

BluesCube Stage

SERVICE NOTES

Issued by RJA

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Cautionary Notes

Before beginning the procedure, please read through this document. The matters described may differ according to the model.

No User Data

This product cannot save user data. Backing up user data during servicing is not required.

Part Replacement

When replacing components near the power-supply circuit or a heat-generating circuit (such as a circuit provided with a heat sink or including a cement resistor), carry out the procedure according to the instructions with respect to the part number, direction, and attachment position (mounting so as to leave an air gap between the component and the circuit board, etc.).

Parts List

A component whose part code is ***** will not be supplied as a service part because one of the following reasons applies.

- Because it is supplied as an assembled part (under a different part code).
- Because a number of circuit boards are grouped together and supplied as a single circuit board (under a different part code).
- Because supply is prohibited due to copyright restrictions.
- Because reissuance is restricted.
- Because the part is made to order (at current market price).
- Because it is carried in electronic data on the Roland web site.
- Because it is a package or an accessory irrelevant to the function maintenance of the main body.
- Because it can be replaced with an article on the market. (battery or etc.)

Circuit Diagram

In the circuit diagram, "NIU" is an abbreviation for "Not in Use," and "UnPop" is an abbreviation for "Unpopulated." They both mean non-mounted components. The circuit board and circuit board diagram show silk-screened indications, but no components are mounted.

Specifications

Roland BluesCube Stage: Guitar Amplifier

Rated Power Output

60 W

Nominal Input Level

INPUT HIGH: -10 dBu (1 M Ω)

INPUT LOW: 0 dBu

Speaker

30 cm (12 inches) x 1

Controls

POWER switch

DUAL TONE switch

CH SELECT switch

[CLEAN channel]

BOOST button

TONE button

VOLUME knob

[CRUNCH channel]

BOOST button

TONE button

GAIN knob

VOLUME knob

[EQUALIZER]

BASS knob

MIDDLE knob

TREBLE knob

[EFFECT]

REVERB knob

MASTER knob

POWER CONTROL switch

Indicators

CLEAN CHANNEL

BOOST

TONE

CRUNCH CHANNEL

BOOST

TONE

POWER

Connectors

INPUT HIGH/LOW jack: 1/4-inch phone type

LINE OUT jack: 1/4-inch phone type

PHONES jack: Stereo 1/4-inch phone type

FOOT SW (TIP: CH SELECT, RING: DUAL TONE) jack:
1/4-inch TRS phone type

REC OUT port: USB type B

AC IN jack

Power Consumption

58 W

Dimensions

513 (W) x 244 (D) x 465 (H) mm

20-1/4 (W) x 9-5/8 (D) x 18-5/16 (H) inches

Weight

14 kg

30 lbs 14 oz

Accessories

Owner's manual (#5100042691)

Power cord (#00894378, #5100012292, #00894389, #00907001, #5100013842, #03450323)

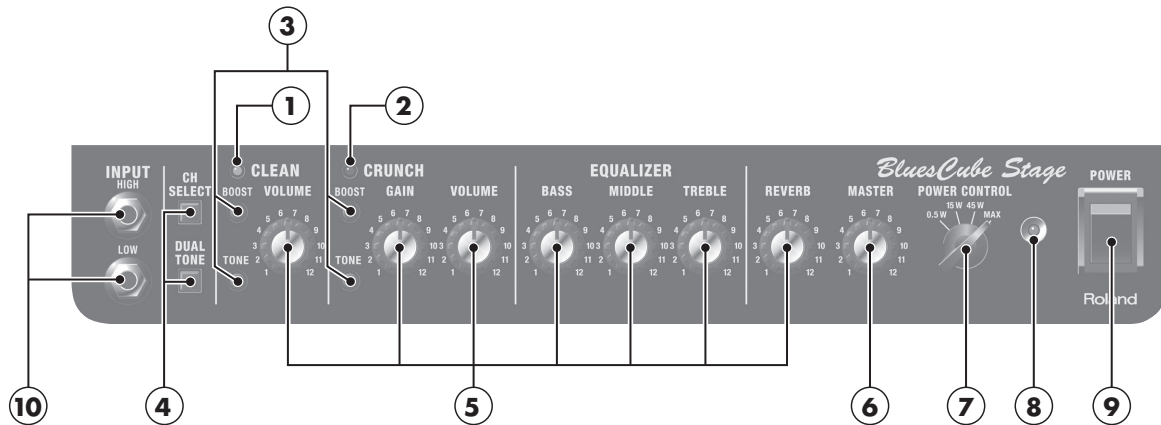
Options (sold separately)

Footswitch (BOSS FS-5L, BOSS FS-6, BOSS FS-7)

* Printed matters will not be supplied after the end of the production. Then, download the electronic file from the Roland web site.

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

Location of Controls (Top)



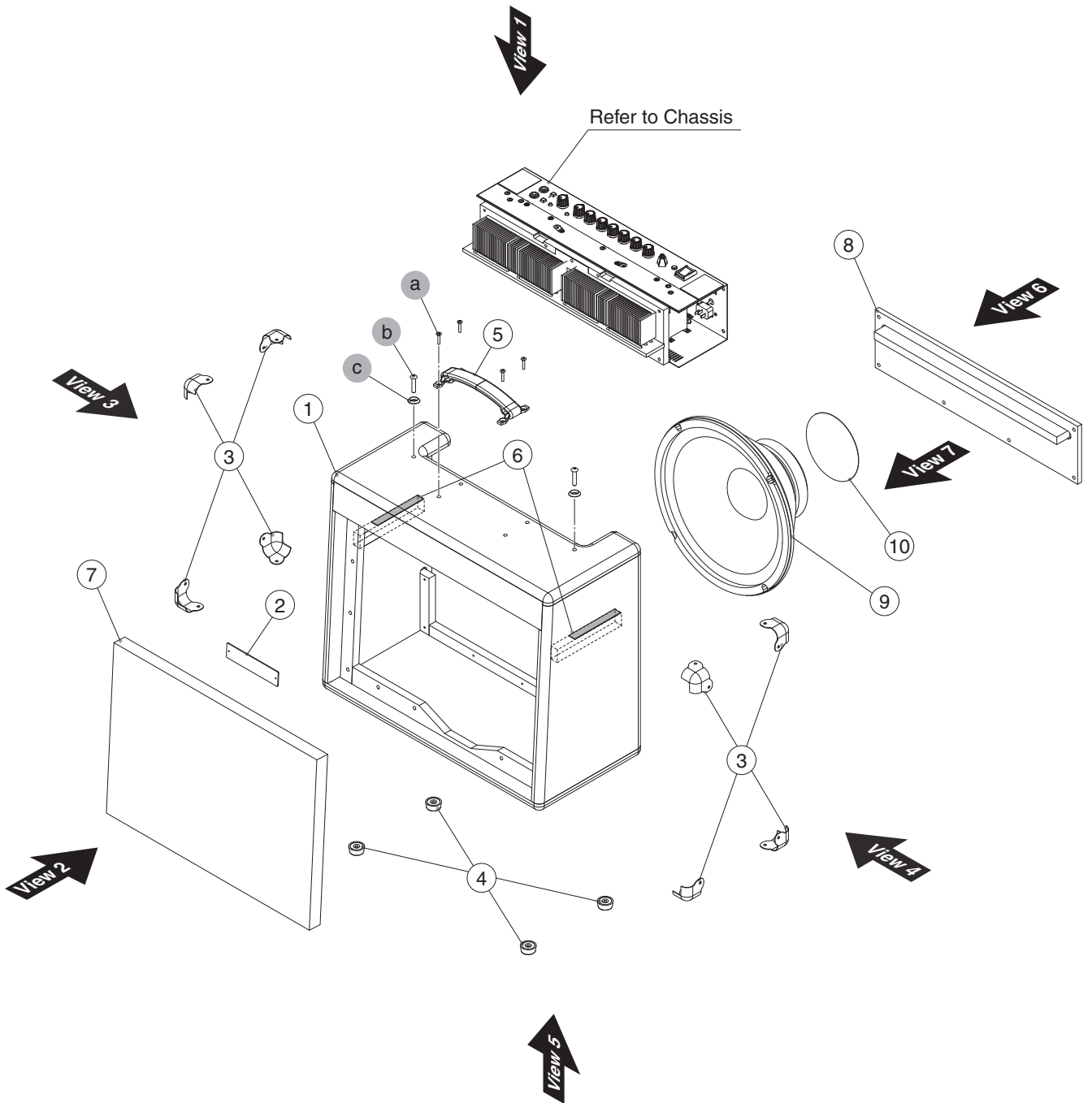
No.	Part Code	Part Name	Description	Q'ty
1	03349989	LED (GREEN)	L-34GDSDL-FPB	1
	510004216	LED SPACER	LEDH-7	1
2	03349978	LED (RED)	L-34HDSL-FPB	1
	510004216	LED SPACER	LEDH-7	1
3	5100041047	C-KEYTOP	MP-21035-97Y1A-000	4
	01780101	TACT SWITCH	SKQKABD010	4
	5100042864	LED	WW03A3AYH1-B4(SQ)	4
	5100044430	LED SPACER	LEDH-1.5	4
	5100041048	S-KEYTOP	MP-21035-19N6A-000	2
4	01780101	TACT SWITCH	SKQKABD010	2
	5100041045	R-KNOB	MP-21035-22A1A-000	7
	5100033433	ROTARY POTENTIOMETER	R0923NOCV1B103FE00A1	7
	* This unit includes the following parts.			
	*****	VR NUT	attached to VR	7
	*****	VR WASHER	attached to VR	7
6	5100041045	R-KNOB	MP-21035-22A1A-000	1
	5100033432	ROTARY POTENTIOMETER	R0923GOCV1P203FE00A4	1
	* This unit includes the following parts.			
	*****	VR NUT	attached to VR	1
	*****	VR WASHER	attached to VR	1
7	5100041046	INDEX KNOB	MP-21035-23A1A-000	1
	5100042592	SWITCH	S171EV114GFS2AN17	1
	* This unit includes the following parts.			
	*****	NUT	attached to Switch	1
	*****	WASHER	attached to Switch	1
	*****	SPACER	attached to Switch	1
8	5100032921	LED	61-238R-REGBB7C-A03-ET	1
	5100041049	LED ESCUTCHEON	ME-21035-8010A-000	1
	5100041050	LED LENS	MP-21035-52N6A-000	1
9	01786012	SEESAW SWITCH	JW-M11RKK	1
	01786045	SW HOLDER	AT-217K	1
	5100004357	HIMELON	21X3X0.35T W /ADH(SD000476)	2
10	5100023843	6.5MM JACK	LJB0664-4SS	2
	* This unit includes the following parts.			
	*****	JACK NUT	attached to Jack	2
	*****	JACK WASHER	attached to Jack	2
	5100042577	JACK SPACER T3.4	MP-21035-29Q1A-MAH	2

Location of Controls (Rear)



No.	Part Code	Part Name	Description	Q'ty
11	5100023507	6.5MM JACK	LJB0664-6(F3439950R0)	3
		* This unit includes the following parts.		
	*****	JACK NUT	attached to Jack	3
	*****	JACK WASHER	attached to Jack	3
	5100042577	JACK SPACER T3.4	MP-21035-29Q1A-MAH	3
12	5100010665	USB CONNECTOR B TYPE FEMALE	2549A-04G2T(610-02001-04-00)	1
13	5100039807	AC INLET S-03-11	EJ-HF301-1101A-MML	1

Exploded View (Cabinet)



Exploded View (Cabinet) Parts List

No.	Part Code	Part Name	Description	Q'ty
	5100046014	CABINET TOTAL		
		* This unit includes the following parts: No.1-8.		
1	*****	CABINET (WOOD)		1
2	5100041041	BADGE	LB-21035-4422A-000	1
3	5100041038	CORNER COVER EK1081 NI	ME-21035-0610A-000	8
4	5100041039	FOOT EK1206	MP-21035-47Q1A-000	4
5	5100041040	HANDLE EKH1005	MI-05168-0201A-000	1
6	5100041065	CABINET CUSHION A	EV-10410-0166X-000	2
7	5100046015	NET BOARD		1
		* This unit includes the following parts.		
	*****	BAFFLE BOARD (WOOD)		1
	*****	SRAN NET 1007C		1
	*****	STAPLE		1
	*****	VINYL TIE		1
8	5100046016	REAR BOARD		1
9	5100041411	SPEAKER W1208-046A	SP-B1080-80031-APM	1
10	5100041511	LABEL SPEAKER MAGNET	PL-21036-L0011-000	1
a	5100041072	SCREW M4X20 MS-40020-236AA-MY	OVAL MACHINE NI	4
b	5100041073	SCREW M4X30 MS-40030-236AA-MY	OVAL MACHINE NI	2
c	5100041078	ROSETTE WASHER M4	NI (MC-15042-20303-000)	2

Disassembly Procedure

Detaching the Chassis Assy

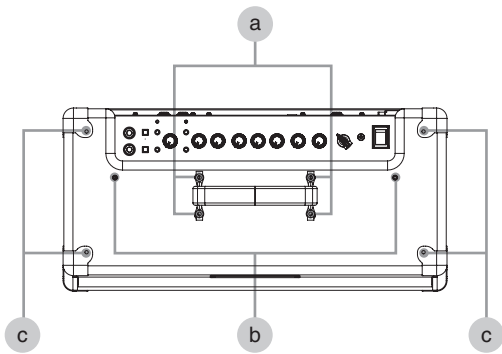
1. Detach the speaker wiring (x 2) from the speaker.
2. Remove screws **b** (x 2) in **View 1** (p. 8).
3. Remove screws **f** (x 4) in **View 6** (p. 8) and detach the Chassis Assy.

Detaching the Circuit Boards

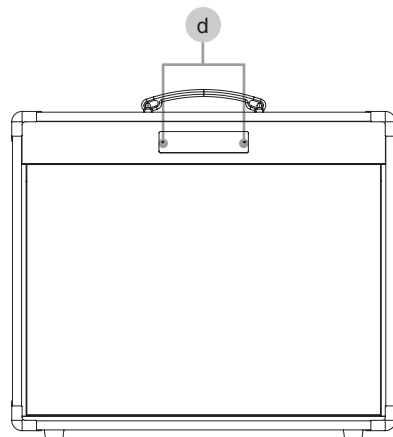
4. Remove screws **b** (x 10) in **View 9** (p. 12).
5. Detach the Chassis Cover Board and remove the connectors (x 4).
6. When detaching the circuit boards, remove screws from the outside of the Chassis.

Plan View (Cabinet)

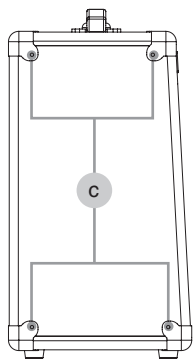
View 1



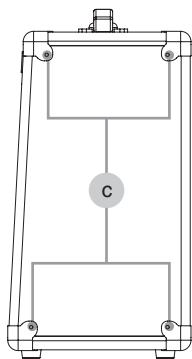
View 2



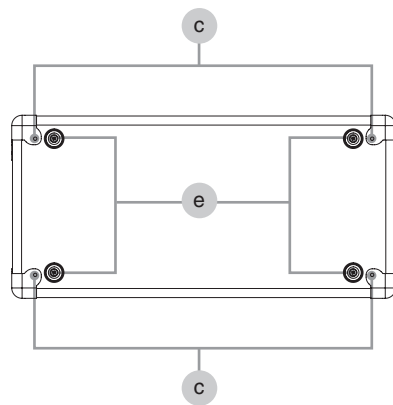
View 3



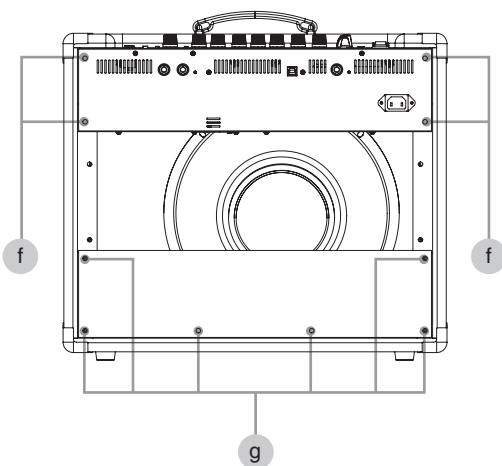
View 4



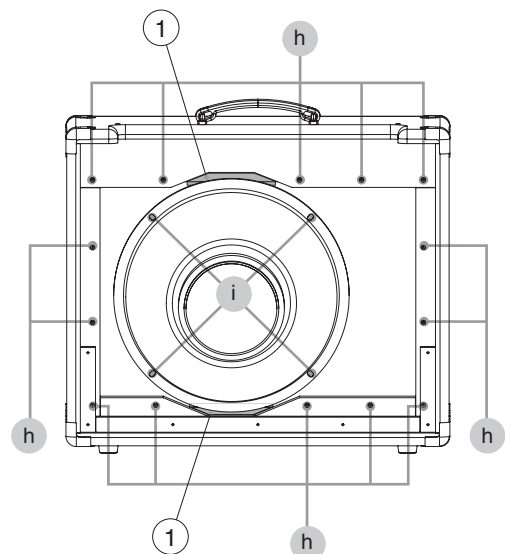
View 5



View 6



View 7



Plan View (Cabinet) Parts List

View 1

No.	Part Code	Part Name	Description	Q'ty
a	5100041072	SCREW M4X20 MS-40020-236AA-MY	OVAL MACHINE NI	4
b	5100041073	SCREW M4X30 MS-40030-236AA-MY	OVAL MACHINE NI	2
	5100041078	ROSETTE WASHER M4	NI (MC-15042-20303-000)	2
c	5100043887	SCREW 3.5X16	TRUSS TAPPING A NI	4

View 2

No.	Part Code	Part Name	Description	Q'ty
d	5100041079	NAIL 1.4X16	SUS	2

View 3

No.	Part Code	Part Name	Description	Q'ty
c	5100043887	SCREW 3.5X16	TRUSS TAPPING A NI	4

View 4

No.	Part Code	Part Name	Description	Q'ty
c	5100043887	SCREW 3.5X16	TRUSS TAPPING A NI	4

View 5

No.	Part Code	Part Name	Description	Q'ty
c	5100043887	SCREW 3.5X16	TRUSS TAPPING A NI	4
e	40010689	SCREW 4X25	TRUSS TAPPING A FE BZC	4

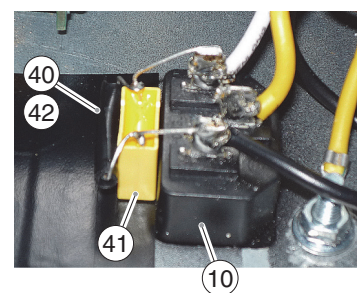
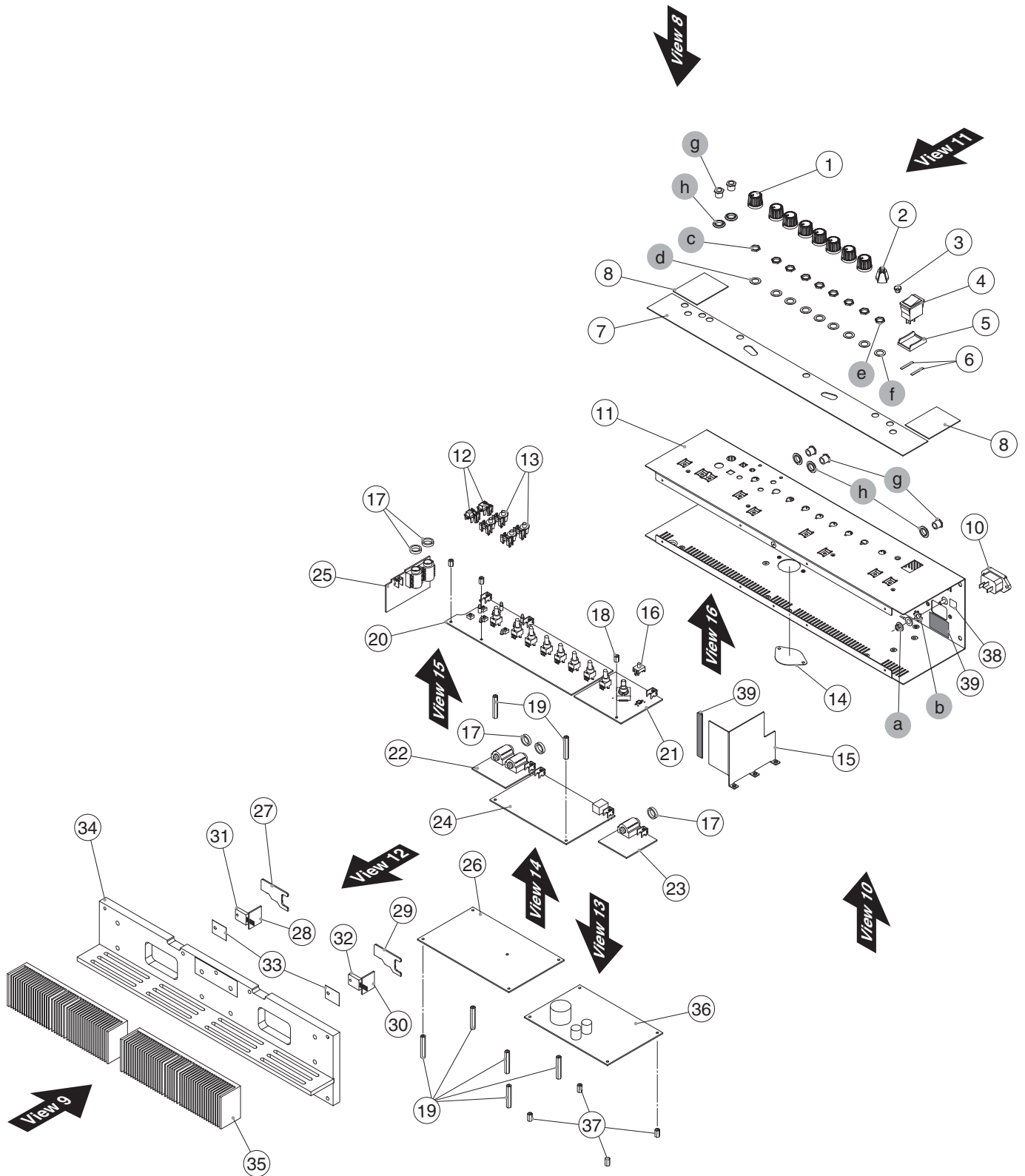
View 6

No.	Part Code	Part Name	Description	Q'ty
f	40010689	SCREW 4X25	TRUSS TAPPING A FE BZC	4
g	5100033930	SCREW 4X25	TRUSS TAPPING A NI	6
	5100043897	PLAIN WASHER 4.2X10X1	NI (MC-10004-10311-MYC)	6

View 7

No.	Part Code	Part Name	Description	Q'ty
1	5100041065	CABINET CUSHION A	EV-10410-0166X-000	2
h	40010690	SCREW 4X30	TRUSS TAPPING A FE BZC	14
i	40010390	SCREW M5X25	BINDING HEAD FE BZC	4

Exploded View (Chassis)

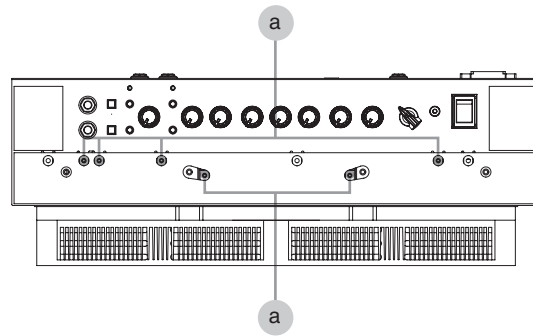


Exploded View (Chassis) Parts List

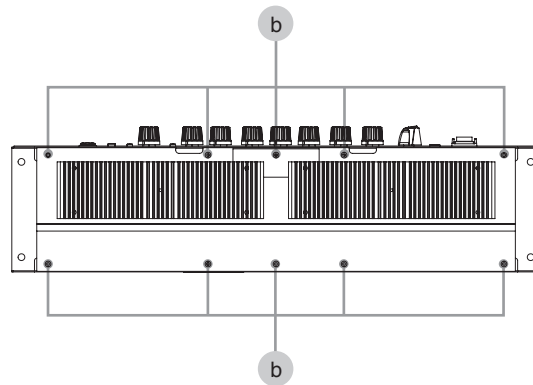
No.	Part Code	Part Name	Description	Q'ty
1	5100041045	R-KNOB	MP-21035-22A1A-000	8
2	5100041046	INDEX KNOB	MP-21035-23A1A-000	1
3	5100041049	LED ESCUTCHEON	ME-21035-8010A-000	1
4	01786012	SEESAW SWITCH	JW-M11RKK	1
5	01786045	SW HOLDER	AT-217K	1
6	510004357	HIMELON	21X3X0.35T W/ADH(SD000476)	2
7	5100041060	TOP CUSHION L	EV-45010-0456A-000	1
8	5100041064	TOP CUSHION S	PP-21036-05011-MXL	2
10	5100039807	AC INLET S-03-11	EJ-HF301-1101A-MML	1
11	5100041043	CHASSIS	ME-21036-2418A-000	1
12	5100041048	S-KEYTOP	MP-21035-19N6A-000	2
13	5100041047	C-KEYTOP	MP-21035-97Y1A-000	4
14	5100041057	ATTACHMENT COVER SHEET	MP-21035-64A5A-000	1
15	5100041058	SHIELD COVER	ME-21035-1801A-000	1
16	5100041050	LED LENS	MP-21035-52N6A-000	1
17	5100042577	JACK SPACER T3.4	MP-21035-29Q1A-MAH	5
18	22150517	STANDOFF M3 L8		3
19	5100041077	STANDOFF M3-L5.5-H33-C	MN-03025-06041-MQC	7
	5100038898	PANEL SHEET ASSY		1
		<i>* This unit includes the following parts.</i>		
20	*****	PANEL VR BOARD		1
21	*****	PANEL MASTER BOARD		1
22	*****	JACK PHONES BOARD		1
23	*****	JACK FS BOARD		1
c	*****	VR NUT	attached to VR (PANEL VR, PANEL MASTER BOARD)	8
d	*****	VR WASHER	attached to VR (PANEL VR, PANEL MASTER BOARD)	8
e	*****	NUT	attached to Switch (PANEL MASTER BOARD)	1
f	*****	WASHER	attached to Switch (PANEL MASTER BOARD)	1
g	*****	JACK NUT	attached to Jack (JACK PHONES, JACK FS BOARD)	3
h	*****	JACK WASHER	attached to Jack (JACK PHONES, JACK FS BOARD)	3
24	5100038912	MAIN BOARD ASSY		1
	5100040684	AMP SHEET ASSY		1
		<i>* This unit includes the following parts.</i>		
25	*****	INPUT BOARD		1
26	*****	AMP BOARD		1
27	*****	PTC-A BOARD		1
28	*****	PTR-P BOARD		1
29	*****	PTC-B BOARD		1
30	*****	PTR-N BOARD		1
31	5100039799	TRANSISTOR	2SA1943N	1
32	5100039798	TRANSISTOR	2SC5200N	1
g	*****	JACK NUT	attached to Jack (INPUT BOARD)	2
h	*****	JACK WASHER	attached to Jack (INPUT BOARD)	2
33	40239345	INSULATOR	BFG-20D-3	2
34	5100041171	CHASSIS COVER BOARD	WS-21036-00117-APM	1
35	5100041052	HEATSINK	MK-21035-K05A1-MVN	2
36	5100041413	SWITCHING POWER SUPPLY	100V	1
	5100041414	SWITCHING POWER SUPPLY	117V	1
	5100041417	SWITCHING POWER SUPPLY	230-240V	1
	5100041416	SWITCHING POWER SUPPLY	220V	1
37	22150501	STAND OFF	M3-L5.5-H10 (BS)	4
38	40013812	CAUTION SEAL	IEC #142	1
39	5100044664	INSULATING TAPE	NITTO #223S 20M	
40	5100044975	RESISTOR	RCR60CT52A335J	1
41	5100044983	CAPACITOR	MPX104K3IC3	1
42	5100045091	THERMAL SHRINKAGE TUBE	TA-03000-10011-NAZ 100MM	-
a	40012667	FLANGE HEX NUT M4	W/CELATION NI	1
b	5100045554	EXTERNAL TOOTH WASHER M4	NI	1

Plan View (Chassis) (1)

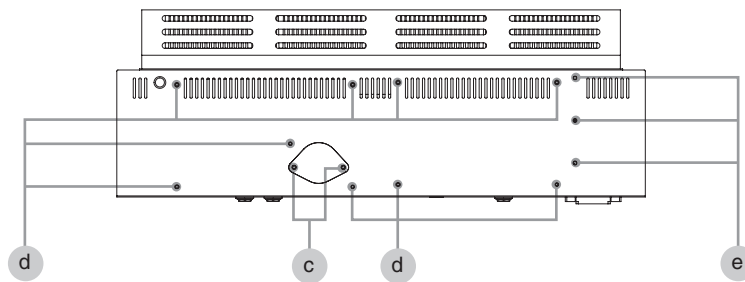
View 8



View 9



View 10



View 8

No.	Part Code	Part Name	Description	Q'ty
a	40011423	SCREW M3X6	PAN SEMS FECCM	6

View 9

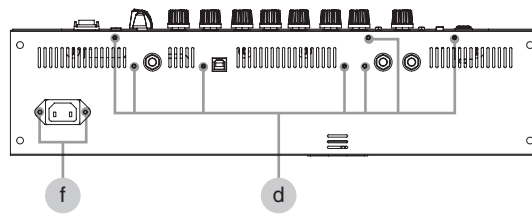
No.	Part Code	Part Name	Description	Q'ty
b	5100043889	SCREW M3X18 MS-03516-11301-CG	PAN MACHINE NI	10
	5100043912	PLAIN WASHER 3.2X7.5X0.5	NI (MC-08003-10311-MYC)	10
	5100043914	SPRING WASHER 3.3X5.5X1	NI (MC-05003-10321-MYC)	10

View 10

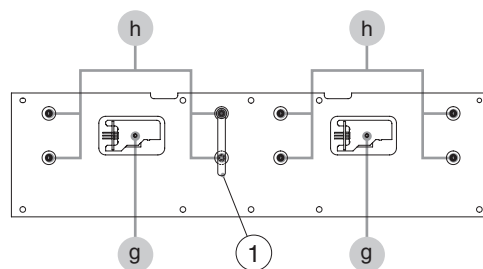
No.	Part Code	Part Name	Description	Q'ty
c	40237101	SCREW M3X8	PAN MACHINE W/SW+SMALL PW BZC	2
d	40012945	SCREW M3X6	PAN MACHINE W/SW+PW BZC	9
e	40011101	SCREW 3X8	BINDING TAPTITE B BZC	3

Plan View (Chassis) (2)

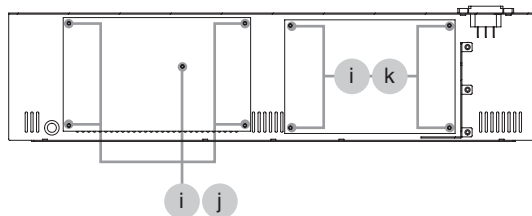
View 11



View 12



View 13



View 11

No.	Part Code	Part Name	Description	Q'ty
d	40012945	SCREW M3X6	PAN MACHINE W/SW+PW BZC	7
f	40011156	SCREW 3X8	FLAT TAPITITE B BZC	2

View 12

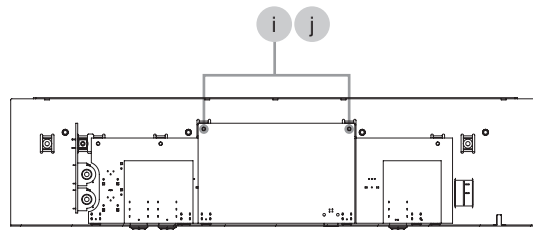
No.	Part Code	Part Name	Description	Q'ty
1	40017378	COATING CLIP	CS-7	1
g	40012889	SCREW M3X12	PAN MACHINE W/SW+PW FE ZC	2
h	40560289	SCREW M4X18	PAN MACHINE W/SW+PW ZC PAN	8

View 13

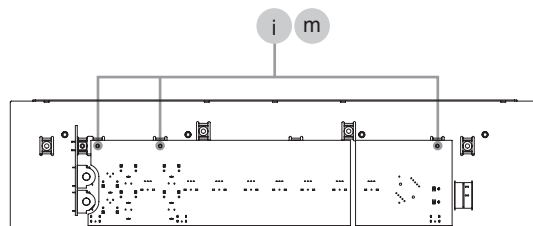
No.	Part Code	Part Name	Description	Q'ty
i	40017934	SCREW M3X6	PAN MACHINE W/SW+PW(L) FE ZC	9
j	5100041077	STANDOFF M3-L5.5-H33-C	MN-03025-06041-MQC	5
k	22150501	STAND OFF	M3-L5.5-H10 (BS)	4

Plan View (Chassis) (3)

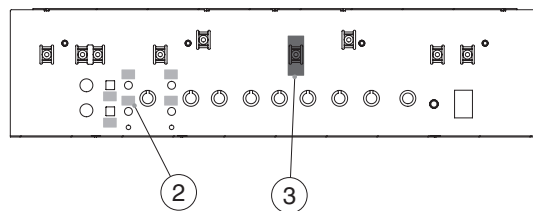
View 14



View 15



View 16



View 14

No.	Part Code	Part Name	Description	Q'ty
i	40017934	SCREW M3X6	PAN MACHINE W/SW+PW(L) FE ZC	2
j	5100041077	STANDOFF M3-L5.5-H33-C	MN-03025-06041-MQC	2

View 15

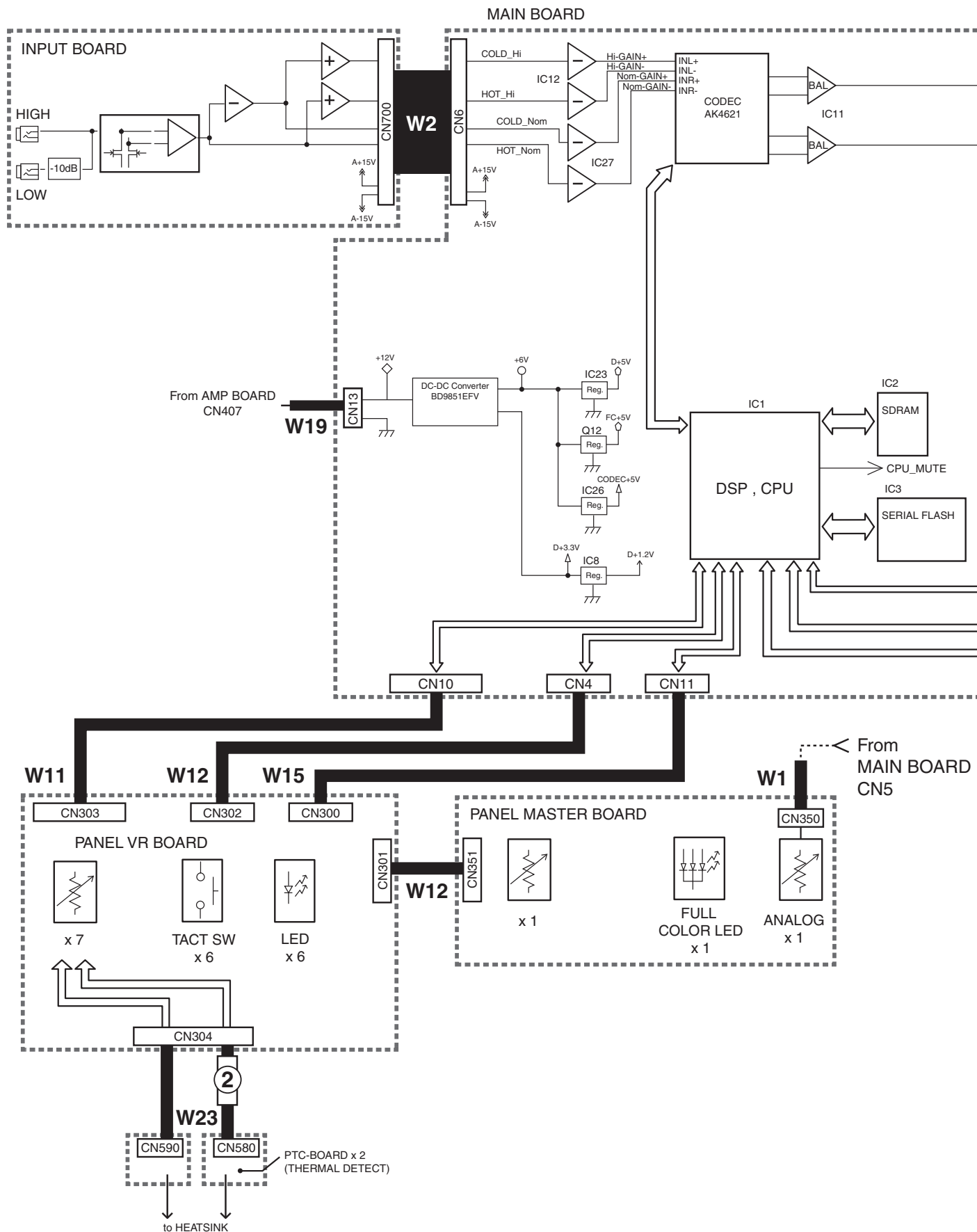
No.	Part Code	Part Name	Description	Q'ty
i	40017934	SCREW M3X6	PAN MACHINE W/SW+PW(L) FE ZC	3
m	22150517	STANDOFF M3 L8		3

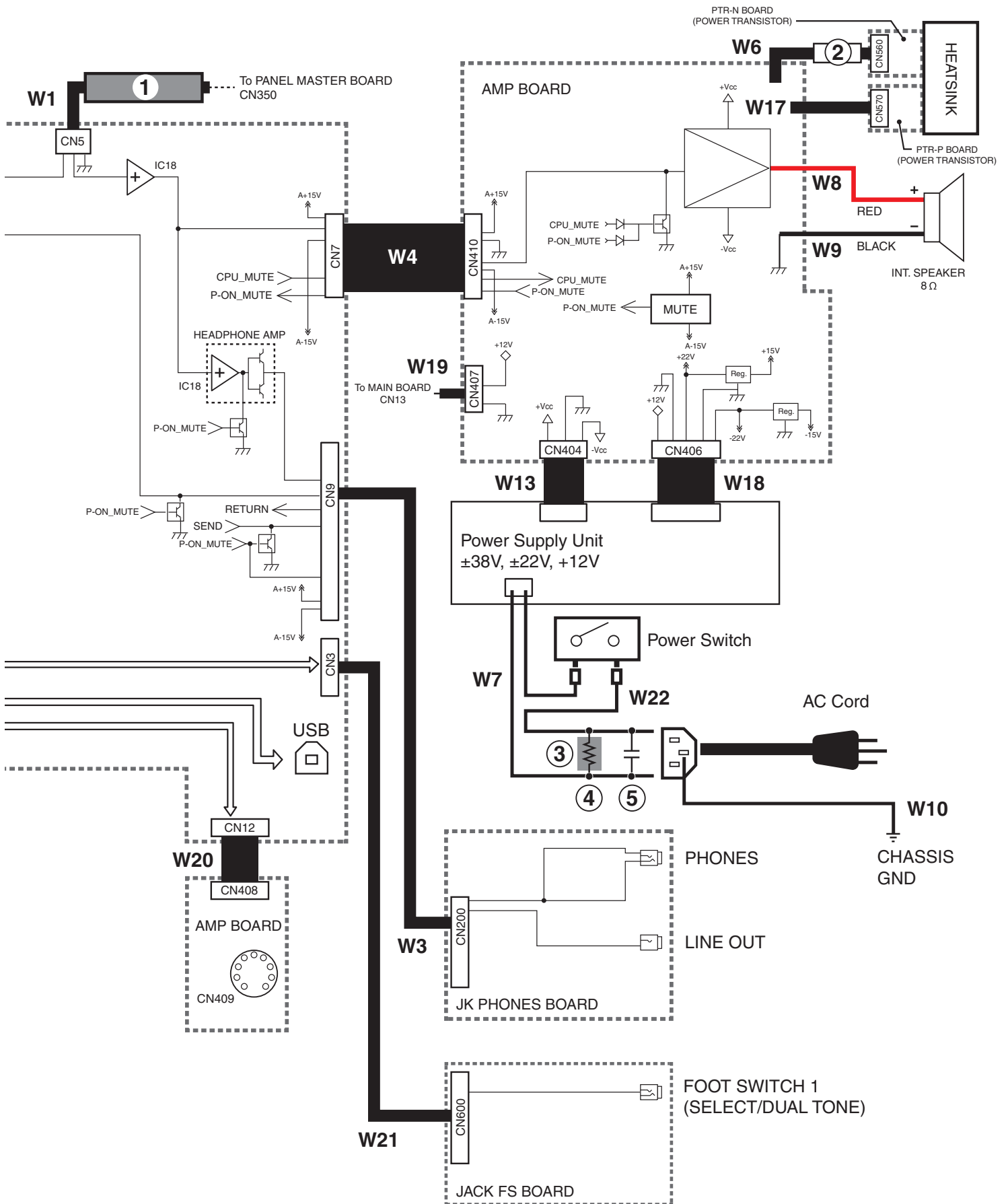
View 16

No.	Part Code	Part Name	Description	Q'ty
2	5100041067	S-KEYTOP CUSHION	EV-01605-0091A-000	6
3	5100044664	INSULATING TAPE	NITTO #223S 20M	

Wiring Diagram/Block Diagram

BC-STAGE connection diagram





Wiring Diagram Parts List

No.	Part Code	Part Name	Description	Q'ty
1	5100039405	CUSHION	WIRING D	1
2	*****	UL TUBE	TA-16014-02012-NAZ 160MM	-
3	5100045091	THERMAL SHRINKAGE TUBE	TA-03000-10011-NAZ 100MM	-
4	5100044975	RESISTOR	RCR60CT52A335J	1
5	5100044983	CAPACITOR	MPX104K3IC3	1
W1	5100041393	WIRING W1	2547#28	1
W2	5100041394	WIRING W2	2547#28/1007#28	1
W3	5100041395	WIRING W3	1007#28/1185#28	1
W4	5100041396	WIRING W4	1007#28/1185#28	1
W6	5100041400	WIRING W6	1015#22-RD/BK/WT	1
W7	5100041402	WIRING W7 (1672#22-BLK/WHT)	CO-AB140-KN101-CHA	1
W8	5100041403	WIRING W8	1015#22-RED	1
W9	5100041404	WIRING W9	1015#22-BLK	1
W10	5100041405	WIRING W10 (1015#18-GRN&YEL)	LJ-HC090-23122-CHA	1
W11	5100041390	WIRING W11	1007#28 11X65-PHR-SAN-F	1
W12	5100041388	WIRING W12	1007#28 10X65-PHR-SAN-F	2
W13	5100041399	WIRING W13	1015#22	1
W15	5100041384	WIRING W15	1007#28 8X65-PHR-SAN-F	1
W17	5100041406	WIRING W17	1015#22-BU/BK/WT	1
W18	5100041397	WIRING W18	1430#22 5X70-EHR-XHP-R	1
W19	5100041398	WIRING W19	1007#22 2X160-EHR-SCN-F	1
W20	5100041386	WIRING W20	1007#28/2547#28	1
W21	5100041392	WIRING W21	1007#28 14X170-PHR-SAN-F	1
W22	5100041407	WIRING W22 (1672#22-BLK)	LJ-HC140-23022-CHA	1
W23	5100041409	WIRING W23	1007#28	1

Parts List

Safety Precautions:

The parts marked Δ have safety-related characteristics. Use only listed parts for replacement.

Due to one or more of the following reasons, parts with parts code ***** cannot be supplied as service parts.

- Supply is prohibited due to copyright restrictions.
- It is carried in electronic data on the Roland web site.
- The part is made to order (at current market price).
- It can be replaced with an article on the market. (battery or etc.)
- It is a package or an accessory irrelevant to the function maintenance of the main body.
- A number of circuit boards are grouped together and supplied as a single circuit board (under a different part code).
- Reissuance is restricted.
- It is supplied as an assembled part (under a different part code).

Note: The parts marked # are new. (initial parts) The description "Q'ty" means a necessary number of the parts per one product.

CASING

#	5100046014	CABINET TOTAL		1
#	5100046015	NET BOARD		1
#	5100046016	REAR BOARD		1
#	5100041057	ATTACHMENT COVER SHEET	MP-21035-64A5A-000	1

CHASSIS

#	5100041043	CHASSIS	ME-21036-2418A-000	1
#	5100041171	CHASSIS COVER BOARD	WS-21036-00117-APM	1
#	5100041058	SHIELD COVER	ME-21035-1801A-000	1
	01786045	SW HOLDER	AT-217K	1

KNOB, BUTTON

#	5100041046	INDEX KNOB	MP-21035-23A1A-000	1
#	5100041045	R-KNOB	MP-21035-22A1A-000	8
#	5100041047	C-KEYTOP	MP-21035-97Y1A-000	4
#	5100041048	S-KEYTOP	MP-21035-19N6A-000	2

SWITCH

Δ	01786012	SEESAW SWITCH	JW-M11RKK	1
	5100042592	SWITCH	S171EV114GFS2AN17	1
	01780101	TACT SWITCH	SKQKABD010	6

JACK, EXT TERMINAL

	5100023507	6.5MM JACK	LJB0664-6(F3439950R0)	3
	5100023843	6.5MM JACK	LJB0664-4SS	2
	5100010665	USB CONNECTOR B TYPE FEMALE	2549A-04G2T(610-02001-04-00)	1

POWER SUPPLY UNIT

#	Δ	5100041413	SWITCHING POWER SUPPLY	100V	for 100V	1
#	Δ	5100041414	SWITCHING POWER SUPPLY	117V	for 117VU, 117VBL, 117VU/CS	1
#	Δ	5100041416	SWITCHING POWER SUPPLY	220V	for 220VCN	1
#	Δ	5100041417	SWITCHING POWER SUPPLY	230-240V	for 230VEU, 230VE, 240VA	1

SPEAKER, BUZZER

#	Δ	5100041411	SPEAKER W1208-046A	SP-B1080-80031-APM	1
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PWB ASSY

	5100038912	MAIN BOARD ASSY		1
	5100038898	PANEL SHEET ASSY		1
		* This unit includes the following parts.		
	*****	JACK FS BOARD		1
	*****	JACK PHONES BOARD		1
	*****	PANEL VR BOARD		1
	*****	PANEL MASTER BOARD		1
	5100040684	AMP SHEET ASSY		1
		* This unit includes the following parts.		
	*****	AMP BOARD		1
	*****	INPUT BOARD		1
	*****	PTR-N BOARD		1
	*****	PTR-P BOARD		1
	*****	PTC-A BOARD		1
	*****	PTC-B BOARD		1

TRANSISTOR

Δ	5100039798	TRANSISTOR	2SC5200N	1
Δ	5100039799	TRANSISTOR	2SA1943N	1

DIODE					
	5100032921	LED	61-238R-REGBB7C-A03-ET	1	
	5100042864	LED	WW03A3AYH1-B4(SQ)	4	
	03349989	LED (GREEN)	L-34GDSL-FPB	1	
	03349978	LED (RED)	L-34HDSL-FPB	1	
RESISTOR					
#	△	5100044975	RESISTOR	RCR60CT52A335J	1
POTENTIOMETER					
	5100033432	ROTARY POTENTIOMETER	R0923GOCV1P203FE00A4	1	
	5100033433	ROTARY POTENTIOMETER	R0923NOCV1B103FE00A1	7	
CAPACITOR					
#	△	5100044983	CAPACITOR	MPX104K3IC3	1
WIRING, CABLE					
	5100041393	WIRING W1	2547#28	1	
	5100041394	WIRING W2	2547#28/1007#28	1	
	5100041395	WIRING W3	1007#28/1185#28	1	
	5100041396	WIRING W4	1007#28/1185#28	1	
	5100041400	WIRING W6	1015#22-RD/BK/WT	1	
#	△	5100041402	WIRING W7 (1672#22-BLK/WHT)	CO-AB140-KN101-CHA	1
	5100041403	WIRING W8	1015#22-RED	1	
	5100041404	WIRING W9	1015#22-BLK	1	
#	△	5100041405	WIRING W10 (1015#18-GRN&YEL)	LJ-HC090-23122-CHA	1
	5100041390	WIRING W11	1007#28 11X65-PHR-SAN-F	1	
	5100041388	WIRING W12	1007#28 10X65-PHR-SAN-F	2	
	5100041399	WIRING W13	1015#22	1	
	5100041384	WIRING W15	1007#28 8X65-PHR-SAN-F	1	
	5100041406	WIRING W17	1015#22-BU/BK/WT	1	
	5100041397	WIRING W18	1430#22 5X70-EHR-XHP-R	1	
	5100041398	WIRING W19	1007#22 2X160-EHR-SCN-F	1	
	5100041386	WIRING W20	1007#28/2547#28	1	
	5100041392	WIRING W21	1007#28 14X170-PHR-SAN-F	1	
#	△	5100041407	WIRING W22 (1672#22-BLK)	LJ-HC140-23022-CHA	1
	5100041409	WIRING W23	1007#28	1	
AC INLET, OUTLET					
#	△	5100039807	AC INLET S-03-11	EJ-HF301-1101A-MML	1
SCREWS					
	40011423	SCREW M3X6	PAN SEMS FECM	6	
	40017934	SCREW M3X6	PAN MACHINE W/SW+PW(L) FE ZC	14	
	40012945	SCREW M3X6	PAN MACHINE W/SW+PW BZC	16	
	40237101	SCREW M3X8	PAN MACHINE W/SW+SMALL PW BZC	2	
	40012889	SCREW M3X12	PAN MACHINE W/SW+PW FE ZC	2	
#	5100043889	SCREW M3X18 MS-03516-11301-CG	PAN MACHINE NI	10	
	40560289	SCREW M4X18	PAN MACHINE W/SW+PW ZC PAN	8	
#	5100041072	SCREW M4X20 MS-40020-236AA-MY	OVAL MACHINE NI	4	
#	5100041073	SCREW M4X30 MS-40030-236AA-MY	OVAL MACHINE NI	2	
	40010390	SCREW M5X25	BINDING HEAD FE BZC	4	
#	5100043887	SCREW 3.5X16	TRUSS TAPPING A NI	16	
	40011101	SCREW 3X8	BINDING TAPTITE B BZC	3	
	40011156	SCREW 3X8	FLAT TAPTITE B BZC	2	
	40010689	SCREW 4X25	TRUSS TAPPING A FE BZC	8	
	5100033930	SCREW 4X25	TRUSS TAPPING A NI	6	
	40010690	SCREW 4X30	TRUSS TAPPING A FE BZC	14	
	40012667	FLANGE HEX NUT M4	W/CELATION NI	1	
	22150501	STAND OFF	M3-L5.5-H10 (BS)	4	
#	5100041077	STANDOFF M3-L5.5-H33-C	MN-03025-06041-MQC	7	
	22150517	STANDOFF M3 L8		3	
#	5100043912	PLAIN WASHER 3.2X7.5X0.5	NI (MC-08003-10311-MYC)	10	
#	5100043897	PLAIN WASHER 4.2X10X1	NI (MC-10004-10311-MYC)	6	
#	5100043914	SPRING WASHER 3.3X5.5X1	NI (MC-05003-10321-MYC)	10	
	5100045554	EXTERNAL TOOTH WASHER M4	NI	1	
#	5100041078	ROSETTE WASHER M4	NI (MC-15042-20303-000)	2	
#	5100042577	JACK SPACER T3.4	MP-21035-29Q1A-MAH	5	
#	5100041079	NAIL 1.4X16	SUS	2	

MISCELLANEOUS

#	5100041040	HANDLE EKH1005	MI-05168-0201A-000	1	
#	5100041041	BADGE	LB-21035-4422A-000	1	
#	5100041038	CORNER COVER EK1081 NI	ME-21035-0610A-000	8	
#	5100041039	FOOT EK1206	MP-21035-47Q1A-000	4	
#	5100041065	CABINET CUSHION A	EV-10410-0166X-000	4	
#	5100041060	TOP CUSHION L	EV-45010-0456A-000	1	
#	5100041064	TOP CUSHION S	PP-21036-05011-MXL	2	
	5100039405	CUSHION	WIRING D	1	
#	5100041067	S-KEYTOP CUSHION	EV-01605-0091A-000	6	
	40017378	COATING CLIP	CS-7	1	
#	5100041052	HEATSINK	MK-21035-K05A1-MVN	2	
	5100004357	HIMELON	21X3X0.35T W/ADH(SD000476)	2	
#	△	40239345	INSULATOR	BFG-20D-3	2
	40016523	INSULOK TIE 100M/M T-18R	(1000 PCS ORDERING PER)	16	
#	5100041049	LED ESCUTCHEON	ME-21035-8010A-000	1	
#	5100041050	LED LENS	MP-21035-52N6A-000	1	
	5100044430	LED SPACER	LEDH-1.5	4	
	5100004216	LED SPACER	LEDH-7	2	
	5100003695	TERMINAL	PCB-12	8	
#	△	5100045091	THERMAL SHRINKAGE TUBE	TA-03000-10011-NAZ 100MM	-
	△	40013812	CAUTION SEAL	IEC #142	1
#	5100041511	LABEL SPEAKER MAGNET	PL-21036-L0011-000	1	
#	△	5100044664	INSULATING TAPE	NITTO #223S 20M	-

ACCESSORIES (Standard)

#	5100042691	OWNER'S MANUAL	MULTILANGUAGE	1		
	△	03340956	AC CORD SET PSE	100V YA-101/YP-3NB/YC-13	for 100V	1
	△	5100012292	AC CORD SET	117VBL 2.5M 3P DAIKEI 117VBL	for 117VBL	1
	△	00894378	AC CORD SET	120V SP301+IS14 SJT18/3	for 117VU, 117VU/CS	1
	△	03450323	AC CORD SET	220V YP-36 YC-13D	for 220VCN	1
	△	00907001	AC CORD SET	240VE SP-62+IS-14	for 230VE	1
	△	00894389	AC CORD SET	230V SP22+IS14 H05VV-F3G1.0	for 230VEU	1
	△	5100013842	AC CORD SET	240VA 2.5M SAA HIRAKAWA	for 240VA	1

Verifying the Version

Carry out verification in the **Test Mode** (p. 23).

Data Backup and Restore Operations

This product cannot save user data. Backing up user data during servicing is not required.

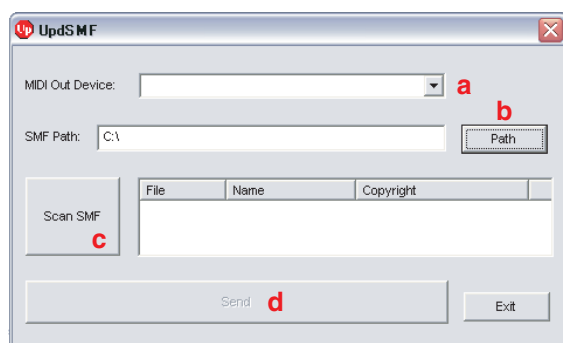
System Update Procedure

Items Required

- Computer (running Windows)
- USB cable
- Driver for BC-ARTIST /STAGE
- * Obtain this from the following web pages, and install it on the computer just described.
<http://www.roland.co.jp/>
<http://www.roland.com/>
- Update program (obtained via Service Net)
- UpdSMF.exe (obtained via Service Information No. 102333.)

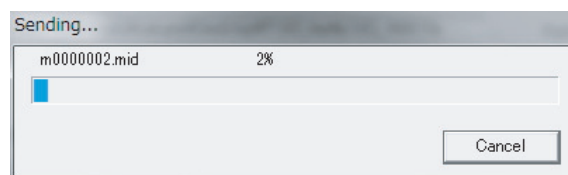
Procedure

1. Using the USB cable, connect the computer to the **REC OUT** connector.
2. Turn all knobs all the way counterclockwise.
3. Hold down **CH SELECT**, **DUAL TONE** and **CRUNCH TONE** and switch on the power.
All LEDs flash rapidly several times, and then **CLEAN**, **CLEAN BOOST**, **CLEAN TONE**, **CRUNCH BOOST** and **CRUNCH TONE** light up.
4. Run UpdSMF.exe.



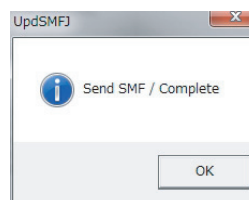
5. Click the drop-down menu (a) and select **Blues Cube Artist**.
6. Click **Path** (b), then select the folder containing the update program (SMF).
7. Click **Scan SMF** (c).
The update program (SMF) appears.

8. Click **Send** (d).
Sending of the update program starts.



While sending is in progress, the **CLEAN** LED flashes.

- * Even if the following display appears, the update does not finish yet. Never switch off the power to the computer or disconnect the USB cable.



9. Click **OK** and wait for while.
When **CLEAN**, **CLEAN BOOST**, **CLEAN TONE**, **CRUNCH BOOST** and **CRUNCH TONE** flash slowly, the update has finished.

Test Mode

Items Required

- FS-5U (x 2) or FS-6 (x 1)
 - Y cable (stereo 1/4-inch phone <-> monaural 1/4-inch phone x 2) or Stereo 1/4-inch phone cable
 - Dummy plug
 - Stereo 1/4-inch phone cable
 - GA-FC
 - Computer (running Windows)
 - USB cable
- Driver for BC-ARTIST/STAGE
- * Obtain this from the following web pages, and install it on the computer just described.
- <http://www.roland.co.jp/>
<http://www.roland.com/>
- * Set the POLARITY switch and the MODE switch on the foot switch as shown below.



FS-5U



FS-6

Entering the Test Mode

1. Turn all knobs all the way counterclockwise.
2. Hold down **CLEAN BOOST** and **CRUNCH BOOST** and switch on the power.

When the unit enters the test mode, the **CLEAN** LED flashes and execution is transferred to **Verifying the Version** (p. 23).

Quitting the Test Mode

Switch off the power.

Skipping Test Items

Test items cannot be skipped.

Verifying the Version

As shown in the table below, **CLEAN BOOST**, **CLEAN TONE** and **CRUNCH BOOST** light up or go dark to display two digits to the right of the decimal point of the version number.

Version	CLEAN BOOST	CLEAN TONE	CRUNCH BOOST
1.00	o	-	-
1.01	-	o	-
1.02	-	-	o
1.03	o	o	-
1.04	o	-	o
1.05	-	o	o

o: lights, -: dark

Press **CH SELECT** to advance to the next test item.

Device Check

The **CLEAN LED**, **CLEAN BOOST**, **CLEAN TONE**, the **CRUNCH LED**, **CRUNCH BOOST** and **CRUNCH TONE** light up.

Devices shown in the table below are checked in sequence from top to down, and if no problem is found, the corresponding LED goes dark. When not OK, the corresponding LED flashes rapidly and other devices are not checked and testing stops.

Device	Circuit Board	LED
Serial Flash	Main Board	CLEAN BOOST
SDRAM	Main Board	CLEAN TONE
DSP IRAM 0/1	Main Board	CRUNCH TONE
DSP PRAM 0/1	Main Board	CRUNCH BOOST
DSP ERAM	Main Board	CRUNCH
Heat Sensor	PTC-A/B Board	CLEAN
R546	Amp Board	

* The last item in the table above means checking R546 on Amp Board is installed or not. R546 is not installed on the Amp Board of the BC-ARTIST and installed on the Amp Board of the BC-STAGE. Refer to **Circuit Diagram (Amp Board: 1/2)** (p. 36).

* If either Heat Sensor or R546 is not OK, the **CLEAN** LED flashes rapidly.

If all devices are OK, execution automatically advances to the next test item.

LED Inspection

1. Verify that the **CLEAN LED**, **CLEAN BOOST**, **CLEAN TONE**, the **CRUNCH LED**, **CRUNCH BOOST** and **CRUNCH TONE** light up.
2. Verify that the **POWER** LED lights up in this sequence: red, green, blue.
3. Press **CH SELECT** to advance to the next test item.

Switch Inspection

The status of the LEDs at the top line of the table below is as Initial state.

Press buttons in numerical order shown in the table below and verify that the status of the corresponding LEDs.

* If the buttons are pressed in the wrong order, if two or more buttons were pressed at the same time or if the test result is not OK, execution does not advance to the next item.

	CRUNCH	CLEAN BOOST	CLEAN TONE	CRUNCH BOOST	CRUNCH TONE
Initial state	*	o	o	o	o
1 DUAL TONE	-	*	o	o	o
2 CLEAN BOOST	-	-	*	o	o
3 CLEAN TONE	-	-	-	*	o
4 CRUNCH BOOST	-	-	-	-	*
5 CRUNCH TONE	-	-	-	-	-

o: lights, -: goes off, *: flashes

When all buttons have been pressed, **CLEAN TONE** lights up and execution automatically advances to the next test item.

Volume Control Inspection

1. Turn the following knobs of (1)–(8) minimum-center-maximum in numerical order and verify that the status of the LEDs shown in the table below.

* After detecting the minimum and maximum value, test program advances to the test of the next knob.

- (1) CLEAN VOLUME
- (2) CRUNCH GAIN
- (3) CRUNCH VOLUME
- (4) BASS
- (5) MIDDLE
- (6) TREBLE
- (7) REVERB
- (8) MASTER

Knob position	CLEAN TONE	CLEAN BOOST	CRUNCH BOOST	CRUNCH TONE
Minimum	o	-	-	-
Minimum – Center	o	o	-	-
Center – Maximum	o	o	o	-
Maximum	o	o	o	o

o: lights, -: dark

When all knobs has been rotated, execution automatically advances to the next test item.

Rotary Switch Inspection

Slowly turn the **POWER CONTROL** knob one click at a time, and verify that the status of the LEDs shown in the table below.

* If the knob is turned either too fast or in the opposite direction, the corresponding LED at the location checked finally flashes rapidly. In this case, returning the knob to that position clears the error.

Knob position	CLEAN TONE	CLEAN BOOST	CRUNCH BOOST	CRUNCH TONE
0.5 W	o	-	-	-
15 W	o	o	-	-
45 W	o	o	o	-
MAX	o	o	o	o
45 W	o	o	o	-
15 W	o	o	-	-
0.5 W	o	-	-	-

o: lights, -: dark

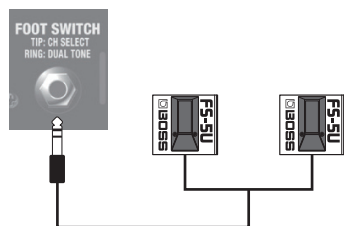
When the knob has been rotated, execution automatically advances to the next test item.

Jack Sense and Foot Switch Inspection

The status of the LEDs at the top line of the table below is as Initial state.

Carry out operations shown in the table below in numerical order and verify that the status of the corresponding LEDs.

* At "Insert the plug at Foot Switch", connect FS-5Us (or an FS-6) as shown in the figure below.



* If you're using PCS-31 for Y cable, white is for TIP and red is for RING. And if you're using 1/4-inch stereo phone cable to connect FS-6, **A** is for RING and **B** is for TIP.

	CLEAN	CLEAN BOOST	CLEAN TONE	CRUNCH	CRUNCH BOOST	CRUNCH TONE
Initial state	*	o	-	o	o	o
1 Insert the dummy plug at INPUT HIGH.	o	o	-	o	o	o
2 Disconnect the dummy plug from INPUT HIGH.	-	*	-	o	o	o
3 Insert the dummy plug at PHONES.	-	o	-	o	o	o
4 Disconnect the dummy plug from PHONES.	-	-	-	*	o	o
5 Insert the plug at Foot Switch.	-	-	-	o	*	o
6 Press the pedal for the tip of Foot Switch.	-	-	-	o	o	o
7 Release the pedal for the tip of Foot Switch.	-	-	-	o	-	*
8 Press the pedal for the ring of Foot Switch.	-	-	-	o	-	o
9 Release the pedal for the ring of Foot Switch.	-	-	-	*	-	-
10 Disconnect the plug from Foot Switch.	-	-	-	-	-	-

o: lights, -: goes off, *: flashes

When all operations have finished, execution automatically advances to the next test item.

USB Inspection

The **POWER** LED flashes in white.

Carry out operations shown in the table below in numerical order and verify that the status of the corresponding LEDs.

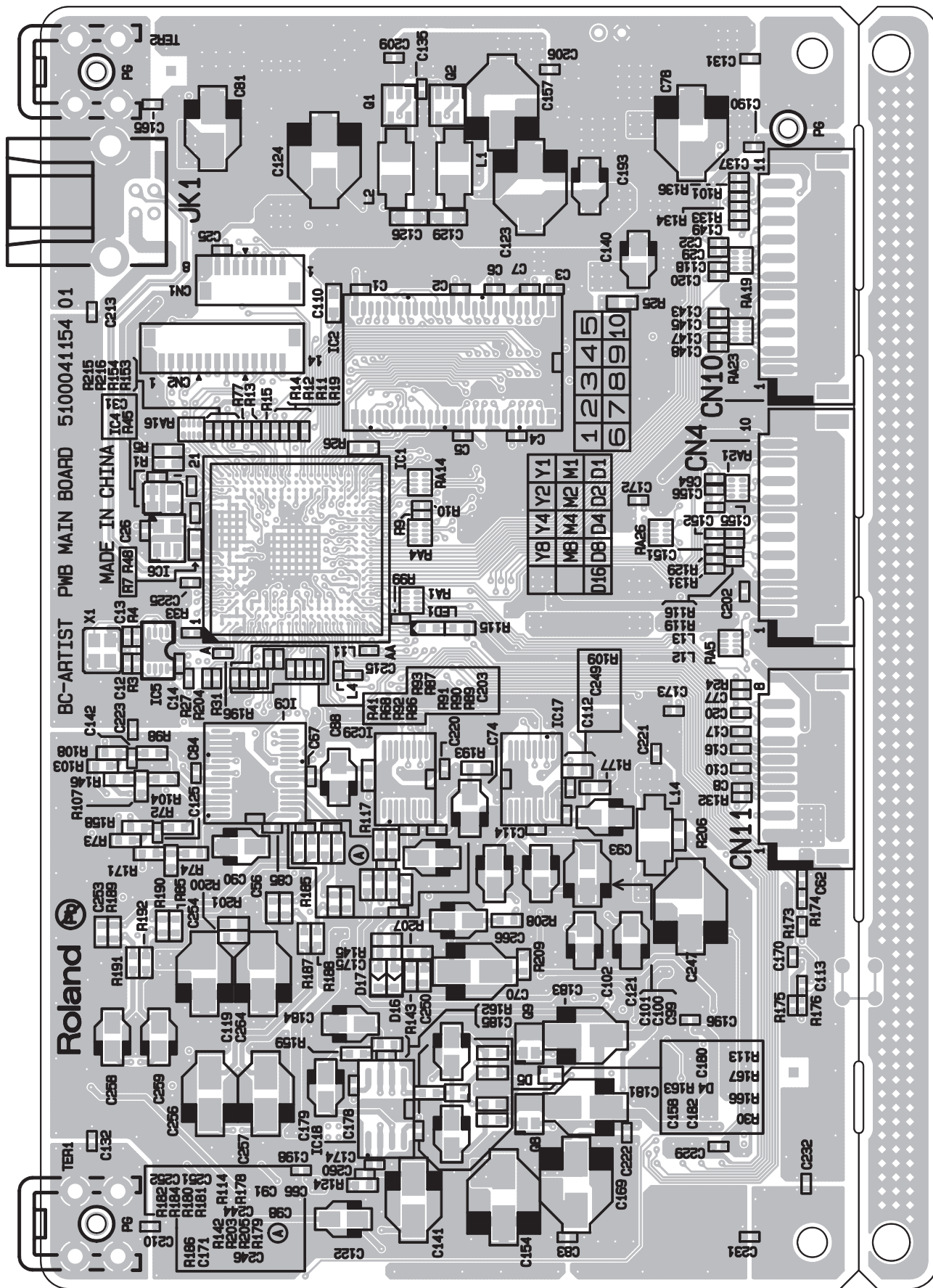
	POWER LED
Initial state	* (white)
1 Connect the computer to the REC OUT connector.	o (white)
2 Disconnect the computer.	o (red)

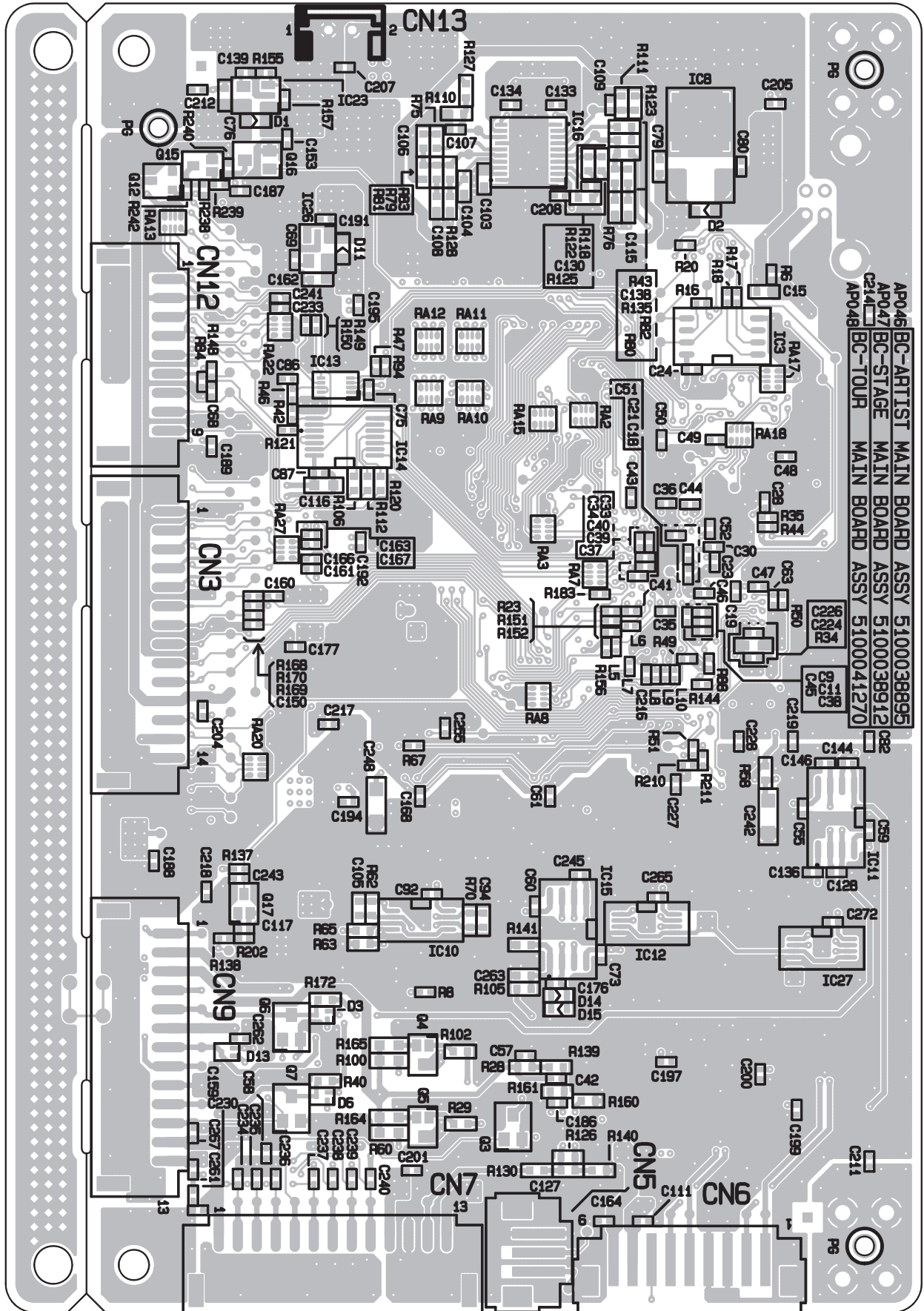
o: lights, *: flashes

When the computer is disconnected, the **POWER** LED lights up red.

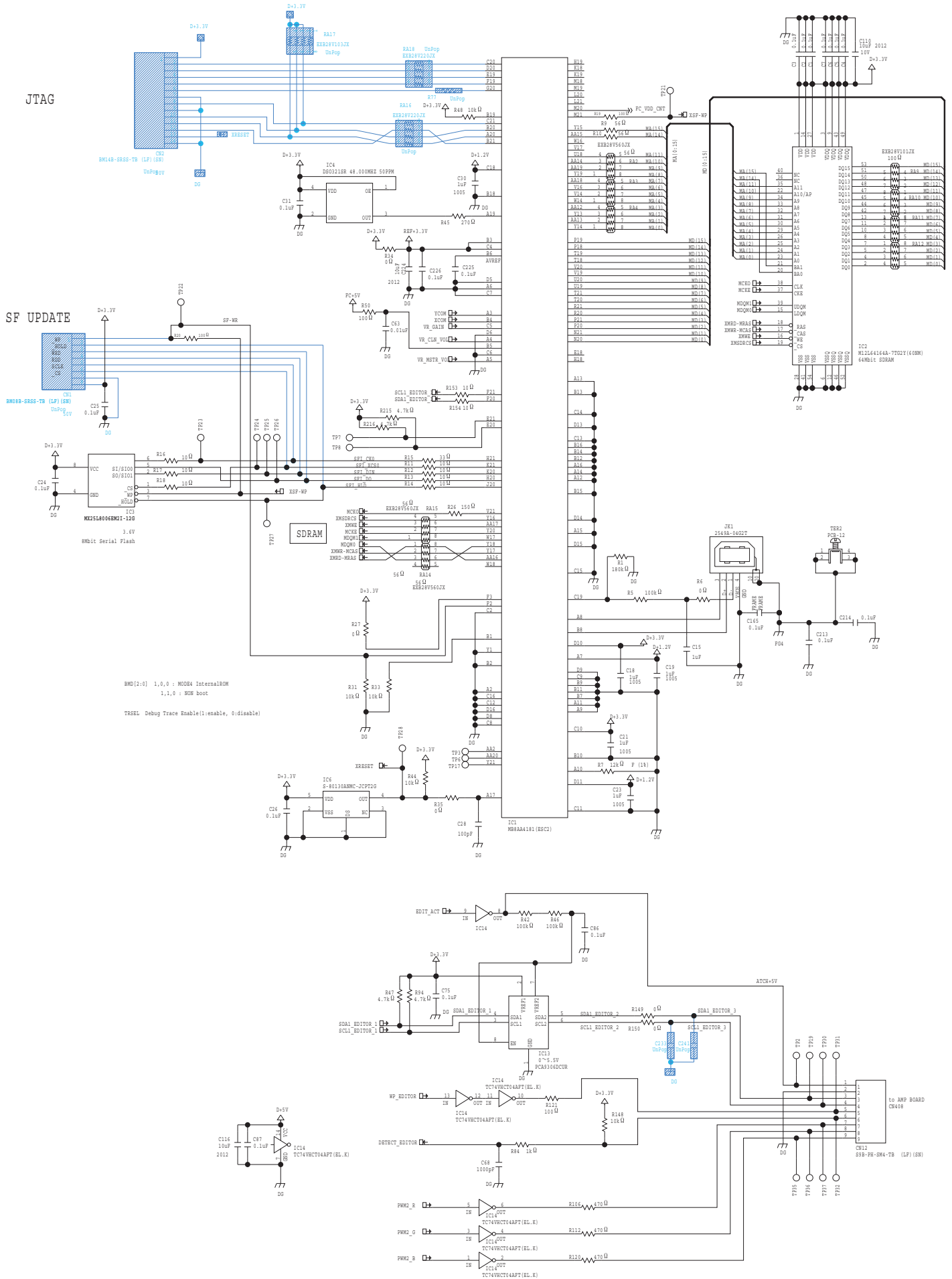
This concludes the testing. Switch off the power.

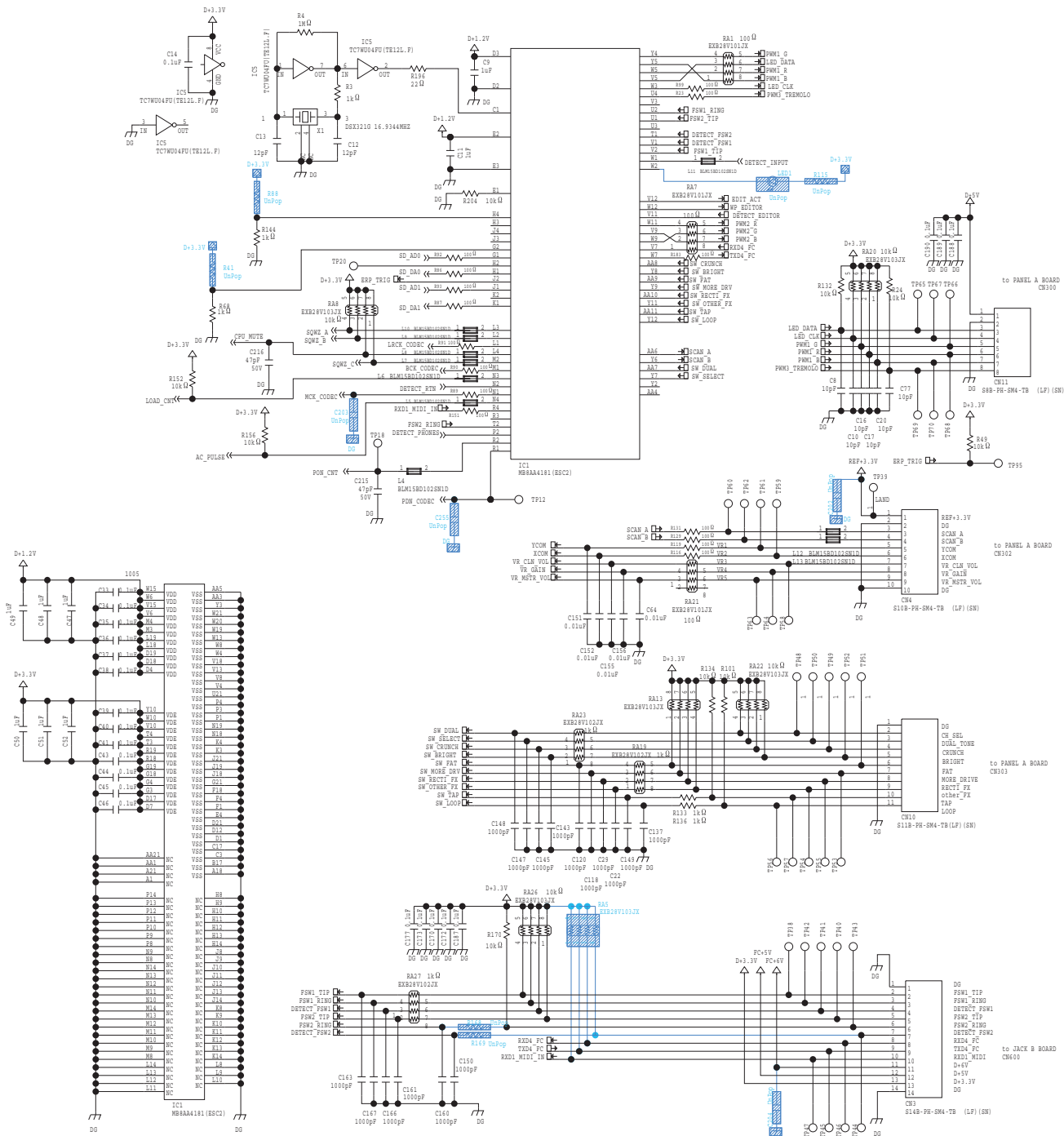
Circuit Board (Main Board)



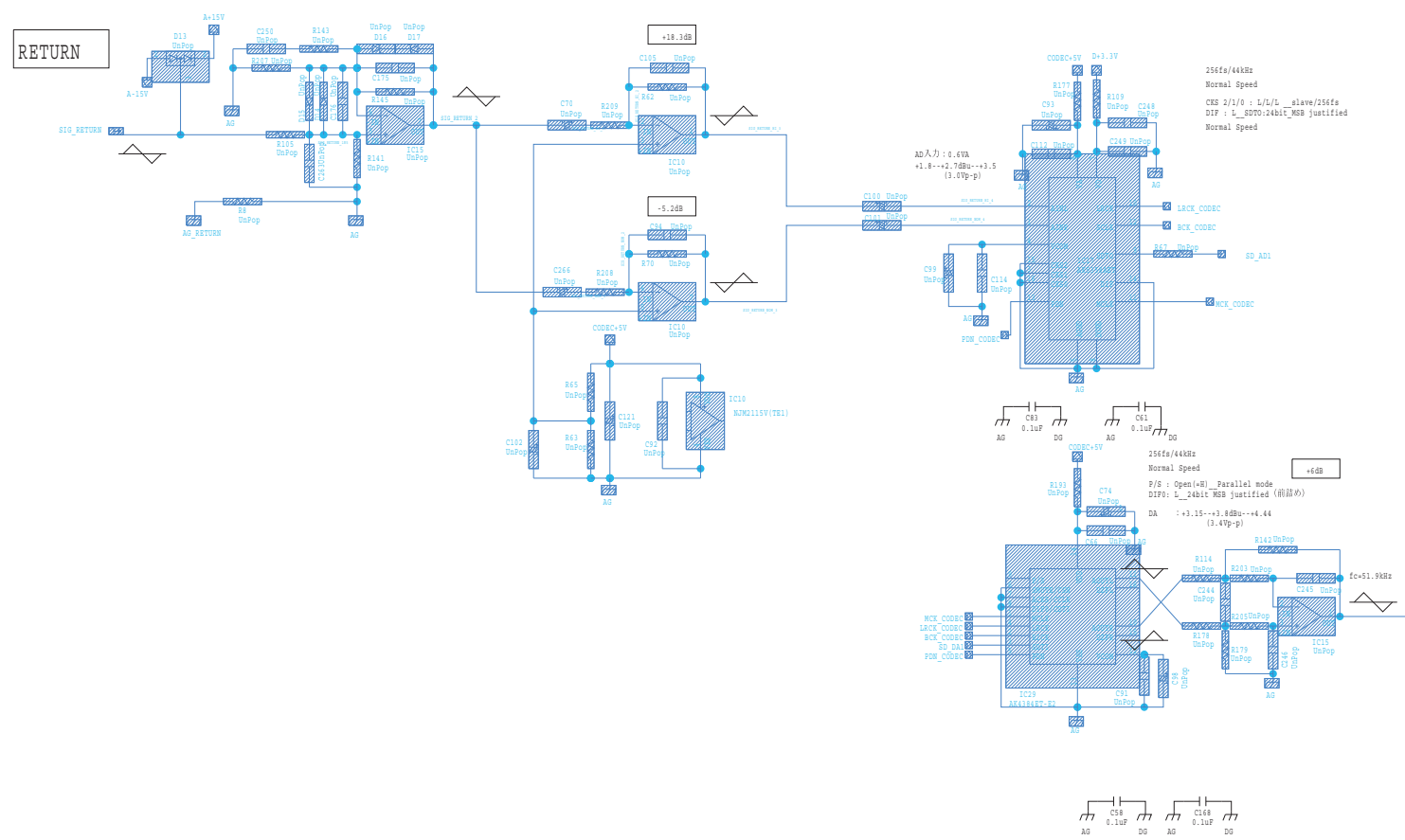
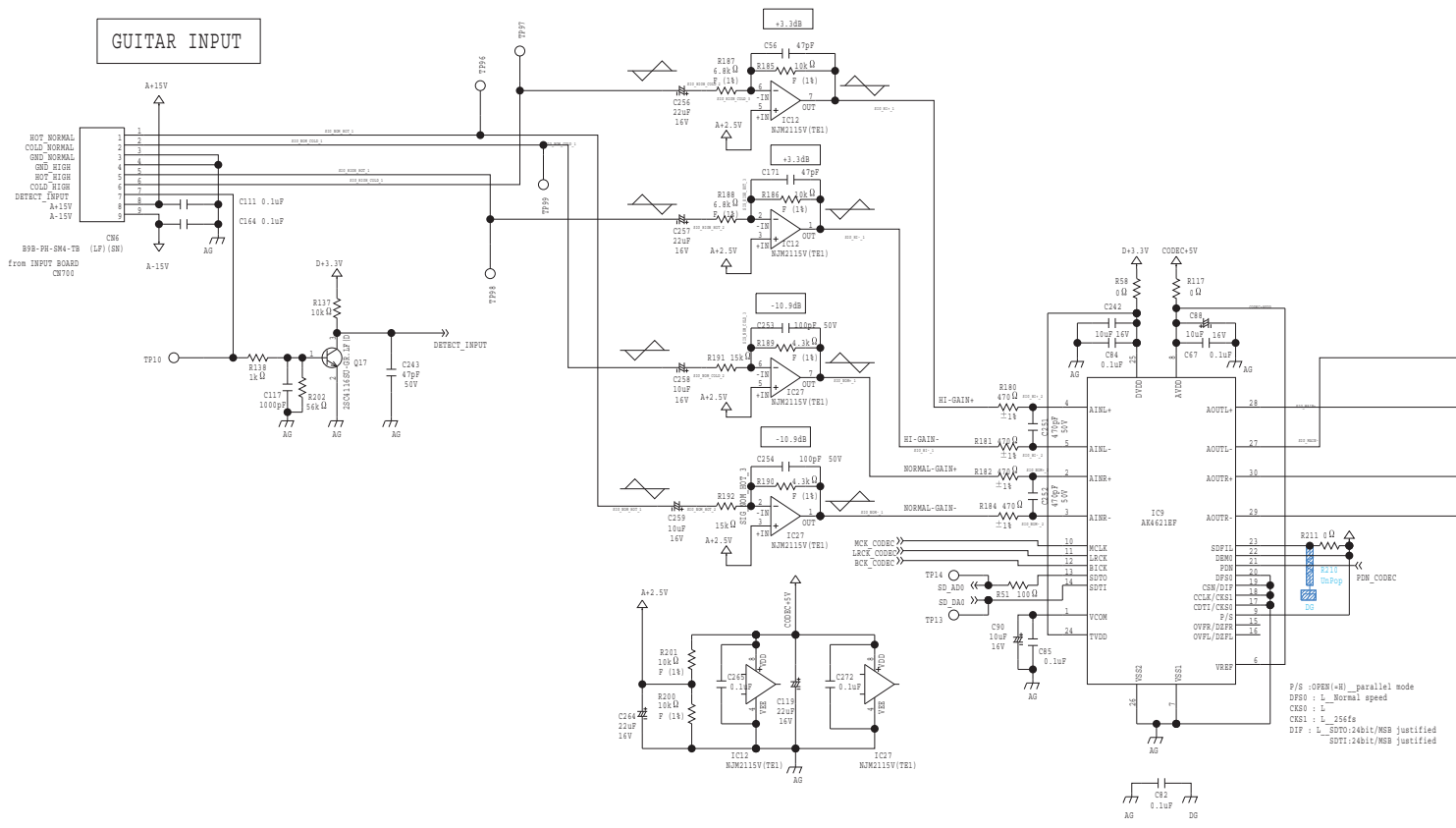


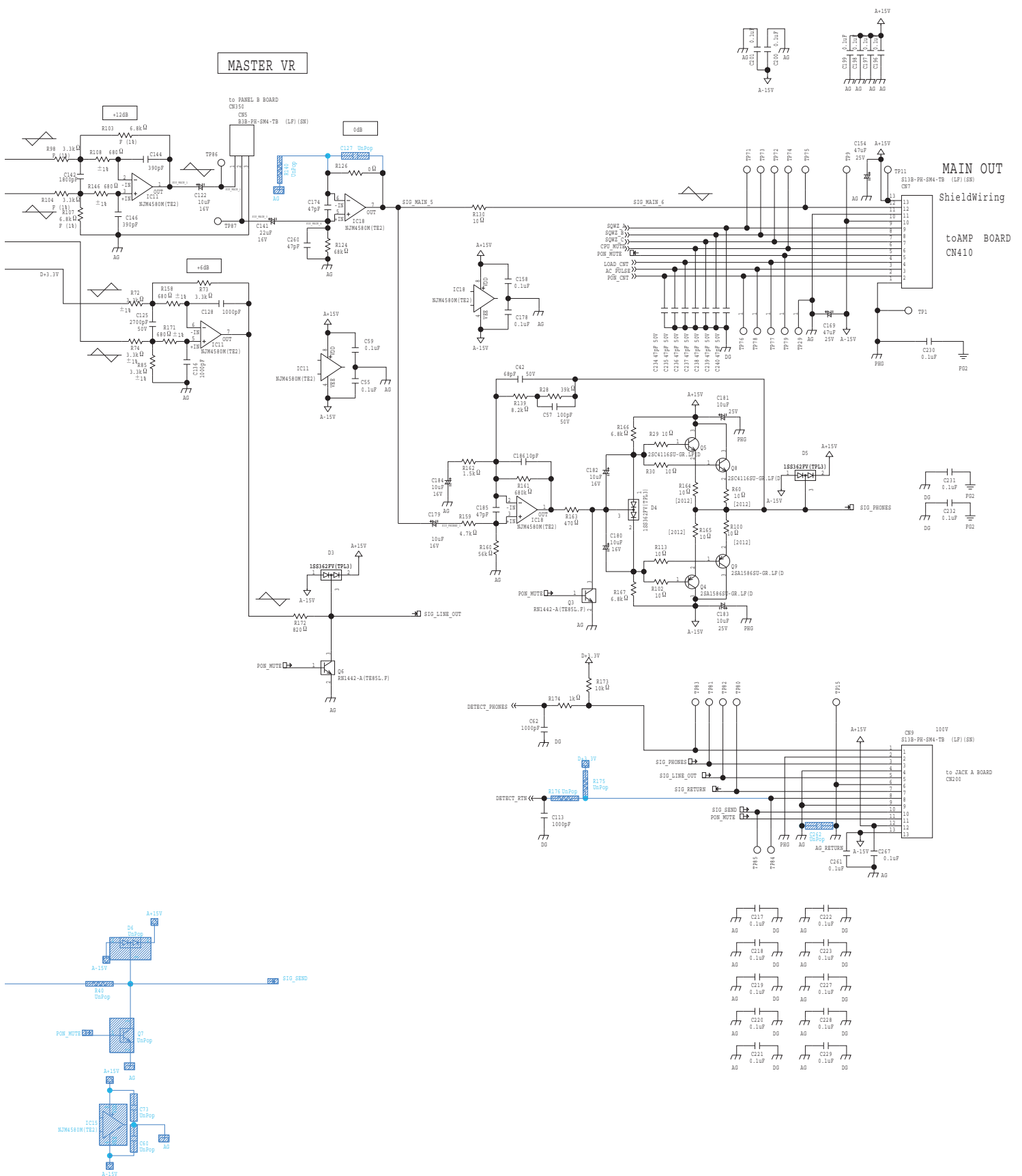
Circuit Diagram (Main Board: 1/3)



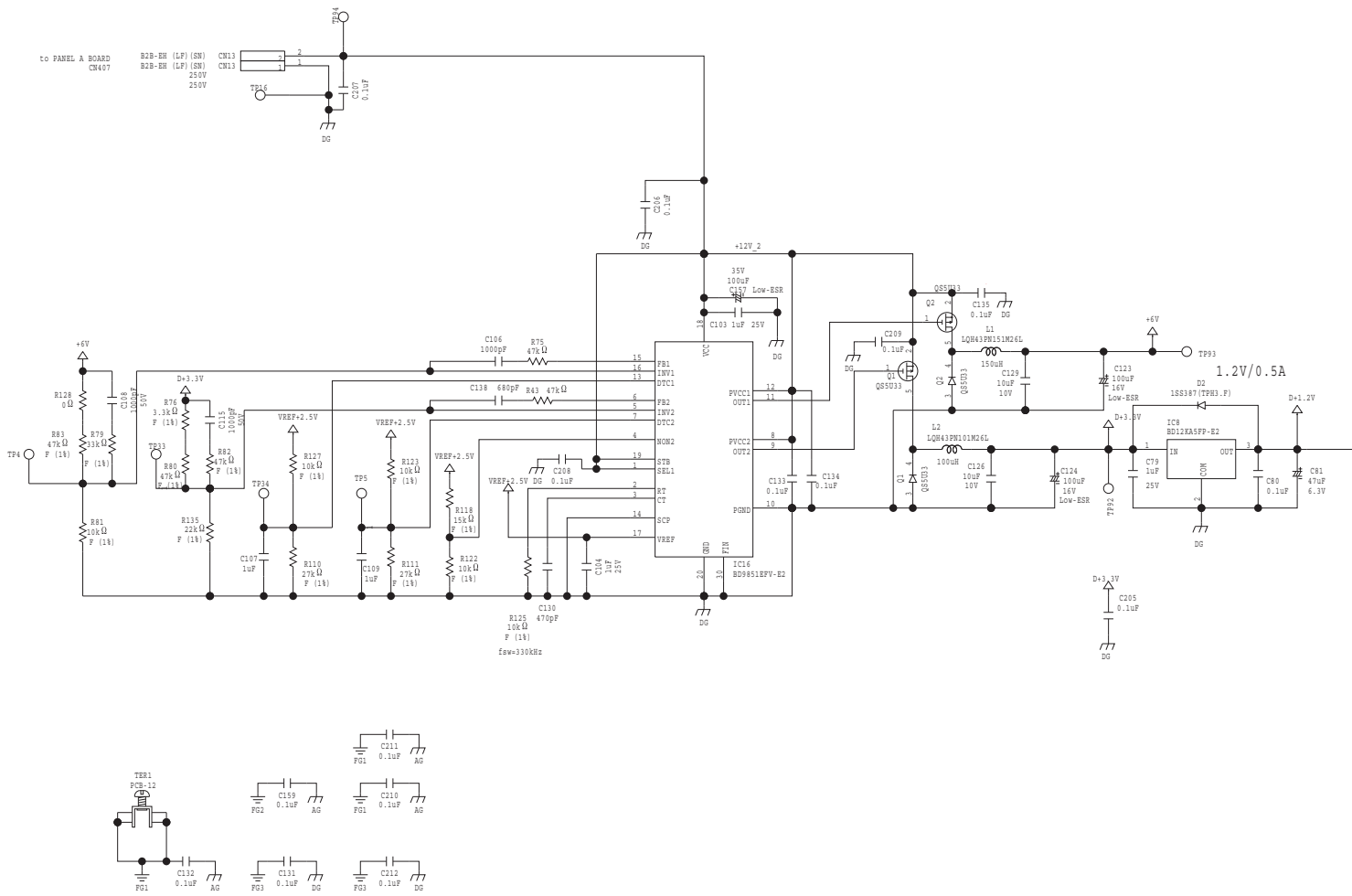


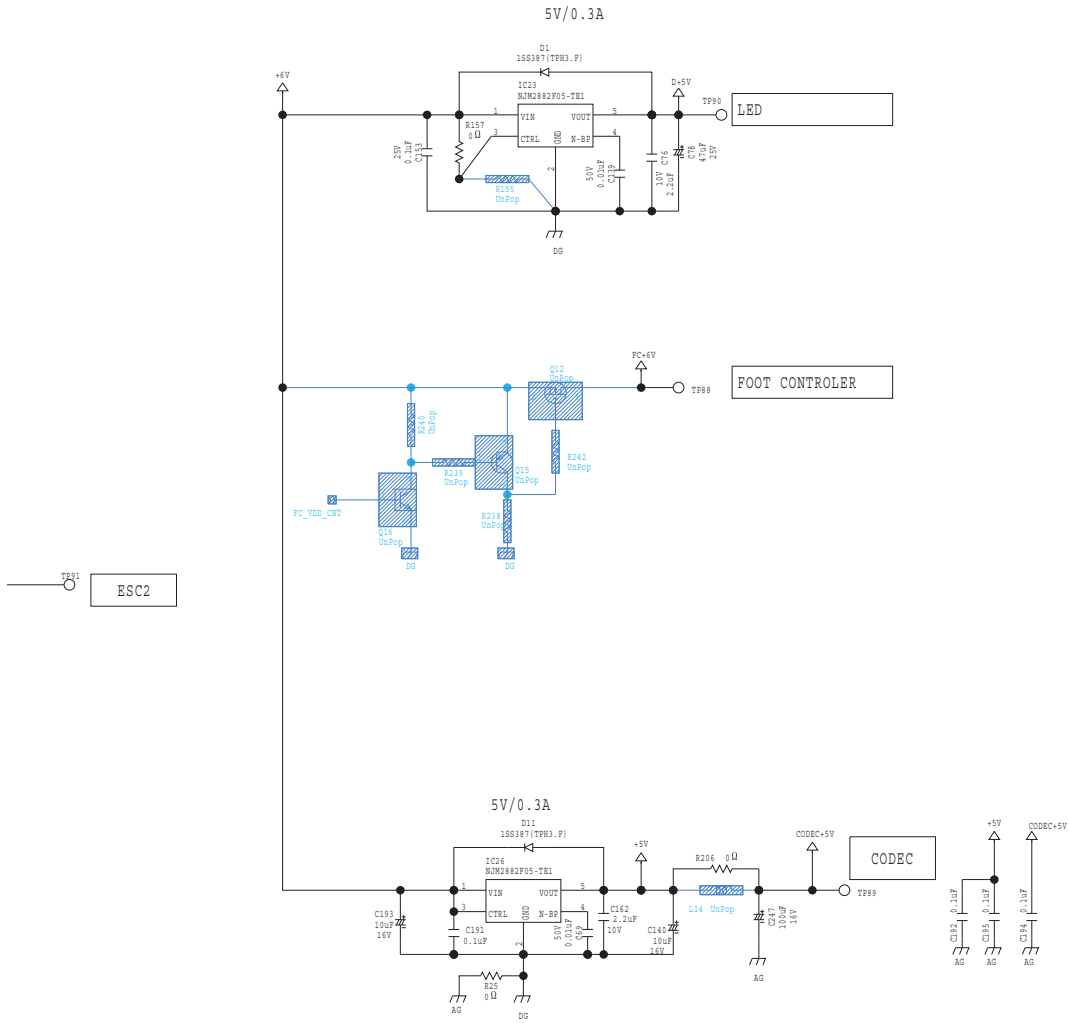
Circuit Diagram (Main Board: 2/3)



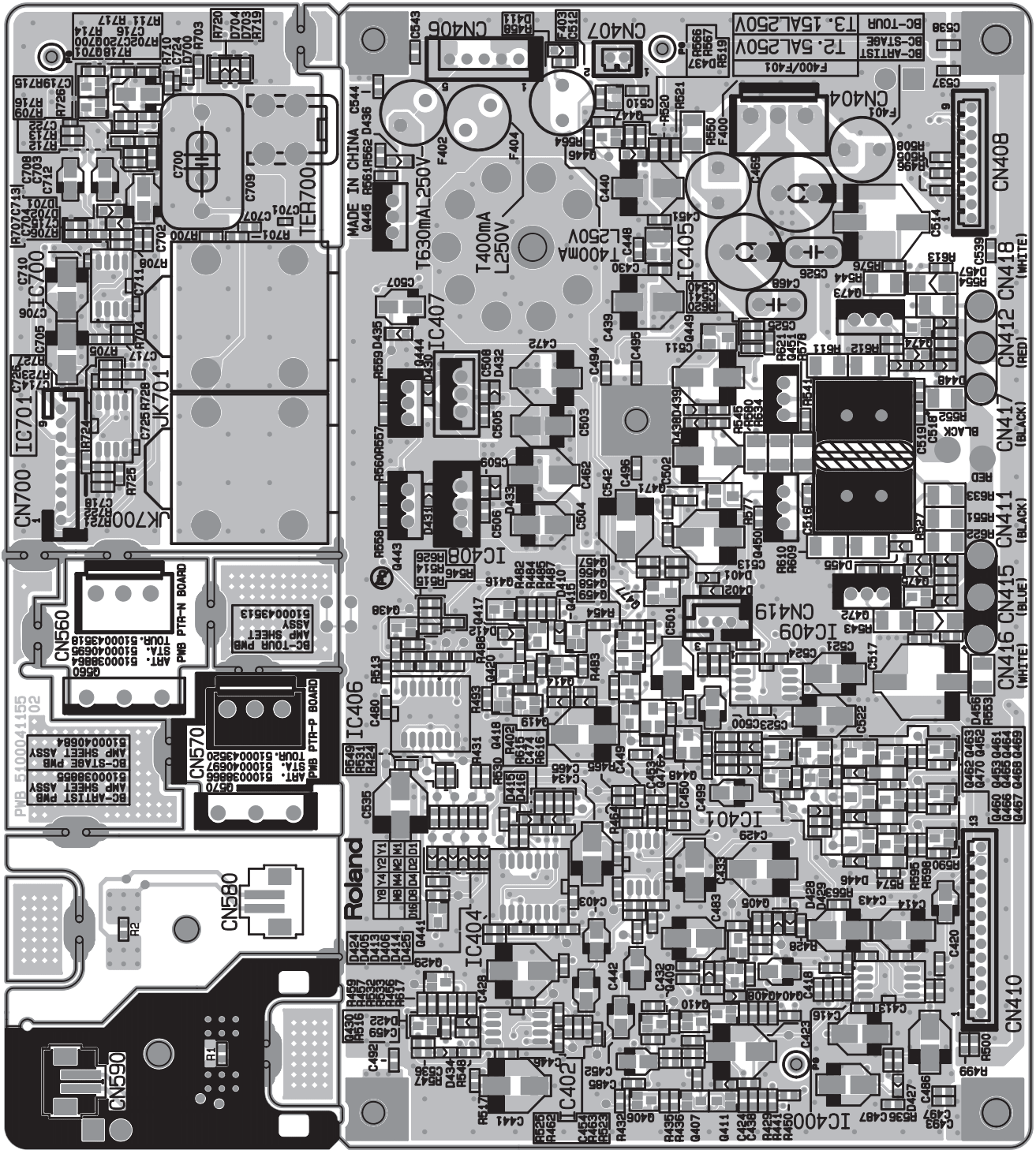


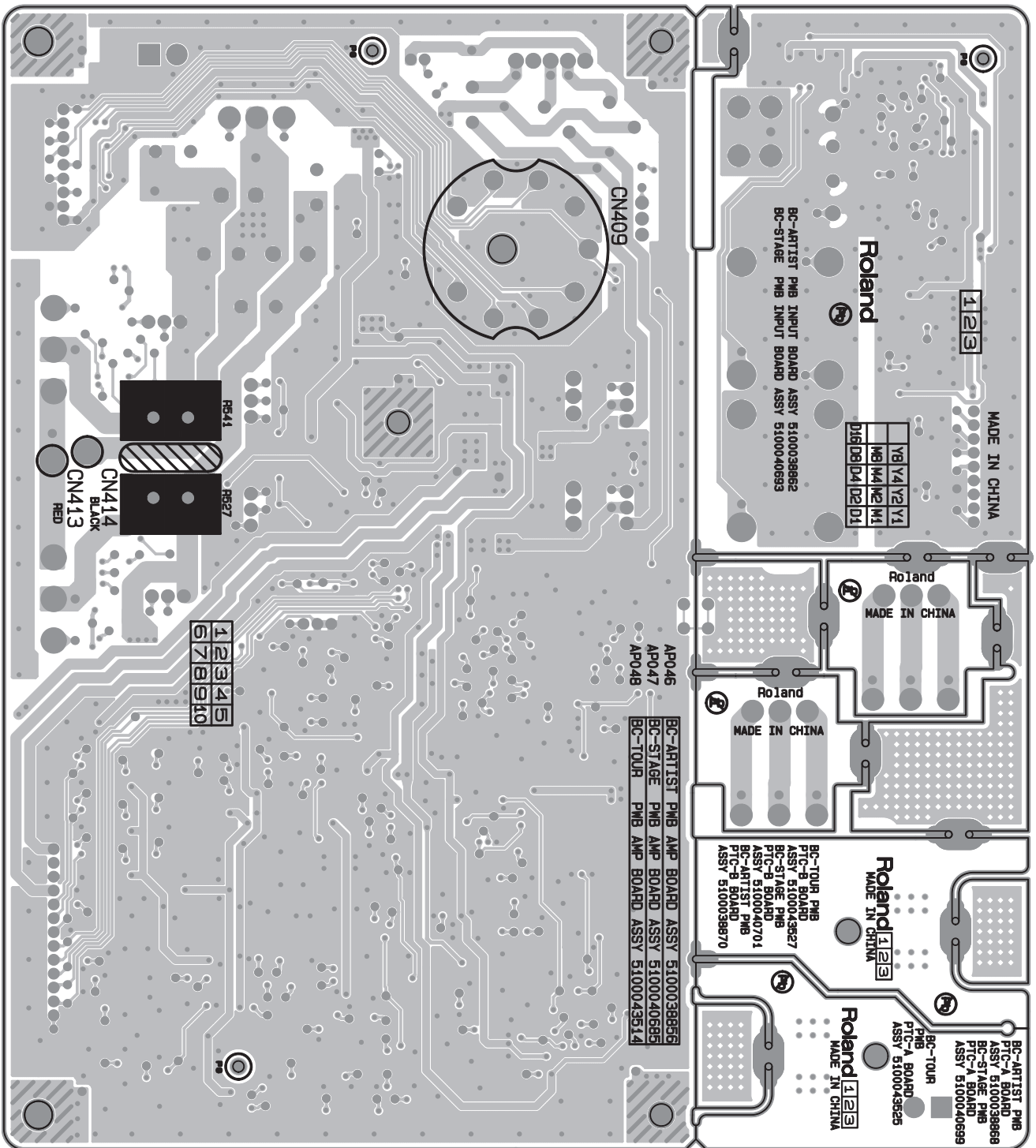
Circuit Diagram (Main Board: 3/3)



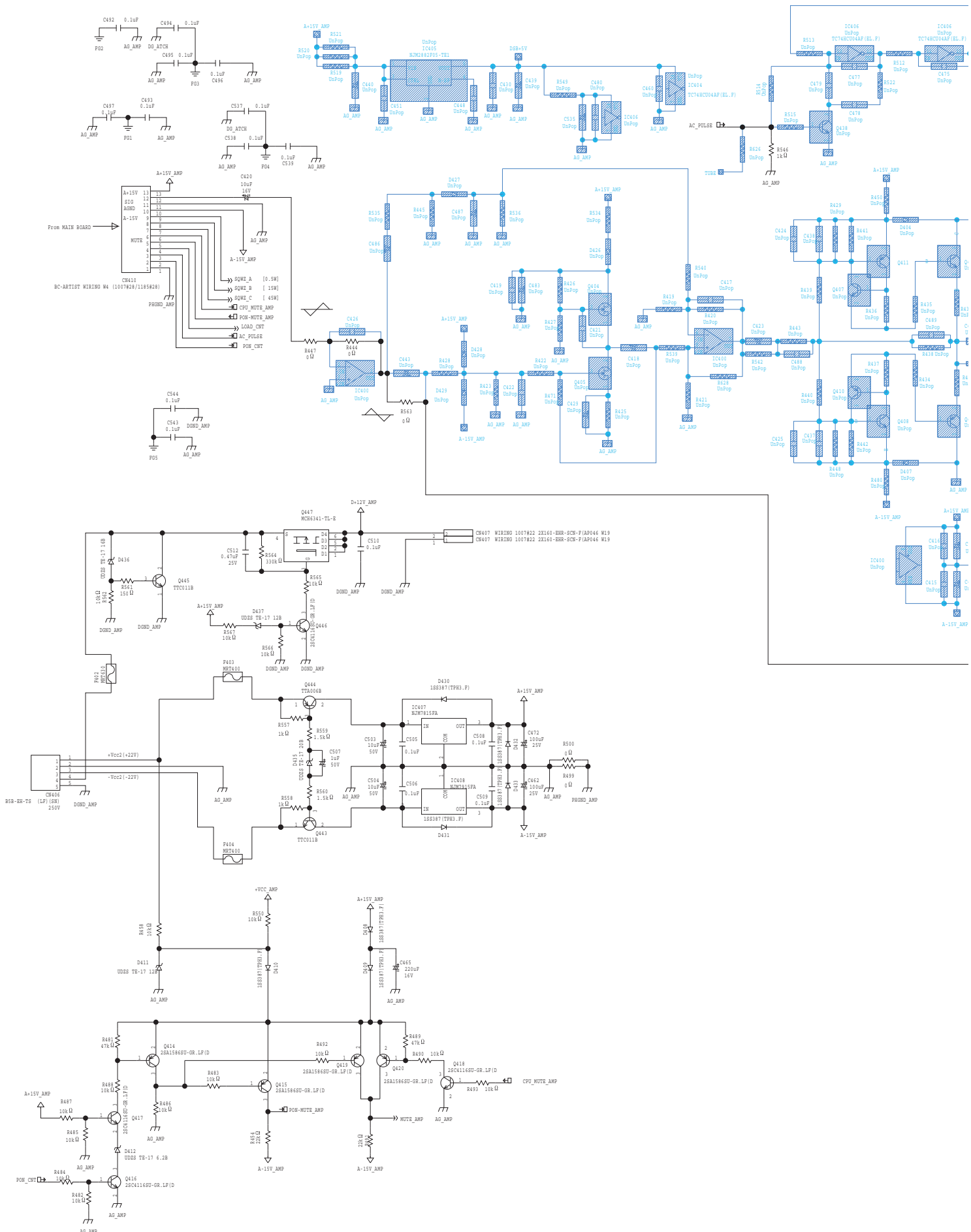


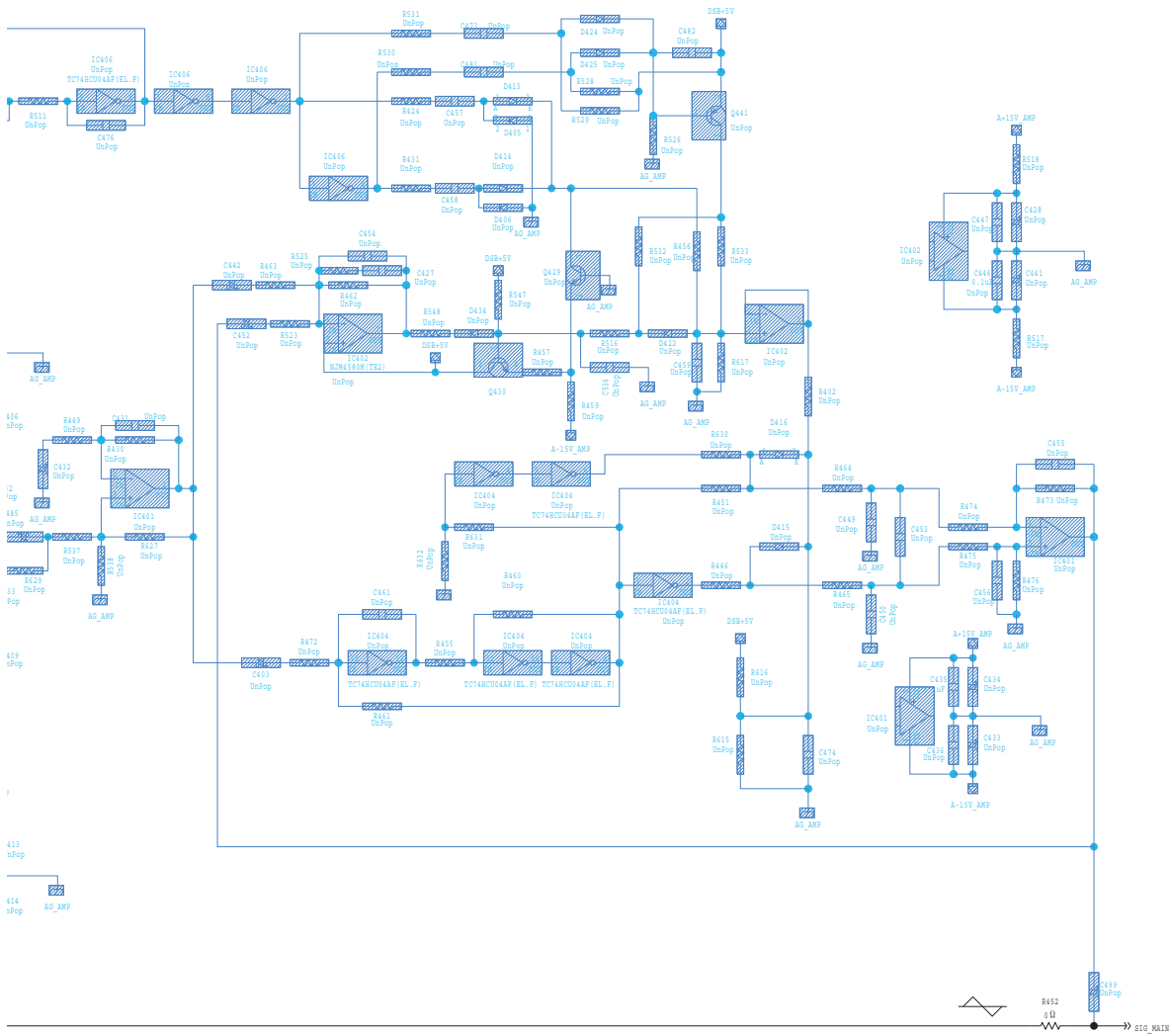
Circuit Board (Amp, Input, Ptr-N, Ptr-P, Ptc-A, Ptc-B Board)



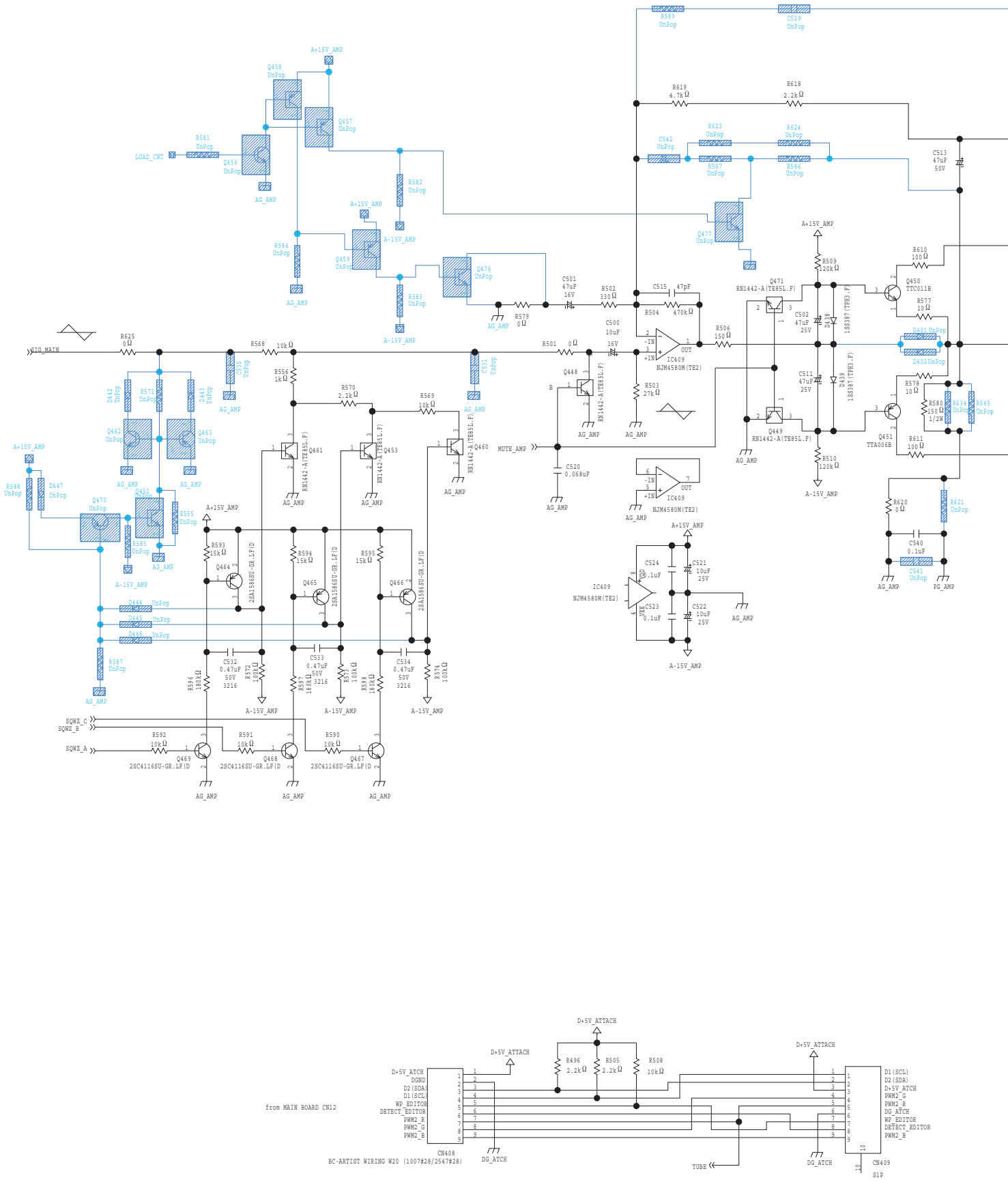


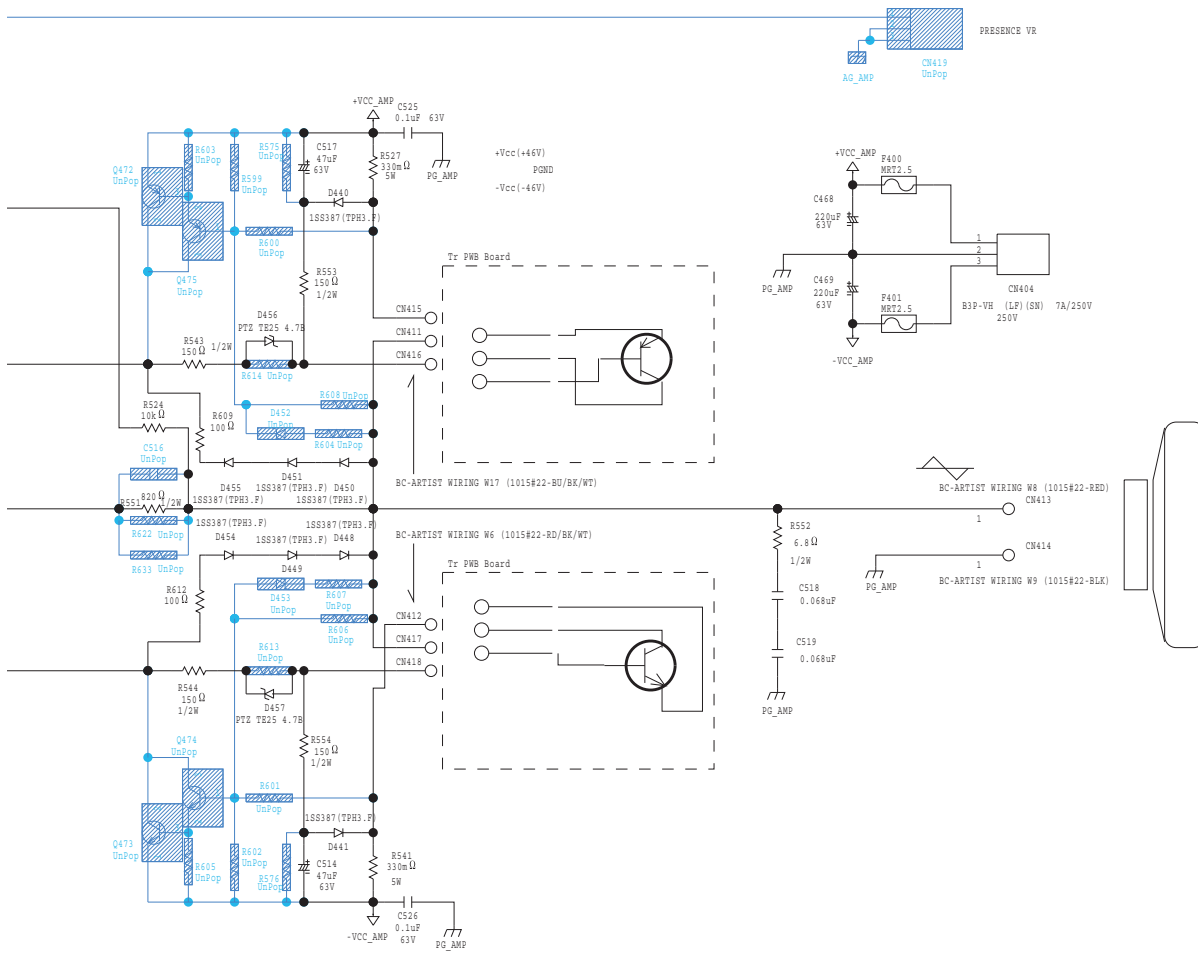
Circuit Diagram (Amp Board: 1/2)



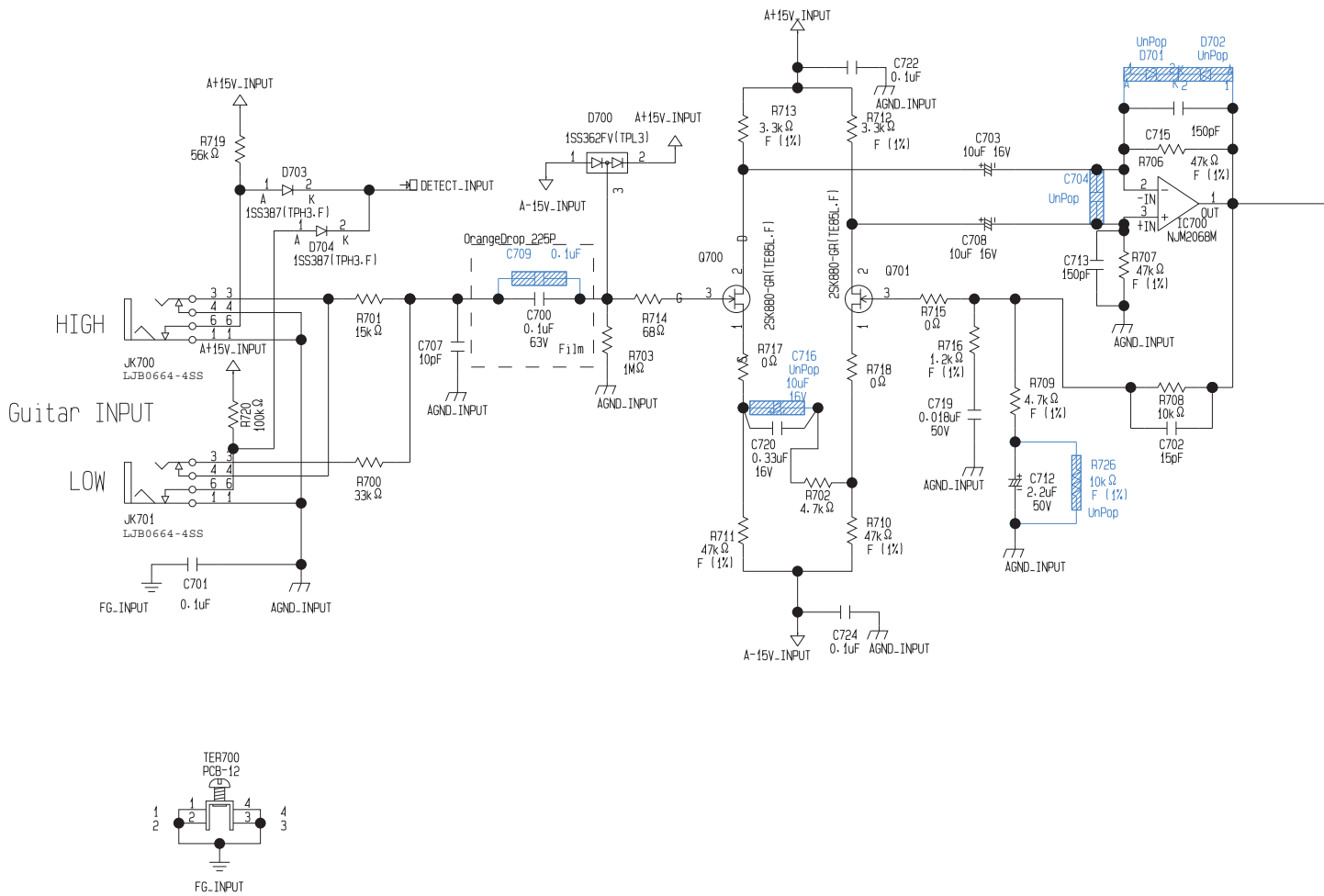


Circuit Diagram (Amp Board: 2/2)

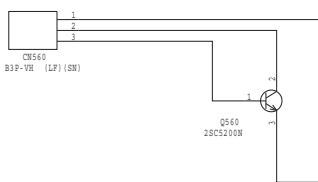




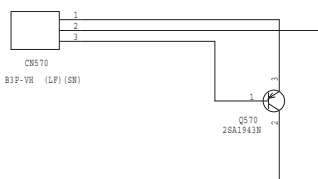
Circuit Diagram (Input Board)

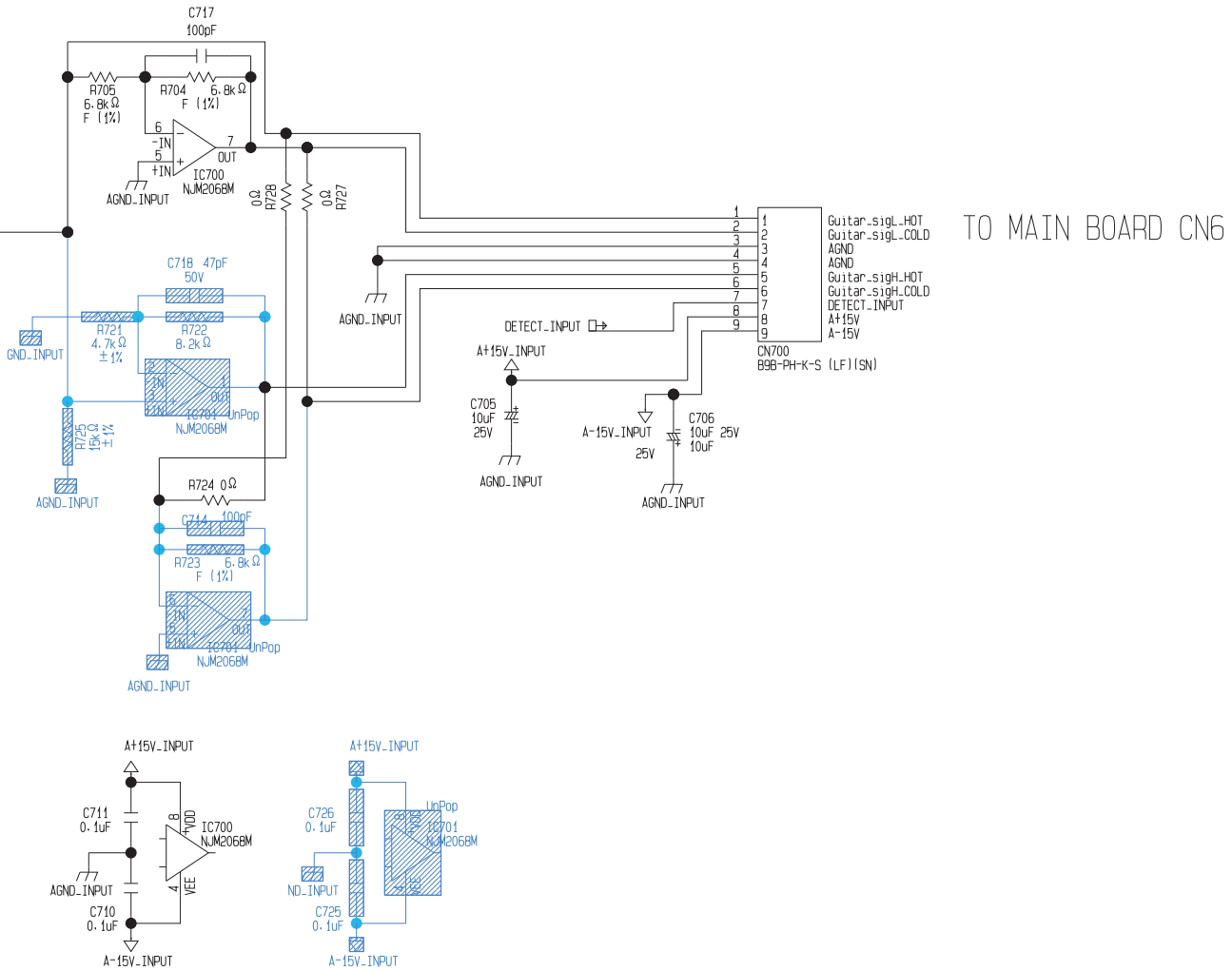


Circuit Diagram (Ptr-N Board)

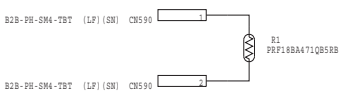


Circuit Diagram (Ptr-P Board)

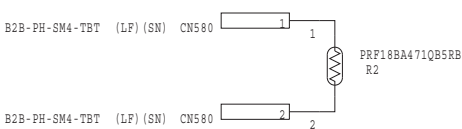




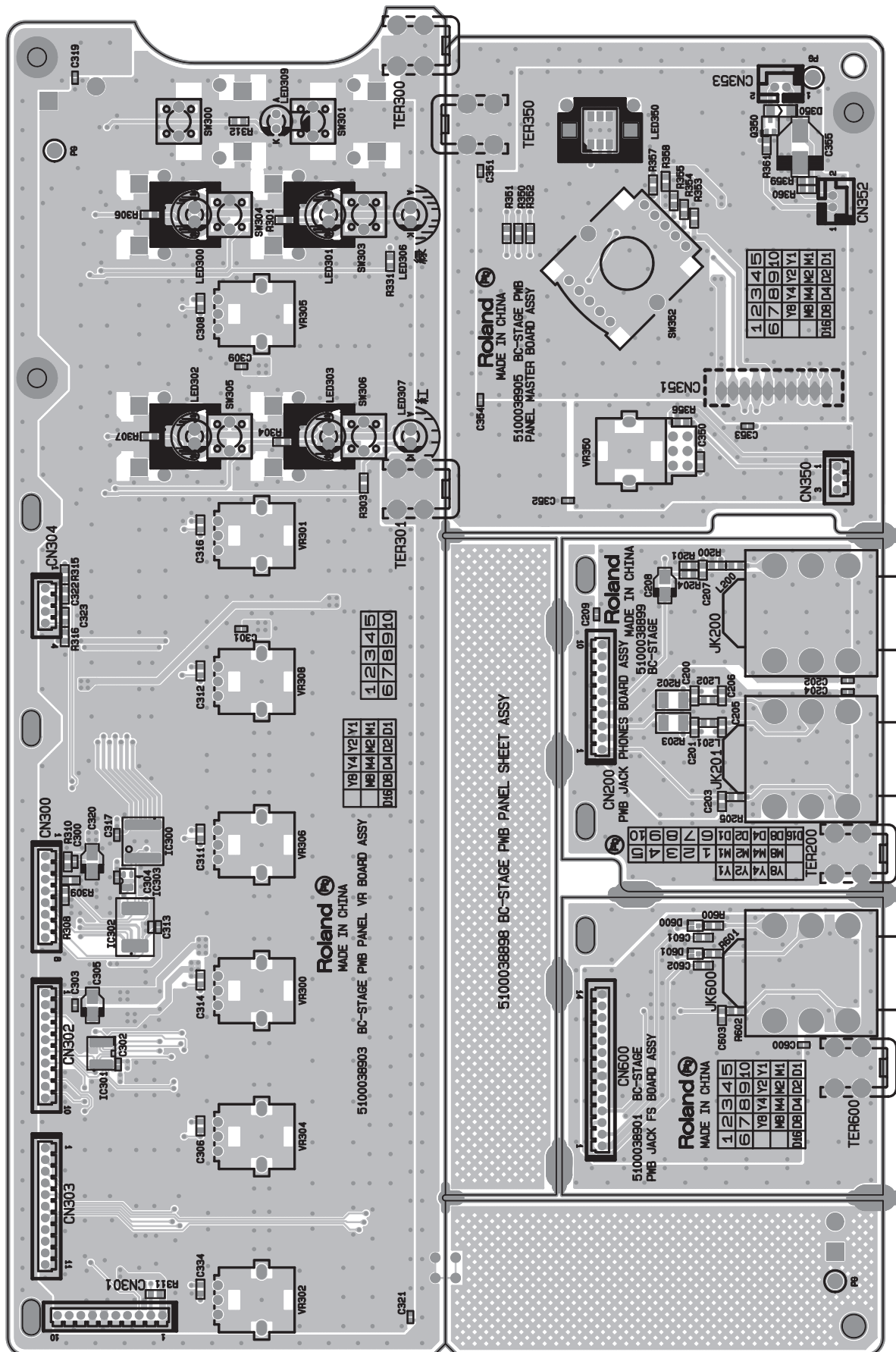
Circuit Diagram (Ptc-A Board)

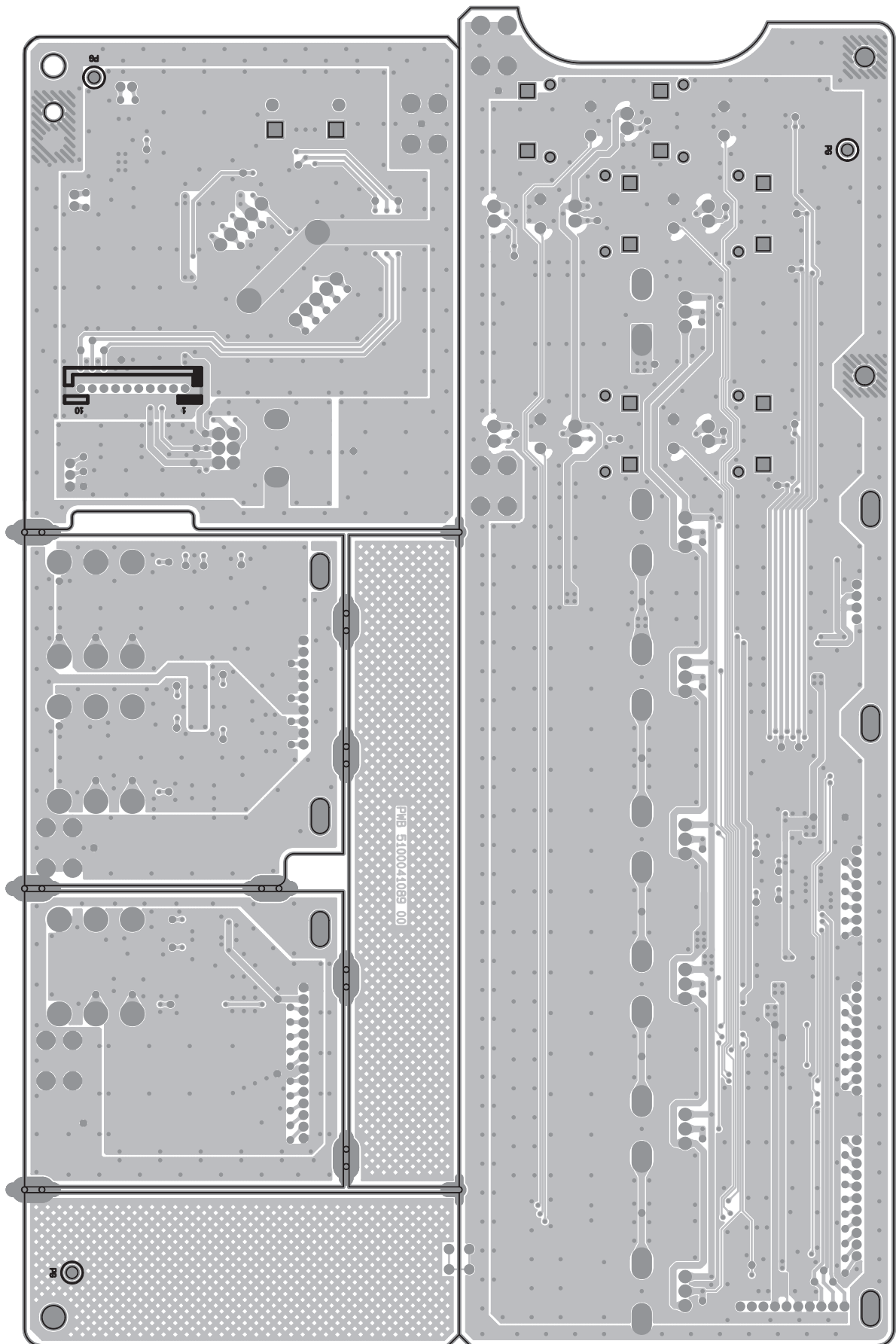


Circuit Diagram (Ptc-B Board)

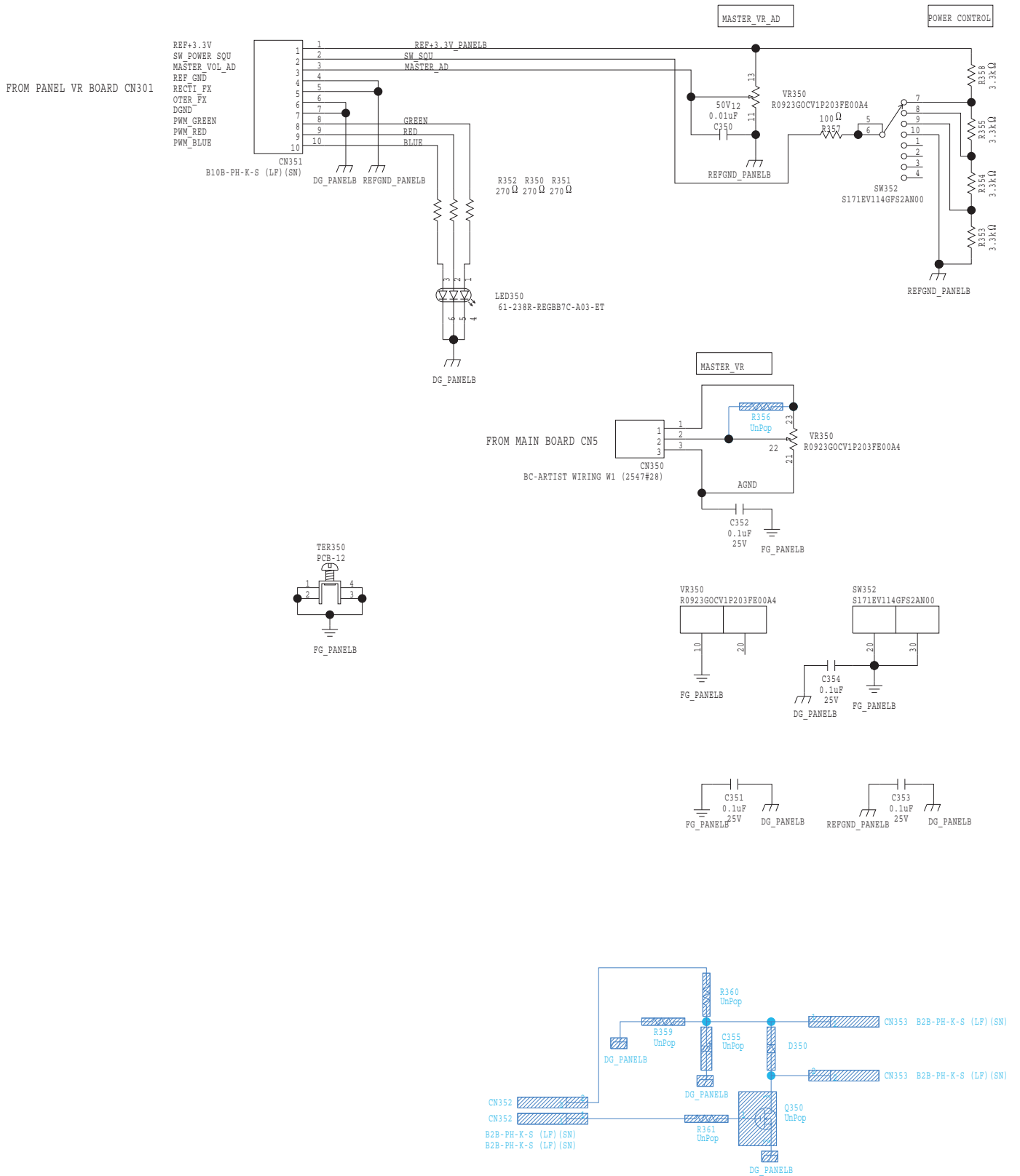


Circuit Board (Panel Master, Panel VR, Jack Phones, Jack FS Board)

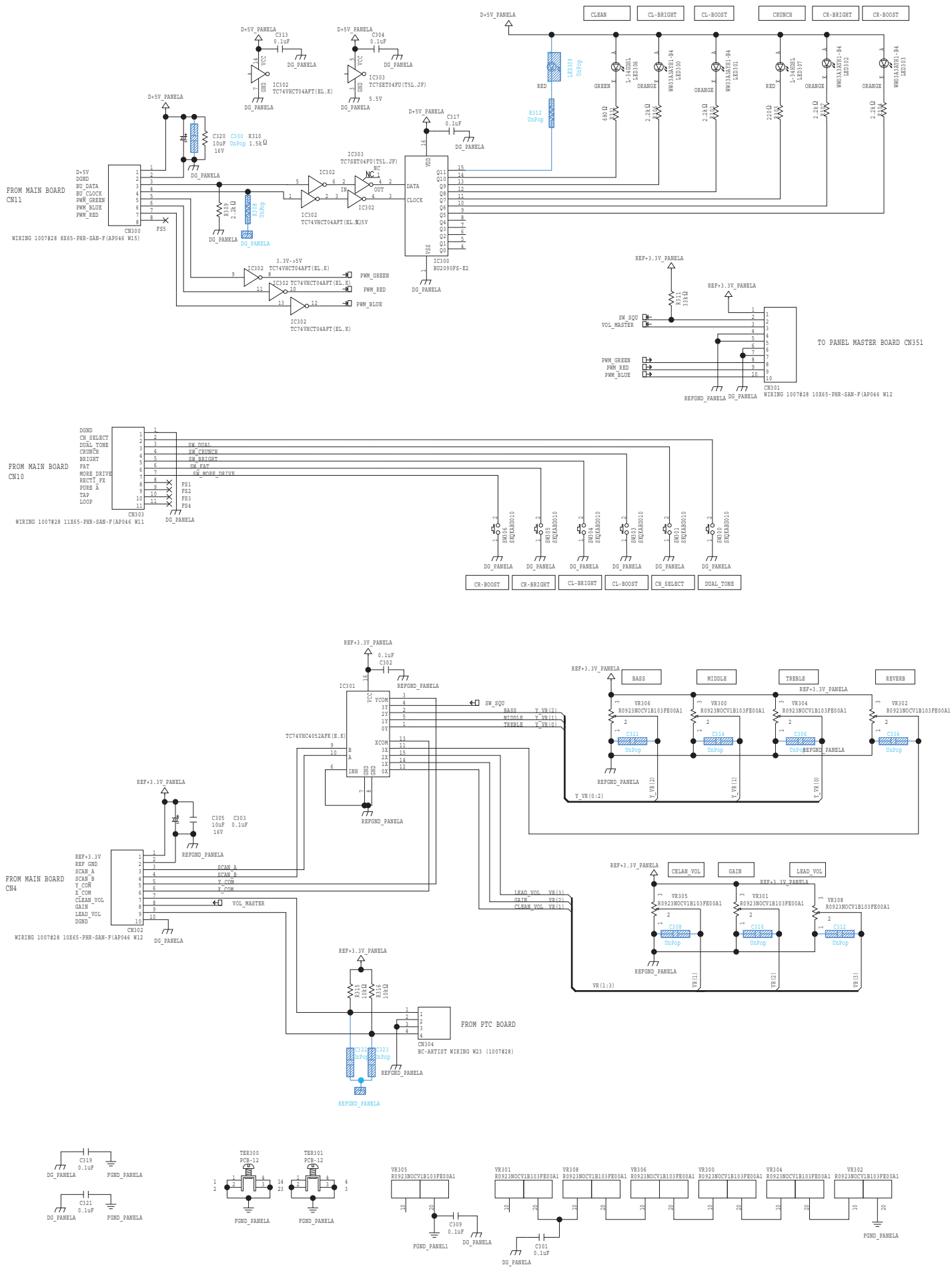




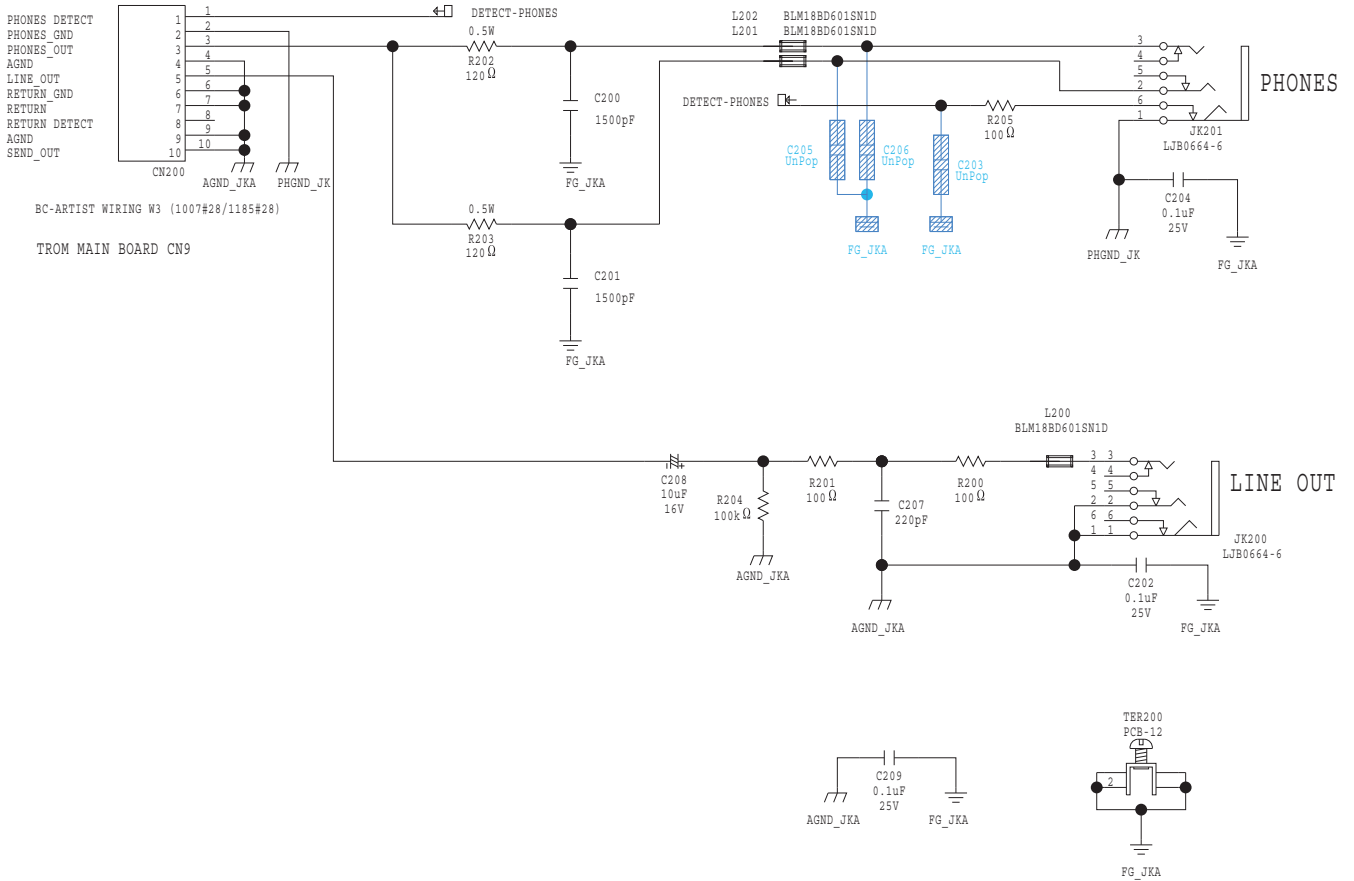
Circuit Diagram (Panel Master Board)



Circuit Diagram (Panel VR Board)



Circuit Diagram (Jack Phones Board)



Circuit Diagram (Jack FS Board)

