour utilisation et rouge pour les mode standby, mute et protect.

Entrées et DEL Clip – L'entrée 0dB a été conçue pour guitares basses avec micros à bobine simple et l'entrée -6dB pour basses avec micros actifs ou avec niveau de sortie extrêmement élevé.

Conseil: ne pas simultanément utiliser les deux entrées pour connecter un deuxième bassiste ou autre musicien.

Limiteur – Appuyez sur ce bouton pour activer le limiteur. Cela peut aider à prévenir l'écrêtage du signal..

Bouton Mute – La fonction Mute désactive le signal de préampli à toutes les sorties sauf à la prise "Tuner." Lorsque la fonction Mute est activée, le voyant d'alimentation passe à la couleur rouge.

Commande de Gain – La commande de Gain détermine le niveau du signal avant qu'il ne soit acheminé aux commandes de tonalité.

Commandes de Tonalité – Avec une plage de $\pm 15\text{dB}$, ces commandes de tonalité couvrent l'ensemble du spectre audio. La position centrale de chaque commande représente un réglage neutre ou nominal.

Commande Master Volume – Augmente ou diminue le niveau du signal envoyé à l'ampli. Les signaux aux prises EFX Send, Return et Phones ne sont pas affectés.

Bouton Mute – Le bouton Mute coupe le signal du préampli à toutes les sorties sauf les prises Tuner et Phones. Lorsqu'il est activé, le voyant d'alimentation/d'état passe à la couleur rouge.

Commande Low Expander – La fonction Low Expander façonne la tonalité en manipulant le gain des fréquences moyennes tout rehaussant les fréquences basses.

Pour obtenir le manuel de utilisateur visitez notre site Web à <http://www.yorkville.com/manuals/> ou, si vous avez besoin d'une version imprimée appelez-nous au 905-837-8777

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