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SERVICE MANUAL

Synergy SA315S

SMT Disclaimer

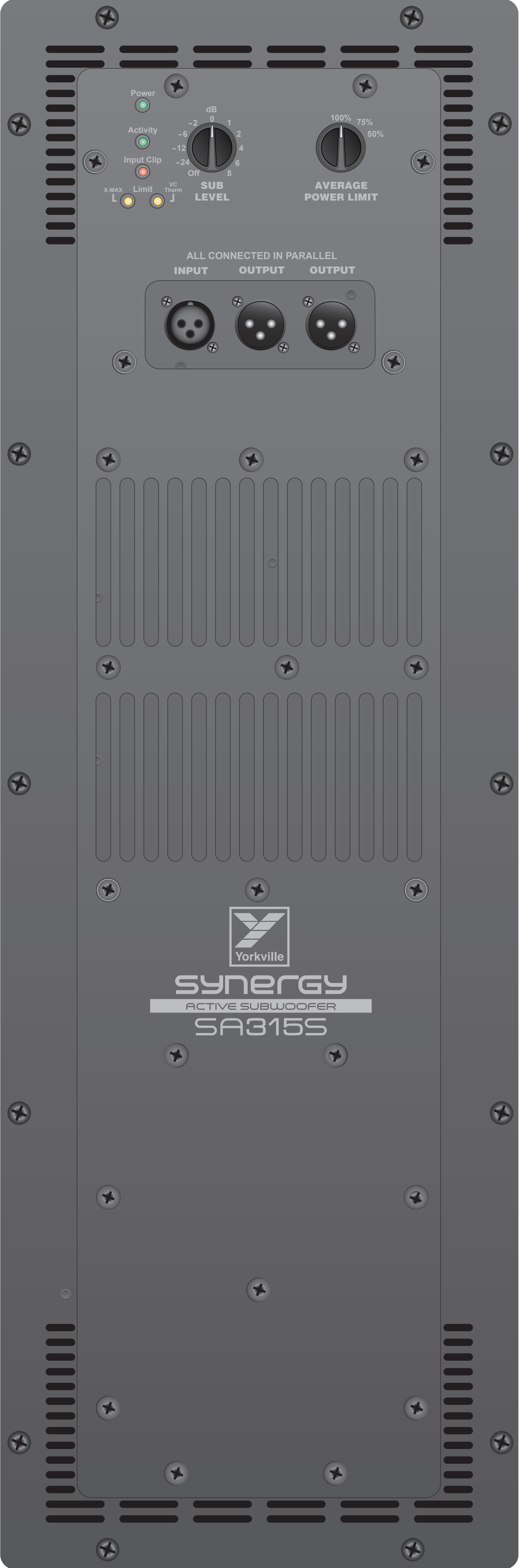
Due to the complex nature of the use of SMT installed components in Yorkville equipment, we highly caution all service technicians in attempting to repair or replace SMT factory installed components.

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



Power

Activity

Input Clip

X-MAX

Limit

VC Therm

dB

-2

0

1

2

4

6

8

Off

SUB LEVEL

100%

75%

50%

AVERAGE POWER LIMIT

ALL CONNECTED IN PARALLEL

INPUT

OUTPUT

OUTPUT



SYNERGY

ACTIVE SUBWOOFER

SA315S

CAUTION • AVIS
RISK OF ELECTRIC SHOCK
DO NOT OPEN
RISQUE DE CHOC ÉLECTRIQUE
NE PAS OUVRIR

CAUTION - TO REDUCE THE RISK OF ELECTRIC SHOCK,
GROUNDING OF THE CENTRE PIN OF THIS PLUG MUST BE MAINTAINED!
ATTENTION - POUR RÉDUIRE LE RISQUE DE CHOC ÉLECTRIQUE, CONSERVER
LA MISE À LA TERRE ASSURÉE PAR LA TIGE CENTRALE DE CETTE FICHE!

NO USER SERVICEABLE PARTS INSIDE.
NE CONTIENT AUCUNE PIÈCE
REPARABLE PAR L'UTILISATEUR.

2A MAX ON
FIRST OUTLET
SEE OWNERS MANUAL FOR
CASCADE INSTALLATION

CAUTION: THIS EQUIPMENT
REQUIRES A 15A LINE CORD
ATTENTION: CET ÉQUIPEMENT
NECESSITE UN CORDON
DE LIGNE 15A

120V~ 60Hz
10A STANDALONE
12A MAX WITH
AC OUTLET
AND 15A LINE CORD

SA315S A-Z1747 / 1v1



DESIGNED & MANUFACTURED BY
YORKVILLE SOUND • TORONTO, CANADA

POWER



On

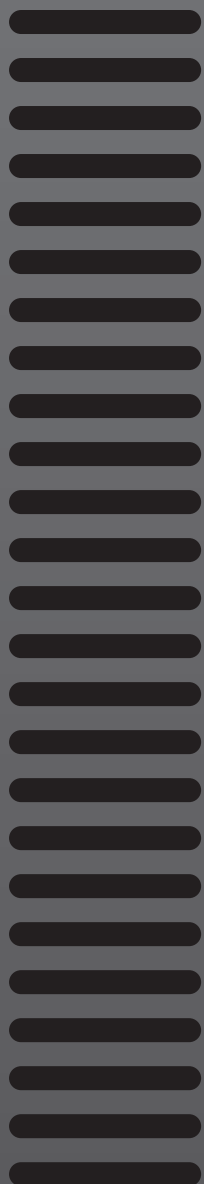
Off



Circuit
Breaker



DISCONNECT POWER
BEFORE SERVICING!
DEBRANCHER L'APPAREIL AVANT
D'ENLEVER LES COUVERCLES!



Specifications

Active or Passive	Active
Program Power (watts)	6500 program (13000 peak)
Measured Max SPL (C-Weighted, Max Hold)	130 dB measured
Frequency Response (Hz +/- 3db)	31-100
Crossover Frequency (Hz)	100 lowpass
Cabinet Configuration	Bass Reflex
Driver Configuration	3x15-inch LF woofer
LF Driver(s)	15-inch Ceramic with 3-inch Voice Coil
LF Program Power (watts)	6500 program (13000 peak)
LF Impedance (ohms)	2.7 (3x 8)
LF Protection	Excursion, Voice Coil Thermal (RMS)
LF Power Amplifier (watts)	6500 program (13000 peak)
LF Amplifier Type	Class D
Cooling Scheme	Convection
Power Cable	Removable Locking Powercon True Input and Loop Thru Output
Power Switch	Yes
Power Consumption (typ/max)	600 VA / 1200 VA
Input	1 XLR with 2x XLR Parallel out, Impedance 35k ohms
Input Sensitivity (Vrms Sine)	Line in 1.4 at center, 0.56 at max
Level Controls	Volume, $-\infty$, 0dB, 8dB (Min, Top, Max)
EQ Controls	Thermal Limiter Advance for power consumption management
Limiter	Excursion, Thermal (RMS), Clipping
LED Indicators	Power, Excursion Limit, Thermal (RMS) Limit, Input Clip, Activity
Enclosure Materials	Multiply 15mm Birch Plywood
Standard Rigging Hardware	RAIL and LOCKBAR Rigging System (Top and Bottom)
Stacking Feature	Interlocking UHMW Feet (Top and Bottom)
Covering / Finish	Paint
Dimensions (DWH xbackW, inches)	24 x 21 x 51.5 x 12.25
Dimensions (DWH xbackW, cm)	60.9 x 53.3 x 130.8 x 31.1
Weight (lbs/kg)	236/107

**Specifications subject to change without notice*

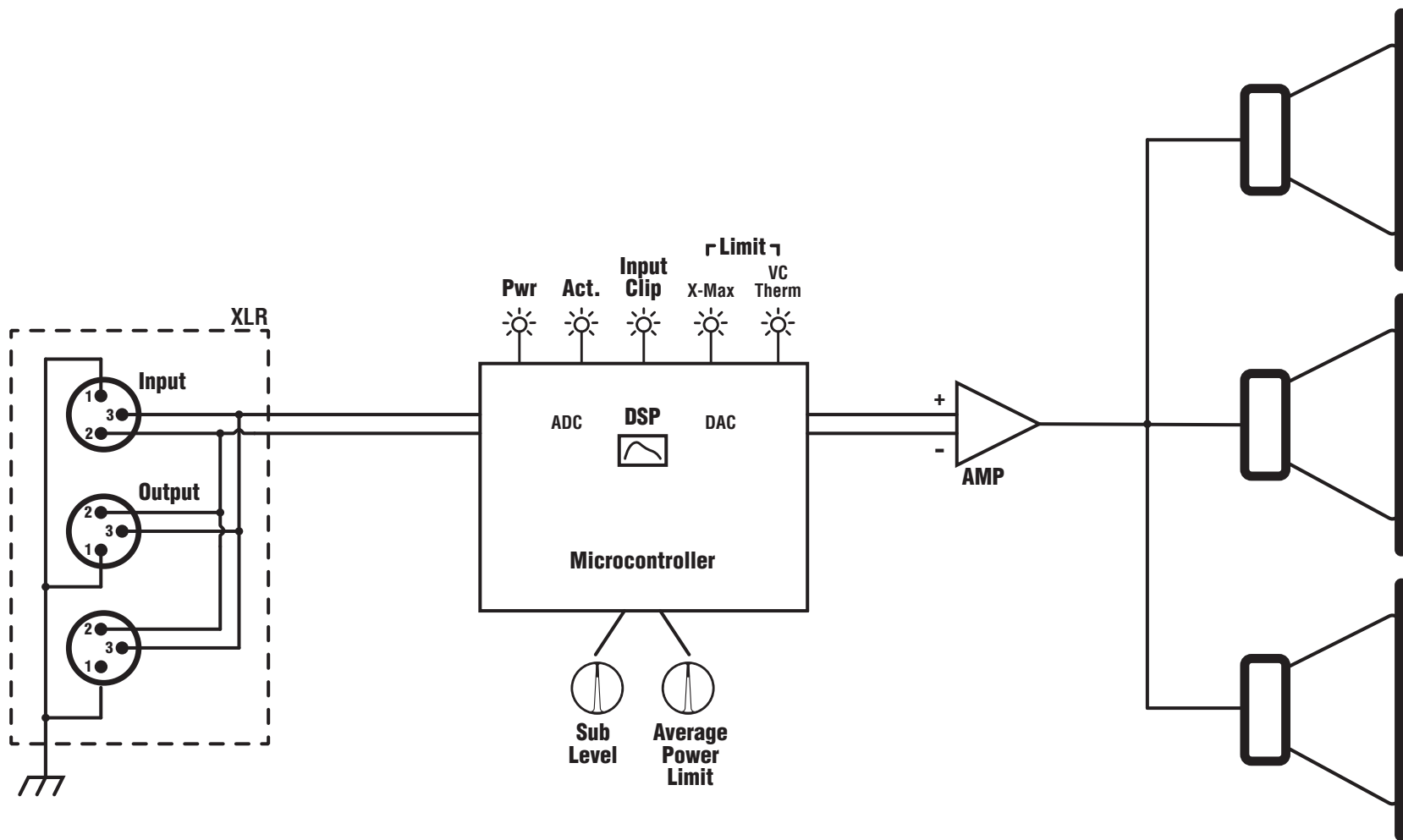
Spécifications

Actif ou passif	Actif
Puissance nominale (watts)	6500 programme (13000 crête)
NPA maximum mesuré (pondéré C, maintien maximum)	130 dB mesuré
Réponse en fréquence (Hz +/- 3db)	31-100
Fréquence de coupure (Hz)	100 passe-bas
Configuration de l'enceinte	Bass Reflex
Configuration des haut-parleurs	Woofers BF 3x15 pouces
Driver(s) BF	Céramique de 15 pouces avec bobine acoustique de 3 pouces
Puissance nominale LF (watts)	Programme 6500 (13000 crête)
Impédance BF (ohms)	2.7 (3x 8)
Protection BF	Excursion, bobine mobile thermique (RMS)
Amplificateur de puissance BF (watts)	Programme 6500 (13000 crête)
Type d'amplificateur BF	Classe D
Système de refroidissement	Convection
Câble d'alimentation	Entrée Powercon True et sortie Loop Thru verrouillables et amovibles
Commutateur d'alimentation	Oui
Consommation électrique (typ/max)	600 VA / 1200 VA
Entrée	1 XLR avec 2x XLR sortie parallèle, Impédance 35k ohms
Sensibilité d'entrée (Vrms sinus)	Entrée ligne 1,4 au centre, 0,56 au maximum
Commandes de niveau	Volume, -∞, 0dB, 8dB (Min, Top, Max)
Commandes d'égalisation	Limiteur thermique Advance pour la gestion de la consommation d'énergie
Limiteur	Excursion, thermique (RMS), écrêtage
Indicateurs DEL	Puissance, Limite d'excursion, Limite thermique (RMS), Clip d'entrée, Activité
Matériaux du boîtier	Contreplaqué de bouleau multi-plis de 15 mm
Matériel de montage standard	Système de suspension RAIL et LOCKBAR (haut et bas)
Fonction d'empilage	Pieds à emboîtement UHMW (haut et bas)
Revêtement / Finition	Peinture
Dimensions (PLH x L arrière, pouces)	24 x 21 x 51.5 x 12.25
Dimensions (PLH x L arrière, cm)	60.9 x 53.3 x 130.8 x 31.1
Poids (livres/kg)	236/107

**Spécifications sujettes à modification sans préavis*

Block Diagram SA315S

DESIGNED & MANUFACTURED BY YORKVILLE SOUND

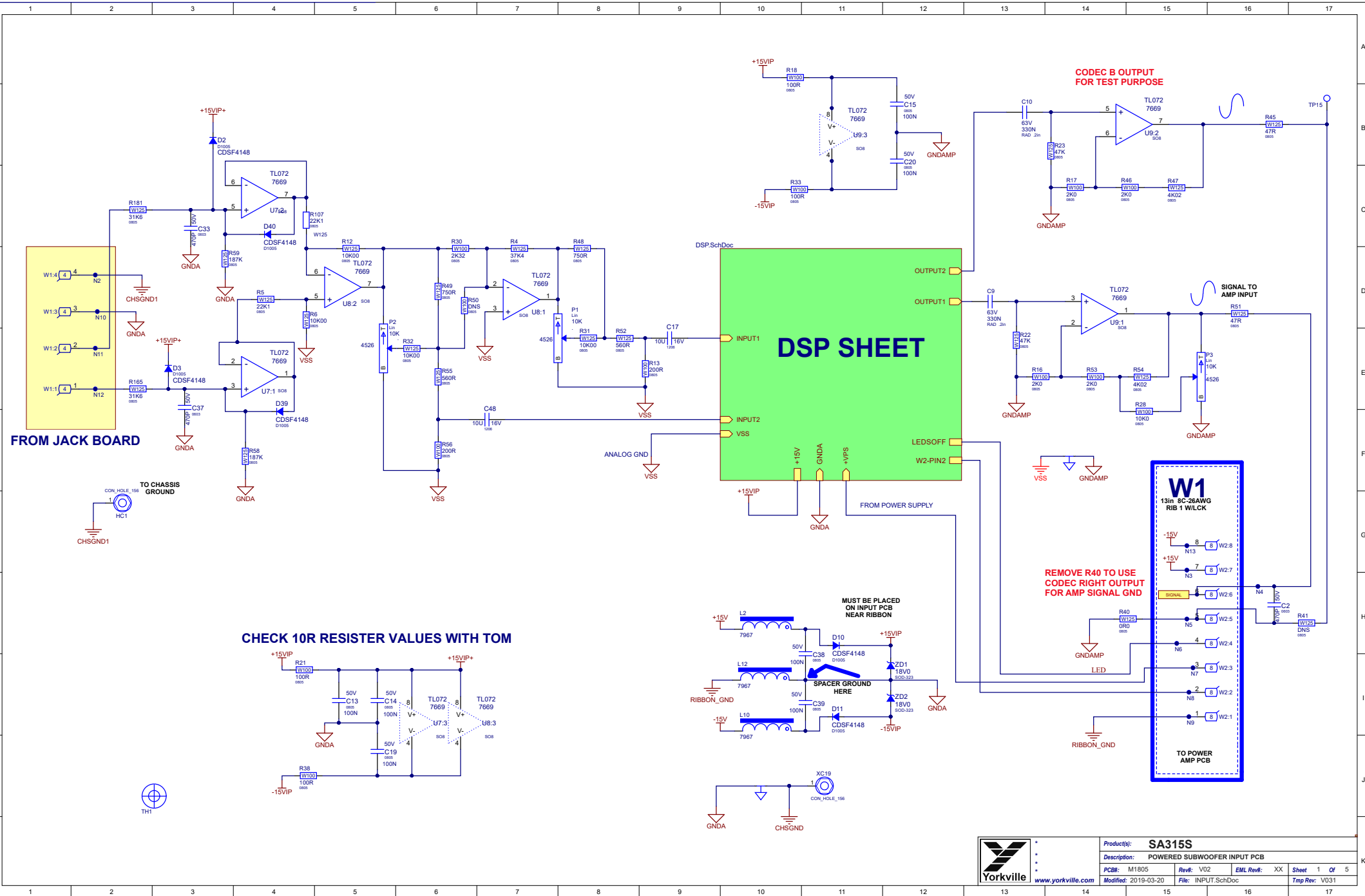


M1818-02 Parts Reference List 5/19/2021

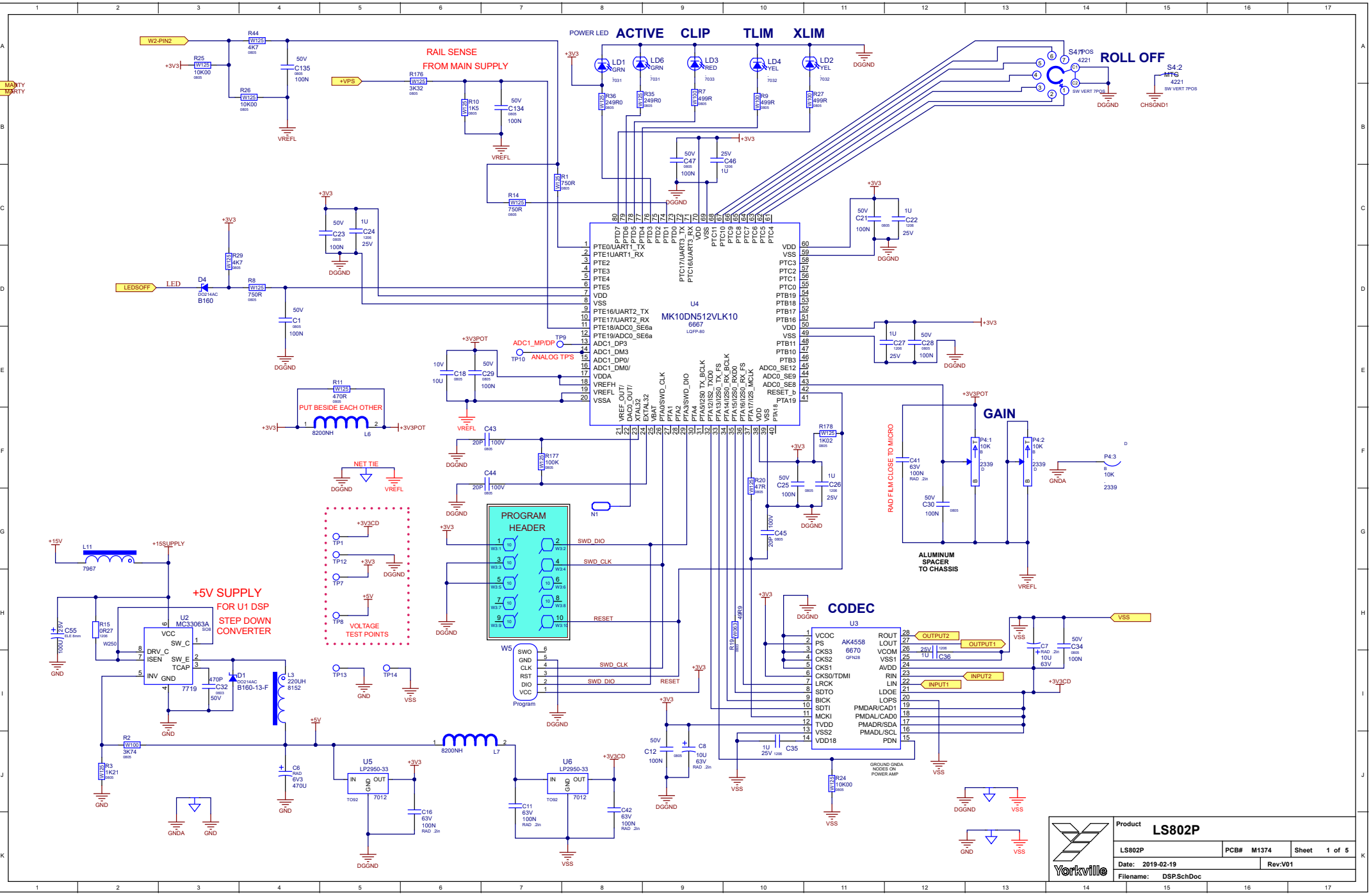
REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
AI-ASS	M1818-02	SA315S AC INPUT						
C1	5242	100N 250V 20%CAP BLK 'X2' 15MM AC						
C2	5266	680N 250V 20%CAP BLK 'X2' 27MM AC						
C3	5865	100N 250V 10%CAP BLK RAD POLY FLM						
C4	5865	100N 250V 10%CAP BLK RAD POLY FLM						
C5	5914	100U 63V 20%CAP BLK 10X13MM EL						
C6	6451	4N7 250V 20%CAP BLK 'Y' 10MM AC						
C32	5629	10U 160V 20%CAP BLK 10X13MM EL						
C33	5260	22U 50V 20%CAP T&R RAD .2EL						
C34	5959	10U 450V 20%CAP BLK EL						
D1	6775	BRIDGE 25A 600V WIRE LEAD SIP						
D2	6775	BRIDGE 25A 600V WIRE LEAD SIP						
D3	6438	1N4007 1000V 1A0 DIODE T&R						
D4	6438	1N4007 1000V 1A0 DIODE T&R						
D11	6438	1N4007 1000V 1A0 DIODE T&R						
D12	6438	1N4007 1000V 1A0 DIODE T&R						
D13	6438	1N4007 1000V 1A0 DIODE T&R						
K1	3696	RELAY 1C 02AMP DC24 006MA PC-S						
K2	3019	RELAY 1C 30AMP DC110 08MA PC-C						
L1	3817	1.5MH COIL INPUT COM MODE						
PCB	M1818B	2 OZ 2SD 45.25SQIN 1PER POWER SUPPL						
Q3	6854	2N6517 350V TO92 NPN TRAN TA						
Q4	5101	BC550C TO92 NPN TRAN T&R TB						
R1	6643	2R 20% 25A INRSH CURR LIM 31MM						
R2	6643	2R 20% 25A INRSH CURR LIM 31MM						
R3	6643	2R 20% 25A INRSH CURR LIM 31MM						
R4	6643	2R 20% 25A INRSH CURR LIM 31MM						
R5	4621	W500 470R 5% T&R RES						
R6	4621	W500 470R 5% T&R RES						
R12	4851	W250 120K 5% T&R RES						
R13	4842	W250 330K 5% T&R RES						
R14	4894	W250 130K 5% T&R RES						
R15	4894	W250 130K 5% T&R RES						
R16	4841	W250 220K 5% T&R RES						
R17	4838	W250 100K 5% T&R RES						
SNL1	8370	1 MIL POLYIMIDE LABEL, 1" X .380"						
W1	4162	2 PIN POWER PIN HEADER MALE POLZED						
W3	4147	6 PIN POWER PIN HEADER MALE POLZED						
W4	4146	3 PIN POWER PIN HEADER MALE POLZED						
W5	4163	5 PIN POWER PIN HEADER MALE POLZED						
W6	4147	6 PIN POWER PIN HEADER MALE POLZED						
W7	4151	4 PIN POWER PIN HEADER MALE POLZED						
W8	4146	3 PIN POWER PIN HEADER MALE POLZED						
W9	4151	4 PIN POWER PIN HEADER MALE POLZED						

M1805-02 Parts Reference List 5/19/2021

REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
AI-ASS	M1805-59	SA315S INPUT DSP BOARD 1OZ	R10		W125 1K5 5% 0805 SMT RES			
C1		100N 50V 5%CAP 0805 SMT X7R	R11		W125 470R 5% 0805 SMT RES			
C2		470P 50V 5%CAP 0603 SMT NPO	R12		W125 10K00 0.1% 0805 SMT RES			
C6	5669	470U 6V3 20%CAP RAD EL T&R	R13		W100 200R 1% 0805 SMT RES			
C7	5945	10U 63V 20%CAP T&R RAD .2EL	R14		W125 750R 1% 0805 SMT RES			
C8	5945	10U 63V 20%CAP T&R RAD .2EL	R15		W250 0R27 5% 1206 SMT RES			
C9	5233	330N 63V 5%CAP T&R RAD .2FLM	R16		W100 2K0 1% 0805 SMT RES			
C10	5233	330N 63V 5%CAP T&R RAD .2FLM	R17		W100 2K0 1% 0805 SMT RES			
C11	5212	100N 100V 5%CAP T&R RAD .2FLM	R18		W100 100R 1% 0805 SMT RES			
C12		100N 50V 5%CAP 0805 SMT X7R	R19		W063 49R9 1% 0603 SMT RES			
C13		100N 50V 5%CAP 0805 SMT X7R	R20		W125 47R 5% 0805 SMT RES			
C14		100N 50V 5%CAP 0805 SMT X7R	R21		W100 100R 1% 0805 SMT RES			
C15		100N 50V 5%CAP 0805 SMT X7R	R22		W125 47K 5% 0805 SMT RES			
C16	5212	100N 100V 5%CAP T&R RAD .2FLM	R23		W125 47K 5% 0805 SMT RES			
C17		10U 16V 10%CAP 1206 SMT X7R	R24		W125 10K00 0.1% 0805 SMT RES			
C18		10U 16V 20%CAP 0805 SMT X5R	R25		W125 10K00 0.1% 0805 SMT RES			
C19		100N 50V 5%CAP 0805 SMT X7R	R26		W125 10K00 0.1% 0805 SMT RES			
C20		100N 50V 5%CAP 0805 SMT X7R	R27		W100 499R 1% 0805 SMT RES			
C21		100N 50V 5%CAP 0805 SMT X7R	R28		W100 10K0 1% 0805 SMT RES			
C22		1U 25V 20%CAP 1206 SMT X7R	R29		W125 4K7 5% 0805 SMT RES			
C23		100N 50V 5%CAP 0805 SMT X7R	R30		W100 2K32 1% 0805 SMT RES			
C24		1U 25V 20%CAP 1206 SMT X7R	R31		W125 10K00 0.1% 0805 SMT RES			
C25		100N 50V 5%CAP 0805 SMT X7R	R32		W125 10K00 0.1% 0805 SMT RES			
C26		1U 25V 20%CAP 1206 SMT X7R	R33		W100 100R 1% 0805 SMT RES			
C27		1U 25V 20%CAP 1206 SMT X7R	R35		W125 249R0 1% 0805 SMT RES			
C28		100N 50V 5%CAP 0805 SMT X7R	R36		W125 249R0 1% 0805 SMT RES			
C29		100N 50V 5%CAP 0805 SMT X7R	R38		W100 100R 1% 0805 SMT RES			
C30		100N 50V 5%CAP 0805 SMT X7R	R40		W125 0R 5% 0805 SMT RES			
C32		470P 50V 5%CAP 0603 SMT NPO	R44		W125 4K7 5% 0805 SMT RES			
C33		470P 50V 5%CAP 0603 SMT NPO	R45		W125 47R 5% 0805 SMT RES			
C34		100N 50V 5%CAP 0805 SMT X7R	R46		W100 2K0 1% 0805 SMT RES			
C35		1U 25V 20%CAP 1206 SMT X7R	R47		W125 4K02 0.1% 0805 SMT RES			
C36		1U 25V 20%CAP 1206 SMT X7R	R48		W125 750R 1% 0805 SMT RES			
C37		470P 50V 5%CAP 0603 SMT NPO	R49		W125 750R 1% 0805 SMT RES			
C38		100N 50V 5%CAP 0805 SMT X7R	R51		W125 47R 5% 0805 SMT RES			
C39		100N 50V 5%CAP 0805 SMT X7R	R52		W125 560R 5% 0805 SMT RES			
C41	5212	100N 100V 5%CAP T&R RAD .2FLM	R53		W100 2K0 1% 0805 SMT RES			
C42	5212	100N 100V 5%CAP T&R RAD .2FLM	R54		W125 4K02 0.1% 0805 SMT RES			
C43		20P 100V 5%CAP 0805 SMT NPO	R55		W125 560R 5% 0805 SMT RES			
C44		20P 100V 5%CAP 0805 SMT NPO	R56		W100 200R 1% 0805 SMT RES			
C45		20P 100V 5%CAP 0805 SMT NPO	R58		W125 187K 0.1% 0805 SMT RES			
C46		1U 25V 20%CAP 1206 SMT X7R	R59		W125 187K 0.1% 0805 SMT RES			
C47		100N 50V 5%CAP 0805 SMT X7R	R107		W125 22K1 1% 0805 SMT RES			
C48		10U 16V 10%CAP 1206 SMT X7R	R165		W125 31K6 0.1% 0805 SMT RES			
C55		100U 25V 20%CAP 8X5.4 SMT ELE	R176		W125 3K32 1% 0805 SMT RES			
C134		100N 50V 5%CAP 0805 SMT X7R	R177		W125 100K 5% 0805 SMT RES			
C135		100N 50V 5%CAP 0805 SMT X7R	R178		W125 1K02 0.1% 0805 SMT RES			
D1		B160-E3 60V 1A0 SCH DO214AC SMT	R181		W125 31K6 0.1% 0805 SMT RES			
D2		CDSF4148 75V 0A15 1005 SMT	S4	4221	SP7T NONSHORTING VERT ROT SWT 7POS			
D3		CDSF4148 75V 0A15 1005 SMT	SNL1	8370	1 MIL POLYIMIDE LABEL, 1" X .380"			
D4		B160-E3 60V 1A0 SCH DO214AC SMT	TP1		TEST POINT MINIATURE SMT			
D10		CDSF4148 75V 0A15 1005 SMT	TP7		TEST POINT MINIATURE SMT			
D11		CDSF4148 75V 0A15 1005 SMT	TP8		TEST POINT MINIATURE SMT			
D39		CDSF4148 75V 0A15 1005 SMT	TP9		TEST POINT MINIATURE SMT			
D40		CDSF4148 75V 0A15 1005 SMT	TP10		TEST POINT MINIATURE SMT			
L2		15.0UH COIL 0805 SMT	TP12		TEST POINT MINIATURE SMT			
L3		220UH COIL 10X10MM SMT	TP13		TEST POINT MINIATURE SMT			
L6		8.2UH COIL 1210 SMT	TP14		TEST POINT MINIATURE SMT			
L7		8.2UH COIL 1210 SMT	TP15		TEST POINT MINIATURE SMT			
L10		15.0UH COIL 0805 SMT	U2		MC33063ADR BUCK/BOOST INV IC SO8			
L11		15.0UH COIL 0805 SMT	U3		AK4558 32BIT CODEC SMT QFN28			
L12		15.0UH COIL 0805 SMT	U4		MK10DN512V1K10 100MHZ MCU IC LQFP80			
LD1		GRN LED 2V8 20MA 1206 SMT	U5	7012	LP2950-33 LDRP TO92 FIXED 3V3 REG			
LD2		YEL LED 1V7 20MA 1206 SMT	U6	7012	LP2950-33 LDRP TO92 FIXED 3V3 REG			
LD3		RED LED 1V5 20MA 1206 SMT	U7		TL072 DUAL OPAMP SMT SO-8			
LD4		YEL LED 1V7 20MA 1206 SMT	U8		TL072 DUAL OPAMP SMT SO-8			
LD6		GRN LED 2V8 20MA 1206 SMT	U9		TL072 DUAL OPAMP SMT SO-8			
P1	4526	10K TRIM POT 6MM TOP ADJ RAD	W1	2357	4 CIR XH-HEADER RA 0.0981N			
P2	4526	10K TRIM POT 6MM TOP ADJ RAD	W2	2328	8 CIR XH-HEADER 0.0981N			
P3	4526	10K TRIM POT 6MM TOP ADJ RAD	W3		10 CIR DUAL ROW HDR 0.05 SPC SMT			
P4	2339	10K B LIN 12MM DUAL 21DET P34	2D1		MM3Z18VT1G 18V0 0W2 5% SMT ZEN			
R1		W125 750R 1% 0805 SMT RES	2D2		MM3Z18VT1G 18V0 0W2 5% SMT ZEN			
R2		W100 3K74 1% 0805 SMT RES	PCB1	M1805BLANK	1 OZ 2SD 60.67 SQIN 03PER SA315S			
R3		W125 1K21 1% 0805 SMT RES						
R4		W125 37K4 1% 0805 SMT RES						
R5		W125 22K1 1% 0805 SMT RES						
R6		W125 10K00 0.1% 0805 SMT RES						
R7		W100 499R 1% 0805 SMT RES						
R8		W125 750R 1% 0805 SMT RES						
R9		W100 499R 1% 0805 SMT RES						



Product(s):	SA315S			
Description:	POWERED SUBWOOFER INPUT PCB			
PCBR: M1805	Rev: V02	EML Rev: XX	Sheet 1	Of 5
Modified: 2019-03-20	File: INPUT.SchDoc	Temp Rev: V031		



Product LS802P		
LS802P	PCB# M1374	Sheet 1 of 5
Date: 2019-02-19	Rev:V01	
Filename: DSP.SchDoc		

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

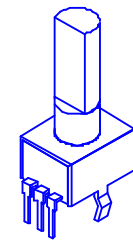
#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	28-MAY-2018	V01P0	.	RELEASE FOR PRODUCTION
2	28-JAN-2019	V01P0	9340	PLACED C2 ACROSS PINS 5 AND 6 OF W2
3	.	.	9343	REMOVED R37 - CHANGED R36 TO 7671
4	.	.	9346	ADDED R178
5	19-FEB-2019	V02	.	RELEASE V02 FOR PRODUCTION
6	.	.	9379	Remove connection o LD1 anode R36 to +3V3
7	.	.	9381	Remove GNDA connection rom Pin 3 o W1 and CHASSGND rom Pin 4 o W1
8	01-MAY-2019	.	.	and connect GNDA to Pin 4 o W1
9	.	.	.	.
10	.	.	.	.
11	.	.	.	.
12	.	.	.	.
13	.	.	.	.

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1
2
3
4
5
6
7
8
9
10
11
12
13

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

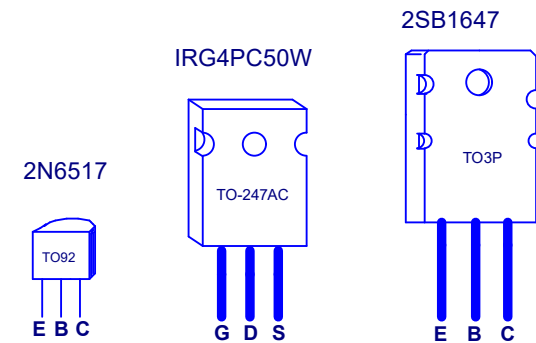
POTENTIOMETERS AND KNOBS

POTENTIOMETERS/SWITCHES AND KNOBS				
REF	FUNCTION	POT/SW YS#	STYLE	KNOB#
S1	MODE SELECT	4202	ROT	8653C
S4	HF ROLL OFF	4202	ROT	8653C
P4	GAIN	2339	P34	8653C
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"STYLE_P32"

PINOUT DIAGRAMS



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



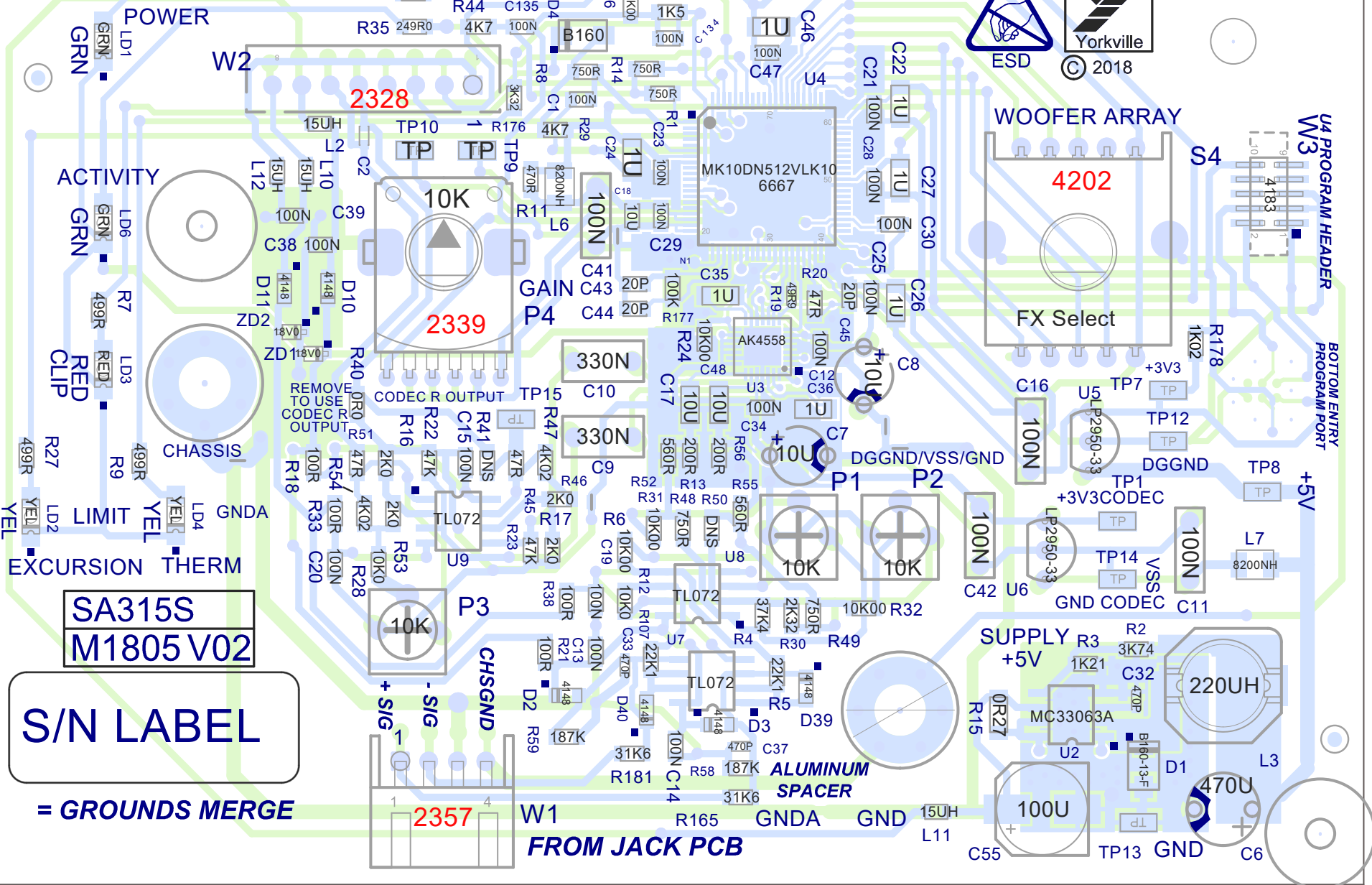
Section: Design Information And History			
Product(s): SA315S			
PCB#: M1805	Rev#: V02	EML Rev#: XX	Sheet 1 Of *
Modified: 2019-05-21	File: History.SchDoc	Tmp Rev: V031	

SA315S INPUT PCB



© 2018

M1805 V02 SA315S



SA315S
M1805 V02
S/N LABEL

= GROUNDS MERGE

FROM JACK PCB

2328

2339

4202

10K

2357



WOOFER ARRAY

FX Select

ACTIVITY

CHASSIS

EXCURSION THERM

SUPPLY

+5V

MC33063A

100U

220UH

470U

U4 PROGRAM HEADER

BOTTOM ENTRY PROGRAM PORT

+5V

+3V3 CODEC

GND CODEC

VSS

DGGND

GND

FROM JACK PCB

POWER

GAIN

FROM JACK PCB

SA315S
M1805 V02

S/N LABEL

= GROUNDS MERGE

FROM JACK PCB

PCB ASSEMBLY DOCUMENTATION

SPECIAL PRODUCTION NOTES

1. PCBSA: RTV BETWEEN ALL TALL COMPONENTS AND WHERE INDICATED.
2. PCBSA: AFTER WAVE USE PIZZA CUTTER TO SEPARATE THE BOARDS.
3. IF REQUIRED USE A JIG FOR INPUT JACK ALIGNMENT.

PCB HARDWARE

SCREWS AND BOLTS

NUTS

STANDOFFS

MISCELLANEOUS

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



Section: Assembly Documentation			
Product(s): SA315S			
PCB#: M1805	Rev#: V02	EML Rev#: XX	Sheet 1 Of *
Modified: 2019-03-20	File: Assembly.SchDoc		Temp Rev: V031

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

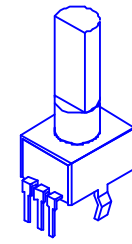
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1	28-MAY-2018	V01P0	.	RELEASE FOR PRODUCTION
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3			9343	REMOVED R37 - CHANGED R36 TO 7671
4			9346	ADDED R178
5	19-FEB-2019	V02	.	RELEASE V02 FOR PRODUCTION
6			9379	Remove connection of LD1 anode R36 to +3V3
7			9381	Remove GNDA connection from Pin 3 of W1 and CHASSGND from Pin 4 of W1
8	01-MAY-2019		.	and connect GNDA to Pin 4 of W1.
9			.	
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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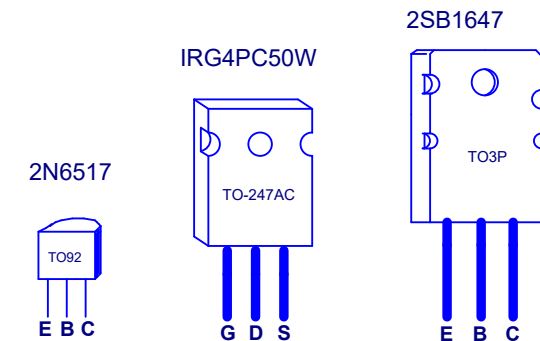
POTENTIOMETERS AND KNOBS

POTENTIOMETERS/SWITCHES AND KNOBS				
REF	FUNCTION	POT/SW YS#	STYLE	KNOB#
S1	MODE SELECT	4202	ROT	8653C
S4	HF ROLL OFF	4202	ROT	8653C
P4	GAIN	2339	P34	8653C
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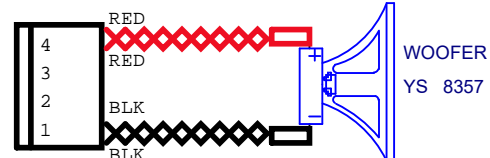
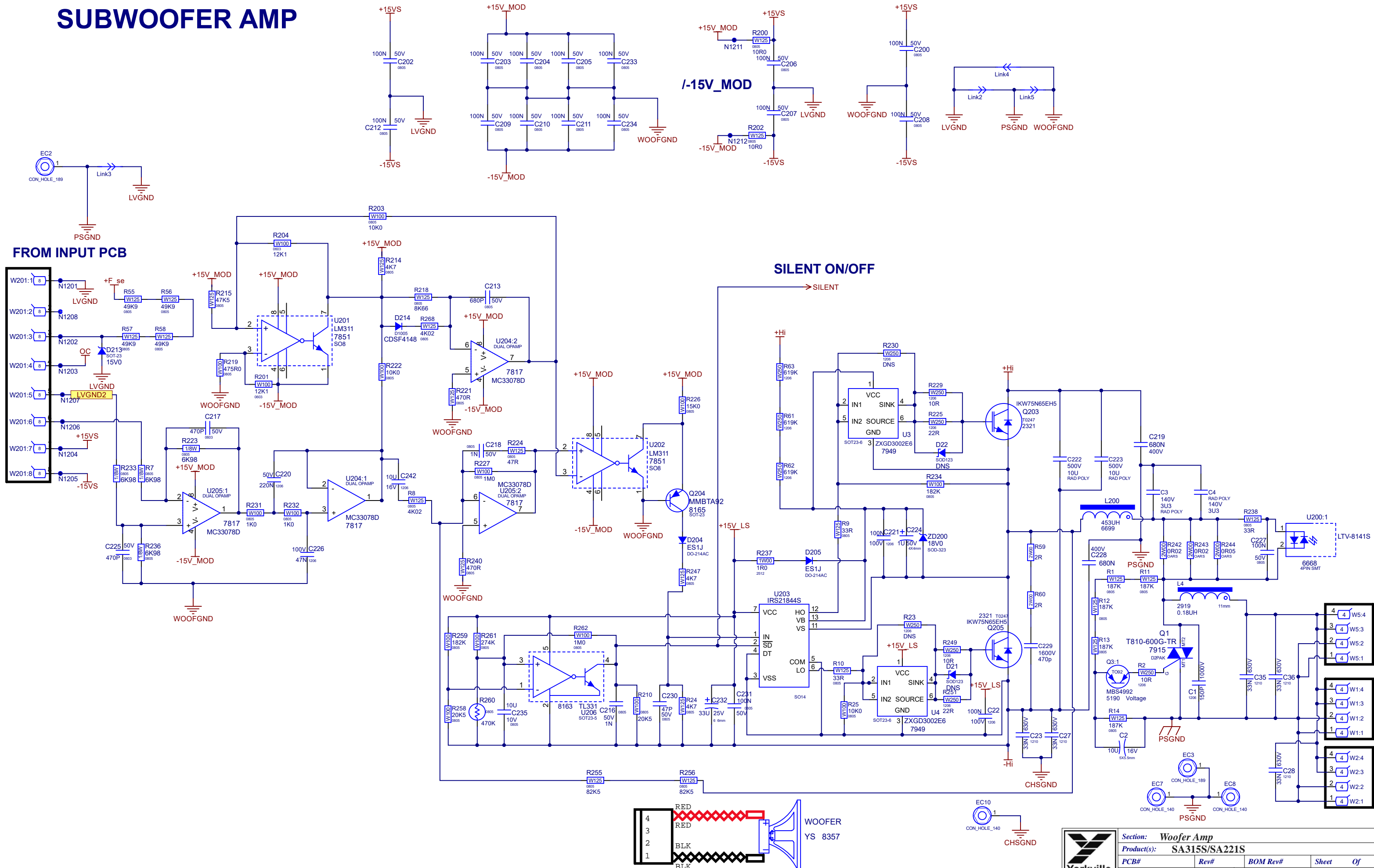
"STYLE_P32"

PINOUT DIAGRAMS

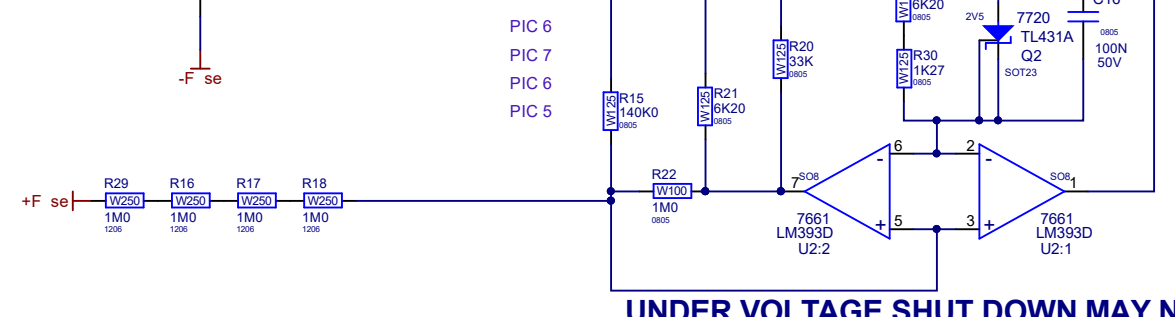
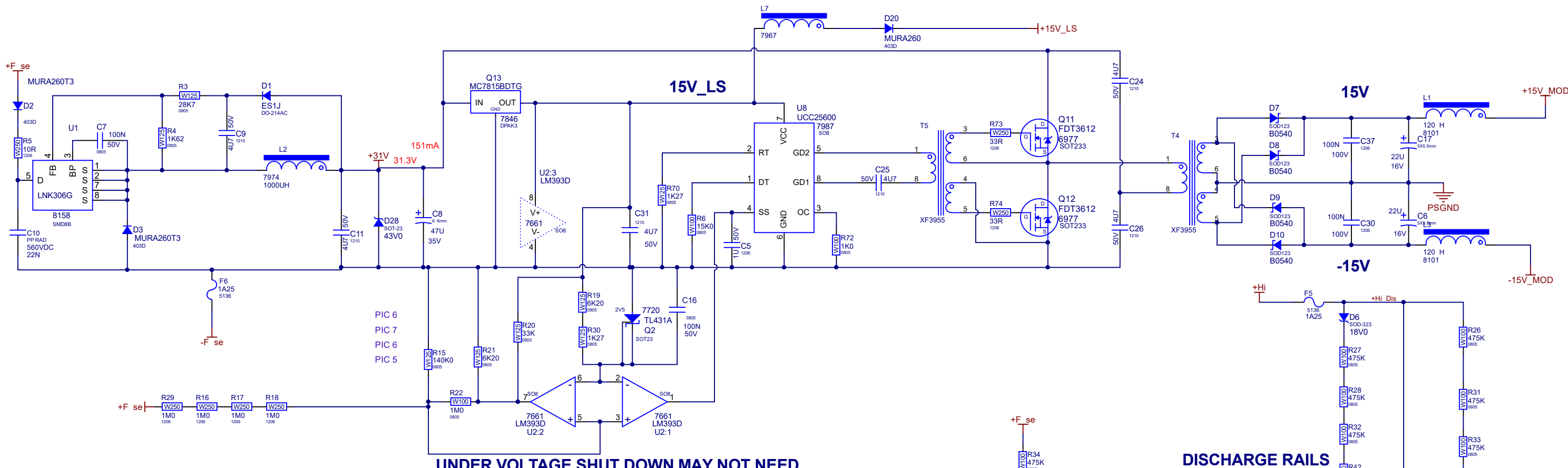


THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.

SUBWOOFER AMP

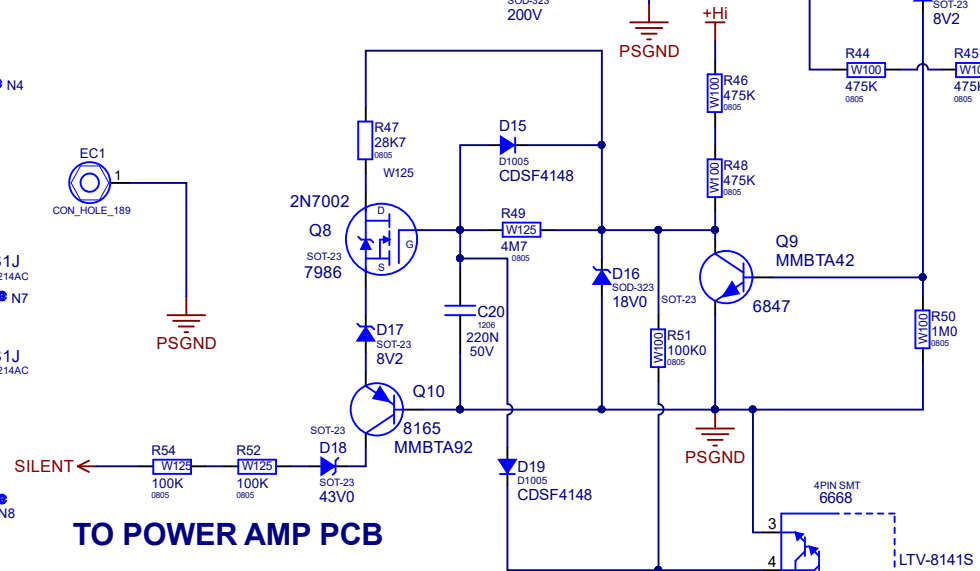


Section:	Woofer Amp
Product(s):	SA315S/SA221S
PCB#	Rev#
Date Modified:	BOM Rev#
Filename:	Sheet Of
	D

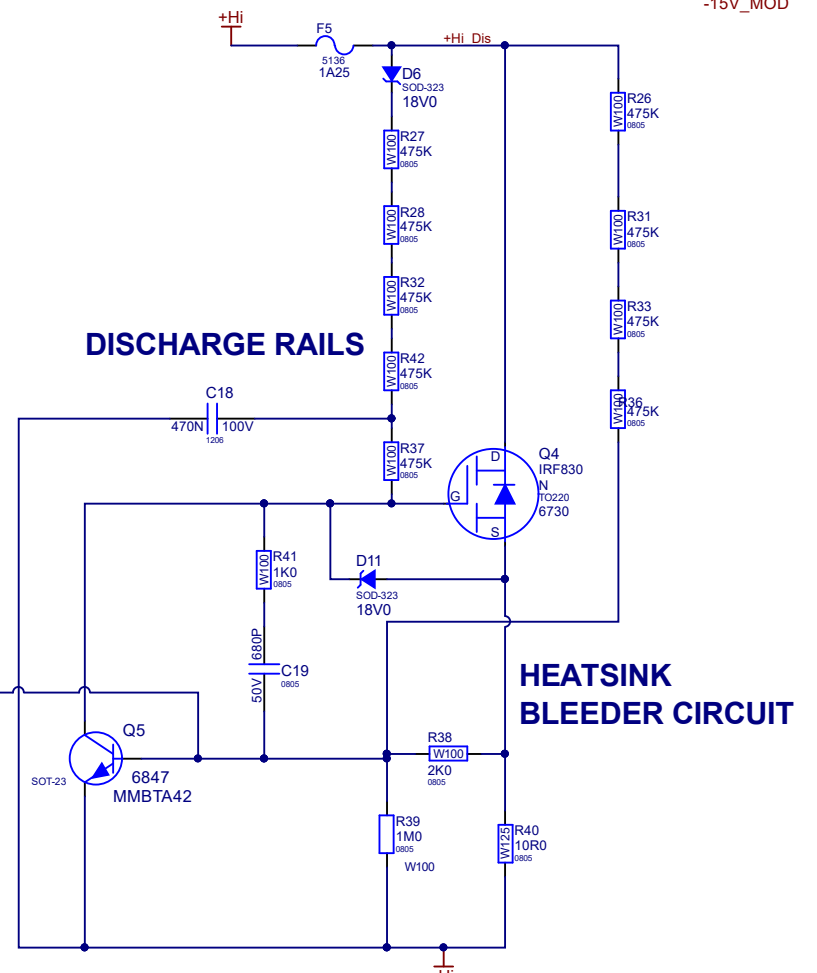


UNDER VOLTAGE SHUT DOWN MAY NOT NEED

**TURN ON VOLTAGE
FROM POWER SUPPLY
OPEN COLLECTOR**

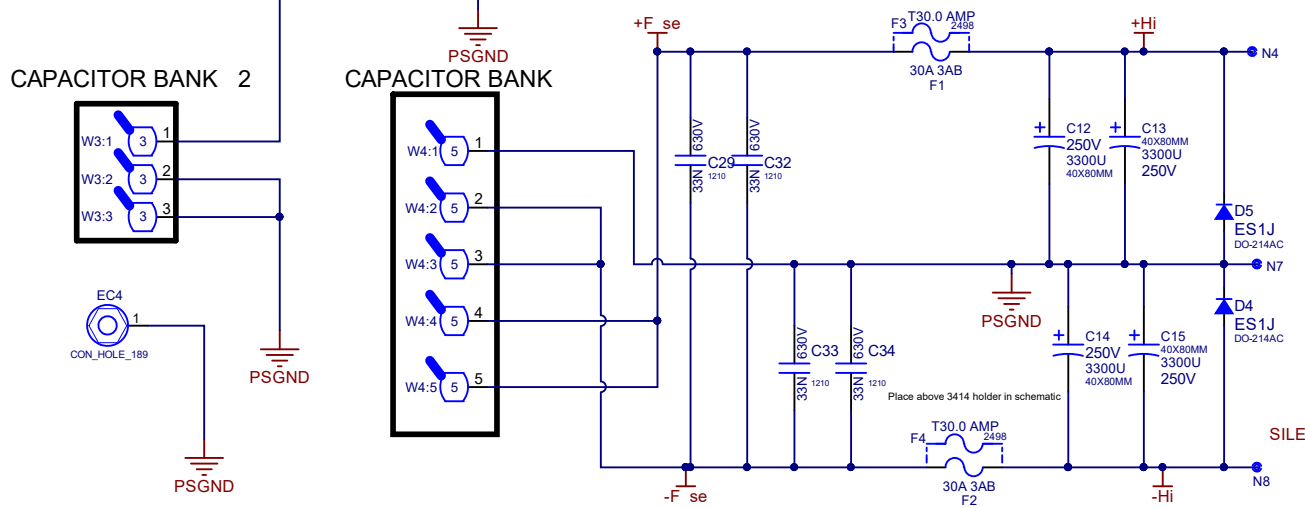


DISCHARGE RAILS



CAPACITOR BANK 2

CAPACITOR BANK



DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	08-NOV-2018	V01		RELEASED FOR PRODUCTION
2	06-FEB-2019	V01	9351	Changed Values, Added D20 and Connected Pin 4 of W201 to Pin 1 of W3
3			9358	Change Capacitor C229 from 5221 to new 5225 470P 1.6kV
4	27-FEB-2019	V02		RELEASED FOR PRODUCTION
5	14-MAY-2019	V03	9380	Replace 8761 heatsink mtg screw with 8835
6			9384	Add Ferrite Bead YS 5136 in series with +Hi net at D6
7				Add Ferrite Bead YS 5136 in series with net -F
8	25-FEB-2020	V04		Add 9 Capacitors YS 6011 and Inductor YS 2919 for EMI Emissions
9				Moved traces for extra grounding and Compliance issues.
10				Added extra chassis mechanical mounting to PCB and Heat Sink.
11				
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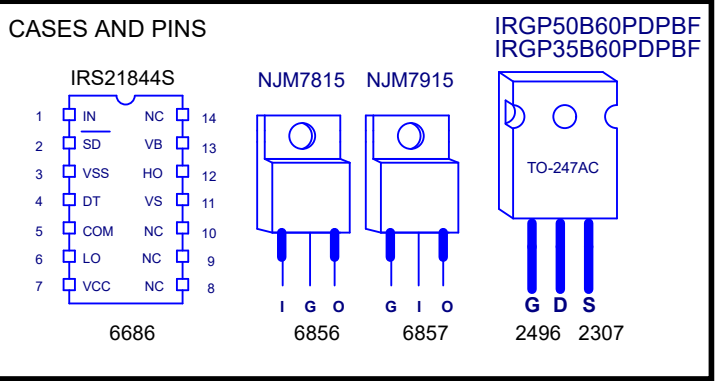
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POTENTIOMETERS AND KNOBS

POTENTIOMETERS AND KNOBS				
REF	FUNCTION	POT#	STYLE	KNOB#
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PINOUT DIAGRAMS



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

	Section: Design Information And History			
	Product(s): SA315S/SA221S			
	PCB#: M1806	Rev#: V04	EML Rev#: 01	Sheet 3 Of 3
	Modified: 2020-07-30	File: History.SchDoc	Tmp Rev: V028	

BlankSize - 292.100mmX184.150mm (11500X7250)

Into Wave

#8835+
#8800

HS3

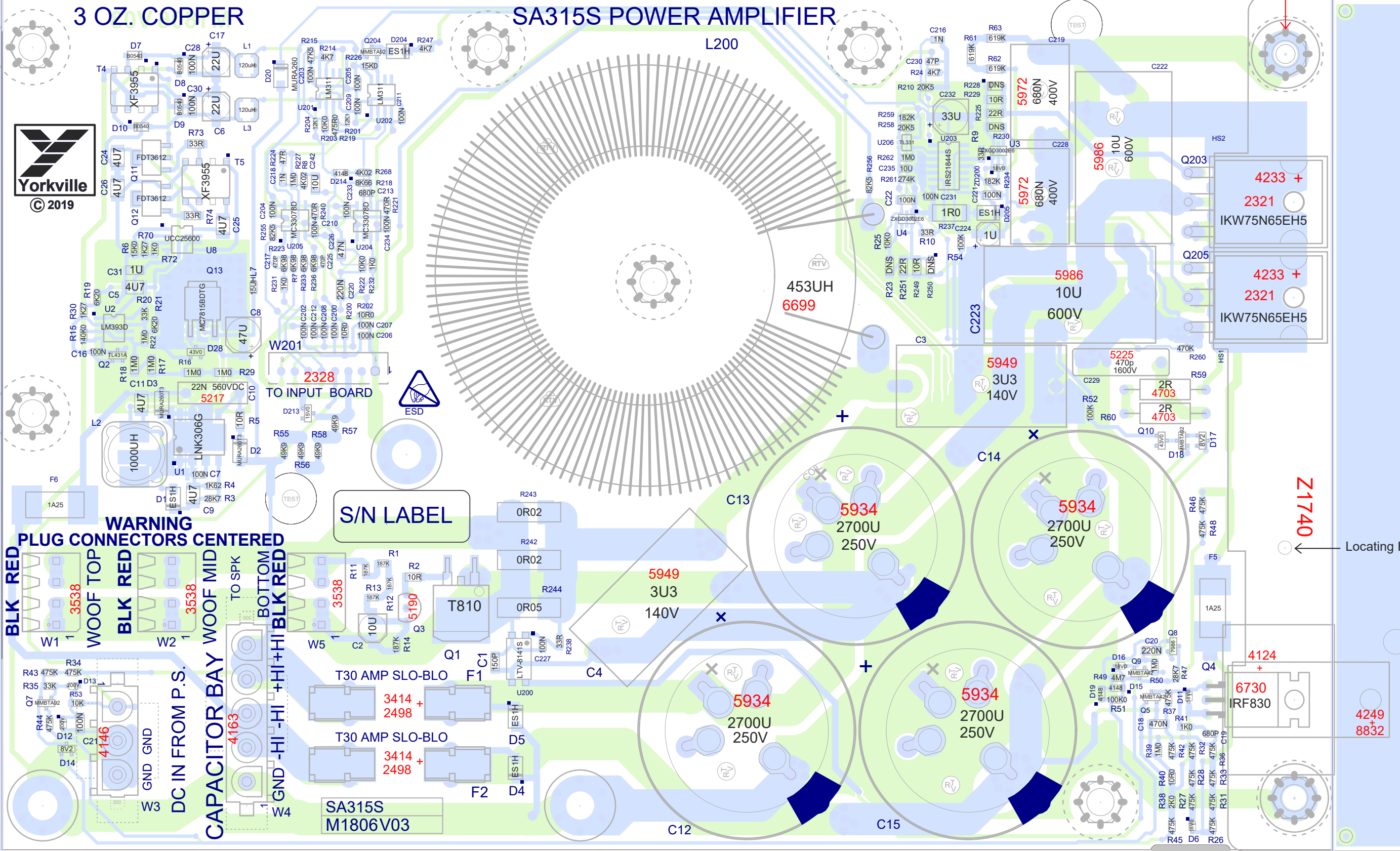
3 OZ. COPPER

SA315S POWER AMPLIFIER

L200



© 2019



WARNING
PLUG CONNECTORS CENTERED

BLK RED
WOOF TOP
3538

BLK RED
WOOF MID
3538

DC IN FROM P.S.
4146

CAPACITOR BAY
4163

GND -HI -HI +HI+HI
BLK RED

TO SPK

SA315S
M1806V03

S/N LABEL

TO INPUT BOARD



ESD

T30 AMP SLO-BLO
3414 +
2498 +

T30 AMP SLO-BLO
3414 +
2498 +

M1806 V03

SA315S

453UH
6699

5934
2700U
250V

5934
2700U
250V

5934
2700U
250V

5934
2700U
250V

5949
3U3
140V

5986
10U
600V

5225
470p
1600V

2R
4703

2R
4703

4233 +
2321

4233 +
2321

4124 +
6730

4249 +
8832

Z1740

Locating Hole

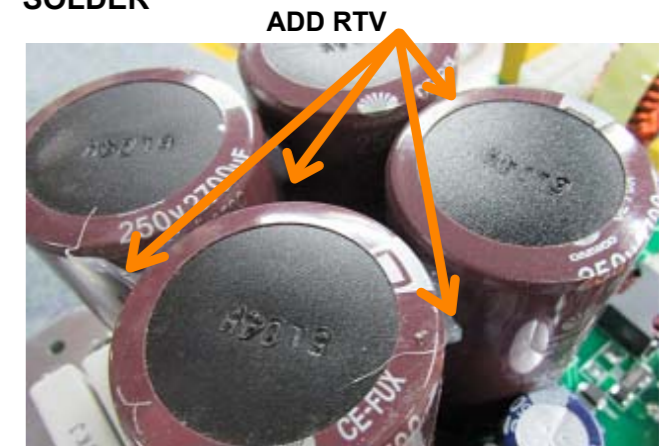
PCB ASSEMBLY DOCUMENTATION

GENERAL ASSEMBLY INSTRUCTIONS

1. Bend leads on hand placed parts in direction of pad and cut short to less than length of pad. No exceptions unless approved by Production Engineering.
2. Any clinch parts with longer leads than the length of the pad must be cut shorter either prior to wave-soldering or afterwards in PCB finishing. No exceptions unless approved by Production Engineering.
3. After Wave apply RTV to all holes indicated and all larger and between tall capacitors.
4. Before tightening screw 8832 on xstr spring 4249 ensure that it is aligned with Q4. Also silpad 4124 should overhang the edge of the heatsink. See picture below.

RTV INSTRUCTIONS:

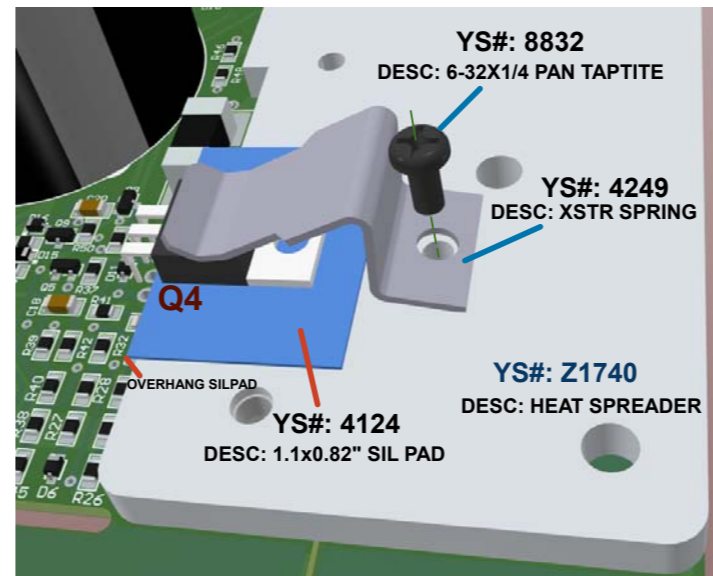
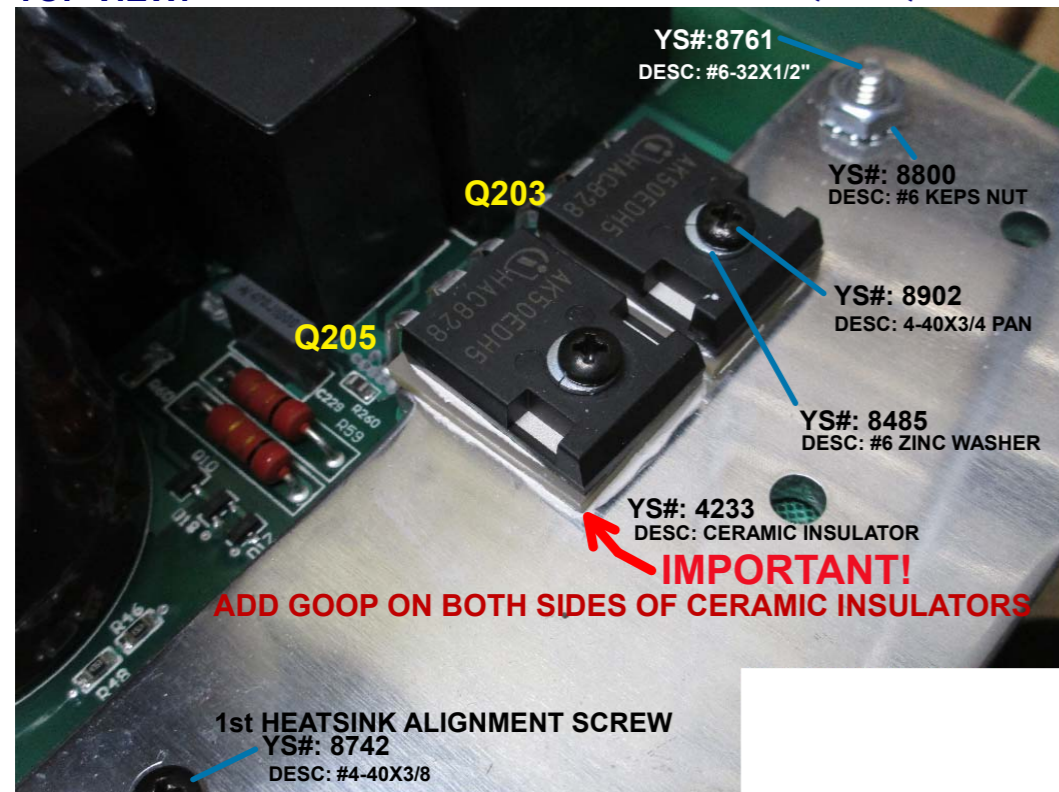
**ADD RTV BETWEEN:
C12, C13, C14, AND C15 AFTER WAVE
SOLDER**



MOUNTING HARDWARE INSTRUCTIONS FOR HEAT SPREADER Z1740:

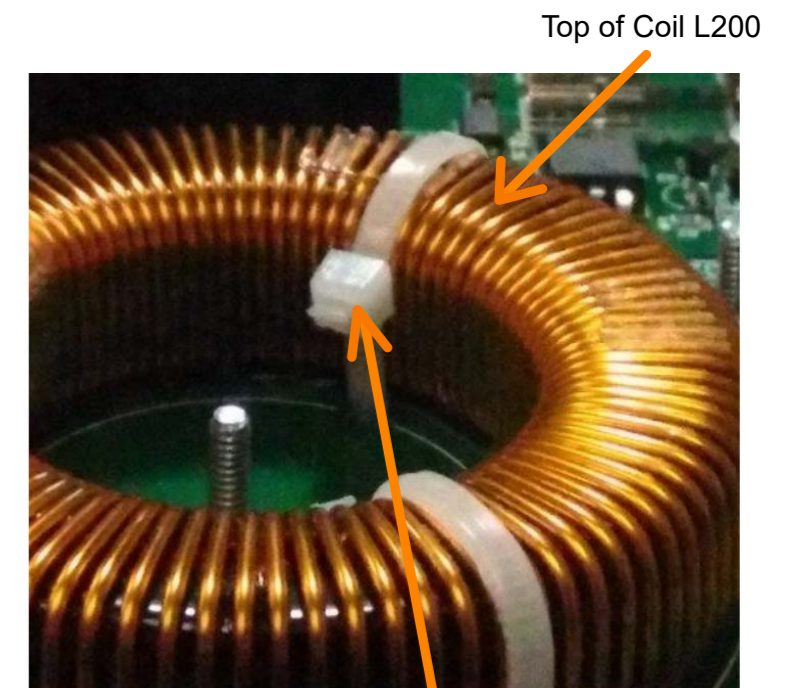
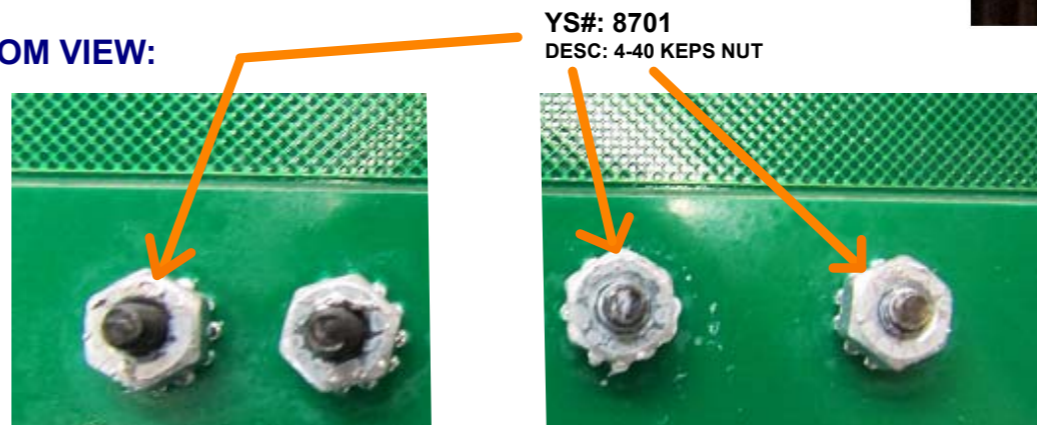
1. First install #8742 screw to align heatspreader Z1740
2. Install all devices, shown in pictures below, on Heat Spreader

TOP VIEW: MOUNTING HARDWARE FOR Q203/Q205:



SEE NOTE 4.

BOTTOM VIEW:



Ensure that all fastener nubs on tie wraps are well below the top of the coil.

	Section: Assembly Documentation		
	Product(s): SA315S		
	PCB#: M1806	Rev#: V03	EML Rev#: 01
	Modified: 2019-05-23	File: Assembly.SchDoc	Sheet 3 Of 3

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	08-NOV-2018	V01		RELEASED FOR PRODUCTION
2	06-FEB-2019	V01	#9351	Changed Values, Added D20 and Connected Pin 4 of W201 to Pin 1 of W3
3			#9358	Change Capacitor C229 from #5221 to new #5225 470P 1.6kV
4	27-FEB-2019	V02		RELEASED FOR PRODUCTION
5	14-MAY-2019	V03	9380	Replace #8761 heatsink mtg screw with #8835
6			9384	Add Fuse YS#5136 in series with +Hi net at D6
7				Add Fuse YS#5136 in series with net -Fuse
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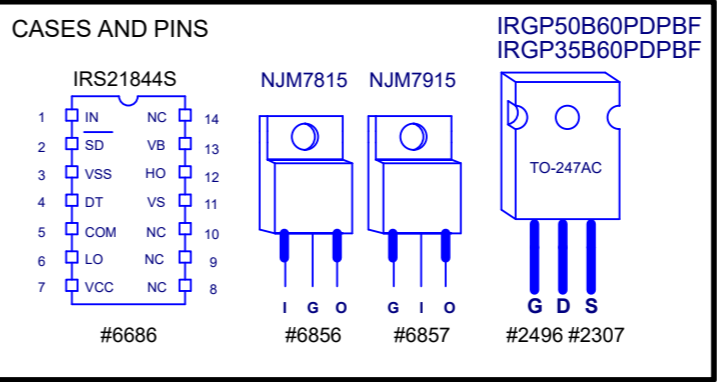
#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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POTENTIOMETERS AND KNOBS

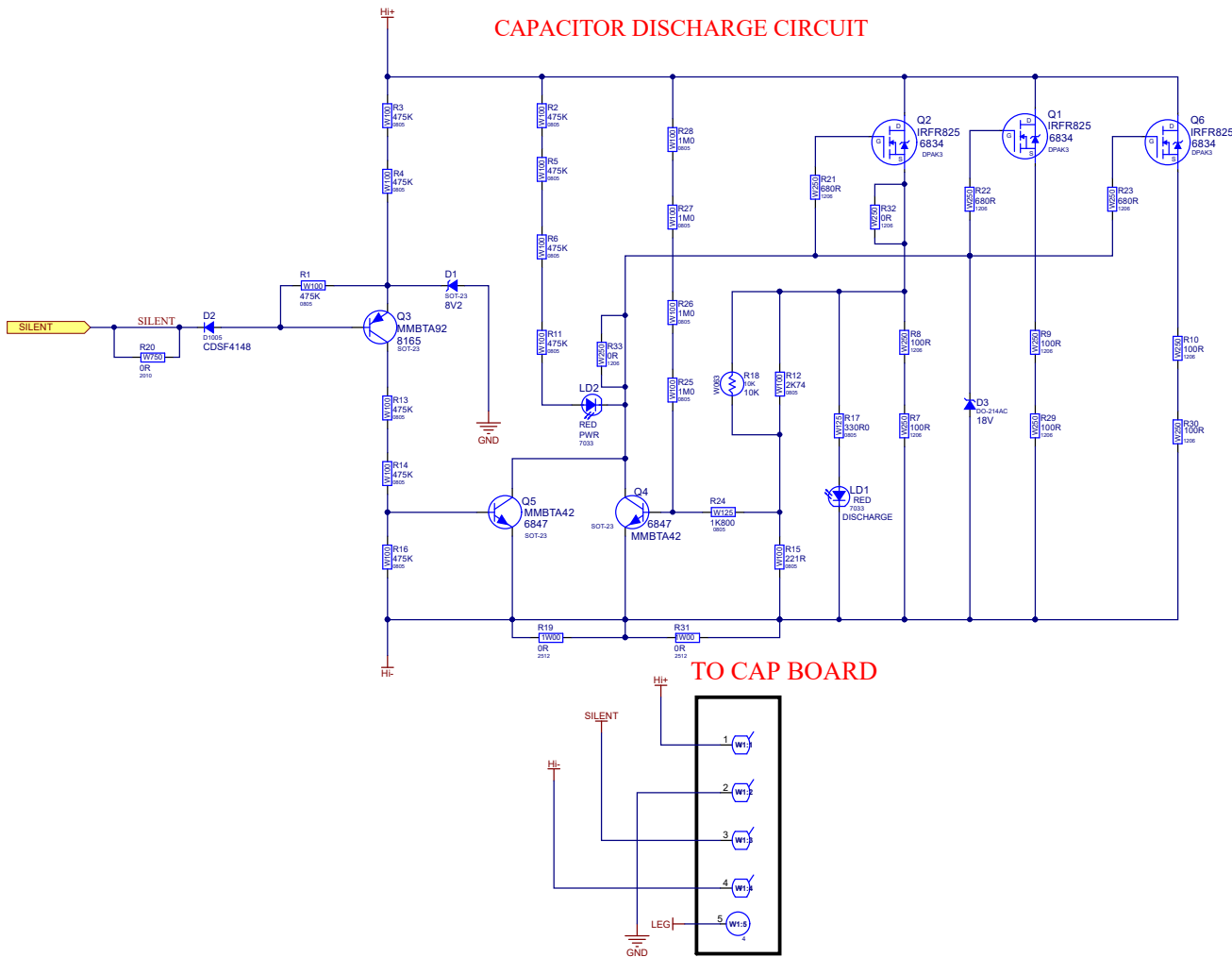
POTENTIOMETERS AND KNOBS				
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PINOUT DIAGRAMS



	Section: Design Information And History		
	Product(s): SA315S		
	PCB#: M1806	Rev#: V03	EML Rev#: 01
	Modified: 2019-05-23	File: History.SchDoc	Sheet 3 Of 3 Tmp Rev: V028

CAPACITOR DISCHARGE CIRCUIT



Yorkville Sound Ltd.
550 Granite Court
Pickering, ON
Canada L1W 3Y8
www.yorkville.com

Product(s):	SA315S			
Description:	Short Description Of The Product			
PCBR: M1811	Rev: V02	EML Rev: XX	Sheet 1	Of 2
Modified: 2019-03-20	File: Discharge_Circuit.SchDoc	Tmp Rev: V031		

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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2	20-FEB-2019	V02		RELEASE FOR PRODUCTION
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POTENTIOMETERS AND KNOBS

POTENTIOMETERS AND KNOBS			
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PINOUT DIAGRAMS

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

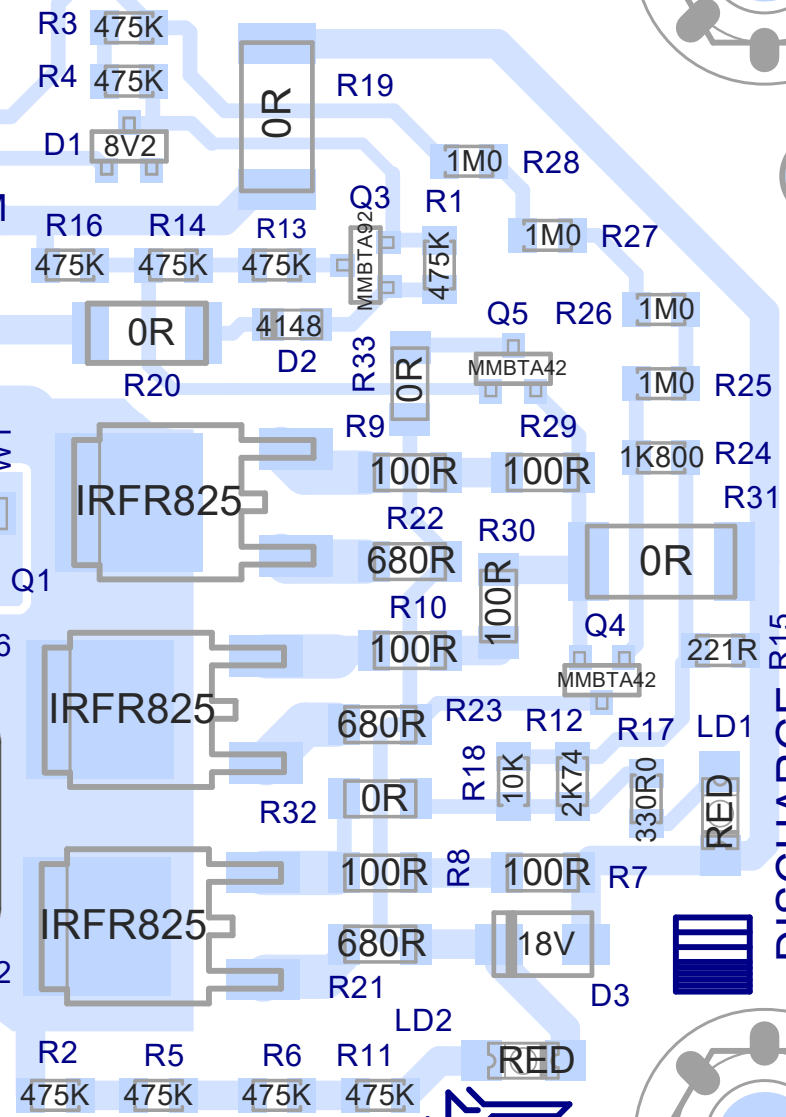
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	Product(s): SA315S			
	PCB#: M1811	Rev#: V02	ENL Rev#: XX	Sheet 1 Of 1
	Modified: 2019-03-20	File: History.SchDoc		Temp Rev: V031

SA315S M1811 V02

SINGLE LAYER
1 OZ.PCB
1.5mm ALUMINUM

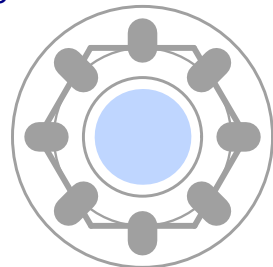
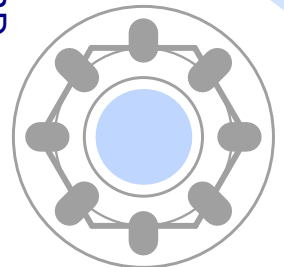
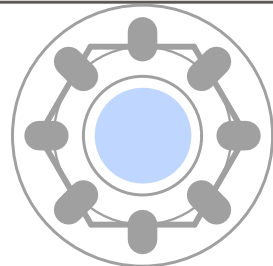
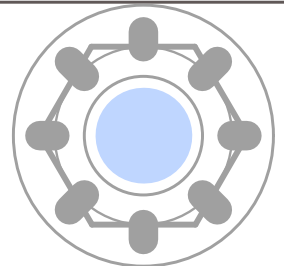
DISCHARGE P.C.B.
FROM CAPACITOR BOARD

LABEL
S/N




POWER ON
INDICATING LED

DISCHARGE LED
INDICATING LED



PCB ASSEMBLY DOCUMENTATION

1. INSPECT SOLDER JOINTS AFTER REFLOW
2. USE PIZZA CUTTER TO SEPARATE BOARDS FROM PANEL.

	Section: Assembly Documentation			
	Product(s): SA315S			
	PCB#: M1811	Rev#: V02	EML Rev#: XX	Sheet 2 Of 4
	Modified: 2019-03-20	File: Assembly.SchDoc		Temp Rev: V031

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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2	20-FEB-2019	V02		RELEASE FOR PRODUCTION
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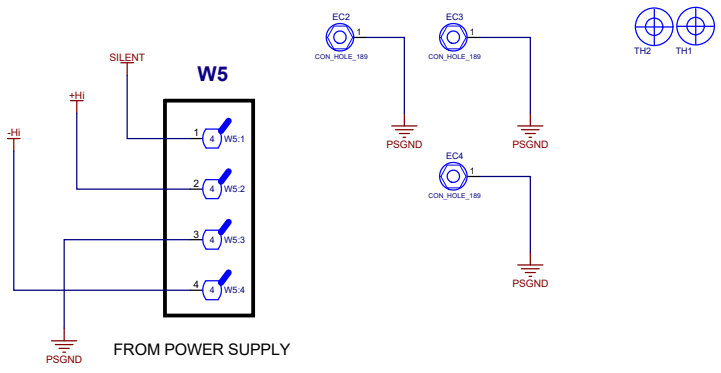
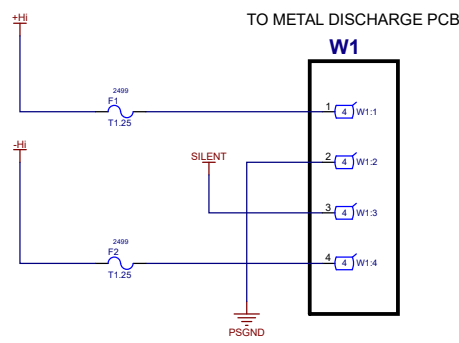
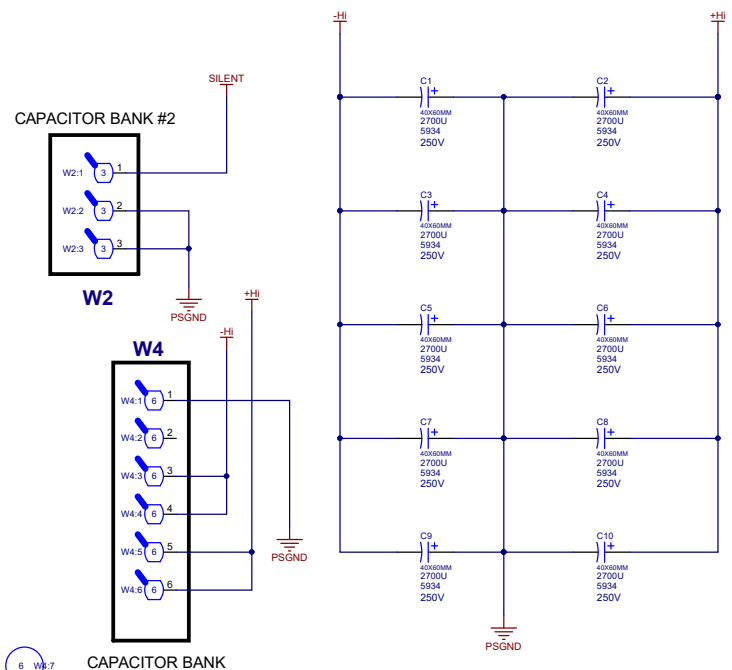
POTENTIOMETERS AND KNOBS

POTENTIOMETERS AND KNOBS			
REF	FUNCTION	POT#	KNOB#
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PINOUT DIAGRAMS

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

	Section: Design Information And History			
	Product(s): SA315S			
	PCB#: M1811	Rev#: V02	EML Rev#: XX	Sheet 1 Of 1
	Modified: 2019-03-20	File: History.SchDoc	Temp Rev: V031	



DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

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1	13-NOV-2018	V01P2		RELEASED FOR PRODUCTION
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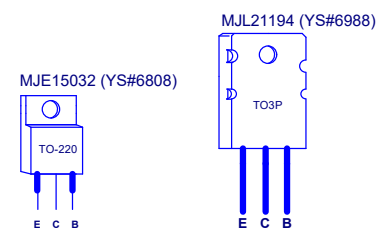
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POTENTIOMETERS AND KNOBS

POTENTIOMETERS/SWITCHES AND KNOBS				
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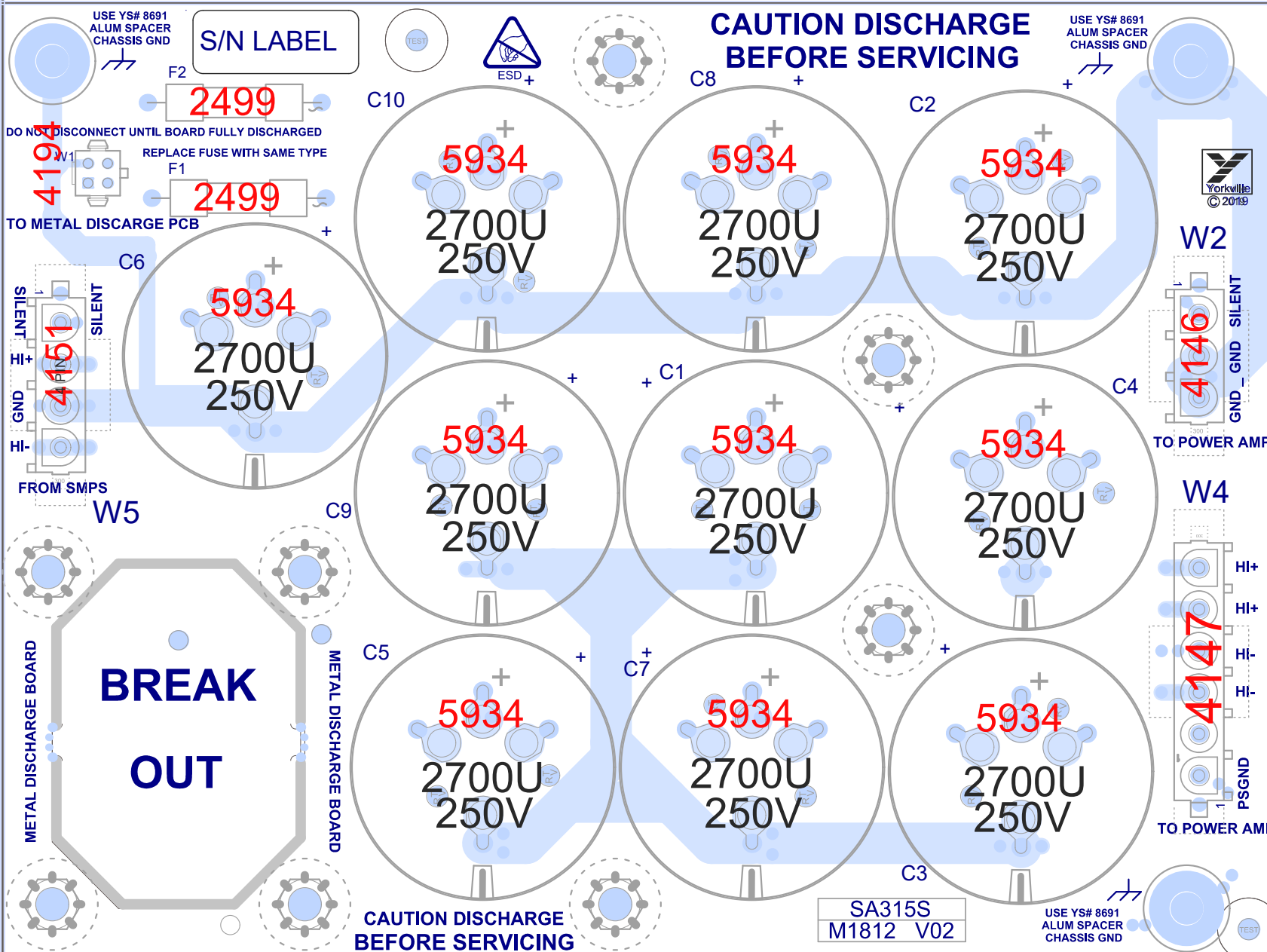
PINOUT DIAGRAMS



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

Into Wave

BlankSize - 220.980mmX171.450mm (8700X6750)



S/N LABEL

CAUTION DISCHARGE BEFORE SERVICING

DO NOT DISCONNECT UNTIL BOARD FULLY DISCHARGED

REPLACE FUSE WITH SAME TYPE

F1

TO METAL DISCHARGE PCB

C6

FROM SMPS

W5

SILENT

GND

SILENT

W3

TO POWER AMP

W4

TO POWER AMP

PSGND

W6

TO POWER AMP

TEST

USE YS# 8691 ALUM SPACER CHASSIS GND

USE YS# 8691 ALUM SPACER CHASSIS GND

USE YS# 8691 ALUM SPACER CHASSIS GND

USE YS# 8691 ALUM SPACER CHASSIS GND

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BREAK OUT

CAUTION DISCHARGE BEFORE SERVICING

SA315S M1812 V02

USE YS# 8691 ALUM SPACER CHASSIS GND

M1812 V02 SA315S

Score


CLINCH ORIGIN CORNER

Score

CLINCH ORIGIN CORNER

PCB ASSEMBLY DOCUMENTATION

1. RTV ALL LARGE AND TALL CAPS

	Section: Assembly Documentation			
	Product(s): SA315S			
	PCB#: M1812	Rev#: V02	ENL Rev#: 02	Sheet 2 Of 4
	Modified: 2019-04-01	File: Assembly.SchDoc		Temp Rev: V032

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	13-NOV-2018	V01P2		RELEASED FOR PRODUCTION
2	20-FEB-2019	V02		RELEASED FOR PRODUCTION
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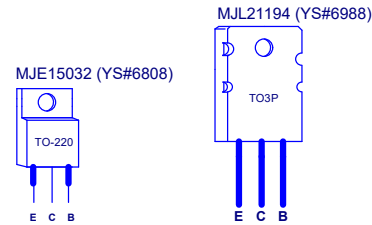
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POTENTIOMETERS AND KNOBS

POTENTIOMETERS/SWITCHES AND KNOBS				
REF	FUNCTION	POT/SW YS#	STYLE	KNOB#
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PINOUT DIAGRAMS

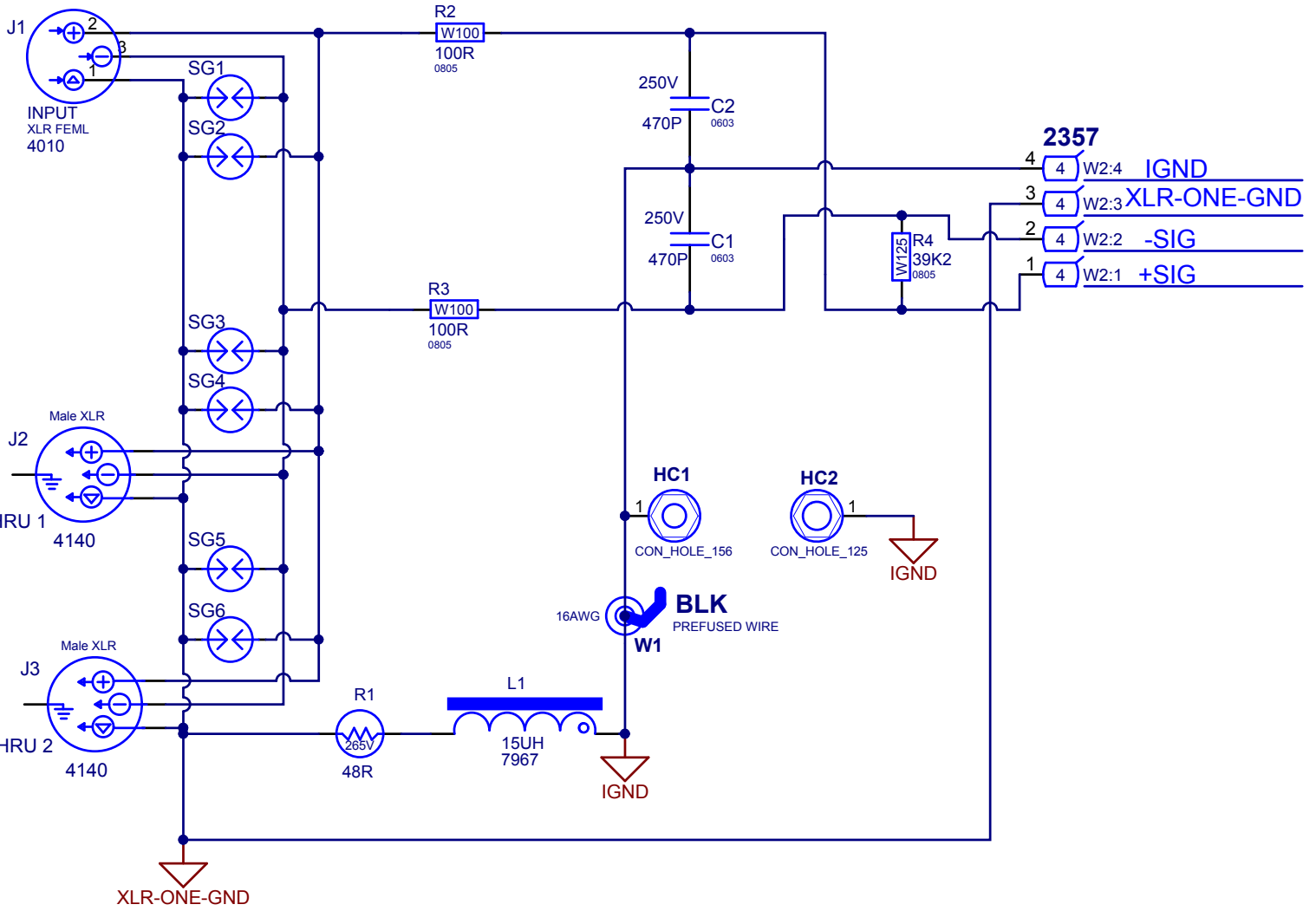


THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.

INPUT

THRU 1

THRU 2



Section: INPUT JACK			
Product(s): SYNERGY			
PCB#: M1813	Rev#: V01	EML Rev#: XX	Sheet 1 Of 2
Modified: 25/10/2018		File: Input.SchDoc	
Tmp Rev: V032			

DESIGN HISTORY AND INFORMATION

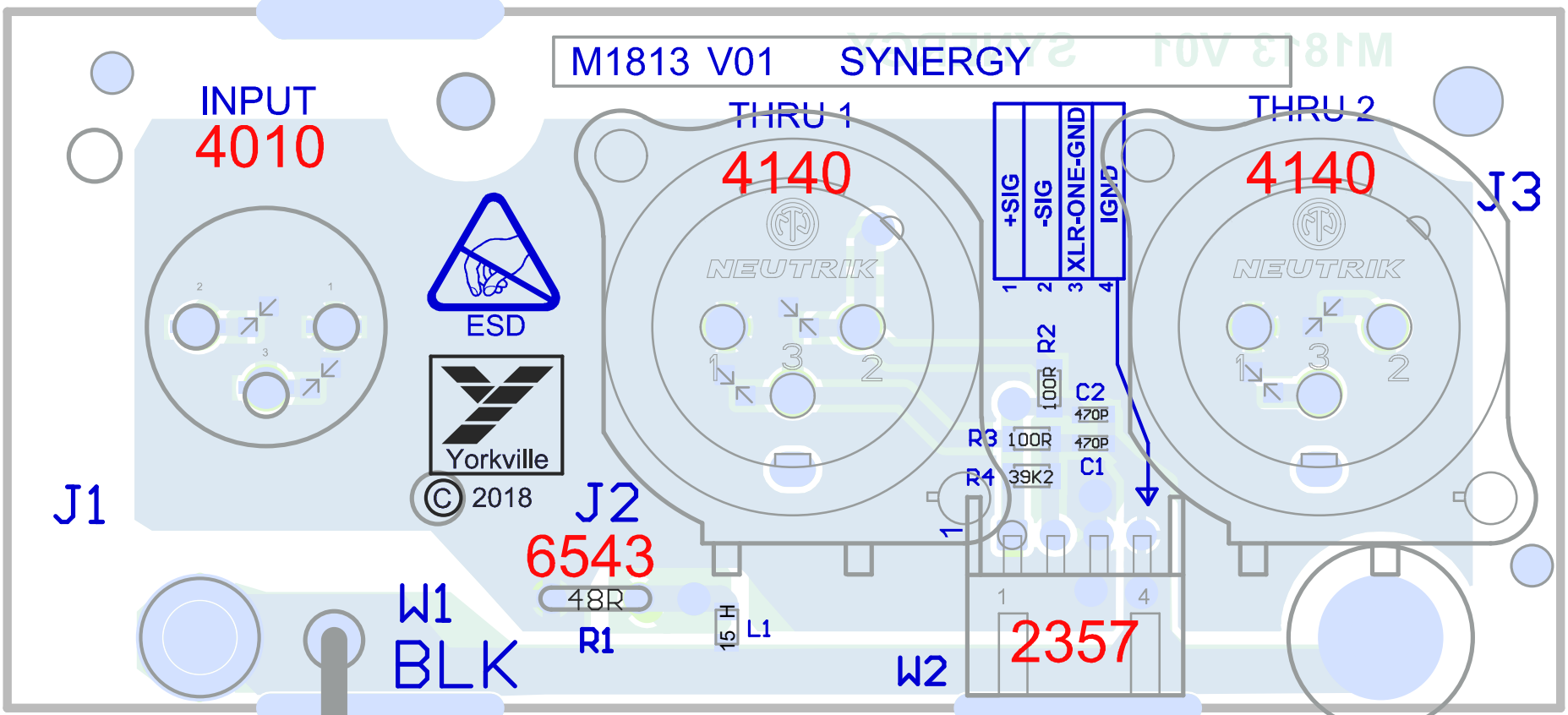
CHANGE HISTORY

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



M1813 V01 SYNERGY

INPUT
4010

THRU 1
4140

THRU 2
4140

J3



© 2018

J1

J2

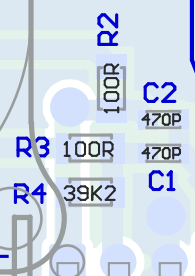
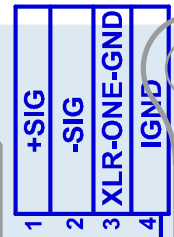
6543

W1
BLK

48R
R1

15 H
L1

W2



2357

BLACK 5 INCH

#3489

PCB ASSEMBLY DOCUMENTATION

SPECIAL PRODUCTION NOTES

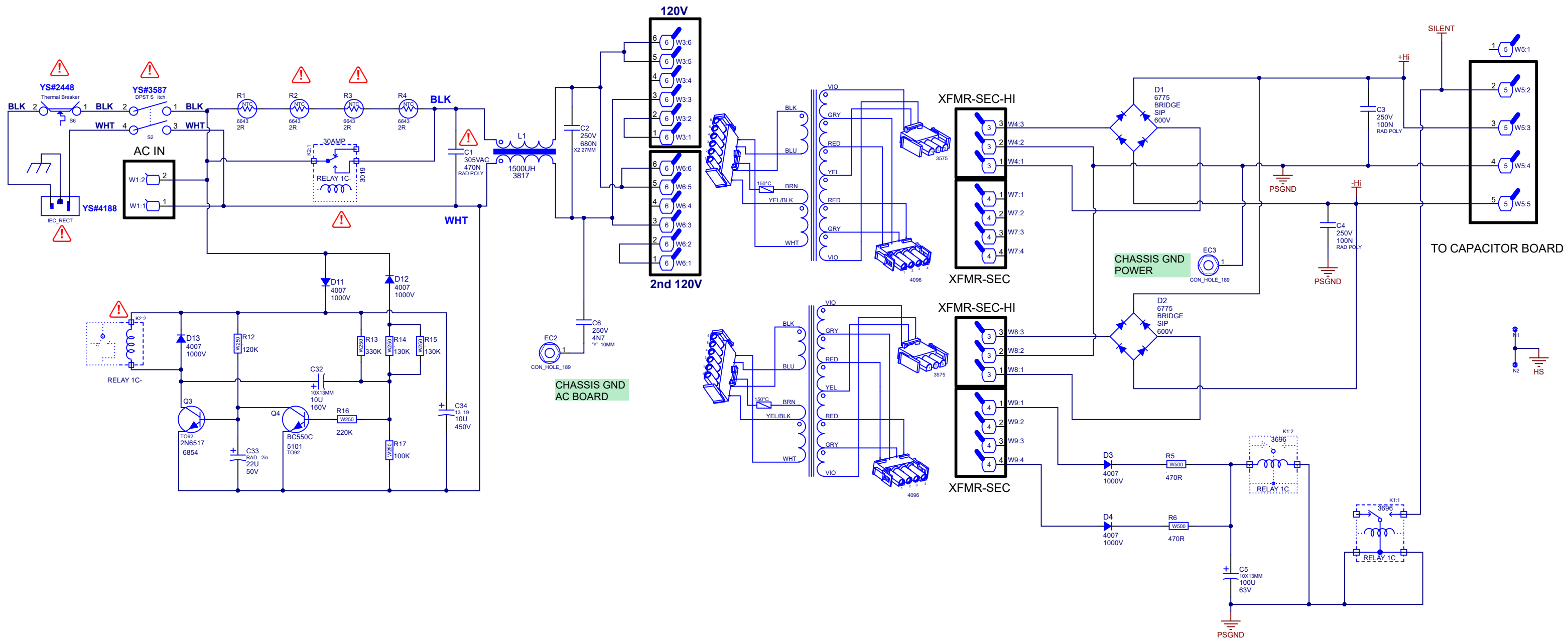
1. PCBSA: R1 #6543 IS HAND INSERTED.

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	22-OCT-2018	V01	.	RELEASED FOR PRODUCTION.
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POWER SUPPLY SA315S



! CRITICAL SAFETY COMPONENTS
THIS SYMBOL IS PLACED AD ACENT TO
SAFETY CRITICAL COMPONENTS

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	12-NOV-2018	V01P1		RELEASED FOR PRODUCTION
2	26-FEB-2019	V02		RELEASED FOR PRODUCTION
3	14-SEP-2023	.	9984	Replace C1 ith YS 5193 470N
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PINOUT DIAGRAMS

9050 5000
Blan Si e 229 870mm 127 000mm
Into Wa e

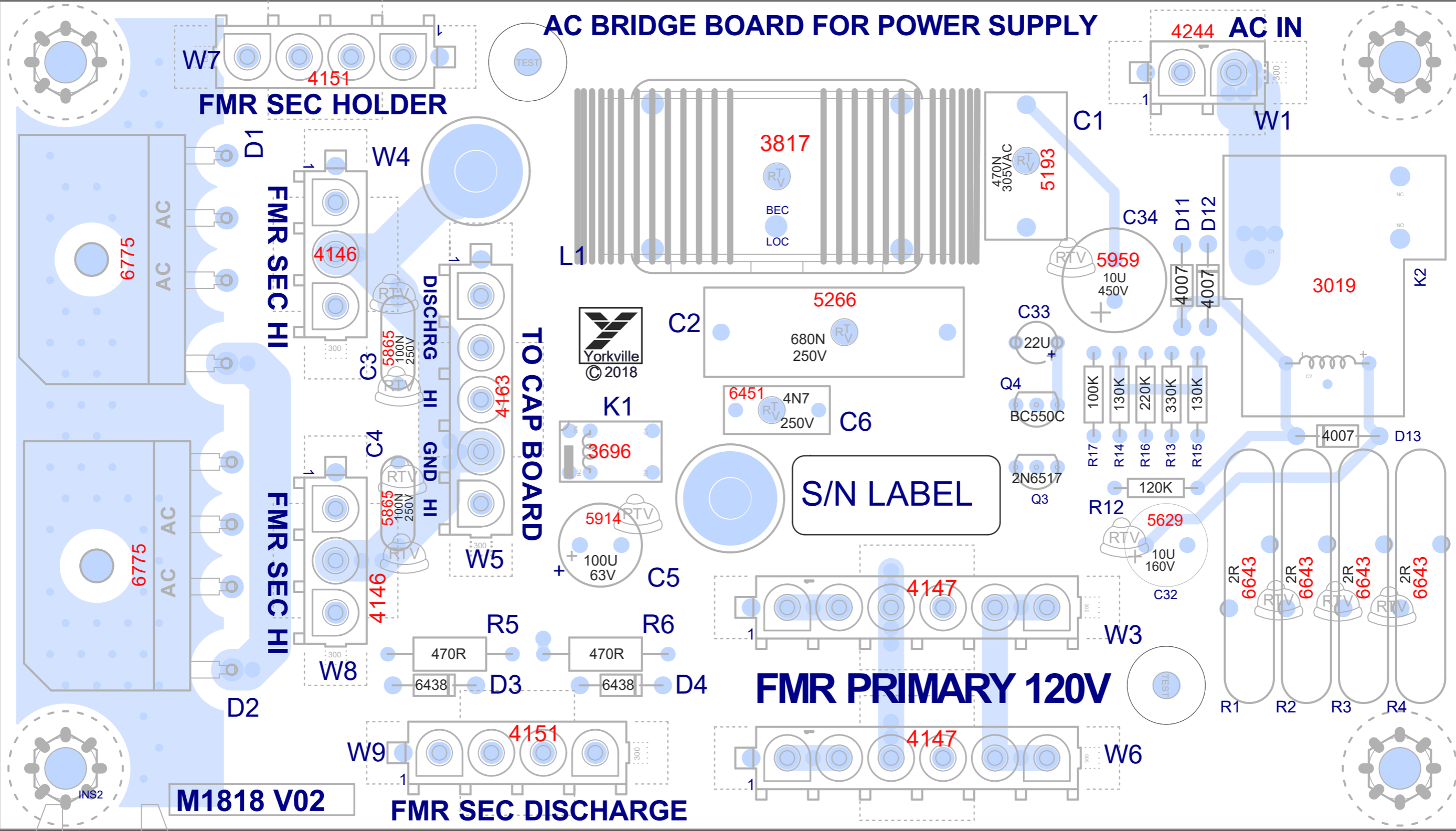
Score

Score

Blan Si e 229 870mm 127 000mm 9050 5000

DRV 03

CLINCH
ORIGIN



M1818 V02 SA115S/SA218S/SA315S

Score

INSE
SECOND

PCB ASSEMBLY DOCUMENTATION

1. RTV between tall components and here indicated
2. When applying RTV to R1-R4, it should only be placed along the tops of the varistors.
3. Separate board from panel with appropriate tool.

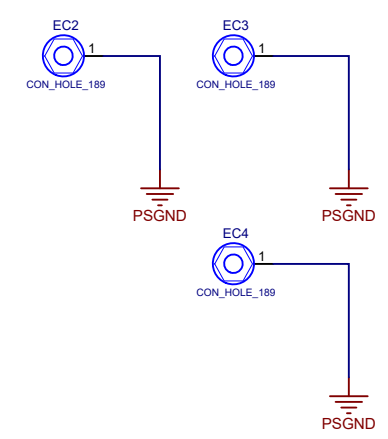
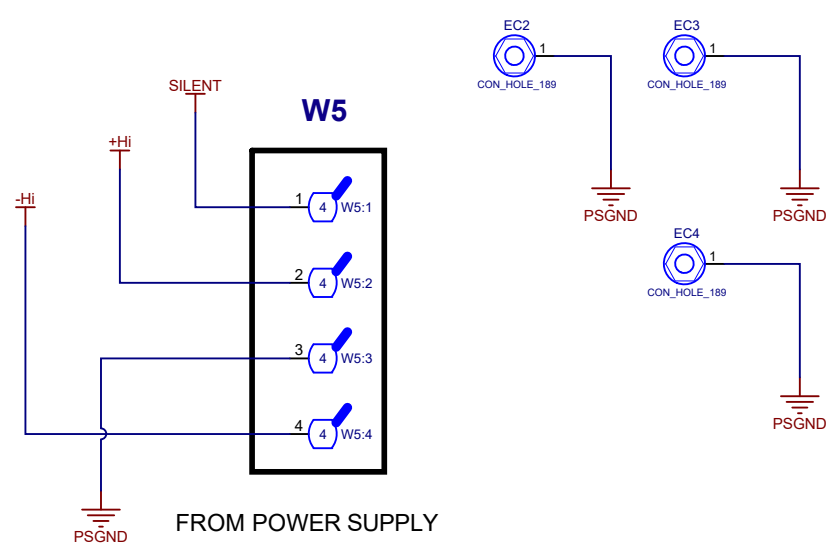
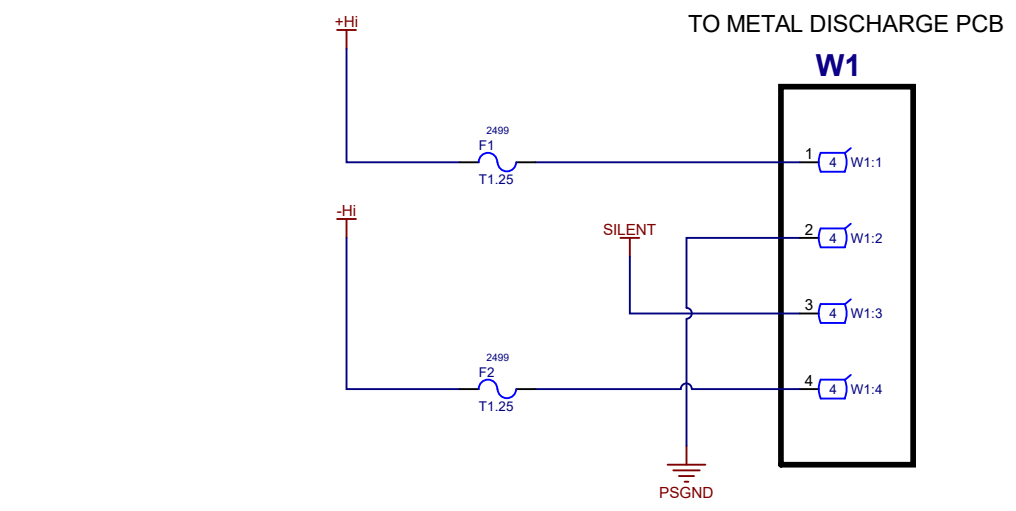
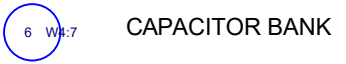
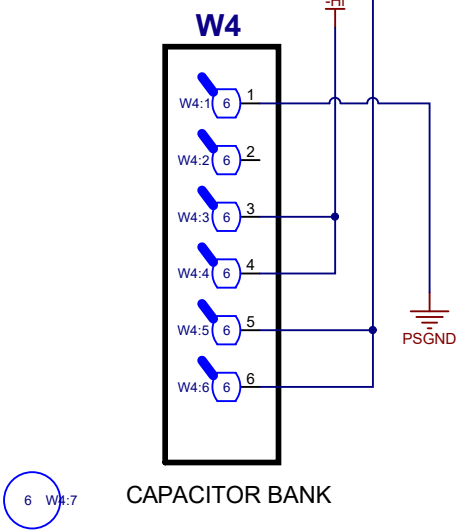
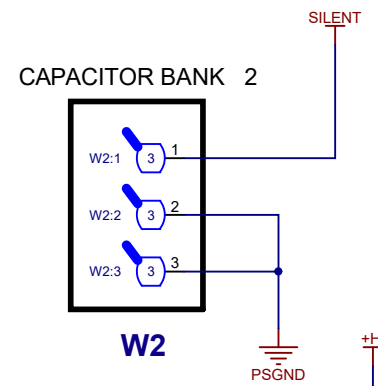
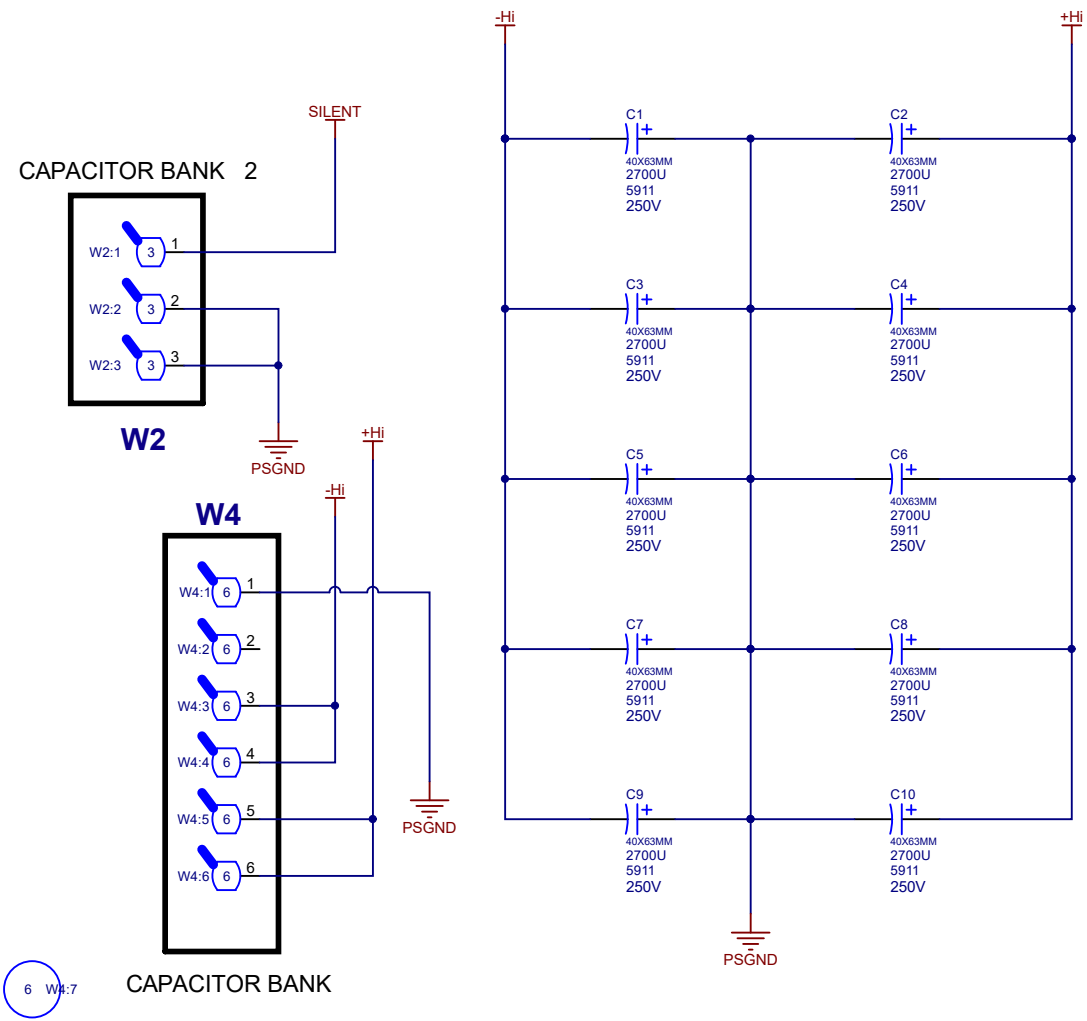
DESIGN HISTORY AND INFORMATION

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PINOUT DIAGRAMS



DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

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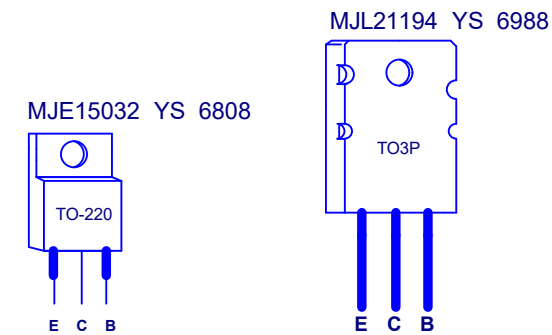
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POTENTIOMETERS AND KNOBS

POTENTIOMETERS/SWITCHES AND KNOBS				
REF	FUNCTION	POT/SW YS#	STYLE	KNOB#
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PINOUT DIAGRAMS



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Into Wave

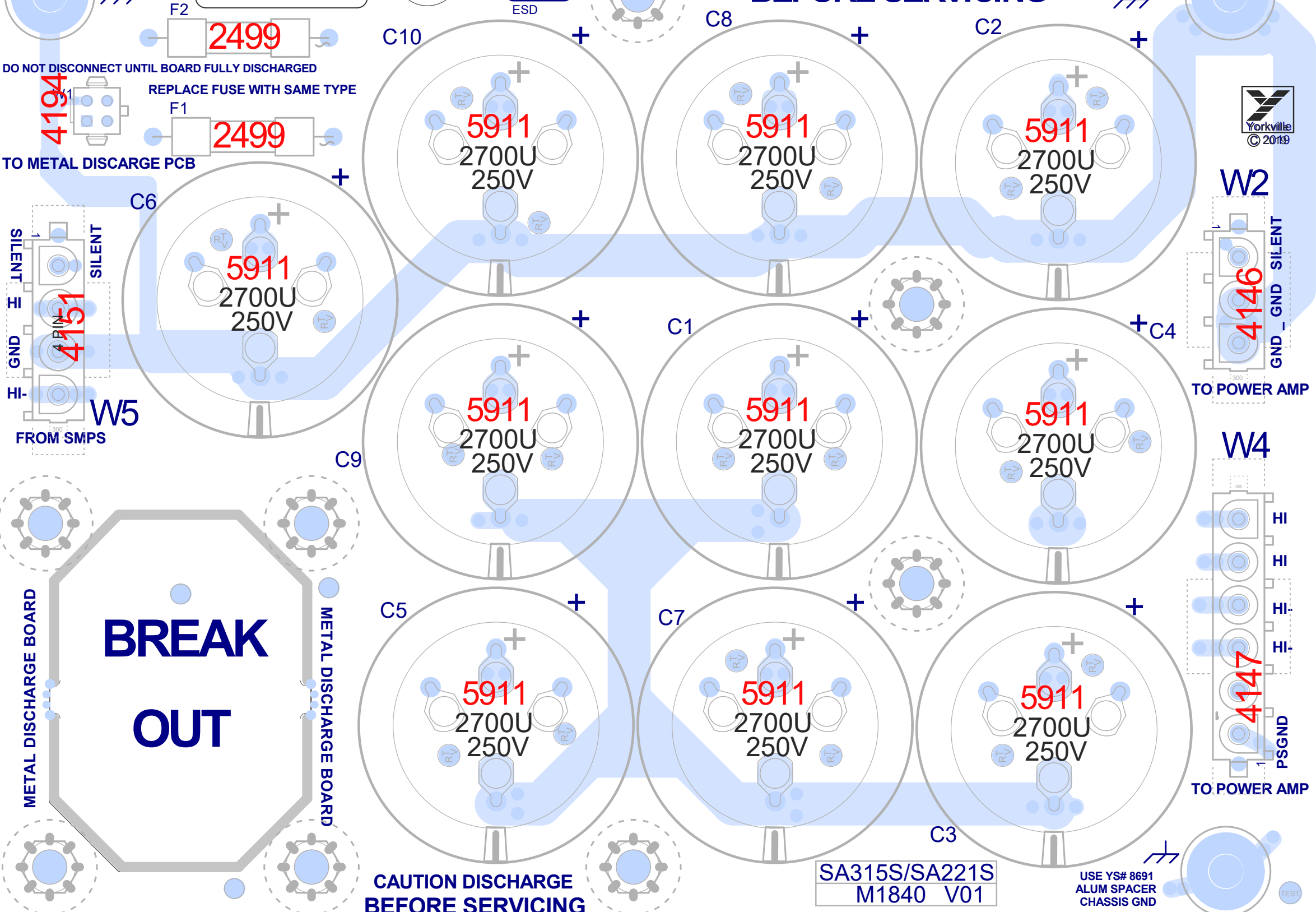
Blan Si e - 220.98mmX171.45mm 8700X6750

USE YS# 8691
ALUM SPACER
CHASSIS GND

S/N LABEL

**CAUTION DISCHARGE
BEFORE SERVICING**

USE YS# 8691
ALUM SPACER
CHASSIS GND



© 2019

**BREAK
OUT**

**CAUTION DISCHARGE
BEFORE SERVICING**

Score

CLINCH
ORIGIN

M1840V01

SA315S/SA221S

PCB ASSEMBLY DOCUMENTATION

1. RTV ALL LARGE AND TALL CAPS AND RTV HOLES PROVIDED.



Section: Assembly Documentation			
Product(s): SA315S/SA221S			
PCB#: M1840	Rev#: V01	EML Rev#: 02	Sheet 2 Of 4
Modified: 2020-03-19	File: Assembly.SchDoc	Tmp Rev: V032	

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

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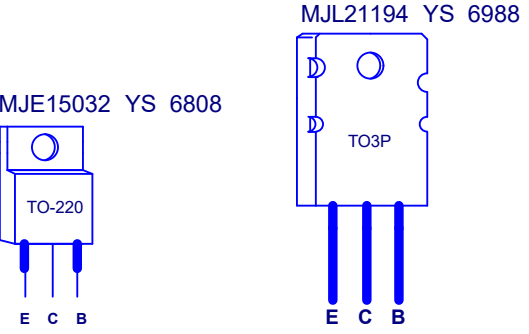
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POTENTIOMETERS AND KNOBS

POTENTIOMETERS/SWITCHES AND KNOBS				
REF	FUNCTION	POT/SW YS#	STYLE	KNOB#
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PINOUT DIAGRAMS



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SYNERGY

ACTIVE SUBWOOFER

SA315S

1. Power Switch and Indicator

The green power LED illuminates when the power switch is turned to the On position and AC voltage is supplied. When the power is removed or the power switched is moved to the off position the green power indicator will blink while the power supply is discharging. The processing circuitry will not reboot unless the power supply is fully discharged before being turned back on. It is not necessary to reboot however. Turning the power back on before the power supply is discharged will simply resume normal operation.

2. PowerCON TRUE AC Loop Thru

As a standard, the AC inlet on the SA315S accepts locking PowerCON TRUE power cords. There is also an AC outlet that can be used to loop power through to other cabinets in your array using a male to female PowerCON TRUE looping power cord. Check with your local Yorkville dealer for availability of these accessory cords.

IMPORTANT: DO NOT EXCEED THE CURRENT RATING OF THE POWER and ACCESSORY CORDS. PLEASE READ THE SECTION OF THIS MANUAL CALLED "CASCADE INSTALLATION."

3. Input Jack

This female-XLR accepts line level XLR microphone cables. For best noise reduction use balanced sources.

4. Dual Link Outputs

These XLR male connectors can be used with a standard XLR cable to daisy-chain up to 20 SA315S cabinets without signal degradation. Simply loop from one cabinet's Link jack to the next cabinets Input jack. In many cases this limit of 20 cabinets can be exceeded, consult Yorkville Sound for more details.

5. SA315S Level Control

This control adjusts the volume level of the SA315S relative to the input signal level. Mixers and other audio sources connected to the SA315S tend to

have different output voltages, which mean the level control on the SA315S is used to fine tune the cabinet's volume relative to the mixer settings. It is perfectly acceptable to set the SA315S Level above or below the center 0 dB setting.

6. Clip, X-Max, VC-Therm, Activity Indicators

The Clip and Limit LED indicators illuminate to guide the user to proper operating levels.

Illumination either of the yellow Limit LEDs indicates that a level has been reached where the SA315S limiters are reducing the signal internally to prevent damage or distortion. It also indicates that further increases in input level or increasing the SA315S Level control position will not appreciably increase acoustic output.

The red Clip LED indicates that the input level is excessive and further increases in level will cause severe distortion. The input signal should be reduced at the source until Clip activity ceases. The clip indicator comes on at 12 Vrms, 16 volts peak. The input clips at 17 Vrms, 24 volts peak.

The activity Indicator comes on at 5 mVrms or -45 dBV.

7. Average Power Limit Control

The average power limit control allows the power to be reduced to allow operation on limited power availability. Full power transients will be allowed through but if the average power is excessive then the power will be limited. This control works by advancing the limiter that limits the voice coil temperature. In the 100% position the power is limited only by the voice coil temperature. In the 75% position music with deep continuous bass will be limited but many types of music will not. In the 50% position only certain types of music will not be limited, primarily music without deep bass or where the bass is unprocessed. Voice applications typically will not be limited in the 50% position.

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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4625 Witmer Industrial Estate
Niagara Falls, New York
14305 USA

Printed In CANADA

QuickStart-SA315S-00-1v0 • YS#QSTART-SA315S • June 24, 2022



SYNERGY

ACTIVE SUBWOOFER

SA315S

1. Interrupteur et Indicateur d'Alimentation

Le voyant d'alimentation vert s'allume lorsque l'interrupteur d'alimentation est réglé sur la position ON et que la tension CA est appliquée. Lorsque l'alimentation est coupée ou que l'interrupteur d'alimentation est placé en position OFF, le voyant vert d'alimentation clignote pendant que l'alimentation se décharge. Le circuit de traitement ne redémarrera pas si l'alimentation n'est pas complètement déchargée avant d'être remise sous tension. Il n'est cependant pas nécessaire de redémarrer. Si vous remettez l'appareil sous tension avant que l'alimentation ne soit déchargée, le fonctionnement normal reprendra simplement.

2. Boucle CA PowerCON TRUE

En standard, l'entrée CA du SA315S est compatible avec les cordons d'alimentation PowerCON TRUE à verrouillage. Il y a également une prise CA qui peut être utilisée pour alimenter en boucle d'autres enceintes de votre réseau en utilisant un cordon d'alimentation PowerCON TRUE mâle à femelle. Vérifiez auprès de votre revendeur Yorkville local pour vérifier la disponibilité de ces cordons accessoires.

IMPORTANT: NE PAS DÉPASSER LE COURANT MAXIMAL DES CORDONS D'ALIMENTATION ET D'ACCESSOIRES. VEUILLEZ LIRE LA SECTION DU MANUEL DU PROPRIÉTAIRE APPELÉ "INSTALLATION EN CASCADE."

3. Prise d'Entrée

Cette prise femelle-XLR est compatible avec les câbles de microphone XLR de niveau ligne. Pour une meilleure réduction du bruit, utilisez des sources équilibrées.

4. Sorties Dual Link

Ces connecteurs mâles XLR peuvent être utilisés avec un câble XLR standard pour relier en chaîne jusqu'à 20 enceintes SA315S sans dégradation du signal. Il suffit de faire une boucle entre la prise Link d'une enceinte et la prise Input de l'enceinte suivante. Dans de nombreux cas, cette limite de 20 enceintes peut être dépassée, consultez Yorkville Sound pour plus de détails.

5. Commande de Niveau SA315S

Cette commande permet de régler le niveau de volume du SA315S par rapport au niveau du signal d'entrée. Les tables de mixage et autres

sources audio connectées au SA315S ont tendance à avoir des tensions de sortie différentes, ce qui signifie que la commande de niveau sur le SA315S est utilisée pour affiner le volume de l'enceinte par rapport aux réglages de la table de mixage. Il est parfaitement acceptable de régler le niveau du SA315S au-dessus ou au-dessous du réglage central de 0 dB.

6. Indicateurs d'Activité Clip, X-Max, VC-Therm,

Les indicateurs DEL Clip et Limit s'allument pour guider l'utilisateur vers les niveaux de fonctionnement appropriés.

L'illumination de l'une ou l'autre des DEL jaunes de limite indique qu'un niveau a été atteint où les limiteurs du SA315S réduisent le signal de façon interne pour éviter tout dommage ou distorsion. Il indique également que d'autres augmentations du niveau d'entrée ou de la position de la commande de niveau du SA315S n'augmenteront pas sensiblement la sortie acoustique.

La DEL Clip rouge indique que le niveau d'entrée est excessif et que toute augmentation supplémentaire du niveau entraînera une distorsion grave. Le signal d'entrée doit être réduit à la source jusqu'à ce que l'activité d'écrêtage cesse. La DEL Clip s'allume à 12 Vrms, 16 volts crête. L'entrée s'écrête à 17 Vrms, 24 volts crête.

L'indicateur d'activité s'allume à 5 mVrms ou -45 dBV.

7. Commande de Limite de la Puissance Moyenne

La commande de limite de la puissance moyenne permet de réduire la puissance pour permettre un fonctionnement avec une disponibilité de puissance limitée. Les transitoires à pleine puissance seront permises, mais si la puissance moyenne est excessive, la puissance sera limitée. Cette commande fonctionne en faisant avancer le limiteur qui limite la température de la bobine mobile. Dans la position 100%, la puissance est limitée uniquement par la température de la bobine mobile. Dans la position 75%, la musique avec des basses profondes et continues sera limitée, mais de nombreux types de musique ne le seront pas. En position 50%, seuls certains types de musique ne seront pas limités, principalement la musique sans basses profondes ou lorsque les basses ne sont pas traitées. Les applications vocales ne seront généralement pas limitées en position 50%.

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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Yorkville Synergy Convenience Receptacle Installation (Cascade Installation)

RATED CURRENT

Table 1 - SYNERGY RATED CURRENT

MAINS VOLTAGE	MODEL	RATED CURRENT (Arms)	LINE CURRENT ^a LIMIT SWITCH (Arms)		
			MAX	80%	60%
120V 60 Hz (NORTH AMERICA)	SA102	1.0			
	SA153	2.5			
	SA115S	3.0			
	SA221S	11.0	11.0	8.0	6.0
	SA315S	10.2	10.2	10.2	8.1
230V 50 Hz (EUROPE)	SA102	0.5			
	SA153	1.5			
	SA221SCE	6.3	6.3	4.0	3.0

^a The LINE CURRENT LIMIT SWITCH allows the user to limit the maximum continuous current consumption to reduced values as shown.

Tech Support: If you have any questions concerning your SYNERGY equipment don't hesitate to contact synergy@yorkville.com

ELECTRICAL SAFETY

It is always important to connect **all** sound reinforcement equipment to ac mains supply circuits that have proper electrical safety grounds. Never break off the Earth Ground pin from a 3-prong plug. This pin provides personal protection from electrical shock and protection of the equipment from lightning strikes and electrostatic buildup. It is also required for EMC shielding. Replace the plug if the Earth Ground pin is missing.

1. Always connect the equipment to a circuit with a suitable electrical ground.
2. Do not overload the power cords and convenience outlets.
3. Always inspect the cords and plugs before use. Do not use outlets or cords that have exposed conductors, are worn or damaged. Replace electrical cords that have worn or damaged insulation and remember to pull the plug not the cord to prevent damage to the cord. Only replace with the equivalent heavy-duty cord supplied by the manufacturer.
4. 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. 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 accessible. Unplug the apparatus during lightning storms or when unused for long periods of time. Route cords away from traffic to avoid tripping hazards and unnecessary wear on the power cord.
5. Never Break Off the Third Prong on a Plug. Replace broken 3-prong plugs and make sure the third prong is properly grounded.
6. Keep line cords away from heat, water and oil. They can damage the insulation and create a shock hazard.
7. Do not tie cords in tight knots. Knots can cause short circuits and shocks. Loop the cords or use a twist lock plug.



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Installation d'Un Réceptacle de Commodité Yorkville Synergy (Installation en Cascade)

COURANT NOMINAL

Tableau 1 - COURANT NOMINAL DE SYNERGIE

TENSION PRINCIPALE	MODÈLE	COURANT NOMINAL (Armes)	COURANT DE LIGNE ^a COMMUTATEUR DE LIMITEUR (Armes)		
			MAX	80%	60%
120V 60 Hz (AMÉRIQUE DU NORD)	SA102	1.0			
	SA153	2.5			
	SA115S	3.0			
	SA221S	11.0	11.0	8.0	6.0
	SA315S	10.2	10.2	10.2	8.1
230V 50 Hz (EUROPE)	SA102	0.5			
	SA153	1.5			
	SA221SCE	6.3	6.3	4.0	3.0


^a Le commutateur LINE CURRENT LIMIT permet à l'utilisateur de limiter la consommation maximale de courant continu à des valeurs réduites comme indiqué.

Support technique : Si vous avez des questions concernant votre équipement SYNERGY, n'hésitez pas à contacter synergy@yorkville.com.

SÉCURITÉ RELATIVE À L'ÉLECTRICITÉ

Il est toujours important de connecter **tous les** équipements de sonorisation à des circuits d'alimentation secteur dotés de mises à la terre de sécurité électrique appropriées. Ne coupez jamais la broche de mise à la terre d'une fiche à trois broches. Cette broche assure la protection des personnes contre les chocs électriques et la protection de l'équipement contre la foudre et l'accumulation d'électricité statique. Elle est également nécessaire pour le blindage CEM. Remplacez la fiche si la broche de mise à la terre est absente.

1. Connectez toujours l'équipement à un circuit avec une mise à la terre électrique appropriée.
2. Ne surchargez pas les cordons d'alimentation et les prises de courant.
3. Inspectez toujours les cordons et les fiches avant de les utiliser. N'utilisez pas de prises ou de cordons dont les conducteurs sont exposés, qui sont usés ou endommagés. Remplacez les cordons électriques dont l'isolation est usée ou endommagée et n'oubliez pas de tirer sur la fiche et non sur le cordon pour éviter d'endommager ce dernier. Ne remplacez le cordon électrique que par un cordon équivalent à usage intensif fourni par le fabricant.
4. Le cordon d'alimentation CA doit être acheminé de manière qu'il soit peu probable qu'il soit endommagé. Protégez le cordon d'alimentation pour qu'il ne soit pas piétiné ou pincé. Si le cordon d'alimentation CA est endommagé, NE PAS FAIRE FONCTIONNER L'APPAREIL. Pour déconnecter complètement cet appareil du secteur, débranchez la fiche du cordon d'alimentation de la prise de courant. La fiche du cordon d'alimentation doit rester facilement accessible. Débranchez l'appareil pendant les orages ou lorsqu'il n'est pas utilisé pendant de longues périodes. Acheminez les cordons à l'écart de la circulation pour éviter les risques de trébuchement et l'usure inutile du cordon d'alimentation.
5. Ne cassez jamais la troisième broche d'une fiche. Remplacez les fiches à trois broches cassées et assurez-vous que la troisième broche est correctement mise à la terre.
6. Gardez les cordons de ligne à l'écart de la chaleur, de l'eau et de l'huile. Ils peuvent endommager l'isolation et créer un risque de choc.
7. Ne faites pas de nœuds serrés avec les cordons. Les nœuds peuvent provoquer des courts-circuits et des chocs. Faites des boucles avec les cordons ou utilisez une fiche à verrouillage par torsion.



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