

PORTATONE

PSR-9000

SERVICE MANUAL



■ CONTENTS

SPECIFICATIONS	3
PANEL LAYOUT	5
UNIT LAYOUT	6
WIRING	7
BLOCK DIAGRAM	8
DISASSEMBLY PROCEDURE	9
LSI PIN DISCRIPTION	15
IC BLOCK DIAGRAM	23
CIRCUIT BOARDS	26
TEST PROGRAM.....	37
POWER ON RESET.....	40
TROUBLESHOOTING	41
MIDI IMPLEMENTATION CHART	43
PARTS LIST	

IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground bus in the unit (heavy gauge black wires connect to this bus).

IMPORTANT: Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit.

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and /or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

■ WARNING

Components having special characteristics are marked  and must be replaced with parts having specification equal to those originally installed.

SPECIFICATIONS

KEYBOARD

61Keys (C1~C6)
with Touch Response (Initial/After)

Polyphony

126 notes max.

VOICES

Preset	827	331 voices + 480 XG voices + 14 Drum Kits + 2 SFX Kits
Custom	32	User programmable
Organ Flutes	20	10 Preset + 10 User

ORCHESTRATION

Right	3 PART	RIGHT1, RIGHT2, RIGHT3
Left	1 PART	

SAMPLING

Resolution	16bit; 44.1KHz	
File Import	AIFF, WAV	
RAM Capacity	1MByte	11.8sec
Expanded Capacity	9M/17M/33M/65MByte	106.9/202.1/392.3/772.7sec
Record Time	380sec max	When 16MB or 32MB SIMMs are installed.

EFFECTS

Reverb	29 Preset + 3 User	
Chorus	25 Preset + 3 User	
DSP Effect	164 Preset	for styles and songs
DSP Effect	(164 Preset + 10 User) x 4 Blocks	for R1, R2, R3, LEFT
DSP Effect	84 Preset + 10 User	for Mic/Line In
DSP Variation	Slow/Fast	for R1, R2, R3, LEFT
POLY/MONO	Yes	
Vocal Harmony	49 Preset + 10 User	2 Polyphony
Harmony/Echo	17Preset	
Master EQ	2 Preset + 2 User	5-band
Part EQ	29 PART	2-band, 29 PART (R1, R2, R3, LEFT, ACMP x 8, SONG x 16, M.PAD)
Touch Response	5 Preset	
Tempo	32~280	
Transpose	-24~0~24	
Tuning	414.6~440Hz~466.8	
Octave	-1, 0, +1	only for Upper
Pitch Bend	Wheel	
Modulation	Wheel	
Left Hold	Yes	

AUTO ACCOMPANIMENT

Preset	125	
Flash	85	
Disk	66 (included in the accessory disk)	max 120 styles or up to 1.8MByte
Format	Style File Format	DISK DIRECT function is available.
Control	INTRO x 3	
	FILL IN x 4	
	BREAK FILL x 1	
	MAIN x 4	
	ENDING x 3	
	FADE IN/OUT	
	TAP TEMPO	
	FINGERING	Single Finger, Multi Finger, Fingered, Fingered Pro, On Bass, On Bass Pro, Full Keyboard

ONE TOUCH SETTING

4/Style	Full programmable
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MUSIC DATABASE

616 max	Full programmable
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MULTI PADS

4 Pads x 60 banks	58 Multi Pad bank, 1 MIDI Control bank, 1 Scale Tune bank
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SONGS

Playback	Disk Direct Playback	with Ultra Quick Start function
Track	16	
Recording	1 song	Quick Record, Multi Track Record
RAM Capacity	300kbyte	Approximately 38,000 notes max.

REGISTRATION MEMORY

512 8 buttons x 64 banks, Freeze function

LANGUAGE

5 languages English, German, French, Spanish, Italian

DISPLAY

Backlit graphic LCD 240 x 320 dots; video out capability

DISK STORAGE

Floppy Disk Drive	3.5" 2HD/2DD	
Built-in Hard Disk	Optional	IDE 2.5 inch, 8GByte max.
SCSI	Optional	Hard Disk, ZIP, MO 8GByte max./each device

DEMO SONGS

15 songs

CONNECTORS

MIDI	MIDI A (IN/OUT) MIDI B (IN/OUT) TO HOST	Switchable to TO HOST HOST SELECT SW (Mac/PC1/PC2/MIDI)
Foot Pedal	FOOT SWITCH1 FOOT SWITCH2 FOOT VOLUME	
SCSI	D-sub half pitch 50-pin	
VIDEO OUT	Pin type	NTSC/PAL Composite Signal
PC KEYBOARD	Mini DIN type	PC/AT Standard
Analog	PHONES LOOP SEND (L/L+R, R) LINE OUT MAIN (L/L+R, R), SUB (1/2) AUX IN/LOOP RETURN (L/L+R, R), TRIM VOL MIC/LINE IN	LEVEL (MIC1/MIC2/LINE), INPUT VOLUME, Indicator

AMPLIFIER

28 W x 2

SPEAKERS

Size	13 cm x 2, 3 cm x 2	
Enclosure	Wooden	Bass Reex, 6.0 liters x 2

POWER SUPPLY

Power Consumption 65 W

WEIGHT

22.5 Kg (49 lbs. 10 oz)

DIMENSIONS

W x H x D	1114 x 464.9 x 182.5 mm (43-7/8" x 18-5/16" x 7-3/16")	without Music Stand
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SUPPLIED ACCESSORIES

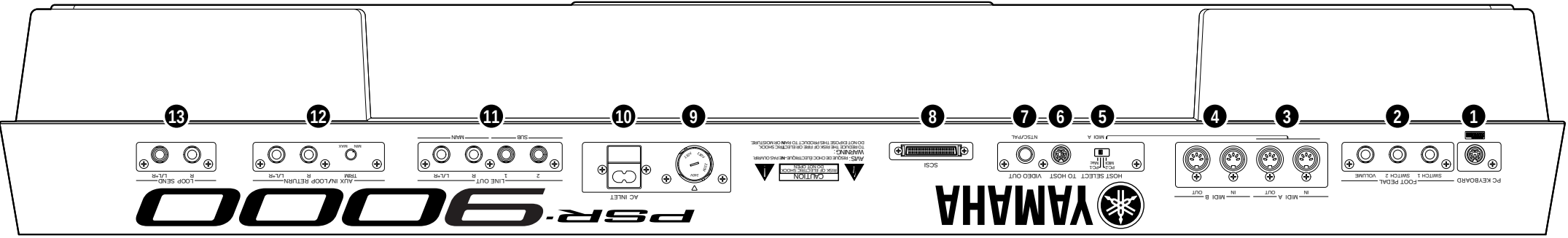
Music Stand	1	
AC Power Cord	1	
AC Plug Adaptor	1	in applicable areas only
Floppy Disk	1	Disk Styles
Owner's Manual	1	

OPTIONAL ACCESSORIES

Foot Switch	FC5	
Foot Volume	FC7	
Headphones	HPE-150,160	
Mic	MZ106s	Dynamic Microphone IMP.250 ohm
Keyboard Stand	L-7	
Hard Disk	2.5inch IDE	Height 12.5 mm max, 8GByte max
SIMM	4M/8M/16M/32MByte	72pin SIMM, 16bit BUS, JEDEC
SCSI Device	SCSI-2	Hard Disk, ZIP, MO, 8GByte max per device
PC Keyboard		
CRT Display		

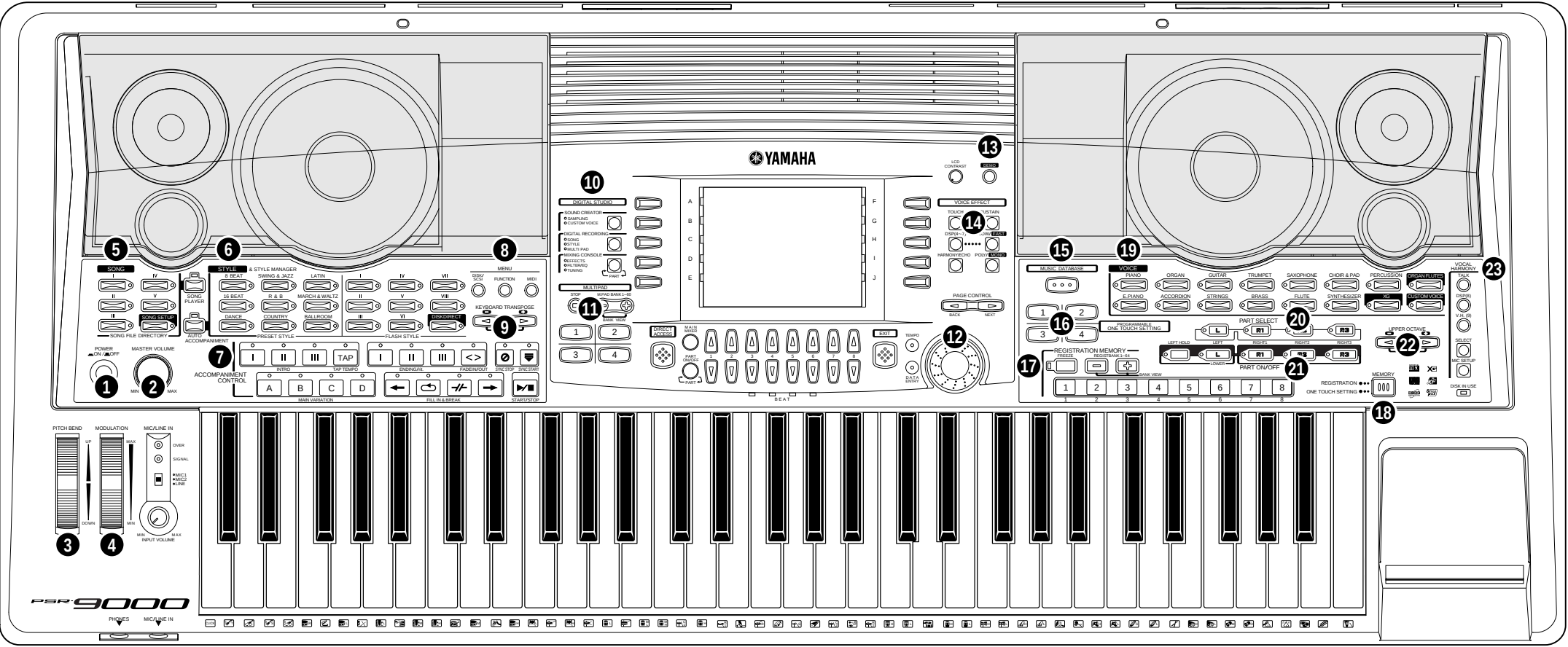
■ PANEL LAYOUT

●Rear View



- 1 PC KEYBOARD jack
- 2 FOOT PEDAL jacks (SWITCH 1, SWITCH 2, VOLUME)
- 3 MIDI A jacks (IN, OUT)
- 4 MIDI B jacks (IN, OUT)
- 5 HOST SELECT switch
- 6 TO HOST jack
- 7 VIDEO OUT jack
- 8 SCSI jack
- 9 Voltage selector
- 10 AC INLET jack
- 11 LINE OUT jacks MAIN (R, L/L+R) SUB (1, 2)
- 12 AUX IN/LOOP RETURN jacks (TRIM, R, L/L+R)
- 13 LOOP SEND jacks (R, L/L+R)

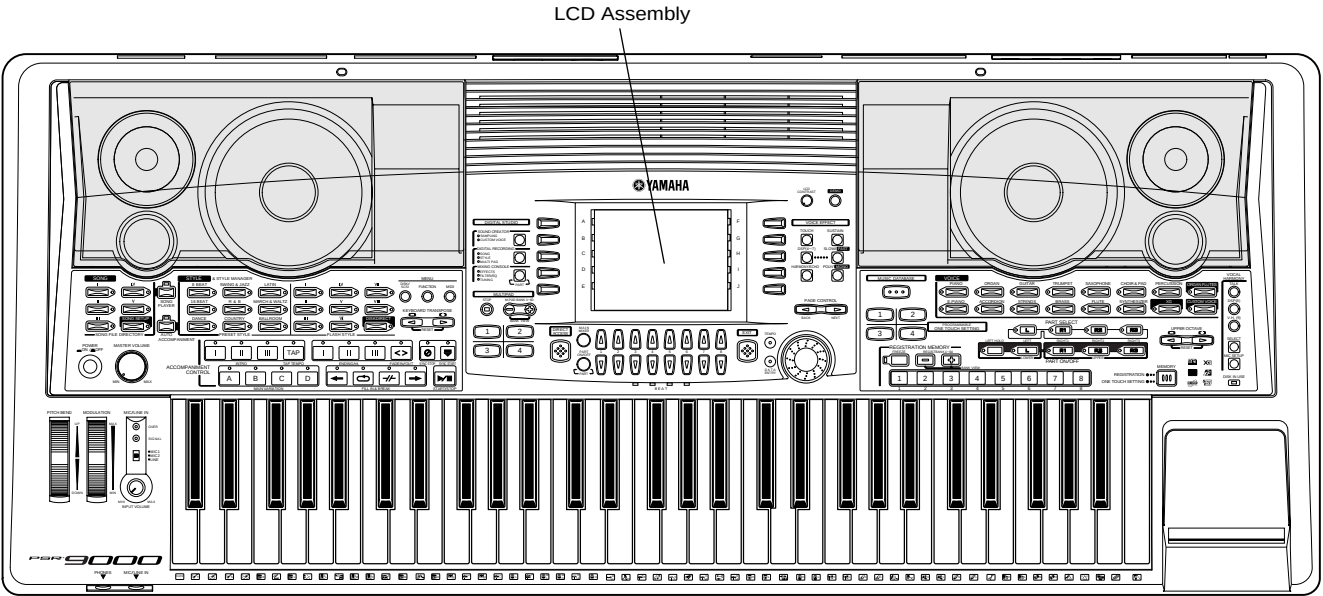
●Top View



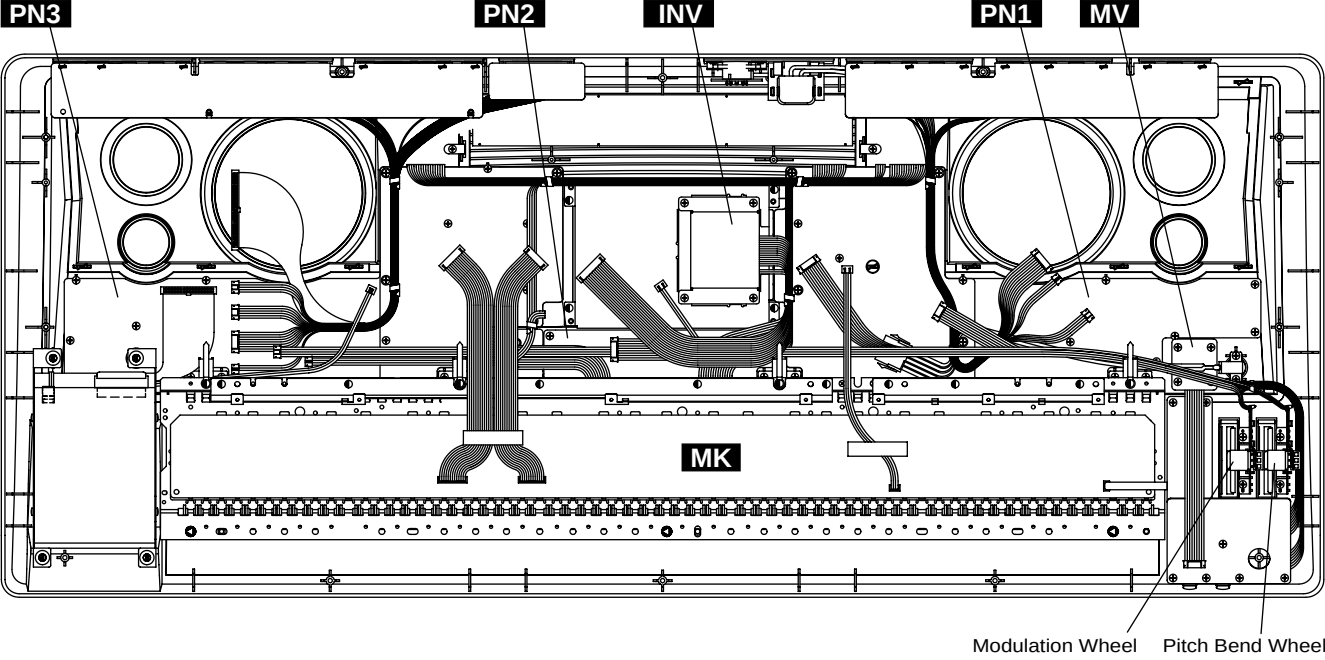
- 1 POWER ON/OFF switch
- 2 MASTER VOLUME control
- 3 PITCH BEND wheel
- 4 MODULATION wheel
- 5 SONG buttons
- 6 STYLE buttons
- 7 ACCOMPANIMENT CONTROL buttons
- 8 MENU buttons
- 9 KEYBOARD TRANSPOSE buttons
- 10 DIGITAL STUDIO buttons
- 11 MULTI PAD buttons
- 12 Data dial
- 13 DEMO button
- 14 VOICE EFFECT buttons
- 15 MUSIC DATABASE button
- 16 ONE TOUCH SETTING button
- 17 REGISTRATION MEMORY buttons
- 18 MEMORY button
- 19 VOICE buttons
- 20 PART SELECT buttons
- 21 PART ON/OFF buttons
- 22 UPPER OCTAVE buttons
- 23 VOCAL HARMONY buttons

UNIT LAYOUT

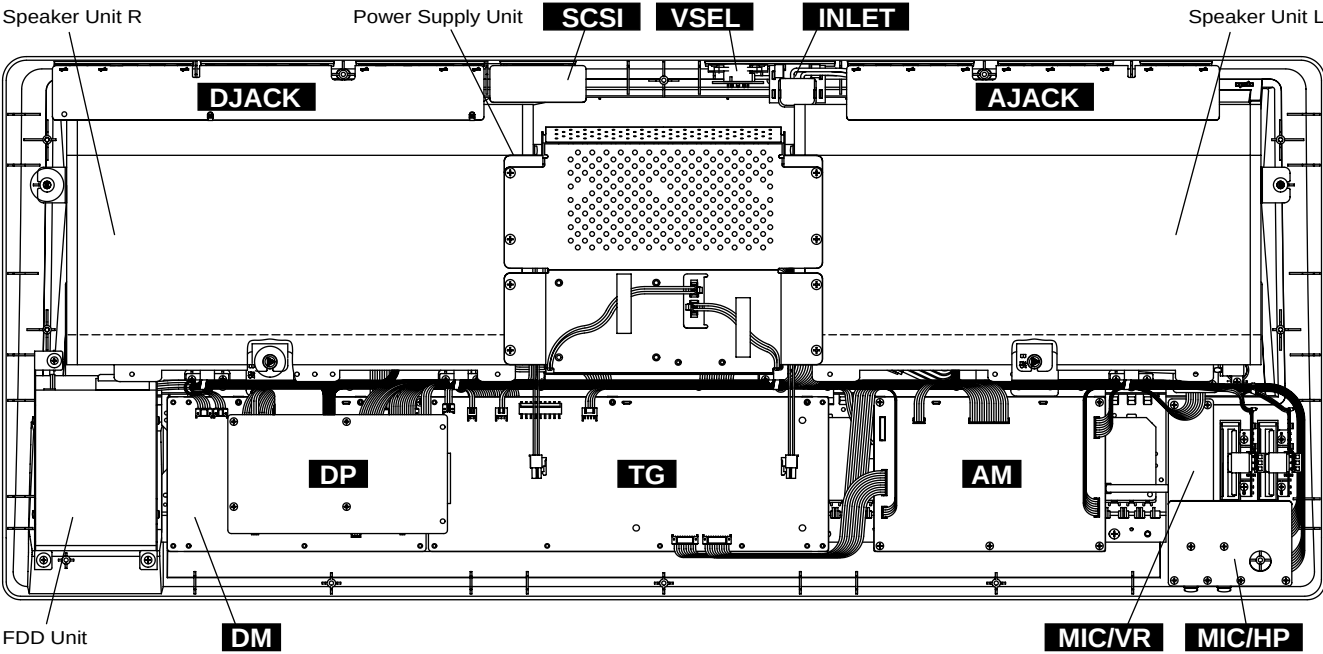
Upper Case (Top View)

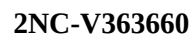


Upper Case (Insid View 2)

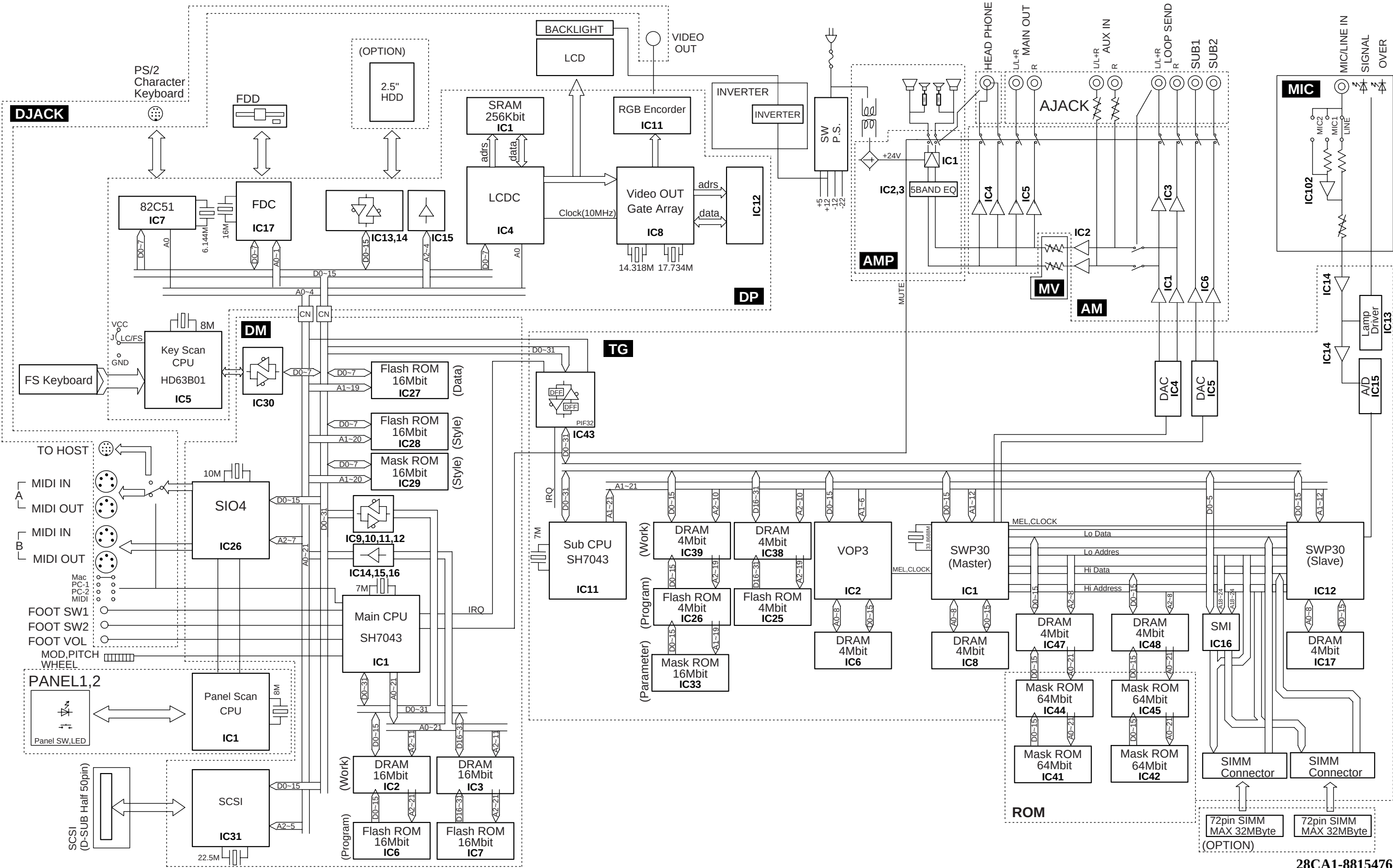


Upper Case (Insid View 1)





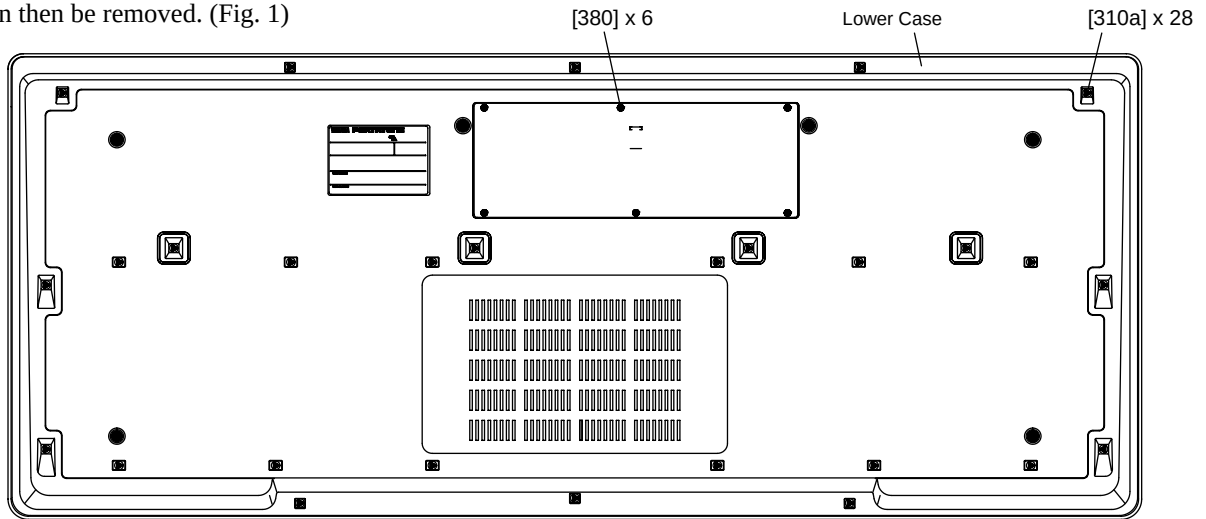
BLOCK DIAGRAM



DISASSEMBLY PROCEDURE

1 Lower Case

- 1-1 Remove the twenty-eight (28) screws marked [310a] and the six (6) screws marked [380]. The lower case can then be removed. (Fig. 1)



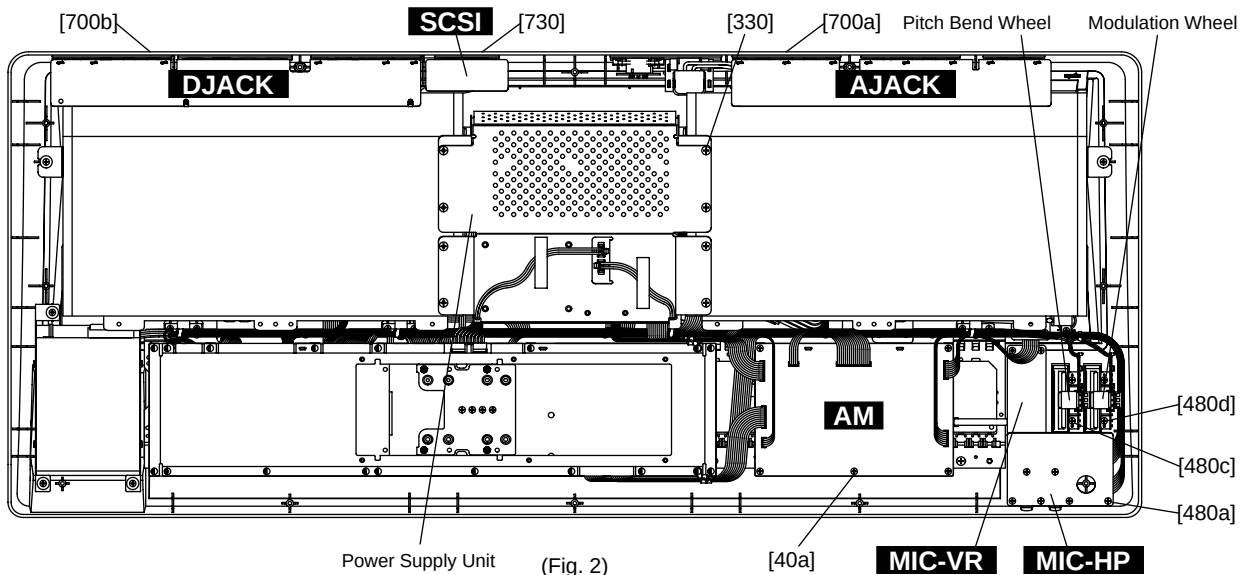
[310]: Bind Head Tapping Screw-B 4.0X14 MFZN2Y (EP600750)
 [380]: Bonding Head Screw 3.0X8 MFZN2BL (VP157800)

(Fig. 1)

2 Circuit Board & Unit

After removing the lower case, remove the following screws. Each circuit board and unit can then be removed. (Fig. 2)

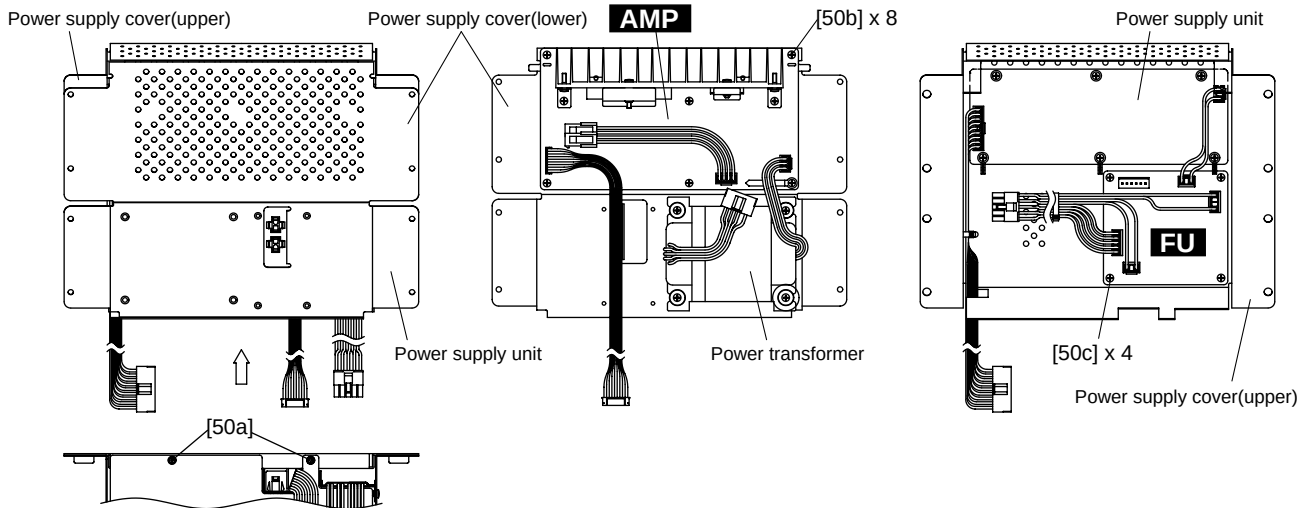
Circuit Board & Unit	Ref. No.	Screw	Prat No.	QTY
MIC-HP Circuit Board	[480a]	Bind Head Tapping Screw-B 3.0X8 MFZN2Y	EP600250	6
MIC-VR Circuit Board	[480b]	Bind Head Tapping Screw-B 3.0X8 MFZN2Y	EP600250	4
(INPUT VOLUME)	[770]	VR Knob	V2300100	1
AJACK Circuit Board	[700a]	Bind Head Tapping Screw-B 3.0X10 MFZN2BL	EP600140	8
DJACK Circuit Board	[700b]	Bind Head Tapping Screw-B 3.0X10 MFZN2BL	EP600140	10
SCSI Circuit Board	[730]	Pan Head Screw 2.5X6 MFZN2BL	VS206600	2
PITCH BEND Wheel	[480c]	Bind Head Tapping Screw-B 3.0X8 MFZN2Y	EP600250	2
MODULATION Wheel	[480d]	Bind Head Tapping Screw-B 3.0X8 MFZN2Y	EP600250	2
AM Circuit Board	[40a]	Bind Head Tapping Screw-B 3.0X10 MFZN2BL	EP600140	8
POWER SUPPLY UNIT	[330]	Bind Head Screw-1 4.0X12 MFZN2Y	EG340030	8



(Fig. 2)

3 AMP Circuit board

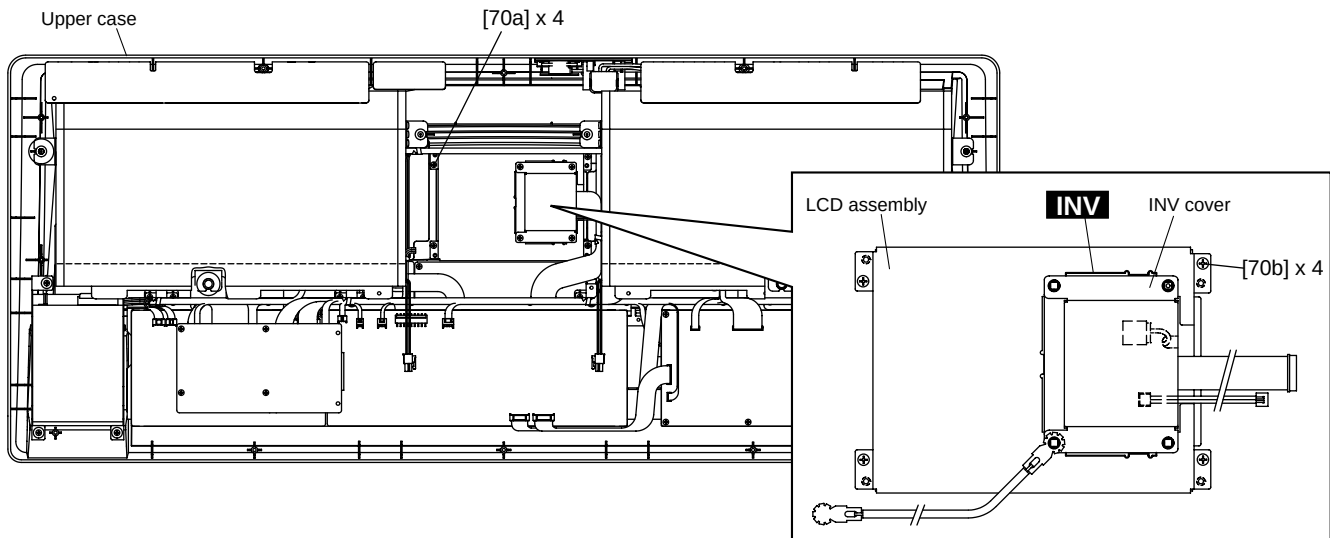
- 3-1 Remove the lower case. (See procedure 1.)
- 3-2 Remove the power supply unit. (See procedure 2.)
- 3-3 Remove the two (2) screws marked [50a]. The power supply cover can then be removed. (Fig. 3)
- 3-4 Remove the eight (8) screws marked [50b]. The AMP circuit board can then be removed. (Fig. 3)



[50]: Bind Head Tapping Screw-B 3.0X6 MFZN2Y (EP600130)
(Fig. 3)

5 LCD Assembly

- 5-1 Remove the lower case. (See procedure 1.)
- 5-2 Remove the power supply unit. (See procedure 2.)
- 5-3 Remove the four (4) screws marked [70a]. The LCD assembly can then be removed. (Fig. 4)



[70]: Bind Head Tapping Screw-B 3.0X6 MFZN2BL (EP600230)
(Fig. 4)

4 FU Circuit Board

- 4-1 Remove the lower case. (See procedure 1.)
- 4-2 Remove the power supply unit. (See procedure 2.)
- 4-3 Remove the power supply cover. (See procedure 3-3.)
- 4-4 Remove the four (4) screws marked [50c]. The FU circuit board can then be removed. (Fig. 4)

6 INV Circuit Board

- 6-1 Remove the lower case. (See procedure 1.)
- 6-2 Remove the power supply unit. (See procedure 2.)
- 6-3 Remove the four (4) screws marked [70b] and INV cover. The INV circuit board can then be removed. (Fig. 4)

7 Speaker Box Unit Left and Right

- 7-1 Remove the lower case. (See procedure 1.)
- 7-2 Remove the power supply unit. (See procedure 2.)
- 7-3 Remove the two (2) screws marked [310b] and the four (4) screws marked [110a]. The left and right speaker box units can then be removed. (Fig. 5)

8 Woofer

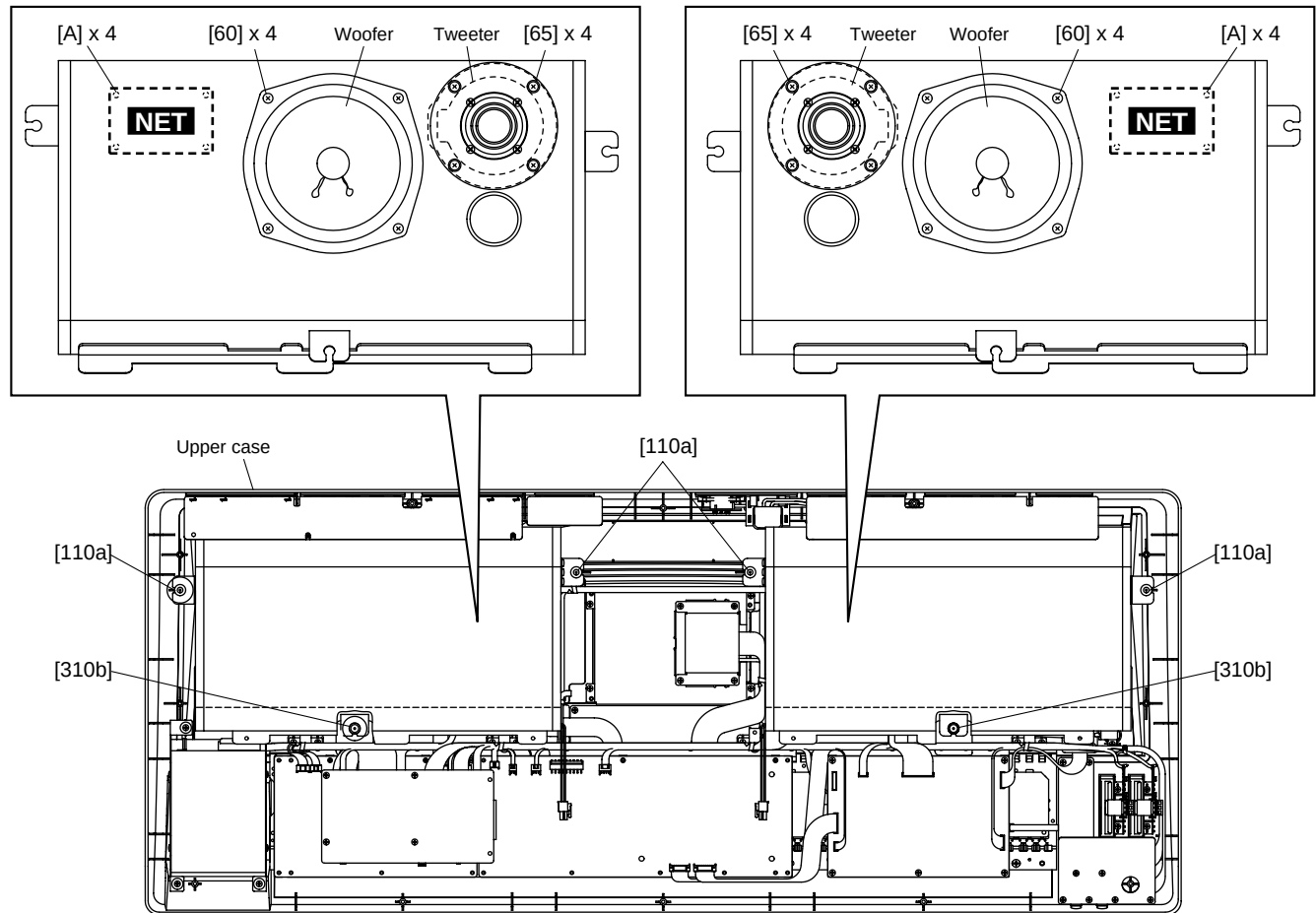
- 8-1 Remove the lower case. (See procedure 1.)
- 8-2 Remove the power supply unit. (See procedure 2.)
- 8-3 Remove the left and right speaker box units. (See procedure 7.)
- 8-4 Remove the four (4) screws marked [60]. The woofer can then be removed. (Fig. 5)

9 Tweeter

- 9-1 Remove the lower case. (See procedure 1.)
- 9-2 Remove the power supply unit. (See procedure 2.)
- 9-3 Remove the left and right speaker box units. (See procedure 7.)
- 9-4 Remove the four (4) screws marked [65]. The tweeter can then be removed. (Fig. 5)

10 NET Circuit Board

- 10-1 Remove the lower case. (See procedure 1.)
- 10-2 Remove the power supply unit. (See procedure 2.)
- 10-3 Remove the left and right speaker box units. (See procedure 7.)
- 10-4 Remove the woofer. (See Procedure 8.)
- 10-5 Remove the four (4) supports marked [A]. The NET circuit board can then be removed. (Fig. 5)



- [60]: Bind Head Tapping Screw-1 3.0X12 MFZN2BL (EP030340)
- [65]: Bind Head Tapping Screw-1 3.5X16 MFZN2BL (EP030260)
- [110]: Pan Head Sems Tapping Screw 3.0X10 (V5115200)
- [310]: Bind Head Tapping Screw-B 4.0X14 MFZN2Y (EP600750)

(Fig. 5)

11 FDD Unit

- 11-1 Remove the lower case. (See procedure 1.)
- 11-2 Remove the power supply unit. (See procedure 2.)
- 11-3 Remove the right speaker box unit. (See procedure 7.)
- 11-4 Remove the four (4) screws marked [110b]. The FDD unit can then be removed. (Fig. 6)

12 MV Circuit Board

- 12-1 Remove the lower case. (See procedure 1.)
- 12-2 Remove the power supply unit. (See procedure 2.)
- 12-3 Remove the left speaker box unit. (See procedure 7.)
- 12-4 Remove the four (4) screws marked [480e] and the MASTER VOLUME knob. The MV circuit board can then be removed. (Fig. 6)

13 INLET Circuit Board and VSEL Circuit Board

- 13-1 Remove the lower case. (See procedure 1.)
- 13-2 Remove the power supply unit. (See procedure 2.)
- 13-3 Remove the left speaker box unit. (See procedure 7.)
- 13-4 Remove the two (2) screws marked [480f] and the POWER knob. The power switch can then be removed.
- 13-5 Remove the two (2) screws marked [700c]. The INLET circuit board can then be removed. (Fig. 6)
- 13-6 Remove the two (2) screws marked [700d]. The VSEL circuit board can then be removed. (Fig. 6)

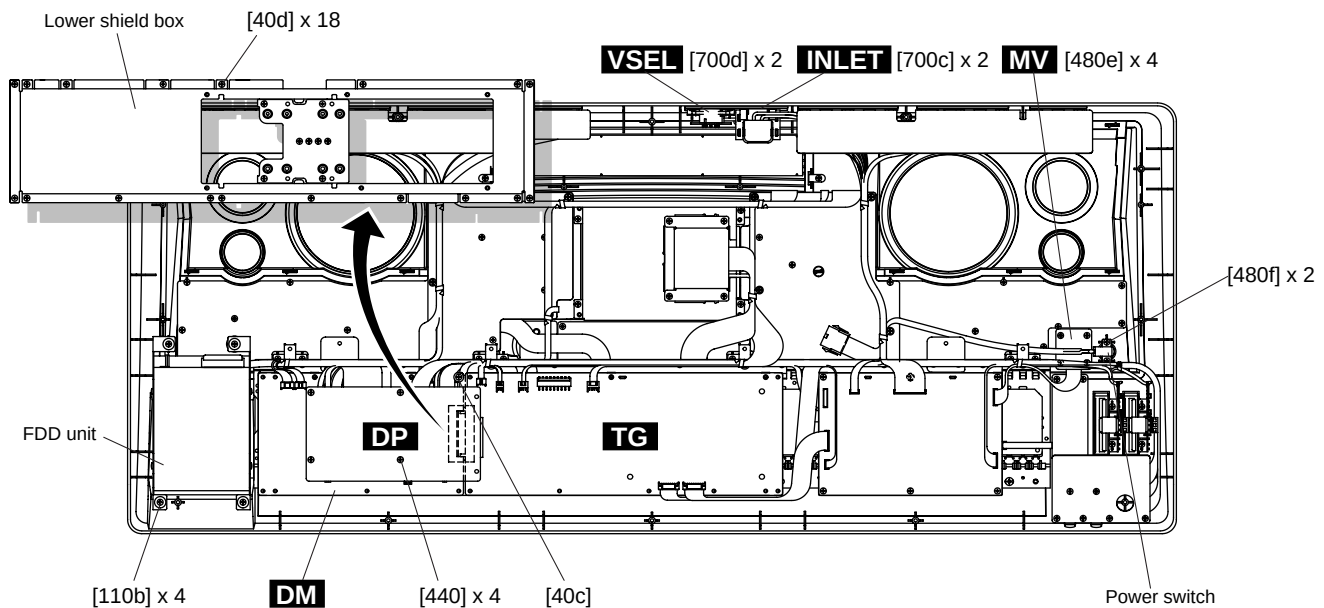
14 DP Circuit Board

- 14-1 Remove the lower case. (See procedure 1.)
- 14-2 Remove the eighteen (18) screws marked [40d]. The lower shield box can then be removed. (Fig. 6)
- 14-3 Remove the four (4) screws marked [440]. The DP circuit board can then be removed. (Fig. 6)

15 DM Circuit Board and TG Circuit Board

- 15-1 Remove the lower case. (See procedure 1.)
- 15-2 Remove the DP circuit board. (See procedure 14.)
- 15-3 Remove the screw marked [40c]. The DM circuit board and TG circuit board can then be removed. (Fig. 6)

N.B.: As the DM and TG circuit boards are connected, they can not be removed separately.

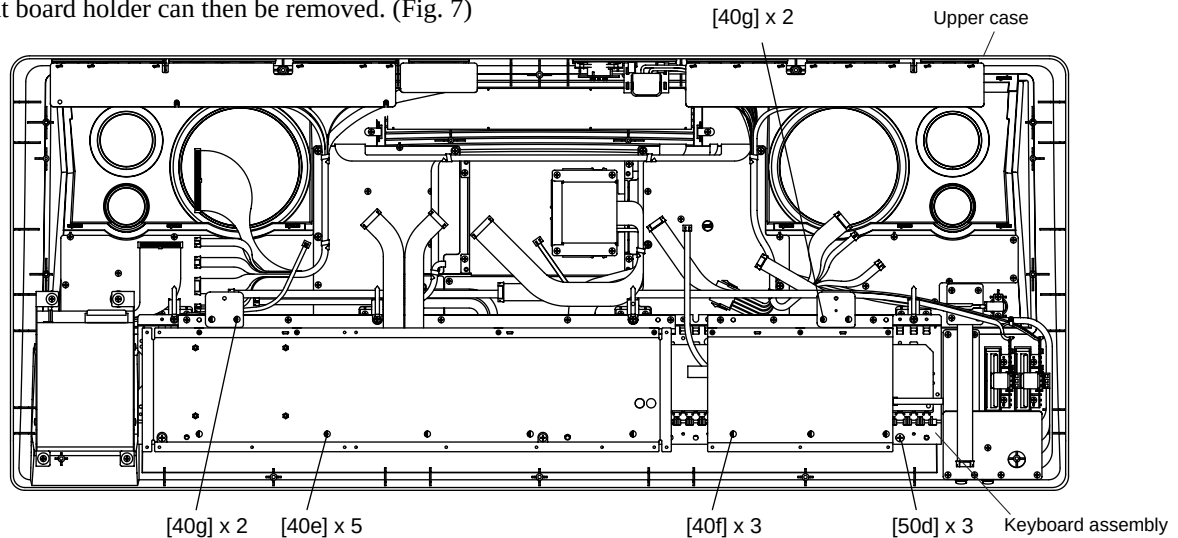


- [40]: Bind Head Tapping Screw-B 4.0X10 MFZN2Y (EP600250)
- [110]: Pan Head Sems Tapping Screw 3.0X10 (V5115200)
- [440]: Bind Head Screw 3.0X8 MFNI33 (VB748400)
- [480]: Bind Head Tapping Screw-B 3.0X8 MFZN2Y (EP600250)
- [700]: Bind Head Tapping Screw-B 3.0X10 MFZN2BL (EP600140)

(Fig. 6)

16 Keyboard Assembly

- 16-1 Remove the lower case. (See procedure 1.)
 16-2 Remove the DP circuit board. (See procedure 14.)
 16-3 Remove the DM circuit board and TG circuit board. (See procedure 15.)
 16-4 Remove the AM circuit board. (See procedure 2.)
 16-5 Remove the five (5) screws marked [40e]. The DM circuit board holder can then be removed. (Fig. 7)
 16-6 Remove the three (3) screws marked [40f]. The AM shield cover can then be removed. (Fig. 7)
 16-7 Remove the three (3) screws marked [50d] and the four (4) screws marked [40g]. The keyboard assembly can then be removed. (Fig. 7)

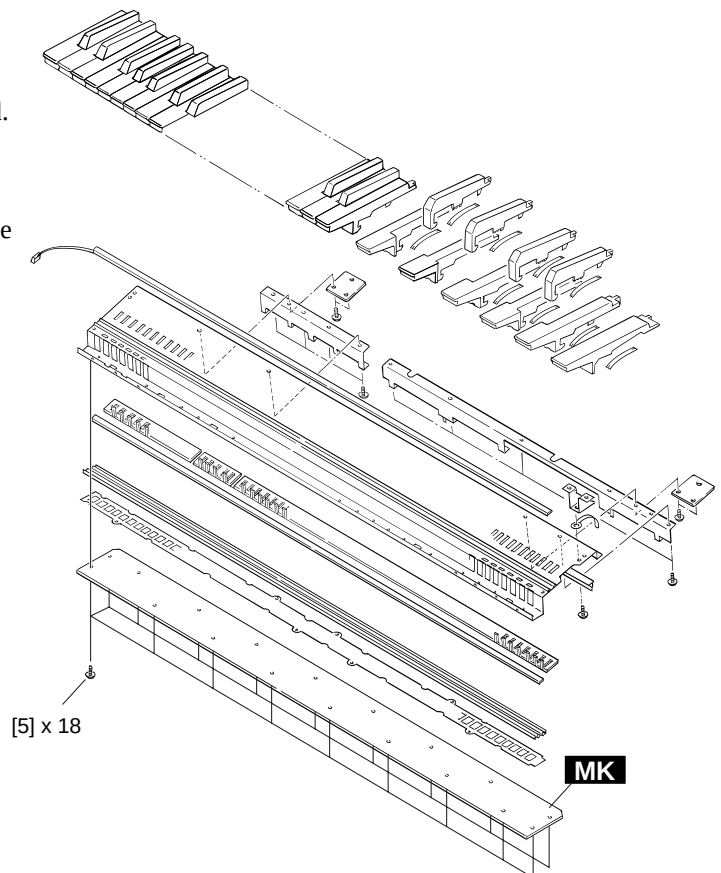


[40]: Bind Head Tapping Screw-B 3.0X8 MFZN2Y (EP600250)
 [50]: Bind Head Tapping Screw-B 3.0X6 MFZN2Y (EP600130)

(Fig. 7)

17 MK Circuit Board

- 17-1 Remove the lower case. (See procedure 1.)
 17-2 Remove the DP circuit board. (See procedure 14.)
 17-3 Remove the DM circuit board and TG circuit board. (See procedure 15.)
 17-4 Remove the AM circuit board. (See procedure 2.)
 17-5 Remove the AM shield cover. (See procedure 16.)
 17-6 Remove the eighteen (18) screws marked [5]. The MK circuit board can then be removed. (Fig. 8)



[5]: Bind Head Tapping Screw-S 3.0X10 MFZN2Y (EP630630)
 (Fig. 8)

18 EN Circuit Board

- 18-1 Remove the lower case. (See procedure 1.)
- 18-2 Remove the DP circuit board. (See procedure 14.)
- 18-3 Remove the DM circuit board and TG circuit board. (See procedure 15.)
- 18-4 Remove the keyboard assembly. (See procedure 16.)
- 18-5 Remove the encoder knob and the hexagonal nut marked [B]. The EN circuit board can then be removed. (Fig. 9)

19 PN1 Circuit Board

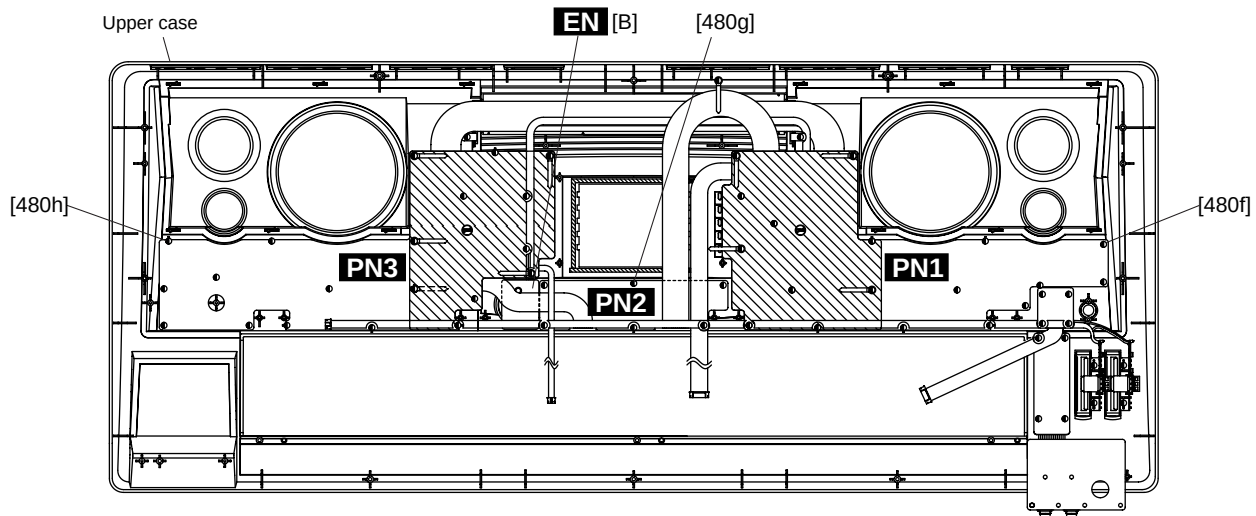
- 19-1 Remove the lower case. (See procedure 1.)
- 19-2 Remove the power supply unit. (See procedure 2.)
- 19-3 Remove the left and right speaker box units. (See procedure 7.)
- 19-4 Remove the DP circuit board. (See procedure 14.)
- 19-5 Remove the DM circuit board and TG circuit board. (See procedure 15.)
- 19-6 Remove the keyboard assembly. (See procedure 16.)
- 19-7 Remove the eighteen (18) screws marked [480f]. The PN1 circuit board can then be removed. (Fig. 9)

20 PN2 Circuit Board

- 20-1 Remove the lower case. (See procedure 1.)
- 20-2 Remove the power supply unit. (See procedure 2.)
- 20-3 Remove the left and right speaker box units. (See procedure 7.)
- 20-4 Remove the DP circuit board. (See procedure 14.)
- 20-5 Remove the DM circuit board and TG circuit board. (See procedure 15.)
- 20-6 Remove the keyboard assembly. (See procedure 16.)
- 20-7 Remove the EN circuit board. (See procedure 18.)
- 20-8 Remove the six (6) screws marked [480g]. The PN2 circuit board can then be removed. (Fig. 9)

21 PN3 Circuit Board

- 21-1 Remove the lower case. (See procedure 1.)
- 21-2 Remove the power supply unit. (See procedure 2.)
- 21-3 Remove the left and right speaker box units. (See procedure 7.)
- 21-4 Remove the DP circuit board. (See procedure 14.)
- 21-5 Remove the DM circuit board and TG circuit board. (See procedure 15.)
- 21-6 Remove the keyboard assembly. (See procedure 16.)
- 21-7 Remove the eighteen (18) screws marked [480h]. The PN3 circuit board can then be removed. (Fig. 9)



[480]: Bind Head Tapping Screw-B 3.0X8 MFZN2Y (EP600250)
(Fig. 9)

LSI PIN DISCRIPTION

CONTENTS

D65621GF-028-3B9	XS370A00	SMI	Page 15
HD6437043AE00F	XW795A00	CPU	Page 16
TC203C760HF-002	XS725A00	SWB30B	Page 17
YSS236-F	XT013A00	VOP3	Page 18
SED1335F0B	XQ595A00	LCDC	Page 19
MBCG46183-129	XV833A00	GATE ARRAY	Page 19
MN101C027YB	XS711200	CPU	Page 20
MSM82C51A-2GS-K	XV513A00	USART	Page 20
HD63266F	XI939A00	FDC	Page 21
PCM1716E/T2	XU829A00	DAC	Page 21
1414-AAPI	XV481B00	GATE ARRAY	Page 22
AK5351-VF-E2	XV510A00	DAC	Page 22
SPC7212F0A	XV636B00	SCSI2 Interface Controller	Page 23

• D65621GF-028-3B9 (XS370A00) SMI

TG: IC16

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	LMA24	I	Low Memory Address	41	VDD	-	
2	LMA23	I	Low Memory Address	42	L1RAS2	O	RAS2 for LoMem SIMM 1
3	LMA22	I	Low Memory Address	43	L1RAS3	O	RAS3 for LoMem SIMM 1
4	LMA21	I	Low Memory Address	44	GND	-	
5	LMA20	I	Low Memory Address	45	HDRAS0	O	RAS for HiMem DRAM 0
6	LMA19	I	Low Memory Address	46	HDRAS1	O	RAS for HiMem DRAM 1
7	LMA18	I	Low Memory Address	47	GND	-	
8	HMA24	I	High Memory Address	48	VDD	-	
9	HMA23	I	High Memory Address	49	LDRAS0	O	RAS for LoMem DRAM 0
10	HMA22	I	High Memory Address	50	LDRAS1	O	RAS for LoMem DRAM 1
11	HMA21	I	High Memory Address	51	LMA1	I	Low Memory Address
12	GND	-	No.12	52	LMA0	I	Low Memory Address
13	HMA20	I	High Memory Address	53	GND	-	No.53
14	HMA19	I	High Memory Address	54	LMA1X	O	Low Memory Address Exchanged
15	HMA18	I	High Memory Address	55	LMA0X	O	Low Memory Address Exchanged
16	RASN	I	Row Address Strobe	56	GND	-	
17	H0RAS0	O	RAS0 for HiMem SIMM 0	57	VDD	-	
18	H0RAS1	O	RAS1 for HiMem SIMM 0	58	HMA1	I	High Memory Address
19	GND	-		59	HMA0	I	High Memory Address
20	H0RAS2	O	RAS2 for HiMem SIMM 0	60	HMA1X	O	High Memory Address Exchanged
21	H0RAS3	O	RAS3 for HiMem SIMM 0	61	HMA0X	O	High Memory Address Exchanged
22	GND	-		62	D0	I	Data Input
23	VDD	-		63	D1	I	Data Input
24	L0RAS0	O	RAS0 for LoMem SIMM 0	64	GND	-	
25	L0RAS1	O	RAS1 for LoMem SIMM 0	65	D2	I	Data Input
26	GND	-		66	D3	I	Data Input
27	L0RAS2	O	RAS2 for LoMem SIMM 0	67	D4	I	Data Input
28	L0RAS3	O	RAS3 for LoMem SIMM 0	68	D5	I	Data Input
29	GND	-		69	A2	I	Address
30	VDD	-		70	WRN	I	Write
31	H1RAS0	O	RAS0 for HiMem SIMM 1	71	GND	-	No.71
32	H1RAS1	O	RAS1 for HiMem SIMM 1	72	VDD	-	No.72
33	GND	-		73	CSN	I	Chip Select
34	VDD	-		74	A0	I	Address
35	H1RAS2	O	RAS2 for HiMem SIMM 1	75	A1	I	Address
36	H1RAS3	O	RAS3 for HiMem SIMM 1	76	MCLK	I	Clock (37MHz)
37	GND	-		77	SYI	I	Sync Clock (48kHz)
38	L1RAS0	O	RAS0 for LoMem SIMM 1	78	HBANK	O	HiMem Bank Select 01/23
39	L1RAS1	O	RAS1 for LoMem SIMM 1	79	LBANK	O	LoMem Bank Select 01/23
40	GND	-		80	REFRN	O	Refresh Timing

• HD6437043AE00F (XW795A00) CPU

DM: IC1 / TG: IC11

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	/WRHH	O	HH write	73	D15	I/O	Data bus
2	DACK0	O	DAM transfer strobe	74	D14	I/O	
3	/WRHL	O	HL write	75	D13	I/O	
4	/CASHH	O	HH Column address strobe	76	D12	I/O	Power supply
5	PE15	I/O	Port E	77	VCC	I	
6	VSS	I	Ground	78	D11	I/O	
7	A0	O	Address bus	79	VSS	I	Ground
8	A1	O		80	D10	I/O	Data bus
9	A2	O		81	D9	I/O	
10	A3	O		82	D8	I/O	
11	A4	O	Power supply	83	D7	I/O	Data bus
12	VCC	I		84	D6	I/O	
13	A5	O		85	VCC	I	
14	VSS	I		86	D5	I/O	Power supply
15	A6	O	Address bus	87	VSS	I	
16	A7	O		88	D4	I/O	
17	A8	O		89	D3	I/O	Data bus
18	A9	O		90	D2	I/O	
19	A10	O	Address bus	91	D1	I/O	
20	A11	O		92	D0	I/O	Ground
21	A12	O		93	VSS	I	
22	A13	O		94	XTAL	I	Crystal oscillator
23	A14	O	Power supply	95	MD3	I	Mode select
24	A15	O		96	EXTAL	I	Crystal oscillator
25	A16	O		97	MD2	I	Mode select
26	VCC	I		98	NMI	-	Non-maskable interrupt
27	A17	O	Address bus	99	VCC	I	Power supply
28	VSS	I	Ground	100	PA16	I/O	Port A
29	/CASHL	O	HL Column address strobe	101	PA17	I/O	Port A
30	PA19	I/O	Port A	102	MD1	I	Mode select
31	/RAS	O	Row address strobe	103	MD0	I	Mode select
32	/CASL	O	Column address strobe (low)	104	PLL VCC	I	PLL Power supply
33	PA18	I/O	Port A	105	PLLCAP	I	PLL capacitor
34	/CASH	O	Column address strobe (high)	106	PLL VSS	I	PLL Ground
35	VSS	I	Ground	107	PA15	I/O	Port A
36	RDWR	O	DRAM read/write	108	/RES	I	Reset
37	A18	O	Address bus	109	/DREQ0	I	DMA transfer request
38	A19	O		110	TIOC0B	I/O	MTU input capture/output comp
39	A20	O		111	PE2	I/O	Port E
40	VCC	I		112	VCC	I	Power supply
41	A21	O	Address bus	113	PE3	I/O	Port E
42	VSS	I	Ground	114	PE4	I/O	
43	/RD	O	Read	115	PE5	I/O	
44	WDTOVF	O	Watch dog timer overflow	116	PE6	I/O	Ground
45	D31	I/O	Data bus	117	VSS	I	
46	D30	I/O	Data bus	118	AN0	I	
47	/WRH	O	High write	119	AN1	I	Analog input
48	/WRL	O	Low write	120	AN2	I	
49	/CS1	O	Chip select	121	AN3	I	
50	/CS0	O	Chip select	122	PF4	I/O	Port F
51	/IRQ3	I	Interrupt request	123	PF5	I/O	Port F
52	/IRQ2	I	Interrupt request	124	AVSS	I	Analog ground
53	/CS3	O	Chip select	125	PF6	I/O	Port F
54	/CS2	O	Chip select	126	PF7	I/O	Port F
55	VSS	I	Ground	127	AVREF	I	Analog reference Voltage
56	D29	I/O	Data bus	128	AVCC	I	Analog power supply
57	D28	I/O		129	VSS	I	Ground
58	D27	I/O		130	RxDO	I	Receive data
59	D26	I/O		131	TxDO	O	Transmit data
60	D25	I/O	Ground	132	/IRQ1	I	Interrupt request
61	VSS	I		133	RxD1	I	Receive data
62	D24	I/O		134	PA4	I/O	Port A
63	VCC	I		135	VCC	I	Power supply
64	D23	I/O	Data bus	136	SCK1	I/O	Serial clock
65	D22	I/O		137	PE7	I/O	Port E
66	D21	I/O		138	PE8	I/O	
67	D20	I/O		139	PE9	I/O	
68	D19	I/O	Ground	140	PE10	I/O	Ground
69	D18	I/O		141	VSS	I	
70	D17	I/O		142	TIOC3D	I/O	
71	VSS	I		143	PE12	I/O	Port EPort E

• TC203C760HF-002 (XS725A00)

SWP30B (AWM Tone Generator coped with MEG) Standard Wave Processor

TG: IC1

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION	
1	VSS		(Ground)	121	VSS		(Ground)	
2	CA0	I		122	HMD0	I/O		Wave memory data bus (Upper 16 bits)
3	CA1	I		123	HMD1	I/O		
4	CA2	I		124	HMD2	I/O		
5	CA3	I		125	HMD3	I/O		
6	CA4	I		126	HMD4	I/O		
7	CA5	I		127	HMD5	I/O		
8	CA6	I		128	HMD6	I/O		
9	CA7	I		129	HMD7	I/O		
10	CA8	I		130	HMD8	I/O		
11	CA9	I		131	HMD9	I/O		
12	CA10	I		132	HMD10	I/O		
13	CA11	I	133	HMD11	I/O			
14	VSS		(Ground)	134	HMD12	I/O		
15	CD0	I/O		135	HMD13	I/O		
16	CD1	I/O		136	HMD14	I/O		
17	CD2	I/O		137	HMD15	I/O		
18	CD3	I/O		138	VSS		(Ground)	
19	CD4	I/O		139	HMA0	O		
20	CD5	I/O		140	HMA1	O		
21	CD6	I/O		141	HMA2	O		
22	CD7	I/O		142	HMA3	O		
23	CD8	I/O		143	HMA4	O		
24	CD9	I/O		144	HMA5	O		
25	CD10	I/O		145	HMA6	O		
26	CD11	I/O	146	HMA7	O			
27	CD12	I/O	147	HMA8	O			
28	CD13	I/O	148	HMA9	O			
29	CD14	I/O	149	HMA10	O			
30	VDD		(Power supply) (Ground)	150	VDD		(Power supply) (Ground)	
31	VSS			151	VSS			
32	CD15	I/O		152	HMA11	O		
33	CSN	I		153	HMA12	O		
34	WRN	I		154	HMA13	O		
35	RDN	I		155	HMA14	O		
36	VDD			156	HMA15	O		
37	SYSH0	O		157	HMA16	O		
38	SYSH1	O		158	HMA17	O		
39	SYSH2	O		159	HMA18	O		
40	SYSH3	O		160	HMA19	O		
41	SYSH4	O		161	HMA20	O		
42	SYSH5	O	162	HMA21	O			
43	SYSH6	O	163	HMA22	O			
44	SYSH7	O	164	HMA23	O			
45	KONO0	O	165	HMA24	O			
46	KONO1	O	166	VSS		(Ground)		
47	KONO2	O	167	MRASN	O			
48	KONO3	O	168	MCASN	O			
49	VSS		169	MOEN	O			
50	SYSL0	I/O	170	MWEN	O			
51	SYSL1	I/O	171	VSS			(Ground)	
52	SYSL2	I/O	172	LMD0	I/O			
53	SYSL3	I/O	173	LMD1	I/O			
54	SYSL4	I/O	174	LMD2	I/O			
55	SYSL5	I/O	175	LMD3	I/O			
56	SYSL6	I/O	176	LMD4	I/O			
57	SYSL7	I/O	177	LMD5	I/O			
58	KONI0	I	178	LMD6	I/O			
59	KONI1	I	179	LMD7	I/O			
60	VDD		180	VDD		Wave memory data bus (Lower 16 bits) (Power supply) (Ground)		
61	VSS		181	VSS				
62	KONI2	I	182	LMD8	I/O			
63	KONI3	I	183	LMD9	I/O			
64	DAC0	O	184	LMD10	I/O			
65	DAC1	O	185	LMD11	I/O			
66	WCLK	O	186	LMD12	I/O			
67	MEL00	O	187	LMD13	I/O			
68	MEL01	O	188	LMD14	I/O			
69	MEL02	O	189	LMD15	I/O			
70	MEL03	O	190	VSS			(Ground)	
71	MEL04	O	191	LMA0	O			
72	MEL05	O	192	LMA1	O			
73	MEL06	O	193	LMA2	O			
74	MEL07	O	194	LMA3	O			
75	VDD		195	LMA4	O			
76	ADLR	O	196	LMA5	O			
77	MELI0	I	197	LMA6	O			
78	MELI1	I	198	LMA7	O			
79	MELI2	I	199	LMA8	O			
80	MELI3	I	200	LMA9	O			
81	MELI4	I	201	LMA10	O			
82	MELI5	I	202	LMA11	O			
83	MELI6	I	203	VSS		(Ground)		
84	MELI7	I	204	LMA12	O			
85	VSS		205	LMA13	O			
86	RCASN	O	206	LMA14	O			
87	RA8	O	207	LMA15	O			
88	RA7	O	208	LMA16	O			
89	RA6	O	209	LMA17	O			
90	VDD		210	VDD			(Power supply) (Ground)	
91	VSS		211	VSS				
92	RA5	O	212	LMA18	O			
93	RA4	O	213	LMA19	O			
94	RA3	O	214	LMA20	O			
95	RA2	O	215	LMA21	O			
96	RA1	O	216	LMA22	O			
97	RA0	O	217	LMA23	O			
98	RRASN	O	218	LMA24	O			
99	RWEN	O	219	VSS		(Ground)		
100	VSS		220	SYO	O			
101	RD7	I/O	221	SYOD	O			
102	RD6	I/O	222	QCLK	O			
103	RD5	I/O	223	HCLK	O			
104	RD4	I/O	224	CK256	O			
105	RD3	I/O	225	SYSCCLK	O			
106	RD2	I/O	226	VDD			Sync. clock Master clock input Master clock output (Power supply)	
107	RD1	I/O	227	SYI	I			
108	RD0	I/O	228	MCLKI	I			
109	VSS		229	MCLKO	O			
110	RD17	I/O	230	VDD				
111	RD16	I/O	231	XIN	I			
112	RD15	I/O	232	XOUT	O			
113	RD14	I/O	233	VSS		Crystal osc. input Crystal osc. output (Ground)		
114	RD13	I/O	234	ICN	I			
115	RD12	I/O	235	CHIP2	I			
116	RD11	I/O	236	SLAVE	I			
117	RD10	I/O	237	TESTON	I			
118	RD9	I/O	238	ACIN	I			
119	RD8	I/O	239	DCTEST	I			
120	VDD		240	VDD			(Power supply)	

• YSS236-F (XT013A00) VOP3

TG: IC2,12

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	VSS		Power supply	81	SO7	O	Serial output
2	WA17	O	External memory address bus	82	SO6	O	
3	WA16	O		83	SO5	O	
4	WA15	O		84	VDD		Ground
5	WA14	O		85	VSS		Power supply
6	WA13	O		86	SO4	O	Serial output
7	WA12	O		87	SO3	O	
8	WA11	O		88	SO2	O	
9	WA10	O		89	SO1	O	
10	VDD		Ground	90	SO0	O	
11	VSS		Power supply	91	WDCK	O	Data enable for DAC
12	WA09	O	External memory address bus	92	SWPKON	O	SWP00 format key on output
13	WA08	O		93	IRQN	O	EG interrupt
14	WA07	O		94	VDD		Ground
15	WA06	O		95	VSS		Power supply
16	WA05	O		96	XTAL_I	I	Cristal oscillator terminal
17	WA04	O		97	XTAL_O	O	Cristal oscillator terminal
18	WA03	O	Ground	98	MCLK	O	Oscillate clock output
19	WA02	O		99	VDD		Ground
20	VDD			100	VSS		Power supply
21	VSS			101	MICN	I	Initial clear
22	WA01	O		102	CLKIN	I	Master clock input
23	WA00	O		103	SYWIN	I	Sync.signal input
24	WEN	O	External memory control (WEN)	104	SYW	O	Sync.signal output
25	OEN	O	External memory control (OEN)	105	SYWD	O	Sync.signal output
26	RASN	O	External memory control (RASN)	106	VDD		Ground
27	CASN	O	External memory control (CASN)	107	VSS		Power supply
28	CEN	O	External memory control (CEN)	108	CLKO	O	For test (512 fs output)
29	VDD		Ground	109	WCLK	O	2 times sync.clock outout (256fs)
30	VSS		Power supply	110	HCLK	O	4 times sync.clock outout (128fs)
31	WD19	I/O	External memory data bus	111	QCLK	O	8 times sync.clock outout (64fs)
32	WD18	I/O		112	TSTCI	I	PLL test input
33	WD17	I/O		113	VDD		Ground
34	WD16	I/O		114	VSS		Power supply
35	WD15	I/O		115	(NC)		
36	WD14	I/O		116	VDD(PLL)		
37	VDD		Ground	117	CPO	O	PLL control output
38	VSS		Power supply	118	CPIN	I	PLL control input
39	WD13	I/O	External memory data bus	119	REF	I	PLL control input
40	WD12	I/O		120	VSS(PLL)		
41	WD11	I/O		121	(NC)		
42	WD10	I/O		122	VDD		Ground
43	WD09	I/O		123	VSS		Power supply
44	WD08	I/O		124	TSTCS	I	PLL test input
45	WD07	I/O	Ground	125	CA6	I	CPU address bus
46	VDD			126	CA5	I	
47	VSS			127	CA4	I	
48	WD06	I/O		128	CA3	I	
49	WD05	I/O		129	CA2	I	
50	WD04	I/O		130	VDD		Ground
51	WD03	I/O	External memory data bus	131	VSS		Power supply
52	WD02	I/O		132	CA1	I	CPU address bus
53	WD01	I/O		133	CA0	I	Lo/Hi select in 8 bits write
54	WD00	I/O		134	CSN	I	Chip select
55	VDD		Ground	135	RDN	I	Register read
56	VSS		Power supply	136	WRN	I	Register write
57	TST2	O	Test output	137	BTYP		Data bus type select
58	TST1	O		138	VDD		Ground
59	TST0	O		139	VSS		Power supply
60	MS	I	Memory select	140	CD15	I/O	CPU data bus
61	LRCLK	O	LR clock for ADC	141	CD14	I/O	
62	SI7	I	Serial input	142	CD13	I/O	
63	SI6	I		143	CD12	I/O	
64	VDD			144	CD11	I/O	
65	VSS			145	VDD		Ground
66	SI5	I		146	VSS		Power supply
67	SI4	I		147	CD10	I/O	CPU data bus
68	SI3	I		148	CD09	I/O	
69	SI2	I		149	CD08	I/O	
70	SI1	I		150	CD07	I/O	
71	SI0	I	Ground	151	CD06	I/O	CPU data bus
72	DB1	I		152	CD05	I/O	
73	DB0	I		153	VDD		
74	VDD			154	VSS		
75	VSS			155	CD04	I/O	CPU data bus
76	ODFM	I		156	CD03	I/O	
77	OFS3	I	Serial output format select	157	CD02	I/O	
78	OFS2	I		158	CD01	I/O	
79	OFS1	I		159	CD00	I/O	
80	OFS0	I		160	VDD		Ground

• SED1335F0B (XQ595A00) LCDC (LCD Controller)

DP: IC4

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	VA5	O	VRAM address bus	31	XD2	O	Data bus output for 4 bit dot
2	VA4	O		32	XD1	O	
3	VA3	O		33	XD0	O	
4	VA2	O		34	XECL	O	S driver enable, chain clock
5	VA1	O		35	XSCL	O	Data bus shift clock
6	VA0	O		36	Vss	-	Ground
7	/VWR	O	VRAM read/write	37	LP	O	X driver latch pulse
8	/VCE	O	Memory control	38	WF	O	Frame signal for X/Y driver
9	/VRD	-	Not used	39	YDIS	O	Power down signal for displaying off mode
10	/RES	I	Initial clear	40	YD	O	Scan start signal
11	NC	-	Not used	41	YSCL	O	Scan shift clock
12	NC	-	Not used	42	VD7	I/O	VRAM data bus
13	/RD	I	Read strobe	43	VD6	I/O	
14	/WR	I	Write strobe	44	VD5	I/O	
15	SEL2	I	Bus select	45	VD4	I/O	
16	SEL1	I	Bus select	46	VD3	I/O	
17	OSC1	I	Clock	47	VD2	I/O	
18	OSC2	O	Clock	48	VD1	I/O	VRAM address bus
19	/CS	I	Chip select	49	VD0	I/O	
20	A0	I	Data mode select	50	VA15	O	
21	Vdd	-	Power supply	51	VA14	O	
22	D0	I/O	Data bus	52	VA13	O	
23	D1	I/O		53	VA12	O	
24	D2	I/O		54	VA11	O	
25	D3	I/O		55	VA10	O	
26	D4	I/O		56	VA9	O	Not used
27	D5	I/O		57	VA8	O	
28	D6	I/O		58	VA7	O	
29	D7	I/O		59	VA6	O	
30	XD3	O	Data bus output for 4 bit dot	60	NC	-	Not used

• MBCG46183-129 (XV833A00) GATE ARRAY

DM: IC26

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	D5	I/O	Data bus	25	TX31	O	Serial data
2	D6	I/O		26	RX32	I	
3	D7	I/O		27	TX32	O	
4	/IRQ0	I/O	Interrupt request	28	RX33	I	
5	/IRQ1	I/O	Interrupt request	29	TX33	I/O	Initial Clear
6	VSS6		Ground	30	/IC	I	
7	/IRQ2	I/O	Interrupt request	31	VSS31		
8	/IRQ3	I/O	Interrupt request	32	XI	I	
9	/RD	I	Read	33	VSS33		Crystal quarts input
10	/WR	I	Write	34	XO	O	Ground
11	/CE	I	Chip enable	35	A0	I	Crystal quarts output
12	/ASTB	I	Test mode	36	A1	I	Address bus
13	TESTI0	I		37	A2	I	
14	RX0	I		38	A3	I	
15	TX0	O		39	A4	I	
16	RX1	I	Serial data	40	A5	I	Clock
17	TX1	O		41	CPUCLK	I	
18	VSS18		Ground	42	VSS42		
19	VDD19		Power supply	43	VDD43		
20	RX2	I	Serial data	44	D0	I/O	Data bus
21	TX2	O		45	D1	I/O	
22	RX30	I		46	D2	I/O	
23	TX30	O		47	D3	I/O	
24	RX31	I		48	D4	I/O	

• **MN101C027YB (XS711200) CPU**

EN: IC1

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	S1	I	Switch matrix data	33	S12	I	Switch matrix data
2	S2	I		34	S13	I	
3	S3	I		35	S14	I	
4	S4	I		36	TXD	O	MIDI transmit data
5	S5	I		37	S15	I	Switch matrix data
6	VREF+	-	Power supply (+5V, analog)	38	S16	I	
7	VDD	-	Power supply (+5V)	39	S17	I	
8	OSC2	O	Crystal oscillator (8MHz)	40	S18	I	
9	OSC1	I	Crystal oscillator (8MHz)	41	L16	O	
10	VSS	-	Ground	42	L17	O	
11	XI	I	Not used	43	L18	O	
12	XO	O	Not used	44	L19	O	
13	MMOD	I	Memory mode select (Grounded)	45	L8	O	
14	RD0	O	Rotary encoder data	46	L9	O	LED drive data
15	RXD	I	MIDI receive data	47	L10	O	
16	D0	O	LED and switch drive data	48	L11	O	
17	D1	O		49	L12	O	
18	D2	O		50	L13	O	
19	D3	O		51	L14	O	
20	D4	O		52	L15	O	
21	/RST	I	Reset	53	L7	O	
22	D5	O	LED and switch drive data	54	L6	O	LED and switch drive data
23	D6	O		55	L5	O	
24	D7	O		56	L4	O	
25	D8	O		57	L3	O	
26	D9	O		58	L2	O	
27	S6	I	Switch matrix data	59	L1	O	
28	S7	I		60	L0	O	
29	S8	I		61	VREF	-	
30	S9	I		62	AD0	I	Analog input
31	S10	I		63	AD1	I	Analog input
32	S11	I		64	S0	I	Switch matrix data

• **MSM82C51A-2GS-K (XV513A00) USART (Serial Control)**

DP: IC7

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	D2	I	Data bus	15	TXRDY	O	Transmit ready
2	D3	I	Data bus	16	SYNDET/BD	I/O	Receiver/Break
3	RXD	I	Receive data	17	/CTS	I	MODEM control
4	GND	-	Ground	18	TXEMPTY	O	Transmitter empty
5	D4	I	Data bus	19	TXD	O	Transmission data
6	D5	I	Data bus	20	CLK	I	Main clock
7	D6	I	Data bus	21	RESET	I	System reset
8	D7	I	Data bus	22	/DSR	I	MODEM control
9	/TXC	I	Transmitter clock	23	/RTS	O	MODEM control
10	/WR	I	Write control	24	/DTR	O	MODEM control
11	/CS	I	Device select	25	/RXC	I	MODEM control
12	C//D	I	Low: Access data High: command word, status word	26	VCC	-	Power supply (+5V)
13	RD	I	Read control	27	D0	I	Data bus
14	RXRDY	O	Receive ready	28	D1	I	Data bus

• **HD63266F** (XI939A00) **FDC** (Floppy Disk Controller)

DP: IC17

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	8"/5"	I	Data transmission speed	33	/TRKO	I	Track 00 signal
2	XTALSET	I	Clock select	34	/INDEX	I	Index signal
3	/RESET	I	Rest	35	/RDATA	I	Read data input from FDD
4	E//RD	I	Enable/Read	36	XTAL2	}	Clock
5	RW//WR	I	Read/write/Write	37	EXTAL2		
6	/CS	I	Chip select	38	NC	}	Clock
7	/DACK	I	DMA acknowledge	39	XTAL1		
8	RS0	I	Register select	40	EXTAL1	}	Ground
9	RS1	I		41	VSS4		
10	VSS1	}	Ground	42	VSS5	}	Power supply
11	VSS2			43	NC		
12	D0	I/O	Data bus	44	VCC2	}	Write control
13	D1	I/O		45	VCC3		
14	D2	I/O		46	VCC4		
15	D3	I/O		47	/WGATE	O	
16	D4	I/O		48	/WDATA	O	Writ data to FDD
17	D5	I/O		49	VSS6		Ground
18	D6	I/O		50	/STEP	O	Step signal to control head of FDD
19	D7	I/O		51	/HDIR	O	Direction
20	/DREQ	O	DMA request	52	/HLOAD	O	Head load
21	/IRQ	O	Interrupt request	53	/HSEL	O	Head select
22	/DEND	I	Data end	54	VSS7		Ground
23	VSS3		Ground	55	/DS0	O	Drive select
24	1/2 EX1			56	/DS1	O	
25	VCC1		Power supply	57	/DS2	O	
26	NUM1	I		58	/DS3	O	Ground
27	NUM3	I		59	VSS8		
28	IFS	I	Host interface select	60	/MON0	O	Motor on
29	SFORM	I	Format data	61	/MON1	O	
30	/INP	I	Index pulse	62	/MON2	O	
31	/READY	I	Ready from FDD	63	/MON3	O	Ground
32	/WPRT	I	Write control signal	64	VSS9		

• **PCM1716E/T2** (XU829A00) **DAC** (Digital to Analog Converter)

TG: IC4,5

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	LRCK	I	Clock input	15	Vcc1	-	Analog power supply (+5V)
2	DATA	I	Data input	16	VOU TL	O	Lch, analog voltage output
3	BCK	I	Bit clock	17	NC	-	
4	CLKO	O	System clock	18	EXTL	O	Lch, analog output
5	XTI	I	Clock input	19	AGND2L	-	Analog ground
6	XTO	O	Clock out	20	Vcc2L	-	Analog power supply (+5V)
7	DGND	-	Digital ground	21	/ZERO	O	Zero data flag
8	VDD	-	Digital power supply (+5V)	22	/RST	I	Reset
9	Vcc2R	-	Analog power supply (+5V)	23	/CS/IWO	I	Chip select
10	AGND2R	-	Analog ground	24	MODE	I	Mode control select (H: Software, L: Hardware)
11	EXTR	O	Rch, analog output	25	/MUTE	I	Mute control
12	NC	-		26	MD/DM0	I	Mode control data/ De-emphasis select1
13	VOU TR	O	Rch, analog voltage output	27	MC/DM1	I	Mode control BCK/De-emphasis select2
14	AGND1	-	Analog ground	28	ML/IIS	I	Mode control Latch/input format select

• **1414-AAPI (XV481B00) GATE ARRAY (Video Out)**

DP: IC8

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	RESET	I	Reset (High/Low)	33	RD	O	Read strobe (High/Low)
2	TEST	I	Test mode setting (High/Low)	34	WR	O	Write strobe (High/Low)
3	MODE	I	Mode select (High/Low)	35	GND	-	Ground (Out buffer)
4	NTSC/PAL	I	NTSC/PAL signal input (High/Low)	36	A0	O	Address bus
5	YD	I	Frame	37	A1	O	
6	LP	I	Line latch pulse	38	A2	O	
7	5V	-	Power supply (5 V)	39	A3	O	
8	XSCL	I	4 Dot latch clock	40	A4	O	
9	GND	-	Ground (In buffer)	41	A5	O	
10	XD0	I	Dot data	42	A6	O	
11	XD1	I		43	A7	O	
12	XD2	I		44	A8	O	
13	XD3	I		45	A9	O	
14	GND	-	Ground	46	A10	O	Ground (Out buffer 5 V)
15	5V	-	Power supply (In bffer 5 V)	47	A11	O	
16	5V	-	Power supply (Out buffer 5 V)	48	A12	O	
17	LCD_CLK	O	LCD clock output (9 MHz)	49	5V	-	
18	GND	-	Ground (Out buffer)	50	A13	O	Address bus
19	XA0	I	OSC_NTSC signal input	51	A14	O	
20	XA1	O	OSC_NTSC signal output	52	A15	O	
21	XB0	I	OSC_PAL signal input	53	A16	O	
22	XB1	O	OSC_PAL signal output	54	SYNCOUT	O	Sync. signal output
23	GND	-	Ground (In buffer)	55	GND	-	Ground (Out buffer)
24	D0	I/O	Data bus	56	SC_NTSC	O	SC_NTSC signal output
25	D1	I/O		57	SC_PAL	O	SC_PAL signal output
26	D2	I/O		58	GND	-	Ground (Out buffer)
27	D3	I/O		59	BOUT1	O	Color data
28	D4	I/O		60	BOUT0	O	
29	D5	I/O		61	GOUT1	O	
30	D6	I/O		62	GOUT0	O	
31	D7	I/O		63	ROUT1	O	
32	GND	-	Ground	64	ROUT0	O	

• **AK5351-VF-E2 (XV510A00) ADC (Analog to Digital Converter)**

TG: IC15

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	AINR+	I	Analog signal input (R channel +)	13	DGND	-	Digital ground
2	AINR-	I	Analog signal input (R channel -)	14	TST4	I/O	Test mode setting 4
3	VREF	O	Reference voltage	15	AMODE2		Interface clock select 2
4	VA	-	Analog power supply	16	/PD	I	Power-down mode
5	AGND	-	Analog ground	17	MCLK	I	Master clock input
6	AINL+	I	Analog signal input (L channel +)	18	SCLK	I/O	Serial data clock
7	AINL-	I	Analog signal input (L channel -)	19	LRCK	I	Input/Output channel clock
8	TST1	I/O	Test mode setting 1	20	FSYNC	I/O	Frame synch. clock
9	HPFE		HPF on/off	21	SDATA	O	Serial data output
10	TST2	I/O	Test mode setting 2	22	CMODE	I	Master clock select
11	TST3	I/O	Test mode setting 3	23	SMODE1	I	Interface clock select 1
12	VD	-	Digital power supply	24	VB	-	Digital power supply

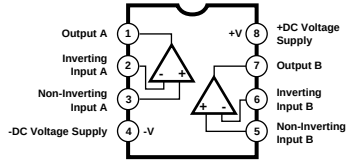
• SPC7212F0A(XV636B00) SCSI2 Interface Controller

DM: IC31

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	LVDD	-	Power supply +3.3V	51	LVDD	-	Power supply +3.3V
2	EXCLK	I	External clock input	52	PD13	I/O	DMA data bus
3	VSS	-	Ground	53	PD2	I/O	
4	OSCIN	I	Oscillator input	54	PD12	I/O	
5	OSCOU	O	Oscillator output	55	PD3	I/O	DMA data bus
6	LVDD	-	Power supply +3.3V	56	VSS	-	
7	CLKSEL0	I	Input clock select	57	PD11	I/O	
8	CLKSEL1	I	System clock select	58	PD4	I/O	DMA data bus
9	VC	O	Internal VCO control	59	PD10	I/O	
10	XPLLPD	I	PLL power down input	60	PD5	I/O	
11	LVDD	-	Power supply +3.3V	61	HVDD	-	Power supply +5V
12	PLLCT0	I	PLL control	62	PD9	I/O	DMA data bus
13	PLLCT1	I	PLL control	63	PD6	I/O	
14	VSS	-	Ground	64	PD8	I/O	
15	TESTEN	I	Test	65	PD7	I/O	Ground
16	DB0	I/O	Data bus	66	VSS	-	
17	DB1	I/O		67	XSIO	I/O	
18	DB2	I/O		68	XSREQ	I/O	SCSI REQ signal
19	DB3	I/O	Power supply +5V	69	VSS	-	Ground
20	HVDD	-		70	XSCD	I/O	SCSI C/D signal
21	DB4	I/O		71	XSSEL	I/O	SCSI SEL signal
22	DB5	I/O	Data bus	72	VSS	-	Ground
23	DB6	I/O		73	XSMMSG	I/O	SCSI MSG signal
24	DB7	I/O		74	XSRST	I/O	SCSI RST signal
25	VSS	-	Ground	75	VSS	-	Ground
26	LVDD	-	Power supply +3.3V	76	LVDD	-	Power supply +3.3V
27	HVDD	-	Power supply +5V	77	XSACK	I/O	SCSI ACK signal
28	AD0	I	Address bus	78	XSBSY	I/O	SCSI BSY signal
29	AD1	I		79	VSS	-	Ground
30	AD2	I		80	NC	-	N.C.
31	AD3	I		81	XSANT	I/O	SCSI ANT signal
32	AD4	I		82	XSDBP	I/O	SCSI data parity
33	VSS	-	Ground	83	VSS	-	Ground
34	XWR	I	Data write	84	TESTMON	O	Test monitor output
35	XRD	I	Data read	85	XSDB7	I/O	SCSI data bus
36	XRESET	I	System reset input	86	XSDB6	I/O	
37	XINT	O	Interrupt request	87	NC	-	N.C.
38	XCS	I	Chip select	88	VSS	-	Ground
39	HVDD	-	Power supply +5V	89	XSDB5	I/O	SCSI data bus
40	XPDAK	I/O	Port DMA acknowledge	90	XSDB4	I/O	
41	XPRD	I/O	Port read	91	VSS	-	Ground
42	XPWR	I/O	Port write	92	NC	-	N.C.
43	PDREQ	I/O	Port DMA request	93	XSDB3	I/O	SCSI data bus
44	VSS	-	Ground	94	XSDB2	I/O	
45	PD15	I/O	Port DMA data bus	95	VSS	-	Ground
46	PD0	I/O		96	NC	-	N.C.
47	PD14	I/O		97	XSDB1	I/O	SCSI data bus
48	PD1	I/O	Power supply +5V	98	XSDB0	I/O	
49	HVDD	-		99	NC	-	N.C.
50	VSS	-	Ground	100	VSS	-	Ground

IC BLOCK DIAGRAM

- **RC4558D-V** (IG001390)
Dual Operational Amplifier
MK: IC1



- **SN74HCU04N** (IG142250)
- **SN74VHC04F** (XM332A00)
- **TC74HCU04AF-TP1** (XD660A00)

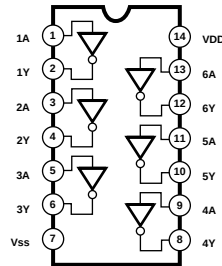
INVERTER

AJACK/DJACK: IC4

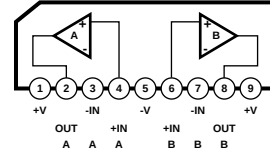
TG: IC3

DP: IC2,9

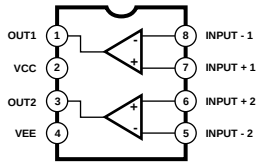
DM: IC4



- **μPC4570HA** (XB247A00)
Operational Amplifier
AM: IC1,2,3,5,6,7



- **LA6517** (XM804A00)
Operational Amplifier
AM: IC4

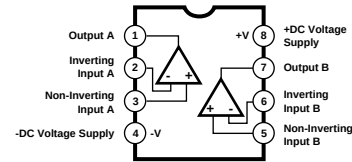


- **μPC4570C** (XC520A00)
- **μPC4570G2** (XF291A00)

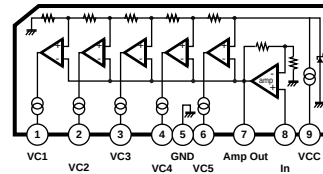
Operational Amplifier

TG: IC14

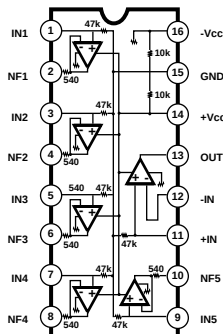
MV: IC101,102



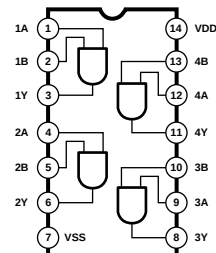
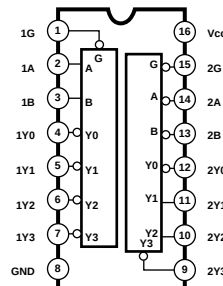
- **LB1443N** (XF483A00)
LEVEL METER DRIVER
TG: IC13



- **M5227P** (XF751A00)
EQUALIZER
AMP: IC2,3



- **HD74LVC139FPEL** (XS048A00)
DEMULTIPLEXER
DM: IC25
- **TC74VHC08F** (XT014A00)
AND
DM: IC5
TG: IC24,27



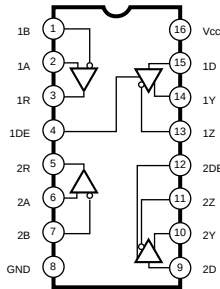
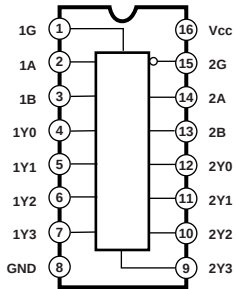
- TC74VHC157F(EL) (XT475A00)

DATA SELECTOR

DM: IC20,21
- SN75C1168N (XU463A00)

LINE TRANSCEIVER

AJACK/DJACK: IC3



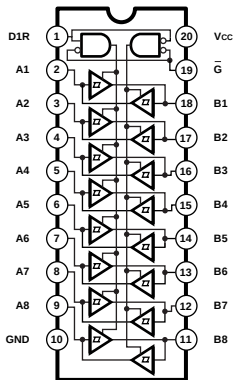
- TC74VHC245F (XT487A00)

● TC74HC245AF (XS720A00)

TRANSCEIVER

DM: IC9-12,14-17,22,30 / DP: IC13,14,15

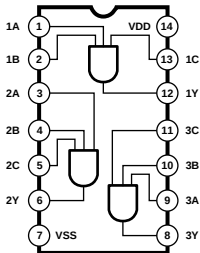
TG: IC19-23,29-32,34-37



- TC74VHC11F (EL) (XT812A00)

Triple 3 input AND

DP: IC16



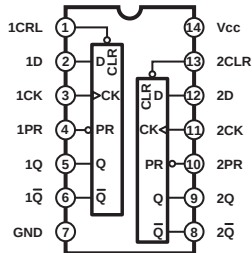
- TC74VHC74F (XN964A00)

D-FF

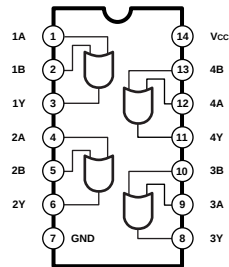
DM: IC18
- TC74VHC32F-TEL (XR337A00)

OR

TG: IC18,28,40 / DM: IC19,34 / DP: IC6



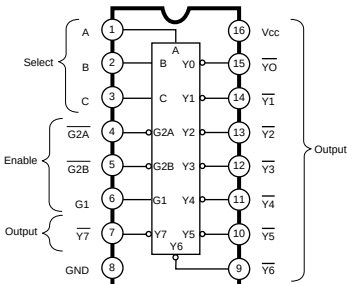
INPUTS				OUTPUTS	
PR	CLR	CLK	D	Q	Q-bar
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	H	H
H	H	↑	H	H	L
H	H	↑	L	L	H
H	H	L	X	Q*	Q*-



- TC74VHC138F (XT015A00)

DECODER

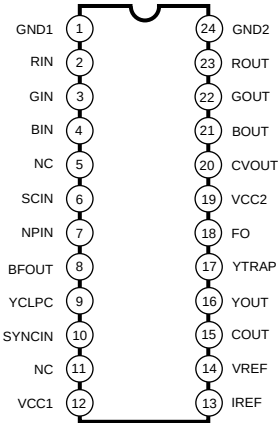
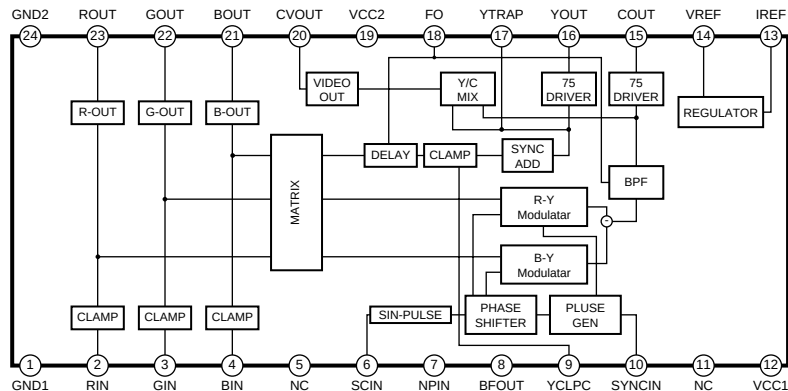
DM: IC23,24



- CXA1645M-T6 (XN431A00)

RGB ENCODER

DP: IC11

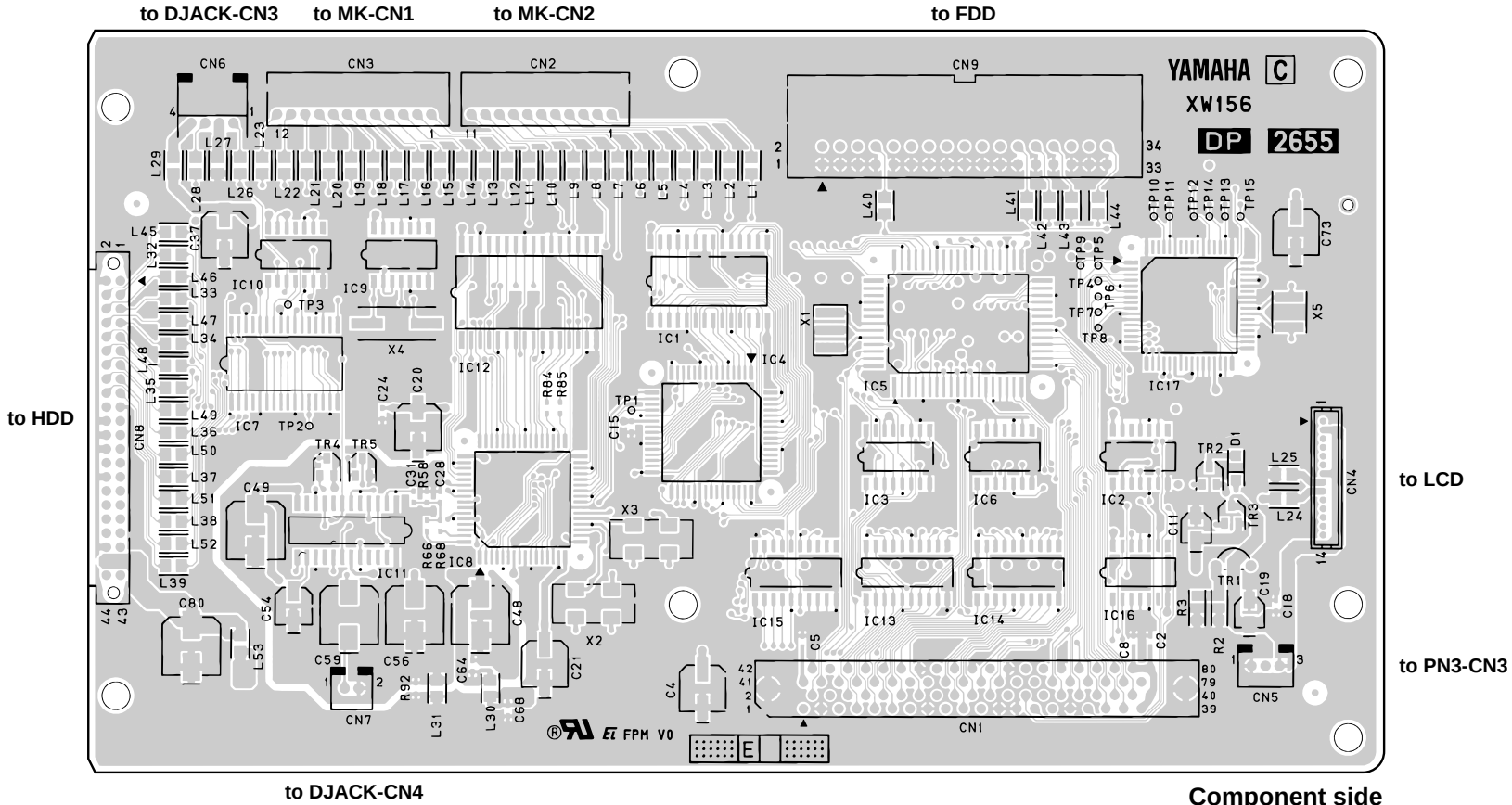


CIRCUIT BOARDS

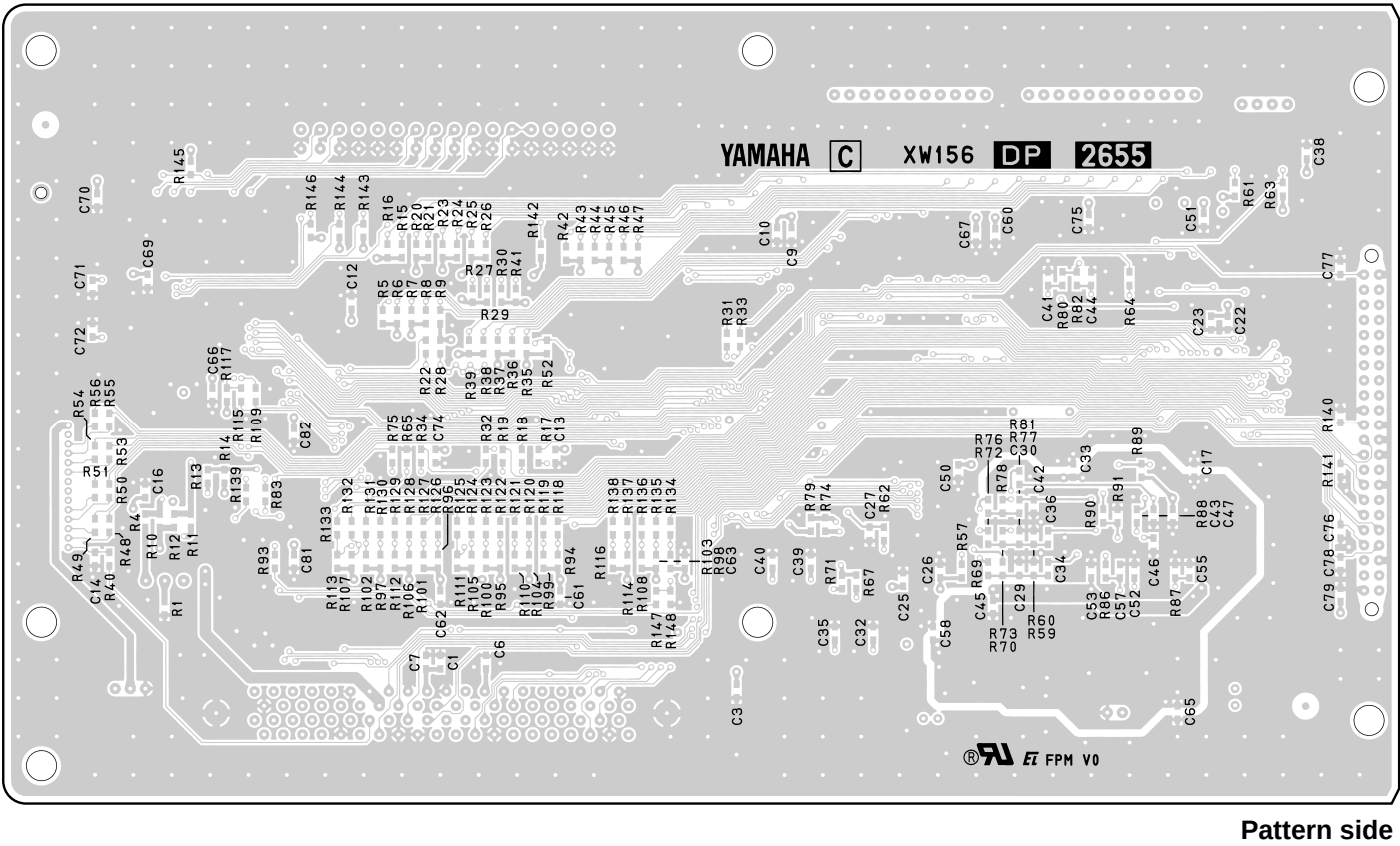
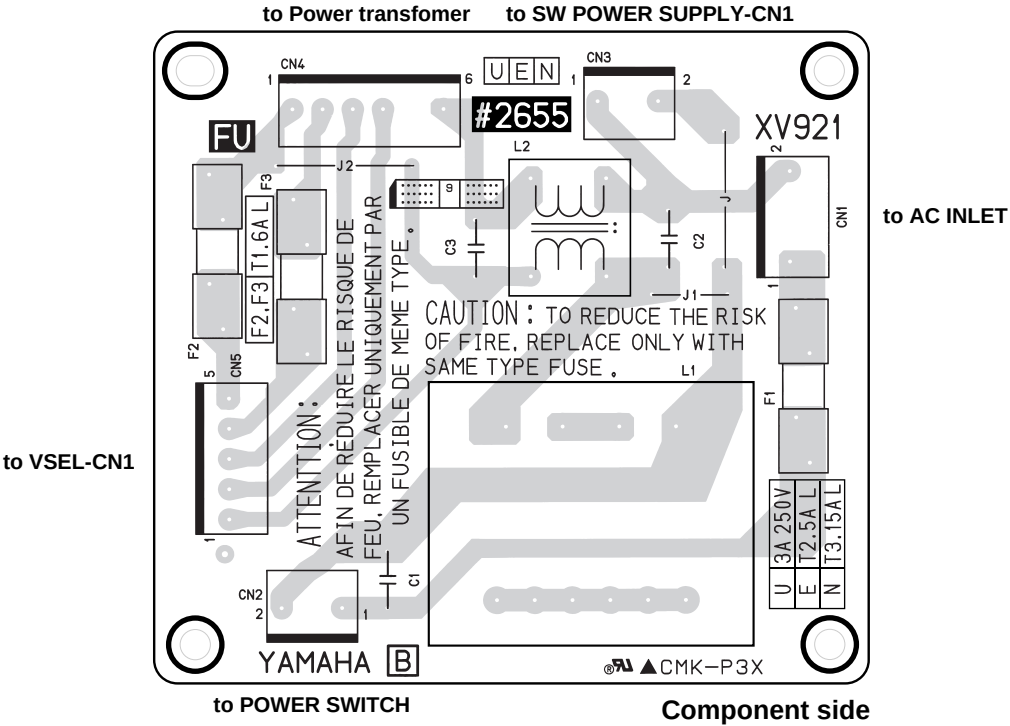
CONTENTS

DP Circuit Board	V4101200 (XW156C0)	P26
FU Circuit Board	V4272800 (XV921B0)	P26
AM Circuit Board	V3558900 (XV931C0)	P27
INV Circuit Board	VY638900 (VT122A0)	P27
EN Circuit Board	V4197300 (XW443B0)	P27
MV Circuit Board	V4197800 (XW438B0)	P27
SCSI Circuit Board	V4271500 (XW083C0)	P27
MIC/VR Circuit Board	V4197700 (XW438B0)	P28
MIC/HP Circuit Board	V4197600 (XW438B0)	P28
DM Circuit Board	V4101100 (XW155C0)	P28
AJACK Circuit Board	V4582000 (XV936B0)	P28
VSEL Circuit Board	V4272300 (XW375B0)	P29
NET Circuit Board	V4272100 (XW374B0)	P29
DJACK Circuit Board	V4270600 (XV936B0)	P29
TG Circuit Board	V4101300 (XW157E0)	P30
PN2 Circuit Board	V4197200 (XW443B0)	P30
PN1 Circuit Board	V4197500 (XW443B0)	P32
PN3 Circuit Board	V4197100 (XW438B0)	P34
AMP Conversion Circuit Board	V3727900 (XV922A0)	P36

DP Circuit Board

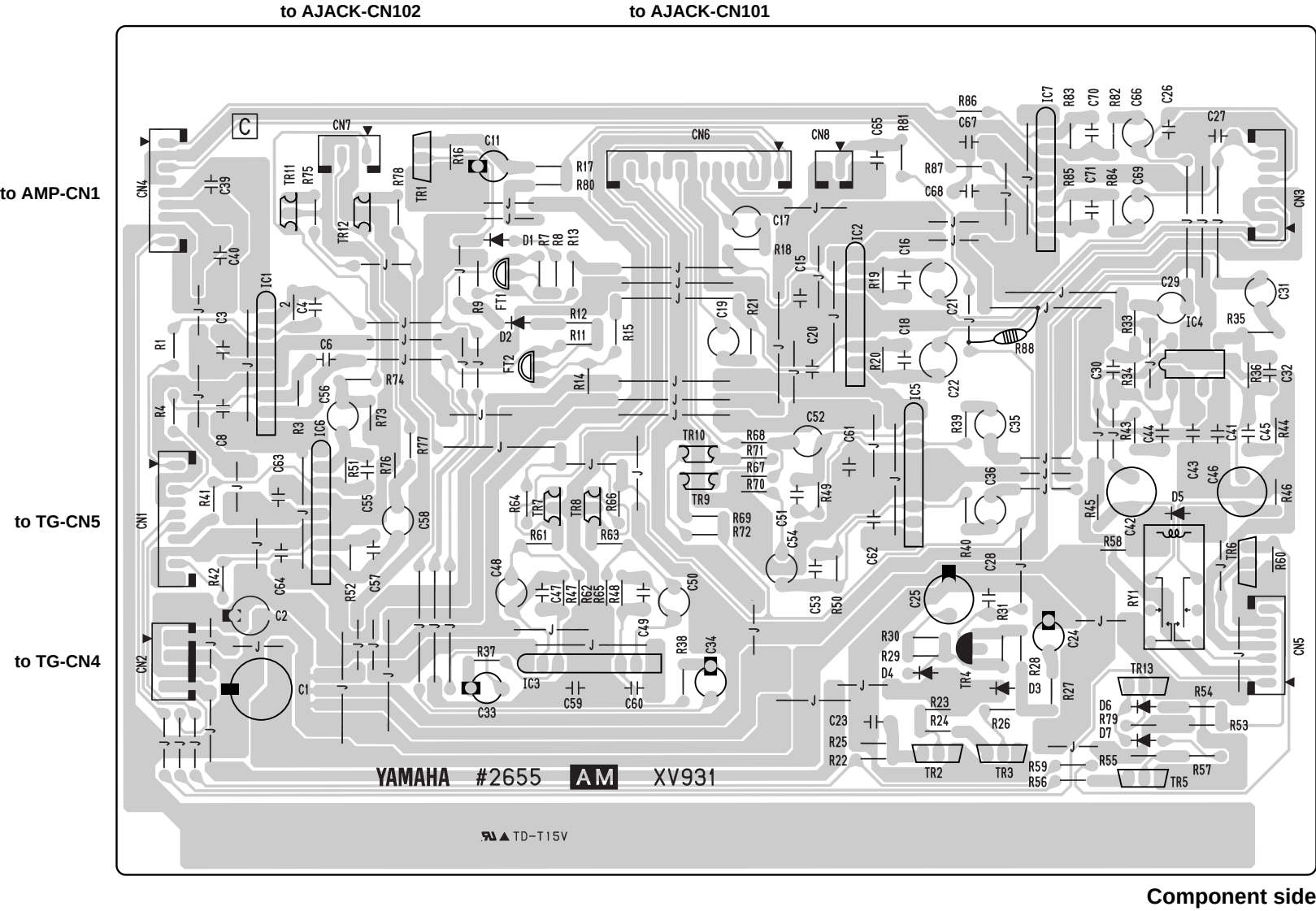


FU Circuit Board

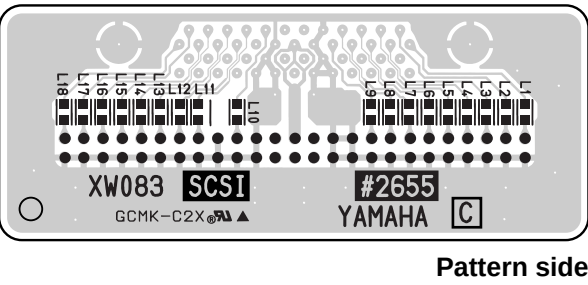
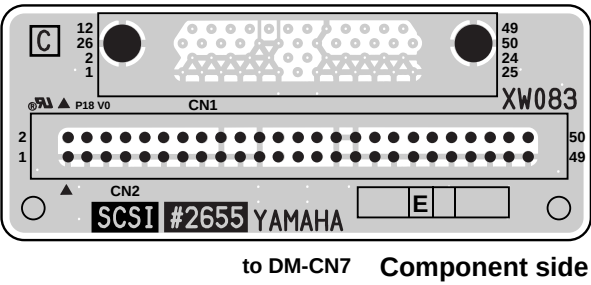


DP: V410120
FU: V427280

●AM Circuit Board

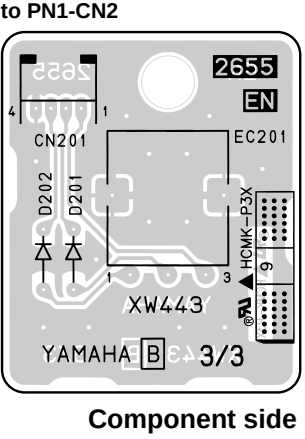


●SCSI Circuit Board

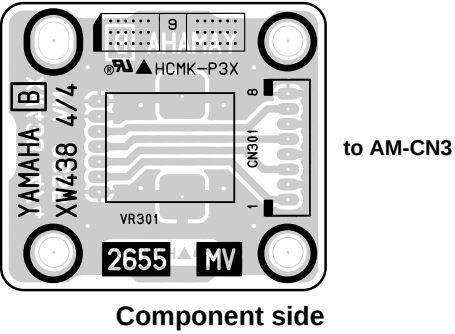


AM: V355890
INV: VY63890
EN: V419730
MV: V419780
SCSI: V427150

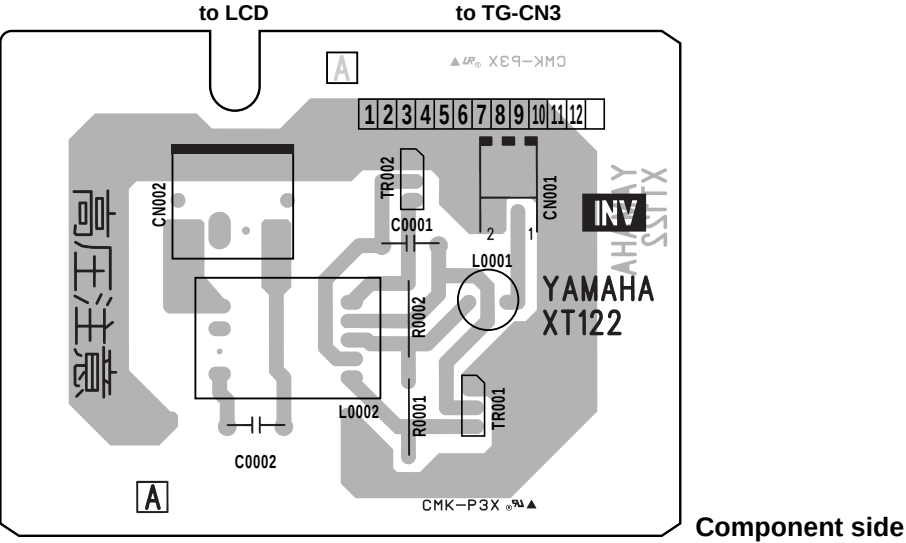
●EN Circuit Board



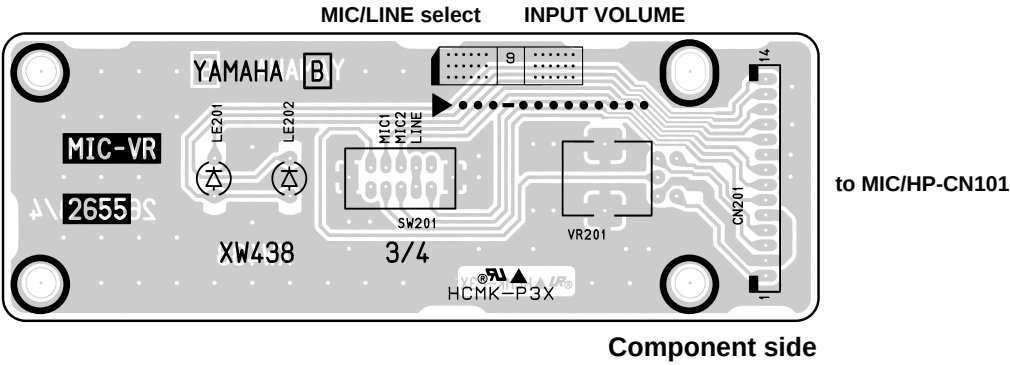
●MV Circuit Board



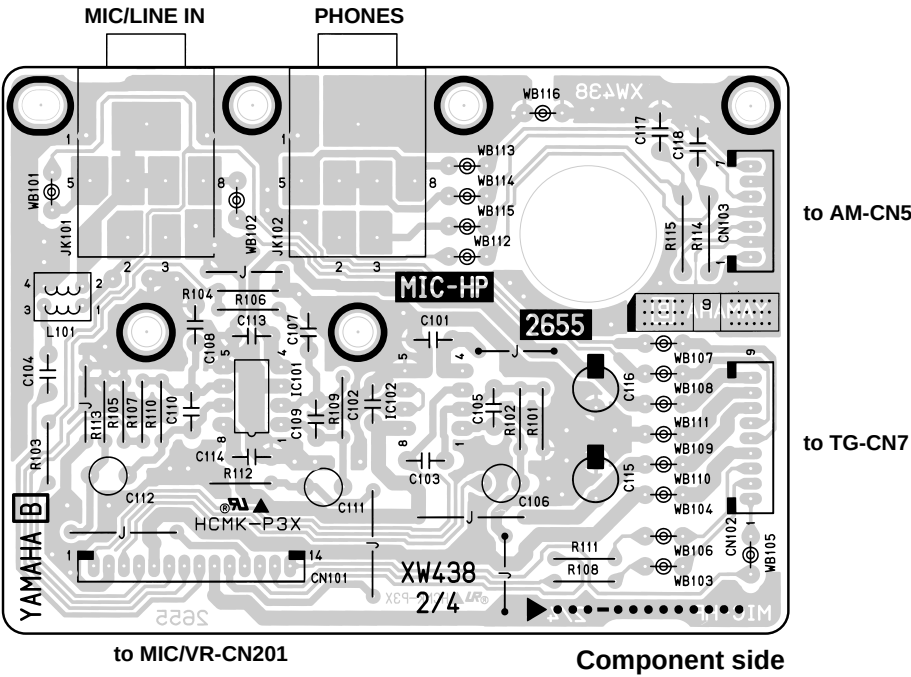
●INV Circuit Board



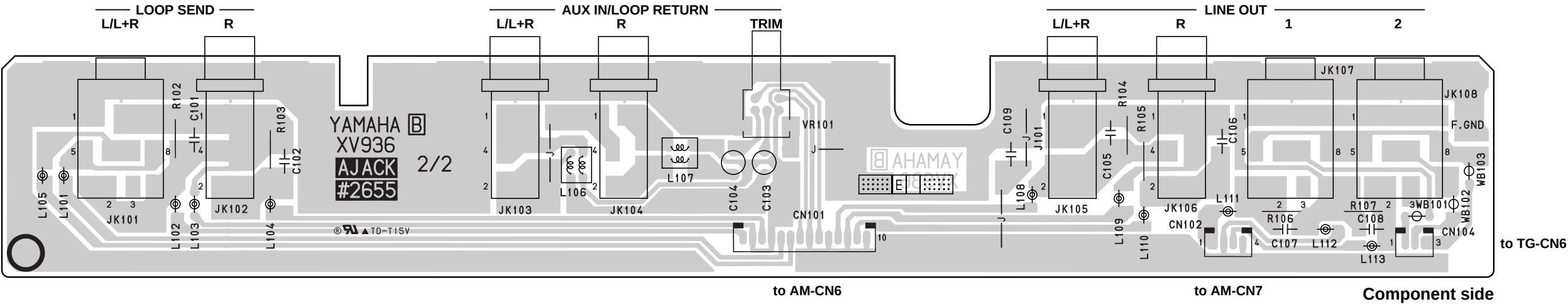
●MIC-VR Circuit Board



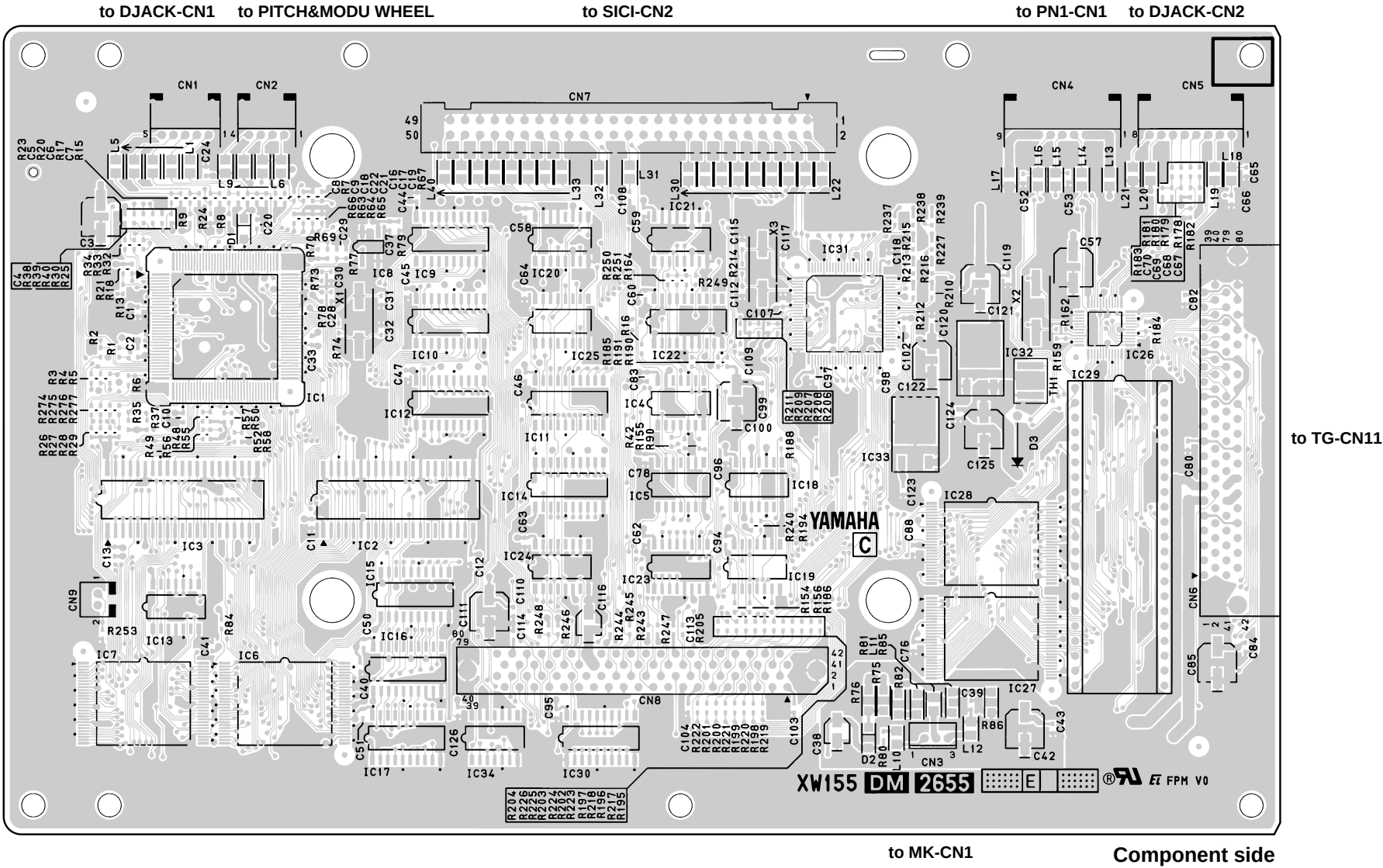
●MIC-HP Circuit Board



●AJACK Circuit Board

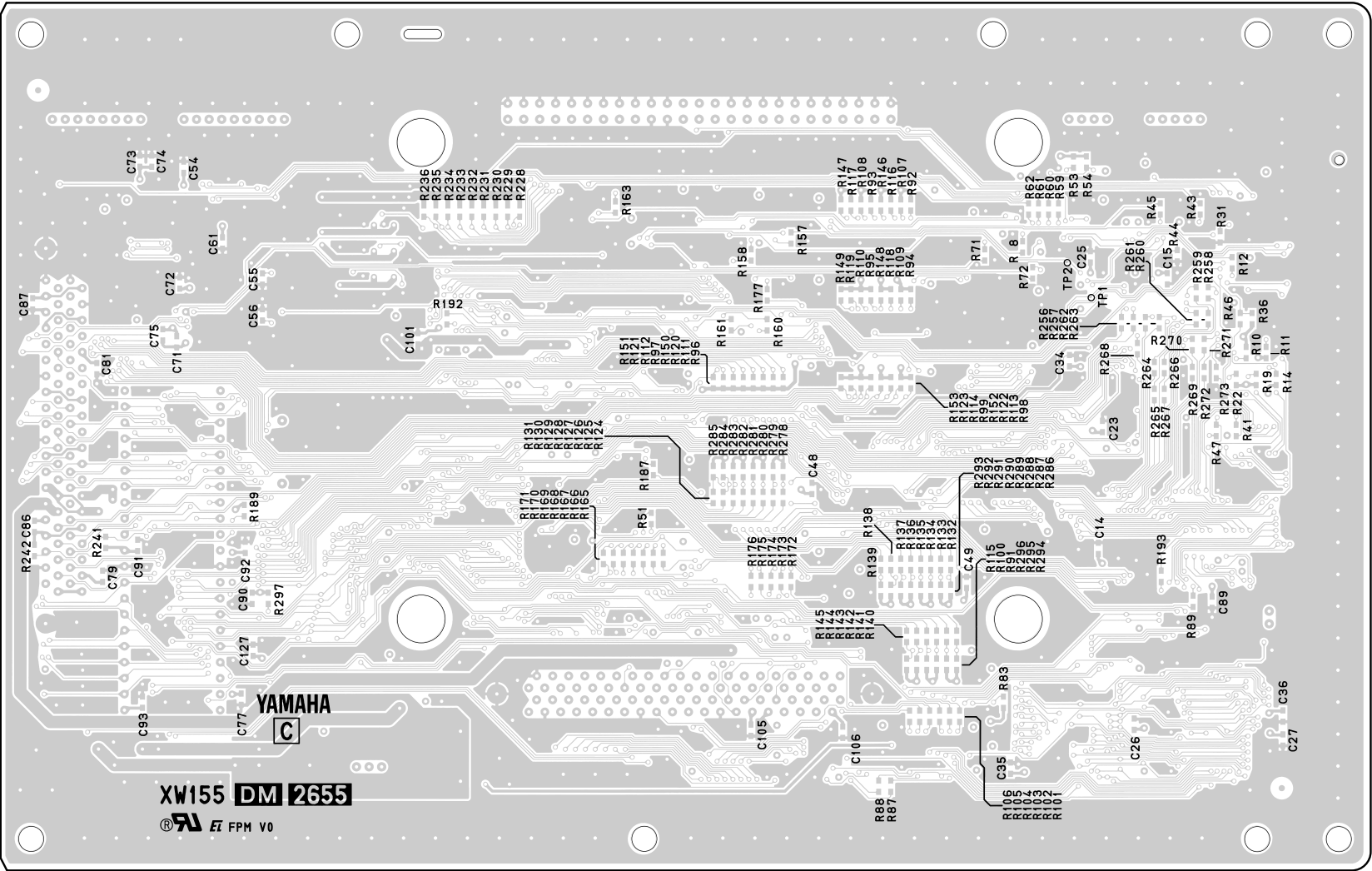


●DM Circuit Board



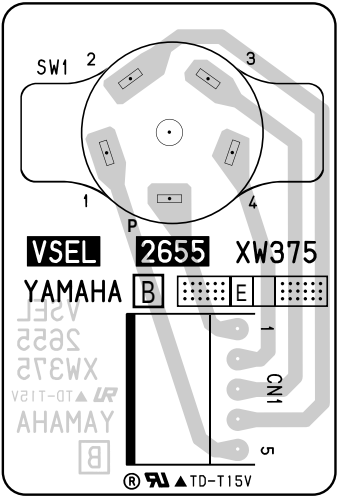
- MIC-VR: V419770
- MIC-HP: V419760
- DM: V410110
- AJACK: V458200

●DM Circuit Board



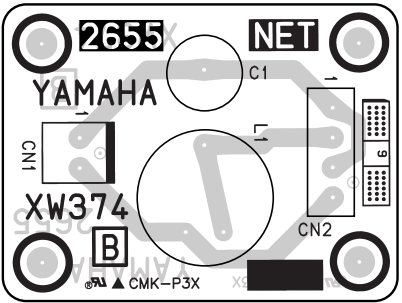
Pattern side

●VSEL Circuit Board



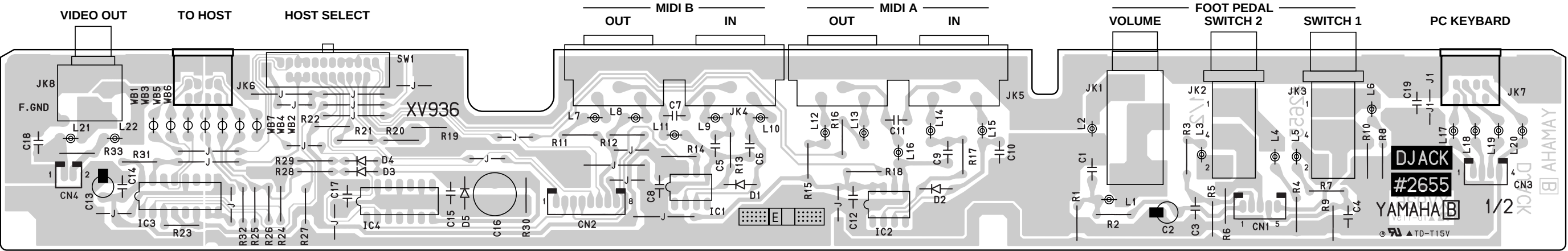
Component side

●NET Circuit Board



Component side

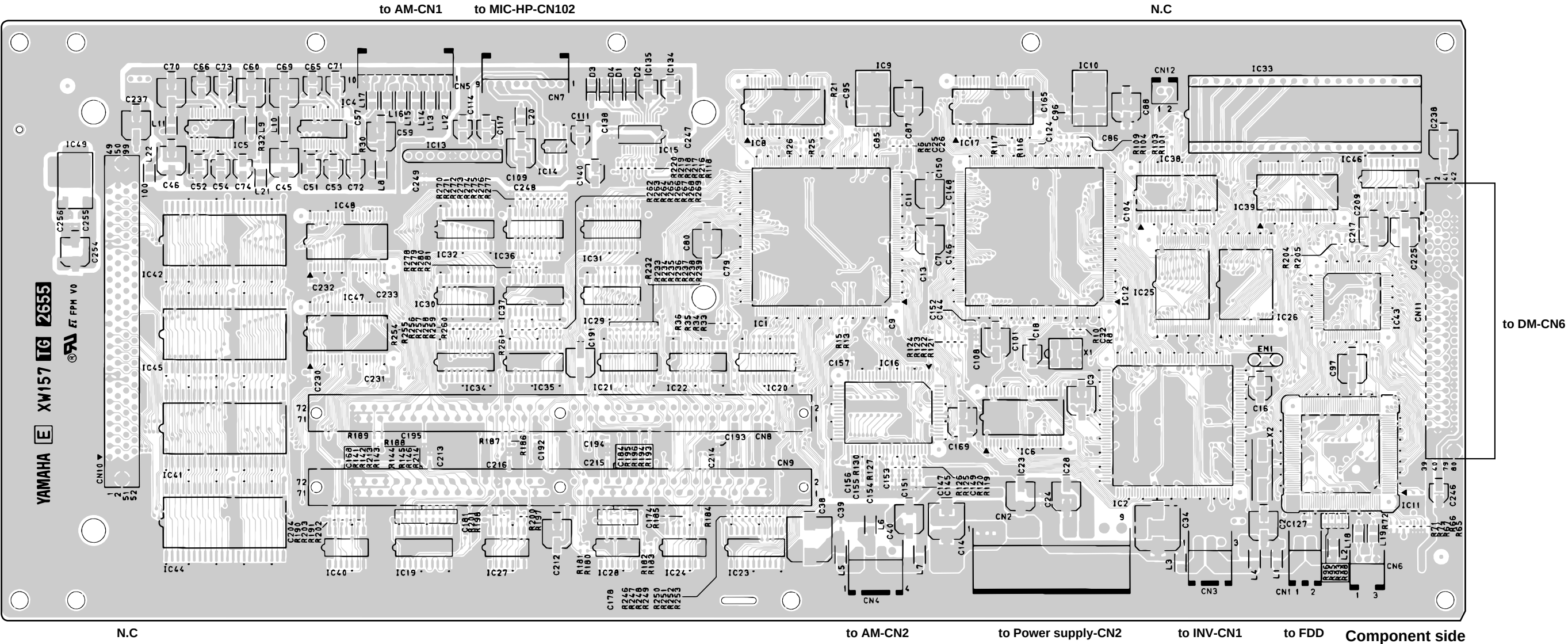
●DJACK Circuit Board



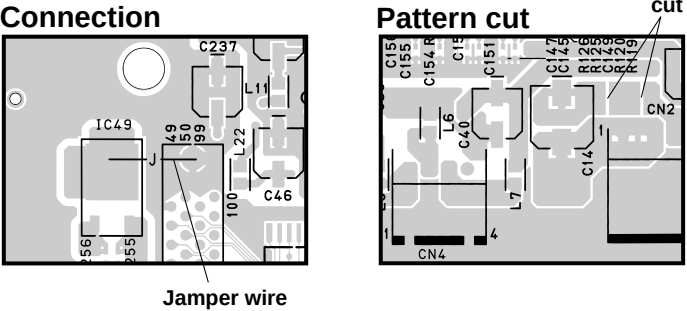
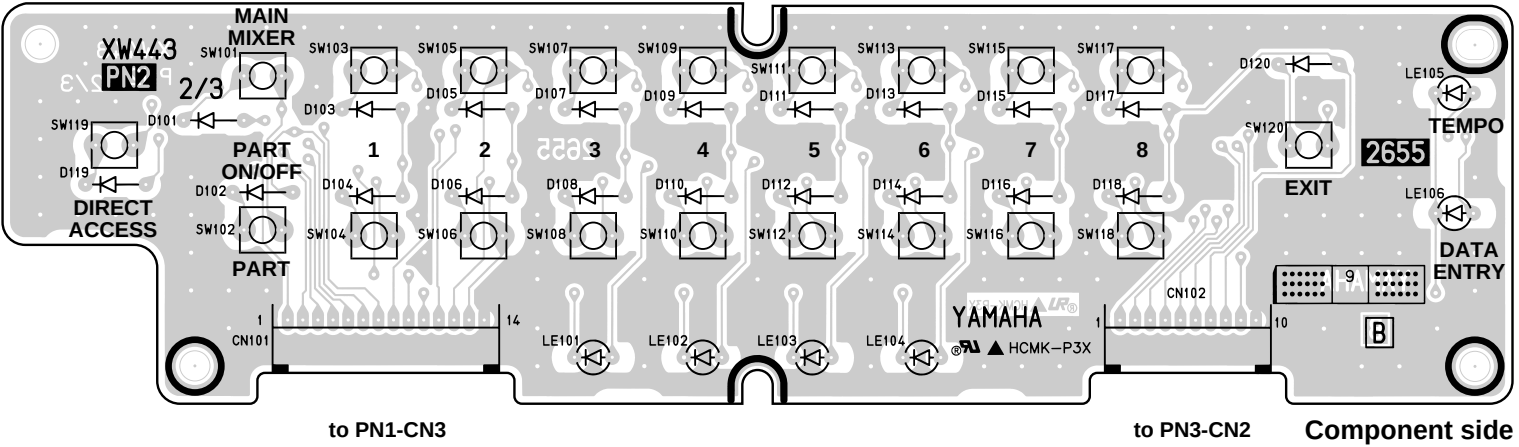
Component side

DM: V410110
VSEL: V427230
NET: V427210
DJACK: V427060

●TG Circuit Board

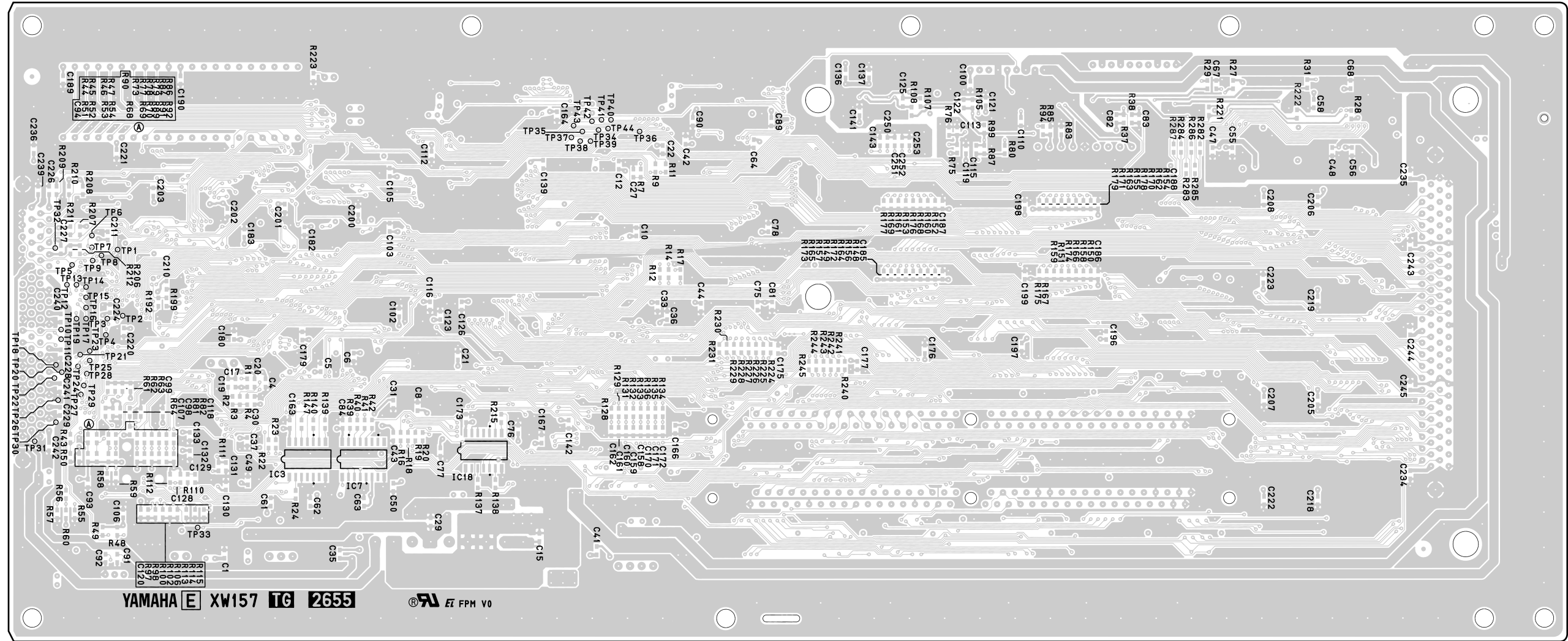


●PN2 Circuit Board



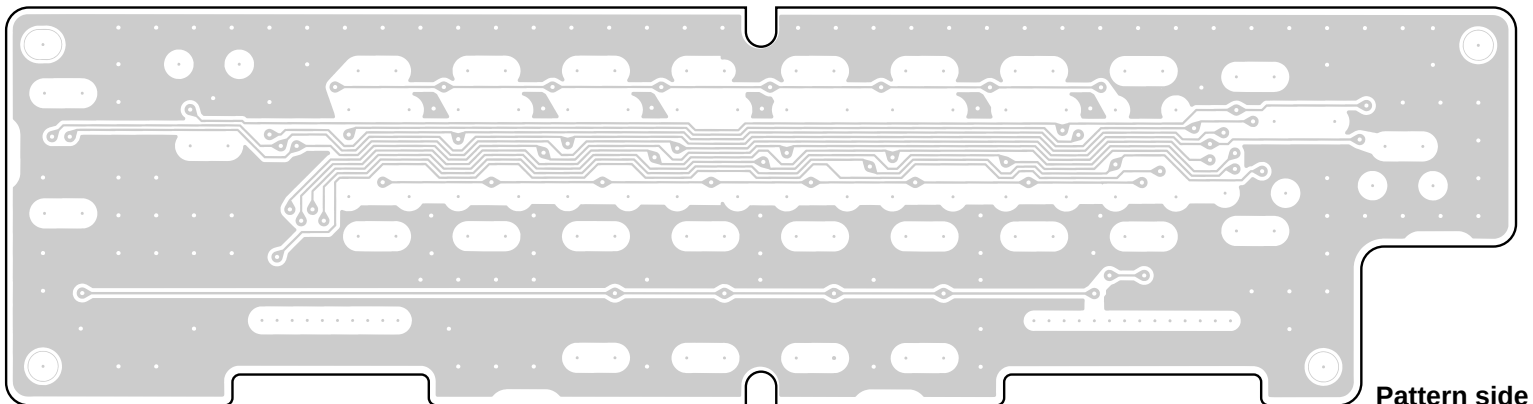
TG: V410130
PN2: V419720

●TG Circuit Board

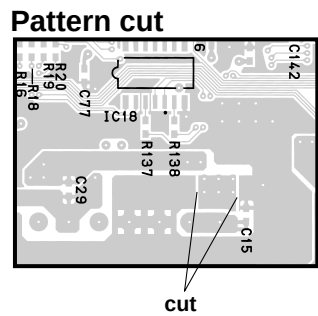


Pattern side

●PN2 Circuit Board

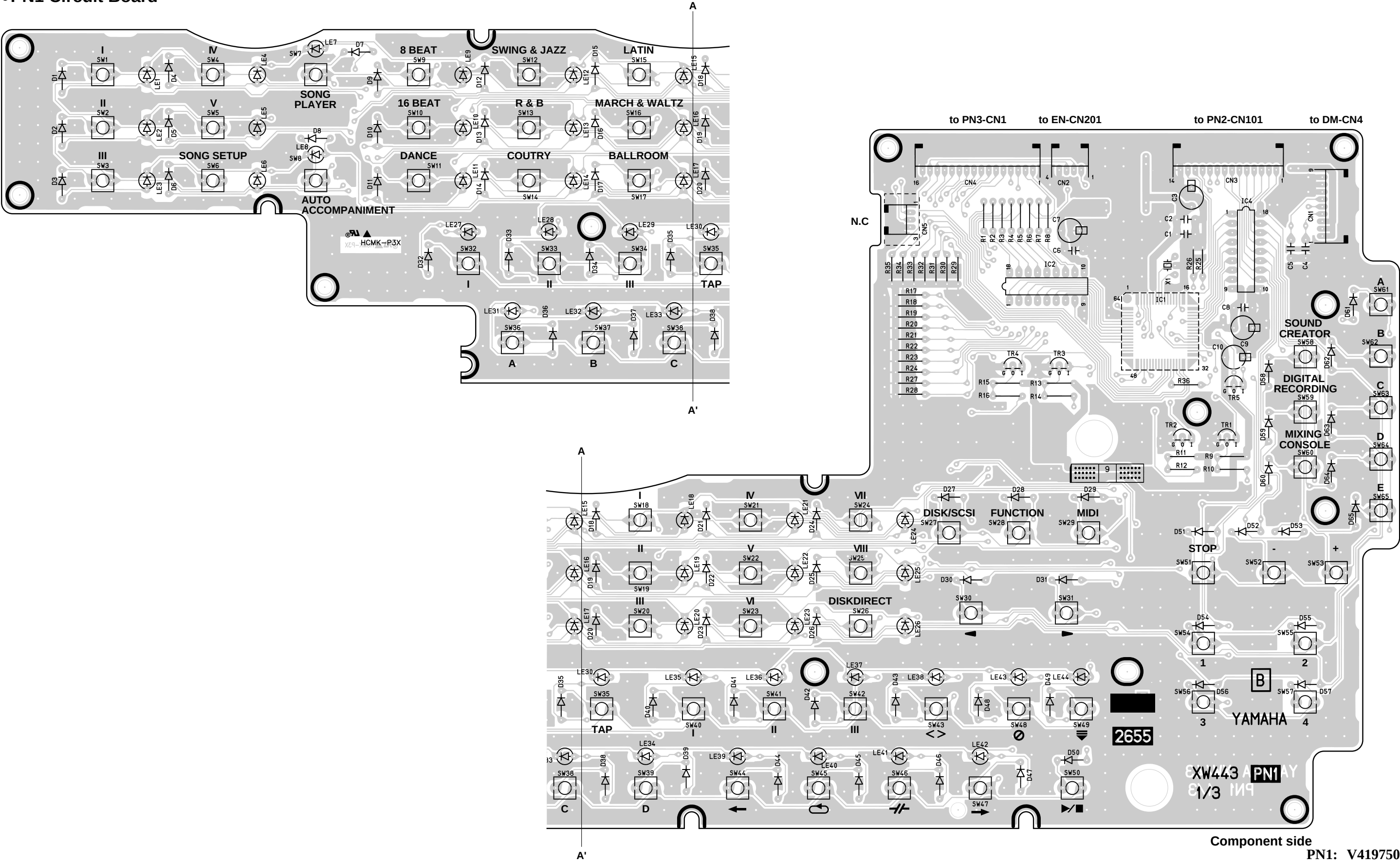


Pattern side

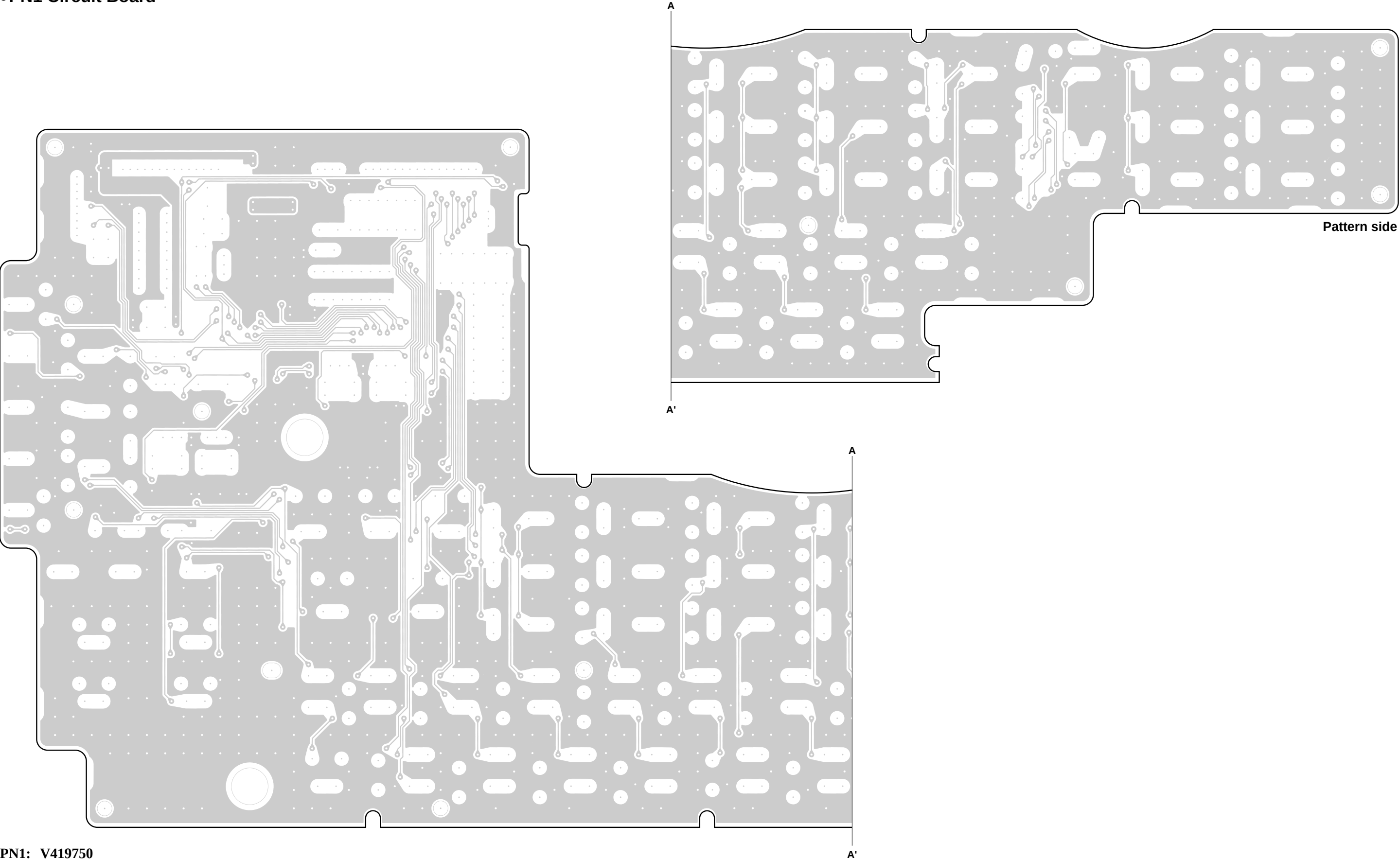


TG: V410130
PN2: V419720

●PN1 Circuit Board

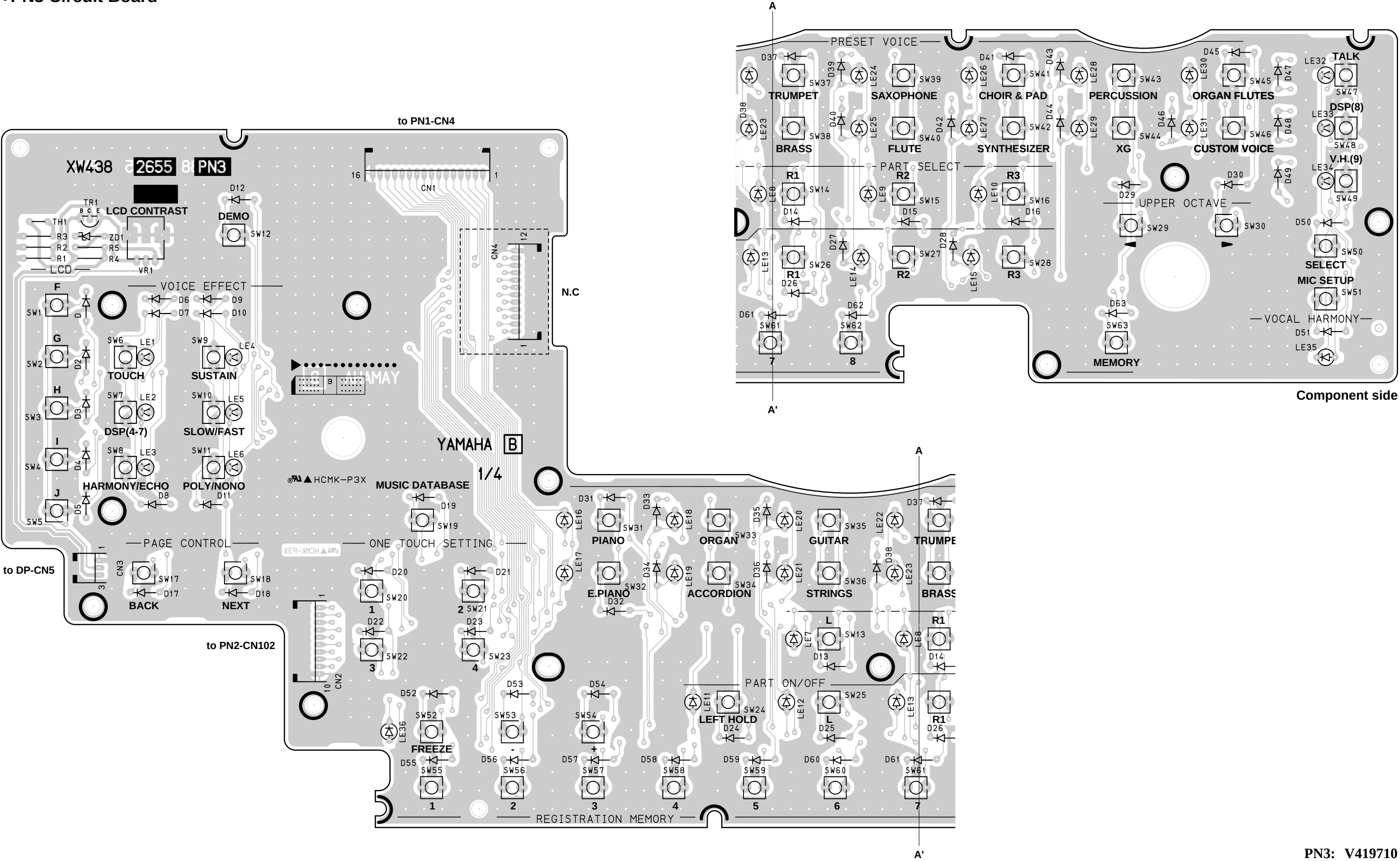


●PN1 Circuit Board

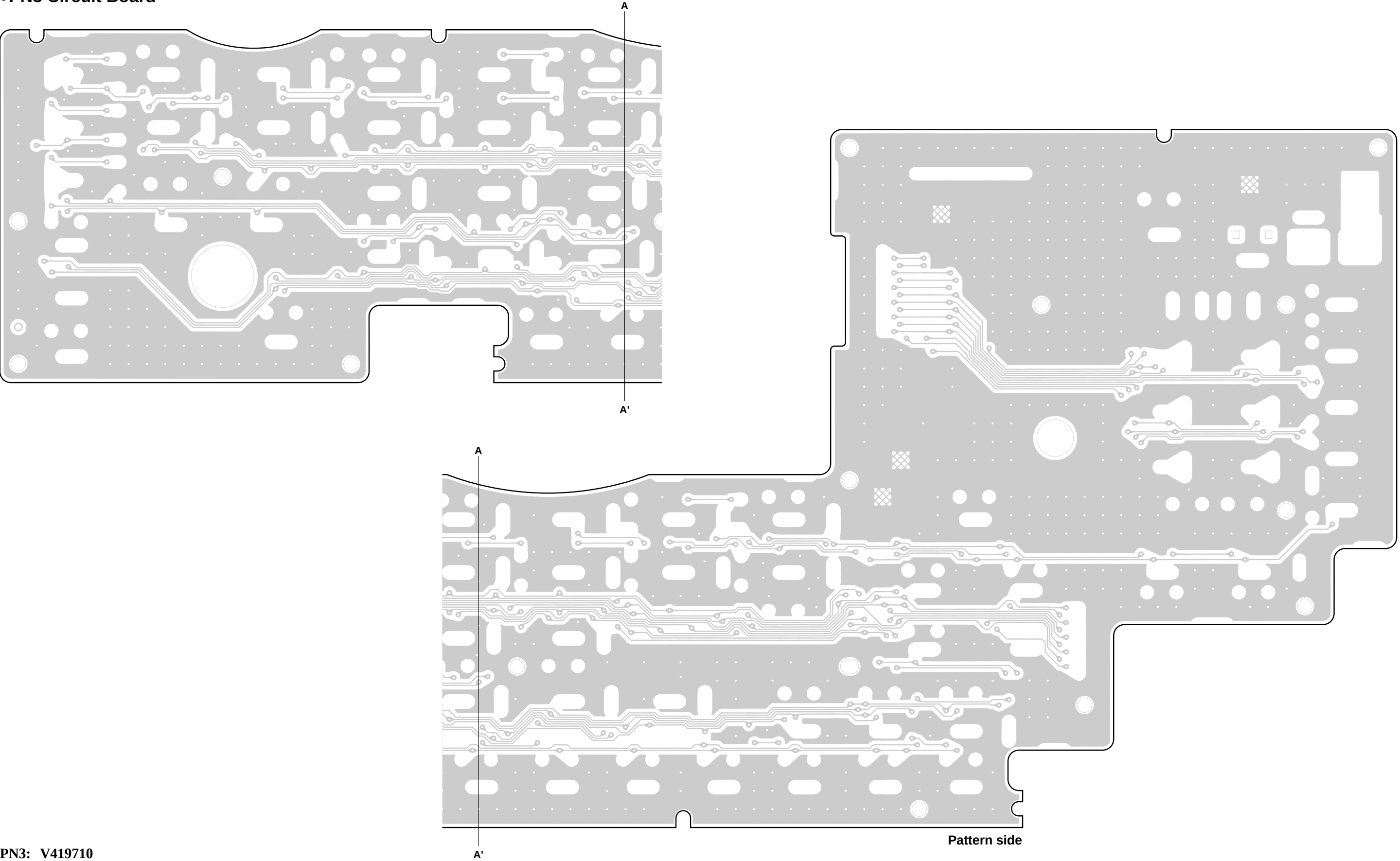


PN1: V419750

●PN3 Circuit Board

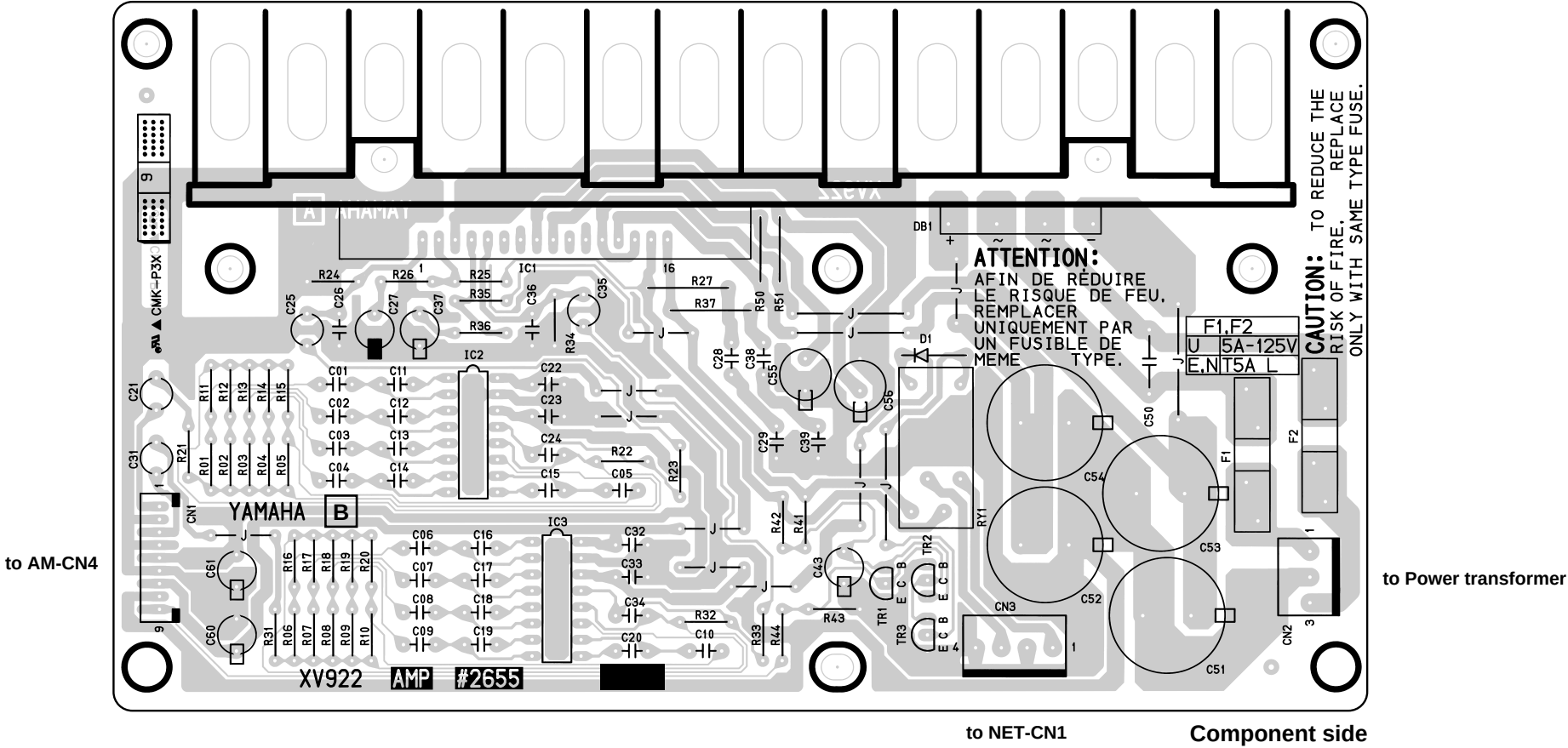


●PN3 Circuit Board



PN3: V419710

●AMP Circuit Board



■ TEST PROGRAM

1. Test Condition

To check the unit using the test program, the following measuring instruments and jig are required:

Measuring instrument: Level meter (JIS-C)

Frequency counter

* Input impedance of 1 M ohm or more

Use the stereo plugs and connect a 33 ohm load at the [PHONES] terminal.

Unit settings:

MASTER VOLUME: Maximum

TRIM VR: Maximum

MIC INPUT VOLUME: Maximum

*LOOP SEND, SUB1, and SUB2 should be disconnected.

2. How to enter the Test Program

[AUTO MODE]

While pressing the [DEMO], [EXIT], and [INTRO A] buttons, turn on the power switch.

[MANUAL MODE]

While pressing the [DEMO], [EXIT], and [INTRO B] buttons, turn on the power switch.

3. Proceeding through the Test Program

To select the program number, use the [NEXT] and [BACK] buttons.

To start the test, press the [START/STOP] button.

When the test result is OK, the LCD will display "*" before the test name.

When the test result is no good, press the [DEMO] button or [C1] key. The test program will then wait for the next selection.

4. Test Program List

No. LCD display Test Functions and Judgment Criteria		
1.	001: Version	Displays version for ROM (Main Program, Sub Program, Wave, Style, Parameter) Displays the flash memory protect state
2.	002:Rom Chk1	Checks ROMs (MAIN Program ROM, SUB Program ROM, Voice Parameter ROM, Style ROM) For NG, ROM name is displayed.
3.	003:Ram Chk1	Checks RAMs For NG, RAM name is displayed.
4.	004:Flash Chk1	Checks flash memorys For NG, flash memory name is displayed.
5.	005:WaveRomChk1	Checks wave ROM
6.	006:WaveRamChk1	Checks wave RAM
7.	007:SIMM Chk1	Checks SIMM
9.	009:FDD Chk	Insert the floppy disks one by one (2HD and 2DD) Checks the floppy disk drive unit
10.	010:HDD Chk(IDE)	Checks the hard disk If the hard disk is not inserted, the display will read "NO HDD".
11.	011:SCSI Chk	Connect the Zip drive at SCSI ID = 5. Checks SCSI drive
12.	012:Eff1Ram Chk	Checks the SWP30 #1 RAM Check the C3 note is produced and that there is no distortion.
13.	013:EFF2Ram Chk	Checks the VOP 3 RAM Check the C3 note is produced and that there is no distortion.
14.	014:Eff3Ram Chk	Checks the SWP 30 #2 RAM Check the C3 note is produced and that there is no distortion.

15.	015: TG1 Chk	Produces the sine wave sequence by changing the sound channels (1ch-64ch) in order from A0 to C6. Confirm that there is no noise. After autoscaling is finished, individual keys can be played. (If playing two or more keys simultaneously, the key pressed first has priority to make a sound.) When the voice switch is pressed, the tone of the voice will sound.
16.	016: TG2 Chk	Produces the sine wave sequence by changing the sound channels (1ch-64ch) in order from A0 to C6. Confirm that there is no noise. After autoscaling is finished, individual keys can be played. (If playing two or more keys simultaneously, the key pressed first has priority to make a sound.) When the voice switch is pressed, the tone of the voice will sound.
17.	017: TG3 Chk (Connection)	Produces the 1 kHz sine wave by changing the tone generators LSI. Confirm that sound is produce at every connection.
18.	018: Pitch Chk	Connect the frequency counter to the PHONES jacks. Check the frequency and output level. Frequency: 440 Hz +/- 0.2 Hz Output level: +5.4 dBm +/-3 dB
19.	019: Output R	Check the output level. (1 kHz) PHONES(L): less than -50 dBm PHONES(R): +7.8 dBm +/-3 dB AUX OUT(L/L+R): less than -40 dBm AUX OUT(R): +19.2 dBm +/-3 dB LOOP SEND(L/L+R): less than -70 dBm LOOP SENDER (R): +11.3 dBm +/-3 dB SUB1: less than -50 dBm SUB2: less than -50 dBm
20.	020: Output L	Check the output level. (1 kHz) PHONES(L): +7.8 dBm +/-3 dB PHONES(R): less than -50 dBm AUX OUT(L/L+R): +19.2 dBm +/-3 dB AUX OUT(R): less than -40 dBm LOOP SEND(L/L+R): +11.3 dBm +/-3 dB LOOP SENDER (R) : less than -70 dBm SUB1: less than -50 dBm SUB2: less than -50 dBm
21.	021: Oputput Sub1	Check the Sub1 output level. (1 kHz) PHONES(L): less than -65 dBm PHONES(R): less than -65 dBm AUX OUT(L/L+R): less than -70 dBm AUX OUT(R): less than -70 dBm LOOP SEND(L/L+R): less than -70 dBm LOOP SENDER (R) : less than -70 dBm SUB1: -11.3 dm +/-3 dB SUB2: less than -60 dBm
22.	022: Output Sub2	Check the Sub2 output level. (1 kHz) PHONES(L): less than -65 dBm PHONES(R): less than -65 dBm AUX OUT(L/L+R): less than -70 dBm AUX OUT(R): less than -70 dBm LOOP SEND(L/L+R): less than -70 dBm LOOP SENDER (R) : less than -70 dBm SUB1: less than -60dBm SUB2: -11.3 dm +/-3 dB
29.	029: EQ Low	Check the output level of EQ-low frequency. (65.4 Hz (C1)) PHONES(both L, R): +3.3 dBm +/-3 dB AUX OUT(both L/L+R, R): +15.8 dBm +/-3 dB LOOP SEND(both L/L+R, R): +7.1 dBm +/-3 dB SUB(both 1, 2): +13.8 dBm +/-3 dB
30.	030: EQ Mis	Check the output level of EQ/Mid frequency. (523 Hz (C4)) PHONES(both L, R): +4.6 dBm +/-3 dB AUX OUT(both L/L+R, R): +16.6 dBm +/-3 dB LOOP SEND(both L/L+R, R): +8.0 dBm +/-3 dB SUB(both 1, 2): +14.8 dBm +/-3 dB
31.	031: EQ High	Check the output level of EQ-High frequency. (4186 Hz (C7)) PHONES(both L, R): +3.7 dBm +/-3 dB AUX OUT(both L/L+R, R): +15.6 dBm +/-3 dB LOOP SEND(both L/L+R, R): +7.2 dBm +/-3 dB SUB(both 1, 2): +13.9 dBm +/-3 dB
32.	032: SP MUTE	When the [NEXT/BACK] button is pressed, check that the 1 kHz sine wave tone from the speaker stops. Press it again and the sound will come back on. During this test, the external output terminal signal will remain on the entire time.

33.	033:MUTE	When the [NEXT/BACK] button is pressed, check that the 1 kHz sine wave tone will stop from excluding the speaker and LOOP SEND(L/L+R), and repress it again, the sound will appear. If the plug is inserted into LOOP SEND(L/L+R), the tone from speaker will stop.
34.	034:D/A Noise	Check DAC noise. Press any key on the keyboard. The PIANO will sound at minimum volume. At this time, confirm that there is no distortion.
35.	035:SW.LED Chk	Check the switches and the LEDs Press the switch that is displayed on the LCD. When the switch is pressed, a pre-assigned note is output. (With some switches, the corresponding LED will light up.) Also check the dial by turning it; the LCD should display "OK". The LCD will display the numbers from 50 -100 when turning the dial clockwise from the center, and the LCD will display the numbers from 0 -50 when turning the dial counter-clockwise from the center.
36.	036:All LED On	Check that all panel LEDs are lit.
37.	037:RedLED On	Check that all red panel LEDs are lit.
38.	038:GreenLED On	Check that all green panel LEDs are lit.
43.	043:All LCD On	Check that all LCD dots are on.
44.	044:All LCD Off	Check that all LCD dots are off.
46.	046:Pedal1 Chk	Connect the foot switch into the SWITCH 1 terminal. Check that the C3 note sound is produced when the pedal is depressed, and that the C4 note sound is produced when the pedal is released. The test results will appear on the LCD.
47.	047:Pedal2 Chk	Connect the foot switch into the SWITCH 2 terminal. Check that the C3 note sound is produced when the pedal is depressed, and that the C4 note sound is produced when the pedal is released. The test results will appear on the LCD.
48.	048:Indv.Out Chk	Check that the LCD displays "OK" when the plugs are inserted into the SUB1 and SUB2 terminals, and then pull them out.
49.	049:PBWheel Chk	Check that the C3 note sound is produced when the PITCH BEND wheel is at minimum and the C4 note sound is produced when it is at maximum.
50.	050:ModWheelChk	Check that the C3 note sound is produced when the MODULATION wheel is at minimum and the C4 note sound is produced when it is at maximum.
51.	051:ExpPedal Chk	Connect the foot pedal into the VOLUME terminal. Check that the C3 note sound is produced when the foot pedal is at minimum and the C4 note sound is produced when it is at maximum.
52.	052:AfterTouch Chk	Check that the C3 note sound is produced when any key on the keyboard is pressed, and check that the C4 note sound is produced when the key is released. The test results will appear on the LCD.
53.	053:Midi Chk	After connecting the MIDI IN jack and MIDI OUT jack (both 1 and 2) with a MIDI cable, execute the test. Set the HOST SELECT switch to MIDI. Check that the C3 and C4 note sounds are produced and the LCD displays "OK". (MIDI-A: C3, MIDI-B: C4) If there is no output after one second, it is judged NG.
54.	05:To Host Chk	Connect pin 3 to pin 5 and pin 6 to pin 8 of the TO HOST terminal, and execute the test. Check that the following note sounds when changing the HOST SELECT switch position according to the LCD; the LCD will display "OK". PC1: note C3; PC2: note C4; MAC: note C5
55.	055:MIC Chk	Enter the sound into the MIC terminal. Check that there is no abnormal noise. Check that the output sound is one octave above the harmonizer when the [BACK]/[NEXT] button is pressed.
57.	057:Rom Chk2	Checks ROMs
58.	058:Ram Chk2	Checks RAMs
59.	059:Flash Chk2	Checks flash memorys
60.	060:WaveROM	Chk2 Checks Wave ROM
61.	061:WaveRam	Chk2 Checks Wave RAM
62.	062:SIMM Ch2	Checks SIMM
65.	065:VideoOut NTSC RED	Using the NTSC signal to check that the red characters are displayed on the video terminal.
67.	067:VideoOut NTSC BLUE	Using the NTSC signal to check that the blue characters are displayed on the video terminal.
68.	068:VideoOut PAL RED	Using the PAL signal to check that the red characters are displayed on the video terminal.
69.	069:ideoOut PAL GREEN	Using the PAL signal to check that the green characters are displayed on the video terminal.
70.	070:VideoOut PAL BLUE	Using the PAL signal to check that the blue characters are displayed on the video terminal.

71.	071:PC Keyboard Chk	Connect the PC keyboard. Check that the LCD will displays "OK".
72.	072:Data Ver. Chk	After reading in the system backup disk, check the version for each data in flash memory.
73.	073:Factory Set	All RAMs are initialized and reset to factory setting data when this test is executed.
74.	074:Test Exit	The test program is exited when this test is executed.

Note: 0 dBm = 0.775V

5. Other

5-1 LCD Contrast

When the LCD CONTRAST knob is turned clockwise and counter-clockwise, confirm that the contrast is changes.

5-2 AUX IN

Apply a 1 kHz, -15 dBm, sine wave to the AUX IN L/L+R. Confirm that the output meets the following specifications:

PHONES (L, R): +0.4 dBm +/-3 dB

When TRIM volume is at minimum, confirm that the output meets the following specifications:

PHONES (L, R): less than -65 dB

5-3 MIC/LINE Input Level & Level Indicate LED

When the following input level are used with test program number 055, confirm that output levels are as follows:

V 1.00

MIC/LINE	Input level	Output level	SIGNAL LED	OVER LED
LINE	-56.0 dBm	-10.0 dBm +/-3 dB	OFF	OFF
MIC 2	-56.0 dBm	-0.4 dBm +/-3 dB	ON	OFF
MIC 1	-50.0 dBm	+12.8 dBm +/-3 dB	ON	ON

V 1.10

MIC/LINE	Input level	Output level	SIGNAL LED	OVER LED
LINE	-56.0 dBm	-14.7 dBm +/-3 dB	OFF	OFF
MIC 2	-56.0 dBm	-4.8 dBm +/-3 dB	ON	OFF
MIC 1	-50.0 dBm	+10.7 dBm +/-3 dB	ON	ON

5-4 Noise Level

When no sound is produced, confirm that each residual output noise is as follows:

PHONES (L, R): less than -75 dBm

AUX OUT (L/L+R, R): less than -65 dBm

LOOP SEND (L, R): less than -65 dBm

INDIV. OUT (1, 2): less than -60 dBm

■ POWER ON RESET

While pressing the [Demo] button, all RAMs will be initialized and be returned to factory setting.

It is recommended that important data, etc. be stored on floppy disks.

■ TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE/SOLUTION
The speakers produce a “pop” sound whenever the power is turned ON or OFF.	This is normal and is no cause for alarm.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the PSR-9000 may produce interference. To prevent this, turn off the mobile phone or use it further away from the PSR-9000.
No sound results.	- The R1/R2/R3/L voice volume (Main Mixer) settings could be set too low. Make sure the voice volumes are set at appropriate levels. - The Local Control function could be turned off. Make sure Local Control is turned on. - The [MASTER VOLUME] controls or foot volume are turned all the way down. Set the [MASTER VOLUME] controls and foot volume to a reasonable listening level. - Are the desired parts turned on? - A pair of headphones is plugged into the PHONES jack. Unplug the headphones. - A plug is inserted in the LOOP SEND jacks. Unplug the LOOP SEND jacks. - Is the Footswitch connected to the FOOT VOLUME connector? - The [FADE IN/OUT] button is on and has reached the end of its duration, muting the sound. Press the [FADE IN/OUT] button so that its indicator goes out. - Check whether the Speaker is set to ON or OFF. When the Speaker is OFF, no sound results.
- Not all simultaneously-played notes sound. - Auto Accompaniment seems to “skip” when the keyboard is played.	You are probably exceeding the maximum polyphony of the PSR-9000. The PSR-9000 can play up to 126 notes at the same time — including voice R2, voice R3, voice L, auto accompaniment, song, and multi pad notes. When the maximum polyphony is exceeded, the earliest played notes will stop sounding, letting the latest played notes sound. This is referred to as “last-note priority.”
- The accompaniment or song does not play back even when pressing the [START/STOP] button. - The Multi Pads do not play back, even when one of the MULTI PAD buttons is pressed.	The MIDI Clock may be set to “EXTERNAL.” Make sure it is set to “INTERNAL”.
The auto accompaniment does not start, even when Synchro Start is in standby condition and a key is pressed.	You may be trying to start accompaniment by playing a key in the right-hand range of the keyboard. To start the accompaniment with Synchro Start, make sure to play a key in the left-hand (accompaniment) range of the keyboard.
Certain notes sound at the wrong pitch.	Make sure that the scale tuning value for those notes is set to “0”.
Auto accompaniment chords are recognized regardless of the split point or where chords are played on the keyboard.	Check whether the fingering mode is set to “Full Keyboard” or not. If the Full Keyboard fingering mode is selected, chords are recognized over the entire range of the keyboard, irrespective of the split point setting.
The Harmony function does not operate.	Harmony cannot be turned on when the Full Keyboard fingering mode is selected. Select an appropriate fingering mode.

PROBLEM	POSSIBLE CAUSE/SOLUTION
MIDI data is not transmitted or received via the MIDI A terminals, even when MIDI cables are connected properly.	The MIDI terminals can only be used when the HOST SELECT switch is set to "MIDI." All other settings ("Mac," "PC-1" and "PC-2") are for direct transmission/ reception with a computer.
If you experience distorted or out-of-tune sound from the Vocal Harmony feature, your vocal microphone may be picking up extraneous sounds (other than your voice) — the Auto Accompaniment sound from the PSR-9000, for example. In particular, bass sounds can cause mistracking of the Vocal Harmony feature.	The solution to this problem is to ensure that as little extraneous sound as possible is picked up by your vocal microphone: - Sing as closely to the microphone as possible. - Use a directional microphone. - Turn down the MASTER VOLUME, ACMP volume, or SONG volume control. - Separate the microphone from the instrument's speakers as much as possible. - Cut the Low band via the 3 Band EQ function in the MIC SETUP display.
When a voice is changed, the previously selected effect is changed.	This is normal, each voice has its own suitable preset values which are automatically recalled when the corresponding Voice Set parameters are turned on.
- There is a slight difference in sound quality between notes played on the keyboard. - Some voices have a looping sound. - Some noise or vibrato is noticeable at higher pitches, depending upon the voice.	This is normal and is a result of the PSR-9000's sampling system.
Some voices will jump an octave in pitch when played in the upper or lower registers.	Some voices have a pitch limit which, when reached, causes this type of pitch shift. This is normal.
The auto-accompaniment chord does not change even when a different chord is played or the chord is not recognized.	- Are you sure you're playing on the left-hand section of the keyboard? - You may be using single-finger type fingering in the fingered mode, or vice versa. Use the correct type of chord fingering for the selected auto-accompaniment fingering mode.
The displayed disk free area value does not coincide with the actual value.	The displayed value is an approximate value.
Disk save operations — particularly when saving wave data to floppy disk — take a long time.	This is normal. It takes approximately 8 minutes to save 1 megabyte of data to a floppy disk.
Appropriate harmony notes are not produced by the Vocal Harmony feature.	Make sure you are using the appropriate method to specify the harmony notes for the current Vocal Harmony mode.
The voice produces excessive noise.	Certain voices may produce noise, depending on the Harmonic Content and/or Brightness settings of the Mixing Console Filter. This is unavoidable due to the sound generation and processing system of the PSR-9000. To avoid noise, change the above mentioned settings.
The sound is distorted or noisy.	- The MASTER VOLUME control may be turned up too high. - This may be caused by the effects. Try cancelling all unnecessary effects, especially distortion-type effects. - Some filter resonance settings in the Custom Voice Creator display can result in distorted sound. - Is the gain of the Low band set too high in the Master Equalizer display? - If this applies to the "Sampled" voice, you may have recorded the sample(s) at too high a level.
- A strange "flanging" or "doubling" sound occurs. - The sound is slightly different each time the keys are played.	- Are the R1 and R2 parts set to "ON" and both parts set to play the same voice? - If you are routing the MIDI OUT on the PSR-9000 to a sequencer and back to the MIDI IN, you may want to set Local Control to "off" to avoid MIDI "feedback."

YAMAHA [Portable Keyboard]
Model PSR-9000 MIDI Implementation Chart

Date:9-SEP-1999
Version : 1.0

Function...		Transmitted		Recognized		Remarks
Basic Channe	Default	1 - 16	*1	1 - 16	*2	
	Changed	1 - 16	*1	1 - 16	*2	
Mode	Default	3		3		
	Message	x		x		
	Altered	*****		x		
Not Number:	True voice	0 - 12		0 - 127		
		*****		0 - 127		
Velocity	Note ON	o 9nH,v=1-127		o 9nH,v=1-127		
Note OFF	x 9nH,v=0	x				
After Touch	Key's	x		x		
	Ch's	o		o		
Pitch Bend		o		o 0-24 semi		
Control Change	0,32	o		o	*1	Bank Select
	1,5,7,10,11	o		o	*1	
	6,38	o		o	*1	Data Entry
	64-67	o		o	*1	
	71,74	o		o	*1	Sound Controller
	72,73	x	*3	o	*1	Sound Controller
	84	x	*3	o	*1	Portamento Cntrl
	91,93,94	o		o	*1	Effect Depth
	96,97	x		o	*1	Data Inc,Dec
	98,99	o		o	*1	NRPN LSB,MSB
	100,101	o		o	*1	RPN LSB,MSB
Prog Change:	True #	o 0 - 127 *****		o 0 - 127		
System Exclusive		o		o		
Common:	: Song Pos.	x		x		
	: Song Sel.	x		x		
	: Tune	x		x		
System:	Clock	o		o		
Real Time:	Commands	o		o		
Aux:	All Sound OFF	x		o(120,126,127)		
:	Reset All Cntrls	x		o(121)		
:	Reset All Cntrls	x		o(121)		
:	Local ON/OFFx		x			
:	All Notes OFFx		o(123-125)			
Mes-:	Active Sense	o		o		
sages:	Reset	x		x		
Notes: *1,*2,*3 see next page.						

Mode 1: OMNI ON , POLY
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON ,MONO
Mode 4: OMNI OFF,MONO

o: Yes
x: No

*1 The tracks for each channel can be selected on the panel.
See page 43 for more information.

*2 The tone generator normally functions as a 16-channel multi-timbre tone generator in response to MIDI input. MIDI messages therefore do not normally affect the panel voices or other panel settings.

The MIDI messages listed below, however, do affect the panel voice, style, Multi Pad, and song settings.

- MIDI MASTER TUNE, XG System parameter MASTER TUNE
- XG System parameter TRANSPOSE
- System exclusive messages which change the REVERB, CHORUS or DSP EFFECT settings.
- XG MULTI EQ parameters

Also, the MIDI messages affect the panel settings when one of the following MIDI reception modes is selected.

These modes can be selected on the panel.

- RIGHT1, RIGHT2, RIGHT3, LEFT, KEYBOARD, ACMP RHYTHM1, ACMP RHYTHM2, ACMP BASS, ACMP CHORD1, ACMP CHORD2, ACMP PAD, ACMP PHRASE1, ACMP PHRASE2
- CHORD
- ROOT
- OFF

*3 These Control Change Messages are not transmitted by PSR-9000 panel operation, but may be transmitted by the ACCOMPANIMENT or SONG playing.

PORTATONE

PSR-9000

PARTS LIST

■ CONTENTS

OVERALL ASSEMBLY.....	2
SPEAKER BOX UNIT(Left and right)	5
UPPER CASE ASSEMBLY	6
KEYBOARD ASSEMBLY	8
LCD ASSEMBLY	8
FDD ASSEMBLY	9
POWER SUPPLY UNIT	10
WHEEL ASSEMBLY	12
ELECTRICAL PARTS	13

Notes: DESTINATION ABBREVIATIONS

A: Australian model	J: Japanese model
B: British model	U: U.S. model
C: Canadian model	V: General export model (110V)
E: European model	W: General export model (220V)
H: North European model	X: General export model
I: Indonesian model	Y: Export model

- The numbers in "QTY" shows quantities for each unit.
- The parts with "--" in "Parts No." are not available as spare parts.
- The mark "}" in the remarks column indicates that these parts are interchangeable.
- The second letter of the shaded () part number is I, not one.

■ WARNING

Components having special characteristics are marked  and must be replaced with parts having specification equal to those originally installed.

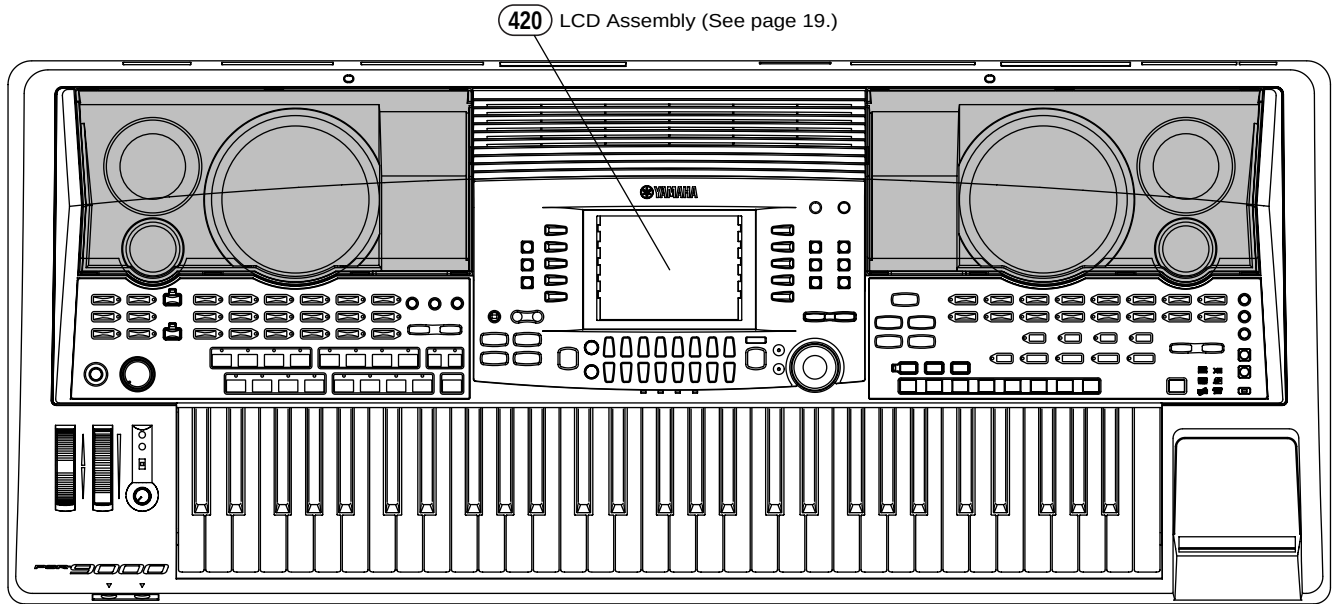
OVERALL ASSEMBLY

REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
		OVERALL ASSEMBLY	総 組 立	PSR-9000		
	--	Overall Assembly	総 組 立	E,B (V363660)		
	--	Overall Assembly	総 組 立	U (V363670)		
	--	Overall Assembly	総 組 立	N (V363680)		
10	--	Upper Case Assembly	上 ケ ー ス A s s ' y	E,B (V364810)		
10	--	Upper Case Assembly	上 ケ ー ス A s s ' y	N (V364820)		
10	--	Upper Case Assembly	上 ケ ー ス A s s ' y	U (V364830)		
20	VN399200	Keyboard Assembly	L C 鍵 盤 A s s ' y			29
30	CB040540	Cord Binder	束 線 止 め		7	01
40	EP600250	Bind Head Tapping Screw-B	+ バ イ ン ド B タ イ ト		55	01
50	EP640130	Bind Head Tapping Screw-B	+ バ イ ン ド B タ イ ト		3	01
60	--	Connector Assembly	M K L C 束 線 1	(V414830)		
70	--	Connector Assembly	M K L C 束 線 2	(V414840)		
80	--	Connector Assembly	M K L C 束 線 3	(V414850)		
90	--	LCD Assembly	L C D A s s ' y	(V387800)		
100	--	Floppy Disk Drive Assembly	F D D A s s ' y	(V364880)		
120	VS730200	Plain Washer	特 殊 平 座 金		8	
130	--	Holder, Speaker C	スピーカ固定金具 C	(V387400)	2	
140	--	Holder, AM P.C.B.	A M シ ー ト 固 定 金 具	(V387580)		
150	--	Shield Cover	シールドカバー AM	(V389130)		
*	V3558900	Circuit Board	A M シ ー ト			
170	--	Connector Assembly	M D A C 束 線	(V414570)		
180	--	Connector Assembly	電 源 束 線 2	(V414500)		
190	--	Holder, DM P.C.B.	D M シ ー ト 固 定 金 具	(V387540)		
200	--	Shield Box	シールドボックス 上	(V387750)		
*	V4101100	Circuit Board	D M シ ー ト			
*	V4101200	Circuit Board	D P シ ー ト			
*	V4101300	Circuit Board	T G シ ー ト			
260	--	Shield Box	シールドボックス下加工品	(V484310)		
270	--	Speaker Unit	スピーカユニット L	(V393870)		
280	--	Speaker Unit	スピーカユニット R	(V427120)		
290	VA121600	Bushing	ゴ ム ブ ッ シ ュ		6	01
300	VA121400	Spacer	ス ペ ー サ ー		2	02
310	EP600750	Bind Head Tapping Screw-B	+ バ イ ン ド B タ イ ト		30	01
320	--	Power Supply Unit	電 源 ユ ニ ッ ト	E,B (V393840)		
320	--	Power Supply Unit	電 源 ユ ニ ッ ト	U (V393850)		
320	--	Power Supply Unit	電 源 ユ ニ ッ ト	N (V393860)		
330	EG340030	Bind Head Screw-1	+ バ イ ン ド 小 ネ ジ		8	01
340	V3648700	Lower Case Assembly	下 ケ ー ス A s s ' y			
340a	CB043750	Foot	ゴ ム 足		6	01
350	--	Holder, HDD	H D D 固 定 金 具	(V387740)		
360	VG048000	Bind Head Screw	+ バ イ ン ド 小 ネ ジ		4	01
*	V3877300	Bottom Cover	底 面 蓋			07
380	VP157800	Bonding Head Screw	+ ボ ン デ ィ ン グ 小 ネ ジ		10	01
390	CB069250	Cord Holder	インシュロックタイ			01
*	V4271900	LCD Protector	L C D 保 護 板			10
430	--	Adhesive Tape	フィラメントテープ	(2154500)		
440	VB748400	Bind Head Screw	+ バ イ ン ド 小 ネ ジ		4	01
450	EP030260	Bind Head Tapping Screw-1	+ バ イ ン ド T P 1 種		3	01
		ACCESSORIES	付 属 品			
*	V4272400	Music Rest Assembly	譜 面 板 A s s ' y			
	VT015900	AC Cord Set	電 源 コ ー ド セ ッ ト	E,N		05
	VT015800	AC Cord Set	電 源 コ ー ド セ ッ ト	U		06
	VT016000	AC Cord Set	電 源 コ ー ド セ ッ ト	B		08
	VK726100	Connector	電 源 コ ネ ク タ	N		03
*	V3873000	Floppy Disk	フロッピーディスク			04

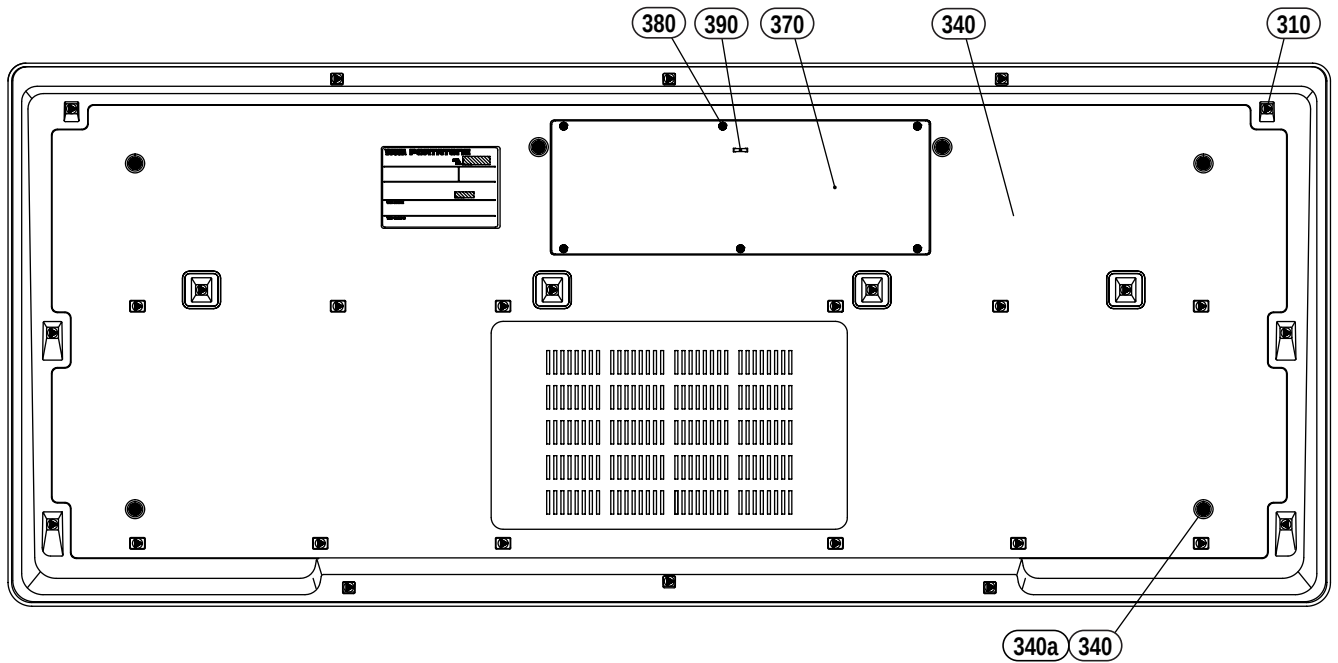
*: New parts

RANK: Japan only

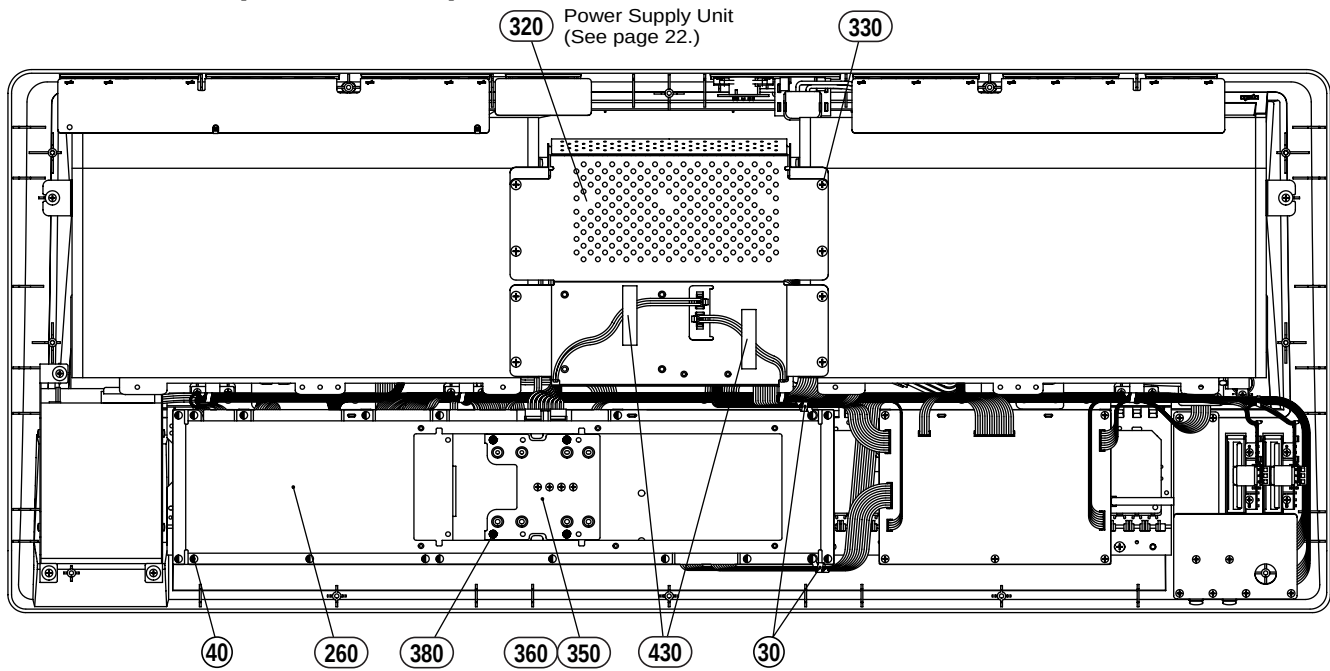
●Upper Case (Top View)



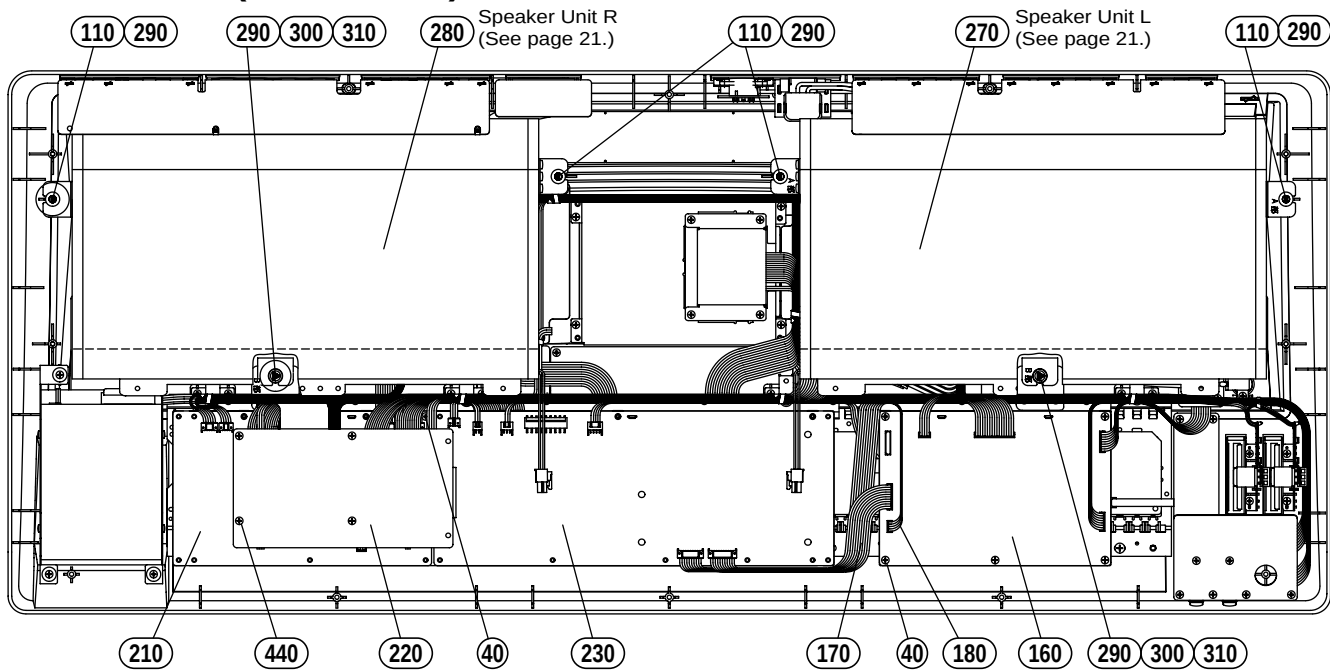
●Lower Case (Bottom View)



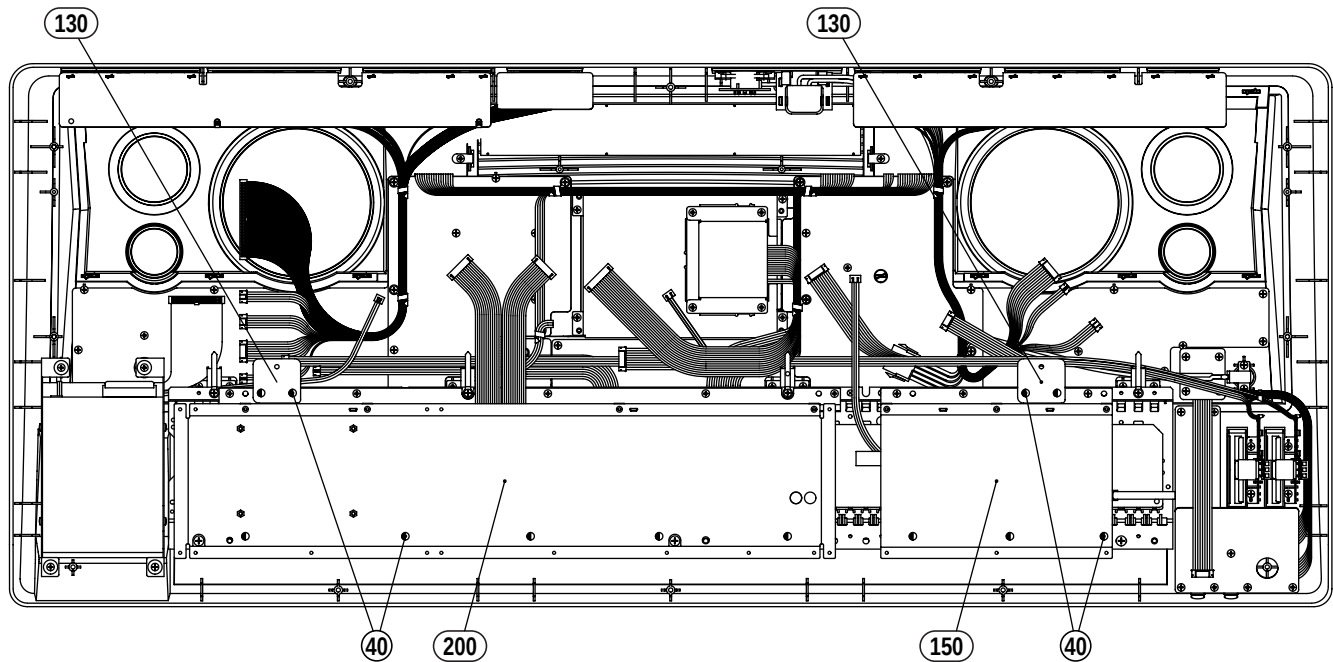
●Lower Case (Insid View 1)



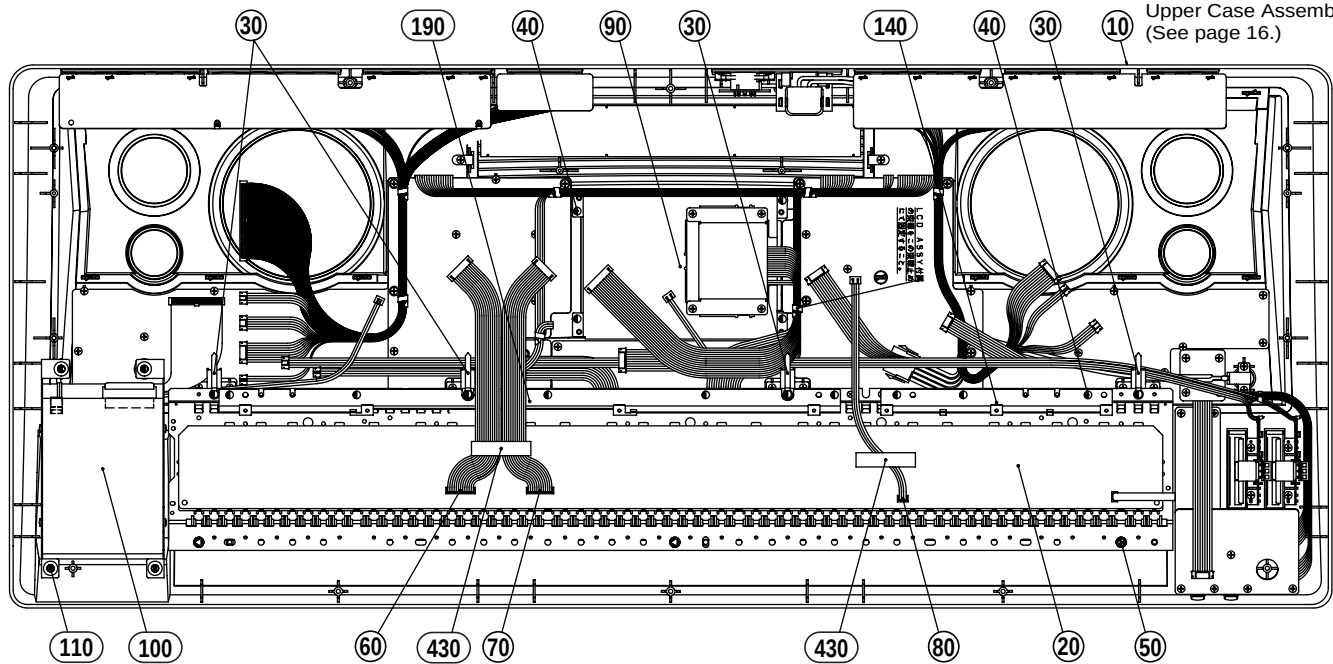
●Lower Case (Insid View 2)



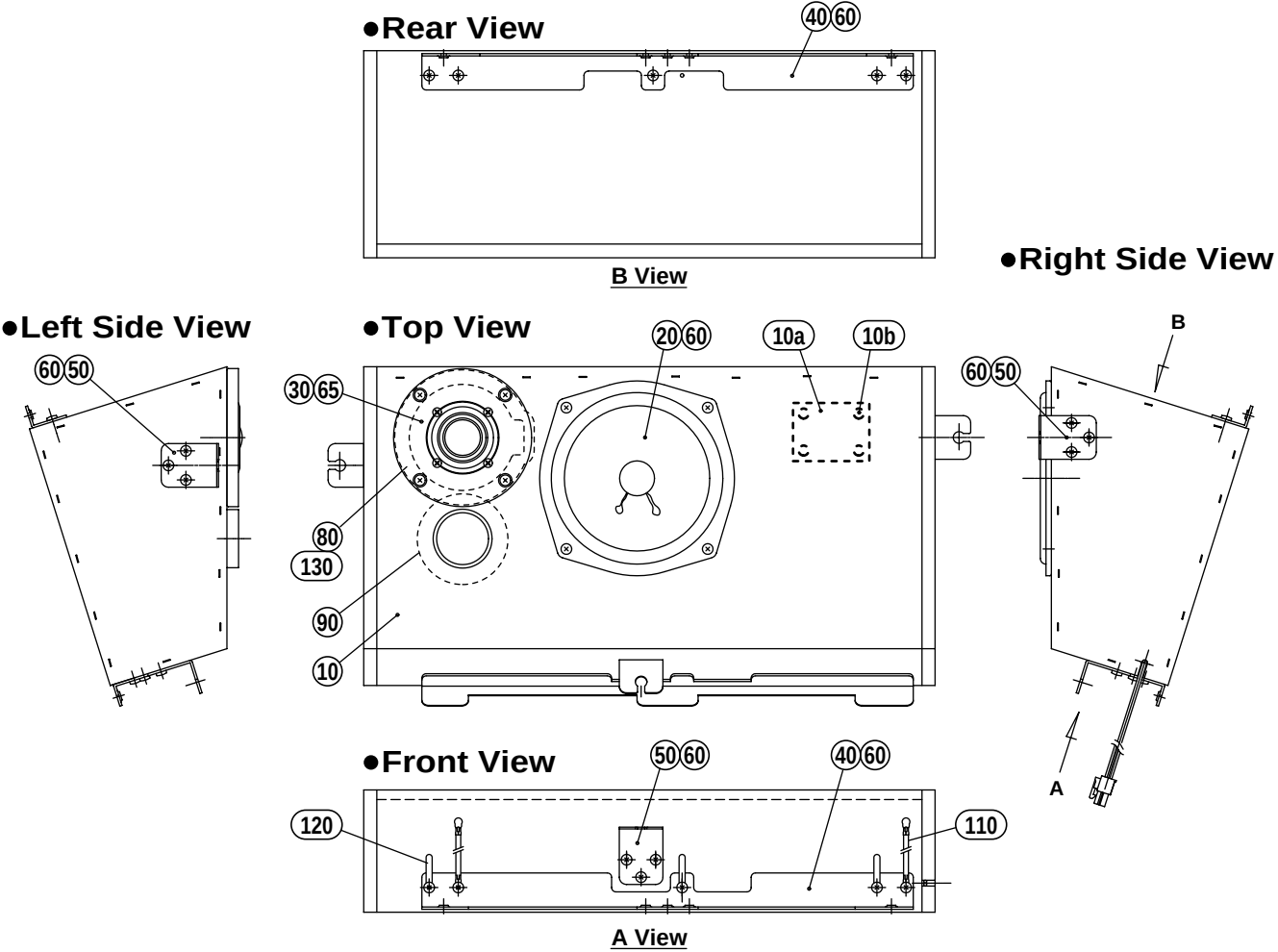
●Lower Case (Insid View 3)



●Lower Case (Insid View 4)



■SPEAKER BOX UNIT (Left and Right)



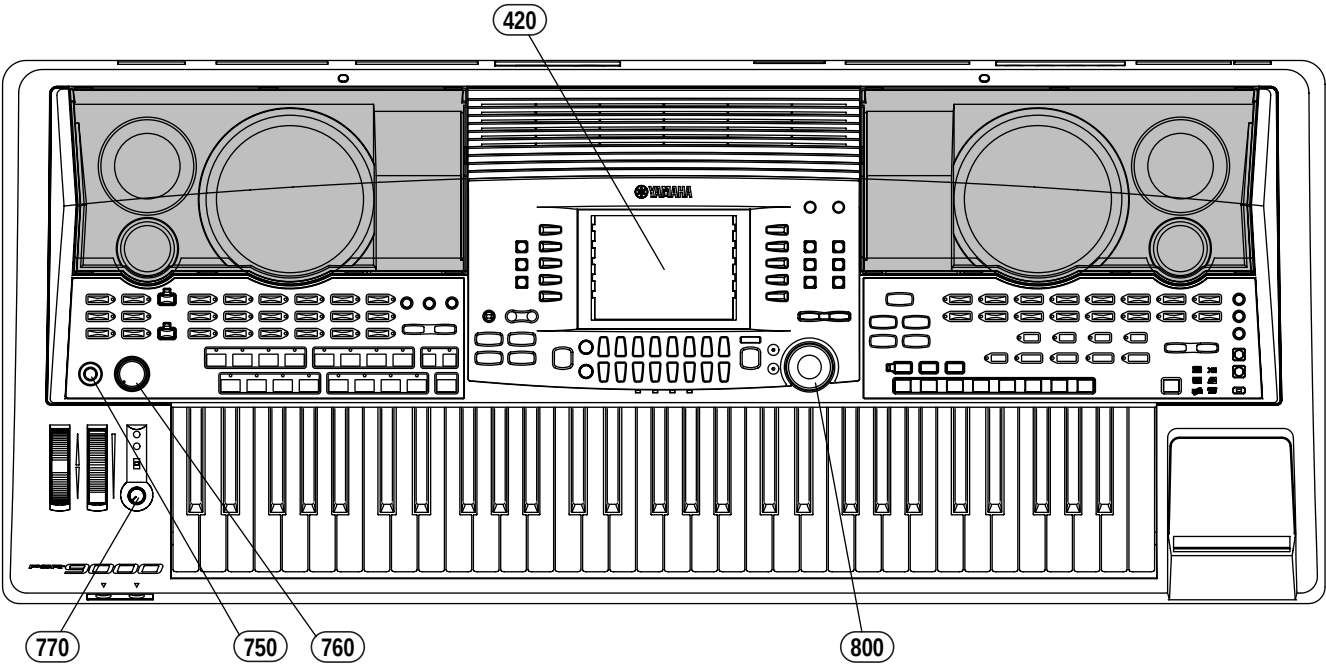
REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
		SPEAKER BOX UNIT	スピーカユニット	PSR-9000		
	--	Speaker Box Unit	スピーカユニット L	(V393870)		
	--	Speaker Box Unit	スピーカユニット R	(V427120)		
* 10	V4370300	Speaker Box	ボックス L 木部集成			
* 10	V4370400	Speaker Box	ボックス R 木部集成			
10a	CB046030	Support, PCB	基板サポート		4	01
10b	V4272100	Circuit Board	NET シート			
* 20	XV992A00	Speaker	スピーカ			09
* 30	XV993A00	Speaker	スピーカ			08
40	--	Holder, Speaker B	スピーカ固定金具 B	(V437450)	2	
50	--	Holder, Speaker A	スピーカ固定金具 A	(V387380)	3	
60	EP030260	Bind Head Tapping Screw-1	+ バインド T P 1 種		22	01
65	EP030470	Bind Head Tapping Screw-1	+ バインド T P 1 種		4	01
80	--	Vibration-proof Form	防振フォーム	(V510380)		
90	--	Blind Form	目隠しフォーム	(V510390)		
110	--	GND Wire 12	アース線 12	(V523030)	2	
120	CB040540	Cord Binder	束線止め		3	01
130	--	Vibration-proof Form	防振フォーム	(V528890)		

*: New parts

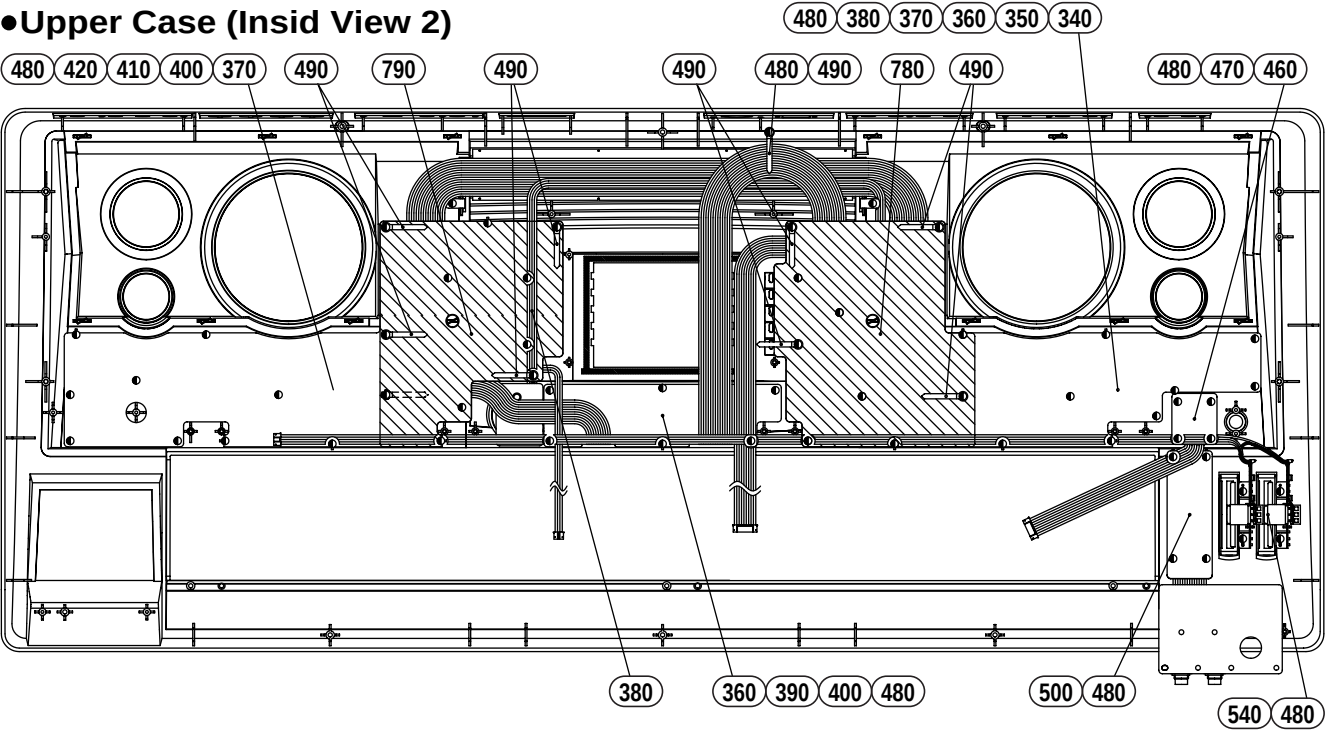
RANK: Japan only

■ UPPER CASE ASSEMBLY

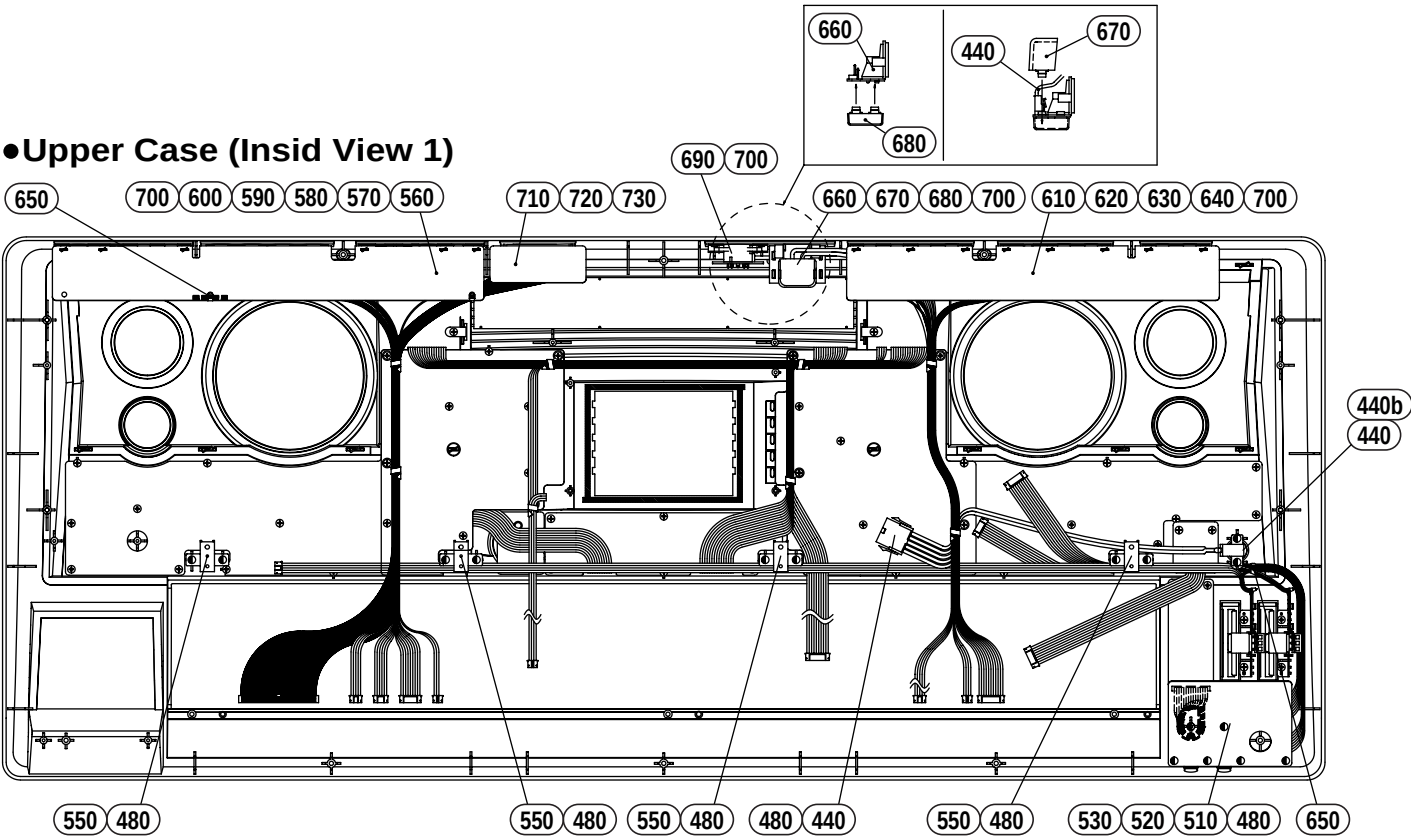
●Upper Case (Top View)



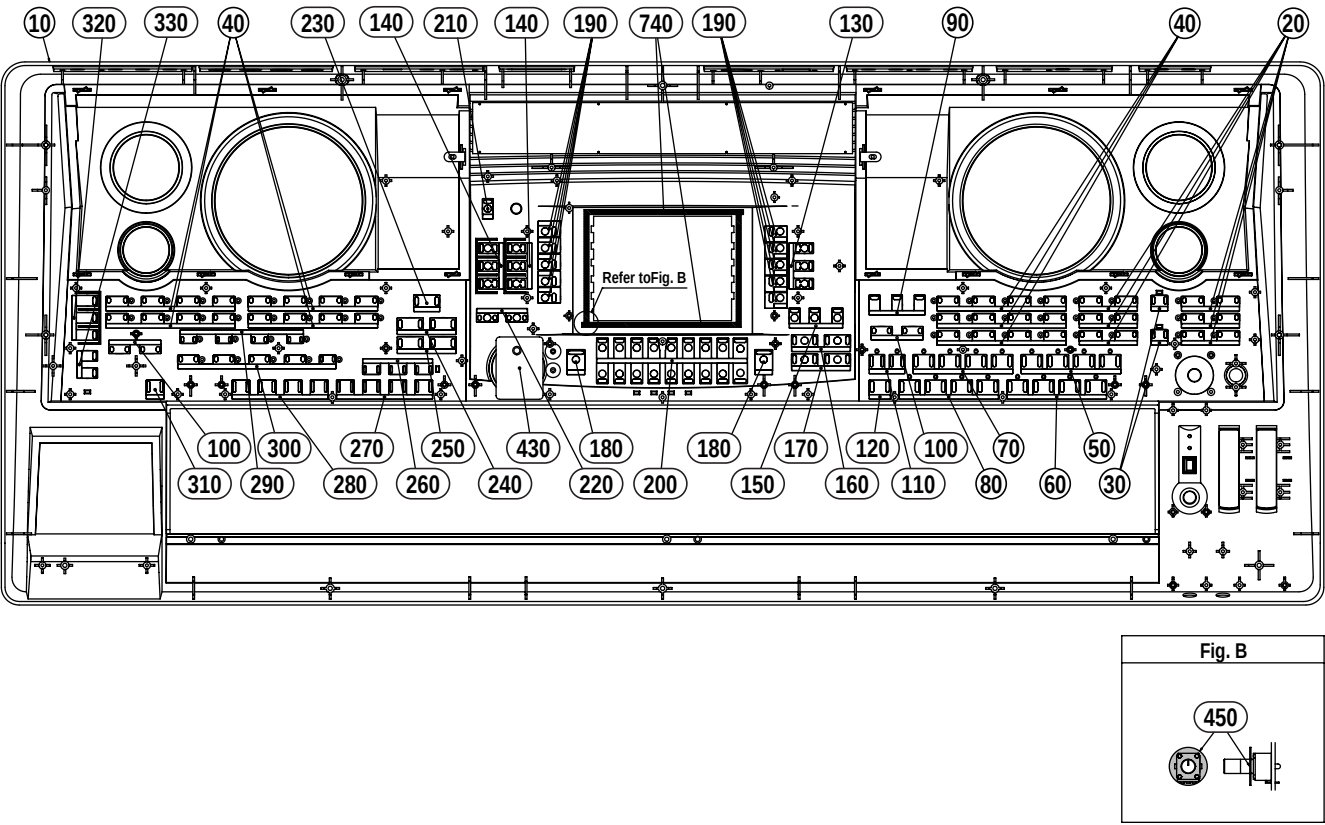
●Upper Case (Insid View 2)



●Upper Case (Insid View 1)



●Upper Case (Insid View 3)



REF NO.	PART NO.	DESCRIPTION		部 品 名	REMARKS	QTY	RANK
* 10	--	UPPER CASE ASSEMBLY	E U N	上 ケース A S S ' Y	PSR-9000		
	--	Upper Case Assembly		上 ケース A s s ' y	E,B (V364810)		
	--	Upper Case Assembly		上 ケース A s s ' y	U (V364830)		
	--	Upper Case Assembly		上 ケース A s s ' y	N (V364820)		
* 10	V3871700	Upper Case Sub-assembly		上ケースサブ A s s ' y			
* 10a	V3957900	Speaker Grille	LEFT	S P グリル L 塗 装 品	SONG(I-V,SONG SETUP), STYLE(8BEAT,...,COUNTRY) SONG PLAYER,AUTO ACCOMP. STYLE(LATIN,...DISKDIRECT) VOICE(PIANO,...CUSTOM V.) ACCOMP. CONTROL (INTRO,TAP TEMPO) ACCOMP. CONTROL (MAIN VARIATION) ACCOMP. CONTROL (ENDING,FADE IN/OUT) ACCOMP. CONTROL (FILL IN & BREAK) MENU(DISK/SCSI,...,MIDI) KEYBOARD,TRANPOSE ACCOMP. CONTROL (SYNC STOP,SYNC START) ACCOMP. CONTROL (START/STOP) DIGITAL STUDIO VOICE EFFECT MULTIPAD MULTIPAD(1,2) MULTIPAD(3,4) DIRECT ACCESS,EXIT LCD Selects(L/R) LCD Selects(1-8) DEMO PAGE CONTROL(BACK,NEXT) MUSIC DATABASE ONE TOUCH SETTING(1,2) ONE TOUCH SETTING(3,4) REGIST. MEMORY(FREEZE, REGISTBANK1-64/BANK VIEW)	6	08 08
* 10b	V3958000	Speaker Grille	RIGHT	S P グリル R 塗 装 品			
* 20	V3878700	Key Top Rubber	A	キ ー ト ッ プ A			
* 30	V3878800	Key Top Rubber	B	キ ー ト ッ プ B			
* 40	V3878900	Key Top Rubber	C	キ ー ト ッ プ C		7	
* 50	V3879000	Key Top Rubber	D 1	キ ー ト ッ プ D 1			
* 60	V3879100	Key Top Rubber	D 2	キ ー ト ッ プ D 2			
* 70	V3879200	Key Top Rubber	D 3	キ ー ト ッ プ D 3			
* 80	V3879300	Key Top Rubber	D 4	キ ー ト ッ プ D 4			
* 90	V3879400	Key Top Rubber	E	キ ー ト ッ プ E		2	
* 100	V3879500	Key Top Rubber	F	キ ー ト ッ プ F			
* 110	V3879600	Key Top Rubber	G	キ ー ト ッ プ G			
* 120	V3879700	Key Top Rubber	H	キ ー ト ッ プ H			
* 130	V3879800	Key Top Rubber	I 1	キ ー ト ッ プ I 1		2	
* 140	V3879900	Key Top Rubber	I 2	キ ー ト ッ プ I 2			
* 150	V3880000	Key Top Rubber	J	キ ー ト ッ プ J			
* 160	V3880100	Key Top Rubber	K 1	キ ー ト ッ プ K 1			
* 170	V3880200	Key Top Rubber	K 2	キ ー ト ッ プ K 2		2	10
* 180	V3880300	Key Top Rubber	L	キ ー ト ッ プ L			
* 190	V3880400	Key Top Rubber	M	キ ー ト ッ プ M			
* 200	V3880500	Key Top Rubber	N	キ ー ト ッ プ N			
* 210	V3880600	Key Top Rubber	O	キ ー ト ッ プ O	DEMO		
* 220	V3880700	Key Top Rubber	P	キ ー ト ッ プ P	PAGE CONTROL(BACK,NEXT)		
* 230	V3880800	Key Top Rubber	Q	キ ー ト ッ プ Q	MUSIC DATABASE		
* 240	V3880900	Key Top Rubber	R 1	キ ー ト ッ プ R 1	ONE TOUCH SETTING(1,2)		
* 250	V3881000	Key Top Rubber	R 2	キ ー ト ッ プ R 2	ONE TOUCH SETTING(3,4)		
* 260	V3881100	Key Top Rubber	S	キ ー ト ッ プ S	REGIST. MEMORY(FREEZE, REGISTBANK1-64/BANK VIEW)		
* 270	V3881200	Key Top Rubber	T 1	キ ー ト ッ プ T 1	REGIST. MEMORY(1-4)		
* 280	V3881300	Key Top Rubber	T 2	キ ー ト ッ プ T 2	REGIST. MEMORY(5-8)		
* 290	V3881400	Key Top Rubber	U	キ ー ト ッ プ U	PART SELECT		
* 300	V3881500	Key Top Rubber	V	キ ー ト ッ プ V	PART ON/OFF		
* 310	V3881600	Key Top Rubber	W	キ ー ト ッ プ W	MEMORY		
* 320	V3881700	Key Top Rubber	X	キ ー ト ッ プ X	VOCAL HARMONY(TALK-V.H.)		
* 330	V3881800	Key Top Rubber	Y	キ ー ト ッ プ Y	VOLAL HARMONY(SELECT, MIC SETUP), DISK IN USE		
* 340	V4197500	Circuit Board	PN1	P N 1 シ ー ト			
* 350	--	Connector Assembly	PN1 L=640	P N 1 束 線	(V415090)		
* 360	--	Connector Assembly	PN3-FC	P N 3 束 線 - F C	(V523140)		
* 390	V4197200	Circuit Board	PN2	P N 2 シ ー ト			
* 400	--	Connector Assembly	PN3-2	P N 3 束 線 2	(V415130)		
* 410	V4197100	Circuit Board	PN3	P N 3 シ ー ト			
* 420	--	Connector Assembly	LCDC	L C D C 束 線	(V415170)		
* 430	V4197300	Circuit Board	EN	E N シ ー ト			
* 440	--	Connector Assembly	POW1 A L=470	P O W 1 束 線 A	E,B,U (V417580)		
* 440	--	Connector Assembly	POW1 B	P O W 1 束 線 B	N (V417590)		
* 440a	--	Plug	5559 4P	プ ラ グ	E,B,U (VM41710)		
* 440a	--	Plug	5559 10P	プ ラ グ	N (V426840)		
* 440b	VC843500	Push Switch	SDDL81216A J.U.C.S	プ ッ シ ュ S W	POWER ON/OFF		03
* 440c	CB049980	Switch Cover	BL	パ ワ ー ス イ ッ チ カ バ ー			01
* 450	V2320400	VR Crosse		ボ リ ュ ー ム ク ロ ス			03
* 460	V4197800	Circuit Board	MV	M V シ ー ト			
* 470	--	Connector Assembly	VR	V R 束 線	(V414640)		
* 480	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y	+ バ イ ン ド B タ イ ト	E,B,U	73	01
* 480	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y	+ バ イ ン ド B タ イ ト	N	74	01
* 490	CB040540	Cord Binder	S-72B L=50	束 線 止 め	U,B,N	9	01
* 490	CB040540	Cord Binder	S-72B L=50	束 線 止 め	E	8	01

*: New parts

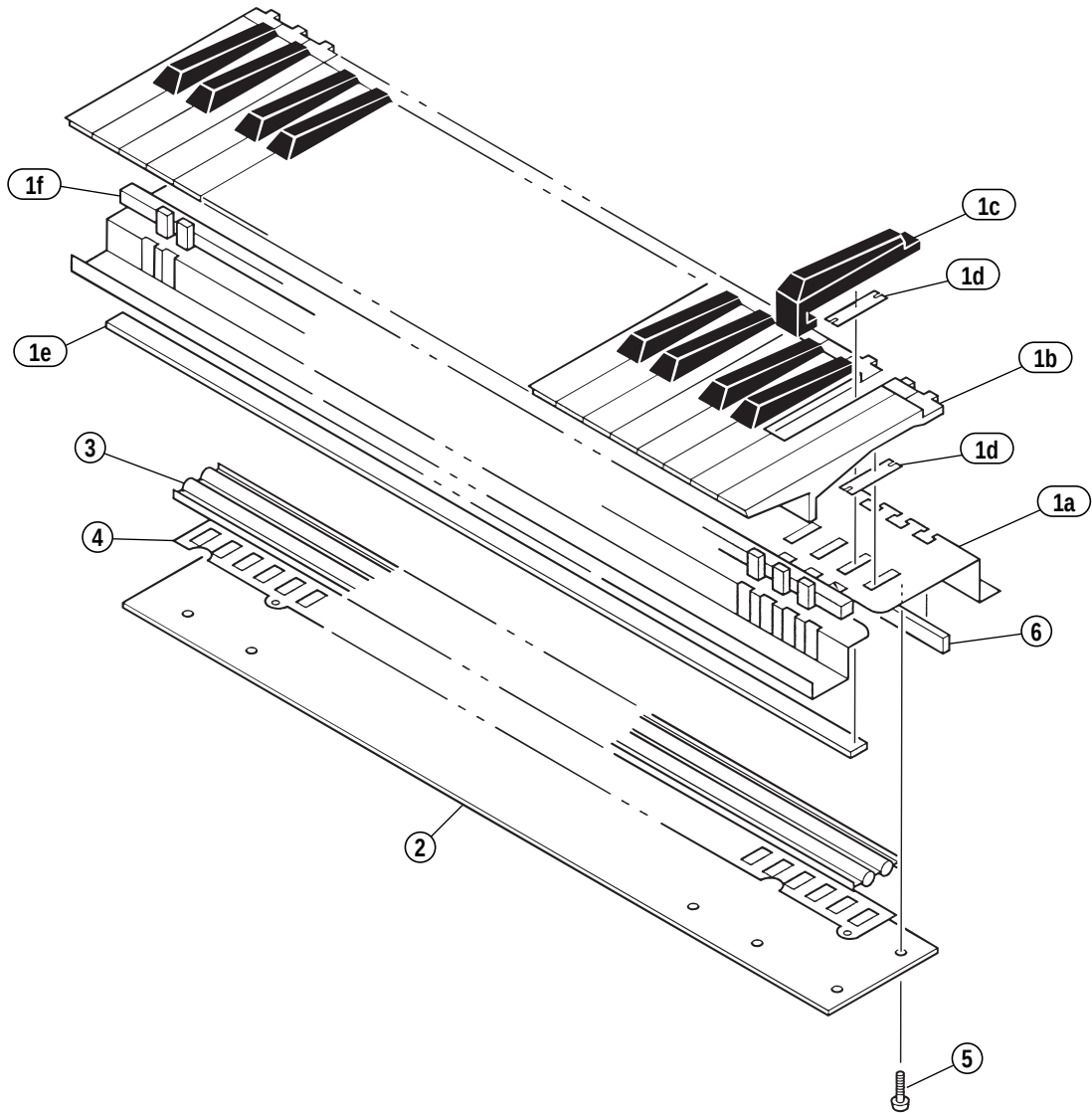
RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		部 品 名	REMARKS	QTY	RANK
* 500	V4197700	Corcuit Board	MIC/VR	M I C / V R シ ー ト			
* 510	V4197600	Circuit Board	MIC/HP	M I C / H P シ ー ト			
* 520	--	Connector Assembly	HP L=460	H P 束 線	(V415190)		
* 530	--	Connector Assembly	MIC-B	M I C 束 線	(V526710)		
* 540	--	Wheel Assembly		ホ イ ー ル A s s ' y	(V387620)		
* 550	--	Holder, MK		M K 固 定 金 具	(V387520)	4	
* 560	V4270600	Circuit Board	DJACK	D J A C K シ ー ト			
* 570	--	Connector Assembly	DJACK 1	D J A C K 束 線 - F C	(V523130)		
* 600	--	Connector Assembly	VIDEO	V I D E O 束 線	(V415400)		
* 610	V4582000	Circuit Board	AJACK	A J A C K シ ー ト			
* 620	--	Connector Assembly	AJACK 1	A J A C K 束 線 1	(V414600)		
* 630	--	Connector Assembly	AJACK 2	A J A C K 束 線 2	(V414690)		
* 640	--	Connector Assembly	AJACK 3 L=840	A J A C K 束 線 3	(V415370)		
* 650	CB069250	Cord Holder	BK-1	イ ン シ ュ ロ ッ ク タ イ		3	01
* 660	VT388200	Circuit Board	INLET	イ ン レ ッ ト シ ー ト C E	E,B,N	08	
* 660	VT388100	Circuit Board	INLET	イ ン レ ッ ト シ ー ト U C	U	08	
* 670	--	Cover		U L 保 護 カ バ ー	(VU08700)		
* 680	--	Cover		U L 保 護 カ バ ー	(VU08710)		
* 690	--	Plate		目 隠 し 板	E,B,U (V389160)		
* 690	V4272300	Circuit Board	VSEL	V S E L シ ー ト	N		
* 700	EP600140	Bind Head Tapping Screw-B	3.0X10 MFZN2BL	+ バ イ ン ド B タ イ ト		22	01
* 710	V4271500	Circuit Board	SCSI	S C S I シ ー ト			
* 720	--	Connector Assembly	SCSI	S C S I 束 線	(V414950)		
* 730	VS206600	Pan Head Screw	2.5X6 MFZN2BL	+ ナ ベ 小 ネ ジ		2	
* 740	VS386300	Cushion		防 塵 ス ボ ン ジ		2	03
* 750	CB825380	Push Button		プ ッ シ ュ ボ タ ン	POWER ON/OFF		03
* 760	VQ218900	Knob		V ー ツ マ ミ	MASTER VOLUME		03
* 770	V2300100	VR Knob		V R ノ ブ	INPUT VOLUME		04
* 780	--	Insulation sheet L		絶 縁 シ ー ト L	(V448380)		
* 790	--	Insulation sheet R		絶 縁 シ ー ト R	(V448400)		
* 800	V4561900	Encoder Knob		エ ン コ ー ダ ツ マ ミ	DATA Dial		05
* 820	--	GND Wire 3		ア ー ス 線 3	(V522940)		
* 830	--	GND Wire 9		ア ー ス 線 9	(V523000)		
* 840	--	GND Wire 10		ア ー ス 線 1 0	(V523010)		
* 850	VA126100	Adhesive Tape	12X50	粘 着 テ ー プ			03
* 860	--	Vibration-proof Tape F		防 振 テ ー プ F	(V202660)	4	

*: New parts

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KEYBOARD ASSEMBLY

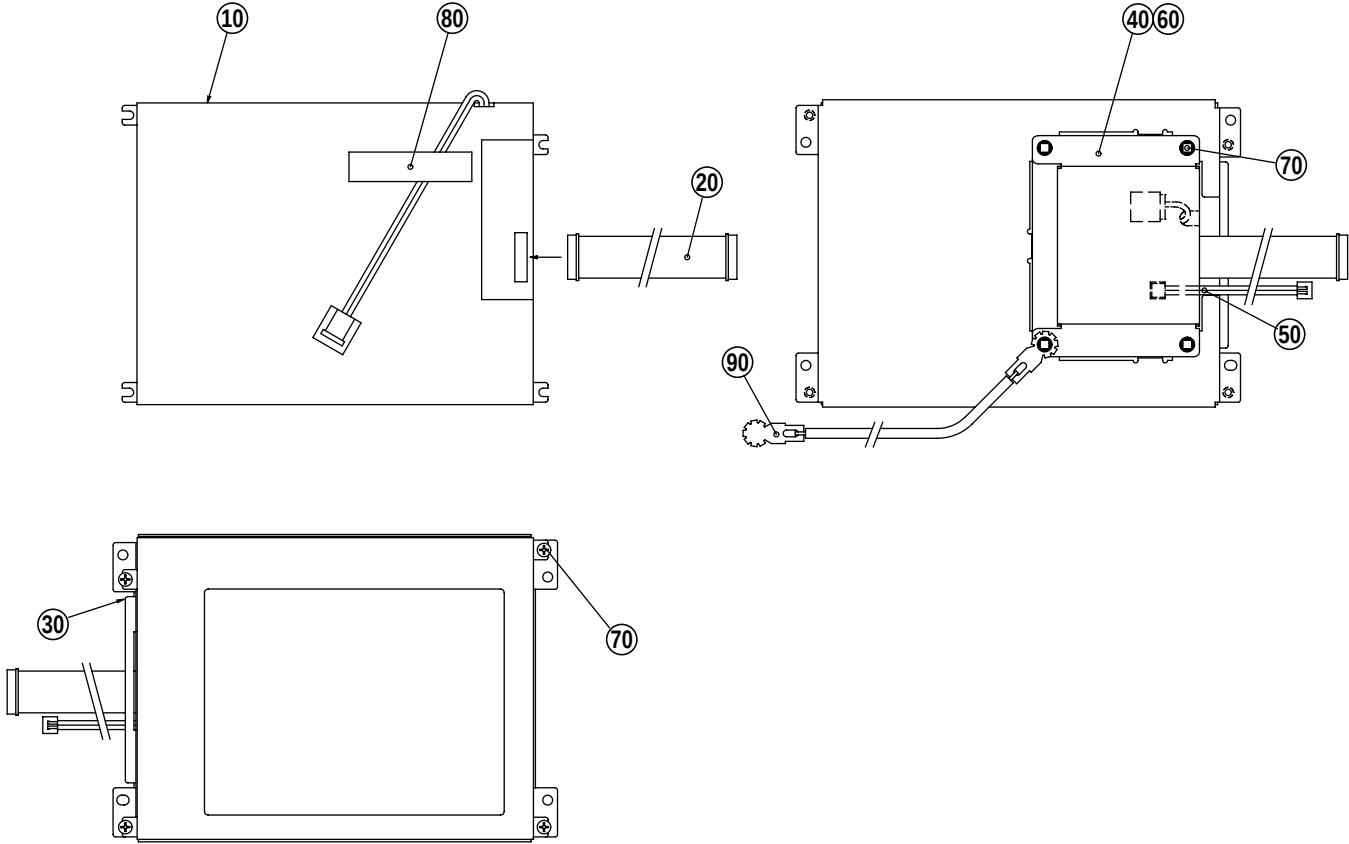


REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
		KEYBOARD ASSEMBLY	L C 鍵 盤 A S S ' Y	PSR-9000		29
1	VN399200	Keyboard Assembly	L C 鍵 盤 A s s ' y			
1a	--	MK Frame Assembly	M K フ レ ー ム A s s ' y	(VN40550)		
1a	--	MK Frame	M K フ レ ー ム	(VM63000)		
1b	VL570000	White Key	白 鍵		10	03
1b	VL570100	White Key	D		5	03
1b	VL570200	White Key	B,E		10	03
1b	VL570300	White Key	G		5	03
1b	VL570400	White Key	A		5	03
1b	VL570500	White Key	C'			03
1c	VL570600	Black Key	黒		25	03
1d	VC077600	Spring	バ		61	01
1e	VR857100	Felt	フ ェ ル ト シ	820X6X3.6 WH		03
1f	VN406100	PC Sensor	PC セ ン サ ー	MK-LC61TO-N		10
2	VI912000	Circuit Board	M K シ ー ト	LC		14
3	VF834100	Rubber Contact	可 動 導 電 コ ム	LC		09
4	VM630100	Insulation Spacer	絶 縁 ス ペ ー サ ー	LC		06
5	EP630630	Bind Head Tapping Screw-S	+ バ イ ン ド S タ イ ト	3.0X10 MFZN2Y	16	01
6	VC079800	Stopper	ス ト ッ パ ー	LC		02

*: New parts

RANK: Japan only

LCD ASSEMBLY

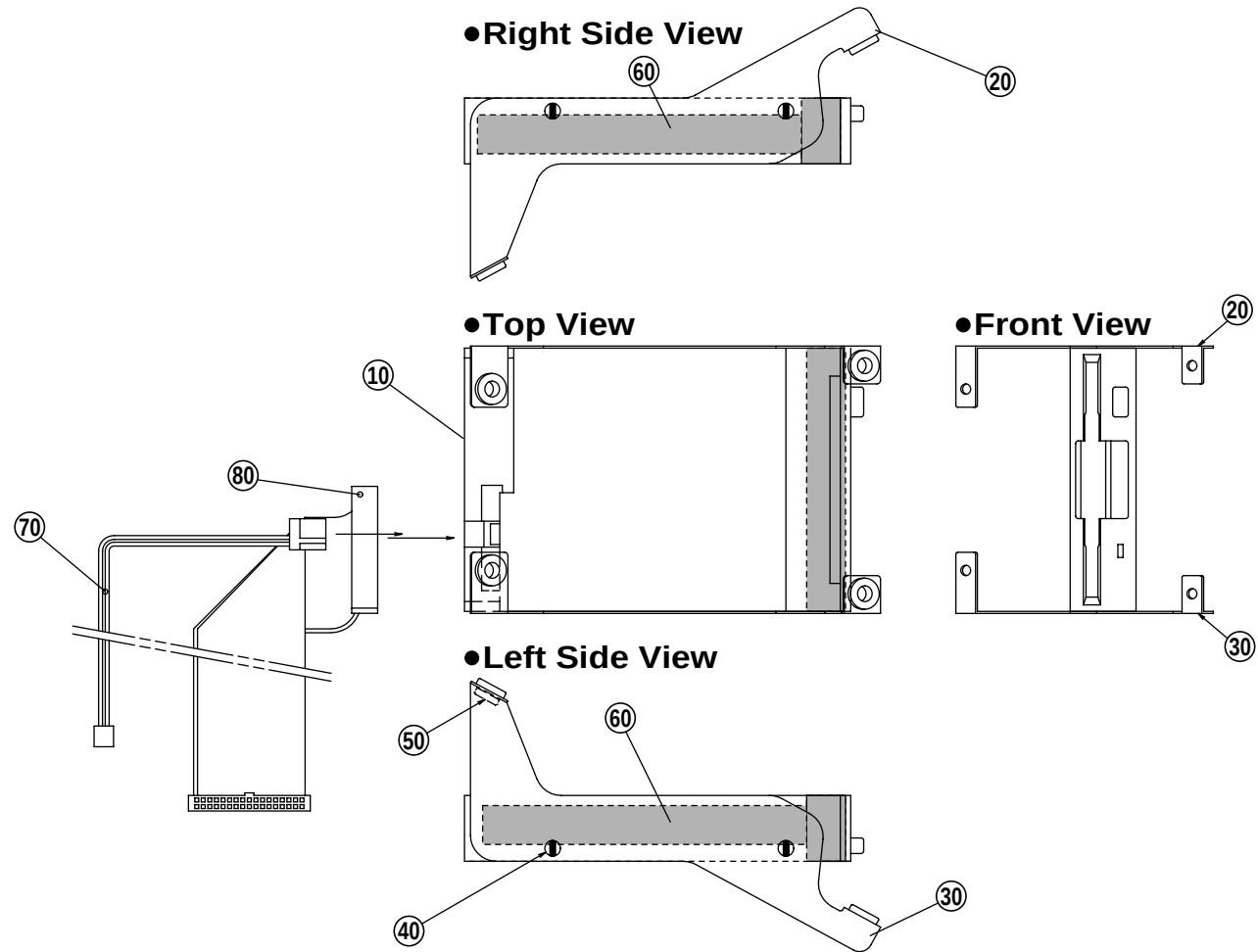


REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
		LCD ASSEMBLY	L C D A S S ' Y	PSR-9000		
	--	LCD Assembly	L C D A s s ' y	(V387800)		23
10	V3331300	LCD	液 晶 デ ィ ス プ レ イ			
20	--	Connector Assembly	L C D 束 線	(V415080)		
30	--	Holder, LCD	L C D 固 定 金 具	(V387420)		
40	VY638900	Circuit Board	I N V シ ー ト			13
50	--	Connector Assembly	I N V 束 線	(V414880)		
60	VZ664400	Cover	I N V カ バ ー			05
70	EP600230	Bind Head Tapping Screw-B	+ バ イ ン ド B タ イ ト	3.0X6 MFZN2BL	8	01
80	VA126100	Adhesive Tape	粘 着 テ ー プ	12X50		03
90	--	GND Wire 11	ア ー ス 線 1 1	(V523020)		

*: New parts

RANK: Japan only

FDD ASSEMBLY

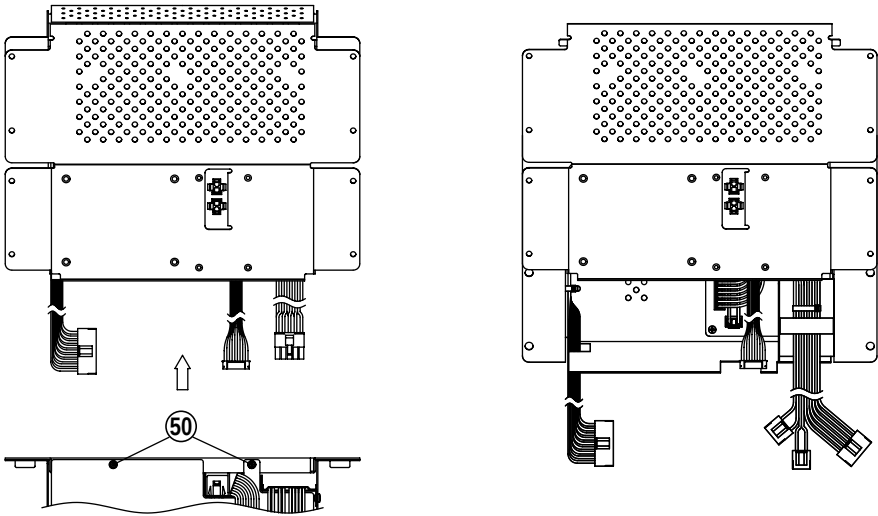


REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
		FLOPPY DISK DRIVE ASSEMBLY	F D D A S S ' Y	PSR-9000		
10	--	Floppy Disk Drive Assembly	F D D A s s ' y	(V364880)		16
20	--	Floppy Disk Drive	3 . 5 " F D D			
30	--	Holder, FDD	F D D 固 定 金 具 R	(V387660)		
			F D D 固 定 金 具 L	(V387670)		
40	VK712400	Bonding Head Screw	ボ ン デ ィ ン グ コ ネ ジ		4	01
50	VA121600	Bushing	ゴ ム ブ ッ シ ュ		4	01
60	--	Adhesive Tape	綿 粘 着 テ ー プ	(ZL35000)		
70	V4148600	Connector Assembly	F D D 電 源 束 線			
80	V4148900	Connector Assembly	F D D 束 線			05

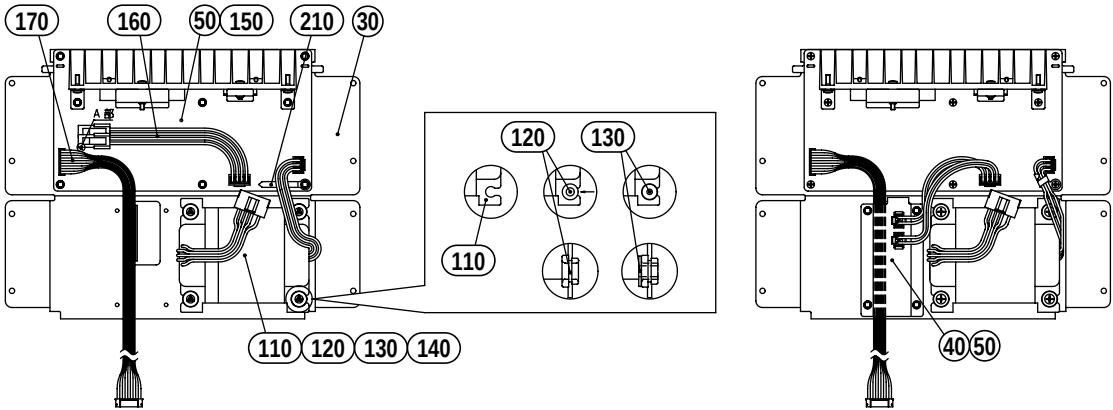
*: New parts
RANK: Japan only

■ POWER SUPPLY UNIT

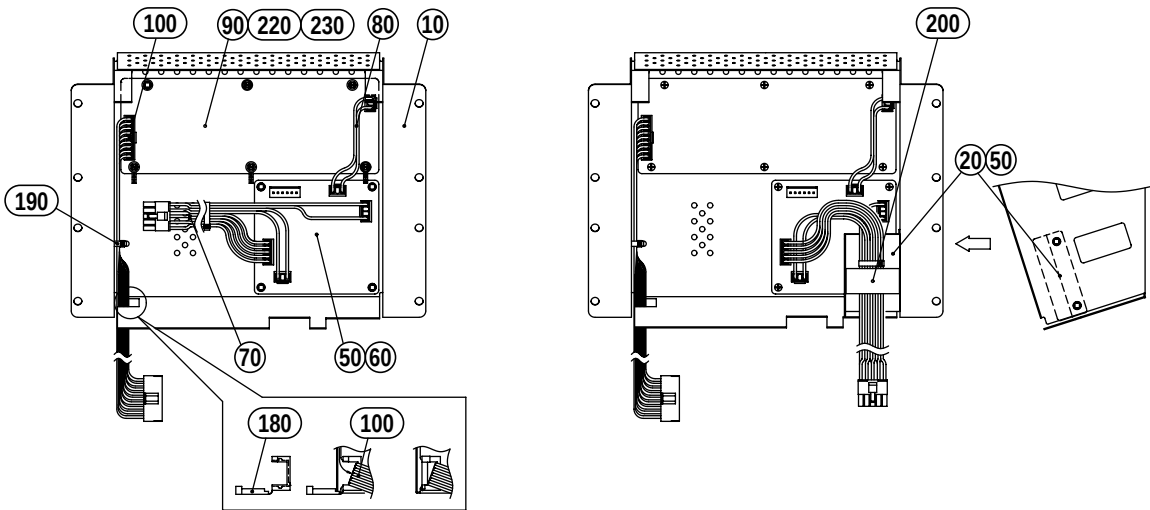
●Power Supply Unit Assembly



●Bottom Open View



●Top Open View



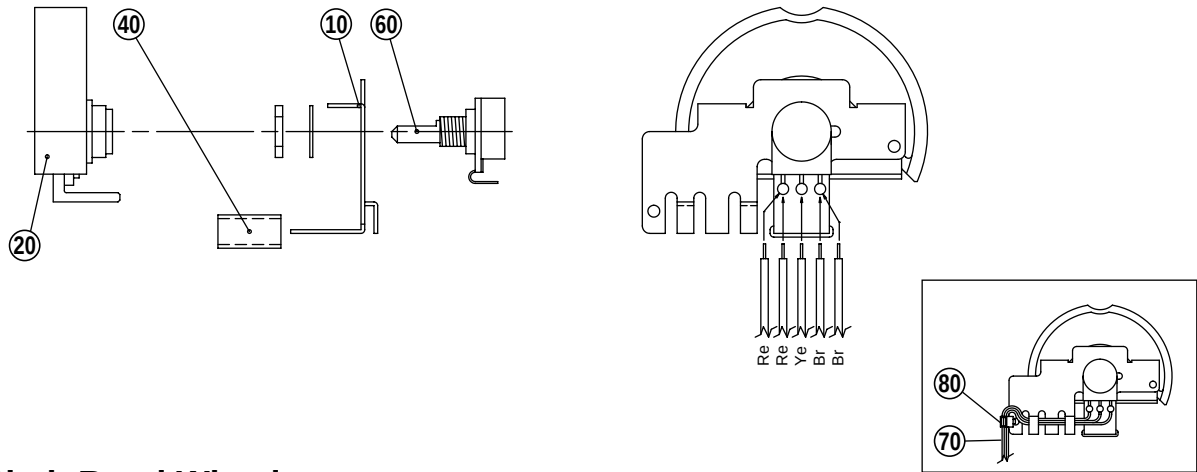
REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
	--	POWER SUPPLY UNIT	電 源 ユ ニ ッ ト	PSR-9000		
	--	Power Supply Unit	電 源 ユ ニ ッ ト	E,B (V393840)		
	--	Power Supply Unit	電 源 ユ ニ ッ ト	U (V393850)		
	--	Power Supply Unit	電 源 ユ ニ ッ ト	N (V393860)		
10	--	Power Supply Cocer	電 源 カ バ ー	U (V387600)		
20	--	Rail B	束 線 レ ー ル	B (V388240)		
30	--	Power Supply Cover	電 源 カ バ ー	L (V387610)		
40	--	Rail A	束 線 レ ー ル	A (V388230)		
50	EP600130	Bind Head Tapping Screw-B	+ バ イ ン ド B タ イ ト		20	01
60	V4272800	Circuit Board	F U シ ー ト	E,B		
60	V4272700	Circuit Board	F U シ ー ト	U		
60	V4272900	Circuit Board	F U シ ー ト	N		
70	--	Connector Assembly	P O W 2 束 線	A E,B,U (V417600)		
70	--	Connector Assembly	P O W 2 束 線	B N (V417610)		
80	--	Connector Assembly	S W P 束 線	(V414480)		
90	V3676700	Power Supply Unit	電 源 ユ ニ ッ ト			19
100	--	Connector Assembly	電 源 束 線	1 (V414490)		
110	XW052A00	Power Transformer	電 源 ト ラ ン ス	E,B		11
110	XW051A00	Power Transformer	電 源 ト ラ ン ス	U		11
110	XW053B00	Power Transformer	電 源 ト ラ ン ス	N		11
120	VA121600	Bushing	ゴ ム ブ ッ シ ュ		4	01
130	VA121400	Spacer	ス ペ ー サ ー		4	02
140	EP600750	Bind Head Tapping Screw-B	+ バ イ ン ド B タ イ ト		4	01
150	V3727900	Circuit Board	A M P シ ー ト	E,B,N		
150	V3727800	Circuit Board	A M P シ ー ト	U		
160	--	Connector Assembly	S P 中 継 束 線	(V414510)		
170	--	Connector Assembly	S I G 束 線 F C	(V524670)		
180	--	Saddle	エ ッ ジ サ ド ル	(V445200)		
190	CB069250	Cord Holder	イ ン シ ュ ロ ッ ク タ イ			01
200	VF298800	Adhesive Tape	粘 着 テ ー プ			01
210	CB040540	Cord Binder	束 線 止 め			01
220	V3766800	INV Bush	I N V ブ ッ シ ュ		6	
230	VD017400	Brazer W.H.Tap. Screw	+ P W H B タ イ ト		6	

*: New parts

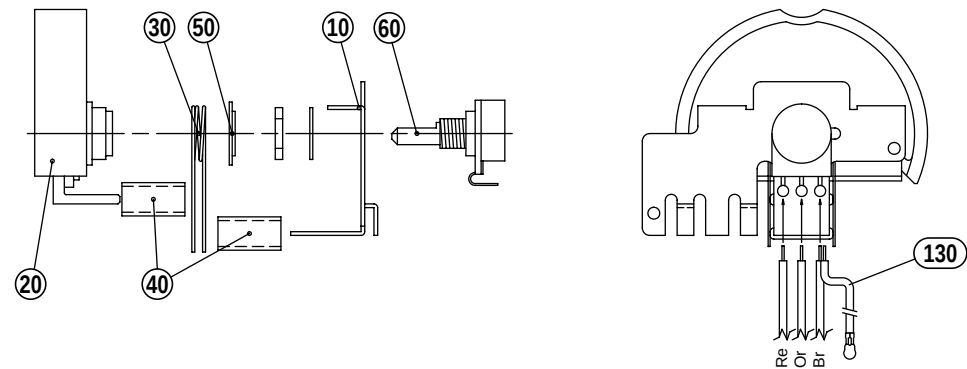
RANK: Japan only

WHEEL ASSEMBLY

Modulation Wheel



Pitch Bend Wheel



REF NO.	PART NO.	DESCRIPTION	部品名	REMARKS	QTY	RANK
		WHEEL ASSEMBLY	ホイール A S S ' Y	PSR-9000		
	--	Wheel Assembly	ホイール A s s ' y	(V387620)		
10	--	Frame	フ レ ム	(V453380)	2	
20	VF537400	Wheel	ホ イ - ル	PITCH/MODULATION	2	03
30	VC792800	Spring	リ タ ー ン S P			01
40	CB819020	Wheel Tube	ホ イール チューブ		3	04
50	EW600110	Stop Ring	C S 形 止 め 輪			01
60	VT695100	Rotary Variable Resistor	ロ - タ リ - V R	PITCH/MODULATION	2	03
70	--	Connector Assembly	W L 束 線	(V414540)		
80	CB069250	Cord Holder	インシュロックタイ		2	01
130	--	GND Wire 7	ア - ス 線 7	(V522980)		

*: New parts

RANK: Japan only

ELECTRICAL PARTS

REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
		ELECTRICAL PARTS	電 気 部 品	PSR-9000		
*	V3558900	Circuit Board	A M シ ー ト	(XV931C0)		
*	V3727900	Circuit Board	A M P シ ー ト	E,B,N (XV922B0)		
*	V3727800	Circuit Board	A M P シ ー ト	U (XV922B0)		
*	V4101100	Circuit Board	D M シ ー ト	(XW155C0)		
*	V4101200	Circuit Board	D P シ ー ト	(XW156C0)		
*	V4197300	Circuit Board	E N シ ー ト	(XW443B0)		
*	V4197500	Circuit Board	P N 1 シ ー ト	(XW443B0)		
*	V4197200	Circuit Board	P N 2 シ ー ト	(XW443B0)		
*	V4272800	Circuit Board	F U シ ー ト	E,B (XV921B0)		
*	V4272700	Circuit Board	F U シ ー ト	U (XV921B0)		
*	V4272900	Circuit Board	F U シ ー ト	N (XV921B0)		
*	VT388200	Circuit Board	インレットシート CE	E,B,N (XQ666B0)		08
*	VT388100	Circuit Board	インレットシート UC	U (XQ666B0)		08
*	VY638900	Circuit Board	INV	(XT122A0)		13
*	V4270600	Circuit Board	D J A C K シ ー ト	(XV936B0)		
*	V4582000	Circuit Board	A J A C K シ ー ト	(XV936B0)		
*	VI912000	Circuit Board	M K シ ー ト	(XH07890)		14
*	V4197800	Circuit Board	M V シ ー ト	(XW438B0)		
*	V4197700	Circuit Board	M I C / V R シ ー ト	(VW438B0)		
*	V4197600	Circuit Board	M I C / H P シ ー ト	(XW438B0)		
*	V4197100	Circuit Board	P N 3 シ ー ト	(XW438B0)		
*	V4272100	Circuit Board	N E T シ ー ト	(XW374B0)		
*	V4271500	Circuit Board	S C S I シ ー ト	(XW083C0)		
*	V4101300	Circuit Board	T G シ ー ト	(XW157E0)		
*	V4272300	Circuit Board	V S E L シ ー ト	N (XW375B0)		
*	V3558900	Circuit Board	A M シ ー ト	(XV931C0)		
	VD041700	Jumper Wire	0.55			
CN1	VB390600	Connector Base Post	PH-10P TE			01
CN2	LB918040	Base Post Connector	XH 4P TE			01
CN3	VB390400	Connector Base Post	PH- 8P TE			01
CN4	VB390500	Connector Base Post	PH- 9P TE			03
CN5	VB390300	Connector Base Post	PH- 7P TE			01
CN6	VE352600	Connector Base Post	PH-14P TE			01
CN7	VB390000	Connector Base Post	PH- 4P TE			01
D1	VB941200	Diode	1SS133,1SS176	ダ イ オ ー ド		01
-7	VB941200	Diode	1SS133,1SS176	ダ イ オ ー ド		01
FT1	IE101250	FET	2SK105 E,F	F E T		01
FT2	IE101250	FET	2SK105 E,F	F E T		01
IC1	XB247A00	IC	UPC4570HA	I C	OP AMP	02
-3	XB247A00	IC	UPC4570HA	I C	OP AMP	02
IC4	XM804A00	IC	LA6517	I C	OP AMP	04
IC5	XB247A00	IC	UPC4570HA	I C	OP AMP	02
-7	XB247A00	IC	UPC4570HA	I C	OP AMP	02
RY1	VZ057500	Relay	DC MR82-12USR	リ レ ー 1 2 V		04
TR1	IC174020	Transistor	2SC1740S R,S	ト ラ ン ジ ス タ		01
-3	IC174020	Transistor	2SC1740S R,S	ト ラ ン ジ ス タ		01
TR4	IA093320	Transistor	2SA933S Q,R	ト ラ ン ジ ス タ		01
TR5	IC174020	Transistor	2SC1740S R,S	ト ラ ン ジ ス タ		01
TR6	IC174020	Transistor	2SC1740S R,S	ト ラ ン ジ ス タ		01
TR7	IC332720	Transistor	2SC3327 A,B	ト ラ ン ジ ス タ		01
-12	IC332720	Transistor	2SC3327 A,B	ト ラ ン ジ ス タ		01
TR13	IC174020	Transistor	2SC1740S R,S	ト ラ ン ジ ス タ		01
	FG613220	Ceramic Capacitor-B	2200P 50V K	セ ラ コ ン (B)	C:26,27	01
	FG644100	Ceramic Capacitor-F	0.01 50V Z	セ ラ コ ン (F)	C:65	01
	FG651220	Ceramic Capacitor-SL	22P 50V J	セ ラ コ ン (S L)	C:55,57	01
	FG651270	Ceramic Capacitor-SL	27P 50V J	セ ラ コ ン (S L)	C:16,18	01
	FG651330	Ceramic Capacitor-SL	33P 50V J	セ ラ コ ン (S L)	C:47,49,51,53	01
	FG651470	Ceramic Capacitor-SL	47P 50V J	セ ラ コ ン (S L)	C:4,6,70,71	01
	FG652100	Ceramic Capacitor-SL	100P 50V J	セ ラ コ ン (S L)	C:30,32	01
	UA355100	Mylar Capacitor	0.1 50V J	マ イ ラ ー コ ン	C:44,45	01
	UN866470	Electrolytic Cap.-BP	4.7 50.0V	B P ケ ミ コ ン	C:17,19,29,31,35,36,48,50,56,58	01
	UN847100	Electrolytic Cap.-BP	10.00 25.0V	B P ケ ミ コ ン	C:52,54	01
	UN847470	Electrolytic Cap.-BP	47.00 25.0V	B P ケ ミ コ ン	C:21,22	01
	UN848100	Electrolytic Cap.-BP	100.00 25.0V	B P ケ ミ コ ン	C:42,46	01
	UN865470	Electrolytic Cap.-BP	0.47 50.0V	B P ケ ミ コ ン	C:66,69	01
	UR847470	Electrolytic Cap.	47.00 25.0V	ケ ミ コ ン	C:11	01
	UR848100	Electrolytic Cap.	100.00 25.0V	ケ ミ コ ン	C:2	01
	UR848220	Electrolytic Cap.	220.00 25.0V	ケ ミ コ ン	C:25	01

*: New parts

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REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
	UR848470	Electrolytic Cap.	470.00 25.0V	ケ ミ コ ン		01
	UR865330	Electrolytic Cap.	0.33 50.0V	ケ ミ コ ン	C:24	
	UR866470	Electrolytic Cap.	4.7 50.0V	ケ ミ コ ン	C:33,34	01
	VC694800	Semiconductive Cera. Cap.	0.1 25V Z	半 導 体 セ ラ コ ン	C:3,8,15,20,23,28,39,41,43,59-64, 67,68	01
	VD930900	Semiconductive Cera. Cap.	0.1 25V M	半 導 体 セ ラ コ ン	C:40	01
	HF754330	Carbon Resistor	33.0 1/4 J	カ ー ボ ン 抵 抗	R:43,44	01
	HF755100	Carbon Resistor	100.0 1/4 J	カ ー ボ ン 抵 抗	R:26,58,86,87	01
	HF755150	Carbon Resistor	150.0 1/4 J	カ ー ボ ン 抵 抗	R:27	01
	HF755470	Carbon Resistor	470.0 1/4 J	カ ー ボ ン 抵 抗	R:29,30	01
	HF755680	Carbon Resistor	680.0 1/4 J	カ ー ボ ン 抵 抗	R:61,63,68,71,74,77	01
	HF756100	Carbon Resistor	1.0K 1/4 J	カ ー ボ ン 抵 抗	R:22,64,66,69,72,75,78,81	01
	HF756470	Carbon Resistor	4.7K 1/4 J	カ ー ボ ン 抵 抗	R:16,17,60	01
	HF757100	Carbon Resistor	10.0K 1/4 J	カ ー ボ ン 抵 抗	R:1,4,8,12,18,21,23,24,28,33,35, 39-42,45,46,53-57,59,62,65,67, 70,73,76,79,82,84	01
	HF757180	Carbon Resistor	18.0K 1/4 J	カ ー ボ ン 抵 抗	R:83,85	01
	HF757220	Carbon Resistor	22.0K 1/4 J	カ ー ボ ン 抵 抗	R:34,36	01
	HF757270	Carbon Resistor	27.0K 1/4 J	カ ー ボ ン 抵 抗	R:37,38	01
	HF757330	Carbon Resistor	33.0K 1/4 J	カ ー ボ ン 抵 抗	R:47-50,80	01
	HF757470	Carbon Resistor	47.0K 1/4 J	カ ー ボ ン 抵 抗	R:2,3	01
	HF757560	Carbon Resistor	56.0K 1/4 J	カ ー ボ ン 抵 抗	R:51,52	01
	HF757820	Carbon Resistor	82.0K 1/4 J	カ ー ボ ン 抵 抗	R:13,15,19,20	01
	HF758100	Carbon Resistor	100.0K 1/4 J	カ ー ボ ン 抵 抗	R:9,14,25,31,88	01
	HF758560	Carbon Resistor	560.0K 1/4 J	カ ー ボ ン 抵 抗	R:7,11	01
	V3727900	Circuit Board	AMP E GBR,N	A M P シ ー ト	E,B,N (XV922B0)	
	V3727800	Circuit Board	AMP U CSA	A M P シ ー ト	U (XV922B0)	
	VE683000	Bind Head Tapping Screw-B	3.0X12 MFZN2Y	+ バ イ ン ド B タ イ ト		01
	V1064600	Bind Head Tapping Screw-B	3.0X20 MFZN2Y	+ バ イ ン ド B タ イ ト		01
	LB201530	Fuse Holder	PC-PH1	ヒ ュ ー ス ホ ル ダ		01
	--	Regulator Holder A		レギュレータ固定金具 A	(V387630)	
	--	Regulator Holder B		レギュレータ固定金具 B	(V387640)	
	--	Holder, Heat Sink		放 熱 板 固 定 金 具	(V387650)	
	--	Heat Sink	30BS172H-L80	放 熱 板 熱	(V444550)	
	VJ834500	Insulation Sheet		放 熱 シ ー ト (パ ー)		03
	VD041700	Jumper Wire	0.55	ジ ャ ン パ ー 線		
CN1	VB390500	Connector Base Post	PH- 9P TE	コネクタベースポスト		03
CN2	LB932030	Base Post Connector	VH- 3P TE	ベ ー ス ポ ス ト		01
CN3	LB932040	Base Post Connector	VH- 4P TE	ベ ー ス ポ ス ト		01
D1	VB481900	Diode	11ES4	ダ イ オ ー ド		01
DB1	VQ111500	Diode Stack	D3SBA20-4103 4.0A	ダ イ オ ー ド ス タ ッ ク		03
F1	KB003240	Fuse	5.00A S	ヒ ュ ー ズ	E,B,N	01
F1	KB003630	Fuse	5.00A JU	ヒ ュ ー ズ	U	01
F2	KB003240	Fuse	5.00A S	ヒ ュ ー ズ	E,B,N	01
F2	KB003630	Fuse	5.00A JU	ヒ ュ ー ズ	U	01
IC1	XL972A00	IC	STK401-040	イ ン テ ー グ レ ー ト	POWER AMPLIFIER	08
IC2	XF751A00	IC	M5227P	イ ン テ ー グ レ ー ト	EQUALIZER	04
IC3	XF751A00	IC	M5227P	イ ン テ ー グ レ ー ト	EQUALIZER	04
R2	VD041700	Jumper Wire	0.55	ジ ャ ン パ ー 線		
R4	VD041700	Jumper Wire	0.55	ジ ャ ン パ ー 線		
R7	VD041700	Jumper Wire	0.55	ジ ャ ン パ ー 線		
R9	VD041700	Jumper Wire	0.55	ジ ャ ン パ ー 線		
R11	VD041700	Jumper Wire	0.55	ジ ャ ン パ ー 線		
R16	VD041700	Jumper Wire	0.55	ジ ャ ン パ ー 線		
RY1	VK881200	Relay	DC G5Z-2A-YA	リ レ ー 1 2 V		04
TR1	IC1815M0	Transistor	2SC1815 Y,GR	ト ラ ン ジ ス タ		01
-3	IC1815M0	Transistor	2SC1815 Y,GR	ト ラ ン ジ ス タ		01
	FG612560	Ceramic Capacitor-B	560P 50V K	セ ラ コ ン (B)	C:24,34	01
	FG613100	Ceramic Capacitor-B	1000P 50V K	セ ラ コ ン (B)	C:26,36	01
	UA353100	Mylar Capacitor	1000P 50V J	マ イ ラ ー コ ン	C:05,10	01
	UA353220	Mylar Capacitor	2200P 50V J	マ イ ラ ー コ ン	C:04,09	01
	UA354100	Mylar Capacitor	0.01 50V J	マ イ ラ ー コ ン	C:15,20	01
	UA354270	Mylar Capacitor	0.027 50V J	マ イ ラ ー コ ン	C:03,08	01
	UA354330	Mylar Capacitor	0.033 50V J	マ イ ラ ー コ ン	C:14,19	01
	UA354470	Mylar Capacitor	0.047 50V J	マ イ ラ ー コ ン	C:02,07	
	UN866470	Electrolytic Cap.-BP	4.7 50.0V	B P ケ ミ コ ン	C:21,25,31,35	01
	UR838100	Electrolytic Cap.	100.00 16.0V	ケ ミ コ ン	C:27,37,60,61	01
	UR838220	Electrolytic Cap.	220.00 16.0V	ケ ミ コ ン	C:43	01
	VA302600	Ceramic Capacitor-E	0.01 500V P	セラコン (E)	C:50	01

*: New parts

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REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
	VC694800	Semiconductive Cera. Cap.	半 導 体 セ ラ コ ン	C:22,23,28,29,32,33,38,39		01
	VL232200	Electrolytic Cap.	ケ ミ コ ン	C:51-54		04
	VE326300	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン	} C:01,06		01
	VR168600	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン			01
	VE327100	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン	} C:11,16		02
	VR169500	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン			01
	VE326600	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン	} C:12,17		01
	VR169000	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン			01
	VE326200	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン	} C:13,18		
	VR168500	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン			01
	VE327000	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン	} C:15,20		01
	VR169400	Monolithic Mylar Capacitor	積 層 マ イ ラ ー コ ン			
	HF455560	Carbon Resistor	カ ー ボ ン 抵 抗	R:23,26,33,36		01
	HF456100	Carbon Resistor	カ ー ボ ン 抵 抗	R:11,16		01
	HF456120	Carbon Resistor	カ ー ボ ン 抵 抗	R:03,07,08		01
	HF456330	Carbon Resistor	カ ー ボ ン 抵 抗	R:22,32,43,44		01
	HF456390	Carbon Resistor	カ ー ボ ン 抵 抗	R:04,09		01
	HF456560	Carbon Resistor	カ ー ボ ン 抵 抗	R:21,31,41,42		01
	HF456680	Carbon Resistor	カ ー ボ ン 抵 抗	R:15,20		01
	HF457100	Carbon Resistor	カ ー ボ ン 抵 抗	R:24,25,34,35		01
	HF457150	Carbon Resistor	カ ー ボ ン 抵 抗	R:05,10		01
	HF457220	Carbon Resistor	カ ー ボ ン 抵 抗	R:01,06,12-14,17-19		01
	HW095100	Fuse Resistor	ヒ ュ ー ズ 抵 抗	R:50,51		01
	VC742500	Metal Oxide Film Resistor	酸 化 金 属 被 膜 抵 抗	R:27,37		01
*	V4101100	Circuit Board	D M シ ー ト	(XW155C0)		
	VK863100	IC Socket	イ C ソ ケ ッ ト			03
CN1	VB858400	Connector Base Post	コ ネ ク タ ベ ー ス ポ ス ト			01
CN2	VB858300	Connector Base Post	コ ネ ク タ ベ ー ス ポ ス ト			01
CN3	VE387000	Base Post Connector	ベ ー ス ポ ス ト			03
CN4	VB858800	Connector Base Post	コ ネ ク タ ベ ー ス ポ ス ト			01
CN5	VB858700	Connector Base Post	コ ネ ク タ ベ ー ス ポ ス ト			01
CN6	V3836300	Connector	基 板 用 コ ネ ク タ			04
CN7	VL536600	Connector Header	コ ネ ク タ ヘ ッ ダ ー			03
CN8	V3836100	Connector	基 板 用 コ ネ ク タ			04
CN9	VB389800	Connector Assembly	コ ネ ク タ ベ ー ス ポ ス ト			01
D1	VB493900	Diode	ダ イ オ ー ド			01
D2	VB493900	Diode	ダ イ オ ー ド			01
D3	VE243700	Diode	ダ イ オ ー ド			01
D3	VS406000	Diode	シ ョ ッ ト キ ー ダ イ オ ー ド			01
IC1	XW795A00	IC	I	C CPU		11
IC2	XV145A00	IC	I	C DRAM 16M		12
IC3	XV145A00	IC	I	C DRAM 16M		12
IC4	XM332A00	IC	I	C INVERTER		01
IC5	XT014A00	IC	I	C AND		01
IC6	XW722C00	IC	I	C MAIN PROGRAM LOW 16M		
IC7	XW723C00	IC	I	C MAIN PROGRAM HIGH 16M		
IC8	XP226A00	IC	I	C RESET		03
IC9	XT487A00	IC	I	C TRANSCEIVER		03
-12	XT487A00	IC	I	C TRANSCEIVER		03
IC13	XT812A00	IC	I	C TRIPLE 3 INPUT AND		01
IC14	XT487A00	IC	I	C TRANSCEIVER		03
-17	XT487A00	IC	I	C TRANSCEIVER		03
IC18	XN964A00	IC	I	C D-FF		02
IC19	XR337A00	IC	I	C OR		01
IC20	XT475A00	IC	I	C DATA SELECTOR		02
IC21	XT475A00	IC	I	C DATA SELECTOR		02
IC22	XS720A00	IC	I	C TRANSCEIVER		03
IC23	XT015A00	IC	I	C DECODER		02
IC24	XT015A00	IC	I	C DECODER		02
IC25	XS048A00	IC	I	C DEMULTIPLEXER		03
IC26	XV833A00	IC	I	C GATE ARRAY		06
IC27	XW250A00	IC	I	C FLASH ROM 16M DATA		21
IC28	XW726A00	IC	I	C FLASH ROM 16M STYLE		
IC29	XW695100	IC	I	C ROM STYLE 16M		
IC30	XT487A00	IC	I	C TRANSCEIVER		03
IC31	XV636B00	IC	I	C SCSI		08
IC32	XN028A00	IC	I	C SCSI REGULATOR		04
IC33	XS516A00	IC	I	C REGULATOR +3.3V		03
IC34	XR337A00	IC	I	C OR		01

*: New parts

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REF NO.	PART NO.	DESCRIPTION		部 品 名	REMARKS	QTY	RANK
L1	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
-10	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
L11	VT872900	Chip Inductance	0.22U LEM2520TR22K	チップインダクタ			
-13	VT872900	Chip Inductance	0.22U LEM2520TR22K	チップインダクタ			
L14	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
-16	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
L17	VT872900	Chip Inductance	0.22U LEM2520TR22K	チップインダクタ			
L18	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
-21	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
L22	RD250000	Carbon Resistor (chip)	0.0 0.0 J	チップ抵抗			01
-30	RD250000	Carbon Resistor (chip)	0.0 0.0 J	チップ抵抗			01
L31	VT872900	Chip Inductance	0.22U LEM2520TR22K	チップインダクタ			
L32	RD250000	Carbon Resistor (chip)	0.0 0.0 J	チップ抵抗			01
-40	RD250000	Carbon Resistor (chip)	0.0 0.0 J	チップ抵抗			01
TH1	VV111600	Protector Switch	SMD100-2018-2 SMD	ポリスイッチ			03
X1	VV762900	Quartz Crystal Unit	7M SMD-49	水晶振動子			03
X2	VR870700	Quartz Crystal Unit	10M SMD-49	水晶振動子			04
X3	V4458700	Quartz Crystal Unit	22.5M SMD-49	水晶振動子			03
	UF018100	Electrolytic Cap. (chip)	100 6.3V	チップケミコン	C:3,57,85,100,111,121,122,125		
	UF038100	Electrolytic Cap. (chip)	100 16V	チップケミコン	C:42		01
	UF066100	Electrolytic Cap. (chip)	1 50V	チップケミコン	C:38		01
	UF066330	Electrolytic Cap. (chip)	3.3 50V	チップケミコン	C:116		01
	US060500	Ceramic Capacitor-CH (chip)	5P 50V C	チップセラ (C H)	C:112,115		01
	US061270	Ceramic Capacitor-CH (chip)	27P 50V J	チップセラ (C H)	C:31,32,55,56		01
	US062100	Ceramic Capacitor-SL (chip)	100P 50V J	チップセラ (S L)	C:9,29,52,53,66-70,73,109		01
	US062470	Ceramic Capacitor-SL (chip)	470P 50V J	チップセラ (S L)	C:30		01
	US064100	Ceramic Capacitor-B (chip)	0.01 50V K	チップセラ (B)	C:1,2,4-8,10-15,21-27,33-36,39-41, 43-51,54,58-64,71,72,74-84, 86-99,101-108,110,113,114, 117-120,123,124,126,127		01
	US135100	Ceramic Capacitor-F (chip)	0.1 16V Z	チップセラ (F)	C:16-20,28,37,65		01
	RD350000	Carbon Resistor (chip)	0 63M J	チップ抵抗	R:1-6,12,13,16,32-34,38-43,45-52, 59-62,68,71,72,87-90,103,106, 154,156-158,160,161,163,164, 166-168,170-173,175-177, 185-188,191-207,217-226,256-277		01
	RD154560	Carbon Resistor (chip)	56.0 1/4 J	チップ抵抗	R:81		01
	RD154680	Carbon Resistor (chip)	68.0 1/4 J	チップ抵抗	R:82		01
	RD155100	Carbon Resistor (chip)	100.0 1/4 J	チップ抵抗	R:75,101,102,104,105,165,166, 169,174		01
	RD155180	Carbon Resistor (chip)	180.0 1/4 J	チップ抵抗	R:85,86		01
	RD155820	Carbon Resistor (chip)	820.0 1/4 J	チップ抵抗	R:76		01
	RD354470	Carbon Resistor (chip)	47.0 1/4 J	チップ抵抗	R:124-145		01
	RD355100	Carbon Resistor (chip)	100 63M J	チップ抵抗	R:159,178-181		01
	RD355220	Carbon Resistor (chip)	220 63M J	チップ抵抗	R:15,17,20,23,78		01
	RD355680	Carbon Resistor (chip)	680 63M J	チップ抵抗	R:74		01
	RD356100	Carbon Resistor (chip)	1.0K 63M J	チップ抵抗	R:80		01
	RD356330	Carbon Resistor (chip)	3.3K 63M J	チップ抵抗	R:73		01
	RD356680	Carbon Resistor (chip)	6.8K 63M J	チップ抵抗	R:211		01
	RD357100	Carbon Resistor (chip)	10K 63M J	チップ抵抗	R:63-66,69,70,77,79,91-100, 107-123,146-153,182-184,190, 253,278-296		
	RD358100	Carbon Resistor (chip)	100K 63M J	チップ抵抗	R:10,11,14,18,19,21,22,26-31, 35-37,44,55-58, 83,84,189		01
	RD358470	Carbon Resistor (chip)	470K 63M J	チップ抵抗	R:7-9,24,25,67,155,240-248		01
	RD359100	Carbon Resistor (chip)	1.0M 63M J	チップ抵抗	R:53,54,162,214		01
	V4266800	Carbon Resistor (chip)	110 63M F	チップ抵抗	R:210,212,213,215-239		01
	V4101200	Circuit Board	DP	D P シ ー ト	(XW156C0)		
CN1	V3835800	Connector	TX24-80R-12ST-H1	基板用コネクタ			04
CN2	VE389200	Base Post Connector	53015 11P SE	ベースポスト			01
CN3	VE389300	Base Post Connector	53015 12P SE	ベースポスト			01
CN4	VV878100	Connector Base Post	DF13-14P-1.25DSA	コネクタベースポスト			04
CN5	VB389900	Connector Base Post	PH- 3P TE	コネクタベースポスト			01
CN6	VB858300	Connector Base Post	PH- 4P SE	コネクタベースポスト			01
CN7	VB389800	Connector Base Post	PH- 2P TE	コネクタベースポスト			01
CN8	V4459100	Pin Header	88333-044 44P SE	ピンヘッダー			05
CN9	VK633200	Connector Header	HIF3FC-34PA2.54DS	コネクタヘッダー			03
D1	VB493900	Diode	MA221	ダイオード			01
IC1	XV411A00	IC	W24257S-70LE-EL10	I C	SRAM 256K		07

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REF NO.	PART NO.	DESCRIPTION		部 品 名	REMARKS	QTY	RANK
IC1	XW433A00	IC	CY62256LL-70SNCT	I	C	J SRAM 256K	05
IC2	XM332A00	IC	TC74VHC04F	I	C	INVERTER	01
IC3	XW314A00	IC	TC74VHC174F	I	C	D-FF	02
IC4	XQ595A00	IC	SED1335F0B	I	C	LCDC	08
IC5	XM234A00	IC	HD63B01Y0RCE0F	I	C	PKS (CPU)	08
IC6	XR337A00	IC	TC74VHC32F-TEL	I	C	OR	01
IC7	XV513A00	IC	MSM82C51A-2GS-K	I	C	CEREAL CONTROL	06
IC8	XV481B00	IC	VIDEO	I	C	GATE ARRAY	07
IC9	XD660A00	IC	TC74HCU04AF-TP1	I	C	INVERTER	01
IC10	XW313A00	IC	TC74VHC125F	I	C	BUFFER	02
IC11	XN431A00	IC	CXA1645M-T6	I	C	RGB ENCODER	06
IC12	XV976A00	IC	M5M51008CFP-70H	I	C	SRAM 1M	07
IC13	XT487A00	IC	TC74VHC245F	I	C	TRANSCEIVER	03
IC14	XT487A00	IC	TC74VHC245F	I	C	TRANSCEIVER	03
IC15	XS720A00	IC	TC74HC245AF	I	C	TRANSCEIVER	03
IC16	XT812A00	IC	TC74VHC11F(EL)	I	C	TRIPLE 3 INPUT AND	01
IC17	XI939A00	IC	HD63266F	I	C	FDC	09
L1	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
-26	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
L27	VT872900	Chip Inductance	0.22U LEM2520TR22K	チップインダクタ			01
L28	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
L29	VT872900	Chip Inductance	0.22U LEM2520TR22K	チップインダクタ			01
L30	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
-52	VR243700	Chip Inductance	56U LEM2520 T 560J	巻線チップインダクタ			01
L53	VT872900	Chip Inductance	0.22U LEM2520TR22K	チップインダクタ			01
TR1	VI242900	Transistor	2SA1020-Y(TPE6) Y	トランジスタ			01
TR2	VJ927200	Transistor	2SA1162 O,Y	トランジスタ			01
TR3	VJ927100	Transistor	2SC2712 Y	トランジスタ			01
TR4	VV556400	Transistor	2SC2412K Q,R,S	トランジスタ			01
TR5	VV556400	Transistor	2SC2412K Q,R,S	トランジスタ			01
X1	VY681200	Ceramic Resonator	8M CSTCC8.00MG	セラミック発振子			01
X2	V3082900	Quartz Crystal Unit	14.318MHZ DSX151G	水晶振動子			03
X3	V3083000	Quartz Crystal Unit	17.734MHZ DSX151G	水晶振動子			03
X4	VZ683900	Quartz Crystal Unit	6.144MHZ SMD-49	水晶振動子			03
X5	VQ274900	Ceramic Resonator	16M CSACS16.00MX24	セラミック振動子			03
	US060500	Ceramic Capacitor-CH (chip	5P 50V C	チップセラ (C H)	C:43		01
	US061100	Ceramic Capacitor-CH (chip	10P 50V D	チップセラ (C H)	C:76,78		01
	US061150	Ceramic Capacitor-CH (chip	15P 50V J	チップセラ (C H)	C:32,40,71,72		01
	US061180	Ceramic Capacitor-CH (chip	18P 50V J	チップセラ (C H)	C:35,39		01
	US061270	Ceramic Capacitor-CH (chip	27P 50V J	チップセラ (C H)	C:27,41,44		01
	US061470	Ceramic Capacitor-CH (chip	47P 50V J	チップセラ (C H)	C:28-30,42		01
	US061680	Ceramic Capacitor-SL (chip	68P 50V J	チップセラ (S L)	C:52		01
	US062470	Ceramic Capacitor-SL (chip	470P 50V J	チップセラ (S L)	C:14,77		01
	US064100	Ceramic Capacitor-B (chip)	0.01 50V K	チップセラ (B)	C:1-3,5-10,12,13,15,16,18,22-26,38,50,51,60-63,66,67,69,70,74,75,79,81,82		01
	US135100	Ceramic Capacitor-F (chip)	0.1 16V Z	チップセラ (F)	C:17,31,33,34,36,45-47,53,55,58,64,65,68		01
	UF018100	Electrolytic Cap. (chip)	100 6.3V	チップケミコン	C:4,20,21,73		01
	UF028100	Electrolytic Cap. (chip)	100 10V	チップケミコン	C:37		01
	UF037220	Electrolytic Cap. (chip)	22 16V	チップケミコン	C:54		01
	UF066330	Electrolytic Cap. (chip)	3.3 50V	チップケミコン	C:11		01
	UF118220	Electrolytic Cap. (chip)	220 6.3V UUR0J2	チップケミコン	C:48,49,56,80		01
	UF118470	Electrolytic Cap. (chip)	470 6.3V UUR0J4	チップケミコン	C:59		01
	RD155470	Carbon Resistor (chip)	470.0 1/4 J	チップ抵抗	R:2,3		01
	RD350000	Carbon Resistor (chip)	0 63M J	チップ抵抗	R:17-19,22,31-34,65,75,83-85,92,93,109,115,134-139,147		01
	RD354750	Carbon Resistor (chip)	75 63M J	チップ抵抗	R:86		01
	RD355100	Carbon Resistor (chip)	100 63M J	チップ抵抗	R:40,48-51,53-56,62,80,118-133		01
	RD355220	Carbon Resistor (chip)	220 63M J	チップ抵抗	R:58-60		01
	RD355820	Carbon Resistor (chip)	820 63M J	チップ抵抗	R:76		01
	RD356100	Carbon Resistor (chip)	1.0K 63M J	チップ抵抗	R:77,79,142-146		01
	RD356120	Carbon Resistor (chip)	1.2K 63M J	チップ抵抗	R:78		01
	RD356220	Carbon Resistor (chip)	2.2K 63M J	チップ抵抗	R:66,68-73,81		01
	RD356330	Carbon Resistor (chip)	3.3K 63M J	チップ抵抗	R:94-108,110-114,116		01
	RD356560	Carbon Resistor (chip)	5.6K 63M J	チップ抵抗	R:4,140,141		01
	RD357100	Carbon Resistor (chip)	10K 63M J	チップ抵抗	R:10,28,35-39,52,57,61,63,88,89,117		01
	RD357150	Carbon Resistor (chip)	15K 63M J	チップ抵抗	R:5-9,15,16,41-47		01
	RD357220	Carbon Resistor (chip)	22K 63M J	チップ抵抗	R:1,11-14,20,21,23-27,29,30,91		01

*: New parts

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REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
	RD357470	Carbon Resistor (chip)	47K 63M J	チ ッ プ 抵 抗	R:87	01
	RD357560	Carbon Resistor (chip)	56K 63M J	チ ッ プ 抵 抗	R:90	01
	RD358470	Carbon Resistor (chip)	470K 63M J	チ ッ プ 抵 抗	R:148	01
	RD359100	Carbon Resistor (chip)	1.0M 63M J	チ ッ プ 抵 抗	R:67,74,82	01
* * *	V4197300	Circuit Board	EN	E N シ ー ト	(XW443B0)	
	V4197500	Circuit Board	PN1	P N 1 シ ー ト	(XW443B0)	
	V4197200	Circuit Board	PN2	P N 2 シ ー ト	(XW443B0)	
CN1	VB858800	Connector Base Post	PH- 9P SE	コネクタベースポスト		01
CN2	VB858300	Connector Base Post	PH- 4P SE	コネクタベースポスト		01
CN3	VH904200	Connector Base Post	PH-14P SE	コネクタベースポスト		01
CN4	VK015600	Connector Base Post	PH-16P SE	コネクタベースポスト		01
CN101	VH904200	Connector Base Post	PH-14P SE	コネクタベースポスト		01
CN102	VB858900	Connector Base Post	PH-10P SE	コネクタベースポスト		01
CN201	VB858300	Connector Base Post	PH- 4P SE	コネクタベースポスト		01
D1	VB941200	Diode	1SS133,1SS176	ダ イ オ ー ド		01
-65	VB941200	Diode	1SS133,1SS176	ダ イ オ ー ド		01
D101	VB941200	Diode	1SS133,1SS176	ダ イ オ ー ド		01
-120	VB941200	Diode	1SS133,1SS176	ダ イ オ ー ド		01
D201	VB941200	Diode	1SS133,1SS176	ダ イ オ ー ド		01
D202	VB941200	Diode	1SS133,1SS176	ダ イ オ ー ド		01
EC201	VU481300	Encoder	REB161 PVB 15F	1 6 形 エ ン コ ー ダ	TEMPO,DATA	03
IC1	XS711200	IC	MN101C027YB	I	CPU	06
IC2	V4341100	Transistor Array	TD62083CP	トランジスタアレイ		04
IC4	VH885000	Transistor Array	TD62785P SOURCE	トランジスタアレイ		04
LE1	VG778600	LED	SLZ290B-03-T2 GR	L E D	SONG FILE DIRECTORY	01
-6	VG778600	LED	SLZ290B-03-T2 GR	L E D	(SONG 1-5, SONG SETUP)	01
LE7	VT659100	LED	SLZ-174B-03-T1 RE	L E D	SONG PLAYER	01
LE8	VT659100	LED	SLZ-174B-03-T1 RE	L E D	AUTO ACCOMPANIMENT	01
LE9	VG778600	LED	SLZ290B-03-T2 GR	L E D	PRESET STYLE	01
-26	VG778600	LED	SLZ290B-03-T2 GR	L E D	(8BEAT, ...,BALLROOM)	01
					FLASH STYLE(1-8),	
					DISKDIRECT	
LE27	VD180000	LED	SLZ-190B-03 RE	L E D	ACCOMPANIMENT CONTROL	01
-44	VD180000	LED	SLZ-190B-03 RE	L E D	(INTRO, ...,START/STOP)	01
LE101	VT659100	LED	SLZ-174B-03-T1 RE	L E D	BEAT	01
LE102	VT361700	LED	SLZ-274B-03-T1 GR	L E D	BEAT	01
-104	VT361700	LED	SLZ-274B-03-T1 GR	L E D	BEAT	01
LE105	VT425300	LED	SLZ-290B-17-T1 GR	L E D	TEMPO	01
LE106	VT425100	LED	SLZ-190B-17-T1 RE	L E D	DATA	01
SW1	VV439800	Tact Switch	SKQNAJ	タ ク ト S W	SONG FILE DIRECTORY,	01
-65	VV439800	Tact Switch	SKQNAJ	タ ク ト S W	SONG PLAYER,AUTO ACCOMP.,	01
					PRESET STYLE,FLASH STYLE,	
					ACCOMP.CONTROL,MENU,	
					KEYBOARD TRANSPOSE,	
					MULTI PAD,DIGITAL STUDIO	
SW101	VV439800	Tact Switch	SKQNAJ	タ ク ト S W	DIRECT ACCESS,MAIN MIXER,	01
-120	VV439800	Tact Switch	SKQNAJ	タ ク ト S W	PART(ON/OFF),1-8,EXIT	01
TR1	VK165500	Digital Transistor	DTC123JS TP	デジタルトランジスタ		01
-4	VK165500	Digital Transistor	DTC123JS TP	デジタルトランジスタ		01
TR5	VT455400	Digital Transistor	DTB123YS TP	デジタルトランジスタ		01
X1	V4094000	Ceramic Resonator	8.00M EFOMC8004T4	セラミック発振子		01
X1	V4100400	Ceramic Resonator	8.00M EFOMC8004A4	セラミック発振子		02
	VC694800	Semiconductive Cera. Cap.	0.1 25V Z	半 導 体 セ ラ コ ン	C:1	01
	FG644100	Ceramic Capacitor-F	0.01 50V Z	セ ラ コ ン (F)	C:3,6,8	01
	FG651220	Ceramic Capacitor-SL	22P 50V J	セ ラ コ ン (S L)	C:4,5	01
	UM378100	Electrolytic Cap.	100.00 10.0V	ケ ミ コ ン	C:3,9,10	01
	UR628100	Electrolytic Cap.	100.00 10.0V	ケ ミ コ ン	C:7	01
	HF455100	Carbon Resistor	100.0 1/4 J	カ ー ボ ン 抵 抗	R:36	01
	HF454270	Carbon Resistor	27.0 1/4 J	カ ー ボ ン 抵 抗	R:1-8,10,12,14,16	01
	HF457100	Carbon Resistor	10.0K 1/4 J	カ ー ボ ン 抵 抗	R:17-35	01
	HF457220	Carbon Resistor	22.0K 1/4 J	カ ー ボ ン 抵 抗	R:9,11,13,15	01
* * *	V4272800	Circuit Board	FU E GBR	F U シ ー ト	E,B (XV921B0)	
	V4272700	Circuit Board	FU U CSA	F U シ ー ト	U (XV921B0)	
	V4272900	Circuit Board	FU N	F U シ ー ト	N (XV921B0)	
	LB201530	Fuse Holder	PC-PH1	ヒ ュ ー ズ ホ ル ダ	E,B,U	4 01
	LB201530	Fuse Holder	PC-PH1	ヒ ュ ー ズ ホ ル ダ	N	12 01
CN1	VT807100	Base Post Connector	VH- 2P TE	ベ ー ス ポ ス ト		01
CN2	VZ365900	Base Post Connector	VA- 2P TE	ベ ー ス ツ キ ポ ス ト		01

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RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
CN3	VG879900	Base Post Connector	VA- 2P TE	ベースツキポスト		01
CN4	LB932060	Base Post Connector	VH- 6P TE	ベースポスト		01
CN5	LB932050	Base Post Connector	VH- 5P TE	ベースポスト	N	01
F1	KB003080	Fuse	2.50A S	ヒューズ	E,B	01
F1	KB003090	Fuse	3.15A JU	ヒューズ	U,N	01
F2	KB003060	Fuse	1.60A S	ヒューズ	N	01
F3	KB003060	Fuse	1.60A S	ヒューズ	N	01
J1	VD041700	Jumper Wire	0.55	ジャンパー線	U	
J2	VD041700	Jumper Wire	0.55	ジャンパー線	E,B,U	
L1	VY670400	Coil	S-150-J0	コイル 11.7ミリ	E,B,N	07
L2	VF790900	Coil	SU10V-D20010	コイル 10U		03
	VY675000	Capacitor	0.01 250V J.U.C.S	規格認定コン K H	C:1	01
	VY675100	Capacitor	4700P 250V J.U.C.S	規格認定コン K H	C:2,3	01
	VT388200	Circuit Board	INLET	インレットシート C E	(XQ666B0)	08
	VT308100	AC Inlet	CCT9302-0101M	AC インレット 2P		02
CN1	VG879900	Base Post Connector	VA- 2P TE	ベースツキポスト		01
	VY638900	Circuit Board	INV	IN V シート	(XT122A0)	13
C1	VP318400	Electrolytic Cap. (chip)	0.068 250 ECQE26	コンデンサ		01
C2	VS147400	Ceramic Capacitor-SL	18P 3KV J	セラコン S L		01
CN1	LB919020	Base Post Connector	XH 2P SE	ベースツキポスト		01
CN2	VT389600	Base Post Connector	53259 4P SE	ベースポスト		01
L1	VS587900	Coil	LH L 08TB221K	コイル 220UH		01
L2	VS602500	Inverter Transformer	CLF16A	インバータトランス		07
TR1	VS185700	Transistor	2SC3669-O/Y(TPF2)	トランジスタ		01
TR1	VS185600	Transistor	2SD1863 TV2 82-390	トランジスタ		01
TR2	VS185700	Transistor	2SC3669-O/Y(TPF2)	トランジスタ		01
TR2	VS185600	Transistor	2SD1863 TV2 82-390	トランジスタ		01
	HF756560	Carbon Resistor	5.6K 1/4 J	カーボン抵抗	R:1,2	01
	V4270600	Circuit Board	DJACK	D J A C K シート	(XV936B0)	
	V4582000	Circuit Board	AJACK	A J A C K シート	(XV936B0)	
	VD041700	Jumper Wire	0.55	ジャンパー線		
	EP600140	Bind Head Tapping Screw-B	3.0X10 MFZN2BL	+ バインド B タイ		01
CN1	VB390100	Connector Base Post	PH- 5P TE	コネクタベースポスト		01
CN2	VB390400	Connector Base Post	PH- 8P TE	コネクタベースポスト		01
CN3	VB390000	Connector Base Post	PH- 4P TE	コネクタベースポスト		01
CN4	VB389800	Connector Base Post	PH- 2P TE	コネクタベースポスト		01
CN101	VE352600	Connector Base Post	PH-14P TE	コネクタベースポスト		01
CN102	VB390000	Connector Base Post	PH- 4P TE	コネクタベースポスト		01
CN104	VB389900	Connector Base Post	PH- 3P TE	コネクタベースポスト		01
D1	VB941200	Diode	1SS133,1SS176	ダイオード		01
-5	VB941200	Diode	1SS133,1SS176	ダイオード		01
IC1	VD473200	Photo Coupler	6N137	フォトカブラ		05
IC2	VD473200	Photo Coupler	6N137	フォトカブラ		05
IC3	XU463A00	IC	SN75C1168N	I C	LINE TRANSCEIVER	05
IC4	IG142250	IC	SN74HCU04N	I C	INVERTER	01
JK1	VS056300	Phone Jack	HLJ7001-01-	ホーンコネクタ	FOOT PEDAL(VOLUME)	01
JK2	VB312600	Phone Jack	YKB21-5012 BL	ホーンコネクタ (黒)	FOOT PEDAL(SWITCH 2)	02
JK3	VB312600	Phone Jack	YKB21-5012 BL	ホーンコネクタ (黒)	FOOT PEDAL(SWITCH 1)	02
JK4	VJ249300	DIN Connector	5P3 YKF51-50	D I N コネクタ 2 連	MIDI B(IN/OUT)	03
JK5	VJ249300	DIN Connector	5P3 YKF51-50	D I N コネクタ 2 連	MIDI A(IN/OUT)	03
JK6	VM761000	DIN Connector	DIN 8P MD-S810	複合コネクタ	TO HOST	03
JK7	VZ743800	DIN Connector	DIN 6P MD-S610	複合コネクタ	PC KEYBOARD	02
JK8	VI311100	Pin Jack	YKC21-3017 1P	ピンジャック 1 P	VIDEO OUT(NTSC/PAL)	01
JK101	LB101870	Phone Jack	YKB21-5006	ホーンコネクタ	LOOP SEND(L/L+R)	03
JK102	VB312600	Phone Jack	YKB21-5012 BL	ホーンコネクタ (黒)	LOOP SEND(R)	02
JK103	VC687500	Phone Jack	YKB21-5014 BL	ホーンコネクタ (黒)	AUX IN/LOOP RETURN(L/L+R)	01
JK103	VB312600	Phone Jack	YKB21-5012 BL	ホーンコネクタ (黒)		02
JK104	VB312600	Phone Jack	YKB21-5012 BL	ホーンコネクタ (黒)	AUX IN/LOOP RETURN(R)	02
JK105	VC687500	Phone Jack	YKB21-5014 BL	ホーンコネクタ (黒)	LINE OUT MAIN(L/L+R)	01
JK106	VB312600	Phone Jack	YKB21-5012 BL	ホーンコネクタ (黒)	LINE OUT MAIN(R)	02
JK107	LB101870	Phone Jack	YKB21-5006	ホーンコネクタ	LINE OUT SUB(1)	03
JK108	LB101870	Phone Jack	YKB21-5006	ホーンコネクタ	LINE OUT SUB(2)	03
L1	VB835000	Coil	FL5R200QNT	コイル 20U		01
-20	VB835000	Coil	FL5R200QNT	コイル 20U		01
L21	VD041700	Jumper Wire	0.55	ジャンパー線		
L22	VD041700	Jumper Wire	0.55	ジャンパー線		
L101	VB835000	Coil	FL5R200QNT	コイル 20U		01

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REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
L102	VB835000	Coil	コイル 2 0 U			01
L103	GE300670	Ferrite Beads	フェライトビーズ			02
L104	VB835000	Coil	コイル 2 0 U			01
L105	VB835000	Coil	コイル 2 0 U			01
L106	VF456600	Coil	コイル 8 0 U			03
L107	VF456600	Coil	コイル 8 0 U			03
L108	VB835000	Coil	コイル 2 0 U			01
L109	GE300670	Ferrite Beads	フェライトビーズ			02
L110	VB835000	Coil	コイル 2 0 U			01
L111	VB835000	Coil	コイル 2 0 U			01
L112	GE300670	Ferrite Beads	フェライトビーズ			02
L113	VB835000	Coil	コイル 2 0 U			01
MFA	--	Jack Plate A	ジャック金具 A	(V387430)		
MFB	--	Jack Plate B	ジャック金具 B	(V387440)		
MFC	--	Jack Plate C	ジャック金具 C	(V387450)		
MFD	--	Jack Plate D	ジャック金具 D	(V387460)		
MFE	--	Jack Plate E	ジャック金具 E	(V387470)		
SW1	VQ665200	Slide Switch	スライド S W	HOST SELECT(MIDI A)		03
VR101	VV049200	Rotary Variable Resistor	ニ連ロータリー V R	AUX IN/LOOP RETURN(TRIM)		03
WB1	GE300670	Ferrite Bead	フェライトビーズ			02
-7	GE300670	Ferrite Bead	フェライトビーズ			02
WB101	VB835000	Coil	コイル 2 0 U			01
-103	VB835000	Coil	コイル 2 0 U			01
	FG612220	Ceramic Capacitor-B	セラコン (B)	C:5,6,9,10		01
	FG613100	Ceramic Capacitor-B	セラコン (B)	C:18,101,102,105-108		01
	FG644100	Ceramic Capacitor-F	セラコン (F)	C:7,8,11,12,14,15,17,19,109		01
	UN817470	Electrolytic Cap.-BP	B P ケ ミ コ ン	C:16		01
	UN866470	Electrolytic Cap.-BP	B P ケ ミ コ ン	C:103,104		01
	UR837100	Electrolytic Cap.	ケ ミ コ ン	C:13		01
	UR866100	Electrolytic Cap.	ケ ミ コ ン	C:2		01
	VC694800	Semiconductive Cera. Cap.	半 導 体 セ ラ コ ン	C:1,3,4		01
	HF755100	Carbon Resistor	カ ー ボ ン 抵 抗	R:28,29		01
	HF755220	Carbon Resistor	カ ー ボ ン 抵 抗	R:11-13,15-17,24,26		01
	HF756100	Carbon Resistor	カ ー ボ ン 抵 抗	R:2-4,7,8,14,18,30,33		01
	HF757100	Carbon Resistor	カ ー ボ ン 抵 抗	R: 1,19-23,25,27,31,32,102-107		01
	HF757220	Carbon Resistor	カ ー ボ ン 抵 抗	R:5,9		01
	HF758470	Carbon Resistor	カ ー ボ ン 抵 抗	R:6,10		01
	VI912000	Circuit Board	M K シ ー ト	(XH07890)		14
	VQ359100	Adhesive Tape	粘 着 テ ー プ			
	VA078900	Jumper Wire	ジャンパー線			
CN1	VE387800	Base Post Connector	ベースポスト			01
CN2	VE387900	Base Post Connector	ベースポスト			01
CN3	VE387000	Base Post Connector	ベースポスト			03
D1	VB941200	Diode	ダイオード			01
-123	VB941200	Diode	ダイオード			01
IC1	IG001390	IC	IC	OP AMP		03
SC1	LB016030	Connector	コネクター			01
VR1	V4819100	Trimmer Potentiometer	半 固 定 V R			02
VR2	V4818900	Trimmer Potentiometer	半 固 定 V R			02
	VC694800	Semiconductive Cera. Cap.	半 導 体 セ ラ コ ン	C:1,2,3		01
	UJ827470	Electrolytic Cap.	ケ ミ コ ン	C:4		01
	HF755150	Carbon Resistor	カ ー ボ ン 抵 抗	R:1,3		01
	HF756100	Carbon Resistor	カ ー ボ ン 抵 抗	R:4,5,8,10,11		01
	HF756220	Carbon Resistor	カ ー ボ ン 抵 抗	R:9		01
	HF756680	Carbon Resistor	カ ー ボ ン 抵 抗	R:2		01
	HF757470	Carbon Resistor	カ ー ボ ン 抵 抗	R:6,7		01
*	V4197800	Circuit Board	M V シ ー ト	(XW438B0)		
*	V4197700	Circuit Board	M I C / V R シ ー ト	(VW438B0)		
*	V4197600	Circuit Board	M I C / H P シ ー ト	(XW438B0)		
*	V4197100	Circuit Board	P N 3 シ ー ト	(XW438B0)		
	VD041700	Jumper Wire	ジャンパー線			
	--	Connector Assembly	M I C V R 束 線	(V414560)		
CN1	VK015600	Connector Base Post	コネクタベースポスト			01
CN2	VB858900	Connector Base Post	コネクタベースポスト			01
CN3	VB858200	Connector Base Post	コネクタベースポスト			01
CN102	VB390500	Connector Base Post	コネクタベースポスト			03
CN103	VB390300	Connector Base Post	コネクタベースポスト			01
CN301	VB390400	Connector Base Post	コネクタベースポスト			01

*: New parts

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REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
D1	VB941200	Diode	ダイオード			01
-63	VB941200	Diode	ダイオード			01
IC101	XC520A00	IC	IC	OP AMP		01
IC102	XC520A00	IC	IC	OP AMP		01
JK101	LB101870	Phone Jack	ホンコネクタ	MIC/LINE IN		03
JK102	LB101870	Phone Jack	ホンコネクタ	PHONES		03
L101	VF456600	Coil	コイル			03
LE1	VZ460300	Photo Diode	発光ダイオード	} VOICE EFFECT		02
-6	VZ460300	Photo Diode	発光ダイオード			02
LE7	VG778600	LED	LED	PART SELECT		01
-10	VG778600	LED	LED	(LEFT,RIGHT1-3)		01
LE11	VD180000	LED	LED	PART ON/OFF		01
-15	VD180000	LED	LED	(LEFT HOLD,LEFT,RIGHT1-3)		01
LE16	VG778600	LED	LED	VOICE(PIANO,...,PERCUSSION)		01
-31	VG778600	LED	LED	XG,ORGAN FLUTES, CUSTOM VOICE		01
LE32	VZ460300	Photo Diode	発光ダイオード	VOCAL HARMONY		02
-34	VZ460300	Photo Diode	発光ダイオード	(TALK,DSP,V.H.)		02
LE35	VT361700	LED	LED	DISK IN USE		01
LE36	VT659100	LED	LED	REGIST.MEMORY(FREEZE)		01
LE201	VD180000	LED	LED	MIC/LINE IN(OVER)		01
LE202	VG778600	LED	LED	MIC/LINE IN(SIGNAL)		01
SW1	VV439800	Tact Switch	タクトスイッチ	LCD Selects(R),DEMO,		01
-63	VV439800	Tact Switch	タクトスイッチ	VOICE EFFECT,PAGE CONT., MUSIC DATABASE,VOICE, REGIST.MEMORY,PART SELECT		01
				PART ON/OFF,UPPER OCTAVE, MEMORY,VOCAL HARMONY, DISK IN USE		
* SW201	V4400100	Slide Switch	スライドスイッチ	MIC/LINE IN(MIC1,2,LINE)		02
TH1	VS696900	Thermistor	サーミスタ			01
TR1	IC174070	Transistor	トランジスタ			01
* VR1	V3820700	Rotary Variable Resistor	ロータリーVR	LCD CONTRAST		01
VR201	VF636100	Rotary Variable Resistor	二連ロータリーVR	INPUT VOLUME		03
VR301	VR531900	Rotary Variable Resistor	二連ロータリーVR	MASTER VOLUME		03
WB101	GE300670	Ferrite Bead	フェライトビーズ			02
-116	GE300670	Ferrite Bead	フェライトビーズ			02
* ZD1	VP584900	Zener Diode	ツェナーダイオード			01
	FG612220	Ceramic Capacitor-B	セラコン (B)	C:105		01
	FG613270	Ceramic Capacitor-B	セラコン (B)	C:110		01
	FG613820	Ceramic Capacitor-B	セラコン (B)	C:109		01
	FG644100	Ceramic Capacitor-F	セラコン (F)	C:117,118		01
	FG652100	Ceramic Capacitor-SL	セラコン (S L)	C:103,107,108		01
	VC694800	Semiconductive Cera. Cap.	半導体セラコン	C:101,102,113,114		01
	VT757800	Monolithic Ceramic Cap.	積層セラコン	C:104		01
	UN866100	Electrolytic Cap.-BP	B P ケミコン	C:106,111,112		01
	UR848100	Electrolytic Cap.	ケミコン	C:115,116		01
	HF455100	Carbon Resistor	カーボン抵抗	R:103		01
	HF455150	Carbon Resistor	カーボン抵抗	R:5		01
	HF455220	Carbon Resistor	カーボン抵抗	R:108,111		01
	HF456100	Carbon Resistor	カーボン抵抗	R:101,106,117		01
	HF456120	Carbon Resistor	カーボン抵抗	R:1,2		01
	HF456330	Carbon Resistor	カーボン抵抗	R:4,109		01
	HF456560	Carbon Resistor	カーボン抵抗	R:3		01
	HF457100	Carbon Resistor	カーボン抵抗	R:110		01
	HF457270	Carbon Resistor	カーボン抵抗	R:102		01
	HF458100	Carbon Resistor	カーボン抵抗	R:104,105,112,113		01
	VH696500	Carbon Resistor	カーボン抵抗	R:114,115		
* CN1	V4272100	Circuit Board	NET シート	(XW374B0)		
CN2	LB932020	Base Post Connector	ベースポスト			01
L1	V4133500	Network Coil	ネットワークコイル	(V415410)		03
* VQ755900		Electrolytic Cap.-BP	B P ケミコン	C:1		01
* CN1	V4271500	Circuit Board	SCSI シート	(XW083C0)		
CN2	VV331100	Connector	コネクタ FCN-235D			05
L1	VL536600	Connector Header	コネクタヘッダー			03
-18	RD250000	Carbon Resistor (chip)	チップ抵抗			01
	RD250000	Carbon Resistor (chip)	チップ抵抗			01

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REF NO.	PART NO.	DESCRIPTION	部 品 名	REMARKS	QTY	RANK
*	V4101300	Circuit Board	TG	(XW157E0)		
	VK863100	IC Socket	DICF-42CS-E	I C ソ ケ ッ ト		03
CN1	LB919020	Base Post Connector	XH 2P SE	ベ ー ス ツ キ ポ ス ト		01
CN2	LB933090	Base Post Connector	VH- 9P SE	ベ ー ス ポ ス ト		02
CN3	LB919030	Base Post Connector	XH 3P SE	ベ ー ス ツ キ ポ ス ト		01
CN4	LB919040	Base Post Connector	XH 4P SE	ベ ー ス ツ キ ポ ス ト		01
CN5	VB858900	Connector Base Post	PH-10P SE	コ ネ ク タ ベ ー ス ポ ス ト		01
CN6	VB858200	Connector Base Post	PH- 3P SE	コ ネ ク タ ベ ー ス ポ ス ト		01
CN7	VB858800	Connector Base Post	PH- 9P SE	コ ネ ク タ ベ ー ス ポ ス ト		01
CN8	VV345900	SIMM Socket	SX3LB-72S-1.27DSA	S I M M ソ ケ ッ ト		04
CN9	VV345900	SIMM Socket	SX3LB-72S-1.27DSA	S I M M ソ ケ ッ ト		04
CN11	V3836000	Connector	TX24-80R-LT-H1	基 板 用 コ ネ ク タ		04
CN12	VB389800	Connector Base Post	PH- 2P TE	コ ネ ク タ ベ ー ス ポ ス ト		01
D1	VB493900	Diode	MA221	ダ イ オ ー ド		01
-4	VB493900	Diode	MA221	ダ イ オ ー ド		01
EM1	FZ006970	LC Filter	LS MT Y223NB	L C フィ ル タ ー E M I		02
IC1	XS725A00	IC	TC203C760HF-002	I C	SWP30B	19
IC2	XT013A00	IC	YSS236-F	I C	VOP3	13
IC3	XM332A00	IC	TC74VHC04F	I C	INVERTER	01
IC4	XU829A00	IC	PCM1716E	I C	DAC	06
IC5	XU829A00	IC	PCM1716E	I C	DAC	06
IC6	XU462A00	IC	MSM514260C-60TS-K	I C	DRAM 4M	08
IC7	XS963A00	IC	HD74LVC138FP	I C	DECORDER	02
IC8	XU462A00	IC	MSM514260C-60TS-K	I C	DRAM 4M	08
IC9	XS516A00	IC	UPC2933T-E1	I C	REGULATOR +3.3V	03
IC10	XS516A00	IC	UPC2933T-E1	I C	REGULATOR +3.3V	03
IC11	XW795A00	IC	HD6437043AE00F	I C	CPU	11
IC12	XS725A00	IC	TC203C760HF-002	I C	SWP30B	19
IC13	XF483A00	IC	LB1443N	I C	LEVEL METER DRIVER	02
IC14	XF291A00	IC	UPC4570G2	I C	OP AMP	03
IC15	XV510A00	IC	AK5351-VF-E2	I C	A/D CONVERTER	08
IC16	XS370A00	IC	D65621GF-028-3B9	I C	SMI	06
IC17	XU462A00	IC	MSM514260C-60TS-K	I C	DRAM 4M	08
IC18	XR337A00	IC	TC74VHC32F-TEL	I C	OR	01
IC19	XT487A00	IC	TC74VHC245F	I C	TRANSCEIVER	03
-23	XT487A00	IC	TC74VHC245F	I C	TRANSCEIVER	03
IC24	XT014A00	IC	TC74VHC08F	I C	AND	01
IC25	XW724B00	IC	28F400B5	I C	SUB PROGRAM LOW 4M F-ROM	
IC26	XW725B00	IC	28F400B5	I C	SUB PROGRAM HIGH 4M F-ROM	
IC27	XT014A00	IC	TC74VHC08F	I C	AND	01
IC28	XR337A00	IC	TC74VHC32F-TEL	I C	OR	01
IC29	XT487A00	IC	TC74VHC245F	I C	TRANSCEIVER	03
-32	XT487A00	IC	TC74VHC245F	I C	TRANSCEIVER	03
IC33	XW696100	IC	MX23C1610PC-10	I C	ROM 16M PARAMETER	08
IC34	XT487A00	IC	TC74VHC245F	I C	TRANSCEIVER	03
-37	XT487A00	IC	TC74VHC245F	I C	TRANSCEIVER	03
IC38	XU462A00	IC	MSM514260C-60TS-K	I C	DRAM 4M	08
IC39	XU462A00	IC	MSM514260C-60TS-K	I C	DRAM 4M	08
IC40	XR337A00	IC	TC74VHC32F-TEL	I C	OR	01
IC41	XW765100	IC	MX23C6410MC-10	I C	ROM 64M WAVE2 LOW	11
IC42	XW766100	IC	MX23C6410MC-10	I C	ROM 64M WAVE2 HIGH	11
IC43	XW154A00	IC	SLA904FF1T	I C	PIF32	05
IC44	XW763200	IC	MX23C6410MC-10	I C	ROM 64M WAVE1 LOW	
IC45	XW764200	IC	MX23C6410MC-10	I C	ROM 64M WAVE1 HIGH	
IC46	XS049A00	IC	HD74LVC541FPEL	I C	BUFFER	03
IC47	XU462A00	IC	MSM514260C-60TS-K	I C	DRAM 4M	08
IC48	XU462A00	IC	MSM514260C-60TS-K	I C	DRAM 4M	08
IC49	XS891A00	IC	UPC29M05T-E1	I C	REGULATOR +5V	03
L1	VT872900	Chip Inductance	0.22U LEM2520TR22K	チ ッ プ イ ン ダ ク タ		
-7	VT872900	Chip Inductance	0.22U LEM2520TR22K	チ ッ プ イ ン ダ ク タ		
L8	VR243700	Chip Inductance	56U LEM2520 T 560J	巻 線 チ ッ プ イ ン ダ ク タ		01
-22	VR243700	Chip Inductance	56U LEM2520 T 560J	巻 線 チ ッ プ イ ン ダ ク タ		01
X1	VV335600	Quartz Crystal Unit	33.8688M DSO751S	水 晶 発 振 器		06
X2	VV762900	Quartz Crystal Unit	7M SMD-49	水 晶 振 動 子		03
	UE166470	Electrolytic Cap.-BP (chip)	4.7 50V RV2BP	チ ッ プ B P コ ン	C:109	01
	UF018100	Electrolytic Cap. (chip)	100 6.3V	チ ッ プ ケ ミ コ ン	C:3,7,80,87,88,97,101,150,169, 191,209,212,237,238	01
	UF027220	Electrolytic Cap. (chip)	22 10V	チ ッ プ ケ ミ コ ン	C:16	01
	UF028100	Electrolytic Cap. (chip)	100 10V	チ ッ プ ケ ミ コ ン	C:59,60	01

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REF NO.	PART NO.	DESCRIPTION		部 品 名	REMARKS	QTY	RANK
	UF037100	Electrolytic Cap. (chip)	10 16V	チ ッ プ ケ ミ コ ン	C:18,53,54,65,66,71-74,111,114,134,135,140		01
	UF038100	Electrolytic Cap. (chip)	100 16V	チ ッ プ ケ ミ コ ン	C:2,23,28,40,45,46,69,70,225,254		01
	UF046470	Electrolytic Cap. (chip)	4.7 25V	チ ッ プ ケ ミ コ ン	C:51,52,117		01
	UF066330	Electrolytic Cap. (chip)	3.3 50V	チ ッ プ ケ ミ コ ン	C:246		01
	UF128470	Electrolytic Cap. (chip)	470 10V UUR1A4	チ ッ プ ケ ミ コ ン	C:14		02
	UF138470	Electrolytic Cap. (chip)	470 16V	チ ッ プ ケ ミ コ ン	C:34,38		02
	US061270	Ceramic Capacitor-CH (chip)	27P 50V J	チ ッ プ セ ラ (C H)	C:25-27,32,130,131,145,147,151,153-155,158-162,170-172		01
	US062100	Ceramic Capacitor-SL (chip)	100P 50V J	チ ッ プ セ ラ (S L)	C:110,125		01
	US062270	Ceramic Capacitor-SL (chip)	270P 50V J	チ ッ プ セ ラ (S L)	C:115,122		01
	US062470	Ceramic Capacitor-SL (chip)	470P 50V J	チ ッ プ セ ラ (S L)	C:129		01
	US064100	Ceramic Capacitor-B (chip)	0.01 50V K	チ ッ プ セ ラ (B)	C:1,4-6,8-13,15,17,20-22,24,29-31,33,35-37,39,41-44,49,50,61-64,75-79,81-86,89-96,98,99,102-108,112,116,118,120,123,124,126,127,132,133,139,142-144,146,148,149,152,156,157,163-168,173-190,192-208,210,211,213-224,226-236,239-245,249		01
	US135100	Ceramic Capacitor-F (chip)	0.1 16V Z	チ ッ プ セ ラ (F)	C:19,47,48,55-58,67,68,100,113,119,121,128,136-138,141,255,256		01
	RD350000	Carbon Resistor (chip)	0 63M J	チ ッ プ 抵 抗	R:9,11,16,18-20,22-24,27,28,33,34,43-47,55-59,65-67,71-73,77-79,81,82,84,86,88,93,95-98,100-104,113-115,121,122,137-142,147,181,182,186,187,192,194,195,200,201,205,213,215,		01
	RD354330	Carbon Resistor (chip)	33 63M J	チ ッ プ 抵 抗	R:224-253		01
	RD354470	Carbon Resistor (chip)	47 63M J	チ ッ プ 抵 抗	R:35,123,143-146		01
	RD354680	Carbon Resistor (chip)	68 63M J	チ ッ プ 抵 抗	R:5-7,10,12-15,17,118-120,125-136		01
	RD355100	Carbon Resistor (chip)	100 63M J	チ ッ プ 抵 抗	R:2,3,21,25,26,29-32,36,39-42,109,116,117,124,190,191,202,203,214,216,254-281		01
	RD355220	Carbon Resistor (chip)	220 63M J	チ ッ プ 抵 抗	R:112		01
	RD355330	Carbon Resistor (chip)	330 63M J	チ ッ プ 抵 抗	R:107,108		01
	RD355390	Carbon Resistor (chip)	390 63M J	チ ッ プ 抵 抗	R:282-287		01
	RD355470	Carbon Resistor (chip)	470 63M J	チ ッ プ 抵 抗	R:217-220		01
	RD355680	Carbon Resistor (chip)	680 63M J	チ ッ プ 抵 抗	R:111		01
	RD356100	Carbon Resistor (chip)	1.0K 63M J	チ ッ プ 抵 抗	R:4		01
	RD356330	Carbon Resistor (chip)	3.3K 63M J	チ ッ プ 抵 抗	R:110		01
	RD356470	Carbon Resistor (chip)	4.7K 63M J	チ ッ プ 抵 抗	R:75,76		01
	RD356560	Carbon Resistor (chip)	5.6K 63M J	チ ッ プ 抵 抗	R:85		01
	RD356680	Carbon Resistor (chip)	6.8K 63M J	チ ッ プ 抵 抗	R:1		01
	RD357100	Carbon Resistor (chip)	10K 63M J	チ ッ プ 抵 抗	R:48,49,60,80,83,87,94,99,105,106,148-179,188,189,199,204,223		01
	RD358100	Carbon Resistor (chip)	100K 63M J	チ ッ プ 抵 抗	R:50-54,61-64,68-70,74,89-92		01
	RD358470	Carbon Resistor (chip)	470K 63M J	チ ッ プ 抵 抗	R:37,38,206-212		01
	V4272300	Circuit Board	VSEL	V S E L シ ー ト	N (XW375B0)		
	EP600140	Bind Head Tapping Screw-B	3.0X10 M FZN2BL	+ バ イ ン ド B タ イ ト			01
	--	Holder, JACK		ジャ ッ ク 金 具	(V389140)		
	LB933050	Base Post Connector	VH- 5P SE	ベ ー ス ポ ス ト			01
	LB202280	Voltage Selector	HXW0131-01-910	電 圧 切 替 器			03
	XW052A00	Power Transformer	E ICE65 E	電 源 ト ラ ン ス	E,B		11
	XW051A00	Power Transformer	UL/CSA A	電 源 ト ラ ン ス	U		11
	XW053B00	Power Transformer	N ICE65 E	電 源 ト ラ ン ス	N		11
	VT015900	AC Cord Set	E 2P 2.5m	電 源 コ ー ド セ ッ ト	E,N		05
	VT015800	AC Cord Set	U2P 2.44m 7A	電 源 コ ー ド セ ッ ト	U		06
	VT016000	AC Cord Set	B 2P 2.5m	電 源 コ ー ド セ ッ ト	B		08
	VK726100	Connector	CCT5902	電 源 コ ネ ク タ	N		03
	VC843500	Push Switch	SDDL1216A J.U.C.S	プ ッ シ ュ S W	POWER ON/OFF		03
	V3331300	LCD	EDMMPU3BCF	液 晶 デ ィ ス プ レ イ			23
	V3075300	Floppy Disk Drive	MF355F-3252MG F	3 . 5 ” F D D			16

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