



BASS550

Powered Subwoofer

120 Volt & 230 Volt Versions

SERVICE MANUAL



JBL Consumer Products Inc.
80 Crossways Park West
Woodbury, N.Y. 11797
1-800-336-4JBL in the USA

H A Harman International Company

Part No.: 1112-JBLBASS550

TABLE OF CONTENTS

Specifications	1	Amplifier Exploded View	6
Features.....	2	Parts Lists.....	7
Powered Sub Test Setup.....	2	Revisions	10
Test Procedure.....	2	Printed Circuit Boards	11
Block Diagram.....	4	Integrated Circuit Diagrams	15
Cabinet Assembly Exploded View.....	5	Schematic Diagrams	16
Packaging Exploded View	5		

SPECIFICATIONS

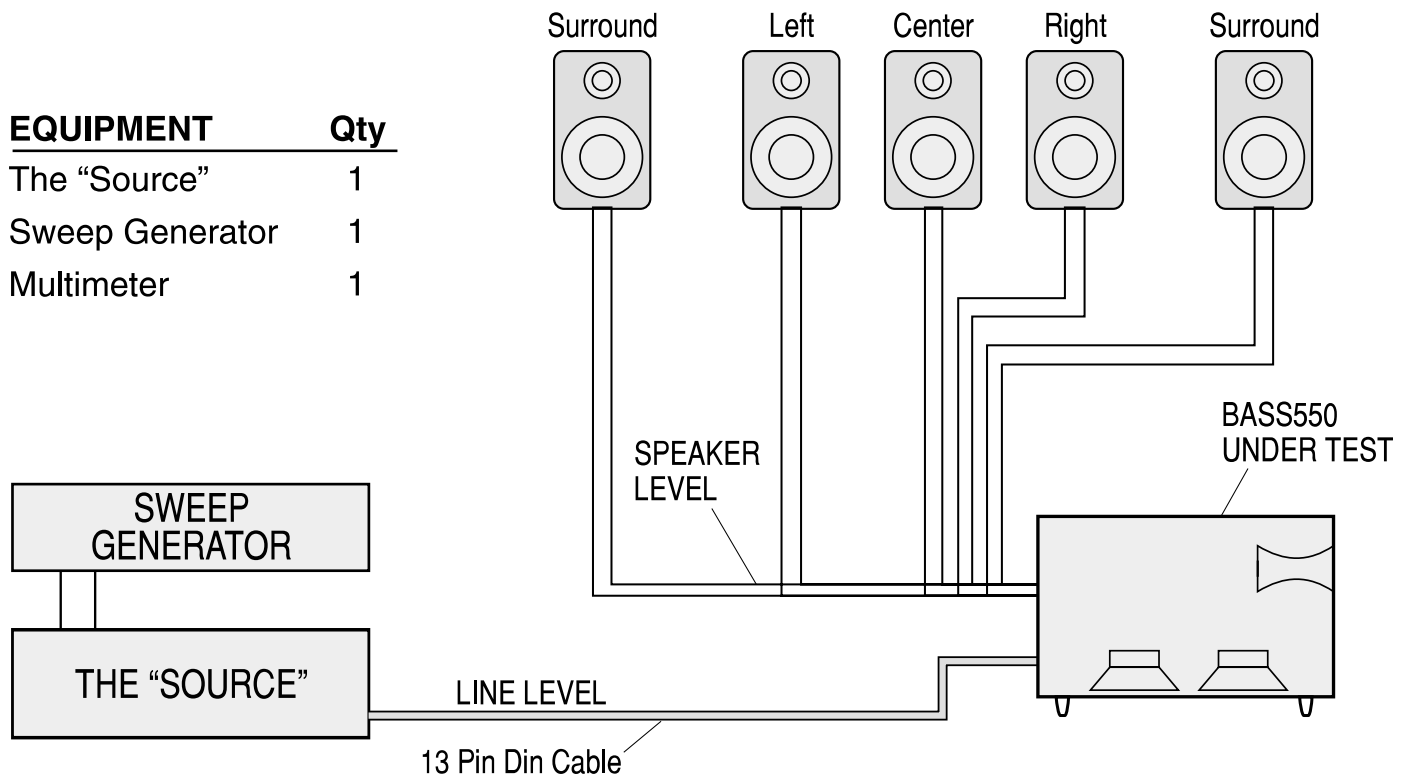
Amplifier Power (RMS)*	250 Watts Total 35 x 3 @ 0.1% THD 23 x 1 @ 0.1% THD 100 x 1 @ 0.1% THD
Low Frequency Woofer (2)	SE6H 6-1/2" Poly-Cone Woofer
Design	Bass Reflex Enclosure
Inputs	RCA Phono plugs at "Source"; 13 pin Din plug to Subwoofer
Outputs	(4) Full range Speaker; (1) Subwoofer
Crossover Frequency Subwoofer (-6dB)	150Hz
Frequency Response (-6dB)	
System	35Hz - 20kHz
Subwoofer.	35Hz - 150Hz
External Dimensions	
Height	15-3/4" (400mm)
Width	8-1/2" (216mm)
Depth	20" (508mm)
Weight	40 lbs. (18.2 kg)

JBL continually strives to improve its products. New materials, production methods and design refinements are introduced into existing models without notice as a routine expression of our design philosophy. For this reason, the Bass550 Subwoofer may differ in some respect from its published specifications and descriptions, but will always equal or exceed the original specifications unless otherwise stated.

FEATURES

- The Bass550 powered subwoofer is part of the ESC550 System.
- Amplifiers for five satellite speakers and subwoofer.
- 100 watt output.
- Variable level control.
- Line level input exclusively from the "Source".
- User friendly "auto on" circuit. Signal sensing automatically turns the subwoofer on so you don't have to; the subwoofer is meant to be left "on" without continually using the power switch.

BASS550 POWERED SUBWOOFER TEST SETUP



TEST PROCEDURE

Equipment needed:

- The "Source" AM/FM tuner/CD player w/ remote control.
- Function/signal generator/sweep generator.
- Multimeter.
- Cable - Phono plugs (RCA) and speaker cables.
- RCA Y-cable

Subwoofer, General Function

- 1) Connect both right and left phono jack (RCA) inputs to signal generator and the "Source" Tape/Aux. input jacks. Use Y-cable if necessary from mono source.
- 2) Connect Bass550 subwoofer to the "Source" with supplied 13 pin Din cable.

- 3) Plug in subwoofer, turn power switch on; red LED should light.
- 4) Turn on generator, adjust to **100 mV, 50 Hz**.
- 5) Push “power” button on the “Source”, (display should now be active); press “Tape/Aux” button, adjust volume (on Source) so display reads “VOLUME 30”.
- 6) Turn up level control on subwoofer full clockwise.
- 7) LED on subwoofer should cycle to green; bass response should be heard and felt from port tube opening.

Subwoofer, Sweep Function

- 1) Follow steps 1-7 above, using a sweep generator as a signal source.
- 2) Sweep generator from 20Hz to 300Hz. Listen to the cabinet and drivers for any rattles, clicks, buzzes or any other noises. If any unusual noises are heard, remove driver and test.

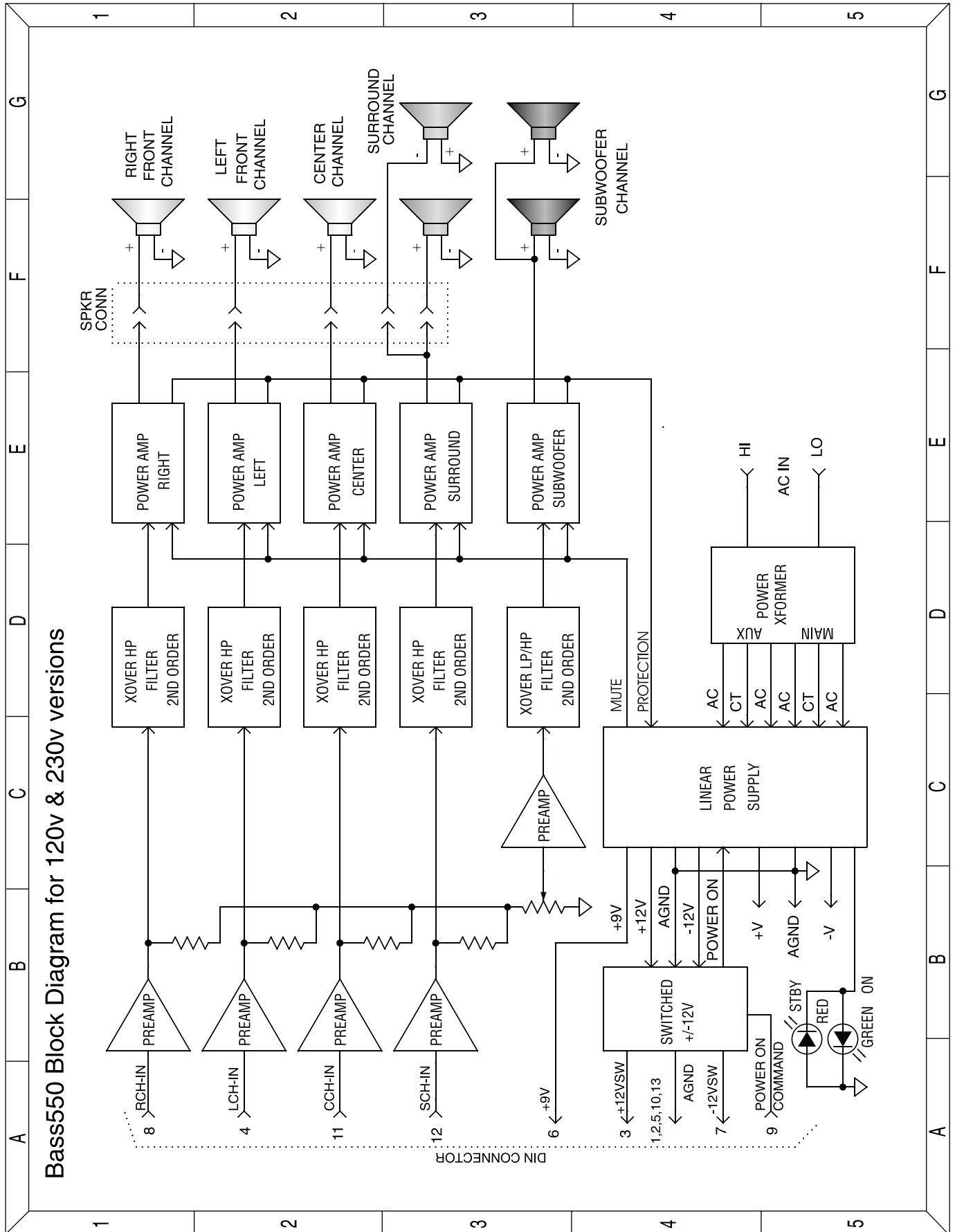
Subwoofer, Driver Function

- 1) Remove one or both drivers from cabinet; remove + and - wire clips.
- 2) Check DC resistance of driver; it should be approximately 5.8 ohms.
- 3) Connect a pair of speaker cables to driver terminals. Cables should be connected to an integrated amplifier fed by a signal generator. Turn on generator and adjust so that speaker level output is **4.0V**.
- 4) Sweep generator from **20Hz to 1kHz**. Listen to driver for any rubbing, buzzing, or other unusual noises.

System, General Function

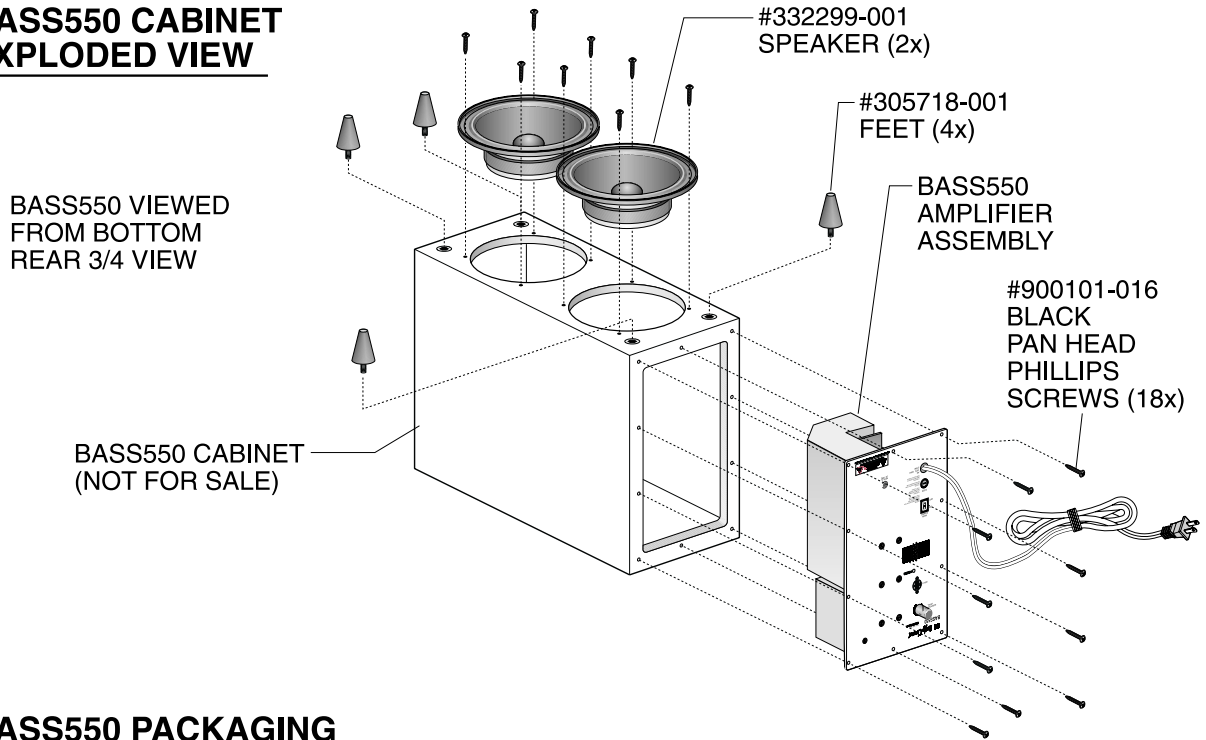
- 1) Connect Bass550 subwoofer to the “Source” with supplied 13 pin Din cable.
- 2) Attach all five satellite speakers to the supplied speaker cables, terminating in a molex connector plugged into the subwoofer.
- 3) Plug in Bass550 subwoofer, turn power switch on; red LED should light.
- 4) Push “power” button on the “Source”; (display should now be active).
- 5) Toggle “surround mode” button on front panel or with remote control until “NORMAL” appears.
- 6) Toggle “rear speaker” button on front panel until “REAR SPEAKERS” is displayed in upper left corner.
- 7) Adjust volume (on Source) so display reads “VOLUME 30”.
- 8) Using remote control, press “TONE” button.
- 9) White noise should be heard, cycling from Left, Center, Right and Rear speakers in succession.
- 10) Press “TONE” button again to halt test.

BASS550 (120v US & 230v European Versions) BLOCK DIAGRAM

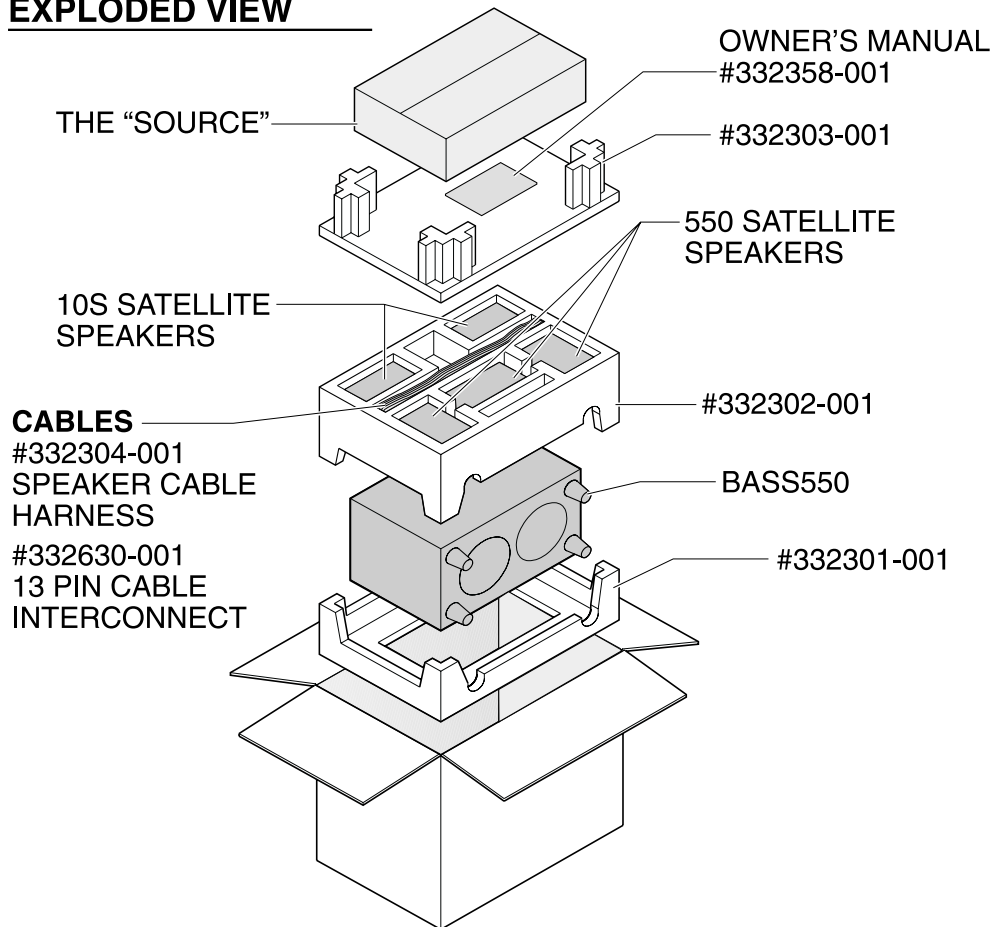


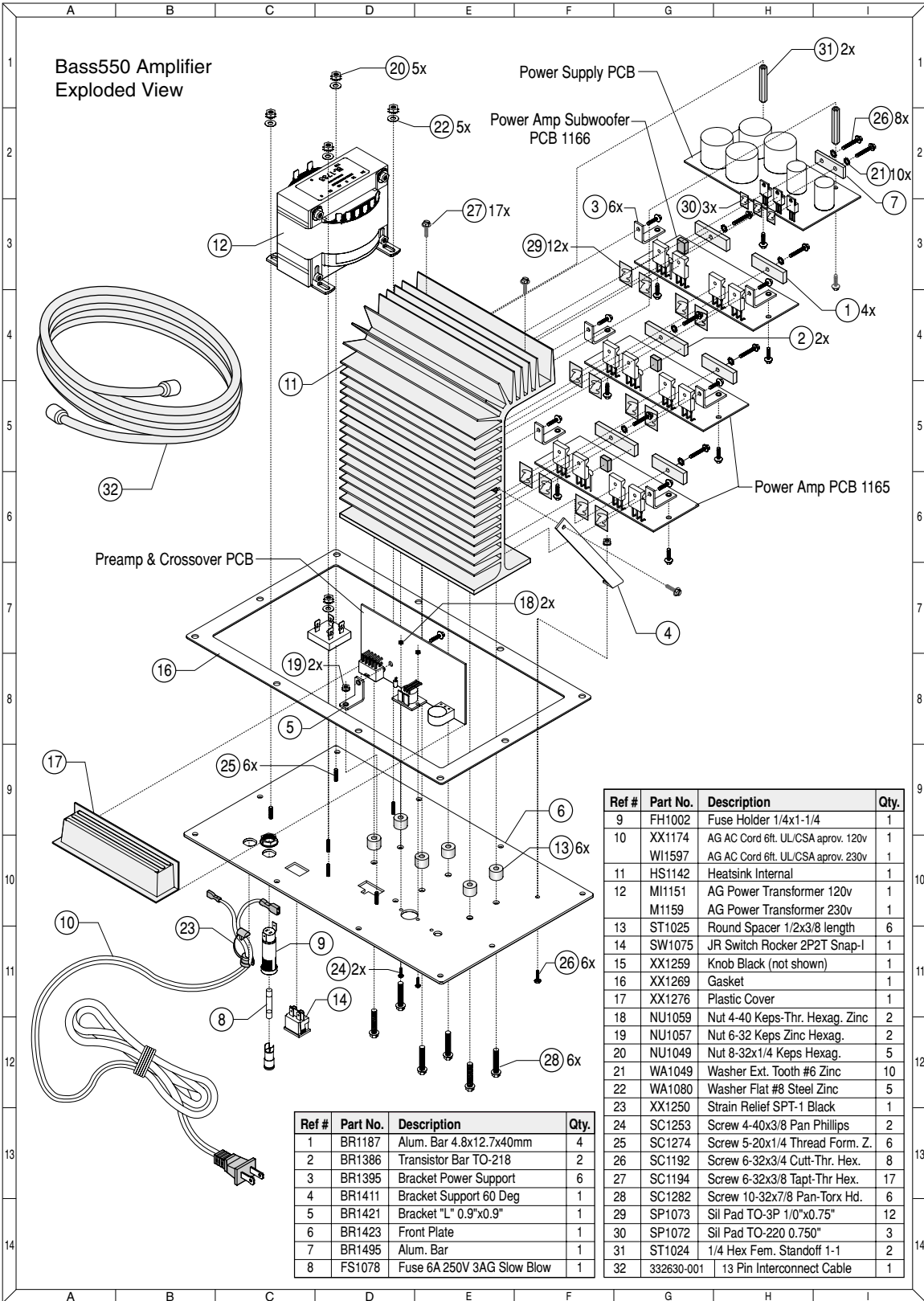
BASS550 CABINET ASSEMBLY & PACKAGING EXPLODED VIEWS

BASS550 CABINET EXPLODED VIEW



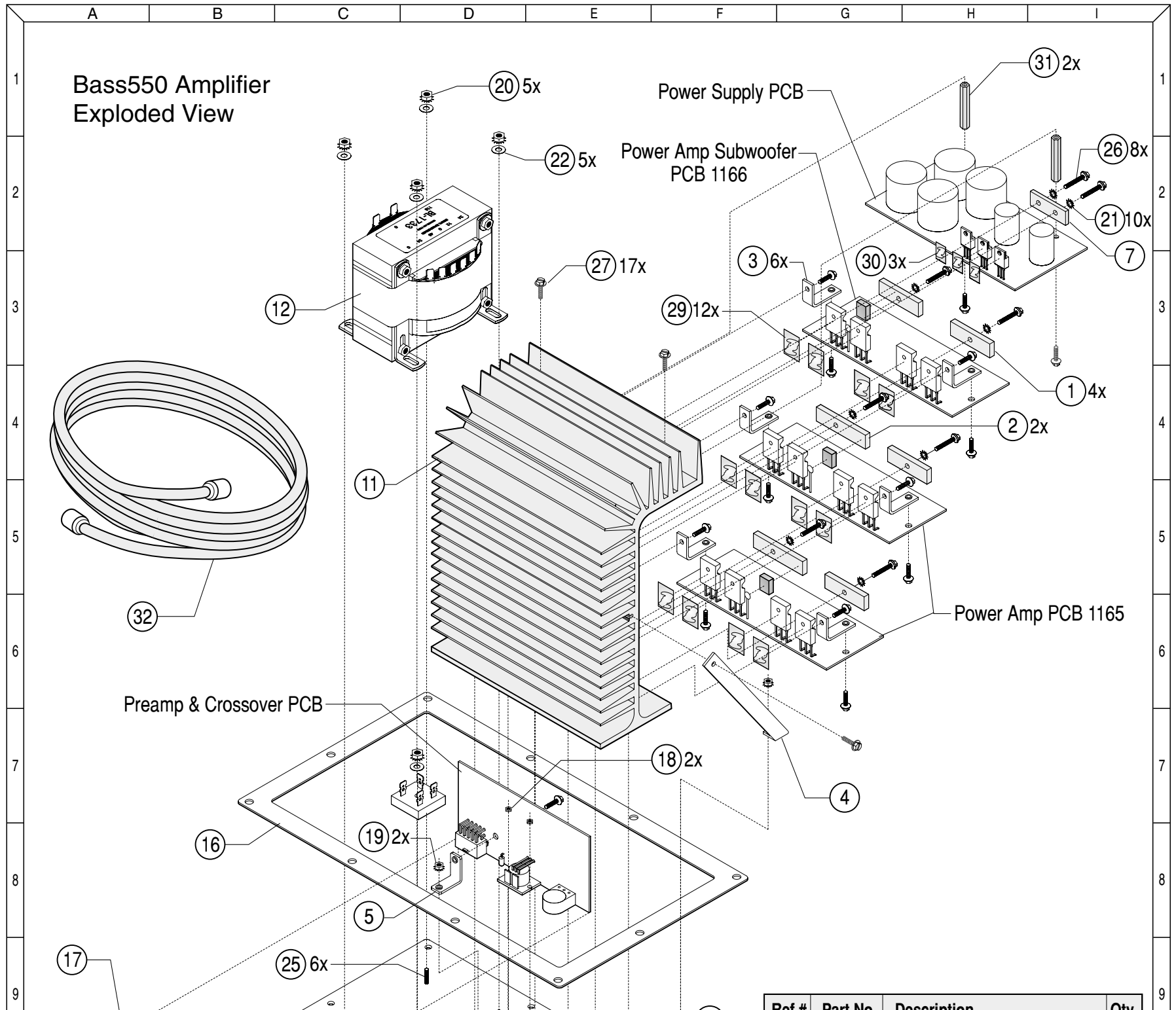
BASS550 PACKAGING EXPLODED VIEW





Ref #	Part No.	Description	Qty.
1	BR1187	Alum. Bar 4.8x12.7x40mm	4
2	BR1386	Transistor Bar TO-218	2
3	BR1395	Bracket Power Support	6
4	BR1411	Bracket Support 60 Deg	1
5	BR1421	Bracket "L" 0.9"x0.9"	1
6	BR1423	Front Plate	1
7	BR1495	Alum. Bar	1
8	FS1078	Fuse 6A 250V 3AG Slow Blow	1

Ref #	Part No.	Description	Qty.
9	FH1002	Fuse Holder 1/4x1-1/4	1
10	XX1174	AG AC Cord 6ft. UL/CSA aprov. 120v	1
	W11597	AG AC Cord 6ft. UL/CSA aprov. 230v	1
11	HS1142	Heatsink Internal	1
12	M11151	AG Power Transformer 120v	1
	M1159	AG Power Transformer 230v	1
13	ST1025	Round Spacer 1/2x3/8 length	6
14	SW1075	JR Switch Rocker 2P2T Snap-I	1
15	XX1259	Knob Black (not shown)	1
16	XX1269	Gasket	1
17	XX1276	Plastic Cover	1
18	NU1059	Nut 4-40 Keps-Thr. Hexag. Zinc	2
19	NU1057	Nut 6-32 Keps Zinc Hexag.	2
20	NU1049	Nut 8-32x1/4 Keps Hexag.	5
21	WA1049	Washer Ext. Tooth #6 Zinc	10
22	WA1080	Washer Flat #8 Steel Zinc	5
23	XX1250	Strain Relief SPT-1 Black	1
24	SC1253	Screw 4-40x3/8 Pan Phillips	2
25	SC1274	Screw 5-20x1/4 Thread Form. Z.	6
26	SC1192	Screw 6-32x3/4 Cutt-Thr. Hex.	8
27	SC1194	Screw 6-32x3/8 Tap-T-Thr Hex.	17
28	SC1282	Screw 10-32x7/8 Pan-Torx Hd.	6
29	SP1073	Sil Pad TO-3P 1/0"x0.75"	12
30	SP1072	Sil Pad TO-220 0.750"	3
31	ST1024	1/4 Hex Fem. Standoff 1-1	2
32	332630-001	13 Pin Interconnect Cable	1



Bass550 Amplifier Exploded View

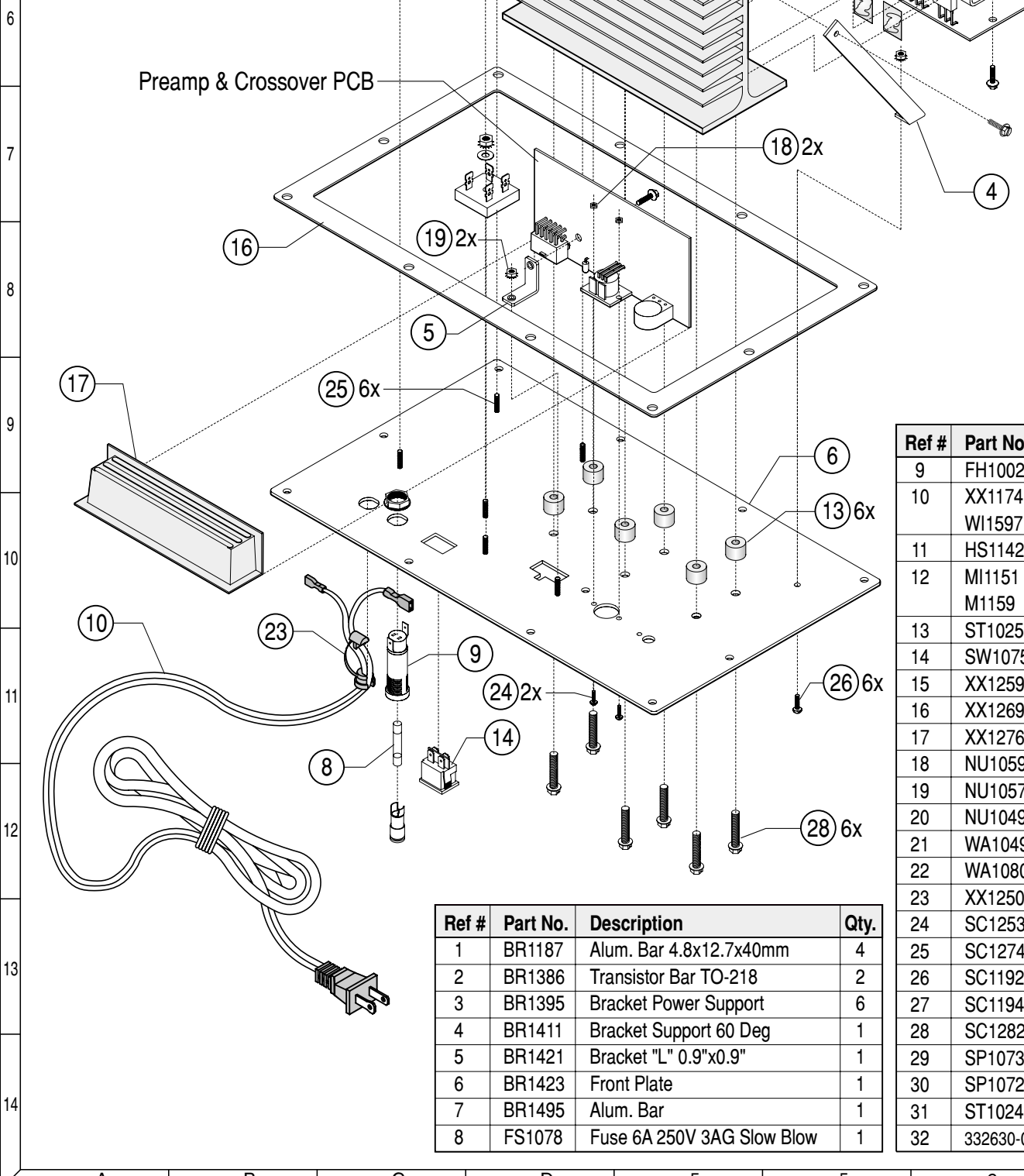
Power Supply PCB

Power Amp Subwoofer PCB 1166

Power Amp PCB 1165

Preamp & Crossover PCB

Ref #	Part No	Description	Qty
-------	---------	-------------	-----



Ref #	Part No.	Description	Qty.
1	BR1187	Alum. Bar 4.8x12.7x40mm	4
2	BR1386	Transistor Bar TO-218	2
3	BR1395	Bracket Power Support	6
4	BR1411	Bracket Support 60 Deg	1
5	BR1421	Bracket "L" 0.9"x0.9"	1
6	BR1423	Front Plate	1
7	BR1495	Alum. Bar	1
8	FS1078	Fuse 6A 250V 3AG Slow Blow	1

Ref #	Part No.	Description	Qty.
9	FH1002	Fuse Holder 1/4x1-1/4	1
10	XX1174	AG AC Cord 6ft. UL/CSA aprov. 120v	1
	WI1597	AG AC Cord 6ft. UL/CSA aprov. 230v	1
11	HS1142	Heatsink Internal	1
12	MI1151	AG Power Transformer 120v	1
	M1159	AG Power Transformer 230v	1
13	ST1025	Round Spacer 1/2x3/8 length	6
14	SW1075	JR Switch Rocker 2P2T Snap-I	1
15	XX1259	Knob Black (not shown)	1
16	XX1269	Gasket	1
17	XX1276	Plastic Cover	1
18	NU1059	Nut 4-40 Keps-Thr. Hexag. Zinc	2
19	NU1057	Nut 6-32 Keps Zinc Hexag.	2
20	NU1049	Nut 8-32x1/4 Keps Hexag.	5
21	WA1049	Washer Ext. Tooth #6 Zinc	10
22	WA1080	Washer Flat #8 Steel Zinc	5
23	XX1250	Strain Relief SPT-1 Black	1
24	SC1253	Screw 4-40x3/8 Pan Phillips	2
25	SC1274	Screw 5-20x1/4 Thread Form. Z.	6
26	SC1192	Screw 6-32x3/4 Cutt-Thr. Hex.	8
27	SC1194	Screw 6-32x3/8 Tapt-Thr Hex.	17
28	SC1282	Screw 10-32x7/8 Pan-Torx Hd.	6
29	SP1073	Sil Pad TO-3P 1/0"x0.75"	12
30	SP1072	Sil Pad TO-220 0.750"	3
31	ST1024	1/4 Hex Fem. Standoff 1-1	2
32	332630-001	13 Pin Interconnect Cable	1

BASS550 ELECTRICAL PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	QTY	REF. NO.	PART NO.	DESCRIPTION	QTY
Power Supply PCB 1163							
Connectors				Capacitors			
CONN1	CO1335	CONNECTOR 6410 SERIES 6 T	1	C1, 1A, 1B, 1C	CP1415	ALUM EL. 2.2uF 20%	4
-V, +V	CO1347	CONNECTOR 41791 SERIES 3	2	C2, 2A, 2B, 2C	CP1473	SMD 220pF 10% 50V NPO	4
GND	CO1348	CONNECTOR 41791 SERIES 4	1	C3, 3A, 3B, 3C, 16, 17	CP1352	ALUM EL. 22uF 20% 25V	6
+, 1, CT(5), GND	TE1175	TERMINAL MALE TAB. 0.032"x0.25	4	C4, 4A, 4B, 4C	CP1344	POLY FIL 0.33uF 10%	4
AC(7), AC(9), CT(8)	TE1185	TERMINAL MALE TYPE QUICK-FIT	3	C5, 5A, 5B, 5C	CP1632	POLY FILM 0.033uF 5%	4
Capacitors				C8	CP1412	ALUM EL. 47uF 20% 16V	1
C1-4	CP1545	ALUM EL. 4700uF 20% 50V	4	C9, 11, 12	CP1495	POLY FILM 0.1uF 5% 63	3
C5, 6, 11, 12, 15, 16, 19, 20, 21, 22, 23, 24	CP1426	SMD 0.1uF 20% 50V Z5U	12	C10	CP1534	POLY FILM 15nF 5% 63V	1
C7	CP1552	SMD 0.1uF 20% 100V Z5U	1	C14, 14A, 14B, 14C, 15, C15A, 15B, 15C, 18, 19, C20, 21	CP1426	SMD 0.1uF 20% 50V Z5U	12
C8	CP1520	SMD 0.01uF 10% 50V T/R	1	C22-25	CP1442	SMD 4.7nF 10% 100V	4
C9, 10	CP1624	ALUM EL. 2200uF 20% 35V	2	Diode			
C13, 14, 25	CP1417	ALUM EL. 22uF 20% 16V T/R	3	D1, 2, 3	DI1132	SMD DIODE 1N4148 LL-34 PKG	3
C17, 18	CP1424	ALUM EL. 10uF 20% 16V T/R	2	Intergrated Circuits			
C26, 27	CP1690	0.01uF 100V	2	IC1, 2, 3, 4	IC1041	NJM072 DUAL J-FET OP-AMP	4
Diodes				IC5	IC1162	NMJ074 QUAD J-FET OP-AMP	1
DI1185	Main Diode Bridge		1	Resistors			
D1-5	DI1010	1N4002 1A/100V AXIAL	5	J1-10, 12-15, 18, 23, 26, 27, 32	RS1779	SMD ZERO Ω JUMPER	19
D6-10	DI1132	SMD 1N4148 LL-34 PKG T/R	5	P1	RS1794	POT 50KΩ 20% LOG TAPER	1
ZD1	DI1129	MBZ5240B 10V ZENER	1	R1, 1A-1C, 22, 24, 29, 32	RS1700	SMD 1KΩ 5% 1/8W	8
Fuses				R2, 2A, 2B, 2C	RS1706	SMD 47KΩ 5% 1/8W	4
F1 (120V Version)	FS1078	FUSE 6A 250V 3AG SLOW BLOW	1	R3, 3A-3C, 9, 26	RS1705	SMD 4.7KΩ 5% 1/8W	6
F1 (230V Version)	FS1078	FUSE 3.15A 250V 3AG SLOW BLOW	1	R4, 4A-4C, 7, 10, 15-17, R21, 23, 25, 28	RS1701	SMD 10KΩ 5% 1/8W	13
F3, 4, 5	FS1055	FUSE FAST 3A/125V PICO T/R	3	R5, 5A, 5C	RS2282	SMD 4.32KΩ 1% 1/8W	3
F6, 7 (230V Version)	FS1055	FUSE FAST 3A/125V PICO	2	R5B	RS1876	SMD 7.5KΩ 1% 1/8W	1
Integrated Circuits				R6, 6A, 6C	RS2281	SMD 24.3KΩ 1% 1/8W	3
IC1	IC1048	VOLTAGE REG. +12V TO-220	1	R6B	RS1934	SMD 15KΩ 1% 1/8W	1
IC2	IC1110	VOLTAGE REG. -12V TO-220	1	R8, 19	RS1767	SMD 1MΩ 5% 1/8W	2
IC3	IC1258	VOLTAGE REG. +9V TO-220	1	R11	RS2165	SMD 28KΩ 1% 1/8W	1
Resistors				R12	RS2162	F/CHIP 60.40KΩ 1% 1/8W	1
R1, 5	RS1725	SMD 15KΩ 5% 1/8W	2	R13	RS1863	SMD 9.09KΩ 1% 1/8W	1
R3	RS1701	SMD 10KΩ 5% 1/8W	1	R14	RS2163	SMD 143 KΩ 1% 1/8W	1
R4	RS1702	SMD 100KΩ 5% 1/8W	1	R18	RS1702	SMD 100KΩ 5% 1/8W	1
R6	RS1703	SMD 2.2KΩ 5% 1/8W	1	R20	RS1883	SMD 1.5KΩ 5% 1/8W	1
R7	RS1700	SMD 1KΩ 5% 1/8W	2	R30	RS1703	SMD 2.2KΩ 5% 1/8W	1
R8	RS1706	SMD 47KΩ 5% 1/8W	1	R31	RS1711	SMD 220Ω 5% 1/8W	1
Transistors				R33, 35, 36	RS1872	SMD 51KΩ 5% 1/8W	3
Q1	TR1108	SMD NPN 2SC2412J	1	Transistor			
Q2	TR1125	SMD PNP 2SA1037K	1	Q3, 9, 11	TR1063	NPN MPS2222A TO-92	3
Wire				Q4, 5	TR1183	NPN POWER TIP31C	2
JW1, 2, 4, 8, 12, 13	WI1553	WIRE #22 BARE SOLID TINNED 1 FOOT	6	Q6, 10	TR1010	PNP MPS2907A TO-92	2
Crossover & Preamp PCB 1164							
Connectors							
CONN1	CO1335	CONNECTOR 6410 SERIES 6 T	1				
CONN2, 3, 4	CO1336	CONNECTOR 6410 SERIES 5	3				
CONN5	CO1341	RIGHT ANGLE WITH PEGS 5569	1				

Powered Subwoofer

REF. NO.	PART NO.	DESCRIPTION	QTY
Jumper Wires			
JW1-16	WI1553	WIRE #22 BARE SOLID TINNED 2.66 FEET TOTAL	16
LED			
LED1	LE1032	LED BICOLOR RED/GREEN 5mm	1

Sub Amp PCB 1166

Connectors

CONN	CO1336	CONNECTOR 6410 SERIES 5 TERM.	1
+V, -V, SPKGND, SPK(2)	TE1194	MALE FASTON TAB 0.250x0.0	5

Capacitors

C1	CP1473	SMD 220pF 10% 50V NPO	1
C2	CP1412	ALUM EL. 47uF 20% 16V RAD.	1
C3, 5, 6	CP1475	SMD 33pF 5% 50V NPO	3
C4, 100, 200	CP1496	SMD 100pF 10% 50V X7R	3
C7, 8, 13, 14, 15, 16, 17	CP1426	SMD 0.1uF 20% 50V Z5U	7
C9-C12	CP1645	ALUM EL. 22uF 20% 63V 85 Deg	4
C18	CP1126	POLY FILM 1uF 10% 50V T/R	1
C19	CP1552	SMD 0.1uF 20% 100V Z5U	1
C20, 21, 23	CP1579	ALUM EL. 33uF 20% 16V NPE T/R	3

Diode

D1-6	DI1132	SMD 1N4148 LL-34 PKG	6
ZD1, 2	DI1150	SMD ZENER 15V 5% CP PKG	2

Fuse

F1	FS1073	FUSE SLOW BLOW 8A 250V 5x20	1
----	--------	-----------------------------	---

Integrated Circuits

IC1	IC1175	NE5532 DUAL LOW-N OP-AMP	1
-----	--------	--------------------------	---

Inductor

L1 (120v Version)	MI1100	INDUCTOR AIR CORE 0.38uH	1
L1 (230v Version)	MI11000	INDUCTOR AIR CORE 0.40uH	1

Resistors

J1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 15	RS1779	SMD ZERO Ω JUMPER	11
P1	RS1794	50K POTENTIOMETER	1
R1, 2, 4, 19, 20, 29, 30, 41, 43, 45	RS1701	SMD 10KΩ 5% 1/8W	10
R3	RS1700	SMD 1KΩ 5% 1/8W 120	1
R5, 8	RS1725	SMD 15KΩ 5% 1/8W	2
R6, 7, 16, 38	RS1831	SMD 7.5KΩ 5% 1/8W T/R	4
R9, 13	RS1722	SMD 470Ω 5% 1/8W	2
R10, 12, 15, 18, 48	RS1717	SMD 100Ω 5% 1/8W	5
R11	RS1703	SMD 2.2KΩ 5% 1/8W	1
R14	RS1704	SMD 22KΩ 5% 1/8W	1
R17	RS1871	SMD 5.1KΩ 5% 1/8W	1
R21	RS1994	100Ω 5% 1/4W C/F T/R	1
R22, 22A, 23, 23A	RS1916	C/F 5.1Ω 5% 1/4W T/R	4
R24, 24A, 25, 25A	RS1868	W/W 0.1Ω 5% 5W RADIAL	4
R26, 44	RS1877	SMD 4.3KΩ 5% 1/8W	2
R27	RS1724	SMD 6.8KΩ 5% 1/8W	1

REF. NO.	PART NO.	DESCRIPTION	QTY
R28	RS1878	SMD 10Ω 5% 1/8W	1
R31, 32	RS1715	SMD 5.6KΩ 5% 1/8W	2
R33, 34, 35	RS1898	SMD 10KΩ 1% 1/8W	3
R36	RS2285	SMD 11.3KΩ 1% 1/8W	1
R37, 39, 40	RS1767	SMD 1MΩ 5% 1/8W	3
R42, 49, 50	RS1702	SMD 100KΩ 5% 1/8W	3
R46, 47	RS2180	M/O 470Ω 5% 1W	2
R51	RS1903	SMD 47Ω 5% 1/8W	1

Thermistor

TH1	TH1006	NTC THERM. 10KΩ @ 25DegC	1
-----	--------	--------------------------	---

Transistors

Q1, 1A	TR1057	NPN POWER TIP35C TO-218	2
Q2, 2A	TR1061	PNP POWER TIP36C TO-218	2
Q3	TR1183	NPN POWER TIP31C TO220	1
Q4	TR1184	PNO POWER TIP32C TO220	1
Q5, 8, 13, 15	TR1166	PNP 2N5401 TO-92 T/R	4
Q6, 7, 14	TR1167	NPN 2N5551 TO-92 T/R	3
Q9	TR1043	NPN MPS2222A TO-92	1
Q10, 11	TR1108	SMD NPN 2SC2412K CP PKG	2
Q12	TR1131	SMD NPN DTC1124TK 10K CP	1

Miscellaneous

TRIAC	TY1001	TRIAC 200V 25V TO-220 MAC224-4	1
JW1, 4, 5	WI1553	WIRE #22 BARE SOLID TINNED 0.5 FOOT	3
JW2, 3	WI1623	WIRE #16 SOLID UL 1569 GREEN 0.166 FOOT	2
F1	XX1297	FUSE CLIP 5x20 PC MOUNT	2

Surround & Center Power Amp 1165

Connectors

CONN	CO1336	CONNECTOR 6410 SERIES 5 TERM.	1
+V, -V, SPK(R-L)	TE1194	MALE FASTON TAB. 0.250x0.032	4

Capacitor

C1, 1A	CP1473	SMD 220pF 10% 50V NPO	2
C2, 2A	CP1412	ALUM EL. 47uF 20% 16V RAD.	2
C3, 3A, 5, 5A, 6, 6A	CP1475	SMD 33pF 5% 50V NPO	6
C4, 4A, 100, 100A, 200, C200A	CP1496	SMD 100pF 10% 50V X7T	6
C7, 7A, 8, 8A, 13, 14, 14A, C15-17	CP1426	SMD 0.1uF 20% 50V Z5U	10
C9-12	CP1645	ALUM EL. 22uF 20% 63V 85Deg	4
C18	CP1126	POLY FILM 1uF 10% 50V T/R	1
C19	CP1552	SMD 0.1uF 20% 100V Z5U	1

Diodes

D1, 1A, 2, 2A, 3, 3A, 4, 4A, 5, 6	DI1132	SMD 1N4148 LL-34 PKG T/R	10
Z1, 2	DI1150	SMD ZENER 15V 5% CP PKG. T/R	2

Integrated Circuits

IC1	IC1175	NE5532 LOW-N OP-AMP	1
IC2	IC1041	NJM072 DUAL J-FET OP-AMP	1

Inductor

L1, 1A (120v)	MI1100	AIR CORE 0.38uH	2
---------------	--------	-----------------	---

REF. NO.	PART NO.	DESCRIPTION	QTY
L1, 1A (230v)	MI11000	INDUCTOR AIR CORE 0.40uH	2
Resistors			
J1-6, 8-15, 17	RS1779	SMD ZERO Ω JUMPER	15
R1, 1A, 2, 2A, 4, 4A, 19, 19A, 20, 20A, 29, 29A, 30, 30A, 41, 43, 45, 45A	RS1701	SMD 10KΩ 5% 1/8W	18
R3, 3A	RS1700	SMD 1KΩ 5% 1/8W	2
R5, 5A, 8, 8A	RS1725	SMD 15Ω 5% 1/8W	4
R6, 6A, 7, 7A, 16, 16A, 38, 38A	RS1831	SMD 7.5KΩ 5% 1/8W T/R	8
R9, 9A, 13, 13A	RS1722	SMD 470Ω 5% 1/8W	4
R10, 10A, 12, 12A, 15, 15A, 18, 18A	RS1717	SMD 100Ω 5% 1/8W	8
R11, 11A	RS1703	SMD 2.2KΩ 5% 1/8W	2
R14, 14A	RS1702	SMD 22KΩ 5% 1/8W	2
R17, 17A	RS1871	SMD 5.1KΩ 5% 1/8W	2
R21, 21A	RS1994	100Ω 5% 1/4W C/F T/R	2
R22, 22A, 23, 23A	RS1916	C/F 5.1Ω 5% 1/4W T/R	4
R24, 24A, 25, 25A	RS1868	W/W 0.1Ω 5% 5W RADIAL	4
R26, 26A, 44, 44A	RS1877	SMD 4.3KΩ 5% 1/8W	4
R27, 27A	RS1724	SMD 6.8KΩ 5% 1/8W	2
R28, 28A	RS1878	SMD 10Ω 5% 1/8W	2
R31, 32	RS1715	SMD 5.6KΩ 5% 1/8W	2
R33-35	RS1898	SMD 10KΩ 1% 1/8W	3
R36	RS2285	SMD 11KΩ 1% 1/8W	1
R37, 39, 40	RS1767	SMD 1MΩ 5% 1/8W	3
R42	RS1702	SMD 100KΩ 5% 1/8W	1
R46, 47	RS2180	M/O 470Ω 5% 1W	2
Thermistor			
TH1	NTC 10KW @ 2 5DegC		1
Transistors			
Q1, 1A	TR1057	NPN POWER TIP35C TO-218	2
Q2, 2A	TR1061	PNP POWER TIP36C TO-218	2
Q3, 3A	TR1183	NPN POWER TIP31C TO220	2
Q4, 4A	TR1184	PNP POWER TIP32C TO220	2
Q5, 5A, 8, 8A, 13, 13A, 15	TR1166	PNP 2N5401 TO-92 T/R	7
Q6, 6A, 7, 7A, 14	TR1167	NPN 2N5551 TO-92 T/R	5
Q9, 9A	TR1043	NPN MPS2222A TO-92	2
Q10, 10A, 11, 11A	TR1108	SMD NPN 2SC2412K CP PKG.	4
Q12, 12A	TR1131	SMD NPN DTC1124TK 10K CP	2
Wires			
JW1-5	WI1623	WIRE #16 SOLID UL1569 GREEN 0.8 FOOT	5
JW6, 9, 10, 11	WI1553	WIRE #22 BARE SOLID TINNED 0.66 FOOT	4

Left & Right Power Amp 1165

REF. NO.	PART NO.	DESCRIPTION	QTY
Connectors			
CONN	CO1336	CONNECTOR 6410 SERIES 5 TERM.	1
+V, -V, SPK(R-L)	TE1194	MALE FASTON TAB 0.250x0.032	4
Capacitors			
C1, 1A	CP1473	SMD 220pF 10% 50V NPO	2
C2, 2A	CP1412	ALUM EL. 47uF 20% 16V RADIAL	2
C3, 3A, 5, 5A, 6, 6A	CP1475	SMD 33pF 5% 50V NPO	6
C4, 4A, 100, 100A, 200, 200A	CP1496	SMD 100pF 10% 50v X7R	6
C7, 7A, 8, 8A, 13, 14, 14A, 15, 16, 17	CP1426	SMD 0.1uF 20% 50V Z5U	10
C9-12	CP1645	ALUM EL. 22uF 20% 63V 85Deg	4
C18	CP1126	POLY FILM 1uF 10% 50V T/R	1
C19	CP1552	SMD 0.1uF 20% 100V Z5U	1
Diode			
D1, 1A, 2, 2A, 3, 3A, 4, 4A, 5, 6	DI1132	SMD 1N4148 LL-34 PKG T/R	10
Z1, 2	DI1150	SMD ZENER 15V 5% CP PKG T/R	2
Integrated Circuits			
IC1	IC1175	NE5532 DUAL LOW-N OP-AMP	1
IC2	IC1041	NJM072 DUAL J-FET OP-AMP	1
Inductor			
L1, 1A (120v)	MI1100	AIR CORE 0.38uH	2
L1, 1A (230v)	MI11000	INDUCTOR AIR CORE 0.40uH	
Resistors			
J1-6, 8-15, 17	RS1779	SMD ZERO Ω JUMPER	15
R1, 1A, 2, 2A, 4, 4A, 19, 19A, 20, 20A, 29, 29A, 30, 30A, 33-35, 41, 43, 45, 45A	RS1701	SMD 10KΩ 5% 1/8W	21
R3, 3A	RS1700	SMD 1KΩ 5% 1/8W	2
R5, 5A, 8, 8A	RS1725	SMD 15KΩ 5% 1/8W	4
R6, 6A, 7, 7A, 16, 16A, 38, 38A	RS1831	SMD 7.5KΩ 5% 1/8 T/R	8
R9, 9A, 13, 13A	RS1722	SMD 470Ω 5% 1/8W	4
R10, 10A, 12, 12A, 15, 15A, 18, 18A	RS1717	SMD 100Ω 5% 1/8W	8
R11, 11A	RS1703	SMD 2.2KΩ 5% 1/8W	2
R14, 14A	RS1704	SMD 22KΩ 5% 1/8W	2
R17, 17A	RS1871	SMD 5.1KΩ 5% 1/8W	2
R21, 21A	RS1994	100Ω 5% 1/4W C/F T/R	2
R22, 22A, 23, 23A	RS1916	C/F 5.1Ω 5% 1/4W T/R	4
R24, 24A, 25, 25A	RS1868	W/W 0.1Ω 5% 5WC RADIAL	4
R26, 26A, 44, 44A	RS1877	SMD 4.3KΩ 5% 1/8W	4
R27, 27A	RS1724	SMD 6.8KΩ 5% 1/8W	2
R28, 28A	RS1878	SMD 10Ω 5% 1/8W	2

REF. NO.	PART NO.	DESCRIPTION	QTY	REF. NO.	PART NO.	DESCRIPTION	QTY
R31, 32	RS1715	SMD 5.6KΩ 5% 1/8W	2	4	BR1411	Bracket Support 60 Deg	1
R36	RS1912	SMD 11.3KΩ 5% 1/8W	1	5	BR1421	Bracket "L" 0.9"x0.9"	1
R37, 39, 40	RS1767	SMD 1MΩ 5% 1/8W	3	6	BR1423	Front Plate	1
R42	RS1702	SMD 100KΩ 1% 1/8W	1	7	BR1495	Alum. Bar	1
R46, 47	RS2180	M/O 470Ω 5% 1W	2	8	SEE FUSES		
Thermistor				9	FH1002	Fuse Holder 1/4x1-1/4	1
TH1	TH1006	NTC 10KW @ 2 5DegC	1	10	XX1174	AG AC Cord 6ft. UL/CSA aprov. 120V	1
Transistors					WI1597	AG AC Cord 6ft. UL/CSA aprov. 230V	
Q1, 1A	TR1057	NPN POWER TIP35CTO-218	2	11	HS1142	Heatsink Internal	1
Q2, 2A	TR1061	PNP POWER TIP36 TO-218	2	12	MI1151	AG Power Transformer 120V	1
Q3, 3A	TR1183	NPN POWER TIP31 TO220	2		m1159	AG Power Transformer 230V	1
Q4, 4A	TR1184	PNP POWER TIP32 TO220	2	13	ST1025	Round Spacer 1/2x3/8 length	6
Q5, 5A, 8, 8A, 13, 13A, 15	TR1166	PNP 2N5401 TO-92 T/R	7	14	SW1075	JR Switch Rocker 2P2T Snap-I	1
Q6, 6A, 7, 7A, 14	TR1167	NPN 2N5551 TO-92 T/R	5	15	XX1259	Knob Black (not shown)	1
Q9, 95	TR1063	NPN MPS2222A TO-92	2	16	XX1269	Gasket	1
Q10, 10A, 11, 11A	TR1108	SMD NPN 2SC2412K CP PKG	4	17	XX1276	Plastic Cover	1
Q12, 12A	TR1131	SMD NPN DTC1124TK 10K CP	2	18	NU1059	Nut 4-40 Keps-Thr. Hexag. Zinc	2
Wires				19	NU1057	Nut 6-32 Keps Zinc Hexag.	2
JW1-5	WI1623	#16 SOLID UL1569 GREEN	8	20	NU1049	Nut 8-32x1/4 Keps Hexag.	5
JW6, 9, 10, 11	WI1553	#22 BARE SOLID TINNED 0.66 FOOT	4	21	WA1049	Washer Ext. Tooth #6 Zinc	10
Miscellaneous (See Exploded View)				22	WA1080	Washer Flat #8 Steel Zinc	5
1	BR1187	Alum. Bar 4.8x12.7x40mm	4	23	XX1250	Strain Relief SPT-1 Black	1
2	BR1386	Transistor Bar TO-218	2	24	SC1253	Screw 4-40x3/8 Pan Phillips	2
3	BR1395	Bracket Power Support	6	25	SC1274	Screw 5-20x1/4 Thread Form. Z.	6
				26	SC1192	Screw 6-32x3/4 Cutt-Thr. Hex.	8
				27	SC1194	Screw 6-32x3/8 Tapt-Thr Hex.	17
				28	SC1282	Screw 10-32x7/8 Pan-Torx Hd.	6
				29	SP1073	Sil Pad TO-3P 1/0"x0.75"	12
				30	SP1072	Sil Pad TO-220 0.750"	3
				31	ST1024	1/4 Hex Fem. Standoff 1-1	2
				32	332630-001	13 Pin Interconnect Cable	1

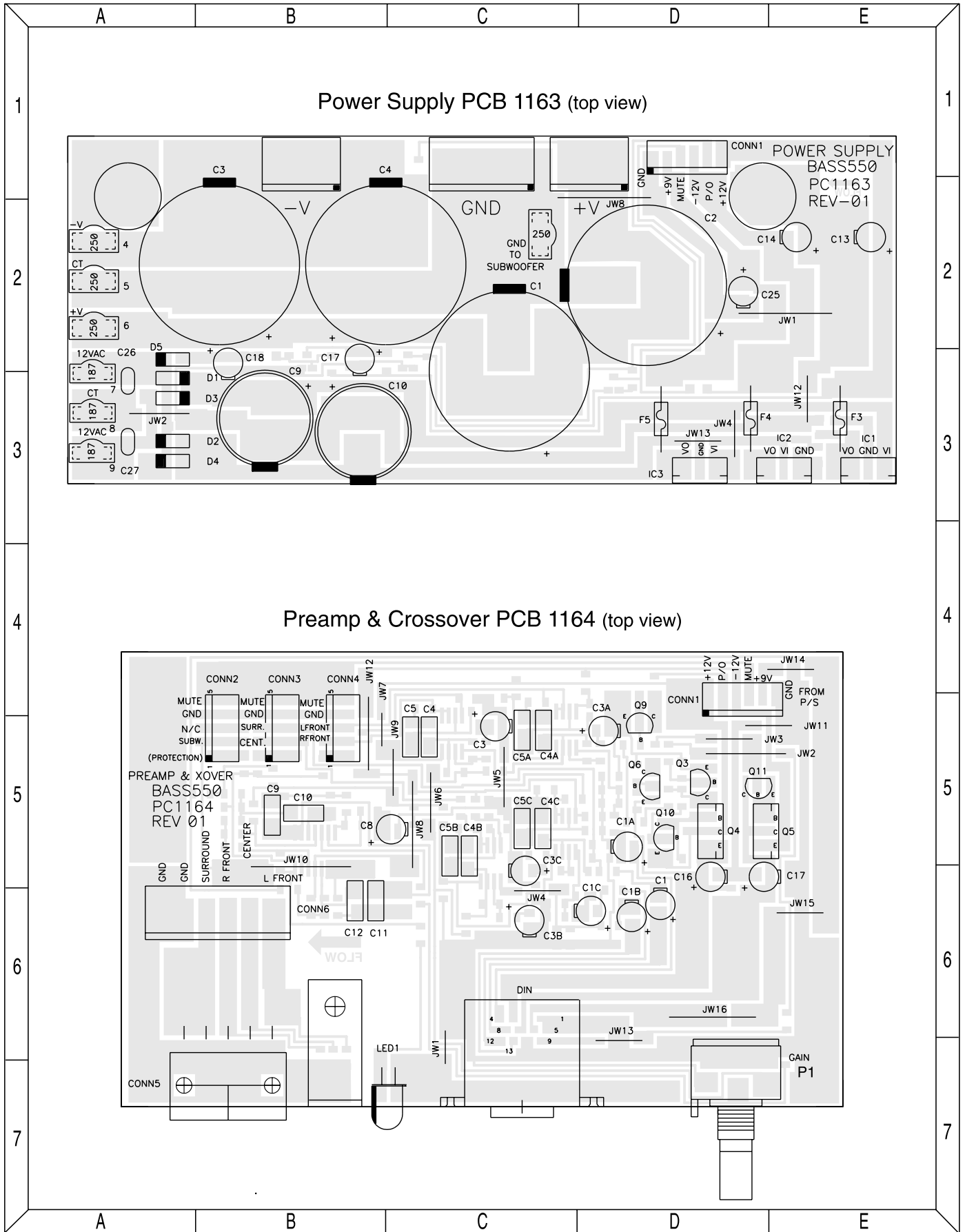
Revisions

Date	Revision	Change Description	Reason of Change
1/29/97	01	A) Changed R6, A, C from 27K to 24.3K 1% on PCB1164. B) Changed R6B from 27K to 15K on PCB1164. C) Changed R5, A, C from 2.7K to 4.32K 1% on PCB1164. D) Changed R5B from 2.7K to 7.5K on PCB1164.	Changes required by Engineering
2/5/97	02	A) Changed R33, R34, R35 from 10K 5% to 10K 1% on (2) PCB1165 & PCB1166. B) Changed R36 from 11K 5% to 11.3K 1% on (2) PCB1165 & PCB1166.	Changes required by Engineering
3/3/97	03	A) Identified Polarity Power Cord.	
3/11/97	04	A) Changed R7 from 4.7K to 10K on PCB1164. B) Changed R26 from 10K to 4.7K on PCB1164. C) Changed R30 from 1K to 2.2K on PCB1164. D) Changed R31 from 470 to 220 on PCB1164. E) Delete JW9, JW10, JW11 on PCB1163. F) Add F3, F4, F5 on JW9, JW10, JW11 on PCB1163. G) Changed R1 from 1K to 15K on PCB1163. H) Delete R2 and Add ZD1, 10V in the same place on PCB1163. I) Add C26, C27 of 0.01µF 100V on PCB1163. J) Add C22, C23, C24, C25 from 4700pF on PCB1164 (Speaker Out).	A, B, C, D = Power On Sensitivity. E, F = Protection On Voltage. G, H = POP On Power Off.

Revisions

Date	Revision	Change Description	Reason of Change
1/29/97	01	A) Changed R6, A, C from 27K to 24.3K 1% on PCB1164. B) Changed R6B from 27K to 15K on PCB1164. C) Changed R5, A, C from 2.7K to 4.32K 1% on PCB1164. D) Changed R5B from 2.7K to 7.5K on PCB1164.	Changes required by Engineering
2/5/97	02	A) Changed R33, R34, R35 from 10K 5% to 10K 1% on (2) PCB1165 & PCB1166. B) Changed R36 from 11K 5% to 11.3K 1% on (2) PCB1165 & PCB1166.	Changes required by Engineering
3/3/97	03	A) Identified Polarity Power Cord.	
3/11/97	04	A) Changed R7 from 4.7K to 10K on PCB1164. B) Changed R26 from 10K to 4.7K on PCB1164. C) Changed R30 from 1K to 2.2K on PCB1164. D) Changed R31 from 470 to 220 on PCB1164. E) Delete JW9, JW10, JW11 on PCB1163. F) Add F3, F4, F5 on JW9, JW10, JW11 on PCB1163. G) Changed R1 from 1K to 15K on PCB1163. H) Delete R2 and Add ZD1, 10V in the same place on PCB1163. I) Add C26, C27 of 0.01 μ F 100V on PCB1163. J) Add C22, C23, C24, C25 from 4700pF on PCB1164 (Speaker Out).	A, B, C, D = Power On Sensitivity. E, F = Protection On Voltage. G, H = POP On Power Off.

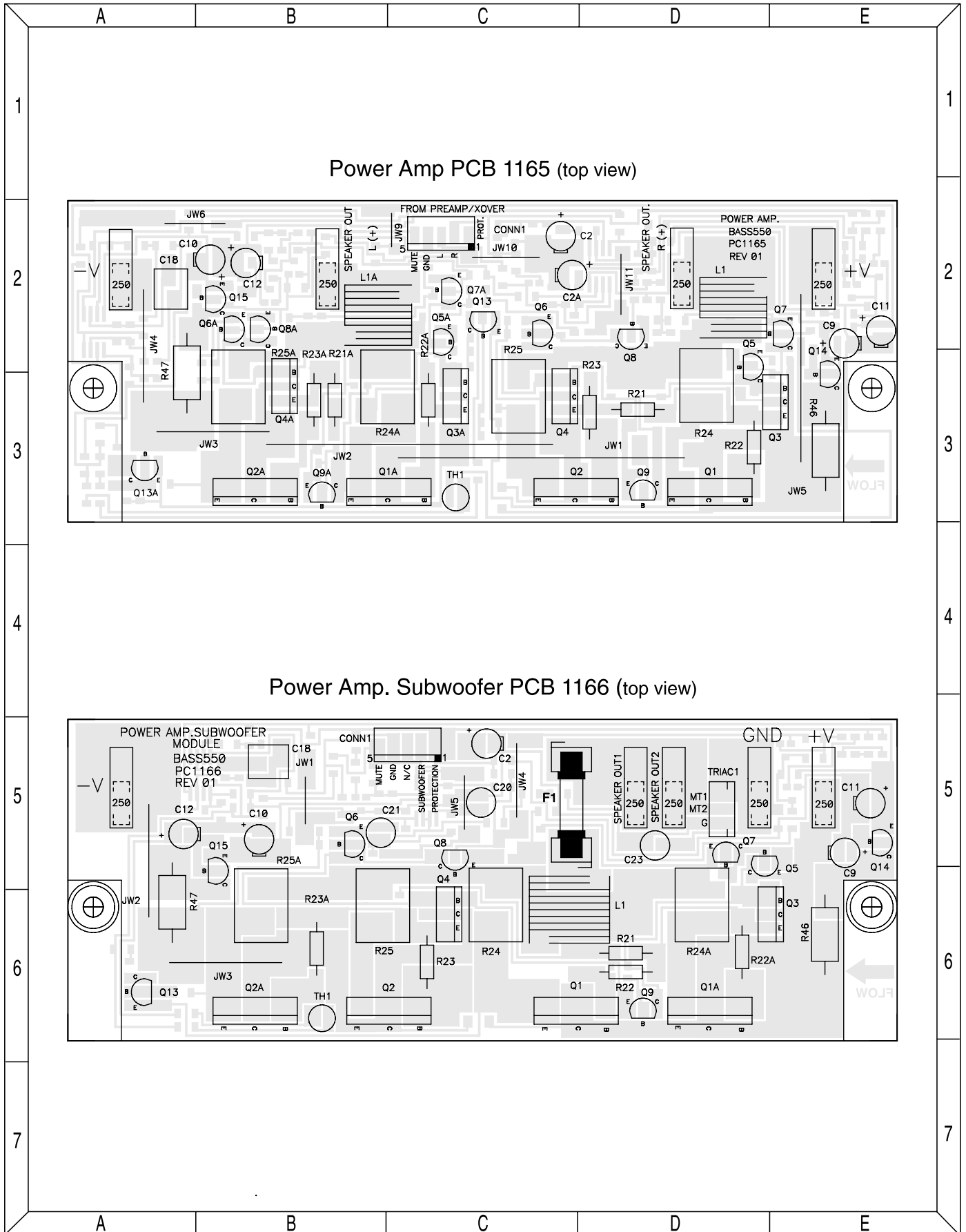
PRINTED CIRCUIT BOARDS 1 (TOP VIEW)



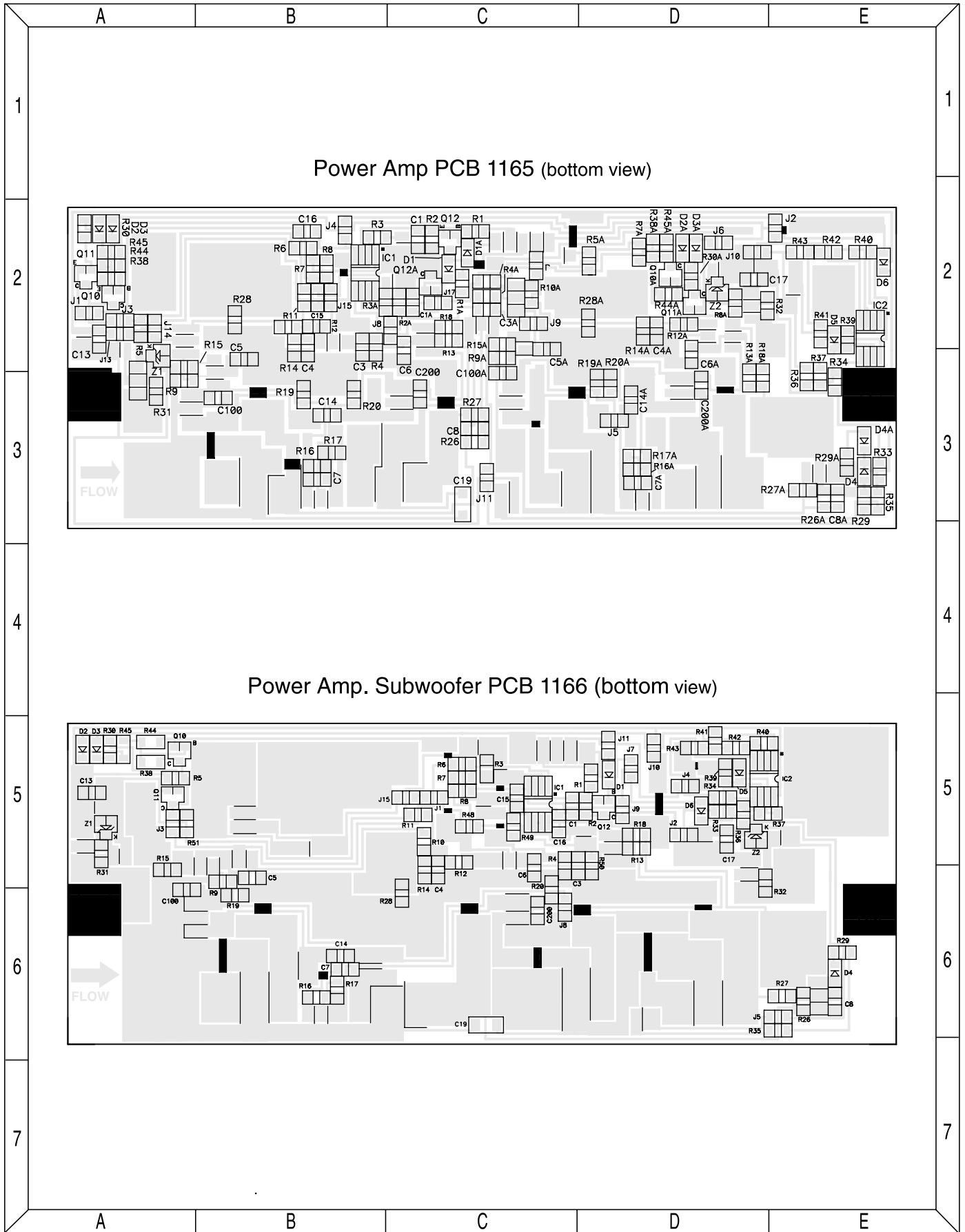
PRINTED CIRCUIT BOARDS 1 (BOTTOM VIEW)



PRINTED CIRCUIT BOARDS 2 (TOP VIEW)

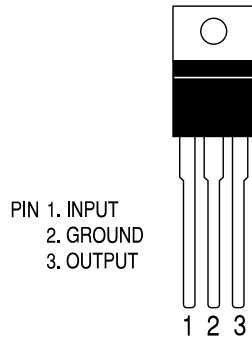


PRINTED CIRCUIT BOARDS 2 (BOTTOM VIEW)

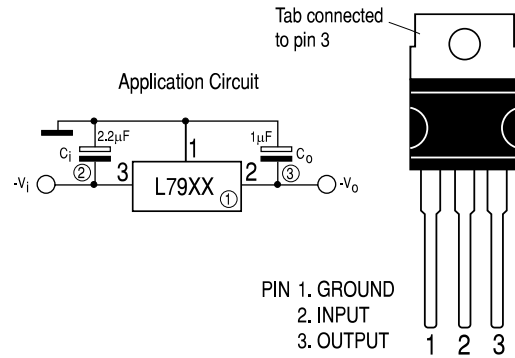


INTEGRATED CIRCUIT DIAGRAMS

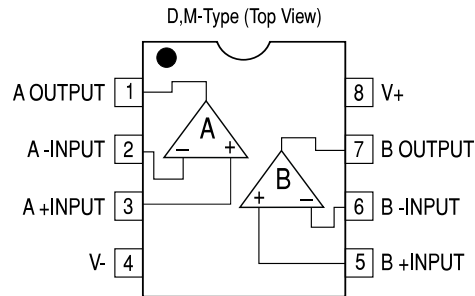
Power Supply PCB IC1 - IC1048 +12 volt
Power Supply PCB IC3 - IC1258 +9 volt



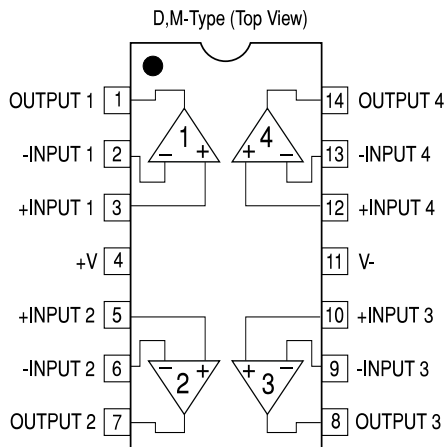
Power Supply PCB IC2 - IC1110



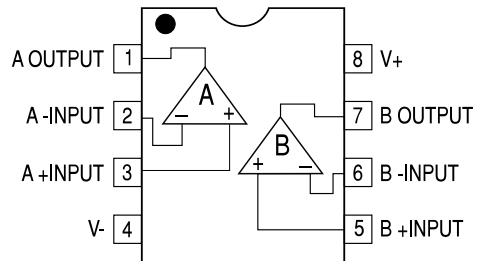
Sub Amp, Surround & Center Power Amp, Left & Right Power Amp - IC1 - IC1175
 NE5532 High Performance Dual Low-N



Crossover & Preamp PCB IC5
 - IC1162 NJM074M
 Quad J-FET Input Op Amp

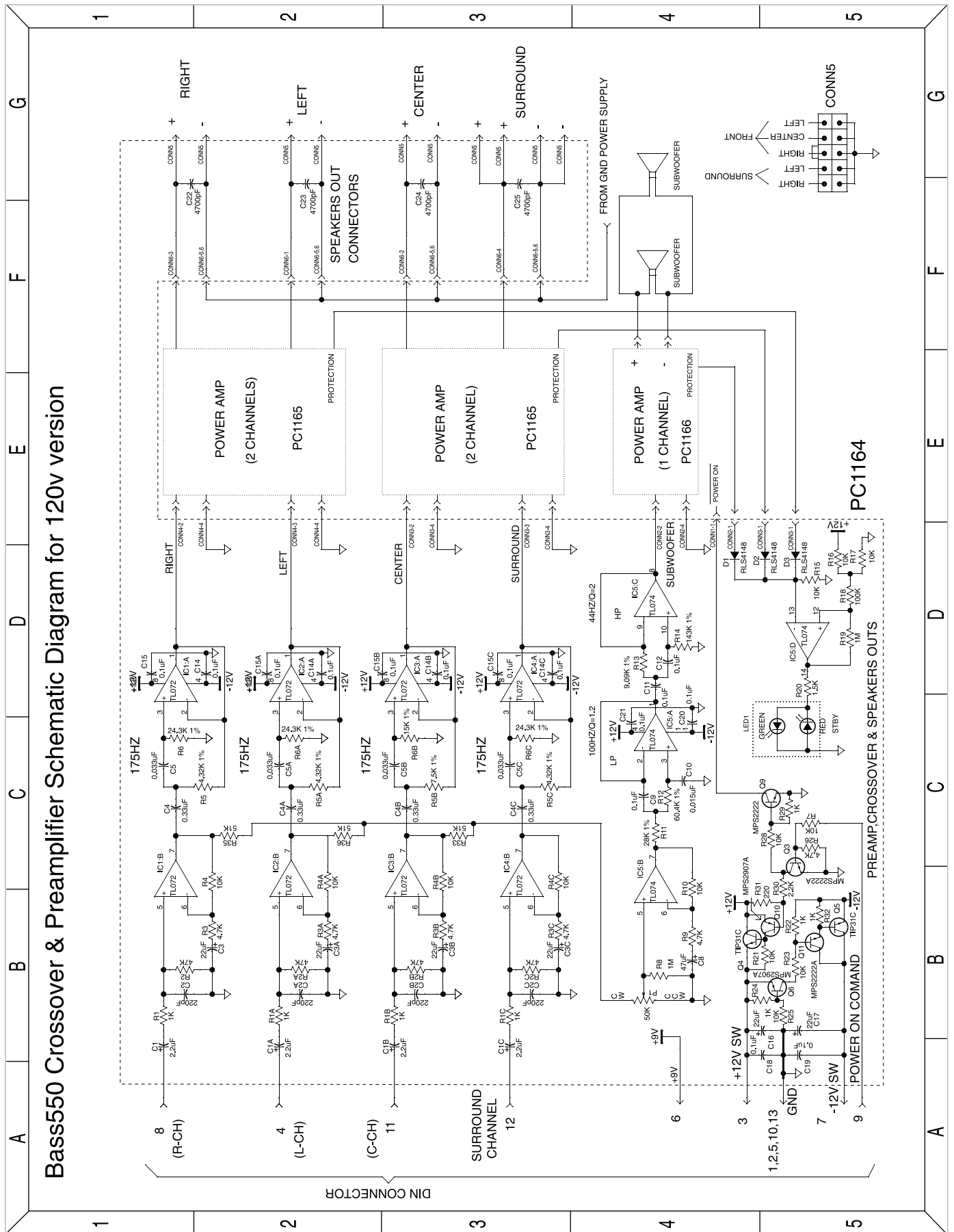


Sub Amp PCB - IC2
Crossover & Preamp PCB - IC1, 2, 3, 4
Surround & Center Power Amp - IC2
Left & Right Power Amp - IC2
 IC1041 NJM072B Dual J-FET Input Op Amp
 D,M,E-Type (Top View)



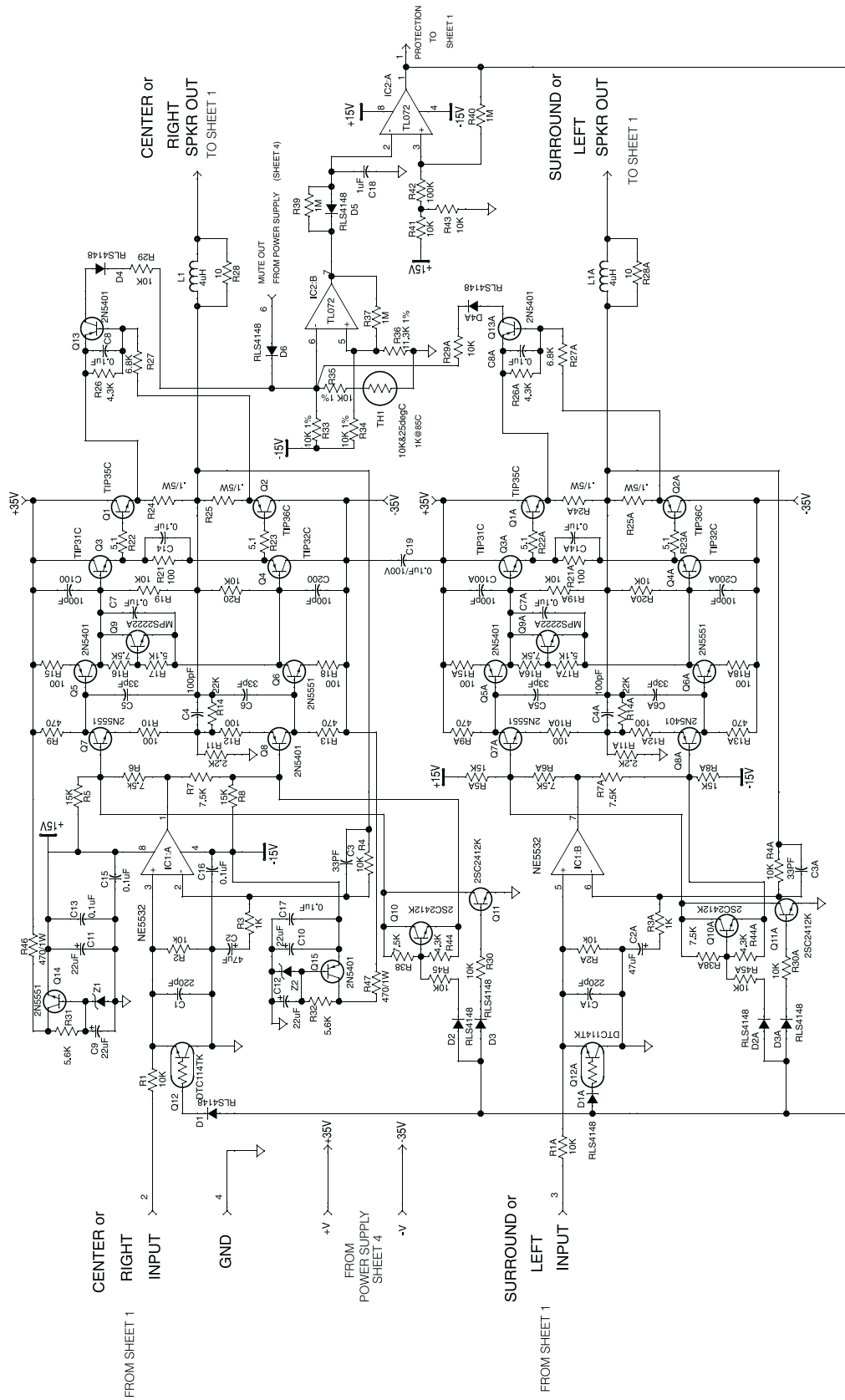
120V CROSSOVER & PREAMP SCHEMATIC DIAGRAM (SHEET 1)

Bass550 Crossover & Preamp Schematic Diagram for 120v version



120V POWER AMP. SCHEMATIC DIAGRAM #1 (SHEET 2)

Bass550 Power Amplifier Schematic Diagram #1 for 120v version
This Schematic applies to both Right & Left, and Center & Surround channel amp boards.

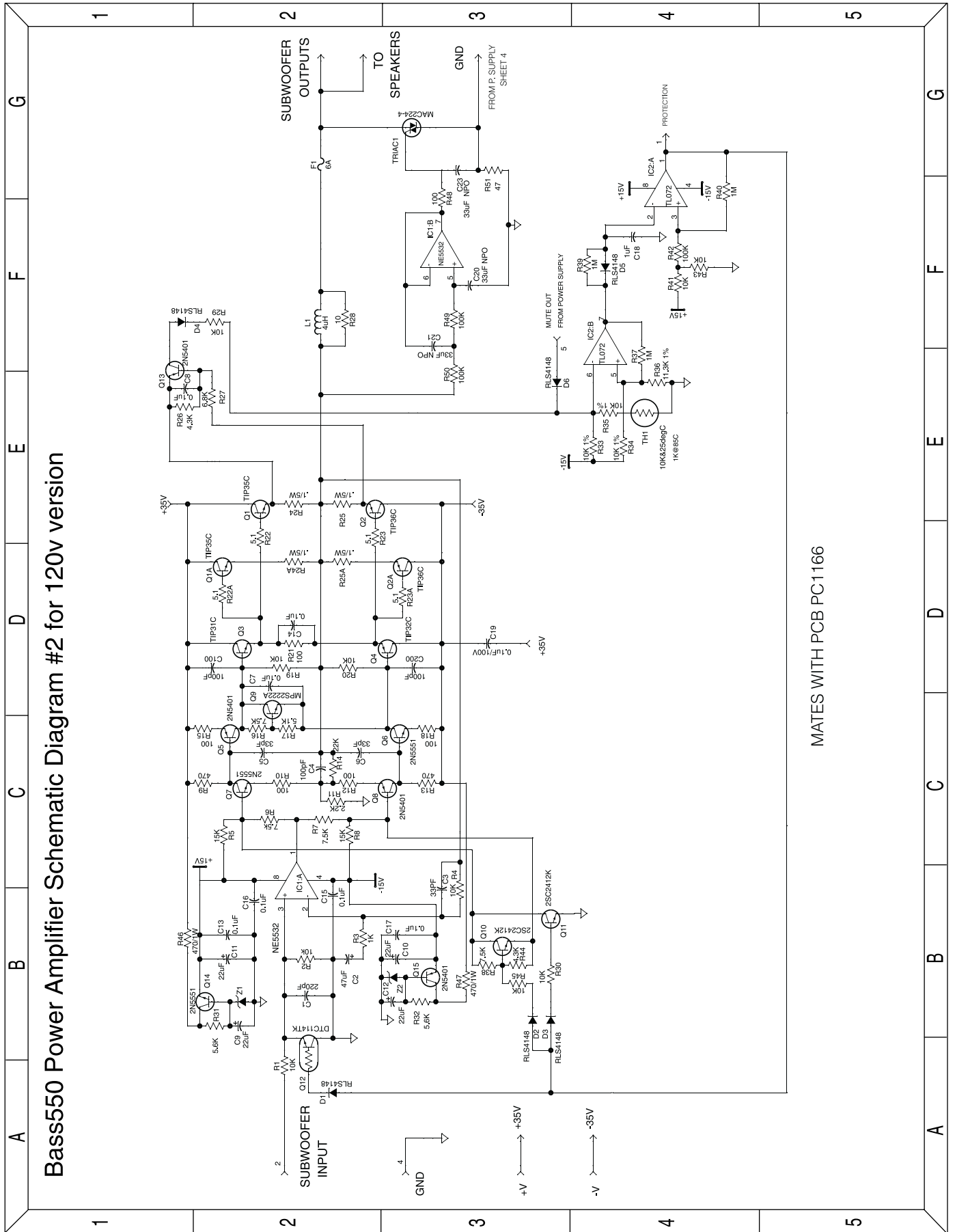


PC1165

120V SUB. AMP. SCHEMATIC DIAGRAM #2 (SHEET 3)

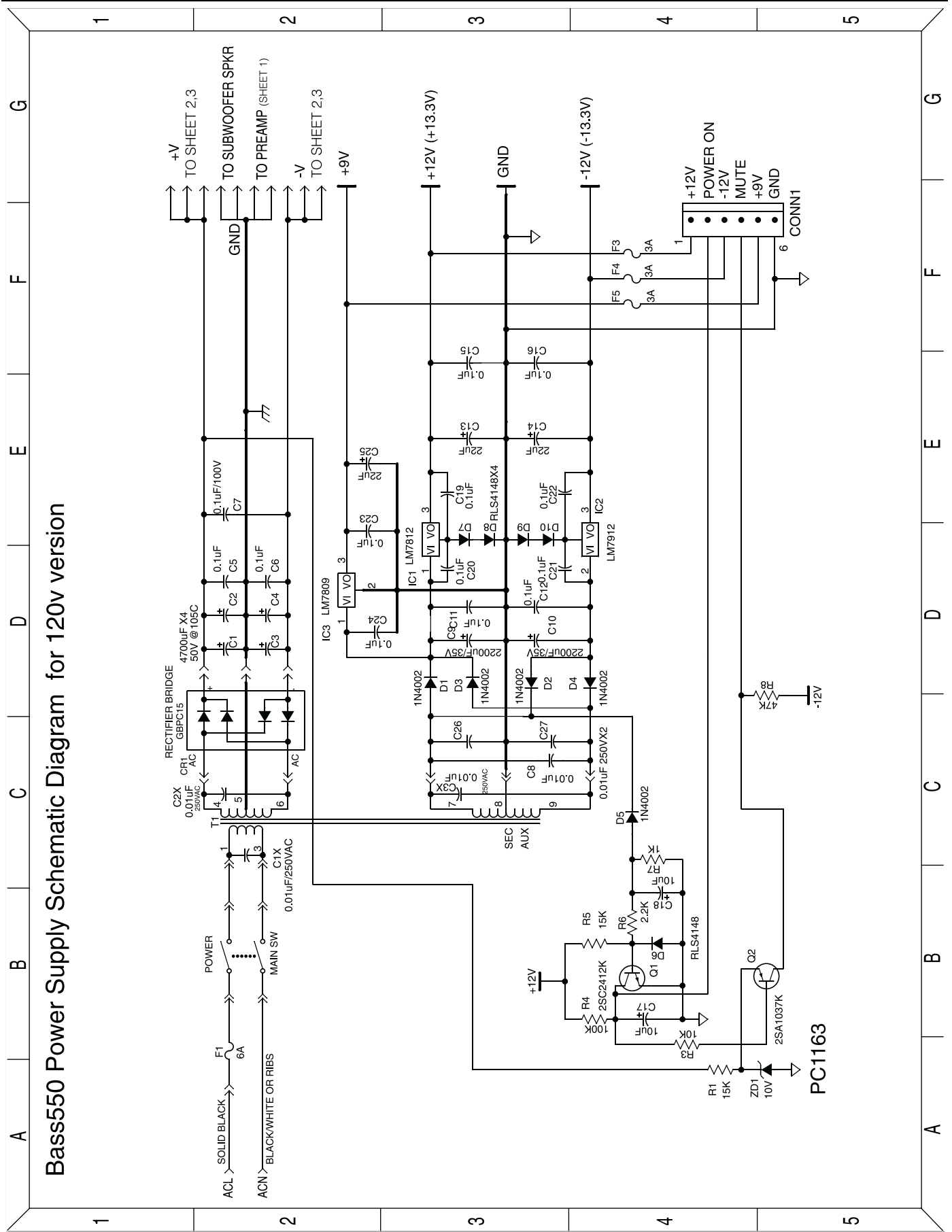
Bass550 Power Amplifier Schematic Diagram #2 for 120v version

MATES WITH PCB PC1166



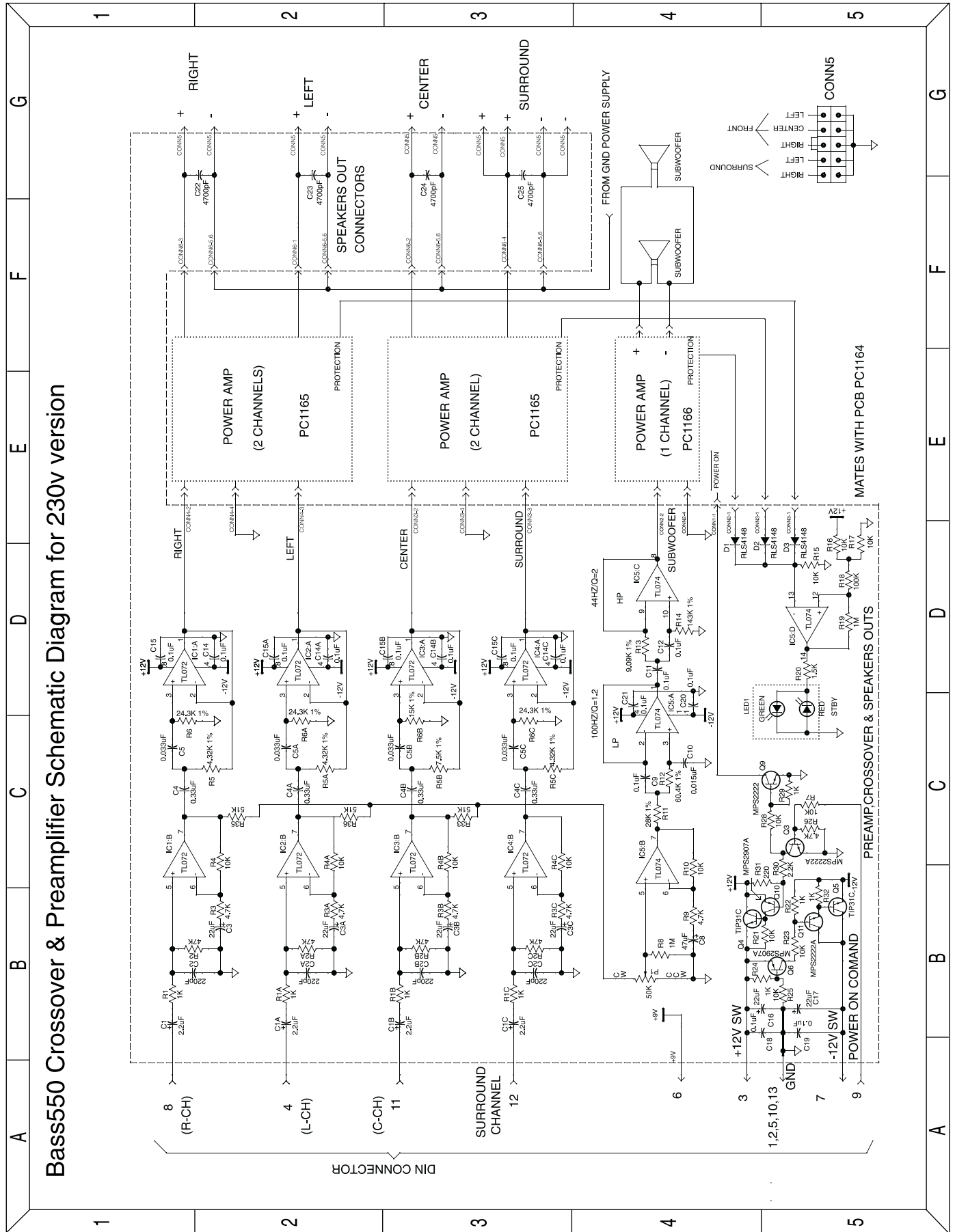
120V POWER SUPPLY SCHEMATIC DIAGRAM (SHEET 4)

Bass550 Power Supply Schematic Diagram for 120v version



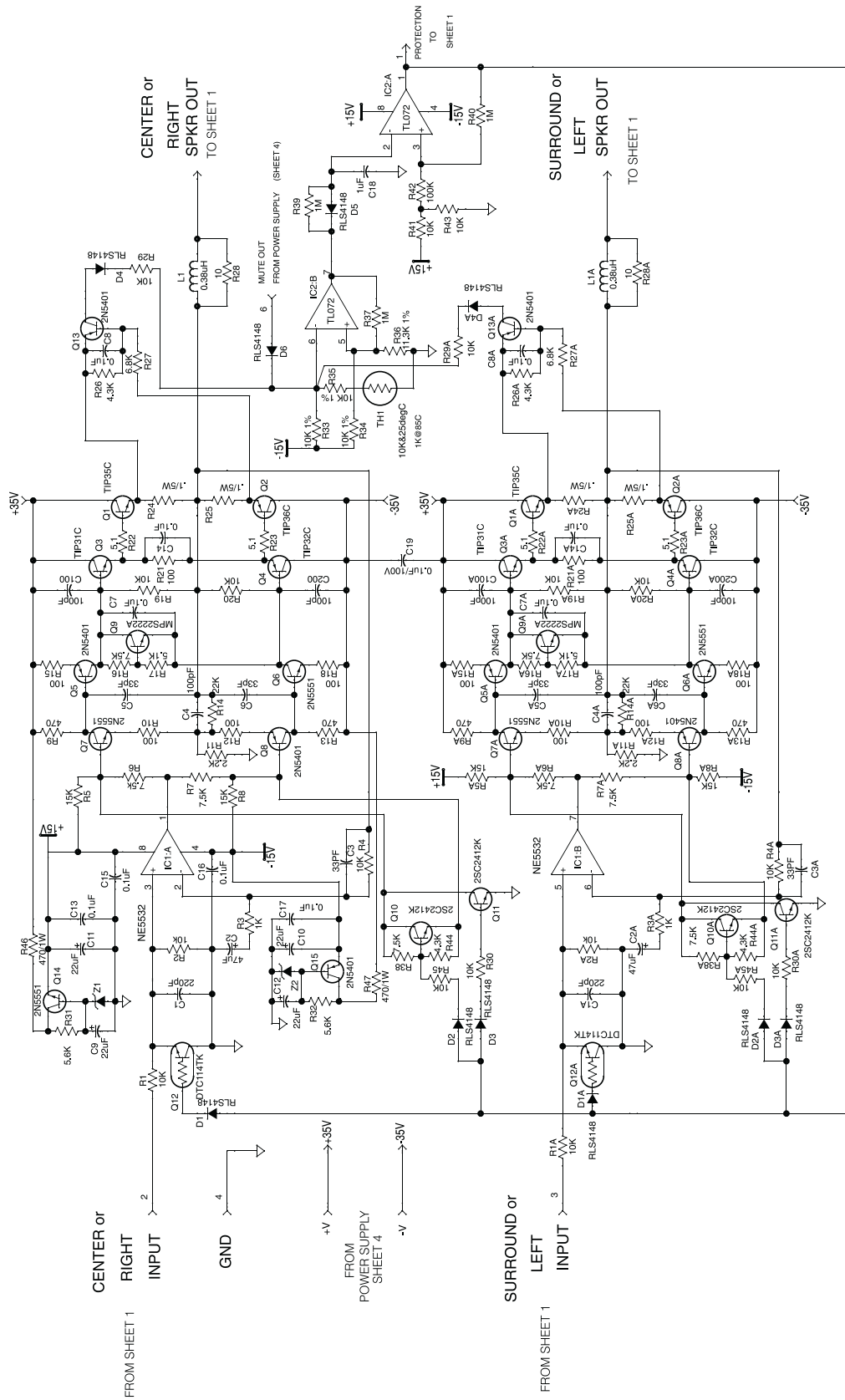
230V CROSSOVER & PREAMP SCHEMATIC DIAGRAM (SHEET 1)

Bass550 Crossover & Preamplifier Schematic Diagram for 230v version



230V POWER AMP. SCHEMATIC DIAGRAM #1 (SHEET 2)

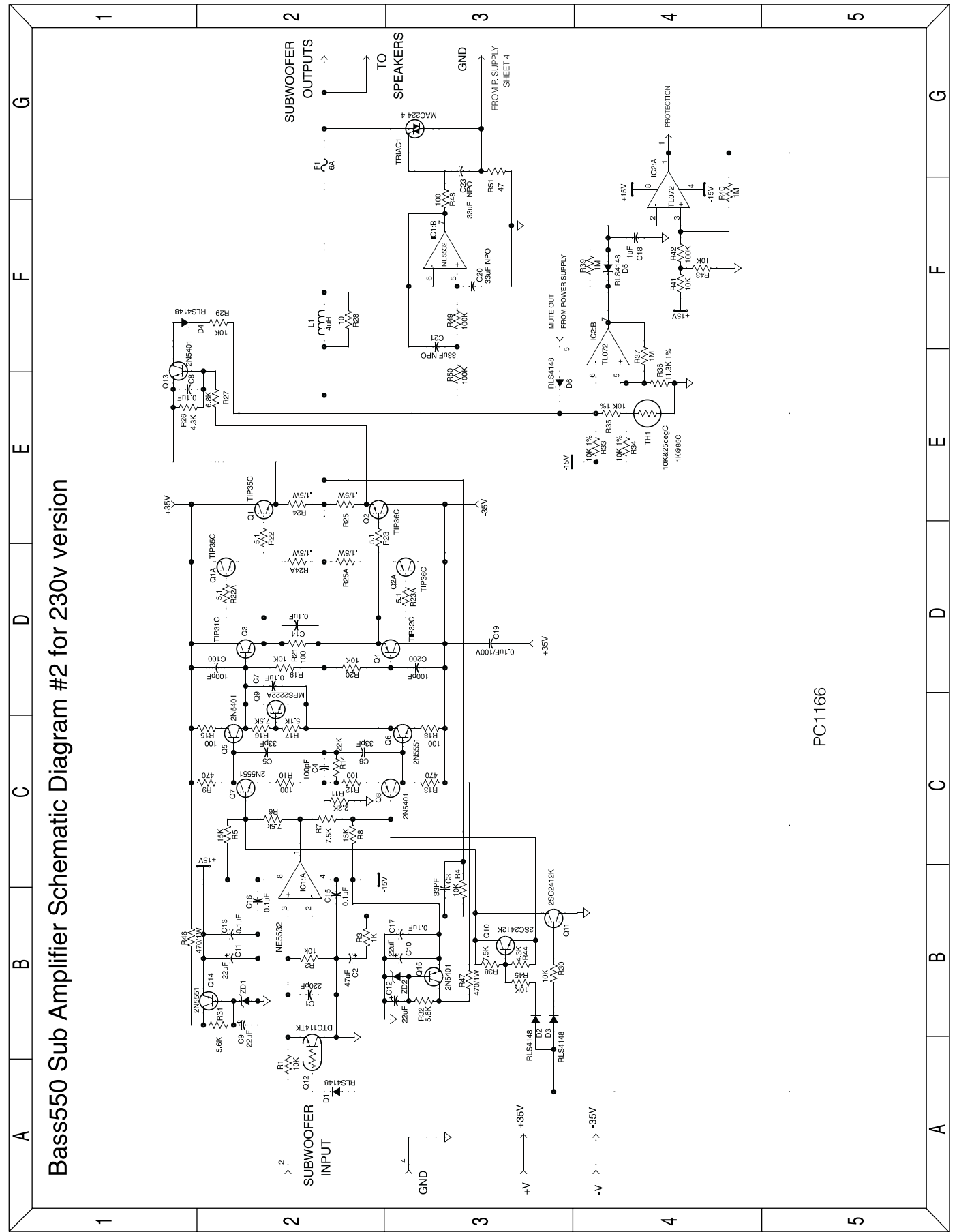
Bass550 Power Amplifier Schematic Diagram #1 for 230v version
This Schematic applies to both Right & Left, and Center & Surround channel amp boards.



PC1165

230V POWER AMP. SCHEMATIC DIAGRAM #2 (SHEET 3)

Bass550 Sub Amplifier Schematic Diagram #2 for 230v version



PC1166

230V POWER SUPPLY SCHEMATIC DIAGRAM (SHEET 4)

Bass550 Power Supply Schematic Diagram for 230v version

