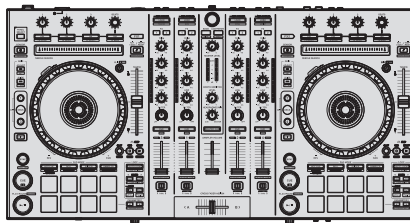


Pioneer

Service Manual



DDJ-SX2

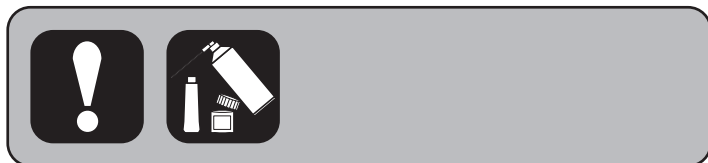
ORDER NO.
RRV4568

DJ Controller

DDJ-SX2

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
DDJ-SX2	SVYXE8	AC 100 V to 240 V	
DDJ-SX2	UXECB	AC 100 V to 240 V	
DDJ-SX2	FJKLPXE5	AC 100 V to 240 V	
DDJ-SX2	AXE5	AC 100 V to 240 V	



PIONEER CORPORATION 1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0031, Japan

PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.

PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium

PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

©PIONEER CORPORATION 2014

K-MZV OCT. 2014 Printed in Japan

SAFETY INFORMATION



This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product may contain a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 - Proposition 65

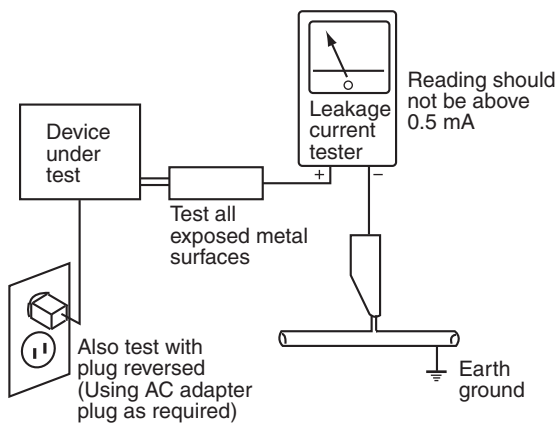
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120 V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

CONTENTS

SAFETY INFORMATION.....	2	
1. SERVICE PRECAUTIONS.....	4	
1.1 NOTES ON SOLDERING.....	4	A
1.2 NOTES ON DSP PCB ASSY.....	4	
2. SPECIFICATIONS.....	5	
3. BASIC ITEMS FOR SERVICE.....	6	
3.1 CHECK POINTS AFTER SERVICING.....	6	
3.2 JIGS LIST.....	6	
3.3 PCB LOCATIONS.....	7	
4. BLOCK DIAGRAM.....	8	
4.1 OVERALL WIRING DIAGRAM.....	8	
4.2 OVERALL BLOCK DIAGRAM.....	10	
5. DIAGNOSIS.....	12	
5.1 TROUBLESHOOTING.....	12	
5.2 OPERATION CHECK WITH Serato DJ.....	18	B
6. SERVICE MODE.....	21	
6.1 SERVICE MODE.....	21	
7. DISASSEMBLY.....	34	
8. EACH SETTING AND ADJUSTMENT.....	45	
8.1 NECESSARY ITEMS TO BE NOTED.....	45	
8.2 UPDATING OF THE FIRMWARE.....	46	
8.3 ITEMS FOR WHICH USER SETTINGS ARE AVAILABLE.....	47	
9. EXPLODED VIEWS AND PARTS LIST.....	50	
9.1 PACKING SECTION.....	50	
9.2 EXTERIOR SECTION.....	52	
10. SCHEMATIC DIAGRAM.....	56	
10.1 CONTROL PCB ASSY A, B and TRANSFER PCB ASSY.....	56	C
10.2 DSP, OUTPUT and BAL. PCB ASSYS.....	58	
10.3 MIX and CR FADER PCB ASSYS.....	60	
10.4 FRONT PCB ASSY.....	62	
10.5 TOUCH PCB ASSY.....	63	
10.6 LED PCB ASSY.....	64	
11. PCB CONNECTION DIAGRAM.....	66	
11.1 CONTROL PCB ASSY A, B and TRANSFER PCB ASSY.....	66	
11.2 DSP, OUTPUT and BAL. PCB ASSYS.....	70	
11.3 MIX and CR FADER PCB ASSYS.....	74	
11.4 FRONT and TOUCH PCB ASSYS.....	78	
11.5 LED PCB ASSY.....	80	
12. PCB PARTS LIST.....	81	D

1. SERVICE PRECAUTIONS

1.1 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.
- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 °C.
Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 °C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Do NOT use a soldering iron whose tip temperature cannot be controlled.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:

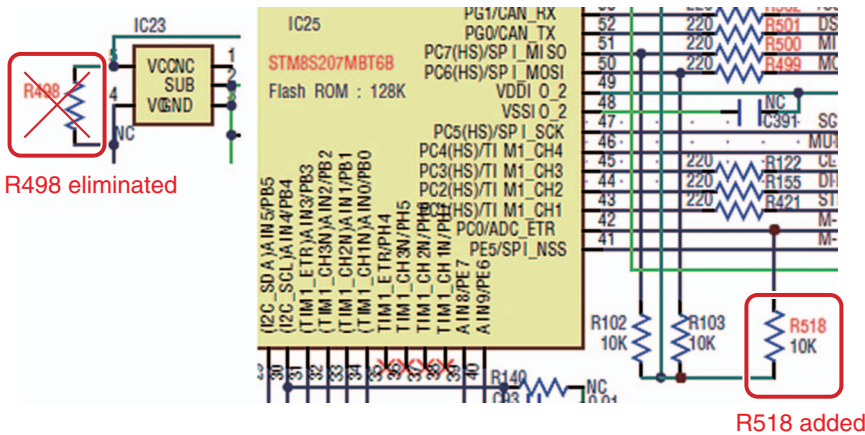
- Parts numbers of lead-free solder:
 - GYP1006 1.0 in dia.
 - GYP1007 0.6 in dia.
 - GYP1008 0.3 in dia.

1.2 NOTES ON DSP PCB ASSY

For stabilization of power-supply start, the circuitry of the DSP PCB Assy was modified during production. The serial numbers of the DDJ-SX2 units with the DSP PCB Assy before modification are as follows:

Model	Not modified	R498 eliminated
DDJ-SX2/UXECB	1 to 1891	1892 to 2409
DDJ-SX2/SVYXE8	None	1 to 200
DDJ-SX2/FJKLPXE5	1 to 900	901 to 1600
DDJ-SX2/AXE5	All modified	

The modified parts in the circuitry are shown below. The circuit diagram indicated in this service manual is that after modification. All the DSP PCB Assys to be supplied as service parts (Part No.: 704-S1MK2-B090) are modified ones.



Modified DSP PCB Assy

2. SPECIFICATIONS

AC adapter

Power.....AC 100 V to 240 V, 50 Hz/60 Hz
Rated current.....800 mA
Rated output.....DC 5 V, 3 A

General – Main Unit

Main unit weight..... 5.8 kg (12.8 lb)
Max. dimensions..... 664 mm (W) × 70.4 mm (H) × 353.4 mm (D)
(26.1 in. (W) × 2.8 in. (H) × 13.9 in. (D))
Tolerable operating temperature.....+5 °C to +35 °C (+41 °F to +95 °F)
Tolerable operating humidity..... 5 % to 85 % (no condensation)

Audio Section

Sampling rate 44.1 kHz
A/D, D/A converter.....24 bits
Frequency characteristic
USB, CD/LINE, MIC1, MIC2.....20 Hz to 20 kHz
S/N ratio (rated output, A-WEIGHTED)
USB 107 dB
CD/LINE 96 dB
PHONO 87 dB
MIC..... 80 dB
Total harmonic distortion (20 Hz — 20 kHzBW)
USB 0.003 %
CD/LINE 0.005 %
Standard input level / Input impedance
CD/LINE -12 dBu/47 kΩ
PHONO -52 dBu/47 kΩ
MIC..... -57 dBu/3 kΩ
Standard output level / Load impedance / Output impedance
MASTER OUT 1 +6 dBu/10 kΩ/330 Ω
MASTER OUT 2 +2 dBu/10 kΩ/1 kΩ
BOOTH OUT +6 dBu/10 kΩ/330 Ω
PHONE +4 dBu/32 Ω/32 Ω
Rated output level / Load impedance
MASTER OUT 1 24 dBu/10 kΩ
MASTER OUT 2 20 dBu/10 kΩ
BOOTH OUT 24 dBu/10 kΩ
Crosstalk
CD/LINE 82 dB
Channel equalizer characteristic
HI -26 dB to +6 dB (13 kHz)
MID..... -26 dB to +6 dB (1 kHz)
LOW -26 dB to +6 dB (70 Hz)

Input / Output terminals

CD input terminal
RCA pin jack.....2 sets
PHONO/LINE input terminals
RCA pin jack.....2 sets
MIC1 terminal
XLR connector/phone jack (Ø 6.3 mm) 1 set
MIC2 terminal
Phone jack (Ø 6.3 mm)..... 1 set
MASTER OUT 1 output terminal
XLR connector..... 1 set
MASTER OUT 2 output terminal
RCA pin jacks 1 set
BOOTH OUT output terminal
Phone jack (Ø 6.3 mm)..... 1 set
PHONES output terminal
Stereo phone jack (Ø 6.3 mm) 1 set
Stereo mini phone jack (Ø 3.5 mm) 1 set
USB terminal
B type 1 set

- For improvement purposes, specifications and design of this unit and the included software are subject to change without notice.

Accessories

- AC adapter (411-S1MK2-930)
- Power plug (SVYXE8: 420-DJM250-362-HA, 420-DJM250-407) (UXECB: 420-DJM250-361) (FJKLPXE5: 420-DJM250-362, 420-DJM250-407, 420-DJM250-363-HA, 420-DJM250-364-HA, 420-DJM250-409) (AXE5: 420-DJM250-408)
- USB cable (408-SUB-132)
- Warranty (for some regions) *1
- Operating Instructions (Quick Start Guide) (SVYXE8: 502-DJSXM2A-3416) (UXECB: 502-DJSXM2A-3416) (FJKLPXE5: 502-DJSXM2F-3419, 502-DJSXM2F-3429) (AXE5: 502-DJSXM2D-3418)
- Serato DJ EXPANSION PACK VOUCHER *2

*1: For the Japanese region, the corresponding information is provided on the back cover of the “Operating Instructions (Quick Start Guide)”.

*2: Note that the Serato DJ EXPANSION PACK VOUCHER cannot be reissued. You will need to use the voucher code to activate the expansion pack. Make sure to store it in a safe place so that you do not lose it.

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

A Items to be checked after servicing

To keep the product quality after servicing, confirm recommended check points shown below.

No.	Procedures	Check points
1	Check the firmware version.	The firmware version must be the latest one. If it is not the latest one, be sure to update it.
2	Confirm that the customer complaint has been resolved. If the problem pointed out by the customer occurs with a specific source (music file, input channel) or specific operation then perform that operation for checking.	The symptoms in question must not be reproduced. There must be no abnormality in audio signals or operations.
3	Check operations of the each operating elements and LEDs.	There must be no errors in operations of each button, the Jog dial, Performance pads, needle search pads, VOL, fader control, rotary encoder and LEDs in service mode.
4	Check the analog audio output. Connect this unit with a PC with the DJ application (Serato DJ) installed, via USB, then operate DJ application.	There must be no errors, such as noise, in audio signals and operations of the MASTER/HEADPHONES outputs.
5	Check the analog audio input. Input an audio signal via each channel (MIC/LINE/PHONO).	There must be no abnormality in audio signals or operations.
6	Check the appearance of the product.	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding audio.

Item to be checked regarding audio	
Distortion	Volume too high
Noise	Volume fluctuating
Volume too low	Sound interrupted

3.2 JIGS LIST

Jigs List

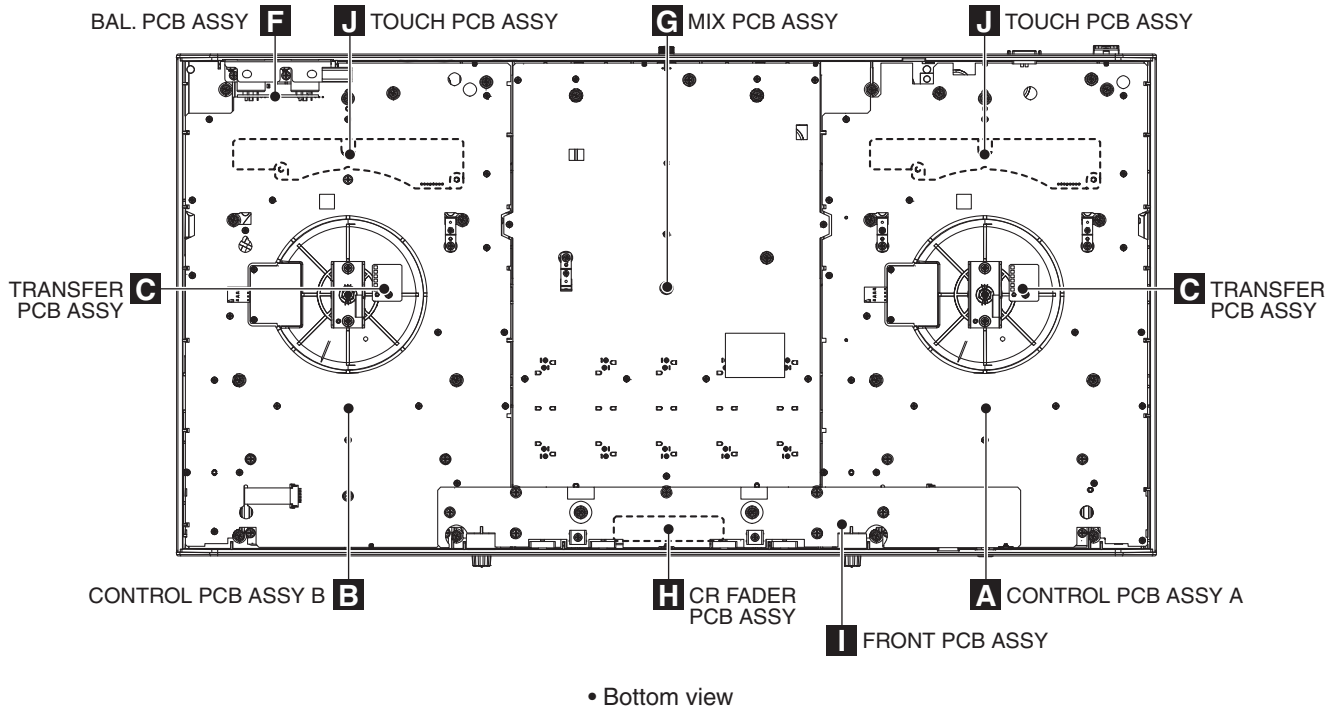
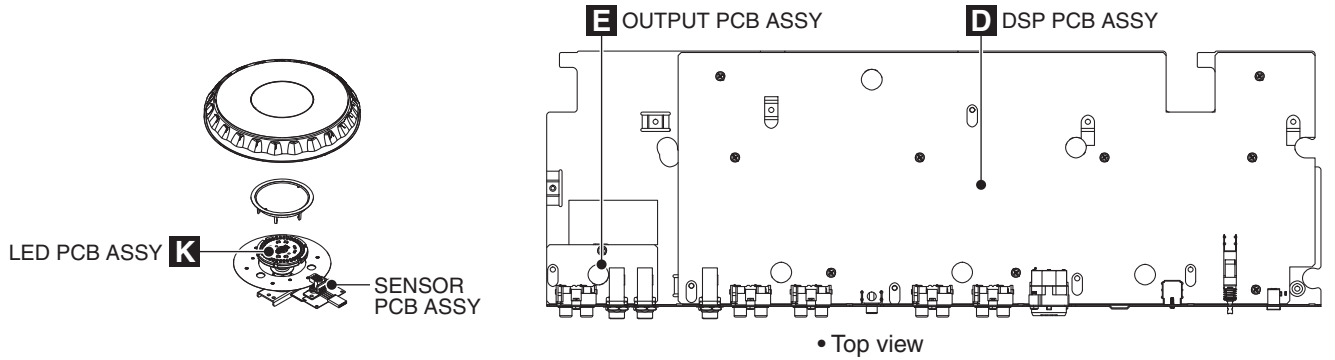
Jig Name	Part No.	Purpose of use / Remarks
USB cable	GGP1193	for PC connection
AC adapter	411-S1MK2-930	Accessory (Note: The power plug part is different.)
Extension FFC for diagnosis	GGP1246	37-pin FFC (Part No.: 406-S1-1234-HA) (Two FFCs required for diagnosis)

Lubricants and Glues List



Name	Part No.	Remarks
Adhesive	GYL1001	Refer to "7. DISASSEMBLY".
Adhesive	GYL1005	Refer to "7. DISASSEMBLY".
Grease	GEM1096	Refer to "7. DISASSEMBLY".

3.3 PCB LOCATIONS

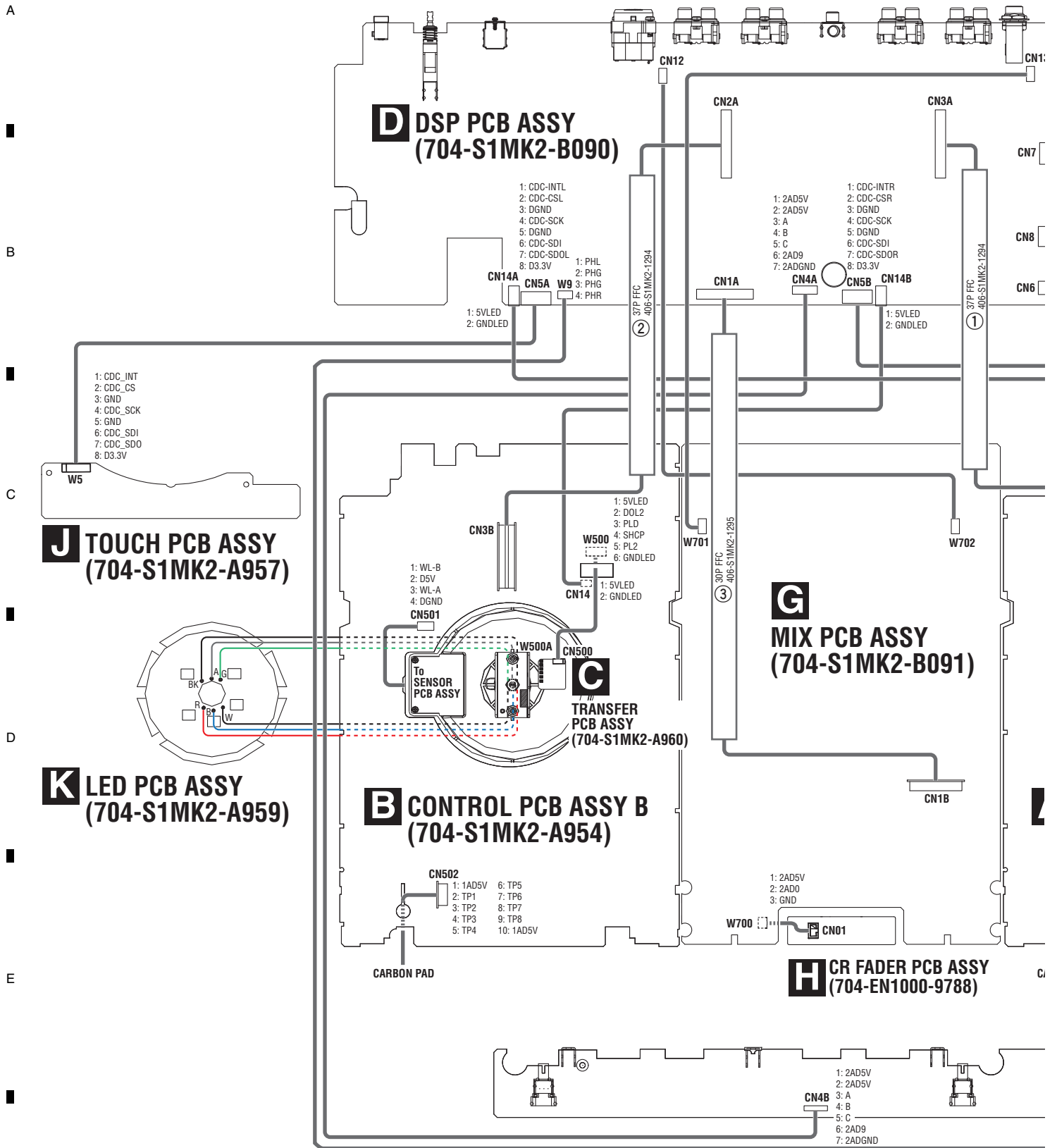


NOTES: ● Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
 ● The \triangle mark found on some component parts indicates the importance of the safety factor of the part.
 Therefore, when replacing, be sure to use parts of identical designation.

Mark No.	Description	Part No.	Mark No.	Description	Part No.
LIST OF ASSEMBLIES					
1..	CR FADER PCB ASSY	704-EN1000-9788	1..	I/O & FIX PLATE ASSY	704-S1MK2-A985
1..	SENSOR PCB ASSY	704-PDJ33-A007-HA	2..	DSP PCB ASSY	704-S1MK2-B090
1..	MIX PCB ASSY	704-S1MK2-B091	2..	OUTPUT PCB ASSY	704-S1MK2-A958
1..	CONTROL PCB ASSY A	704-S1MK2-A953	1..	BAL. PCB & FIXED P. ASSY	704-S1MK2-A986
1..	CONTROL PCB ASSY B	704-S1MK2-A954	2..	BAL. PCB ASSY	704-S1MK2-A956
1..	FRONT PCB ASSY	704-S1MK2-B092	1..	LED & COVER ASSY	704-S1MK2-A961
1..	TOUCH PCB ASSY	704-S1MK2-A957	2..	LED PCB ASSY	704-S1MK2-A959
1..	TRANSFER PCB ASSY	704-S1MK2-A960			

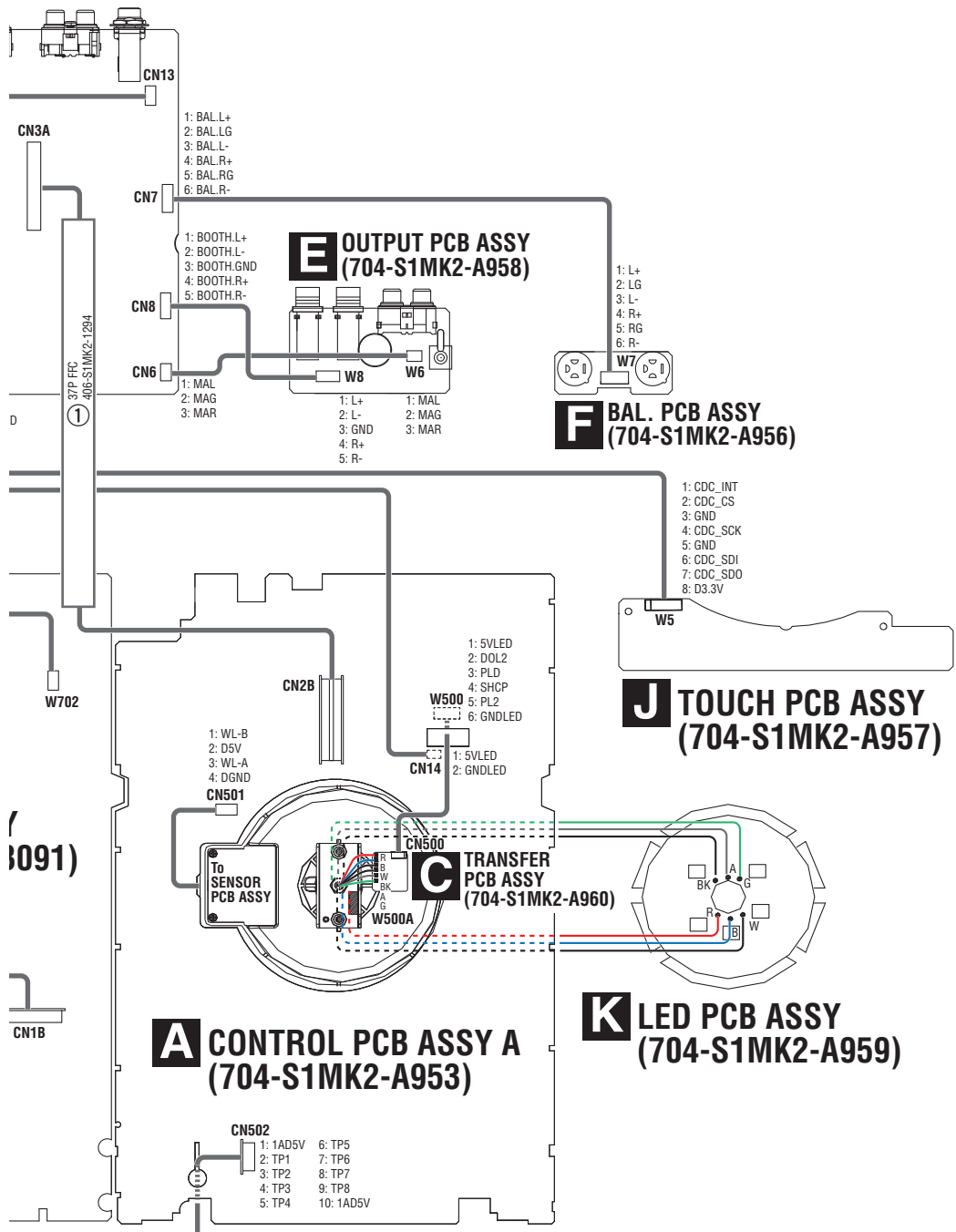
4. BLOCK DIAGRAM

4.1 OVERALL WIRING DIAGRAM



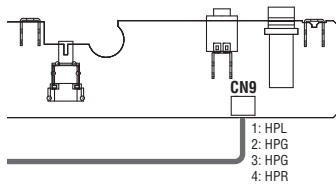
● 部品を発注する場合は、必ず「分解図と部品表」または「電気部品表」を参照してください。
 ● △印の部品は、安全上重要な部品です。
 交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

● When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".
 ● The △ mark found on some component parts indicates the importance of the safety factor of the part.
 Therefore, when replacing, be sure to use parts of identical designation.



CB ASSY (0-9788)

CARBON PAD



D DSP PCB ASSY

1AD5V	1
2AD5V	2
1AD0	3
1AD1	4
1AD2	5
1AD3	6
1AD4	7
1AD5	8
1AD6	9
1AD7	10
2AD7	11
1ADGND	12
2ADGND	13
JOG1	14
WL-A	15
WL-B	16
EN1AL	17
EN1BL	18
A	19
B	20
C	21
CUEL	22
PLAY1	23
PL1	24
DOL 1	25
PL2	26
DOL 2	27
PLD	28
STBL	29
DSL	30
DIN	31
DGND	32
CL K	33
DGND	34
SHCP	35
DSV	36
DSV	37

A CONTROL PCB ASSY A or B CONTROL PCB ASSY B

1AD5V	1
2AD5V	2
1AD0	3
1AD1	4
1AD2	5
1AD3	6
1AD4	7
1AD5	8
1AD6	9
1AD7	10
2AD7	11
1ADGND	12
2ADGND	13
JOG1	14
WL-A	15
WL-B	16
EN1AL	17
EN1BL	18
A	19
B	20
C	21
CUEL	22
PLAY1	23
PL1	24
DOL 1	25
PL2	26
DOL 2	27
PLD	28
STBL	29
DSL	30
DIN	31
DGND	32
CL K	33
DGND	34
SHCP	35
DSV	36
DSV	37

G MIX PCB ASSY

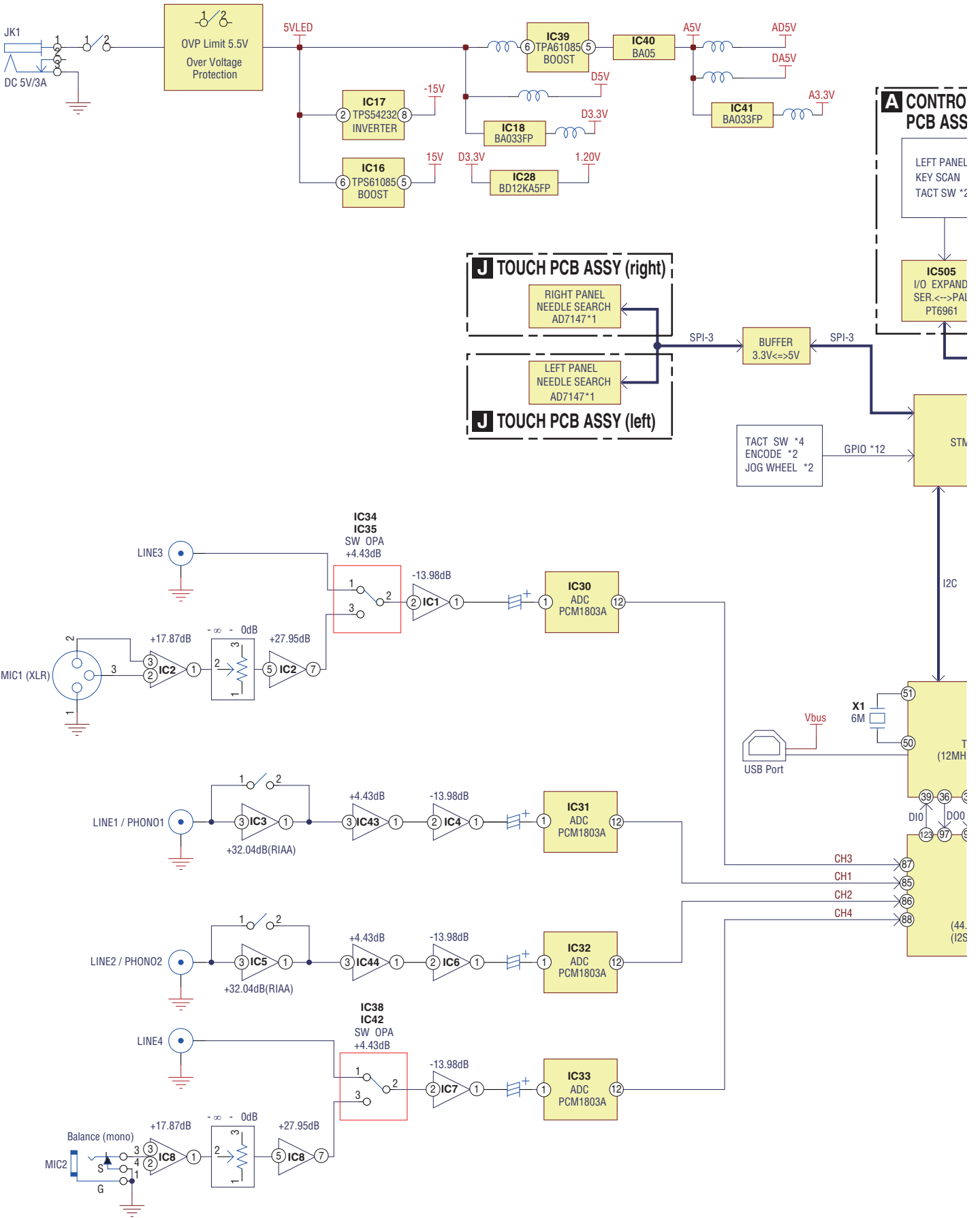
2AD5V	1
2AD0	2
2AD1	3
2AD2	4
2AD3	5
2AD4	6
2AD10	7
2AD11	8
2AD12	9
2AD13	10
2AD14	11
2AD15	12
2AD14	13
2AD15	14
2ADGND	15
ENCA	16
ENCB	17
A	18
B	19
C	20
PWMC	21
DOC	22
PLD	23
STBC	24
DSC	25
DINC	26
CL K C	27
5VLED	28
SHCP	29
5VLED	30
GNDLED	30

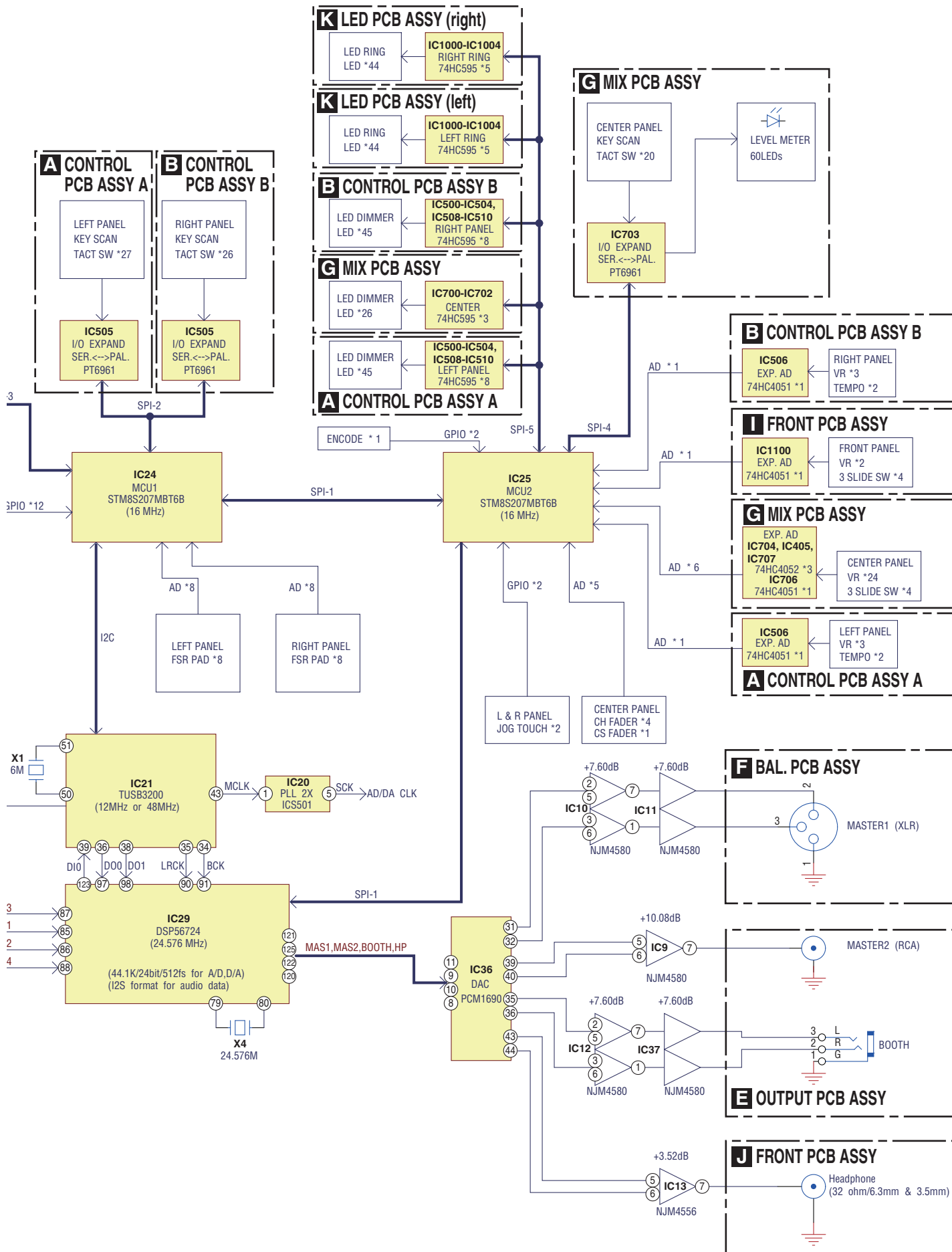
D DSP PCB ASSY

2AD5V	1
2AD0	2
2AD1	3
2AD2	4
2AD3	5
2AD4	6
2AD10	7
2AD11	8
2AD12	9
2AD13	10
2AD14	11
2AD15	12
2AD14	13
2AD15	14
2ADGND	15
ENCA	16
ENCB	17
A	18
B	19
C	20
PWMC	21
DOC	22
PLD	23
STBC	24
DSC	25
DINC	26
CL K C	27
5VLED	28
SHCP	29
5VLED	30
GNDLED	30

4.2 OVERALL BLOCK DIAGRAM

D DSP PCB ASSY

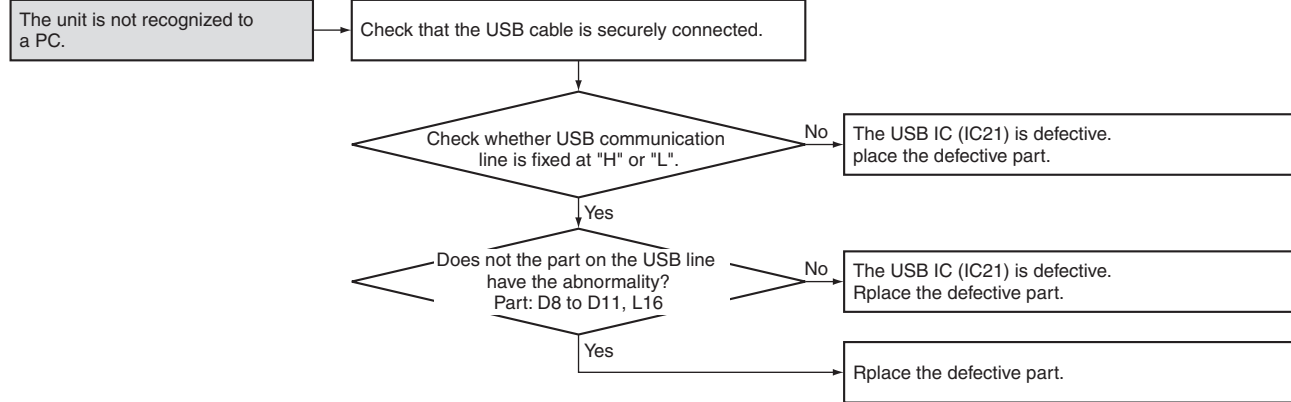
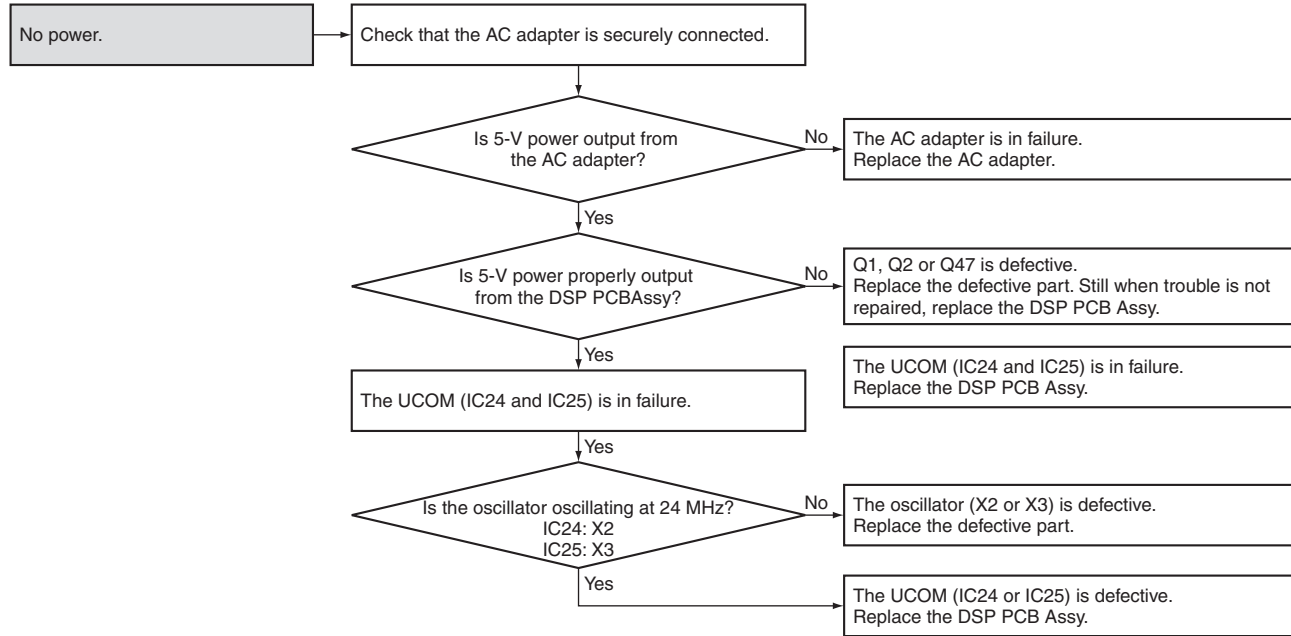




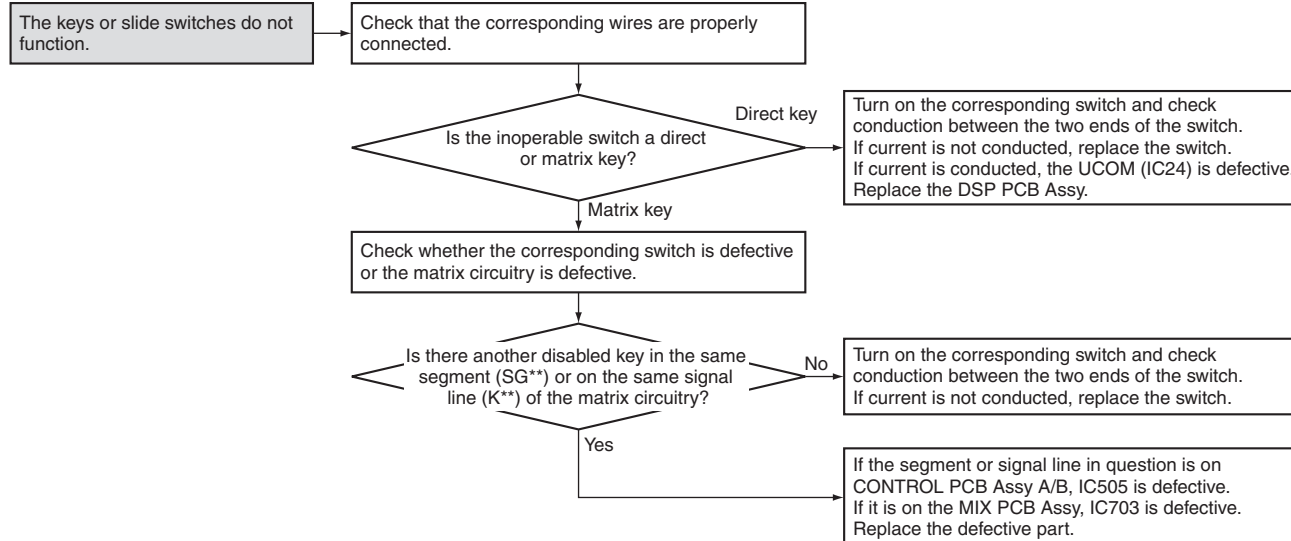
5. DIAGNOSIS

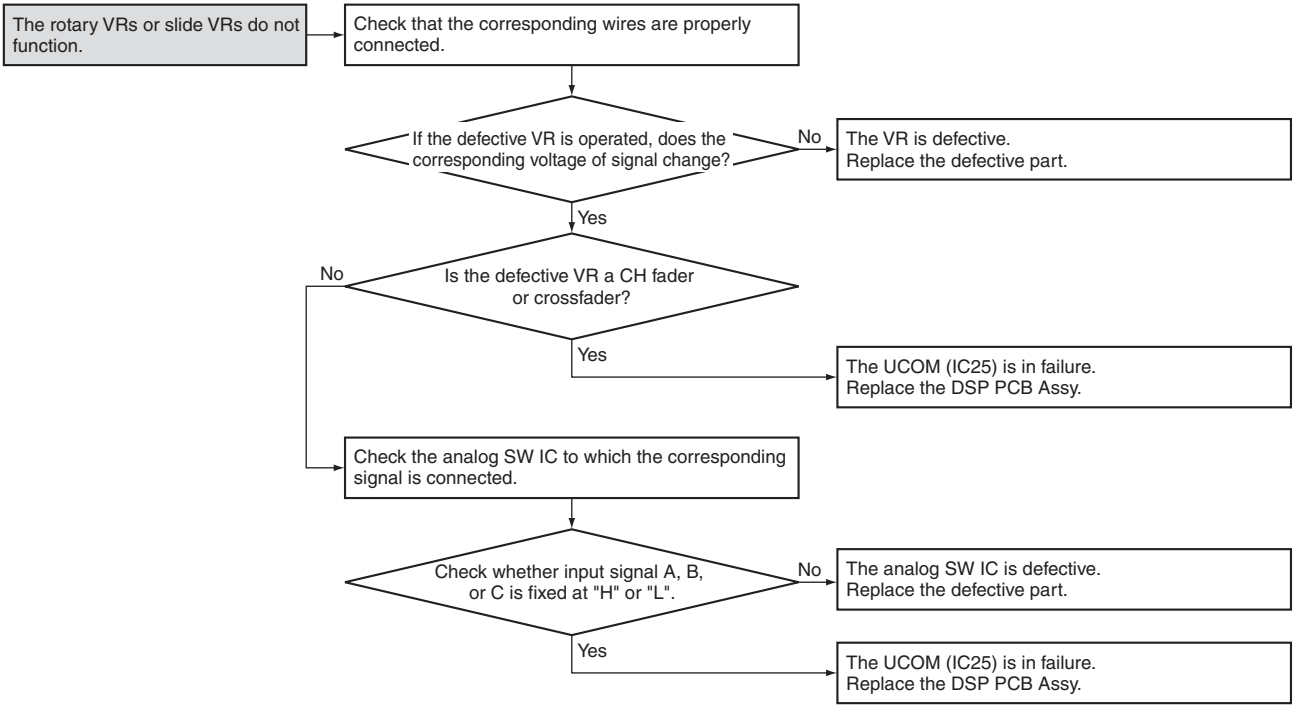
5.1 TROUBLESHOOTING

[1] Abnormality regarding startup and communications



[2] Abnormality regarding the operating elements and LEDs

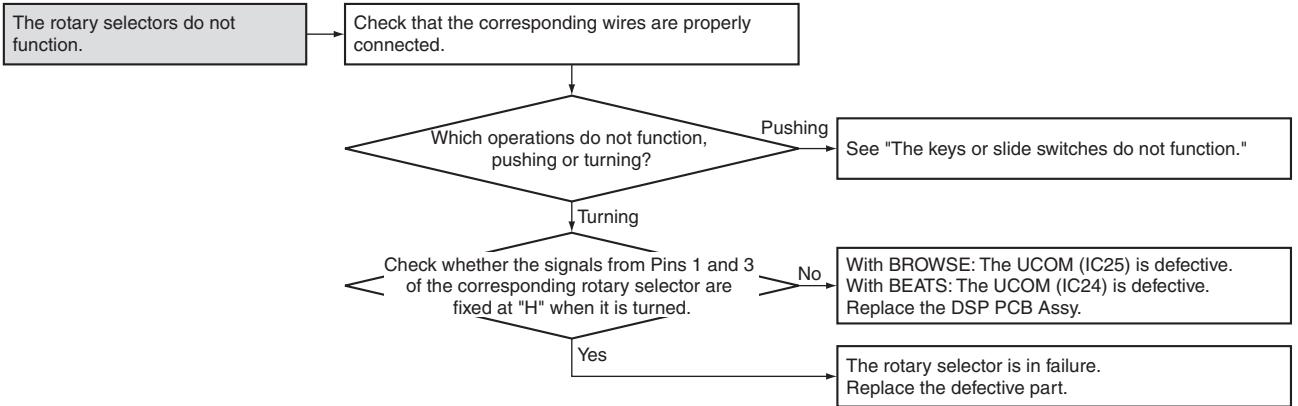




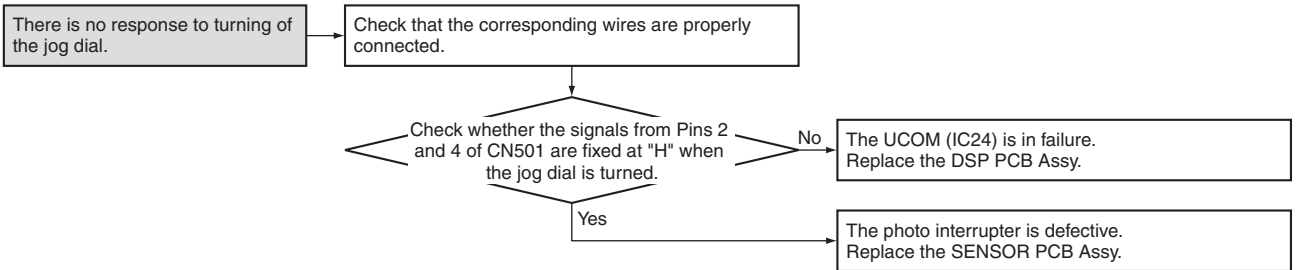
A

B

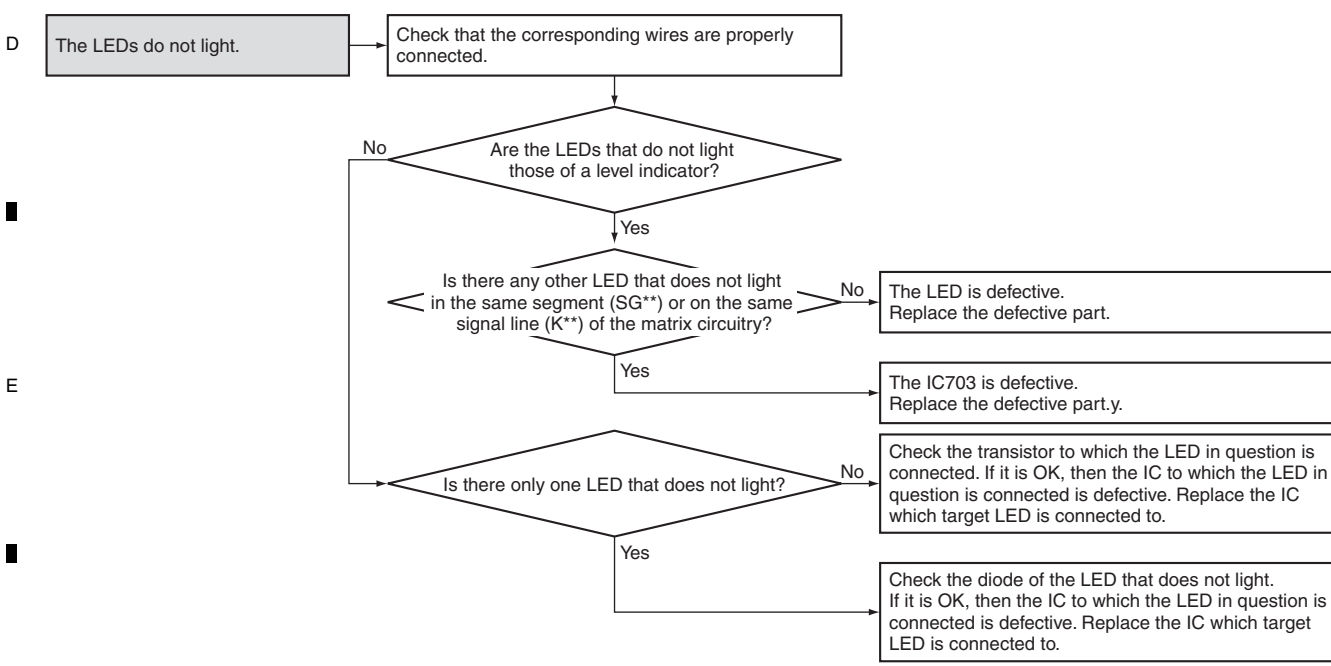
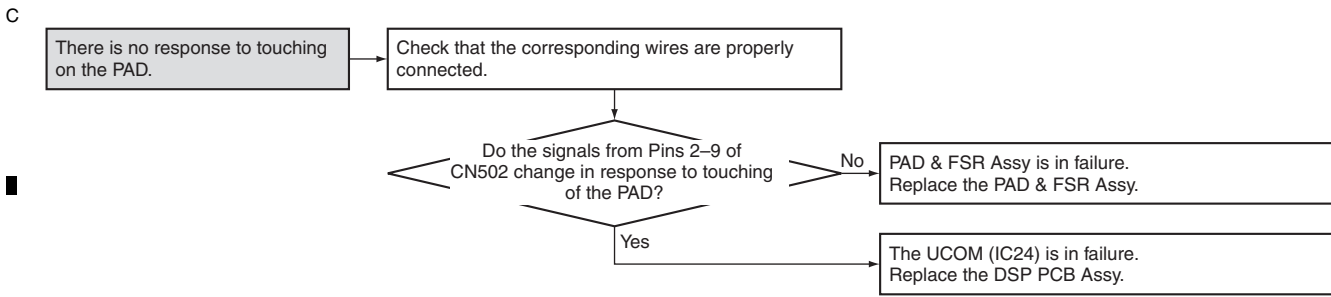
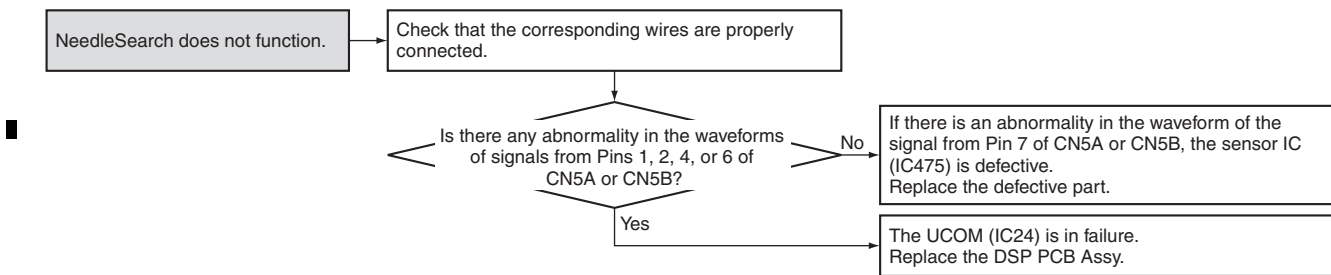
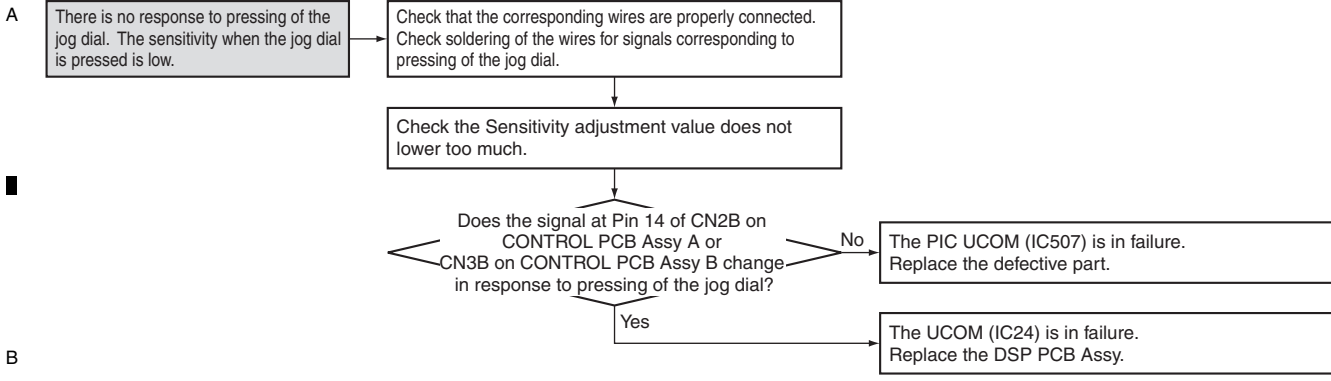
C



D

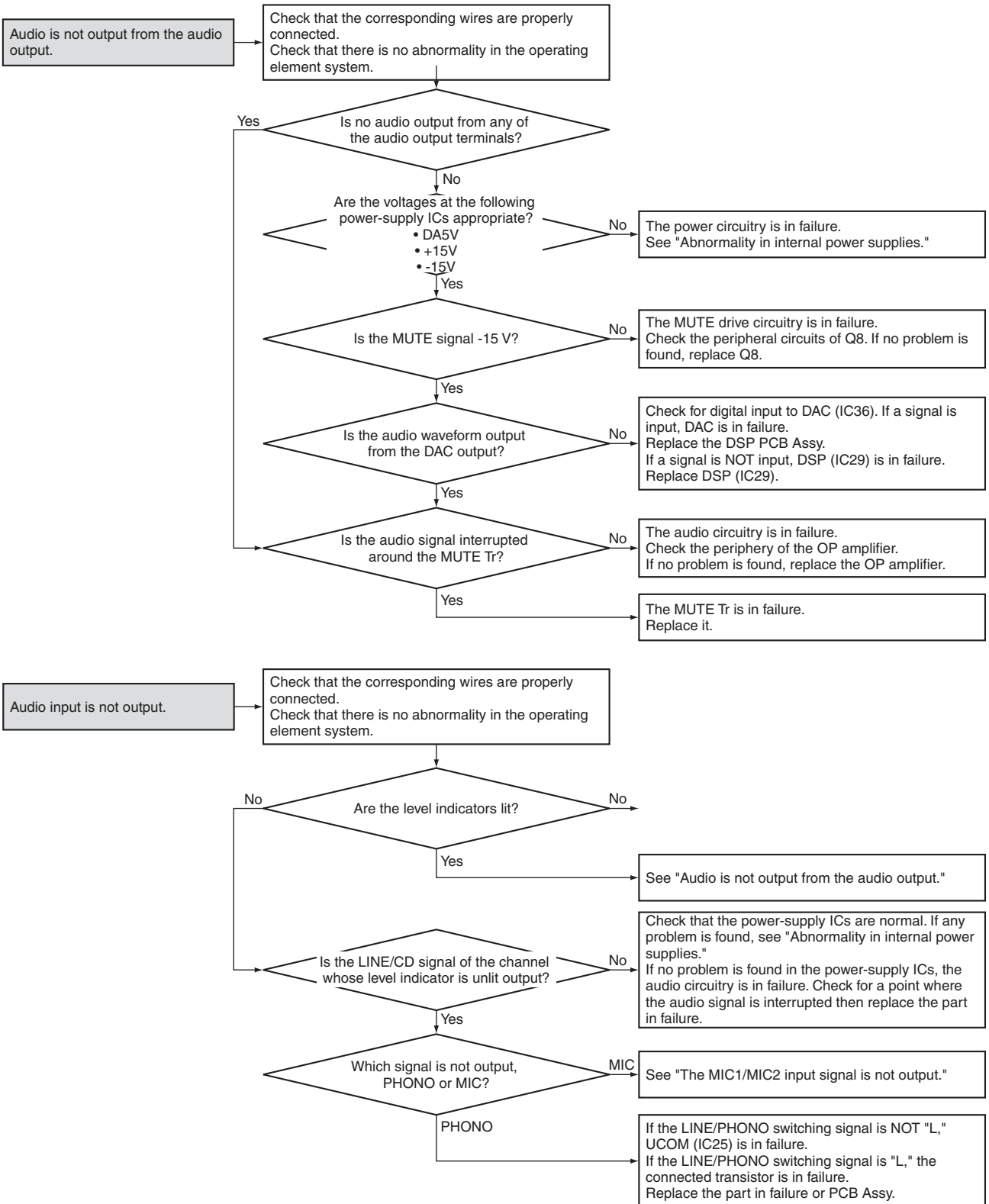


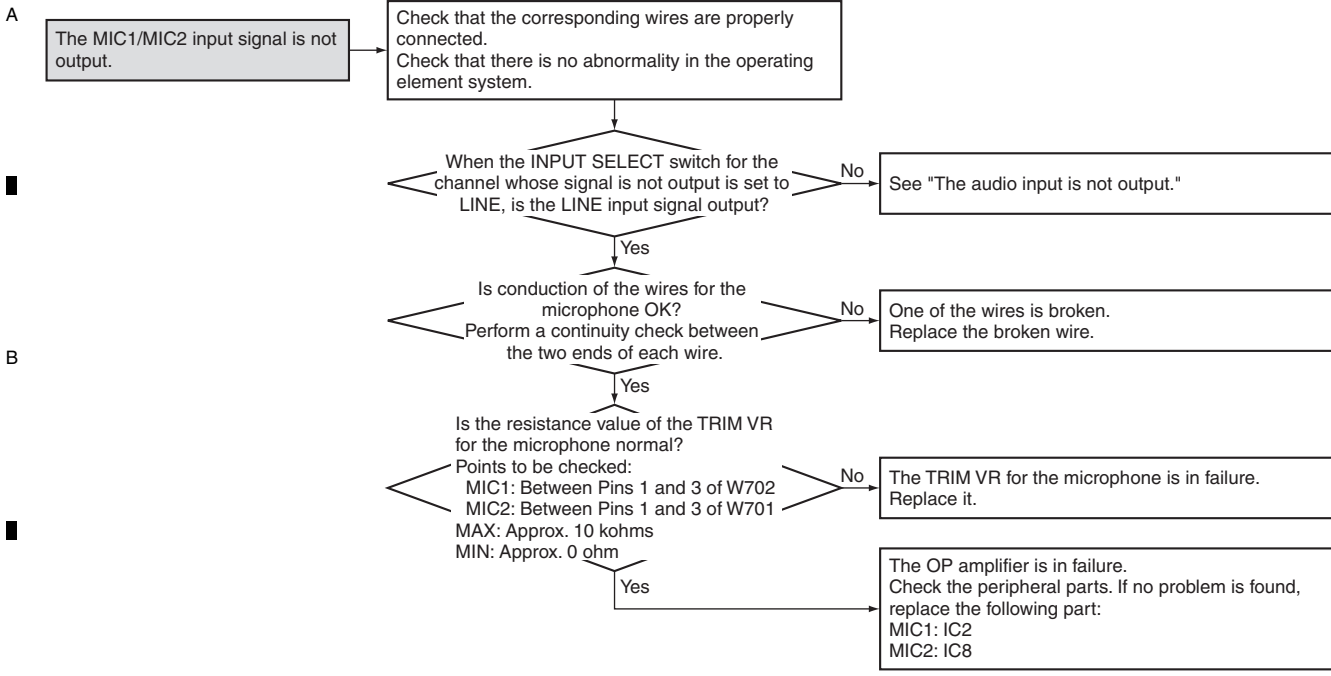
E



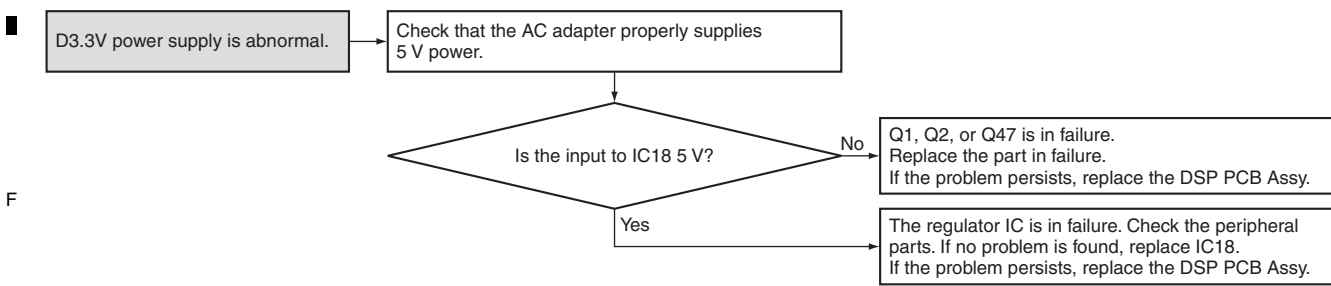
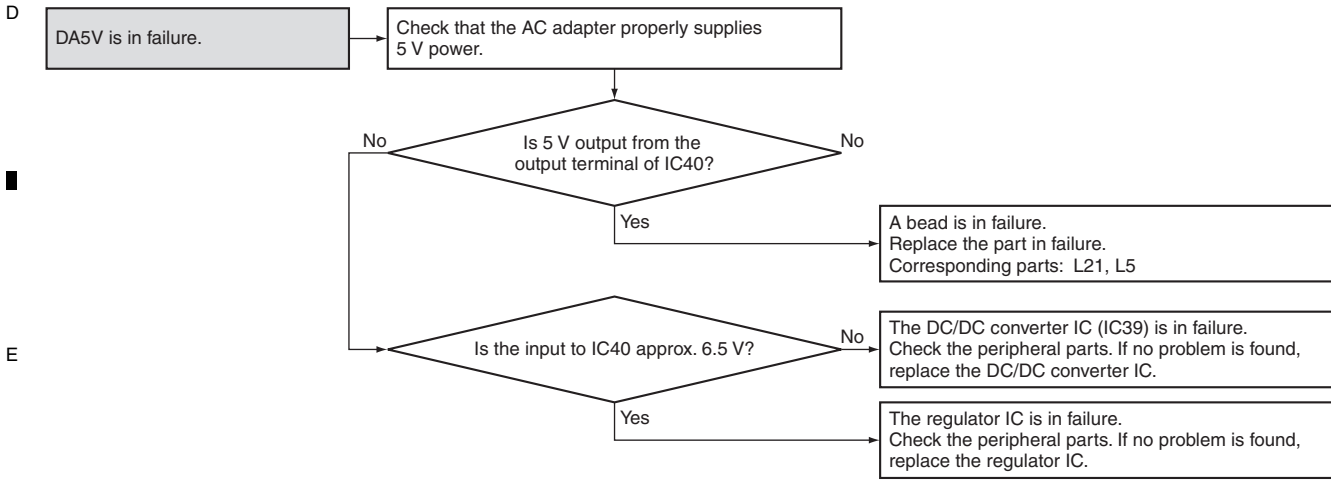
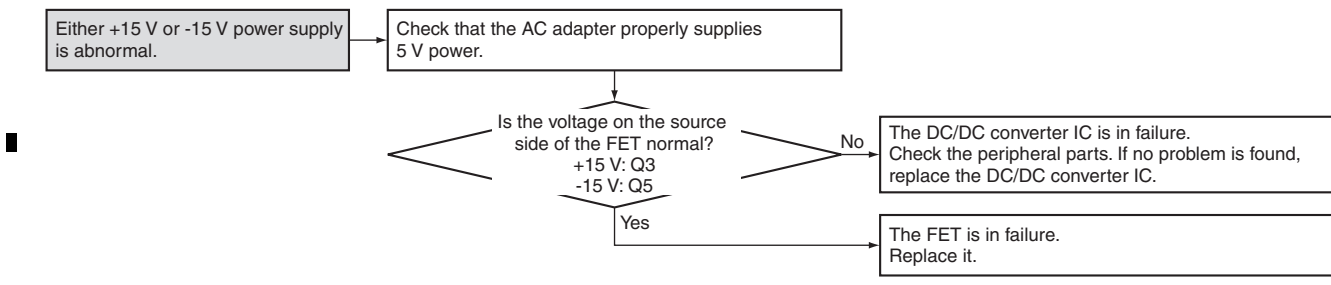
F

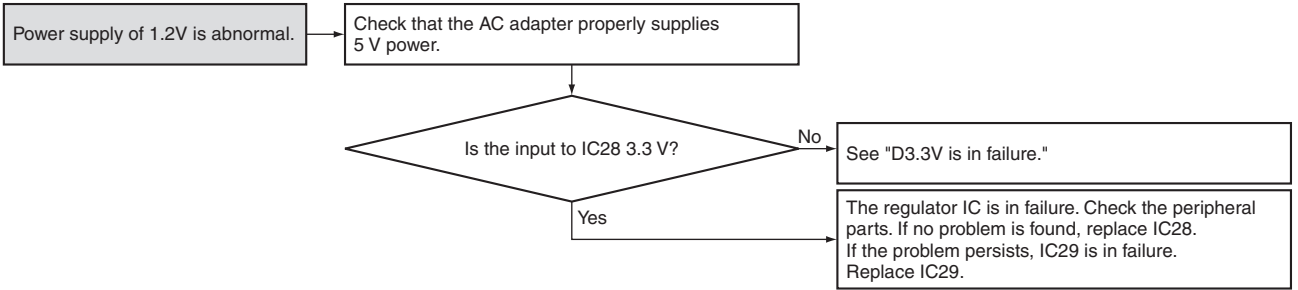
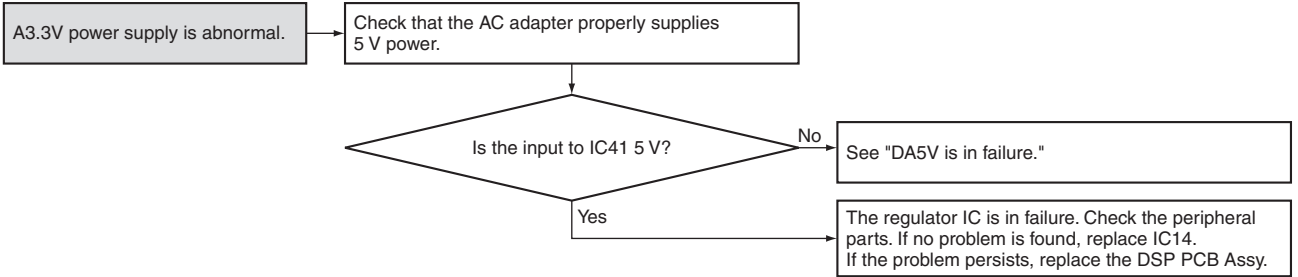
[3] Abnormality in audio input/output





[4] Abnormality in internal power supplies





5.2 OPERATION CHECK WITH Serato DJ

A [Installation of Serato DJ]

A brief explanation of how to install Serato DJ on a PC is given below. For details, refer to the operating instructions of the software.

If the OS of the PC to be used is Windows, install the driver software that enables audio output from the PC beforehand. The operating environment of the PC required for installation of Serato DJ is shown below.

Minimum operating environment

Supported operating systems	CPU and required memory
32-bit version	Intel® processor, Core™ i3, i5 and i7 1.07 GHz or better, Intel® processor, Core™ 2 Duo 2.0 GHz or better
Mac OS X: 10.9, 10.8 and 10.7	2 GB or more of RAM
64-bit version	Intel® processor, Core™ i3, i5 and i7 1.07 GHz or better, Intel® processor, Core™ 2 Duo 2.4 GHz or better
	4 GB or more of RAM

Supported operating systems	CPU and required memory
32-bit version	Intel® processor, Core™ i3, i5 and i7 1.07 GHz or better, Intel® processor, Core™ 2 Duo 2.0 GHz or better
Windows: Windows 8.1 and Windows 7	2 GB or more of RAM
64-bit version	Intel® processor, Core™ i3, i5 and i7 1.07 GHz or better, Intel® processor, Core™ 2 Duo 2.4 GHz or better
	4 GB or more of RAM

Others

USB port	A USB 2.0 port is required to connect the computer with this unit.
Display resolution	Resolution of 1 280 x 720 or greater
Internet connection	An Internet connection is required for registering the "Serato.com" user account and downloading the software.

- For the latest information on the required operating environment and compatibility as well as to acquire the latest operating system, refer to "Software Info" under "DDJ-SX2" on the Pioneer DJ support site below.
<http://pioneerdj.com/support/>
- Operating System support assumes you are using the latest point release for that version.

For the latest version of the Serato DJ software, access Serato.com and download the software from there.

For downloading, registration of a user account at "Serato.com" is required.

Unzip the downloaded file, then double-click the unzipped file to launch the installer.

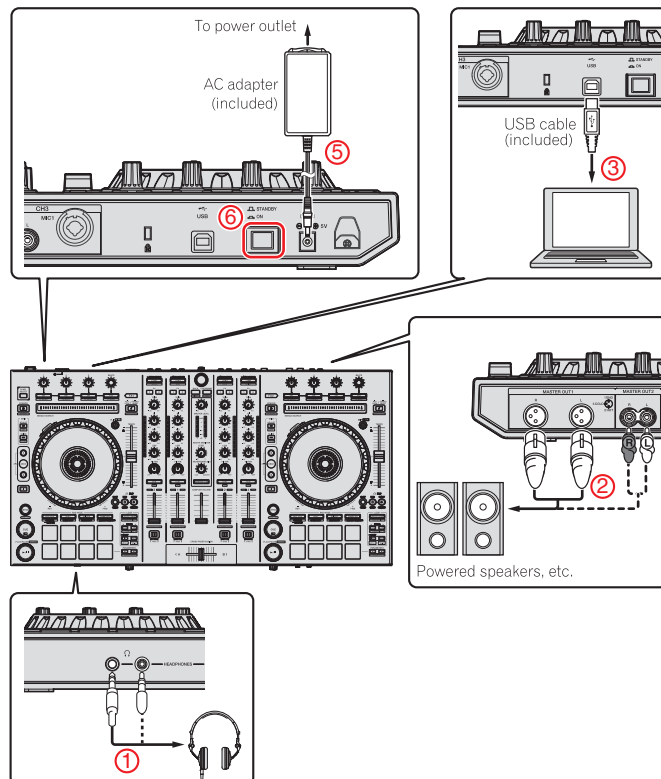
Read the terms of the license agreement carefully, and if you agree, select [I agree to the license terms and conditions], then click [Install].

After installation is completed, the Installation Completed screen will be displayed. Click on [Close] to terminate the Serato DJ installer.

[Operating procedures]

- ① Connect headphones to one of the [PHONES] terminals.
- ② Connect powered speakers, a power amplifier, components, etc., to the [MASTER OUT 1] or [MASTER OUT 2] terminals.
- ③ Connect this unit to your computer via a USB cable.
- ④ Turn on the computer's power.
- ⑤ Connect the AC adapter.
- ⑥ Press the [STANDBY/ON] switch on this unit's rear panel to turn this unit's power on.
- ⑦ Turn on the power of the devices connected to the output terminals (powered speakers, power amplifier, components, etc.).

[Connections]



Starting the system

For Windows 7

From the Windows [Start] menu, click the [Serato DJ] icon under [All Programs] > [Serato] > [Serato DJ].

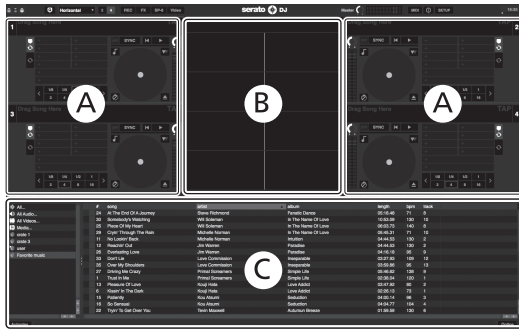
For Windows 8.1

From [Apps view], click the [Serato DJ] icon.

For Mac OS X

In Finder, open the [Applications] folder, then click the [Serato DJ] icon.

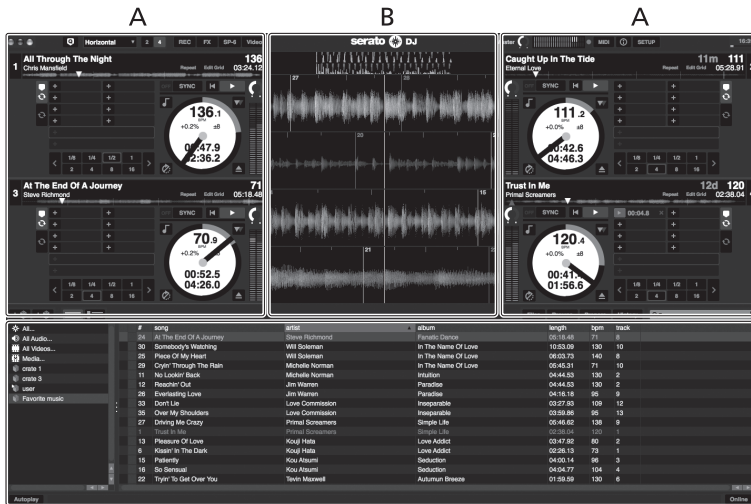
Computer screen directly after the Serato DJ software is launched (The right screen at the unit is not connected to a PC)



- 1 The [BUY/ACTIVATE] icon may appear on the right side of the screen displayed when Serato DJ is launched for the first time, but for those using DDJ-SX2 there is no need to activate or purchase a license. You can purchase extended packs such as DVS and use them as additional options.
- 2 Click [Online] to use the unit as is.

Computer screen when a track is loaded in the Serato DJ software

Click [Library] at the upper left of the computer screen, then select [Vertical] or [Horizontal] from the pull-down menu to switch the Serato DJ screen.



A Deck section

The track information (the name of the loaded track, artist name, BPM, etc.), the overall waveform and other information is displayed here.

B Waveform display

The loaded track's waveform is displayed here.

C Browser section

Crates in which tracks in the library or sets of multiple tracks are stored are displayed here.

A Importing tracks

- 1 Click the [Files] key on the Serato DJ software screen to open the [Files] panel.
- 2 Click the folder on the [Files] panel containing the tracks you want to add to the library to select it.
- 3 On the Serato DJ software screen, drag and drop the selected folder to the crates panel.

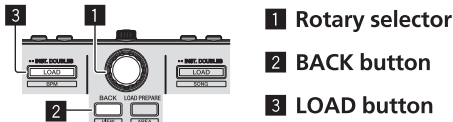


a : [Files] panel
b : Crates panel

B

Loading tracks and playing them

- 1 Press this unit's [BACK] button, move the cursor to the crates panel on the computer's screen, then turn the rotary selector to select the crate, etc.
- 2 Press the rotary selector, move the cursor to the library on the computer's screen, then turn the rotary selector and select the track.
- 3 Press the [LOAD] button to load the selected track onto the deck.



1 Rotary selector
2 BACK button
3 LOAD button

C

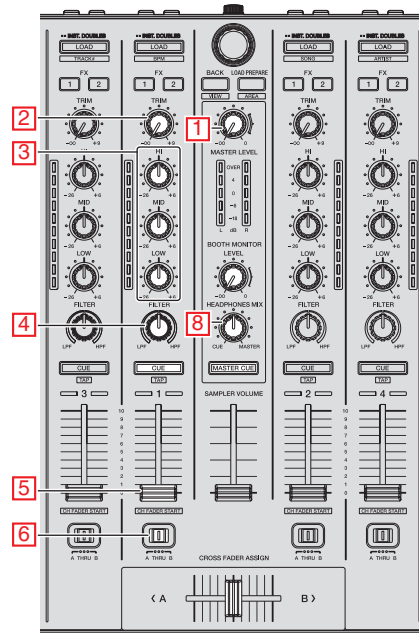


a : Library
b : Crates panel

Playing tracks and outputting the sound

- 1 Set the positions of the controls, etc., as shown below.

Names of controls, etc.	Position
MASTER LEVEL control	1 Turned fully counterclockwise
TRIM control	2 Turned fully counterclockwise
EQ (HI, MID, LOW) controls	3 Center
FILTER control	4 Center
Channel fader	5 Moved forward
Crossfader Assign Switch	6 [THRU] position
INPUT SELECT switch	7 [PC] position

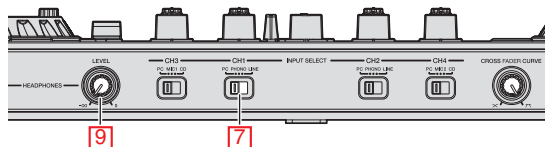


- 2 Press the [▶/||] button to play the track.
- 3 Move the channel fader **(5)** away from you.
- 4 Turn the [TRIM] control **(2)**.
Adjust [TRIM] so that the orange indicator on the channel level indicator lights at the peak level.
- 5 Turn the [MASTER LEVEL] control **(1)** to adjust the audio level of the speakers.

Monitoring sound with headphones

Set the positions of the controls, etc., as shown below.

Names of controls, etc.	Position
HEADPHONES MIX control	8 Center
HEADPHONES LEVEL control	9 Turned fully counterclockwise



F

6. SERVICE MODE

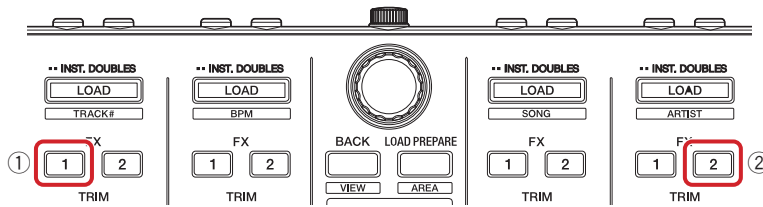
6.1 SERVICE MODE

[1] Error Alarming

When the controller detects following 2 types of problem while the controller is launching or working, it should indicate using LEDs so that user notices the problem.

No.	Part where problem occurs	Symptom	Controller's behavior when detect the problem
①	Built-in FLASH ROM of MAIN UCOM	When firmware is updated, the internal data on FLASH ROM can not be erased. When firmware is updated, the update data can not be written to FLASH ROM correctly.	LED within FX 1 assign button for Deck 3 should be flashed in cycle of 1second. (*1)
②	USB controller	Although the controller connects with a computer via USB cable, the USB controller within the controller can not communicate with the computer.	LED within FX 2 assign button for Deck 4 should be flashed in cycle of 1second.

*1: When the controller launches next, same LED should be flashed.



[2] Service mode

[How to enter Service mode]

Turn on the power while pressing both left "SHIFT" button and the "DECK 1" button or while pressing both right "SHIFT" button and the "DECK 2" button.

LEDs of Channel Level Indicator (CH1), Channel Level Indicator (CH2), and Channel Level Indicator (CH4) should be lit depending on the firmware version and other LEDs should be unlit right after the controller launches in Service mode.

Note: Even if the controller connects with a computer via USB cable, it does not communicate with the computer during Service mode. Unused LEDs should be unlit during Service mode.

[How to exit Service mode]

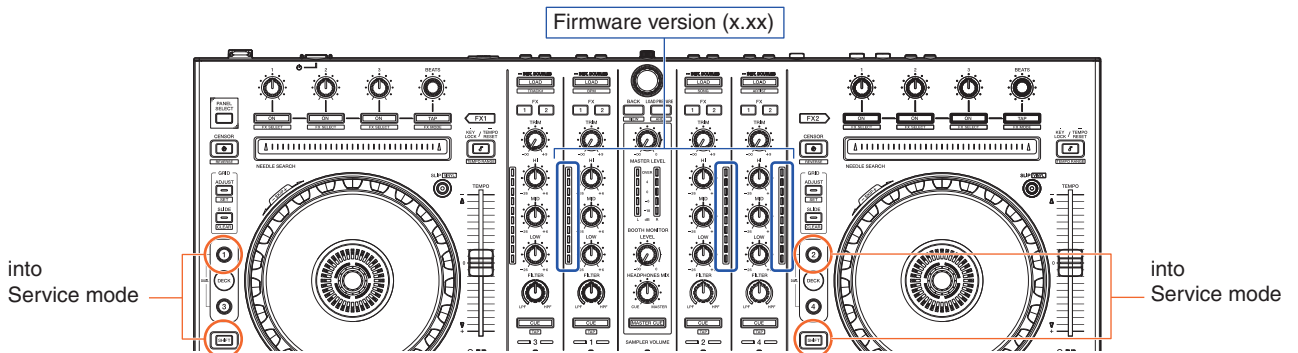
In order to exit Service mode, turn off the power.

[Note]

When in this mode, the firmware version display appear first.

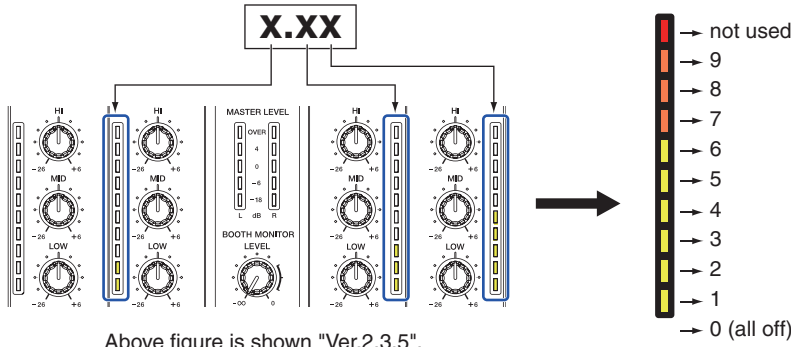
In this mode, it does not work to communicate with computer via USB.

In this mode, LED dimmer is not available.



A 1. Confirmation of firmware version

LEDs of Channel Level Indicator (CH1) indicate first digit of the firmware version. (*1)
 LEDs of Channel Level Indicator (CH2) indicate second digit of the firmware version. (*1)
 LEDs of Channel Level Indicator (CH4) indicate third digit of the firmware version. (*1)
 The firmware version is indicated right after the controller launches in Service mode. (*2)



Above figure is shown "Ver.2.3.5".

*1: If the firmware version is "0", all segments of the Channel Level Indicator are unlit.
 *2: If any Channel fader is slid, state of the Channel fader is indicated instead of firmware version.

C 2. Check of buttons

All buttons on this controller can be checked using LEDs in Service Mode.

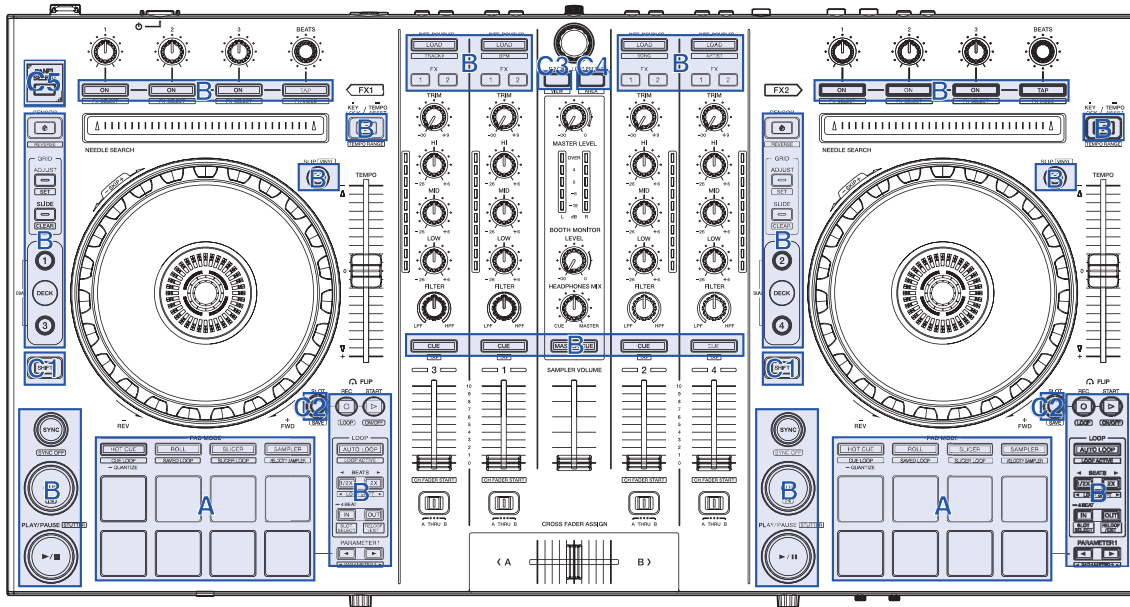
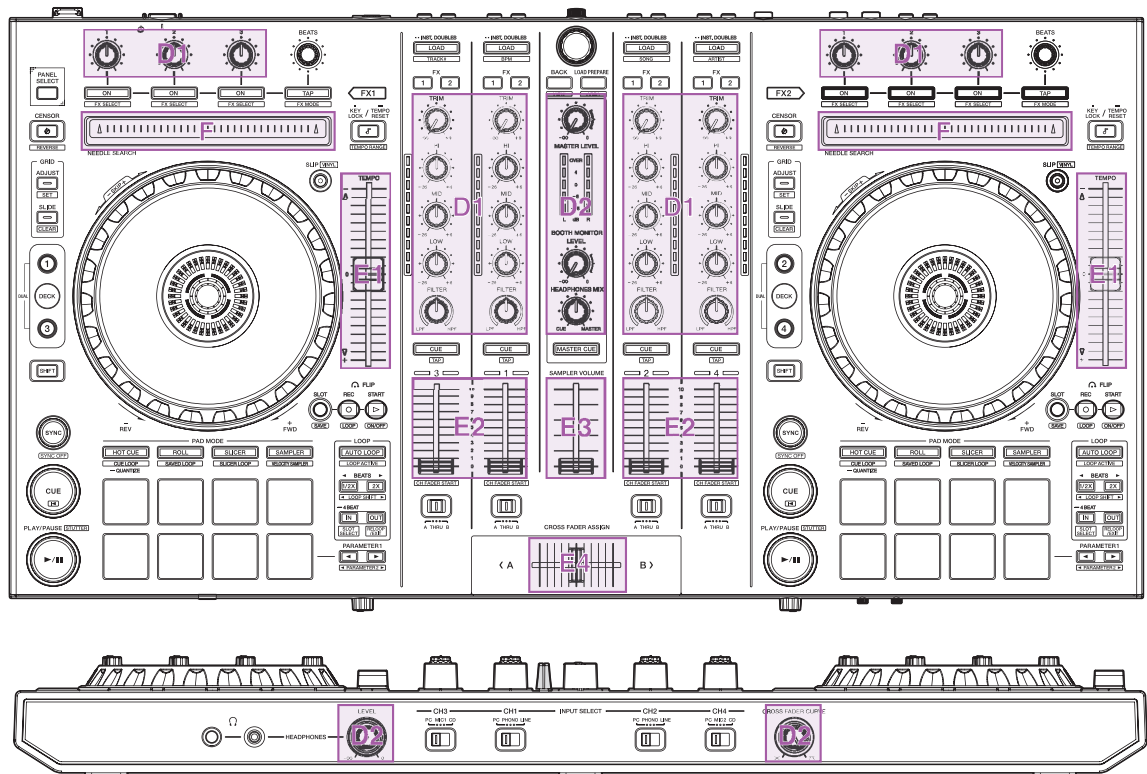


Table-1 LED behavior of when buttons are checked

Group	Trigger	Details
A	Press	LED color is changed as follows whenever the button is pressed. Even if the button is released while the LED is lit, the controller holds lighting. (The LED is embedded within the button.) White → Red → Yellow → Green → Cyan → Blue → Magenta → Unlit → White → ...
B	Press	LED is lit while the button is pressed and held. When the button is released, the LED is unlit. (The LED is embedded within the button.)
C	C1	LED within HOT CUE Mode button of the same side is lit with blue color while the "C1" button is pressed and held. When the "C1" button is released, the LED is unlit. (LED within the HOT CUE Mode button is used in order to check the "C1" button.)
	C2	LED within SAMPLER Mode button of the same side is lit with blue color while the "C2" button is pressed and held. When the "C2" button is released, the LED is unlit. (LED within the SAMPLER Mode button is used in order to check the "C2" button.)
	C3	LED within the HEADPHONE CUE (CH1) button is lit while the "C3" button is pressed and held. When the "C3" button is released, the LED is unlit. (LED within the HEADPHONE CUE (CH1) button is used in order to check the "C3" button.)
	C4	LED within right SYNC button is lit while the "C4" button is pressed and held. When the "C4" button is released, the LED is unlit. (LED within right SYNC button is used in order to check the "C4" button.)
	C5	LED within left SENSOR button is lit while the "C5" button is pressed and held. When the "C5" button is released, the LED is unlit. (LED within left SENSOR button is used in order to check the "C5" button.)

3. Check of rotary knobs, sliders and NEEDLE SEARCH pads

All rotary knobs, sliders and NEEDLE SEARCH pad on this controller can be checked using LEDs in Service Mode.



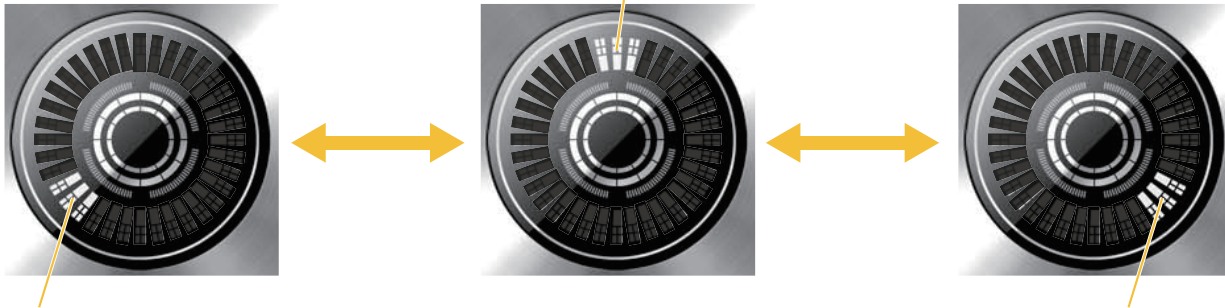
A Table-2 LED behavior of when rotary knobs, sliders and NEEDLE SEARCH pads are checked

Group		Trigger	Details
D	D1	Turn	Lighting position of white LEDs of Jog dial of the same side is moved depending on the turned amount. Refer to Figure-1.
	D2		Lighting position of white LEDs of both side Jog dials are moved depending on the turned amount. Refer to Figure-1.
E	E1	Slide	Lighting position of white LEDs of Jog dial of the same side is moved depending on the slid amount. If the position after sliding is upper than center, The upper "TEMPO slider Take-over" indicator of the same side is lit. If the position after sliding is lower than center, The lower "TEMPO slider Take-over" indicator of the same side is lit. If the position after sliding is center, The upper and lower "TEMPO slider Take-over" indicators of the same side are unlit. Refer to Figure-1.
	E2		Lighting of Channel Level Indicator of the same channel is changed depending on the slid amount. Refer to Figure-2.
	E3		Lighting of Master level indicator is changed depending on the slid amount. Refer to Figure-3.
	E4		Lighting position of white LEDs of both side Jog dials are moved depending on the slid amount. Refer to Figure-1.
F	Touch and move		Lighting position of white LEDs of Jog dial of the same side is moved depending on the touching position. Refer to Figure-1.

Figure-1 LED behavior of when a rotary knob is turned, a slider is slid, or a NEEDLE SEARCH pad is touched and moved

C

When position of the knob is center, these LEDs are lit.
 When position of the slider is center, these LEDs are lit.
 When position of Crossfader is center, these LEDs are lit.
 When touching position of the NEEDLE SEARCH pad is center, these LEDs are lit.



D

When the knob is fully turned counterclockwise, these LEDs are lit.
 When position of the slider is top, these LEDs are lit.
 When position of Crossfader is left edge, these LEDs are lit.
 When the touching position of the NEEDLE SEARCH pad is left edge, these LEDs are lit.

When the knob is fully turned clockwise, these LEDs are lit.
 When position of the slider is bottom, these LEDs are lit.
 When position of Crossfader is right edge, these LEDs are lit.
 When the touching position of the NEEDLE SEARCH pad is right edge, these LEDs are lit.

Figure-2 LED behavior of when a Channel fader is slid

E This controller has Channel faders with 10 bit resolution. But, Channel Level Indicator is only 11 steps. Therefore, the controller should round the actual position data to 11 steps.

When position of the Channel fader is bottom, all segments of the Channel Level Indicator should be unlit.

When position of the Channel fader is top, all segments of the Channel Level Indicator should be lit.



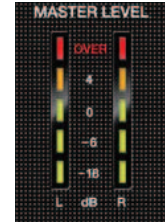
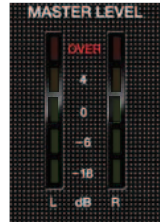
F

Figure-3 LED behavior of when the SAMPLER VOLUME fader is slid

This controller has the SAMPLER VOLUME fader with 10 bit resolution. But, Master level indicator is only 6 steps. Therefore, the controller should round the actual position data to 6 steps.

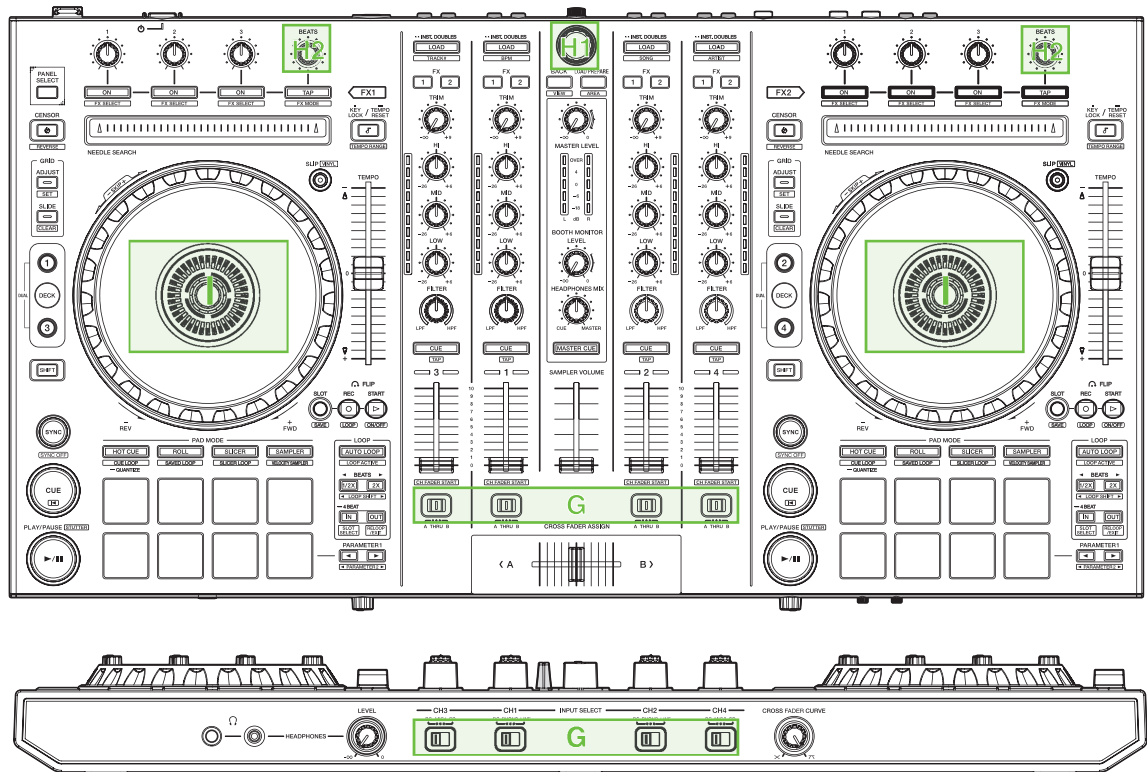
When position of the SAMPLER VOLUME fader is bottom, all segments of the Master level indicator should be unlit.

When position of the SAMPLER VOLUME fader is top, all segments of the Master level indicator should be lit.



4. Check of rotary encoders, slide SWs, and Jog dials

All rotary encoders, slide SWs, and Jog dials on this controller can be checked using LEDs in Service Mode.

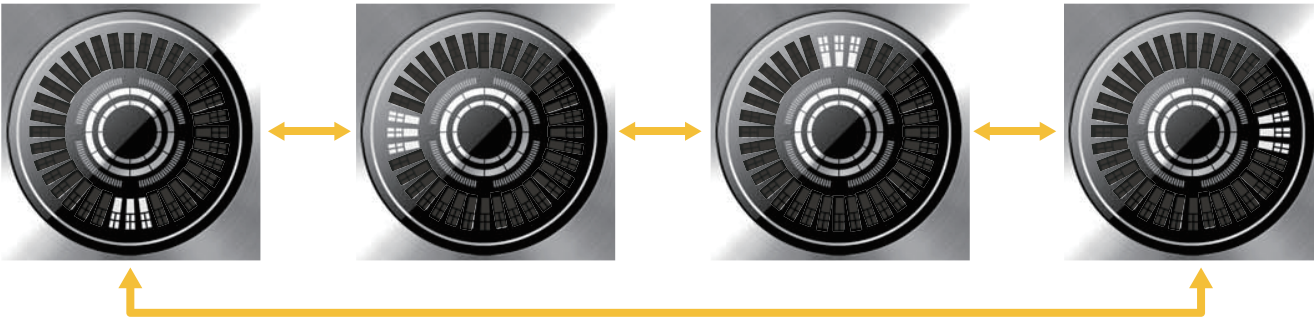


A Table-3 LED behavior of when rotary encoders, slide SWs, and Jog dials are checked

Group	Trigger	Details	
G	Slide	Lighting position of white LEDs of Jog dial of the same side is moved clockwise whenever position of the slide SW is moved. Refer to Figure-4.	
H	H1	Press <ul style="list-style-type: none"> LED lighting is changed as shown in following order whenever the Rotary selector is pressed. Even if the Rotary selector is released while the LEDs are lit, the controller holds lighting. All LEDs are lit with full brightness. (LED color of the Pad Mode buttons and Pads is white.) ⇒ All LEDs are lit with full brightness. (LED color of the Pad Mode buttons and Pads is red.) ⇒ All LEDs are lit with full brightness. (LED color of the Pad Mode buttons and Pads is yellow.) ⇒ All LEDs are lit with full brightness. (LED color of the Pad Mode buttons and Pads is green.) ⇒ All LEDs are lit with full brightness. (LED color of the Pad Mode buttons and Pads is cyan.) ⇒ All LEDs are lit with full brightness. (LED color of the Pad Mode buttons and Pads is blue.) ⇒ All LEDs are lit with full brightness. (LED color of the Pad Mode buttons and Pads is magenta.) ⇒ All LEDs are lit dimly. (LED color of the Pad Mode buttons and Pads is white.) ⇒ All LEDs are lit dimly. (LED color of the Pad Mode buttons and Pads is red.) ⇒ All LEDs are lit dimly. (LED color of the Pad Mode buttons and Pads is yellow.) ⇒ All LEDs are lit dimly. (LED color of the Pad Mode buttons and Pads is green.) ⇒ All LEDs are lit dimly. (LED color of the Pad Mode buttons and Pads is cyan.) ⇒ All LEDs are lit dimly. (LED color of the Pad Mode buttons and Pads is blue.) ⇒ All LEDs are lit dimly. (LED color of the Pad Mode buttons and Pads is magenta.) ⇒ All LEDs are unlit. 	
		Turn	Lighting position of white LEDs of both side Jog dials are moved whenever the Rotary selector is turned. Refer to Figure-4.
H	H2	Press	LED within the TAP button of the same side is lit while the rotary encoder is pressed and held. When the rotary encoder is released, the LED is unlit.
		Turn	Lighting position of white LEDs of Jog dial of the same side is moved whenever the rotary encoder is turned. Refer to Figure-4.
I	Touch	All white and red LEDs of Jog dial are lit while top surface of the Jog dial is touched and held. When top surface of the JOG is released, the LEDs are unlit.	
	Turn	Lighting position of white LEDs of Jog dial is moved when the Jog dial is turned. Refer to Figure-4.	

Figure-4 LED behavior of when a slide SW is slid, a rotary encoder is turned, or a Jog dial is turned

- *: Only when position of a slide SW is moved, lighting position of white LED is moved clockwise.
- *: The starting position depends on the last position.



5. Factory reset

All settings in Utilities mode and adjustment value for Jog dial touch sensitivity can be initialized in Service mode.

[Trigger to initialize]

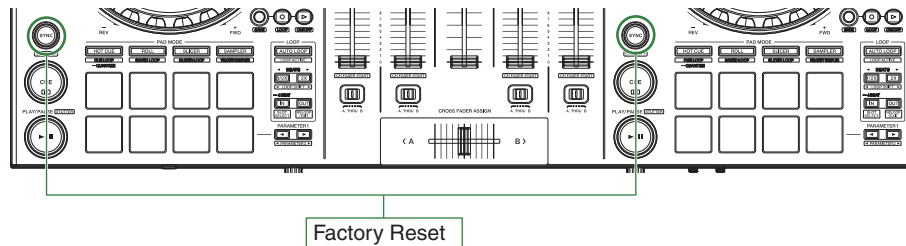
In order to initialize all settings in Utilities mode, press and hold both left and right SYNC buttons for over 2 seconds during Service mode.

[Posterior condition]

LEDs within both left and right SYNC buttons are lit while the controller is initializing the settings. When the initialization is completed, the LEDs are unlit.

*: All settings in Utilities mode are initialized.

Adjustment values for left and right Jog dial touch sensitivity are returned to center value.



6. Check of velocity

Behavior of velocity can be checked using Channel Level Indicator in Service Mode.

[Preparation to check velocity]

In order to check the velocity, press both left and right HOT CUE Mode buttons firstly during Service mode.

In order to select Pads of which check the velocity, press left Pad Mode button.

Relation between left Pad Mode button and checkable Pad is shown in Table-4.

State transition between Service mode and Velocity check mode is shown in Figure-5.

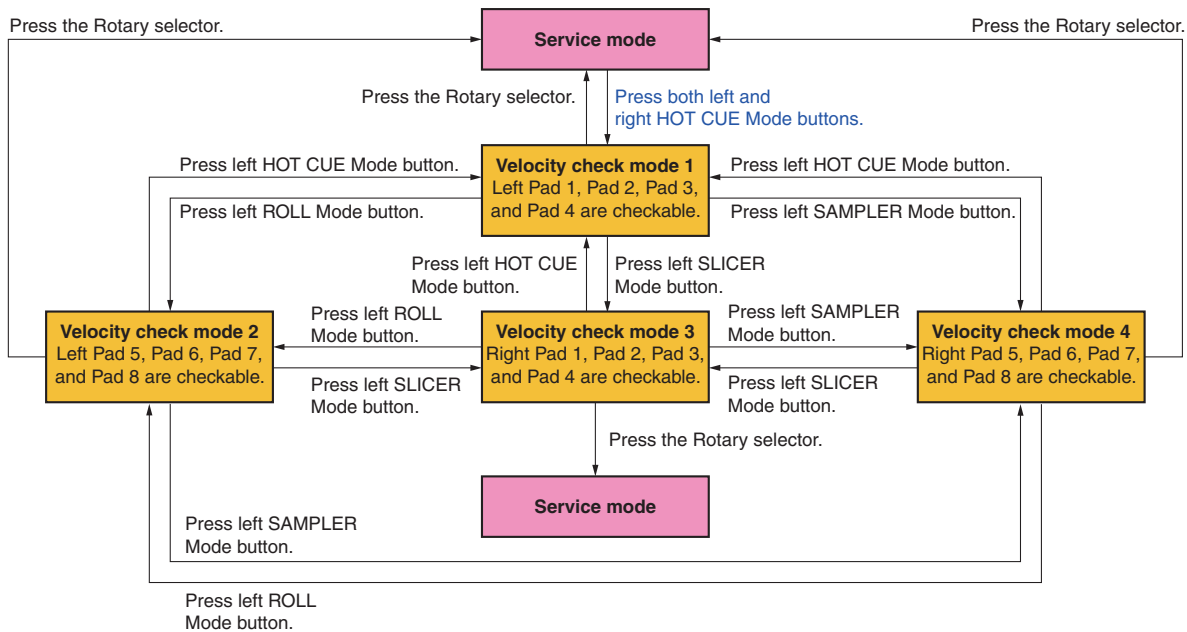
Table-4 Relation between left Pad Mode button and checkable Pads

Mode	Checkable Pads	Pad Mode button
Velocity check mode 1	Left Pad 1, Pad 2, Pad 3, and Pad 4	Left HOT CUE Mode button (*1)
Velocity check mode 2	Left Pad 5, Pad 6, Pad 7, and Pad 8	Left ROLL Mode button (*1)
Velocity check mode 3	Right Pad 1, Pad 2, Pad 3, and Pad 4	Left SLICER Mode button (*1)
Velocity check mode 4	Right Pad 5, Pad 6, Pad 7, and Pad 8	Left SAMPLER Mode button (*1)

*1: LED within the pressed Pad Mode button is lit with blue color.

In order to return from Velocity check mode to Service mode, press the Rotary selector. Then the controller should return to condition right after it launches in Service mode.

A Figure-5 State transition between Service mode and Velocity check mode



C

[Trigger of which check velocity]

- 1) Press left Pad 1, Pad 2, Pad 3, or Pad 4 when LED within left HOT CUE Mode button is lit with blue color.
- 2) Press left Pad 5, Pad 6, Pad 7, or Pad 8 when LED within left ROLL Mode button is lit with blue color.
- 3) Press right Pad 1, Pad 2, Pad 3, or Pad 4 when LED within left SLICER Mode button is lit with blue color.
- 4) Press right Pad 5, Pad 6, Pad 7, or Pad 8 when LED within left SAMPLER Mode button is lit with blue color.

[Posterior condition]

- 1) Lighting of Channel Level Indicator (CH3) is changed depending on pressure force of the pressing Pad (*2).
- 2) Lighting of Channel Level Indicator (CH1) is changed depending on pressure force of the pressing Pad (*3).
- 3) Lighting of Channel Level Indicator (CH2) is changed depending on pressure force of the pressing Pad (*4).
- 4) Lighting of Channel Level Indicator (CH4) is changed depending on pressure force of the pressing Pad (*5).

- *2: When LED within left HOT CUE Mode button is lit with blue color, Channel Level Indicator (CH3) is used in order to check velocity of left Pad 1.
When LED within left ROLL Mode button is lit with blue color, Channel Level Indicator (CH3) is used in order to check velocity of left Pad 5.
When LED within left SLICER Mode button is lit with blue color, Channel Level Indicator (CH3) is used in order to check velocity of right Pad 1.
When LED within left SAMPLER Mode button is lit with blue color, Channel Level Indicator (CH3) is used in order to check velocity of right Pad 5.
- *3: When LED within left HOT CUE Mode button is lit with blue color, Channel Level Indicator (CH1) is used in order to check velocity of left Pad 2.
When LED within left ROLL Mode button is lit with blue color, Channel Level Indicator (CH1) is used in order to check velocity of left Pad 6.
When LED within left SLICER Mode button is lit with blue color, Channel Level Indicator (CH1) is used in order to check velocity of right Pad 2.
When LED within left SAMPLER Mode button is lit with blue color, Channel Level Indicator (CH1) is used in order to check velocity of right Pad 6.
- *4: When LED within left HOT CUE Mode button is lit with blue color, Channel Level Indicator (CH2) is used in order to check velocity of left Pad 3.
When LED within left ROLL Mode button is lit with blue color, Channel Level Indicator (CH2) is used in order to check velocity of left Pad 7.
When LED within left SLICER Mode button is lit with blue color, Channel Level Indicator (CH2) is used in order to check velocity of right Pad 3.
When LED within left SAMPLER Mode button is lit with blue color, Channel Level Indicator (CH2) is used in order to check velocity of right Pad 7.
- *5: When LED within left HOT CUE Mode button is lit with blue color, Channel Level Indicator (CH4) is used in order to check velocity of left Pad 4.
When LED within left ROLL Mode button is lit with blue color, Channel Level Indicator (CH4) is used in order to check velocity of left Pad 8.
When LED within left SLICER Mode button is lit with blue color, Channel Level Indicator (CH4) is used in order to check velocity of right Pad 4.
When LED within left SAMPLER Mode button is lit with blue color, Channel Level Indicator (CH4) is used in order to check velocity of right Pad 8.

*: This controller's velocity has resolution of 128 steps. But, Channel Level Indicator is only 11 steps.
So, the controller should round the actual velocity value to 11 steps
so that indicate behavior of velocity using Channel Level Indicator during Velocity check mode.

*: Lighting of Channel Level Indicator should be applied pressure force of not only initial touch (velocity) but also after touch during Velocity check mode.

F

Figure-6 Relation between Pad and Channel Level Indicator during Velocity check mode
 (Following example is left-side. It is the same for right-side.)

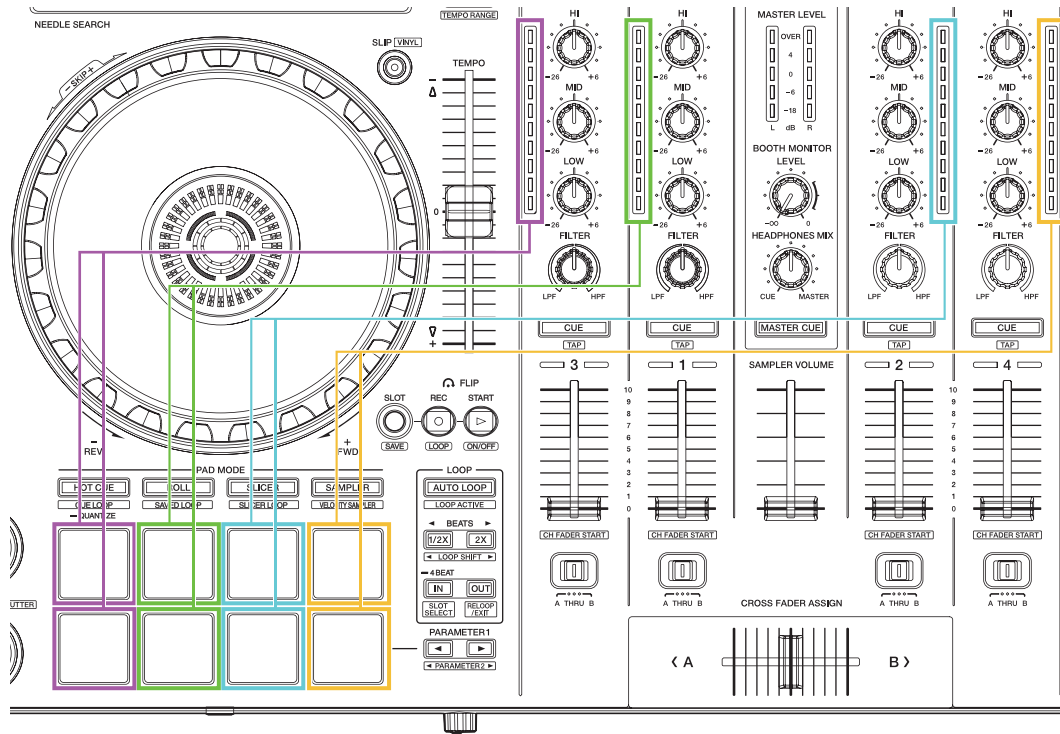
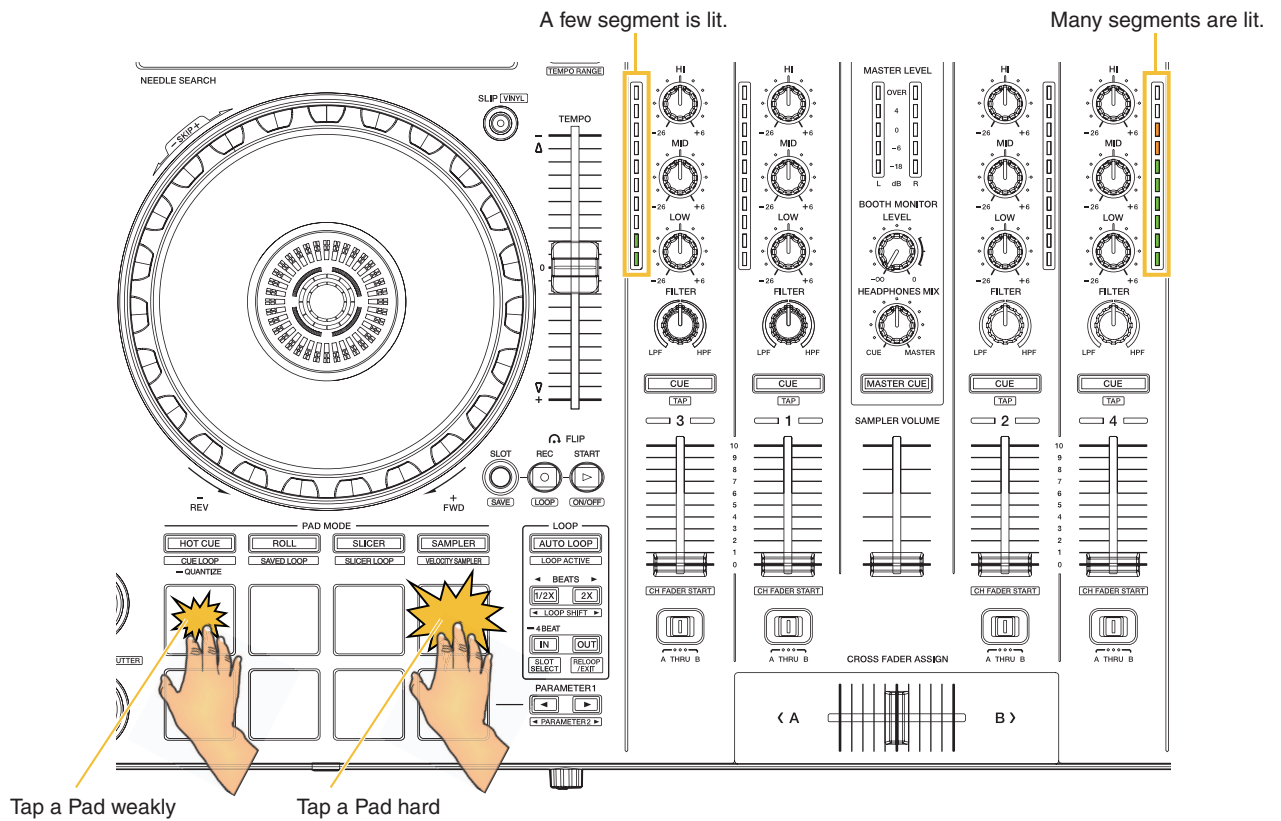


Figure-7 Relation between pressure force and lighting segment



A [3] Measurement mode

This controller can measure "Jog dial rotation time" and drift of knobs and faders in Measurement mode.

[How to enter Measurement mode]

Turn on the power while pressing both left SHIFT button and the DECK 3 button. LEDs within the DECK 3 button, DECK 4 button, and left FX 1-1 ON button should be lit and other LEDs should be unlit right after the controller launches in Measurement mode.

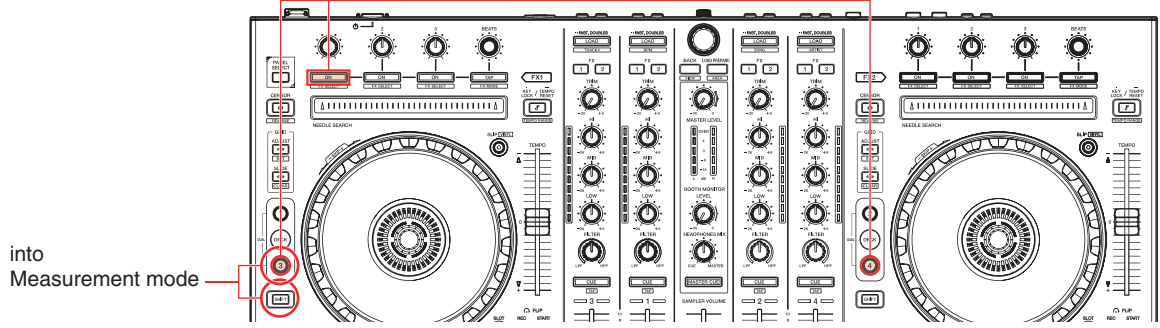
Note: Even if the controller connects with a computer via USB cable, it does not communicate with the computer during Measurement mode.

B Unused LEDs should be unlit during Measurement mode.

[How to exit Measurement mode]

In order to exit Measurement mode, turn off the power.

These LEDs are lit right after the controller launches in Measurement mode.



C

D

E

F

1. Measurement of Jog dial rotation time

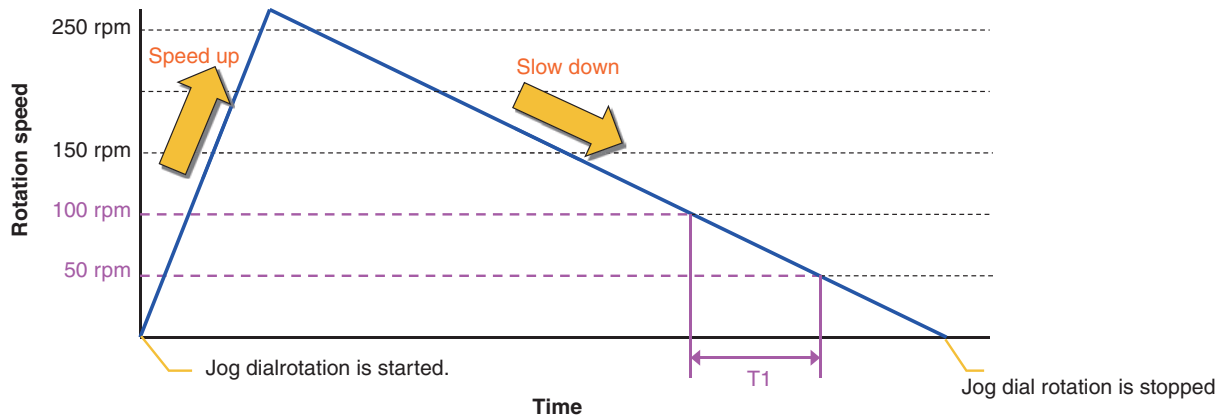
This controller should measure the rotation time by rotating Jog dial during Measurement mode.

In particular, when Jog dial is turned with 233.1 rpm (33.3×7) or more during Measurement mode, the controller should measure difference between time of when the rotation speed slows down to 99.9 rpm (33.3×3) and time of when it slows down to 49.95 rpm (33.3×1.5).

(The controller should measure "T1" shown in Figure-8.)

But, when the rotation speed is less than 233.1 rpm, the controller does not measure.

Figure-8 Characteristic example of when Jog dial is turned



[Trigger of which measure Jog dial rotation time]

- 1) In order to measure the rotation time for left-side Jog dial, turn left-side Jog dial clockwise or counterclockwise during Measurement mode.
- 2) In order to measure the rotation time for right-side Jog dial, turn right-side Jog dial clockwise or counterclockwise during Measurement mode.

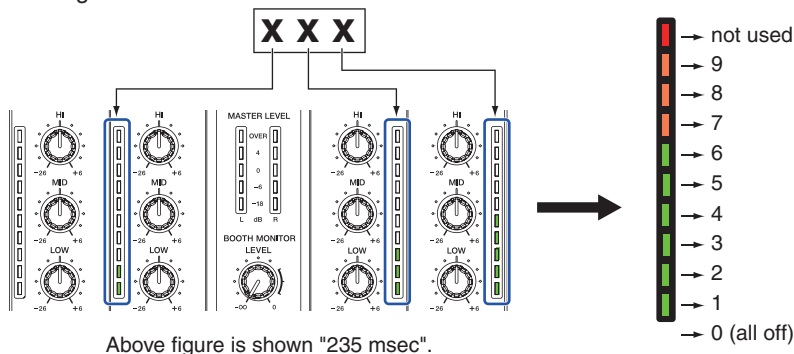
[Posterior condition]

When the rotation speed is more than 233.1 rpm, measurement value ("T1" shown in Figure-8) is indicated using Channel Level Indicator and LEDs within left side SLIP buttons are unlit (*1). Indication method by Channel Level Indicator is common to both side.

The measurement unit is "milli second".

When the rotation speed is less than 233.1 rpm, all Channel Level Indicators are unlit and LED within SLIP button of the left side is lit.

The specified range is 65 ± 35 msec.



*1: If a place of a measurement value is "0", all segments of the related Channel Level Indicator are unlit. Channel Level Indicator (CH3) is not used in Measurement mode.

A 2. Check of drift of knobs and faders

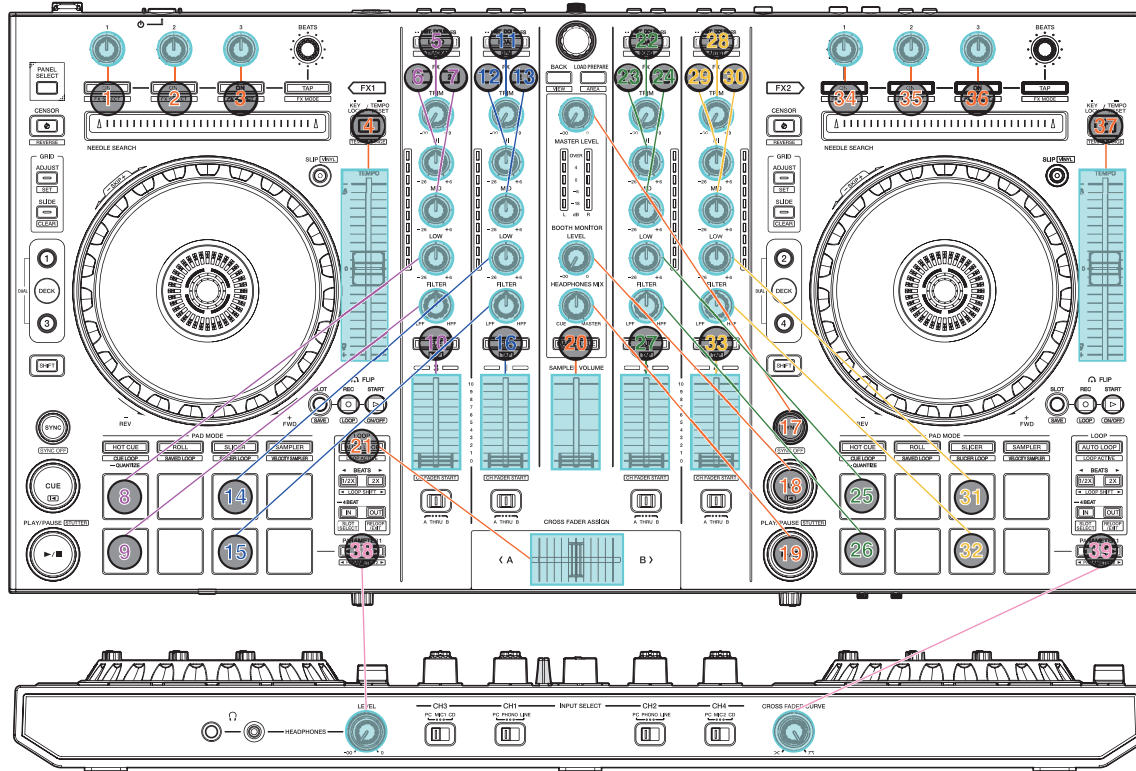
Drift of all knobs and faders can be checked using Master level indicator during Measurement mode. In order to select test subject, turn the Rotary selector clockwise or counterclockwise. Then, lighting LED is moved whenever the Rotary selector is turned. In order to start or reset observation of drift, press the Rotary selector.

[Use of this mode during repair]

- For failure judgment of the rotary VRs
 - As a guide, amplitude values higher than +4 or lower than -4 may be judged as failure.
 - The VRs can be set to any position during measurement. Possible symptoms are shown below.
 - The volume changes arbitrarily.
- Interrupted sound leakage occurs even if the volume is decreased to the minimum at the Master or Booth Monitor.
- The MIDI signal is output even if the corresponding VR is not operated.
- For operation check of a rotary VR after replacement

Figure-9 Relation between knob/fader and LED

Knobs and faders painted with light blue color are checkable. Number in this figure means order of which select test subject.



[Preparation of when check drift]

Firstly, Select knob or fader of which check drift.
 In order to select it, turn the Rotary selector clockwise or counterclockwise.
 Whenever the Rotary selector is turned, lighting LED is moved according to the order shown in Figure-9.
 Knob or fader of which check drift can be identified by lighting LED.

[Trigger of which observe drift]

In order to start observation of drift, press the Rotary selector.
 In order to clear measured result of drift and start new observation of drift, press the Rotary selector again.

The controller should store A/D converted value for knob/fader as "reference value" right after the Rotary selector is pressed.
 The controller should always calculate difference between the "reference value" and latest value during observation.
 The controller should indicate maximum difference value until now as drift.
 If latest difference value is more than past maximum difference value, the drift value should be used the latest difference value.
 If not, the drift value should be used not the latest difference value but past maximum difference value.

[Posterior condition]

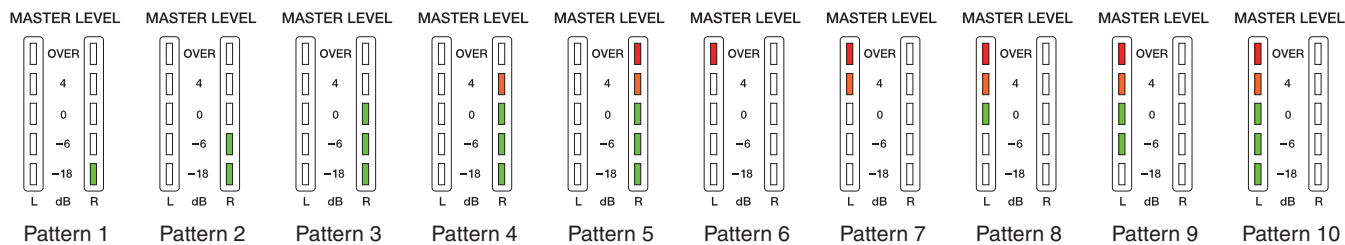
Segments of Master level indicator are lit depending on amount of the drift.

The controller should always indicate both negative and positive maximum drift value at the same time until the Rotary selector is pressed next.

Table-5 Relation between amount of drift and Master level indicator

Amount of drift	Master level indicator		
	Lighting segments	Lighting pattern	Side
+1	-18 dB	Pattern 1	Right-side
+2	-18 dB and -6 dB	Pattern 2	Right-side
+3	-18 dB, -6 dB and 0 dB	Pattern 3	Right-side
+4	-18 dB, -6 dB, 0 dB and +4 dB	Pattern 4	Right-side
+5 or more	-18 dB, -6 dB, 0 dB, +4 dB and "OVER"	Pattern 5	Right-side
-1	"OVER"	Pattern 6	Right-side
-2	+4 dB and "OVER"	Pattern 7	Left-side
-3	0 dB, +4 dB and "OVER"	Pattern 8	Left-side
-4	-6 dB, 0 dB, +4 dB and "OVER"	Pattern 9	Left-side
-5 or less	-18 dB, -6 dB, 0 dB, +4 dB and "OVER"	Pattern 10	Left-side

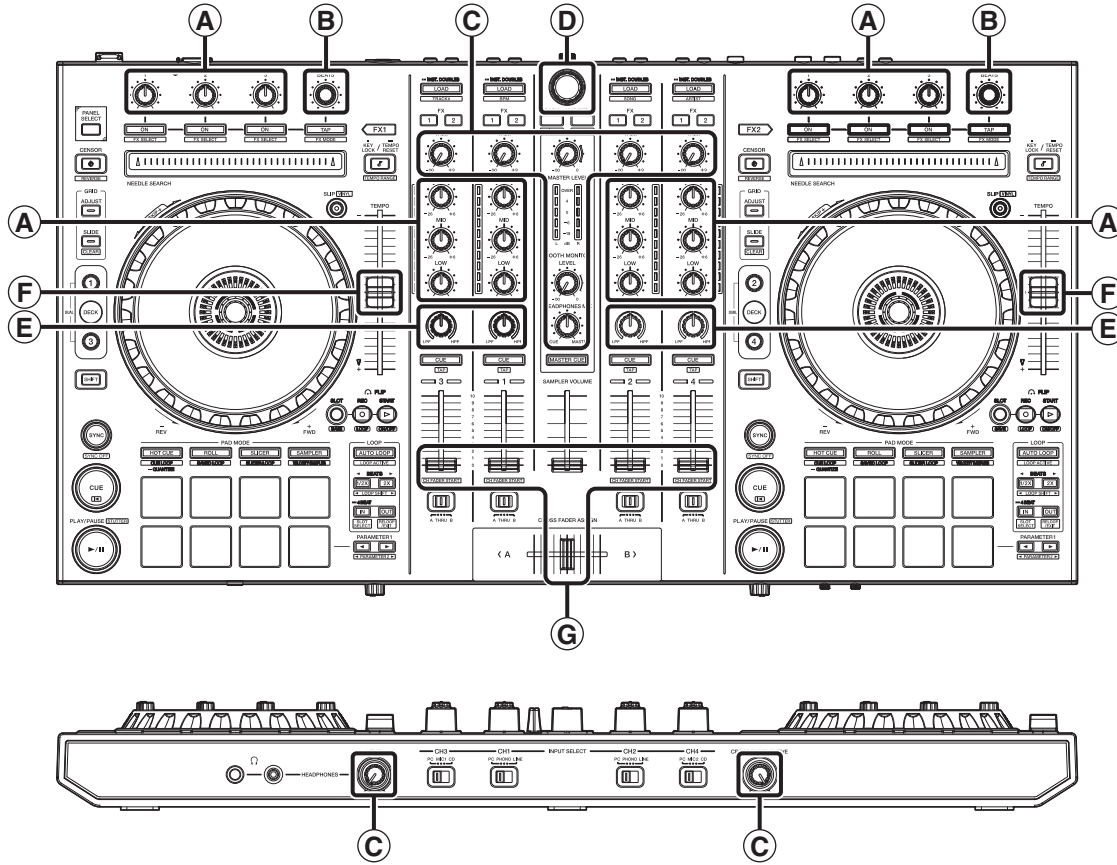
Figure-10 Lighting pattern of Master level indicator during drift observation



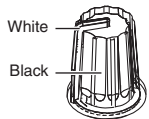
7. DISASSEMBLY

Note:
Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

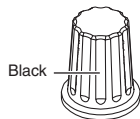
Knobs and Volumes Location



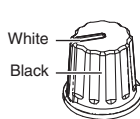
A 100-S1-3006-HA
x18



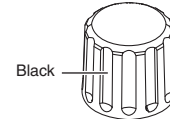
B 100-S1-3007-HA
x2



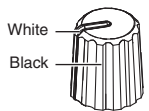
C 100-S1-3008-HA
x9



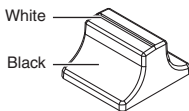
D 100-S1-3010-HA
x1



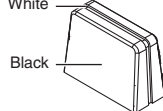
E 100-S1-3009-HA
x4



F 100-S1-3005-HA
x2



G 100-SXMK2-3157
x6



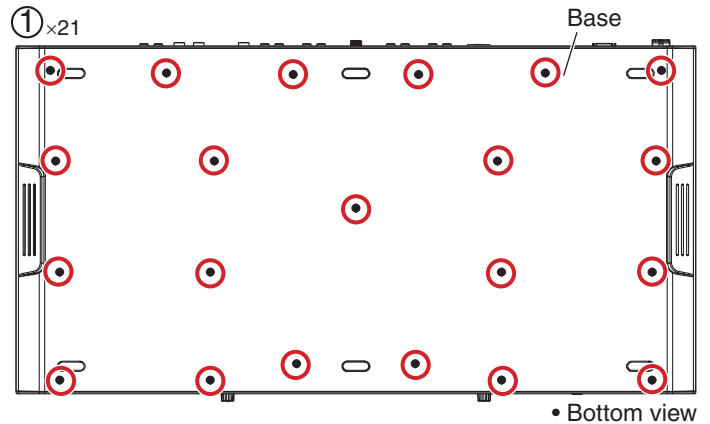
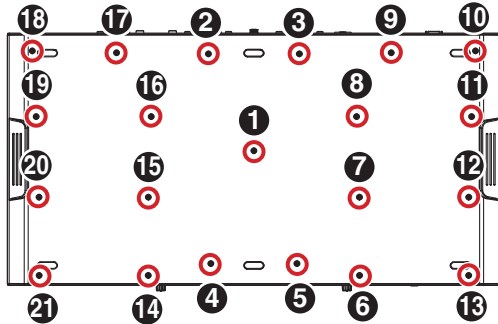
Disassembly

[1] DSP and OUTPUT PCB Assemblies

• Base

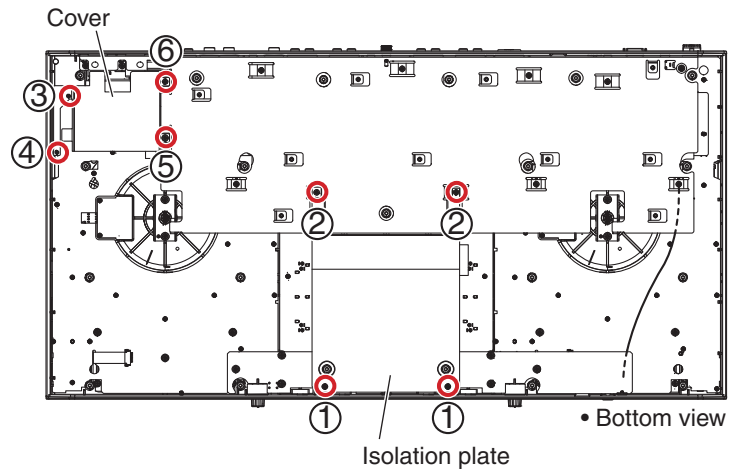
- (1) Remove the Base by removing the 21 screws.
(602-PTP3012-571-HA)

Screw tightening order



• Shield

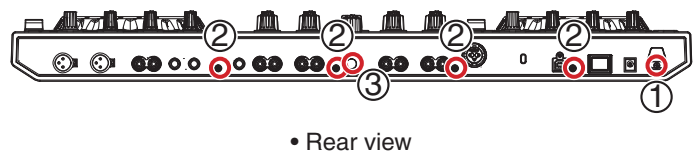
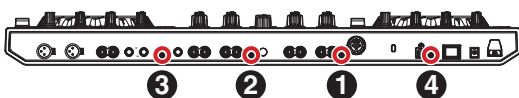
- (1) Remove the 2 screws.
(602-MP3-324-HA)
- (2) Remove the Isolation plate by removing the 2 screws.
(602-B600-072-HA)
- (3) Remove the 1 screw.
(602-CDN88-563)
- (4) Remove the 1 screw.
(602-SL24F-099-HA)
- (5) Remove the 1 screw.
(602-QMX2BPM-322-HA)
- (6) Remove the Cover by removing the 1 screw.
(602-B600-072-HA)



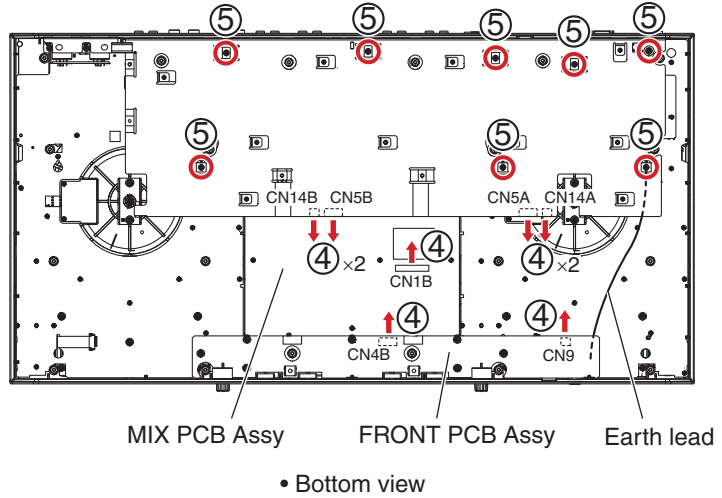
• DSP and OUTPUT PCB Assemblies

- (1) Remove the Strain relief bush by removing the 1 screw.
(602-BTB3012-446B-HA)
- (2) Remove the 4 screws.
(602-MP3-324-HA)
- (3) Remove the Ground terminal and washer.

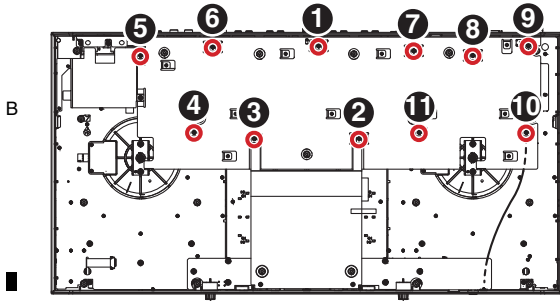
Screw tightening order



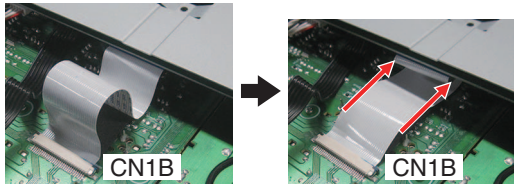
- A (4) Disconnect the 1 flexible cable and 6 connectors.
(CN1B, 4B, 5A, 5B, 9, 14A, 14B)
- (5) Remove the Output board with PCB Assemblies by removing the 8 screws.
(602-B600-072-HA)



Screw tightening order



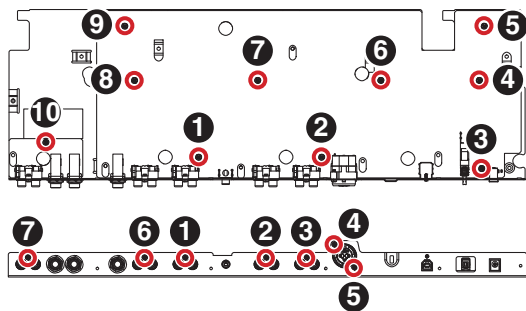
• Note on connection of the flexible cable (CN1B)



Tuck the flexible cable between the PC boards.

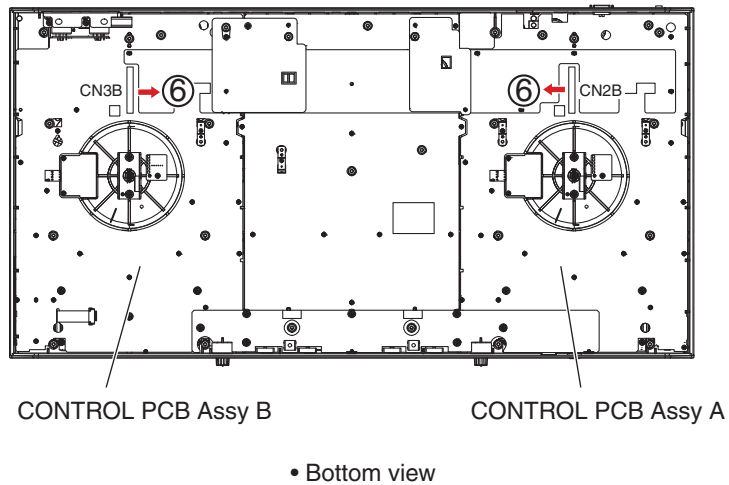
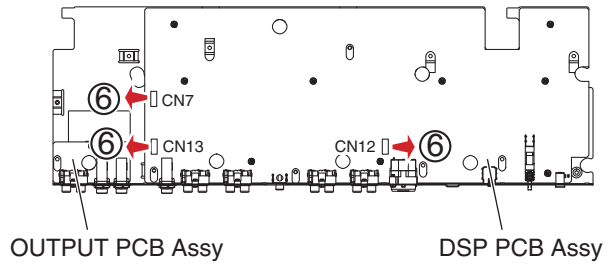
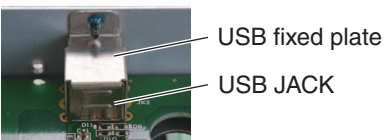
- C (6) Disconnect the 2 flexible cables and 3 connectors.
(CN2B, 3B, 7, 12, 13)

Screw tightening order (reference information)



• When replacing the USB JACK

When the USB JACK in the DSP PCB Assy is to be replaced, the USB fixing bracket (USB fixed plate) must be detached together with it. To detach them, remove the solder from the JACK and USB fixed plate.



■ Diagnosis of DSP PCB Assy

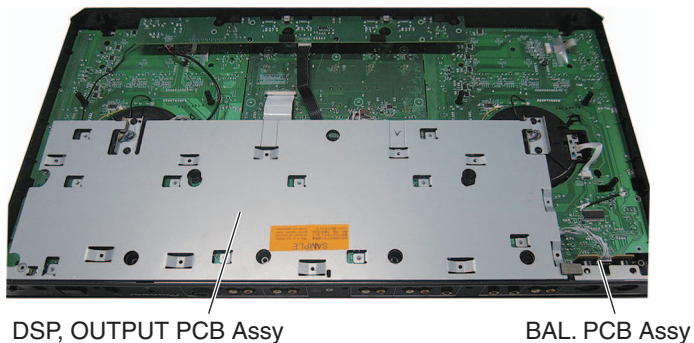
When you diagnose DSP PCB Assy in an electricity state, perform it in the following procedures.

Extension FFCs to be used: GGP1246 (2 pcs)

Step 1:

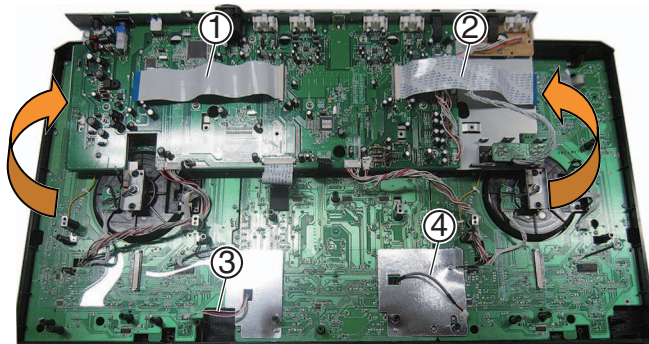
Perform the disassembly steps up to Step (5) described in [1] DSP, OUTPUT PCB Assy in "DISASSEMBLY."

Remove the BAL. PCB Assy.



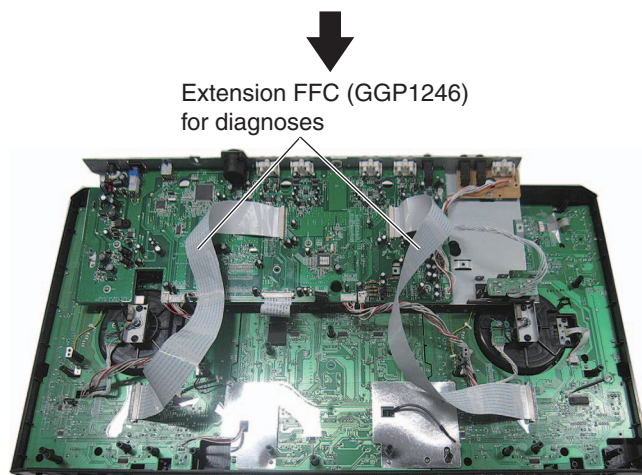
Step 2:

Disconnect the FFCs ① and ② and the wires ③ and ④ then turn over the DSP PCB Assy toward the front side.



Step 3:

Replace the FFCs ① and ② with the ones for diagnosis.



Step 4:

Connect the adapter and cables.

Diagnosis

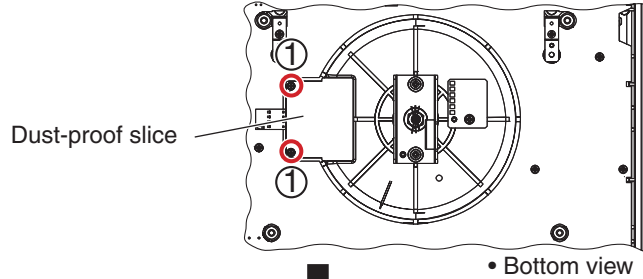
A [2] Jog dial section

Note:

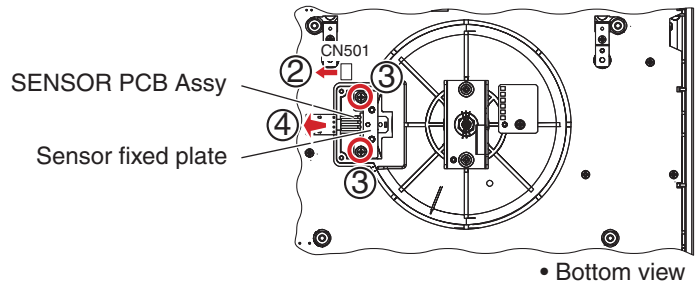
A figure is only left DECK side, but the right side is similar, too.

• **SENSOR PCB Assy**

- (1) Remove the Dust-proof slice by removing the 2 screws.
(602-PROS2-363-HA)

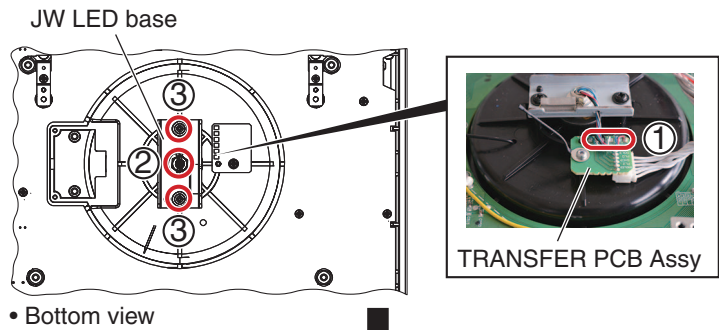


- (2) Disconnect the 1 connector.
(CN501)
- (3) Remove the Sensor fixed plate by removing the 2 screws.
(602-DJ5500-452-HA)
- (4) Remove the SENSOR PCB Assy.

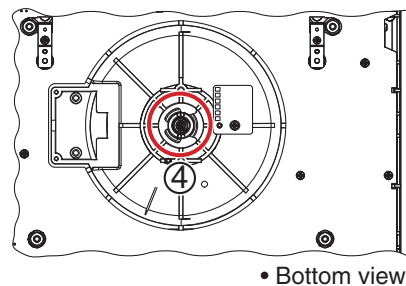


• **Jog dial section**

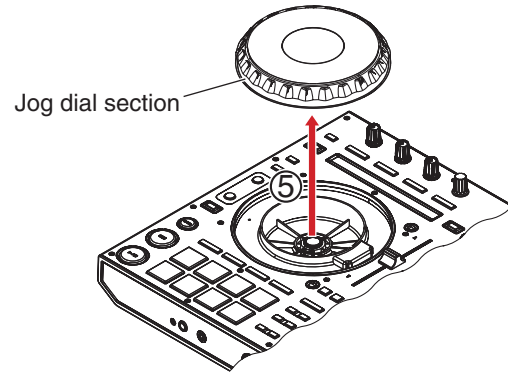
- (1) Remove the 6 solders.
- (2) Remove the 1 nut and 1 washer.
- (3) Remove the JW LED base by removing the 2 screws.
(602-3113-122-HA)



- (4) Remove the 1 E ring.



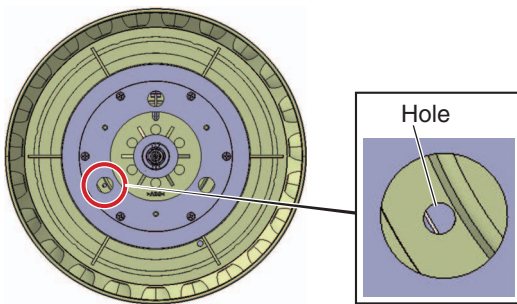
(5) Remove the jog dial section.



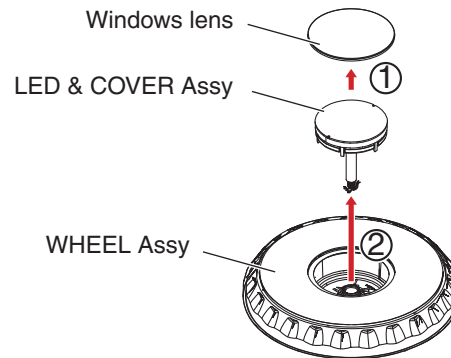
• LED PCB Assy

(1) Remove the Windows lens.

Insert a slim rod in the hole for disassembly in the jog dial section bottom side, and remove it.



• Bottom view



(2) Remove the LED & COVER Assy.

(3) Remove the JW cover by unhooking the 6 hooks.

(4) Remove the LED PCB Assy.

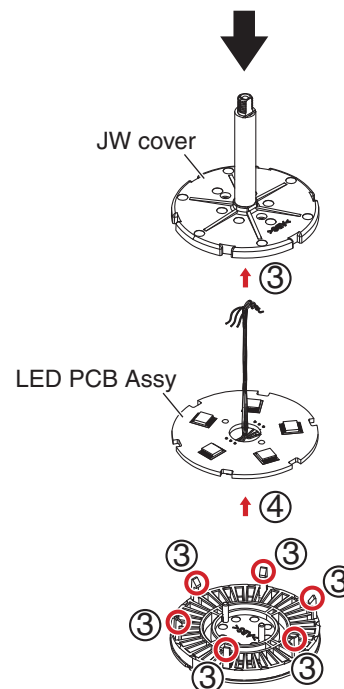
• When replacing the LED & COVER Assy or WHEEL Assy

When replacement of the LED & COVER Assy is required, the Windows Lens must be detached, because the Windows Lens is attached to the WHEEL Assy with double-back tape, which is attached around the outer periphery of the Windows Lens as a tube, and the LED & COVER Assy is placed in between them. Once the Windows Lens is detached, the double-back tape cannot be reused. The Windows Lens may not be reused either, because it may be scratched, depending on the manner in which it was detached.

When replacement of the WHEEL Assy is required, the Windows Lens must also be detached and may not be reused. Note that when replacement of the following Assys are required, replace them together with the parts mentioned below.

Double-back tape is supplied with the WHEEL Assy.

- When the LED & COVER Assy is to be replaced:
Double-back tape (TWIN ADHESIVE) (must),
Windows Lens (if necessary)
- When the WHEEL Assy is to be replaced:
Windows Lens (if necessary)



• Bottom view

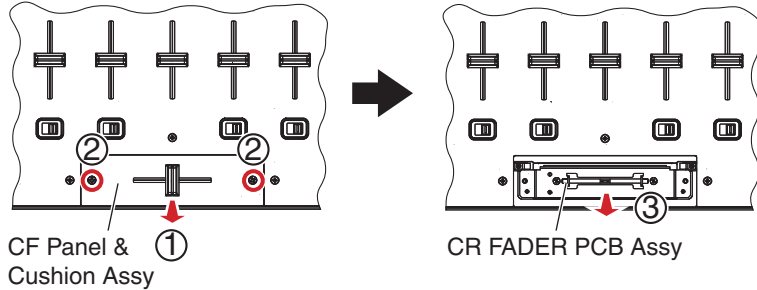
A [3] Each PCB Assemblies

Note:

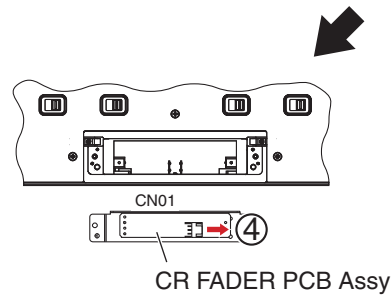
When you remove each PCB Assemblies, it is not necessary to remove a jog dial section.

• CR FADER PCB Assy

- (1) Remove the Push button.
- (2) Remove the CF Panel & Cushion Assy by removing the 2 screws. (602-CTF3010-698B-HA)
- (3) Remove the CR FADER PCB Assy.

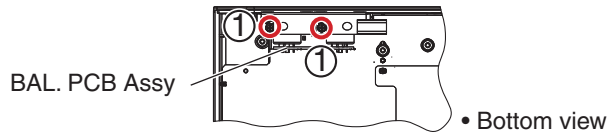


- (4) Disconnect the 1 connector. (CN01)



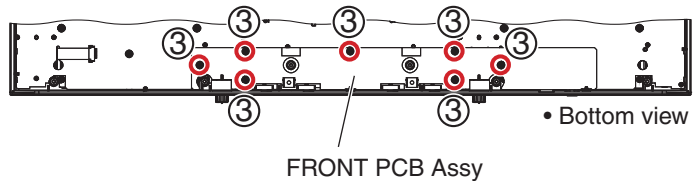
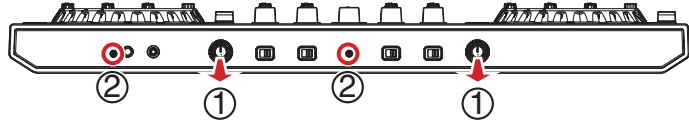
• BAL. PCB Assy

- (1) Remove the BAL. PCB Assy by removing the 2 screws. (602-DJ5500-452-HA)

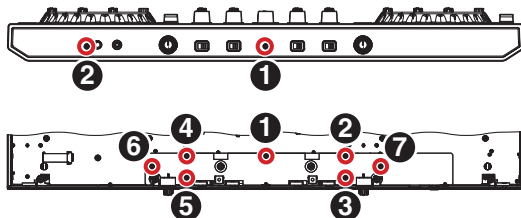


• FRONT PCB Assy

- (1) Remove the 2 Gain rotate knobs.
- (2) Remove the 2 screws. (602-MP3-324-HA)
- (3) Remove the FRONT PCB Assy by removing the 7 screws. (602-DJ5500-452-HA)

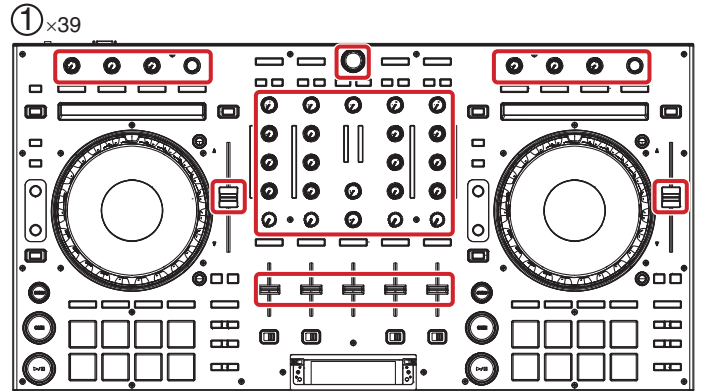


Screw tightening order

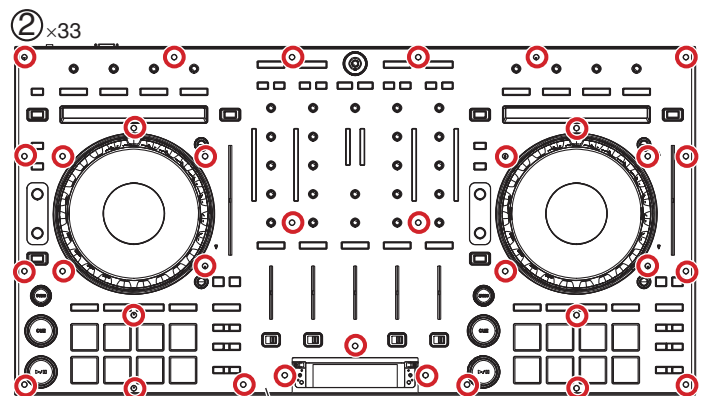


• CONTROL and MIX PCB Assemblies

(1) Remove the all knobs.



(2) Remove the Front panel by removing the 33 screws.
(602-HP1010K-182-HA)



Front panel

■ Detachment/Reattachment of the front panel

For replacement of the CONTROL A/B PCB Assy or MIX PCB Assy, the front panel must be detached.

The front panel is secured to the Chassis Assy with double-back tape at 4 locations for prevention of lifting. Be fully careful not to deform the front panel when detaching it.

• About the double-back tape that is used for securing the front panel and the Chassis Assy

When detaching the front panel

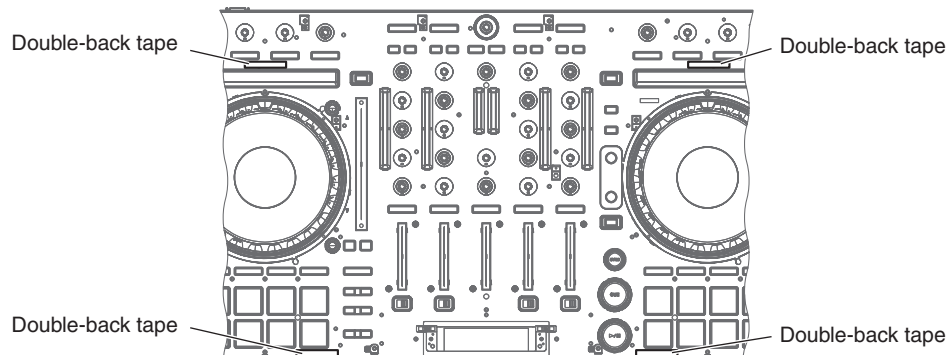
The front panel and the Chassis Assy are secured with 4 pieces of double-back tape at the locations shown in the photo below. Slowly peel off the tape, taking care that you will not deform the front panel.

When reattaching the front panel

① Neatly remove any residue of double-back tape from the back of the front panel and the Chassis Assy.

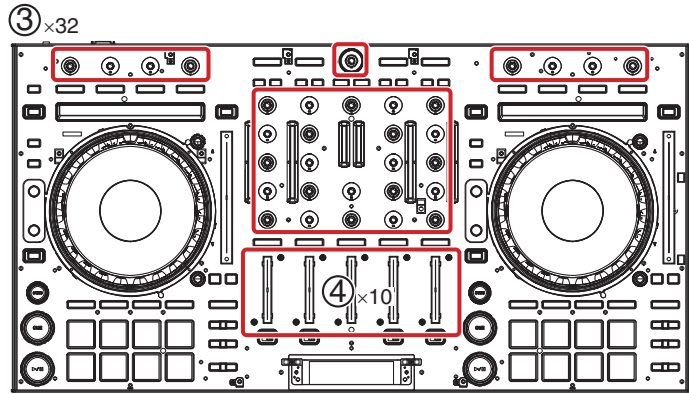
② Stick 4 pieces (5 mm × 40 mm) of NITTO No. 500 double-back tape to the locations shown in the photo below then remove the paper liner.

Note: Even if double-back tape was not used in the initial state, be sure to attach double-back tape when reattaching the front panel.



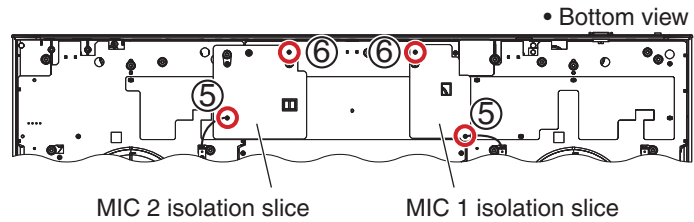
Double-back tape: NITTO No. 500
(5 mm × 40 mm)

- A (3) Remove the 32 nuts and 32 washers.
- (4) Remove the 10 screws.
(602-2002-077-HA)



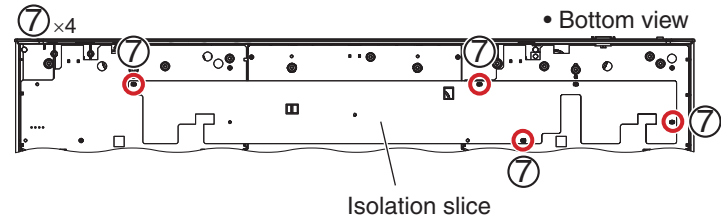
B

- (5) Remove the 2 screws
(602-CDN88-563)
- (6) Remove the MIC1 and 2 isolation slices by removing the 2 screws.
(602-SL24F-099-HA)



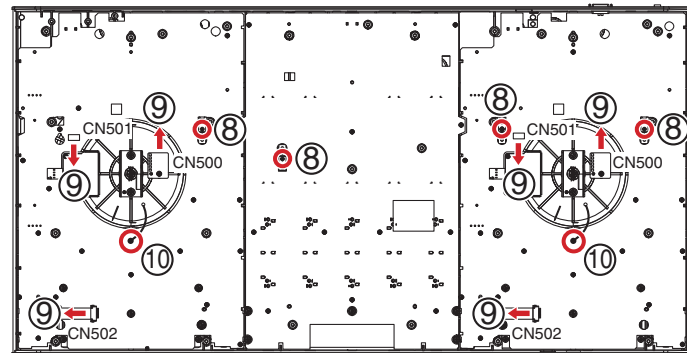
C

- (7) Remove the Isolation slice by removing the 4 screws.
(602-SL24F-099-HA)



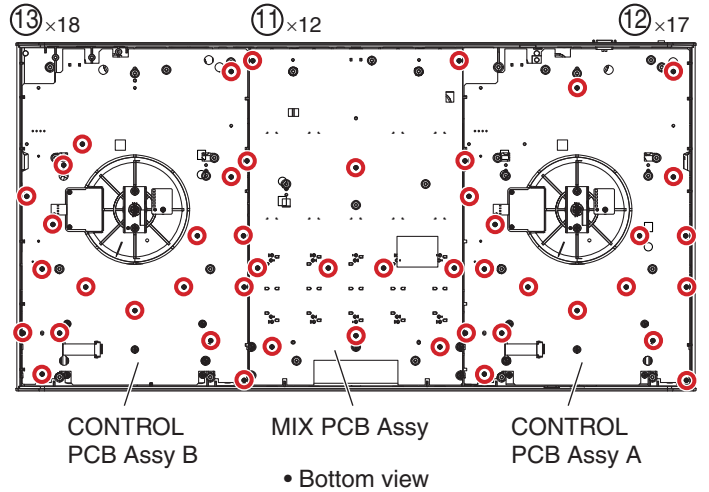
D

- (8) Remove the Ground plate by removing the 4 screws.
(602-SL24F-099-HA)
- (9) Disconnect the 2 flexible cables and 4 connectors.
(CN500 x2, CN501 x2, CN502 x2)
- (10) Remove the 2 solders.



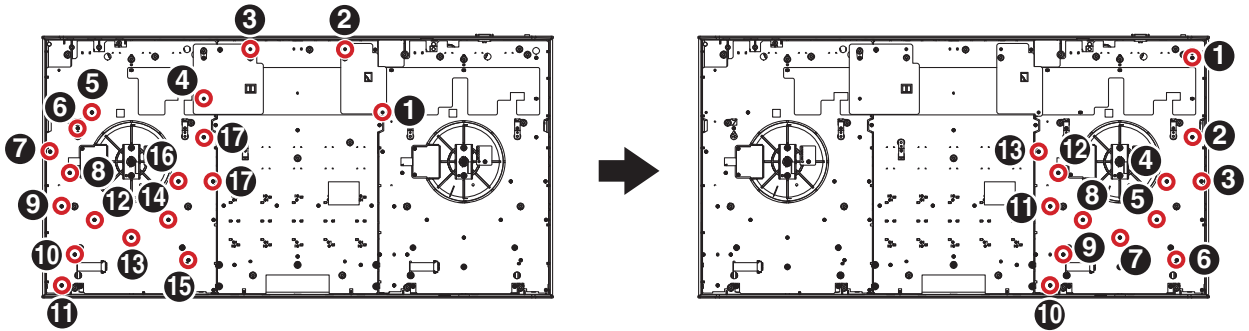
F

- (11) Remove the MIX PCB Assy by removing the 12 screws.
(602-SL24F-099-HA)
- (12) Remove the CONTROL PCB Assy A by removing the 17 screws.
(602-SL24F-099-HA)
- (13) Remove the CONTROL PCB Assy B by removing the 18 screws.
(602-SL24F-099-HA)



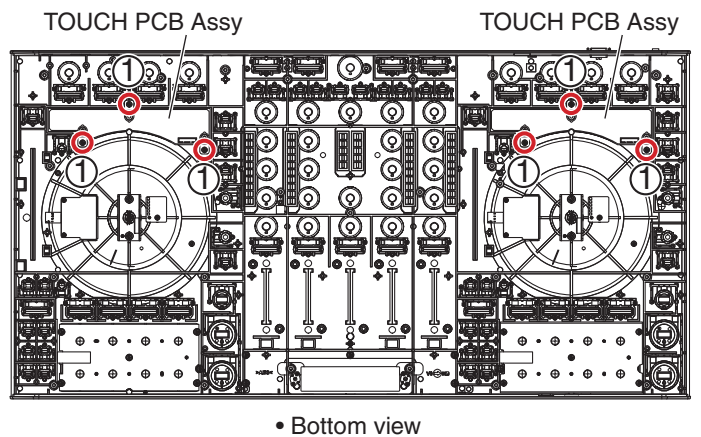
Screw tightening order

The other screws are random order.

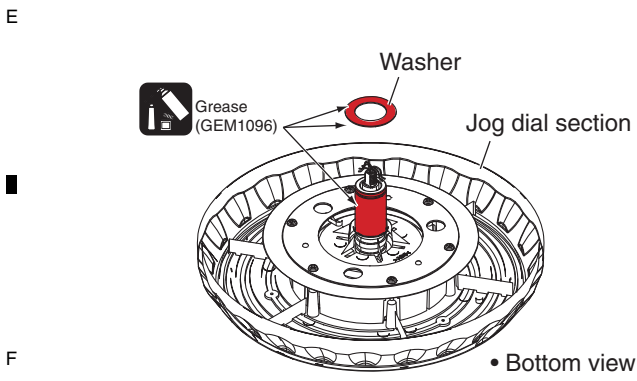
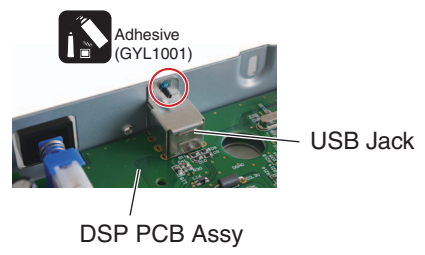
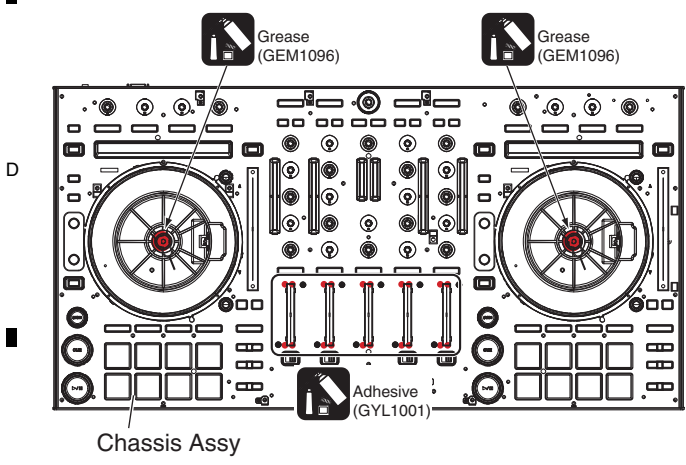
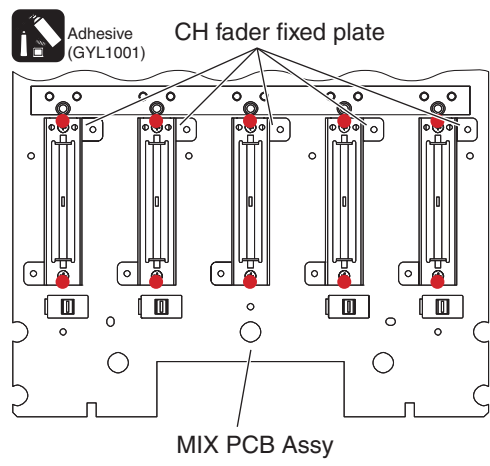
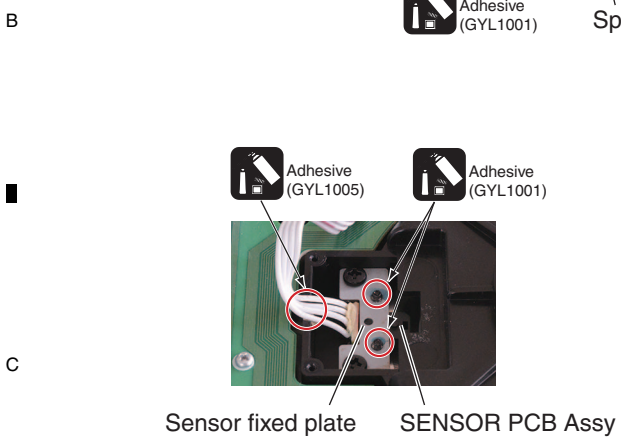
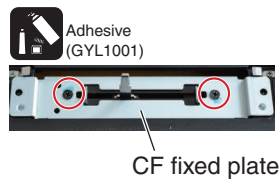
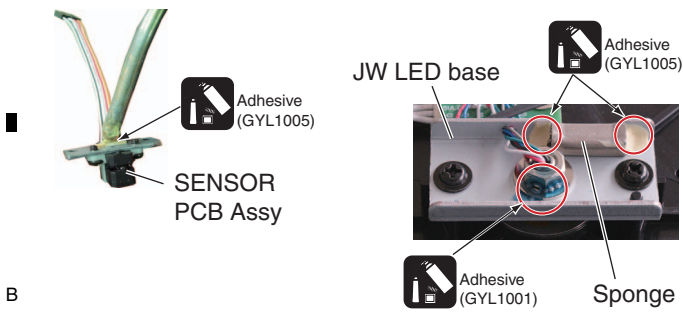


• TOUCH PCB Assy

- (1) Remove the 2 TOUCH PCB Assemblies by removing the 6 screws.
(602-B600-057-HA)



A The Application Position of Adhesive and Grease



8. EACH SETTING AND ADJUSTMENT

8.1 NECESSARY ITEMS TO BE NOTED

After repairing, be sure to check the version of the firmware, and if it is not the latest one, update to the latest version. Perform the each item when the following parts are replaced.

- IC and PCB Assy storing firmware and utility settings
IC24, IC25, DSP PCB Assy \Rightarrow
 - Confirmation of the version of the firmware
 - Updating to the latest version of the firmware
 - Factory reset

- When replaced WHEEL Assy \Rightarrow
 - Confirmation of the specified value by the mode which measures Jog dial rotation time

8.2 UPDATING OF THE FIRMWARE

A What you need for updating

- Update file for DDJ-SX2
 - When the downloaded zip file is double-clicked, the update file is unzipped.
 - Example) DDJ-SX2_V031.jar

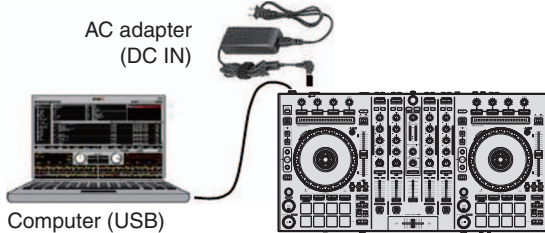


DDJ-SX2_V031.jar

- A computer where Java has been installed.
 - If Java has not been installed, please download the Java Runtime Environment (JRE) at: <http://java.com> and install it on your computer.

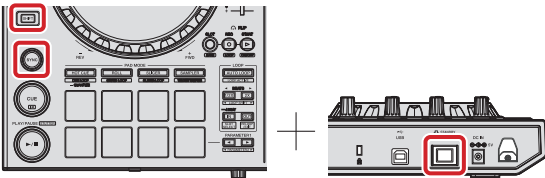
B Updating procedures

- Connect the above prepared computer to DDJ-SX2 via the USB cable included with the product.



Computer (USB)

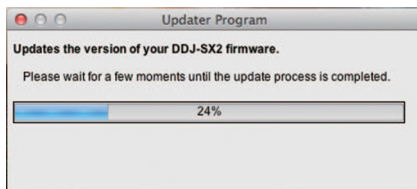
- Turn on the power of DDJ-SX2 while pressing the [SHIFT] button and the [SYNC] button on the LEFT deck ensure the Level meter LEDs flash before releasing your finger from the these buttons.



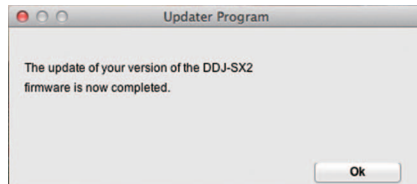
- When the update file for DDJ-SX2 (DDJ-SX2_Vxxx.jar) is activated, the following dialogue is displayed. Click the [Start] button.



- The update of the firmware starts.



- When the firmware update process is complete, click the [OK] button.



Please note that if you fail to update, turn on the power of DDJ-SX2 again and start from Step ③ of the above Updating Procedures.

How to check the firmware version

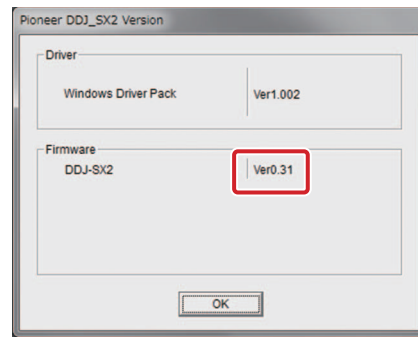
[For Windows]

ASIO driver exclusively for DDJ-SX2 is required to be installed.

From the [Start menu],
Run [All the programs] → [Pioneer] → [DDJ-SX2] → [DDJ_SX2 Version Display Utility]



Pioneer_DDJ-SX2_Version.exe

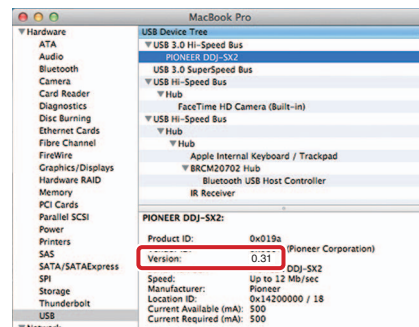


[For Mac]

Open the Apple menu while pressing the option key, then select "System Profiler."



Select the [USB] from the [Hardware] to display the name of the controller. Select the controller to display the firmware version.



8.3 ITEMS FOR WHICH USER SETTINGS ARE AVAILABLE

This unit is provided with user settable items, as shown below.

Although no serious operational problems occur even if data for such user settable items are cleared during repair, it is recommended that you take note of those settings before starting repair.

Use the Check Sheet, to which you can transcribe the settings.

If the corresponding part or board Assy is replaced for repair, change the user resettable settings to those noted on the Check Sheet before starting repair. If resetting is not possible, when returning the repaired product, be sure to tell the customer that the Utility settings have been cleared and will have to be reset, as required.

Item for Which User's Setting is Available		Setting Value (The factory default settings are indicated in bold.)	Part Name	Content to be Stored
		Indication method		
MIDI controller setting		Automatically switching modes, according to whether or not Serato DJ is running / Forced operations to be generally expected from the MIDI controller, regardless of running or not running of Serato DJ Right Deck HOT CUE mode button lit / ROLL mode button lit	IC24 (DSP PCB Assy)	Utility mode setting value
Channel fader start setting		With SYNC / without SYNC / function disabled Left Deck Effect parameter: 1 button lit / 2 button lit / 3 button lit		
Crossfader start setting		With SYNC / without SYNC / function disabled Right Deck Effect parameter: 1 button lit / 2 button lit / 3 button lit		
Attenuator level setting for the Master output		0 dB (without attenuation) / -3 dB / -6 dB Left Deck HOT CUE mode button lit / ROLL mode button lit / SLICER mode button lit		
Flashing setting in Slip mode		Flashing enable / Flashing disable Left Deck SLIP button lit / SLIP button unlit		
Light/flash setting of the SLIP button		The SLIP button to start flashing when Slip mode is entered / The SLIP button to light when Slip mode is entered and flash while normal playback is being performed in the background Right Deck SLIP button lit / SLIP button unlit		
Demo mode setting		Time required for start of Demo mode: One minute / 5 minutes / 10 minutes of no operation / Demo mode disabled Right Deck LOOP 2X button lit / LOOP IN button lit / OOP OUT button lit / LOOP 1/2X button lit		
UTILITY mode	Velocity curve setting	Curve 1 / Curve 2 / Curve 3 / Curve 4 LOOP 2X button lit / LOOP IN button lit / OOP OUT button lit / LOOP 1/2X button lit		
	After touch setting	Setting enable / Setting disable Left Deck SAMPLER mode button lit / SAMPLER mode button unlit		
Operation setting for NEEDLE SEARCH pad		NEEDLE SEARCH pad operation to be limited / NEEDLE SEARCH pad operation NOT to be limited Left Deck CENSOR button lit / CENSOR button unlit		
Cut lag setting for crossfader		0 (0.5 mm) / 1 (0.6 mm) to 5 (1 mm) to 51 (5.6 mm) / 52 (5.7 mm) The number of lit segments of the [CH3] channel level indicator denotes a value in tens, and the number of lit segments of the [CH1] channel level indicator denotes a value in units.		
Microphone output setting to Booth monitor		Microphone sound to be output from the [BOOTH OUT] connector / Microphone sound NOT to be output from the [BOOTH OUT] connector Right Deck SAMPLER mode button lit / SAMPLER mode button unlit		
Illuminations mode setting for jog dial	White illuminations	Decks 1 and 2: Pattern 1 / Pattern 2 / Pattern 3 / Pattern 4 / Pattern 5, Decks 3 and 4: Pattern 1 / Pattern 2 / Pattern 3 / Pattern 4 / Pattern 5 Left Deck Performance pad: 1 lit / 2 lit / 3 lit / 4 lit / 5 lit, Right Deck Performance pad: 1 lit / 2 lit / 3 lit / 4 lit / 5 lit		
	Red illuminations	The red illuminations to be lit when the playback position of a track comes close to a hot cue point / the red illuminations to light or flash in the same way as the SLIP button Left Deck Performance pad: 6 lit / 7 lit		
Setting for backspin length		Backspin length: Short / Normal / Long Right Deck Performance pad: 6 lit / 7 lit / 8 lit		
High-pass filter operation setting for microphone sound		Enable / disable the high-pass filter for the microphone sound Left Deck TAP button lit / TAP button unlit		
MIDI message operation setting for crossfader		Enable / disable optimization of MIDI messages for the crossfader Left Deck KEY LOCK button lit / KEY LOCK button unlit		
Jog dial touch sensor sensitivity adjustment		-17 / -16 . . . 0 . . . +16 / +17 (35 steps) The LEDs at the center of the jog dial: All unlit (-17) to half lit (0) to all lit (+17)	Jog dial touch sensor sensitivity adjustment	

A Each of the above items can be set in Utility mode or Jog Dial Touch Sensor Sensitivity Adjustment mode.
 To enter Utility mode, disconnect the USB cable from the PC then press the STANDBY/ON switch on the rear panel of this unit to set it to Standby. Then while holding the SHIFT and PLAY/PAUSE buttons on the left deck pressed, press the STANDBY/ON switch to set it to ON.
 To start this unit in Jog Dial Touch Sensor Sensitivity Adjustment mode, connect the PC and this unit, using the supplied USB cable, then while holding the SHIFT button pressed, press the DECK1 or DECK3 button for the left jog dial or press the DECK2 or DECK4 button for the right jog dial.
 (For details, refer to the operating instructions of the unit.)

Sheet for confirmation of the user setting

B

MIDI controller setting		Channel fader start setting																																				
Auto	Compulsion	with SYNC	Without SYNC	Disenable																																		
Crossfader start setting			Attenuator level setting for the Master output			Flashing setting in Slip mode																																
with SYNC	Without SYNC	Disenable	0 dB	-3 dB	-6 dB	Enable	Disenable																															
Light/flash setting of the SLIP button		Demo mode setting				Velocity curve setting																																
Flashing	Lit	1 min	5 min	10 min	Disenable	Curve 1	Curve 2	Curve 3	Curve 4																													
After touch setting		Operation setting for NEEDLE SEARCH pad			Cut lag setting for crossfader																																	
Enable	Disenable	Limit	Non limit		0	1 to 5 to 51		52																														
Microphone output setting to Booth monitor																																						
Output	Non output																																					
Illuminations mode setting for jog dial																																						
White illuminations (Left deck)					White illuminations (Right deck)					Red illuminations																												
Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Lit	Flashing																											
Setting for backspin length			High-pass filter operation setting for microphone sound				MIDI message operation setting for crossfader																															
Short	Normal	Long	Enable		Disenable		Enable		Disenable																													
Jog dial touch sensor sensitivity adjustment																																						
-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12	+13	+14	+15	+16	+17				

C

D

E

F

■

5

■

6

■

7

■

8

■

A

■

B

■

C

■

D

■

E

■

F

■

5

■

6

DDJ-SX2

■

7

■

8

■

9. EXPLODED VIEWS AND PARTS LIST

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

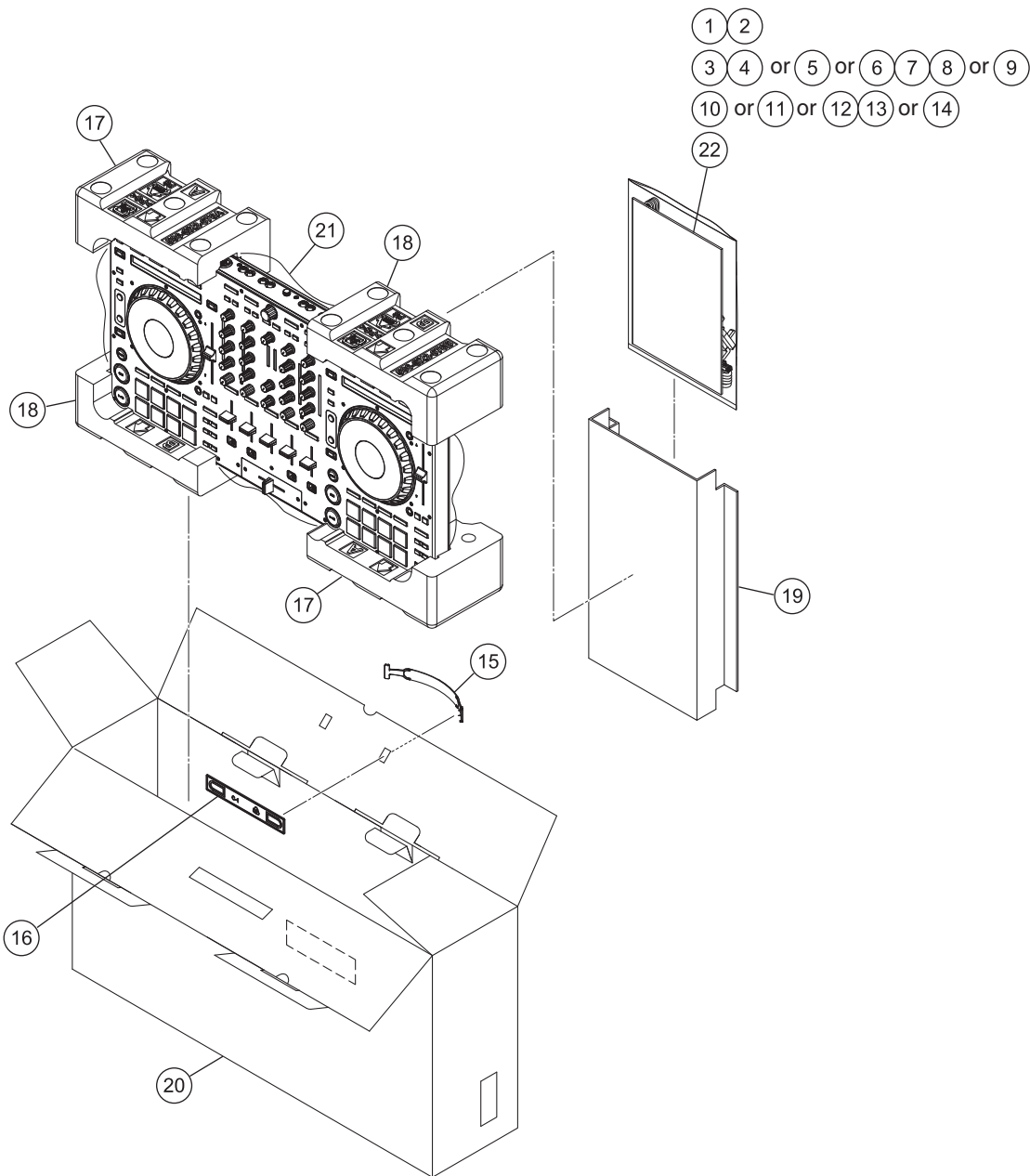
● The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

● Screws adjacent to ∇ mark on product are used for disassembly.

● For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

9.1 PACKING SECTION



(1) PACKING SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
	1 USB Cable (L = 1500 mm)	408-SUB-132	16	Handle Base	100-SX-3018
⚠	2 AC Adapter	411-S1MK2-930	17	Polyfoam A	506-SX2-676A
⚠	3 Power Plug	See Contrast table (2)	18	Polyfoam B	506-SX2-676B
⚠	4 Power Plug	See Contrast table (2)	19	Pasterboard	507-S1-3372-HA
⚠	5 Power Plug	See Contrast table (2)	20	Gift Box	See Contrast table (2)
⚠	6 Power Plug	See Contrast table (2)	21	Soft Bag	509-DDJSX-320-HA
⚠	7 Power Plug	See Contrast table (2)	22	PE Bag (240*340mm, 0.05T)	505-DJM250-014-HA
⚠	8 Power Plug	See Contrast table (2)			
⚠	9 Power Plug	See Contrast table (2)			
	10 Quick Start Guide	See Contrast table (2)			
	11 Quick Start Guide	See Contrast table (2)			
	12 Quick Start Guide	See Contrast table (2)			
	13 Quick Start Guide	See Contrast table (2)			
	14 Quick Start Guide	See Contrast table (2)			
	15 Handle	100-SX-3017			

(2) CONTRAST TABLE

DDJ-SX2/SVYXE8, UXECB, FJKLPXE5 and AXE5 are constructed the same except for the following:

<u>Mark</u>	<u>No.</u>	<u>Symbol and Description</u>	<u>DDJ-SX2 /SVYXE8</u>	<u>DDJ-SX2 /UXECB</u>	<u>DDJ-SX2 /FJKLPXE5</u>	<u>DDJ-SX2 /AXE5</u>
⚠	3	Power Plug	420-DJM250-362-HA	Not used	420-DJM250-362	Not used
⚠	4	Power Plug	420-DJM250-407	Not used	420-DJM250-407	Not used
⚠	5	Power Plug	Not used	420-DJM250-361	Not used	Not used
⚠	6	Power Plug	Not used	Not used	420-DJM250-363-HA	Not used
⚠	7	Power Plug	Not used	Not used	420-DJM250-364-HA	Not used
⚠	8	Power Plug	Not used	Not used	420-DJM250-409	Not used
⚠	9	Power Plug	Not used	Not used	Not used	420-DJM250-408
	10	Quick Start Guide (En, Fr, De, It, NI, Es, Pt, Ru)	502-DJSXM2B-3417A	Not used	Not used	Not used
	11	Quick Start Guide (En)	Not used	502-DJSXM2A-3416	Not used	Not used
	12	Quick Start Guide (En, Es, Ja)	Not used	Not used	502-DJSXM2F-3419	Not used
	13	Quick Start Guide (Ko)	Not used	Not used	502-DJSXM2F-3429	Not used
	14	Quick Start Guide (Zhc)	Not used	Not used	Not used	502-DJSXM2D-3418
	20	Gift Box	507-SX2B-3370A	507-SX2A-3370	507-SX2F-3370A	507-SX2D-3370

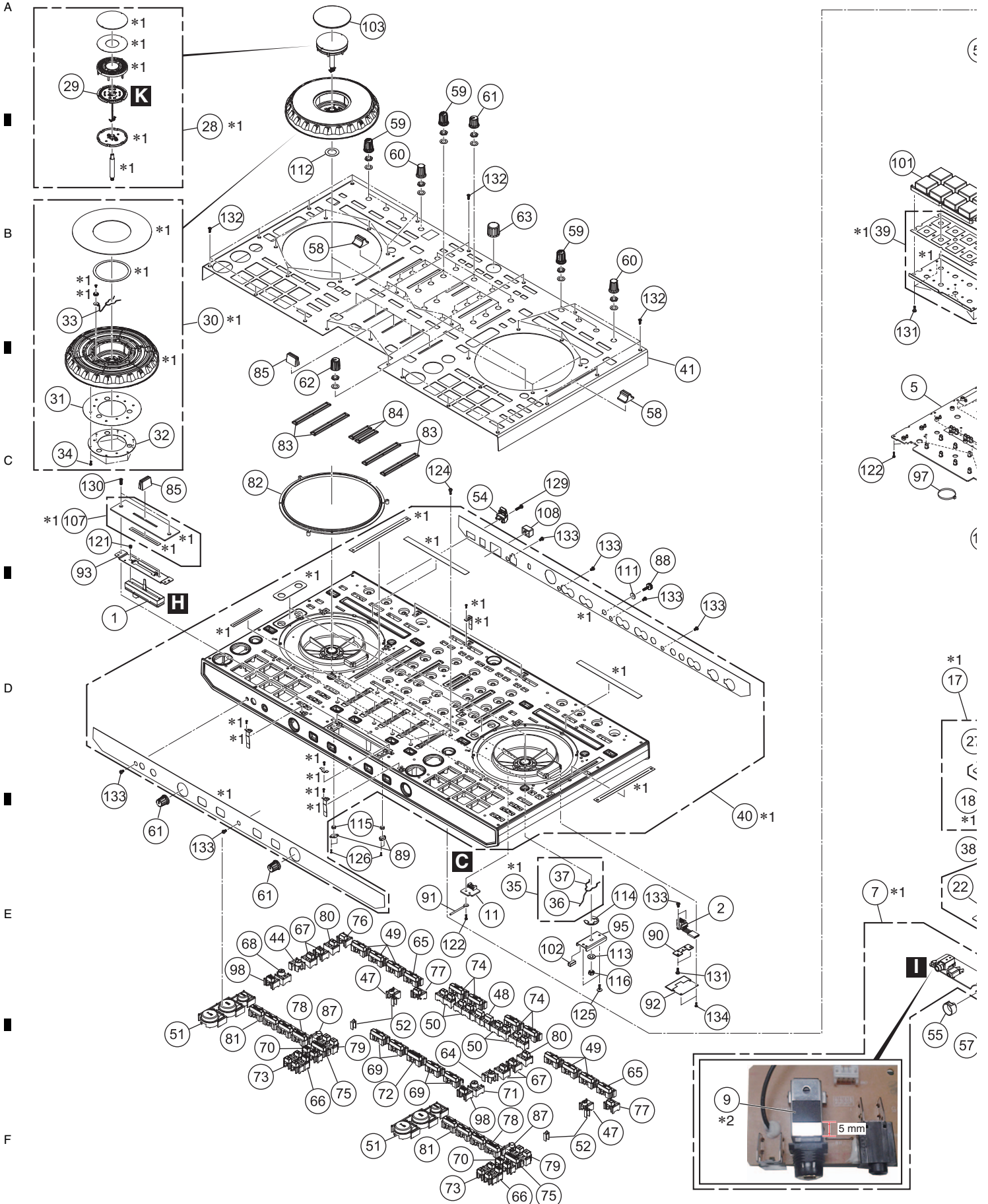
9.2 EXTERIOR SECTION

1

2

3

4

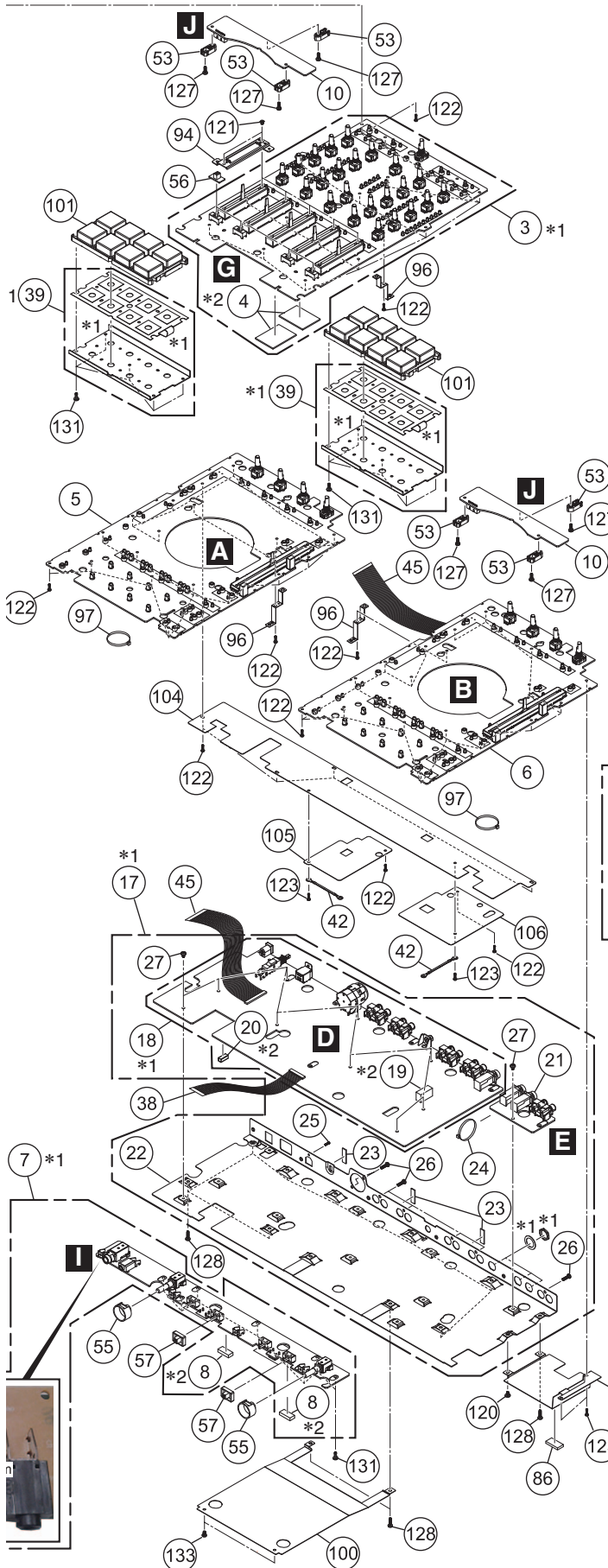


1

2

3

4



*1: The parts in a frame will be supplied as an Assy.
Parts not numbered are non-service parts (NSPs).

*2: To ensure performance of the product and protection of the parts, these parts must be attached.

(1) EXTERIOR SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
A	1 CR FADER PCB Assy	704-EN1000-9788	41	Top Panel Assy	703-SXMK2-1434
	2 SENSOR PCB Assy	704-PDJ33-A007-HA	42	1P Lead Wire (L = 55 mm)	406-S1MK2-1301
	3 1..MIX PCB Assy	704-S1MK2-B091	43	1P Ground Wire (L = 40 mm)	406-8001-833
	4 ² 2..Spacer (40*30*1.5)	612-SX2-450	44	Deck 1 Button	100-S1-2990-HA
	5 CONTROL PCB Assy A	704-S1MK2-A953	45	37P 1.0 FFC Cable (L = 190 mm)	406-S1MK2-1294
	6 CONTROL PCB Assy B	704-S1MK2-A954	46	Foot Mat	612-S1-445-HA
	7 1..FRONT PCB Assy	704-S1MK2-B092	47	Little Round Button	100-S1-2991-HA
	8 ² 2..Spacer	612-SX2-459	48	2 Key Button	100-S1-2992S-HA
	9 ² 2..Spacer	501-MAIE-2451	49	ON Button	100-S1-2993-HA
	10 TOUCH PCB Assy	704-S1MK2-A957	50	1, 2 Button	100-S1-2994-HA
B	11 TRANSFER PCB Assy	704-S1MK2-A960	51	PLAY SYNC Button	100-S1-2995-HA
	12 1..BAL PCB & FIXED P. Assy	704-S1MK2-A986	52	TEMPO Lens	100-S1-2998-HA
	13 2..BAL. PCB Assy	704-S1MK2-A956	53	Fixed Plate	100-S1-2999-HA
	14 2..XLR Fixed Plate	300-S1-2048-HA	54	Strain Relief Bush	100-S1-3000-HA
	15 2..Nut M3 BLK + Gear Washer	601-R2150-033-HA	55	VR Cover	100-S1-3002-HA
	16 2..Screw	602-HMD510B-198-HA	56	CF Button	100-S1-3003-HA
	17 1..I/O & FIX PLATE Assy	704-S1MK2-A985	57	Button	100-S1-3004-HA
	18 2..DSP PCB Assy	704-S1MK2-B090	58	Speed Push Button	100-S1-3005-HA
	19 ² 3..Cushion	612-SX2-362	59	FX Rotate Knob	100-S1-3006-HA
C	20 ² 3..Sponge	612-DJFA-373-HA	60	BEAT Rotate Knob	100-S1-3007-HA
	21 2..OUTPUT PCB Assy	704-S1MK2-A958	61	GAIN Rotate Knob	100-S1-3008-HA
	22 2..Output Board	300-S1-2044A	62	FILTER Rotate Knob	100-S1-3009-HA
	23 2..Sponge	612-F300-358-HA	63	BROWSER Rotate Knob	100-S1-3010-HA
	24 2..Cable Tie	504-S100-004	64	Deck 2 Button	100-S1A-2990-HA
	25 2..Screw	602-HP1010K-181-HA	65	TAP Button	100-S1A-2993-HA
	26 2..Screw	602-MK7-131-HA	66	IN/OUT Button	100-S1A-2994-HA
	27 2..Screw	602-SA12-378	67	CENSOR Button (-)	100-S1B-2989-HA
D	28 1..LED & COVER Assy	704-S1MK2-A961	68	Deck 3 Button	100-S1B-2990-HA
	29 2..LED PCB Assy	704-S1MK2-A959	69	CUE Button	100-S1B-2993-HA
	30 1..WHEEL Assy	703-S1-1383-HA	70	2X Button	100-S1B-2994-HA
	31 2..Encoder Plate	300-PROS2-848-HA	71	Deck 4 Button	100-S1C-2990-HA
	32 2..Encoder Fixed Plate	300-PROS2-851-HA	72	MASTER CUE Button	100-S1C-2993-HA
	33 2..1P Lead Wire (L = 50mm)	406-S1-1232	73	Button	100-S1C-2994-HA
	34 2..Screw	602-PROS2-363-HA	74	LOAD Button	100-S1D-2993-HA
	35 1..Clip & Lead Wire Assy	704-S1-A586	75	AUTO LOOP Button	100-S1E-2993-HA
	36 2..1P Lead Wire	406-S1-1231-HA	76	Rectangular Button	100-SX-2989S-HA
E	37 2..Clip	603-S1-394-HA	77	Key Lock Button	100-SX2-2989
	38 30P 1.0 FFC Cable (L = 120 mm)	406-S1MK2-1295	78	HOT CUE/ROLL Button	100-SX2-3156
	39 PAD & FSR Assy	704-S1MK2-A962	79	1, 2 Button	100-SX2-3159
	40 Chassis Assy (for Service)	See Contrast table (2)	80	CENSOR Button	100-SX2A-2989

*2: To ensure performance of the product and protection of the parts, these parts must be attached.

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
81	HOT CUE/ROLL Button	100-SX2A-3156	106	MIC 2 Isolation Slice	501-SX2-2646
82	JW Ring	100-SXMK2-3152	107	CF Panel & Cushion Assy	703-SX2-1396
83	LM Lens	100-SXMK2-3154	108	Power Knob	100-HDJ2000-1641-HA
84	MASTER Lens	100-SXMK2-3155	109	•••••	
85	Push Button 1	100-SXMK2-3157	110	•••••	
86	Sponge	612-S1-461-HA	111	Washer	606-S1-007-HA
87	Round Knob	100-SXMK2-3160	112	Washer	606-S1-261-HA
88	Ground Terminal	200-S1-665-HA	113	Washer	606-DDJLE-260-HA
89	Fixed Cover	300-33-1918-HA	114	E Type Washer	606-S1-262-HA
90	Sensor Fixed Plate	300-HDJ9800-981-HA	115	Nut (M3*P0.5)	601-A100-004-HA
91	Winding Fixture	300-HM510B-224-HA	116	Nut (M5,7.9*3.8mm, C1010)	601-MM1000-029-HA
92	Dust-Proof Slice	501-HDJ9800-1648-HA	117	•••••	
93	CF Fixed Plate	300-S1-2045-HA	118	•••••	
94	CH Fader Fixed Plate	300-S1-2046-HA	119	Screw	602-PTP3012-571-HA
95	JW LED Base	300-S1-2049A-HA	120	Screw	602-QMX2BPM-322-HA
96	Ground Plate	300-S1-2051-HA	121	Screw	602-SA12-414-HA
97	Cable Tie	504-S100-004-HA	122	Screw	602-SL24F-099-HA
98	Shift Button	100-S1-2989-HA	123	Screw	602-CDN88-563
99	Cover	300-S1-2059-HA	124	Screw	602-2002-077-HA
100	Isolation Plate	300-S1-2060-HA	125	Screw	602-3113-122-HA
101	Velocity Soft Knob	604-SXMK2-651	126	Screw	602-A700-494-HA
102	Sponge	612-DJFA-373-HA	127	Screw	602-B600-057-HA
103	Windows Lens	100-S1-2985-HA	128	Screw	602-B600-072-HA
104	Isolation Slice	501-S1-2542A	129	Screw	602-BTB3012-446B-HA
105	MIC 1 Isolation Slice	501-SX2-2645	130	Screw	602-CTF3010-698B-HA
			131	Screw	602-DJ5500-452-HA
			132	Screw	602-HP1010K-182-HA
			133	Screw	602-MP3-324-HA
			134	Screw	602-PROS2-363-HA

(2) CONTRAST TABLE

DDJ-SX2/SVYXE8, UXECB, FJKLPXE5 and AXE5 are constructed the same except for the following:

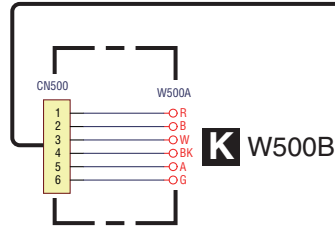
Mark	No.	Symbol and Description	DDJ-SX2 /SVYXE8	DDJ-SX2 /UXECB	DDJ-SX2 /FJKLPXE5	DDJ-SX2 /AXE5
	40	Chassis Assy (for Service)	705-SXMK2-1592	705-SXMK2-1592	705-SXMK2-1592	705-SXMK2D-1593

10. SCHEMATIC DIAGRAM

10.1 CONTROL PCB ASSY A, B and TRANSFER PCB ASSY

A

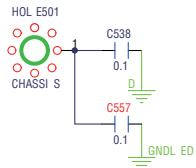
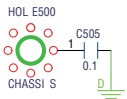
C TRANSFER PCB ASSY (704-S1MK2-A960)



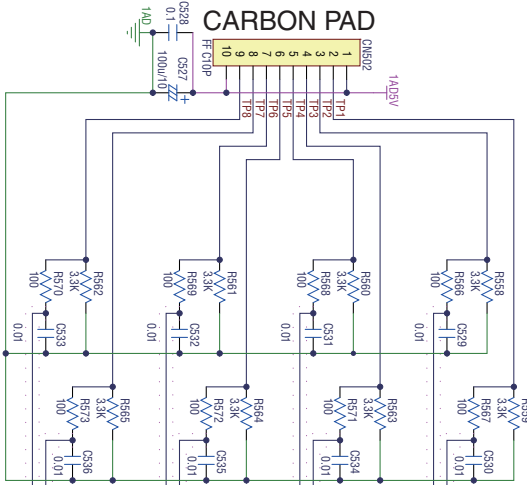
B

A CONTROL PCB ASSY A (704-S1MK2-A953)

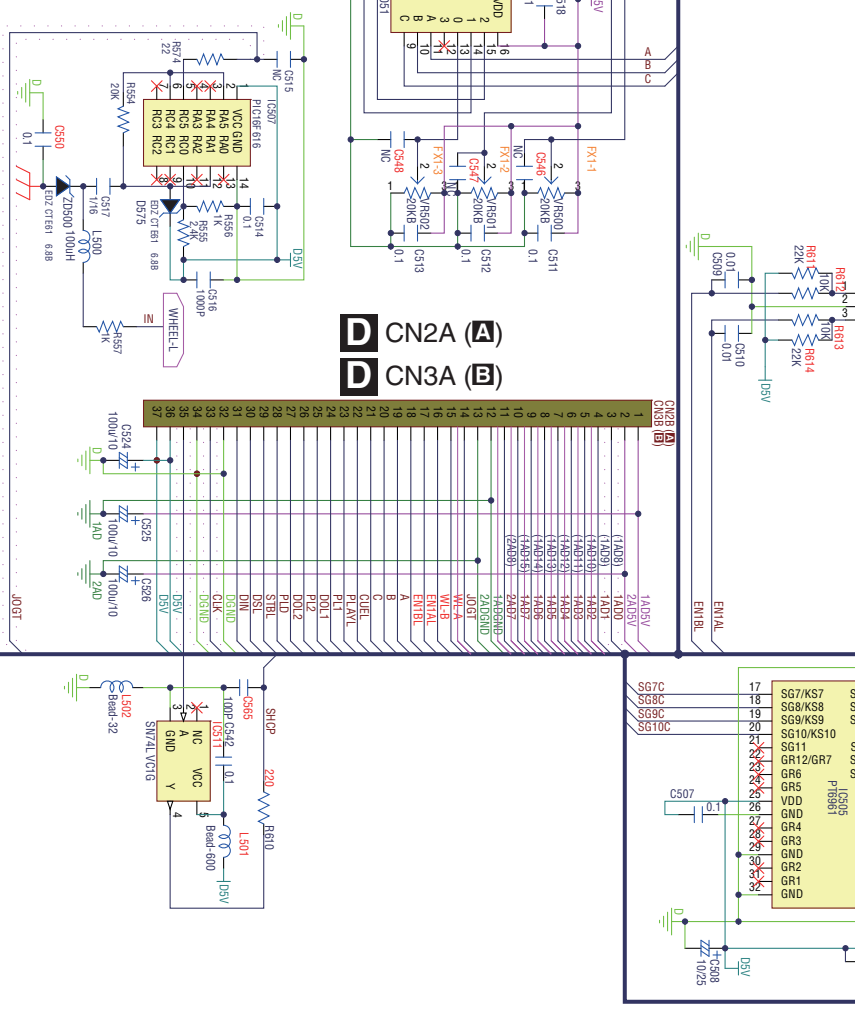
B CONTROL PCB ASSY B (704-S1MK2-A954)



C



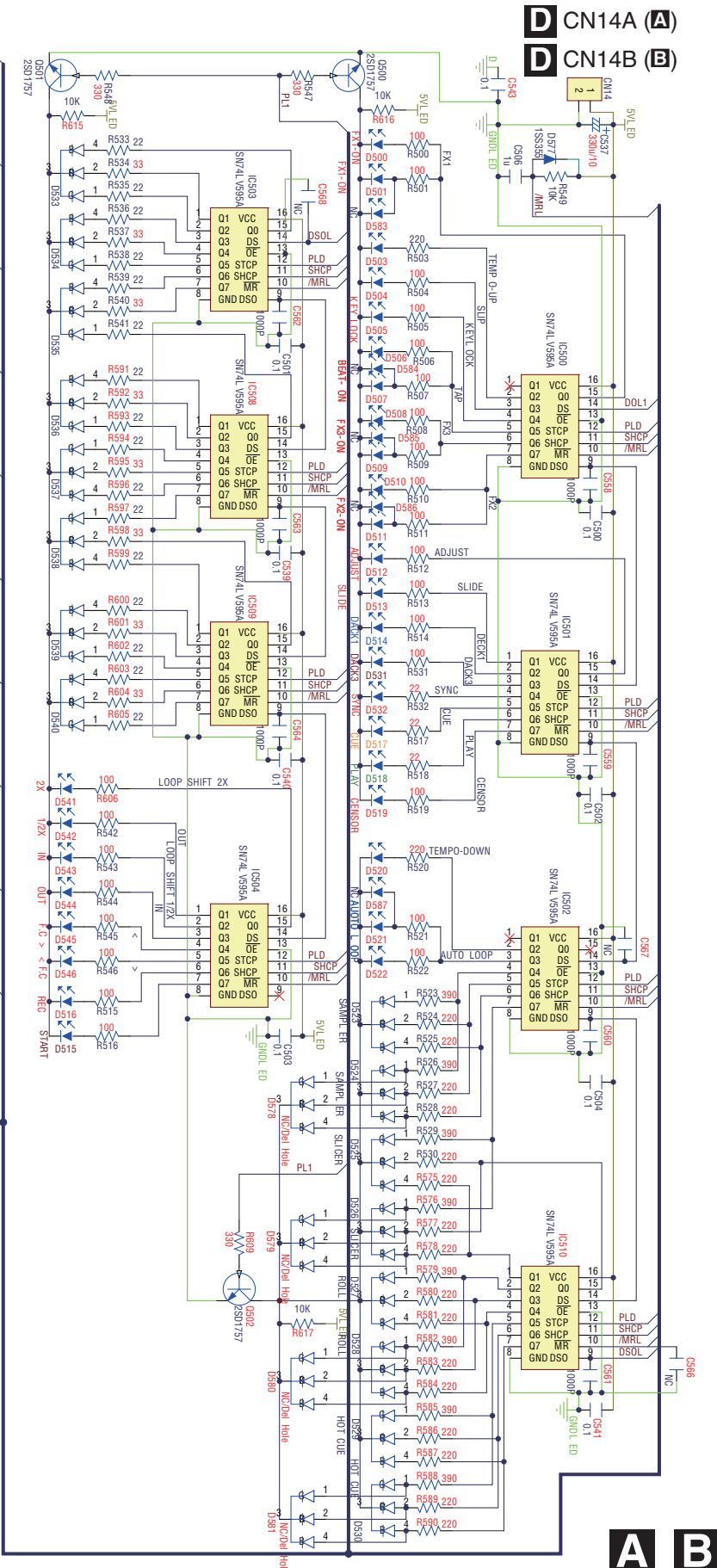
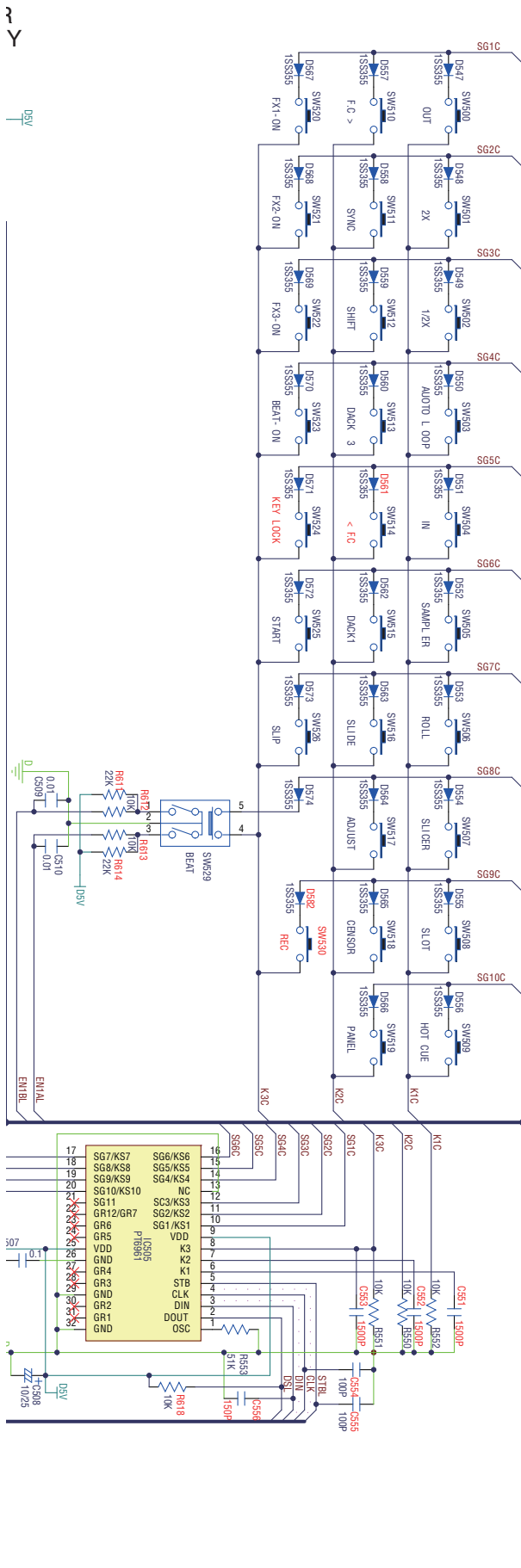
D



E

F

A B C

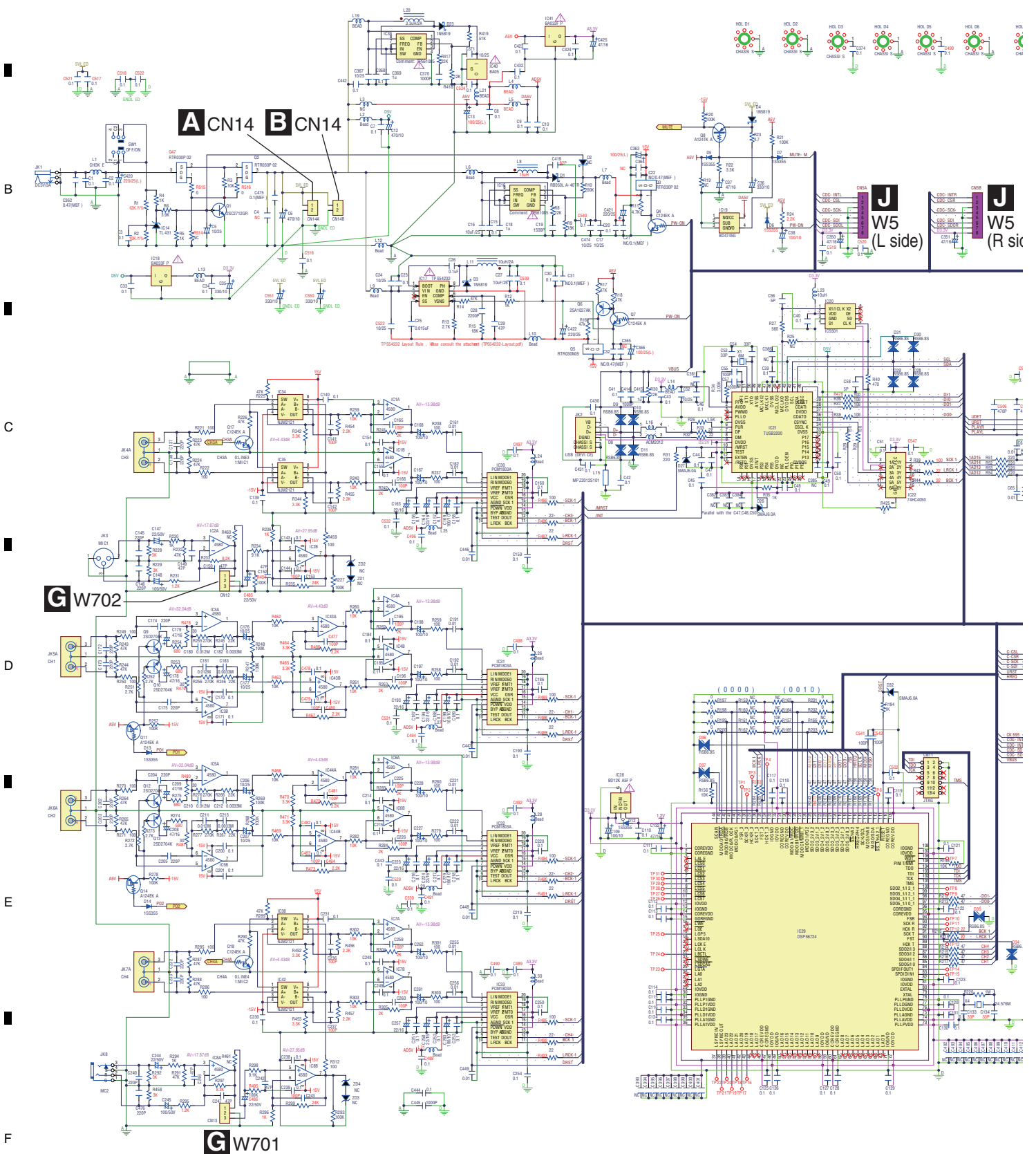


DDJ-SX2

10.2 DSP, OUTPUT and BAL. PCB ASSYS

*The circuitry was modified during production. For details, see "1.2 NOTES ON DSP PCB ASSY."

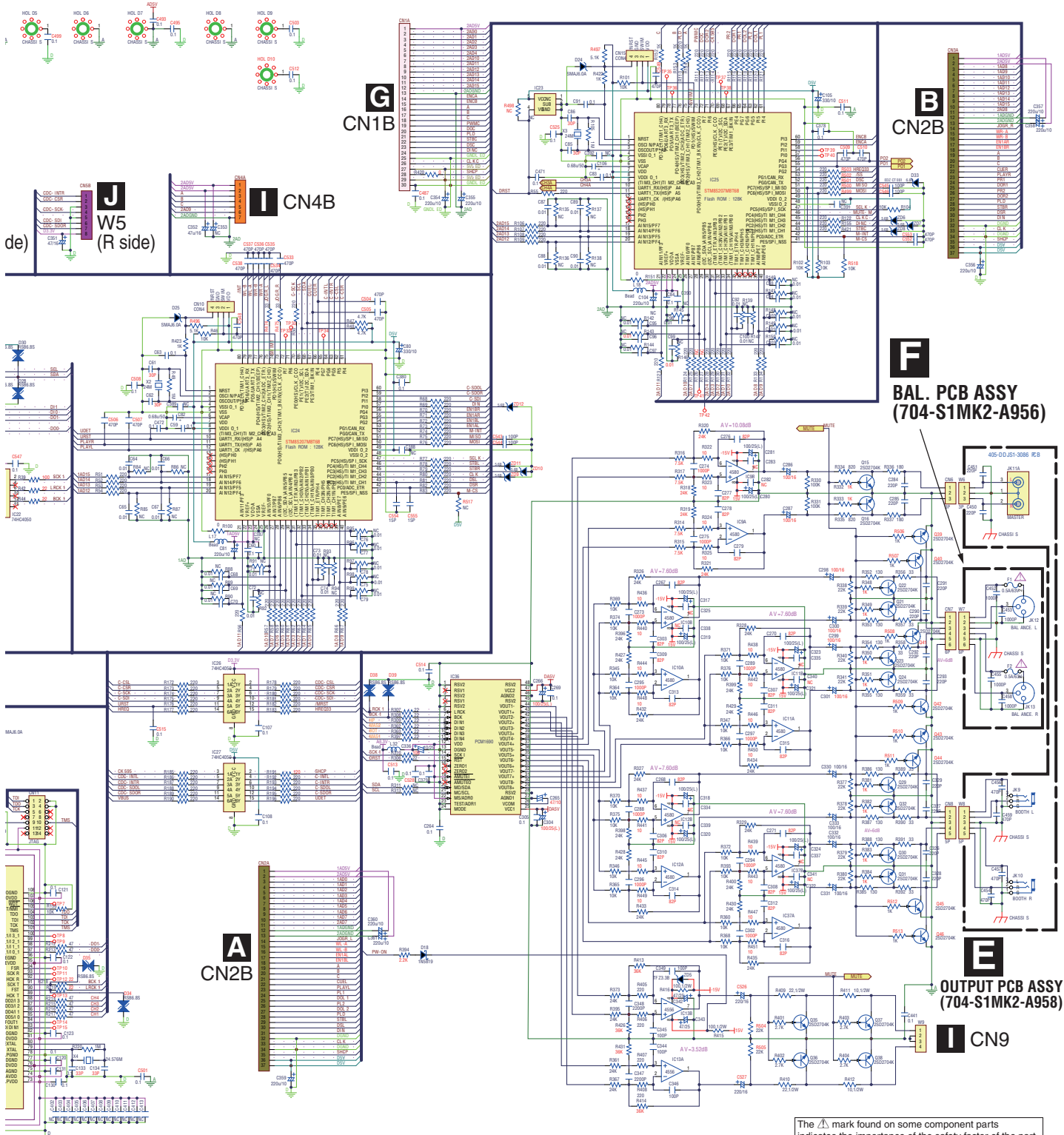
A * 生産途中から回路変更。詳細は「1.2 DSP PCB Assy について」参照。



D

D DSP PCB ASSY (704-S1MK2-B090)

A
B
C
D
E
F

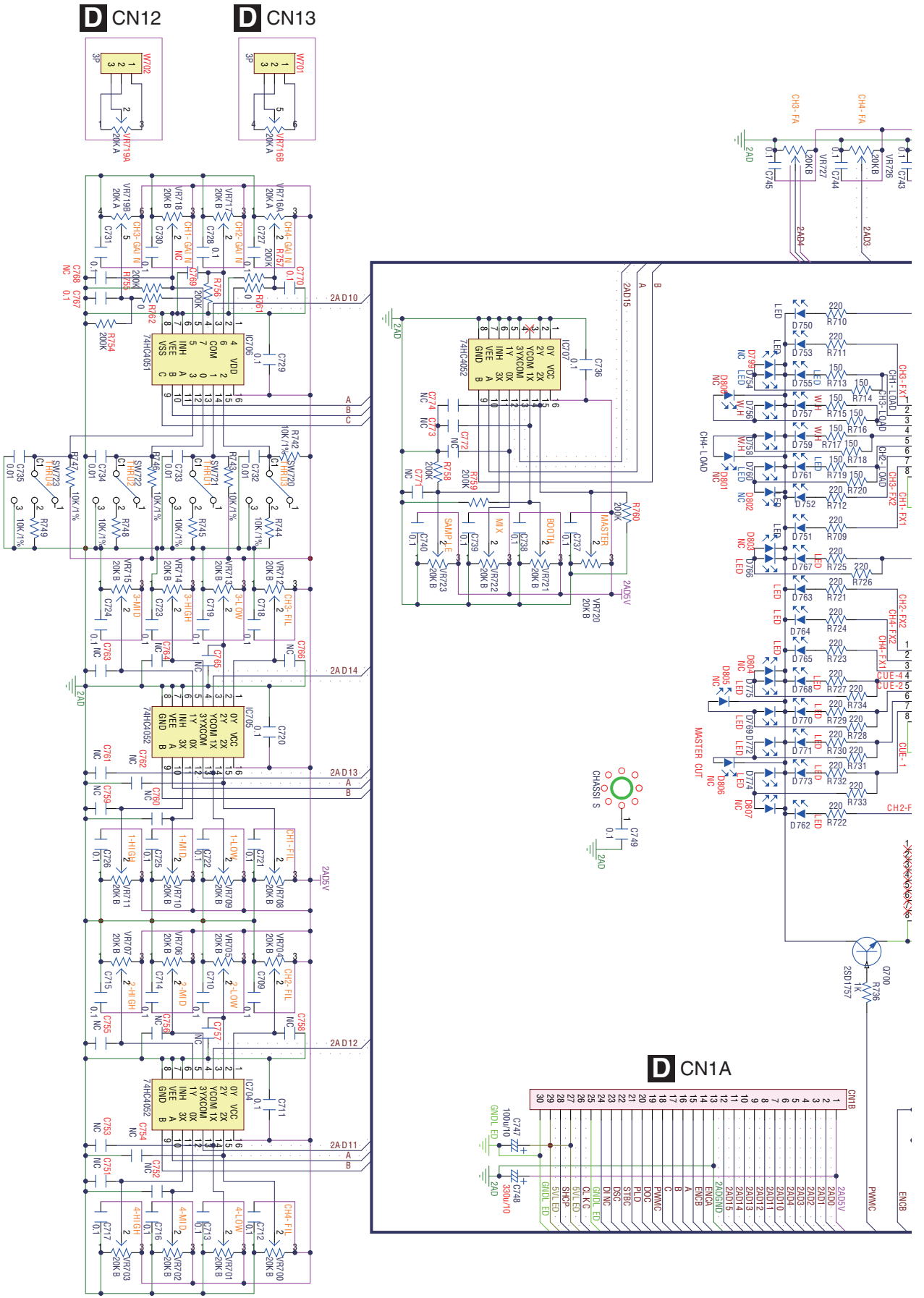


The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

Δ 印の部品は、安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

D E F

10.3 MIX and CR FADER PCB ASSYS

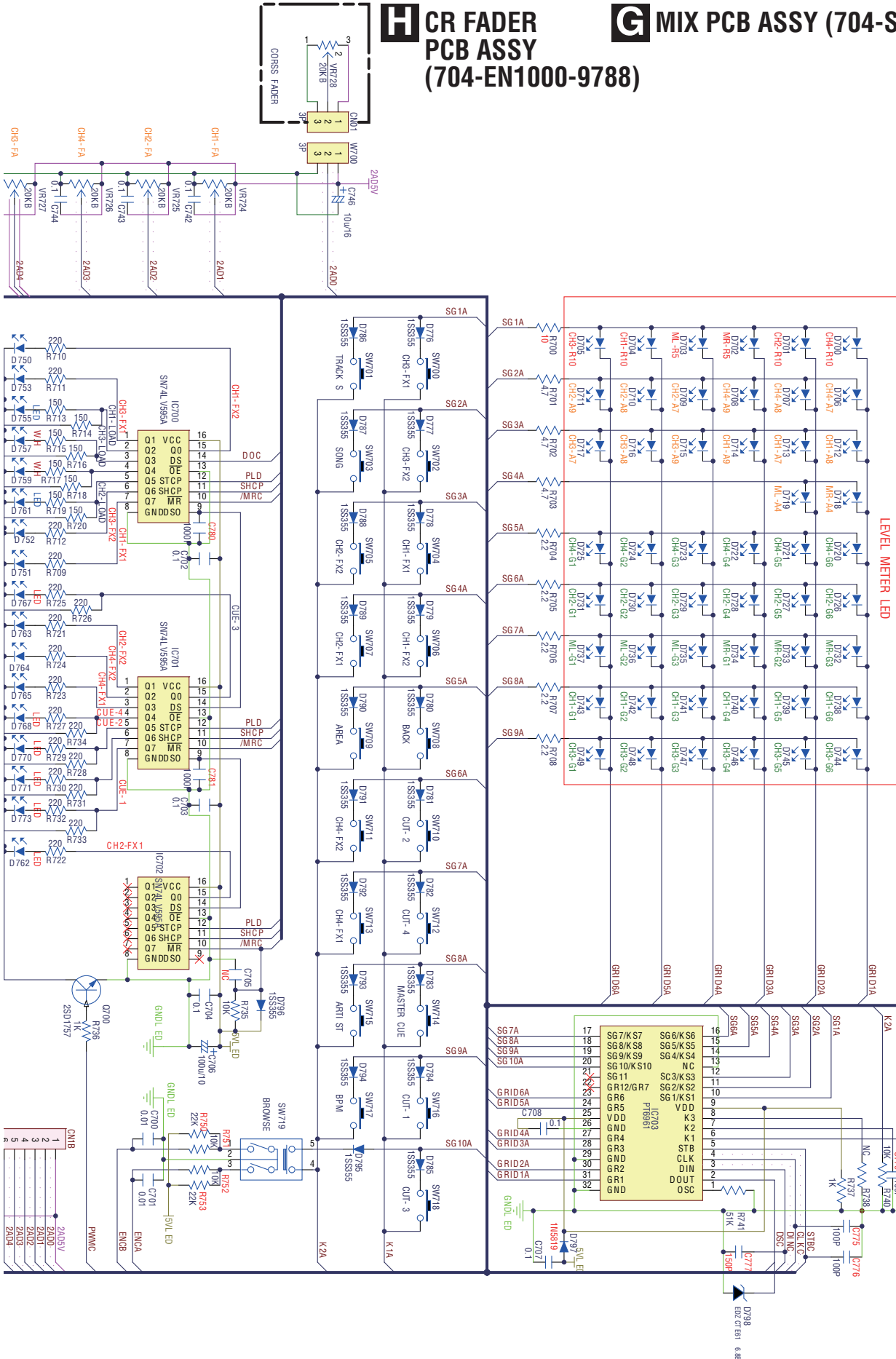


A
B
C
D
E
F



H CR FADER PCB ASSY (704-EN1000-9788)

G MIX PCB ASSY (704-S1MK2-B091)



3mm HYPER LED 50 PCS->GREEN * 30 ORANGE * 14 RED * 6

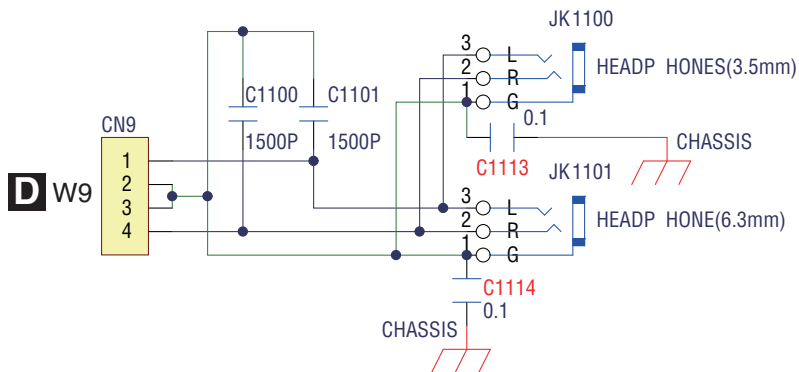
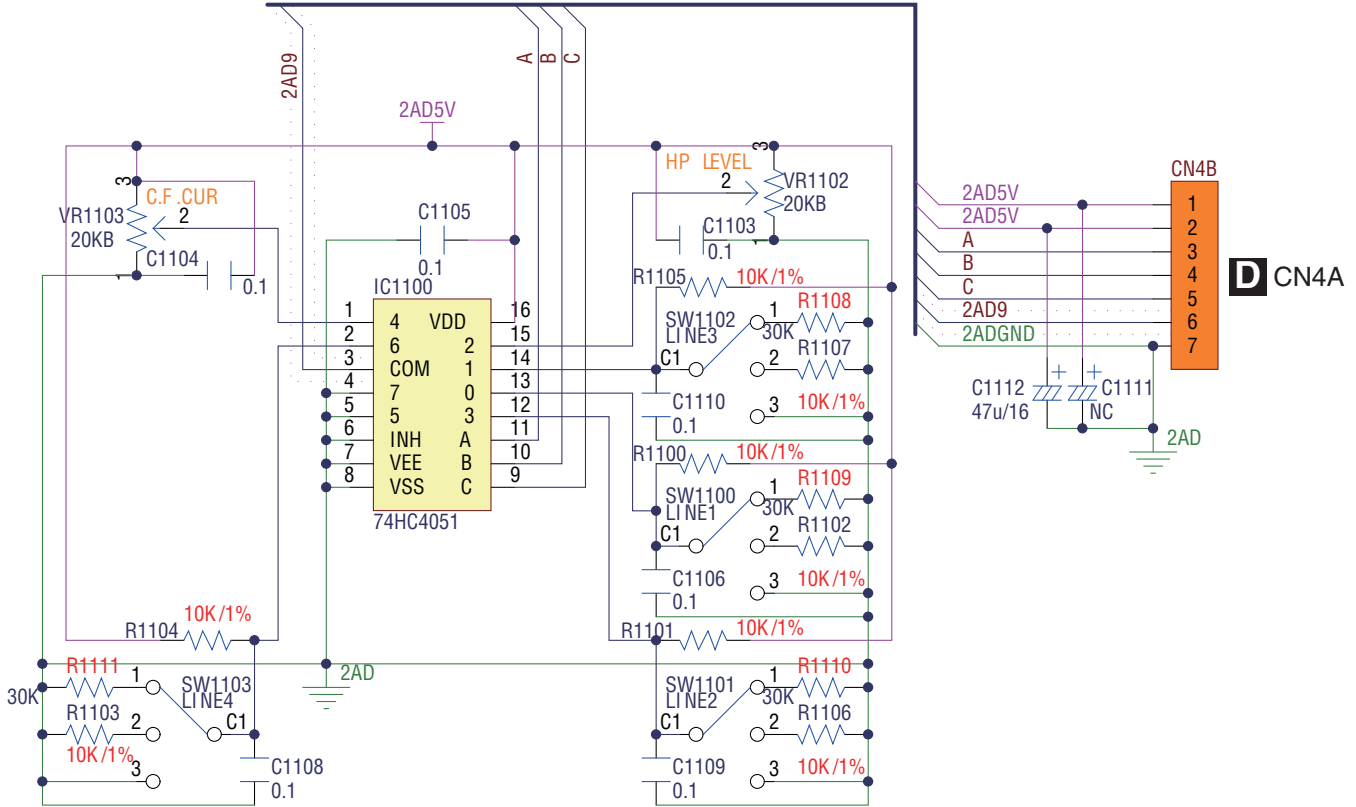
LEVEL METER LED

DDJ-SX2



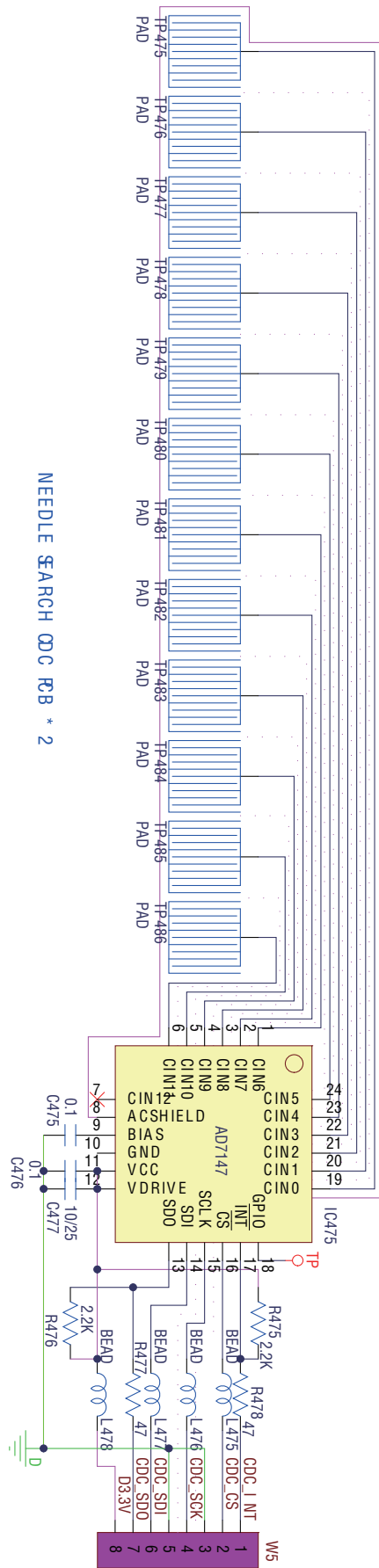
10.4 FRONT PCB ASSY

FRONT PCB ASSY (704-S1MK2-B092)



10.5 TOUCH PCB ASSY

J TOUCH PCB ASSY (704-S1MK2-A957)



NEEDLE SEARCH CDC PCB * 2

- D** CN5A (L side)
- D** CN5B (R side)

DDJ-SX2

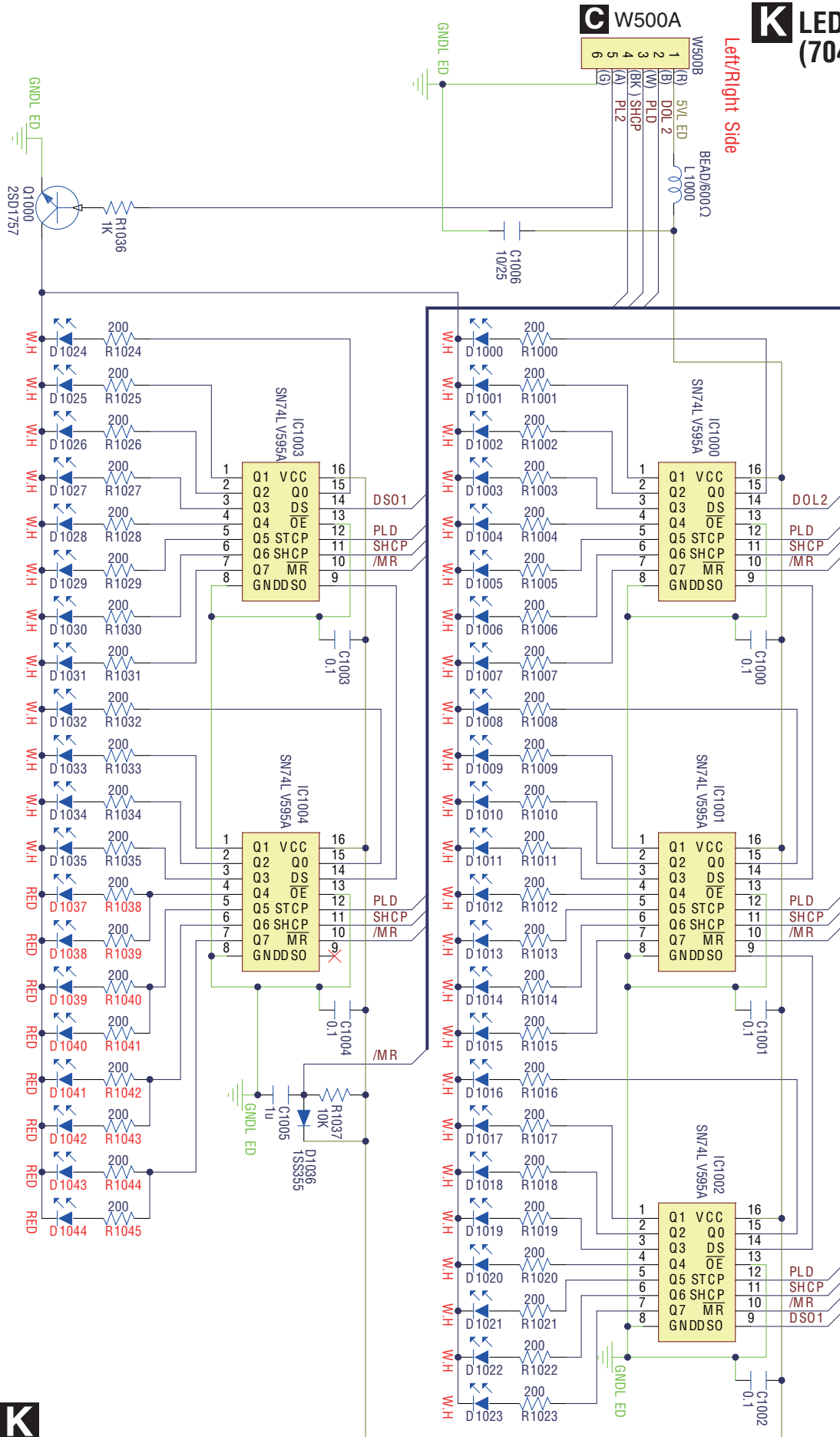
J

10.6 LED PCB ASSY

K LED PCB ASSY (704-S1MK2-A959)

C W500A

Left/Right Side



RING LED 44 PCS->WHITE * 36, RED * 8





5



6



7



8



A



B



C



D



E



F



5



6

DDJ-SX2



7



8



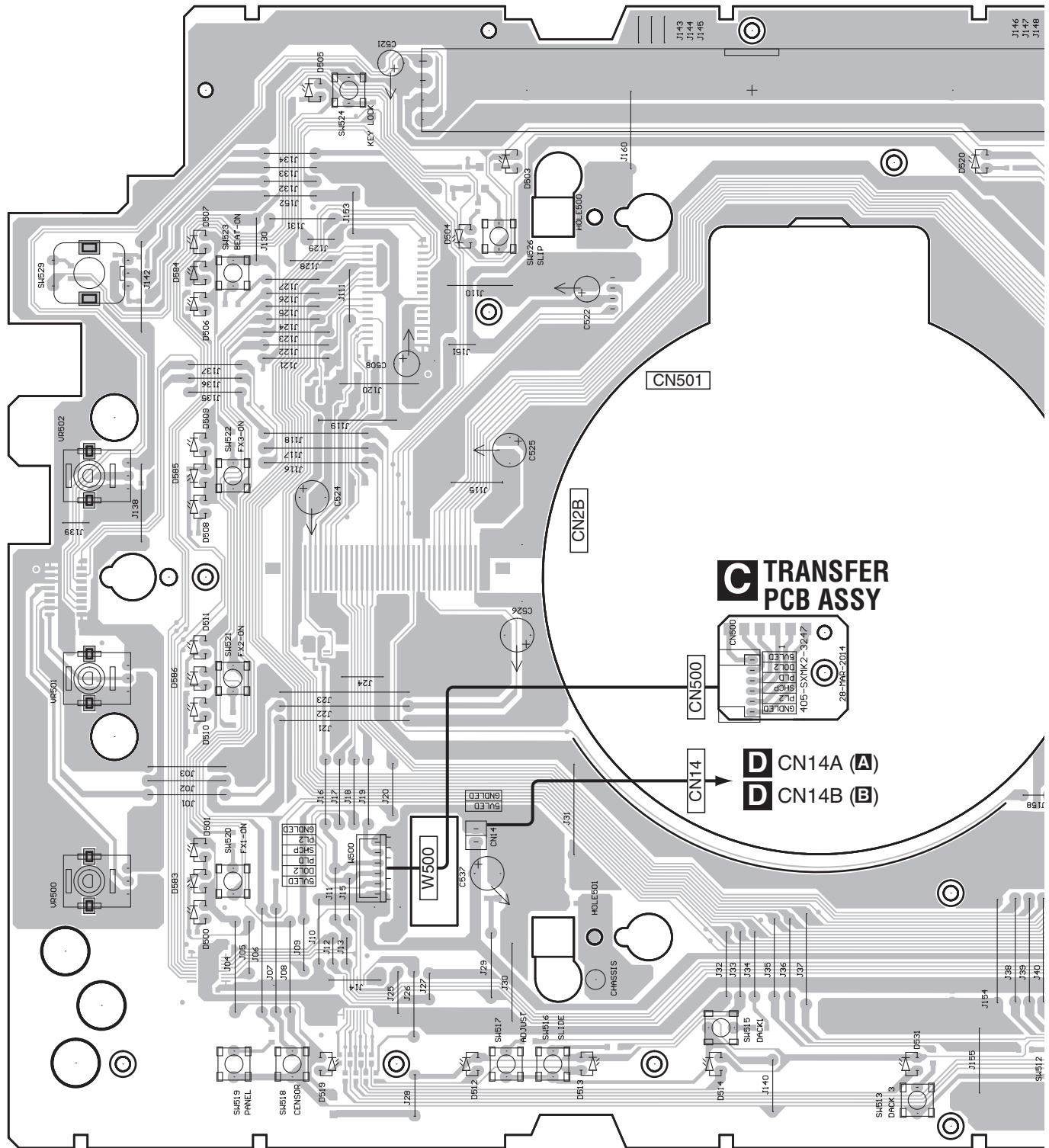
11. PCB CONNECTION DIAGRAM

11.1 CONTROL PCB ASSY A, B and TRANSFER PCB ASSY

A SIDE A

A CONTROL PC B ASSY A

B CONTROL PCB ASSY B



A B C

SIDE A

A

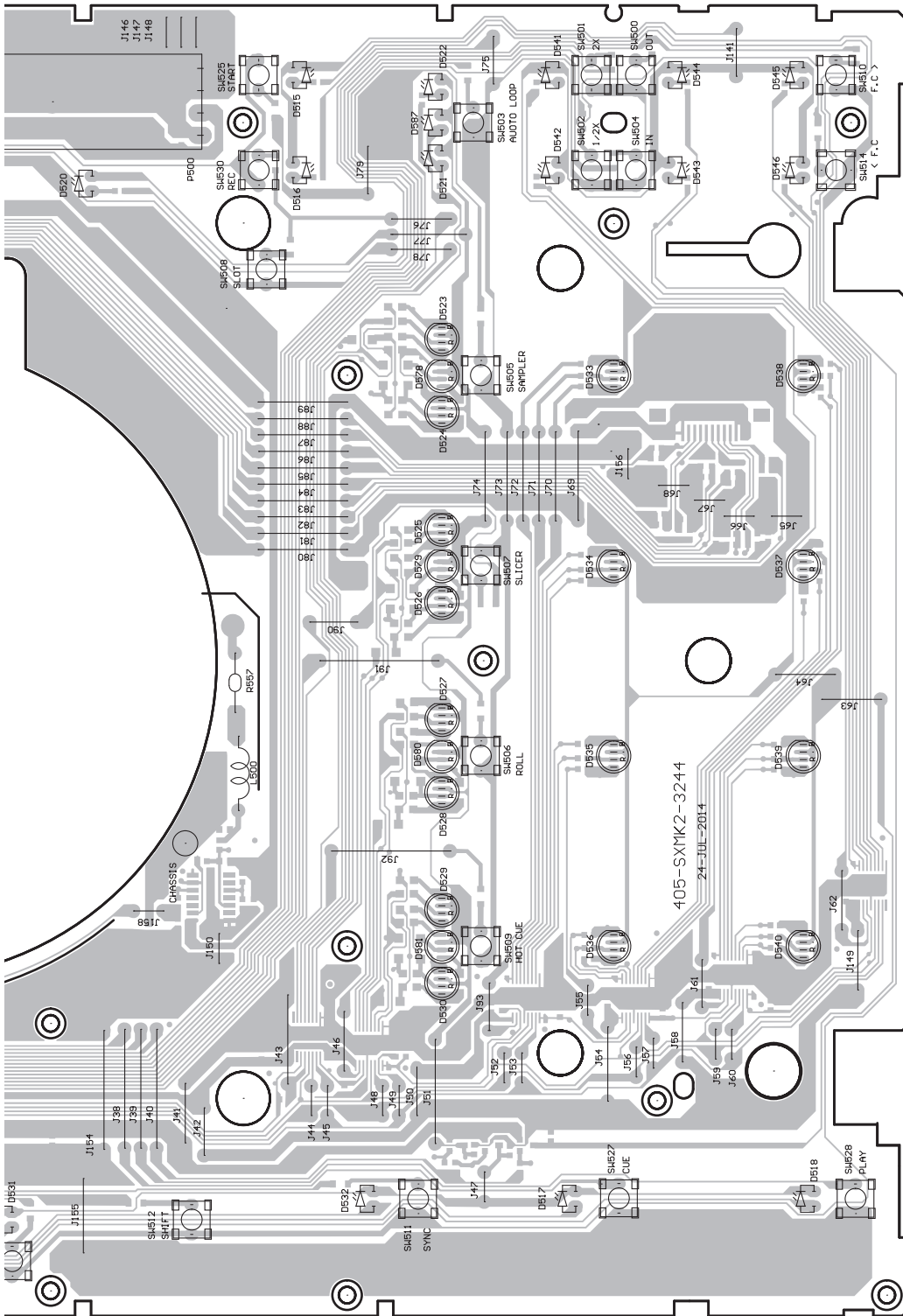
B

C

D

E

F



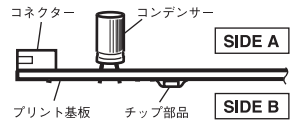
CN502

405-SXMK2-3244
24-JUL-2014

PCB 図に対する注意

1. この PCB 図にマウントしている部品は複数の仕向地の部品を含んでいます。各仕向地の情報は、回路図で確認するようにしてください。

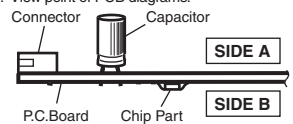
2. PCB 図の見かた。



NOTE FOR PCB DIAGRAMS :

1. The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

2. View point of PCB diagrams.

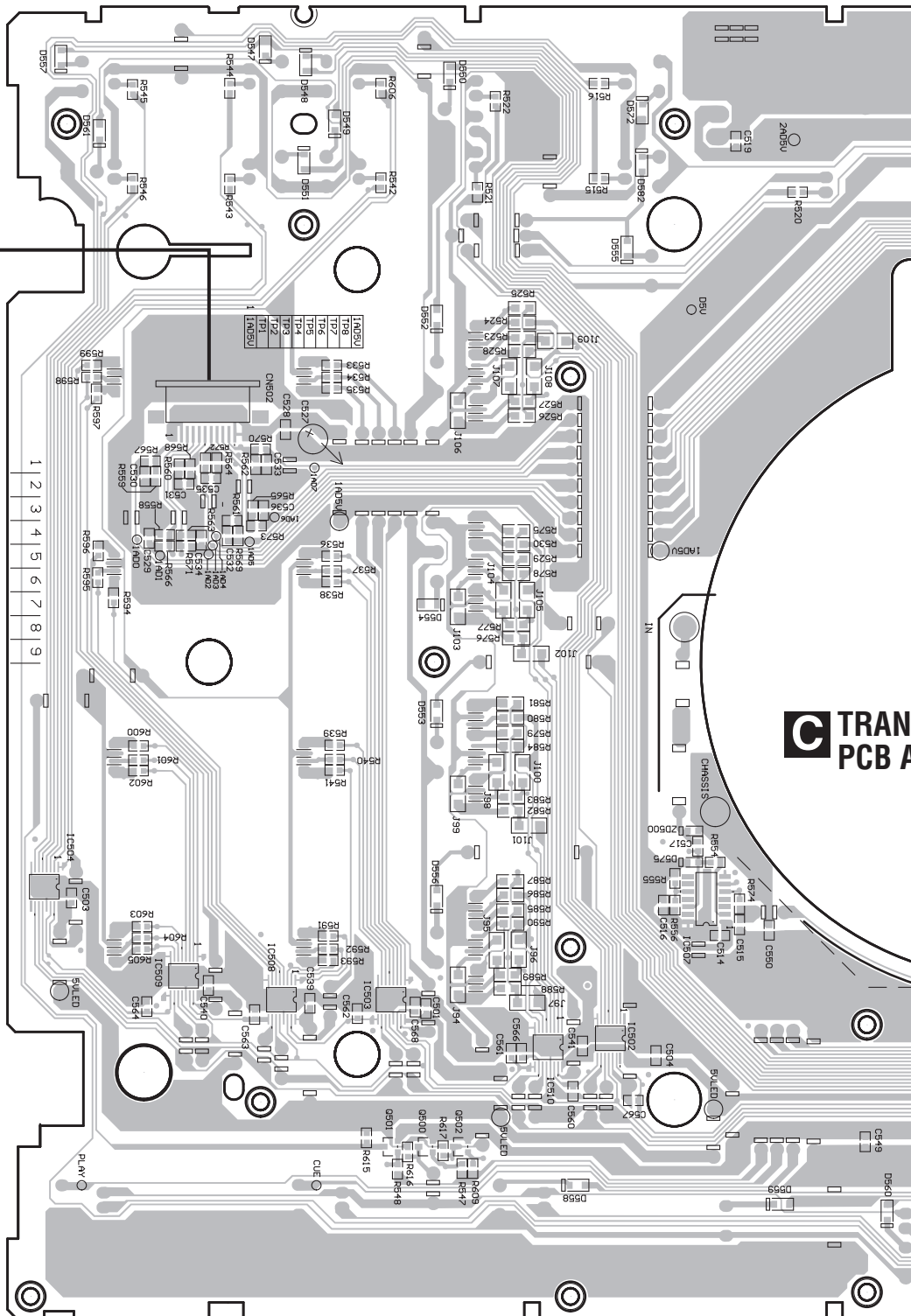


SIDE B

A CONTROL PCB ASSY A

B CONTROL PCB ASSY B

CARBON PAD → **CN502**



TRAN PCB A

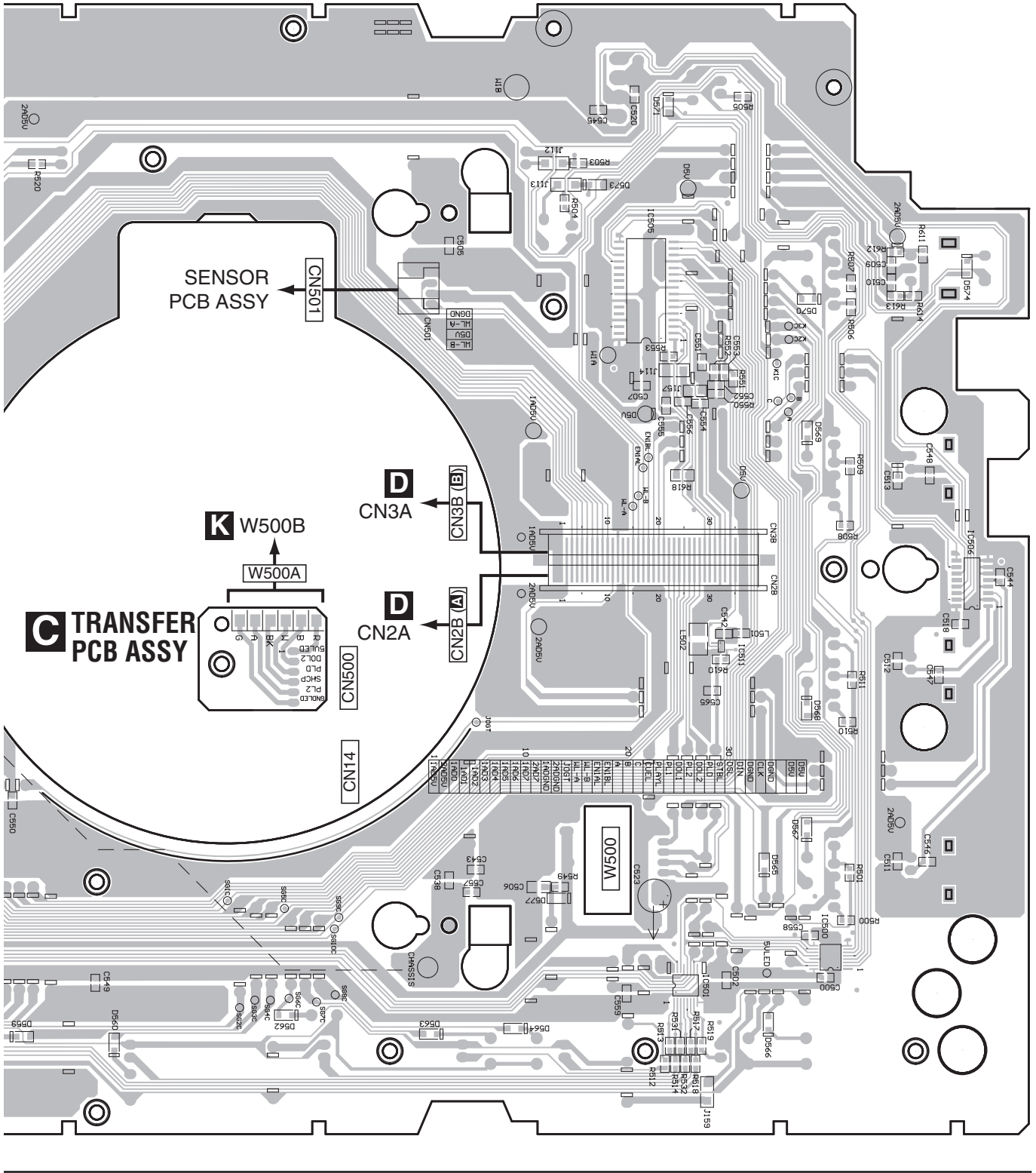
IC504 IC509 IC508 IC503 IC510 IC502 IC507

Q500-Q502

DDJ-SX2

A B

A
B
C
D
E
F



IC505

IC501

IC500

IC506

A B C

DDJ-SX2

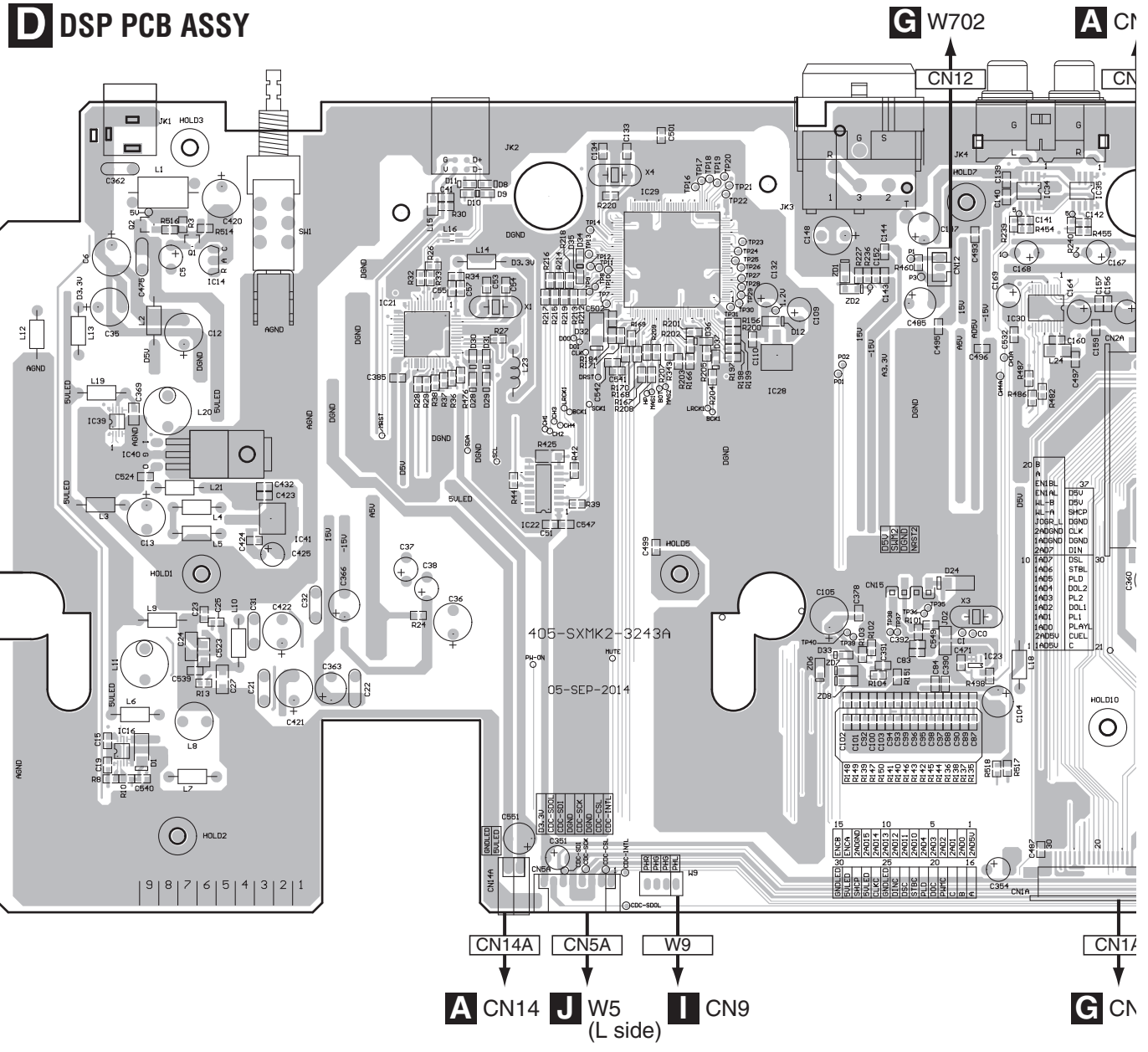
11.2 DSP, OUTPUT and BAL. PCB ASSYS

SIDE A

A
B
C
D
E
F

1 2 3 4

Q2 Q1 IC39 IC16 IC40 IC21 IC22 IC29 IC28 IC23 IC30 IC34 IC35



A CN14 **J** W5 (L side) **I** CN9

G CN

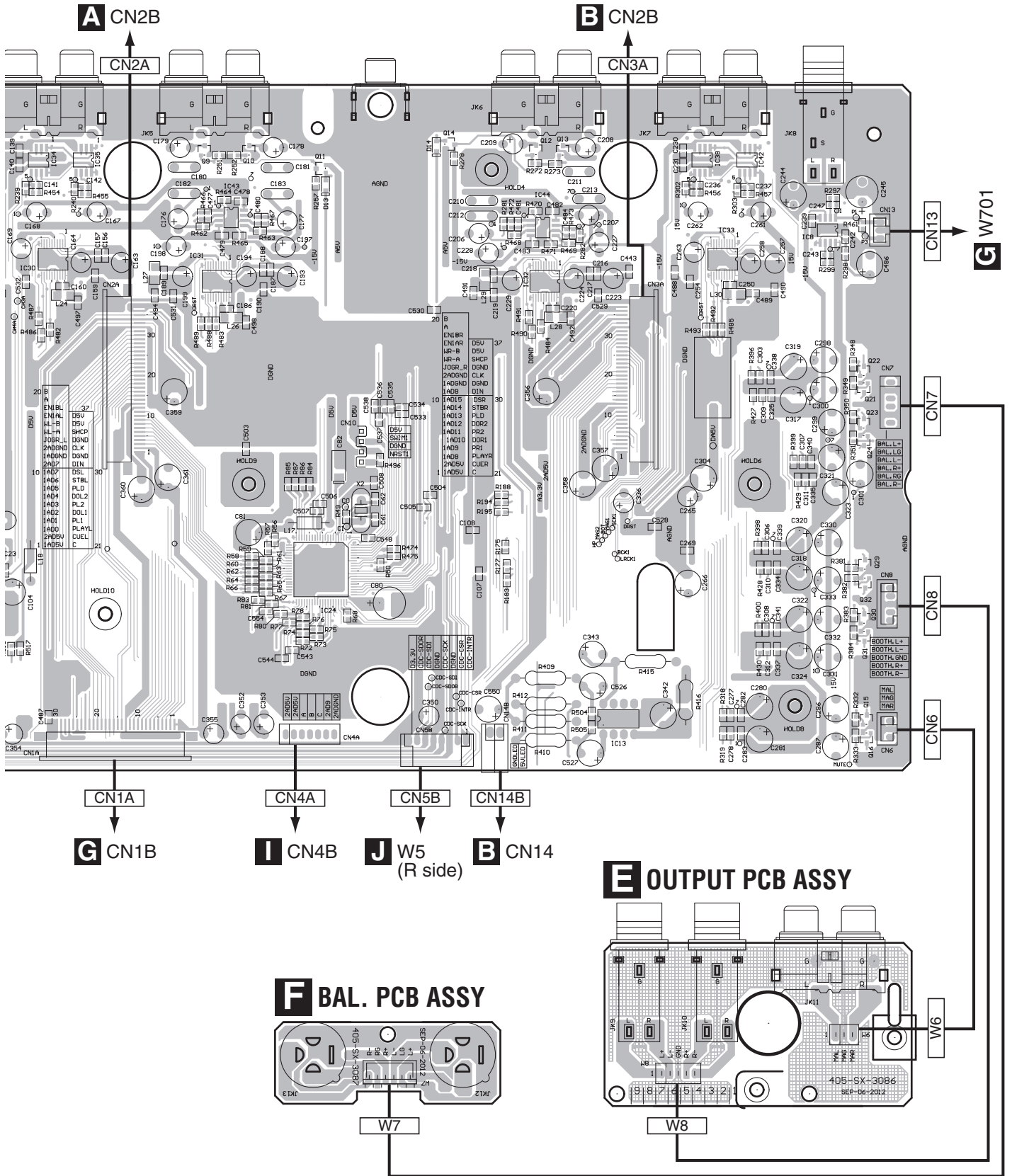
D
70

1 2 3 4

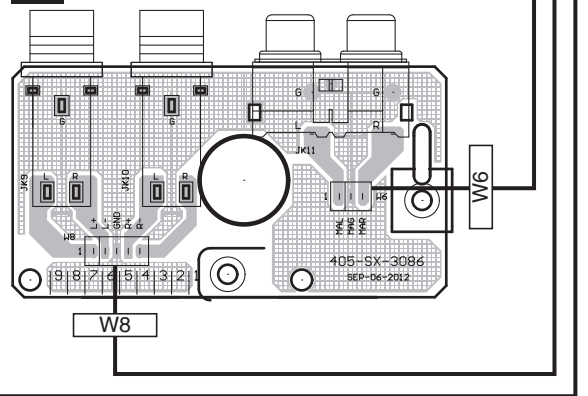
DDJ-SX2

SIDE A

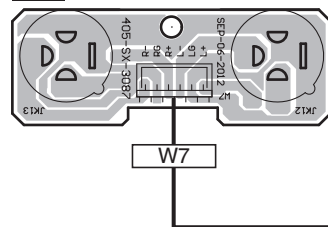
IC34 IC35 Q9 Q10 Q14 Q12 Q13 IC38 IC42 IC8 Q21-Q24
 IC30 IC31 IC24 IC43 IC44 IC32 IC13 IC33 Q15 Q16
 IC8 Q29-Q32



E OUTPUT PCB ASSY



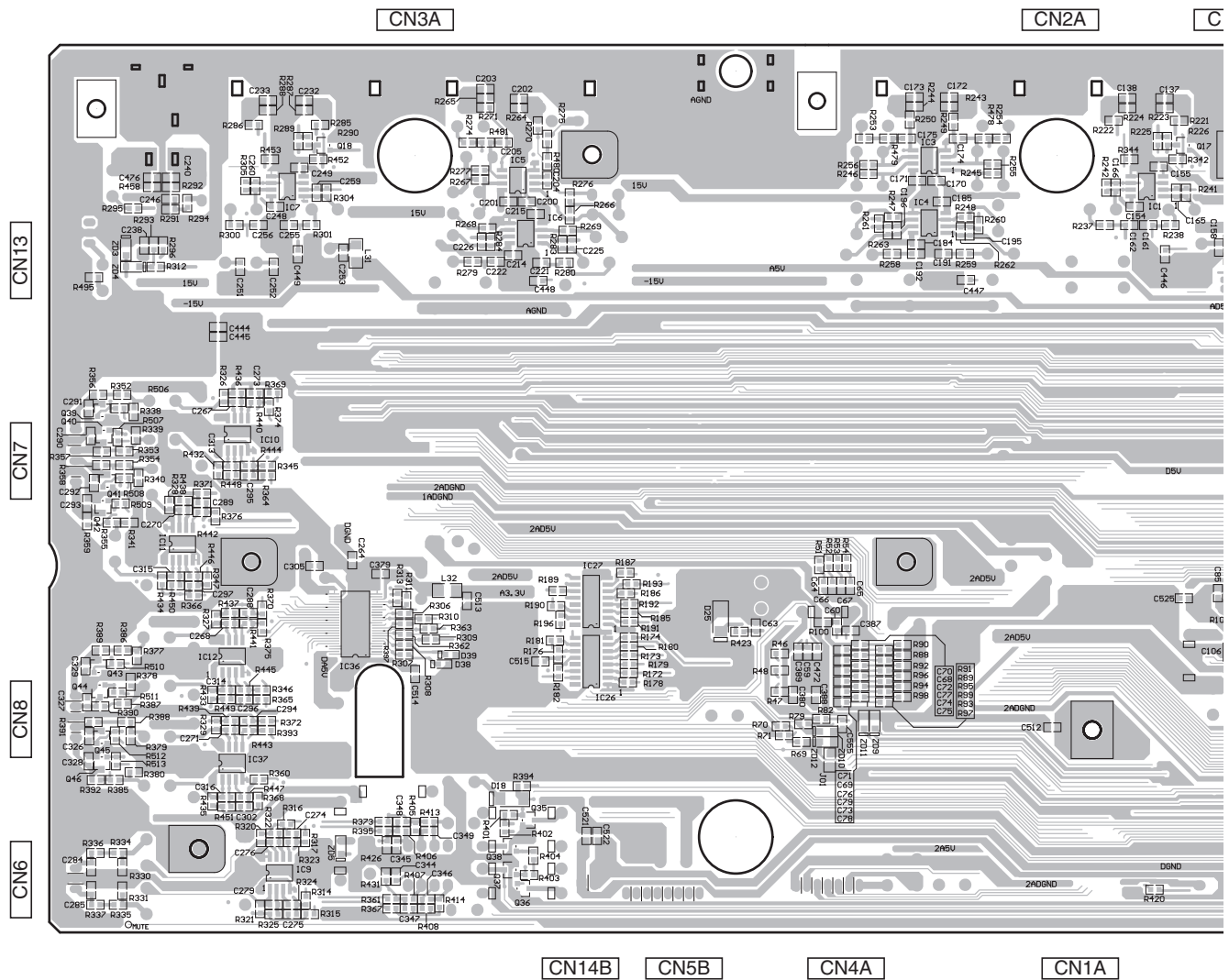
F BAL. PCB ASSY



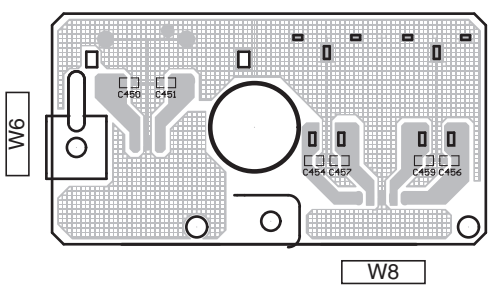
SIDE B

			Q18		IC5				
	Q39		IC7		IC6				
A	Q40		IC10		Q35			IC3	
	Q41	IC11	IC12		Q38	IC27		IC4	IC1
	Q43-Q46	IC37	IC9	IC36	Q36	IC26			

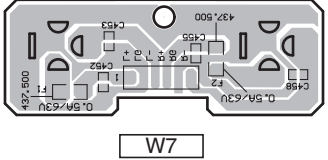
D DSP PCB ASSY



E OUTPUT PCB ASSY



F BAL. PCB ASSY



D E F

SIDE B

IC1

IC2

IC20

Q47

IC25

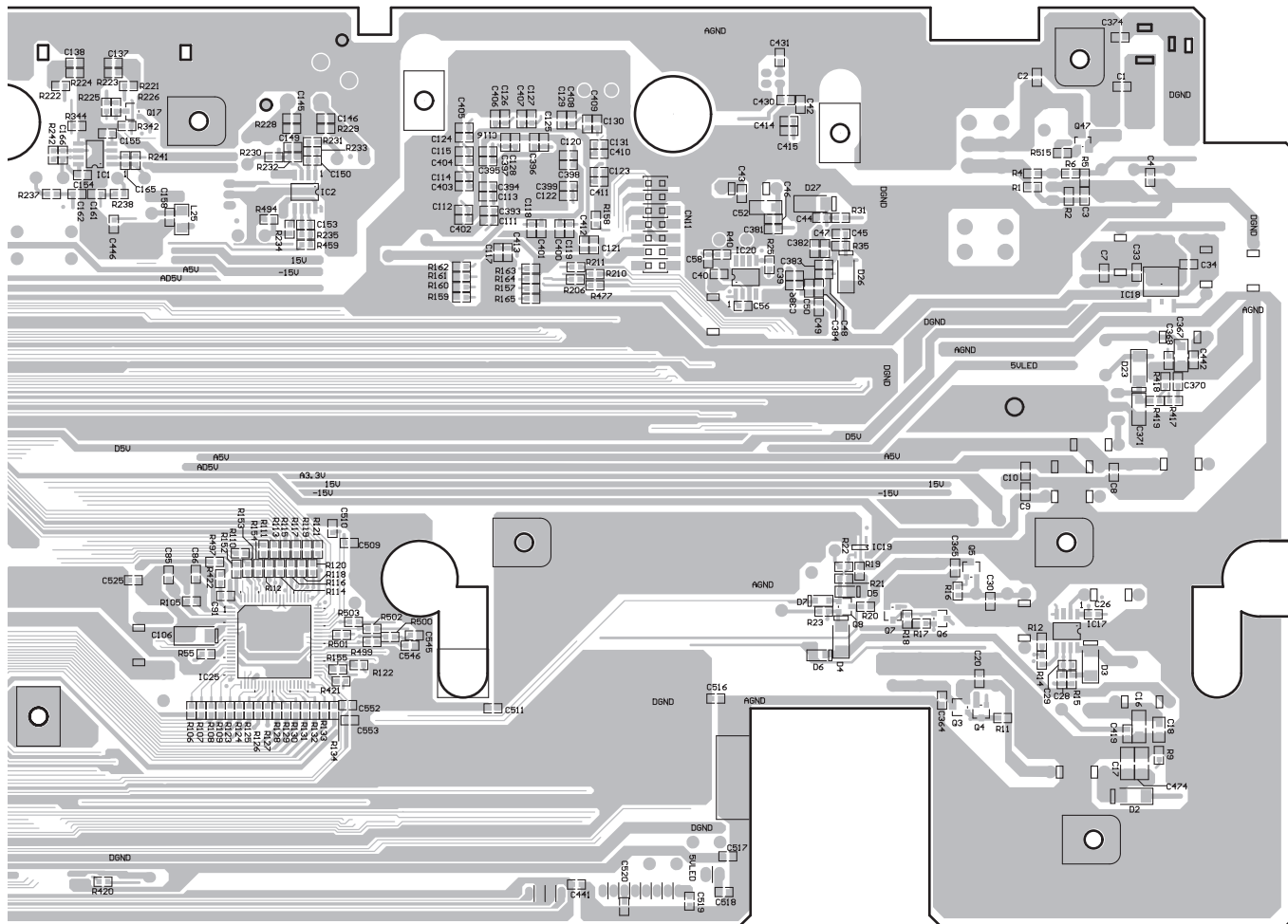
Q3-Q8

IC17

IC18

2A

CN12



N1A

W9

CN5A

CN14A

DDJ-SX2

D

11.3 MIX and CR FADER PCB ASSYS

SIDE A

A

B

C

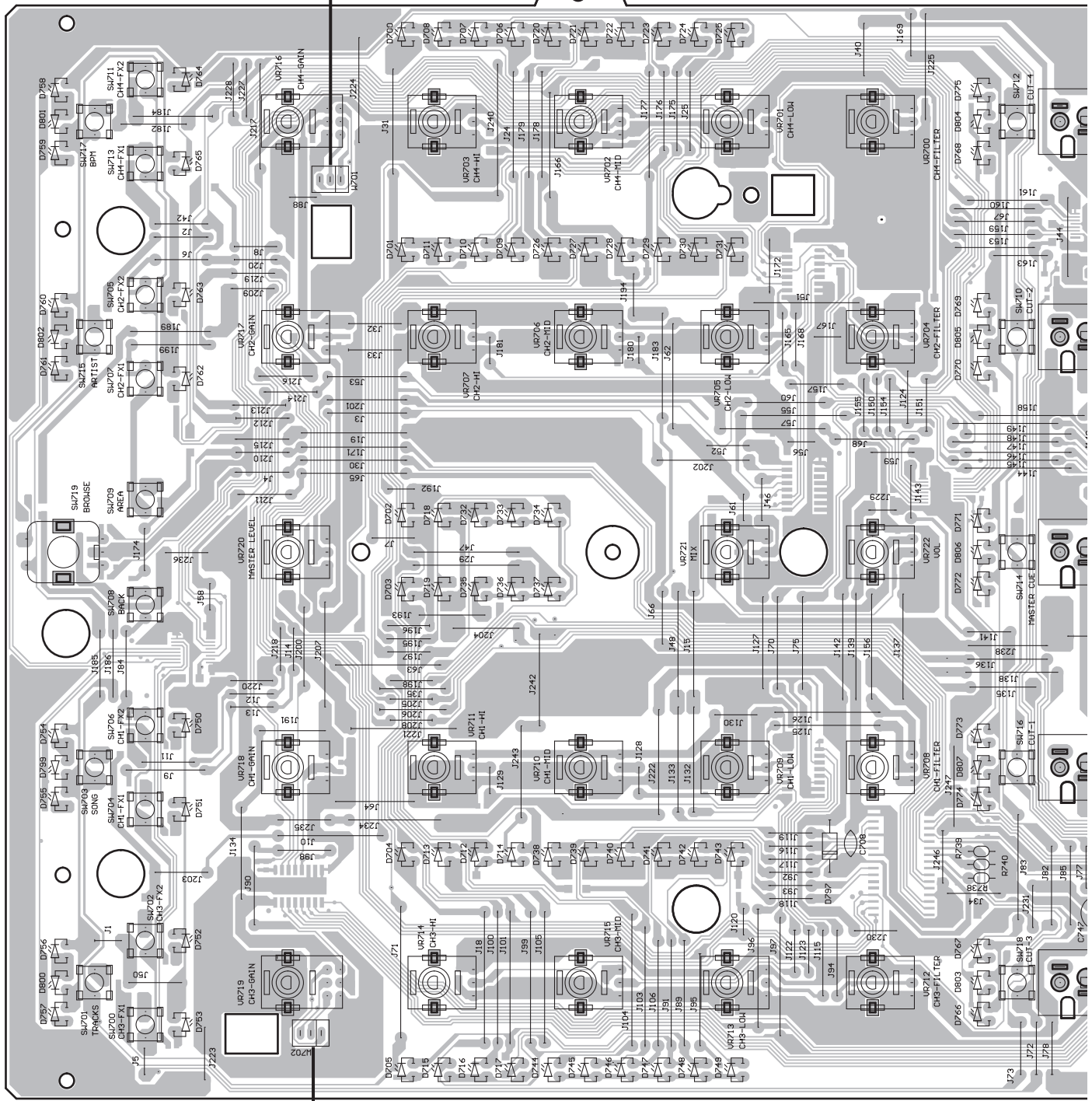
D

E

F

D CN13
W701

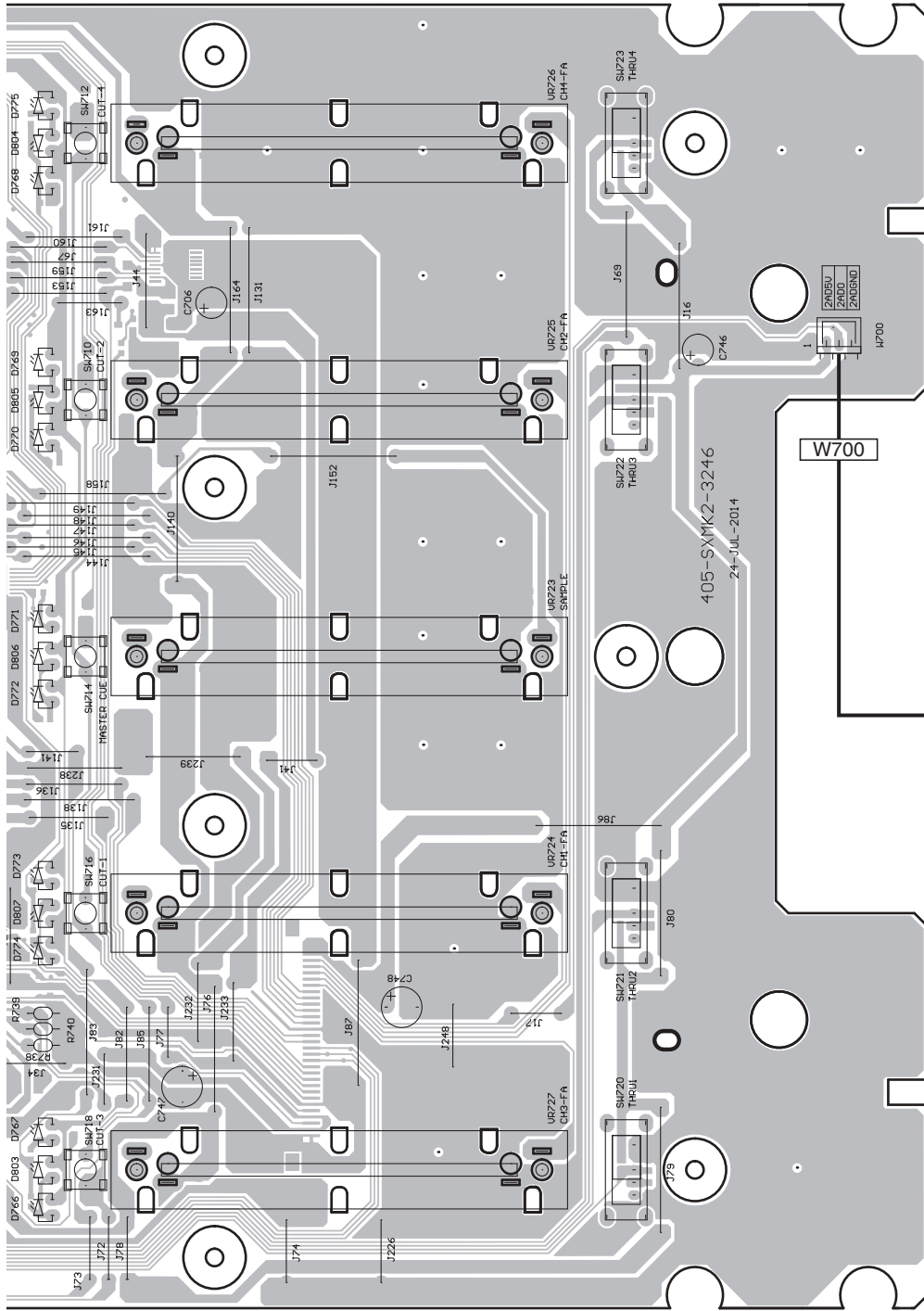
G MIX PCB ASSY



W702
D CN12

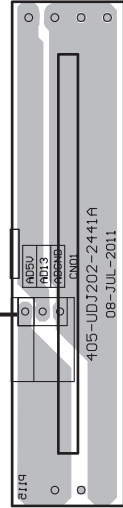


A
B
C
D
E
F



CN1B

CR FADER PCB ASSY



CN01

W700

DDJ-SX2

SIDE B

A

B

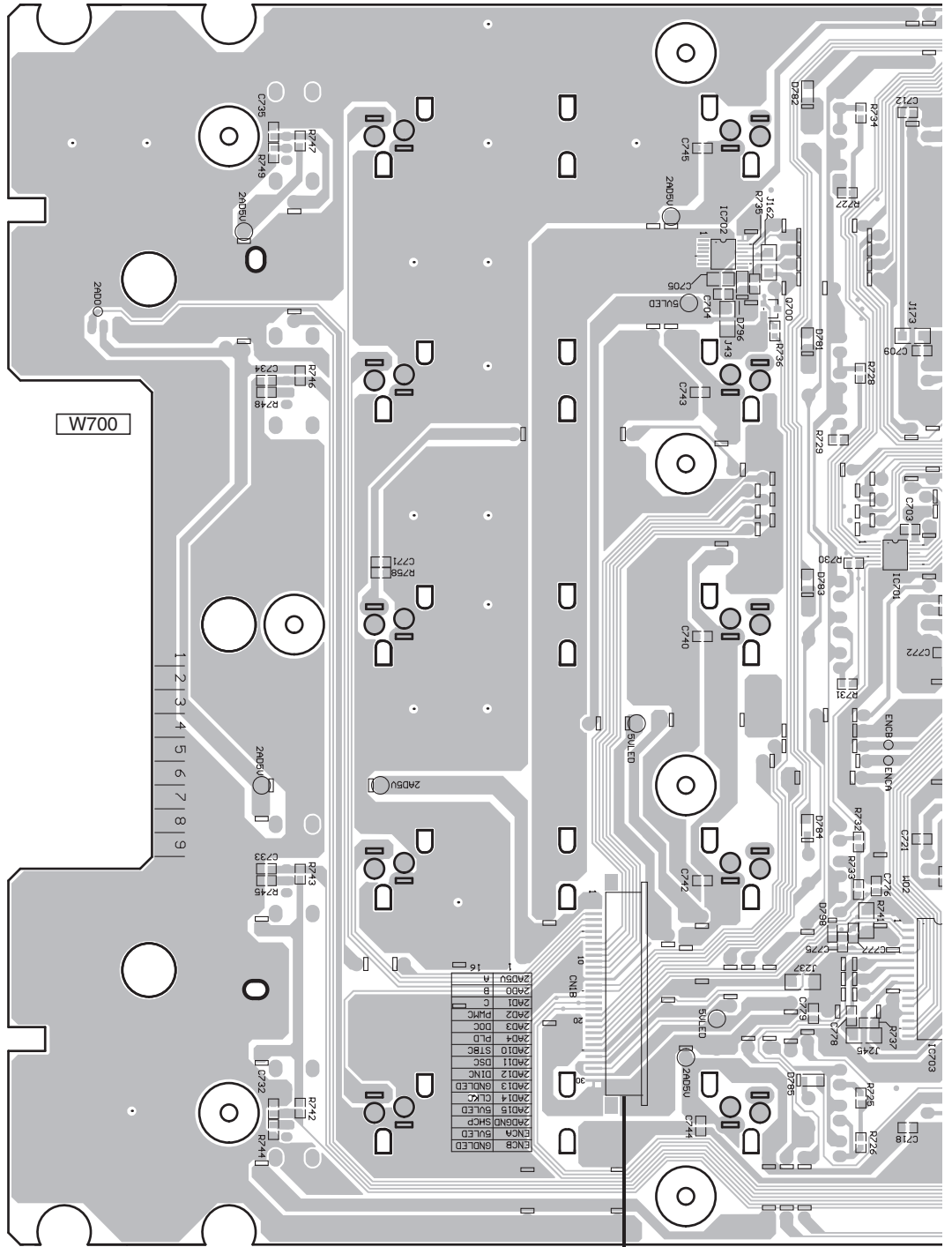
C

D

E

F

G MIX PCB ASSY



H CR FADER PCB ASSY

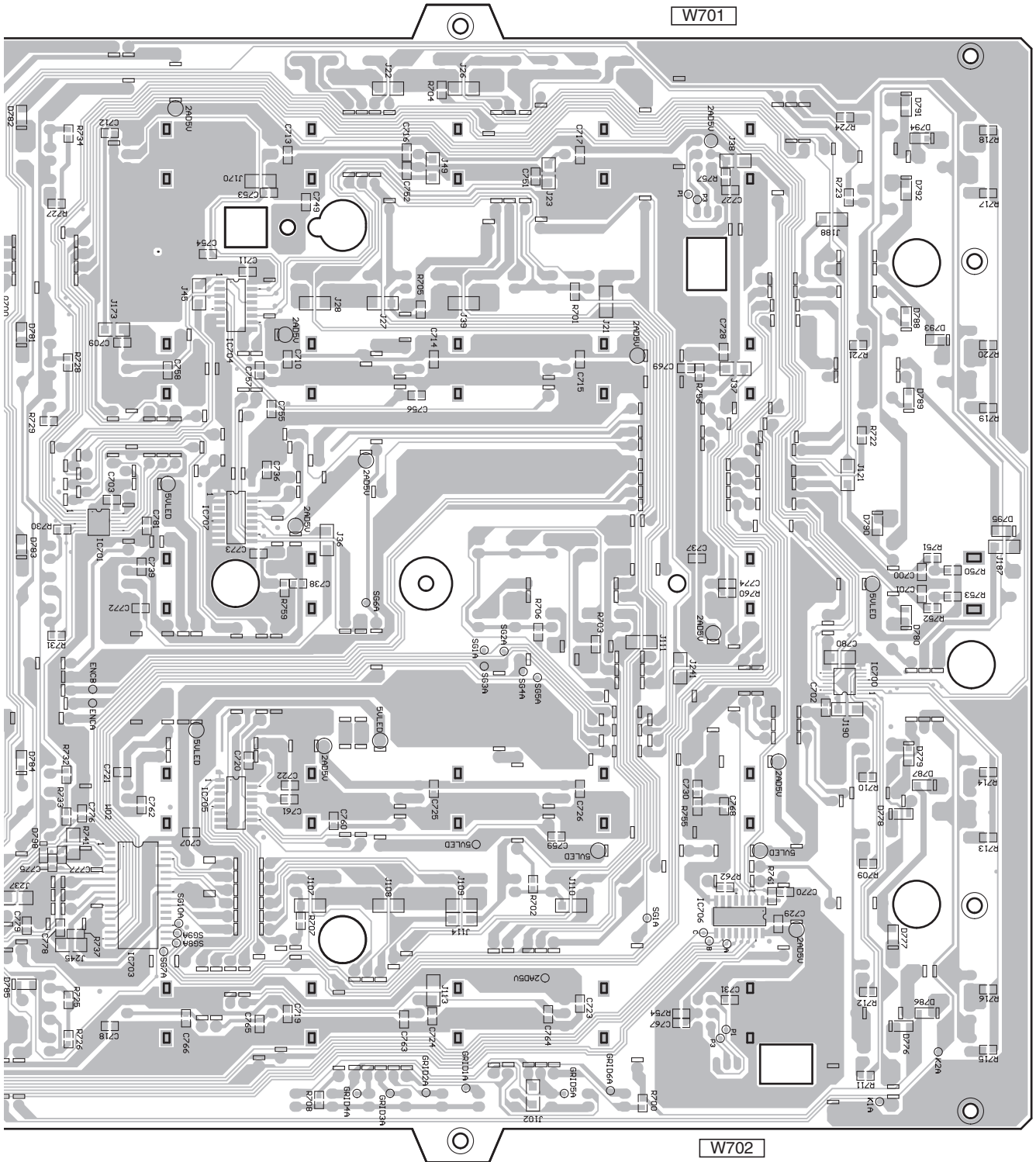


CN1B
D CN1A

IC702 Q700

IC701

IC7



IC701
IC703
IC704
IC707
IC705

IC706
IC700

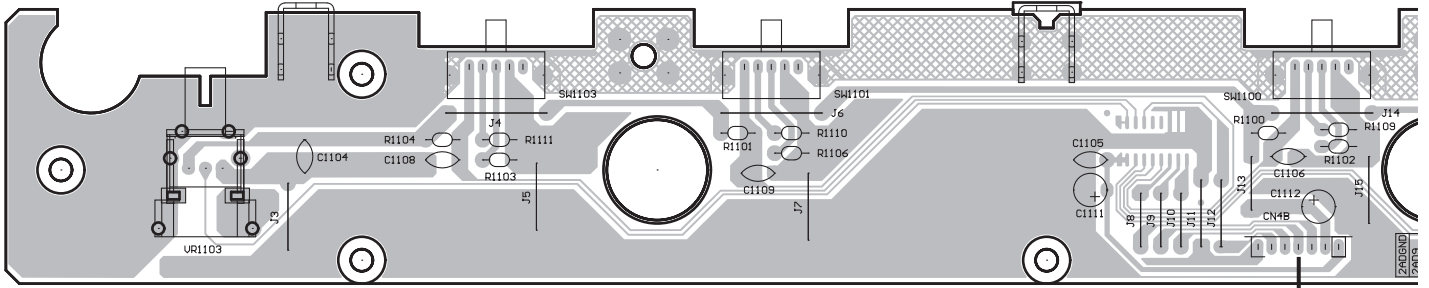
DDJ-SX2



11.4 FRONT and TOUCH PCB ASSYS

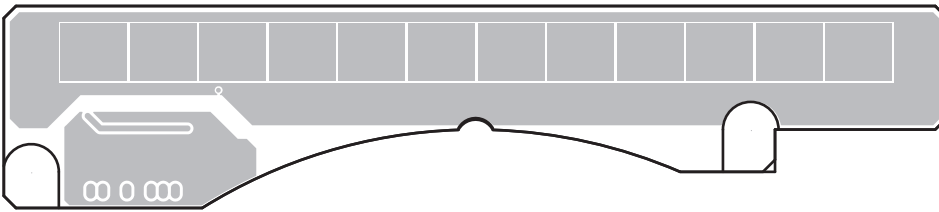
SIDE A

I FRONT PCB ASSY



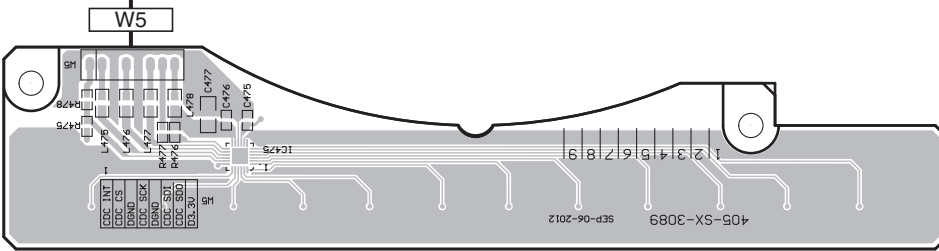
CN4B
↓
D CN4A

J TOUCH PCB ASSY

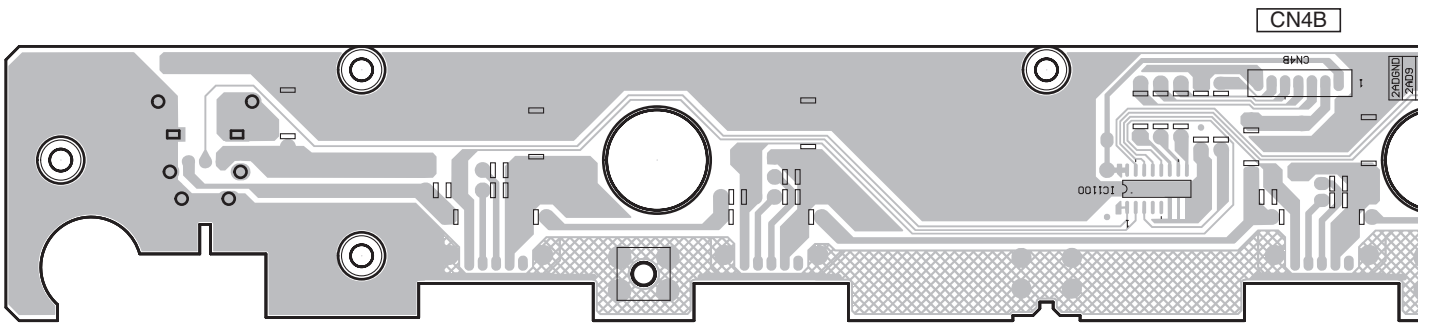


SIDE B

D CN5A (L side)
D CN5B (R side)



J TOUCH PCB ASSY



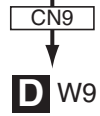
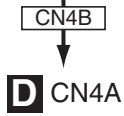
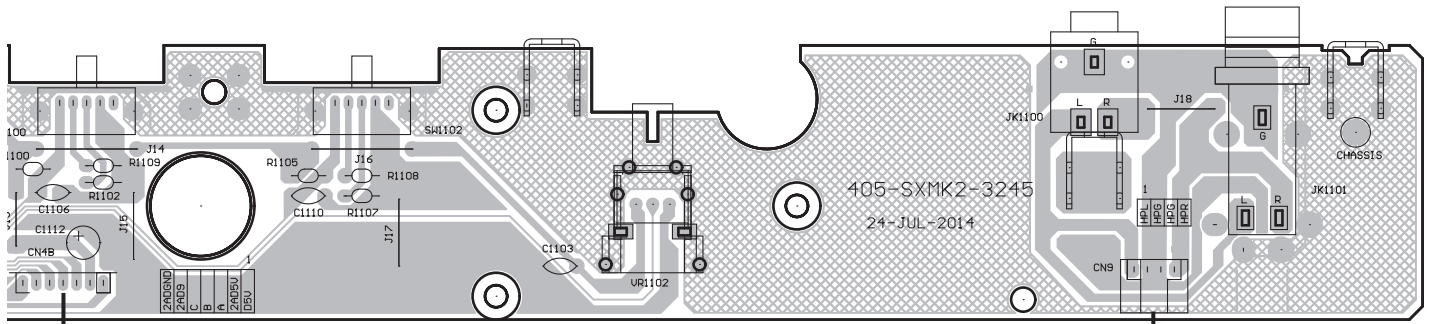
I FRONT PCB ASSY

IC1100



SIDE A

A

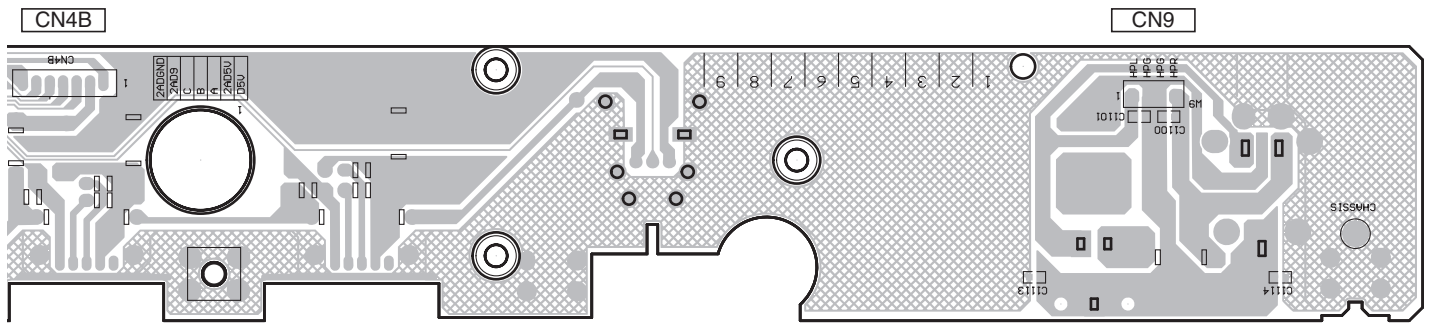


B

C

SIDE B

D



E

F

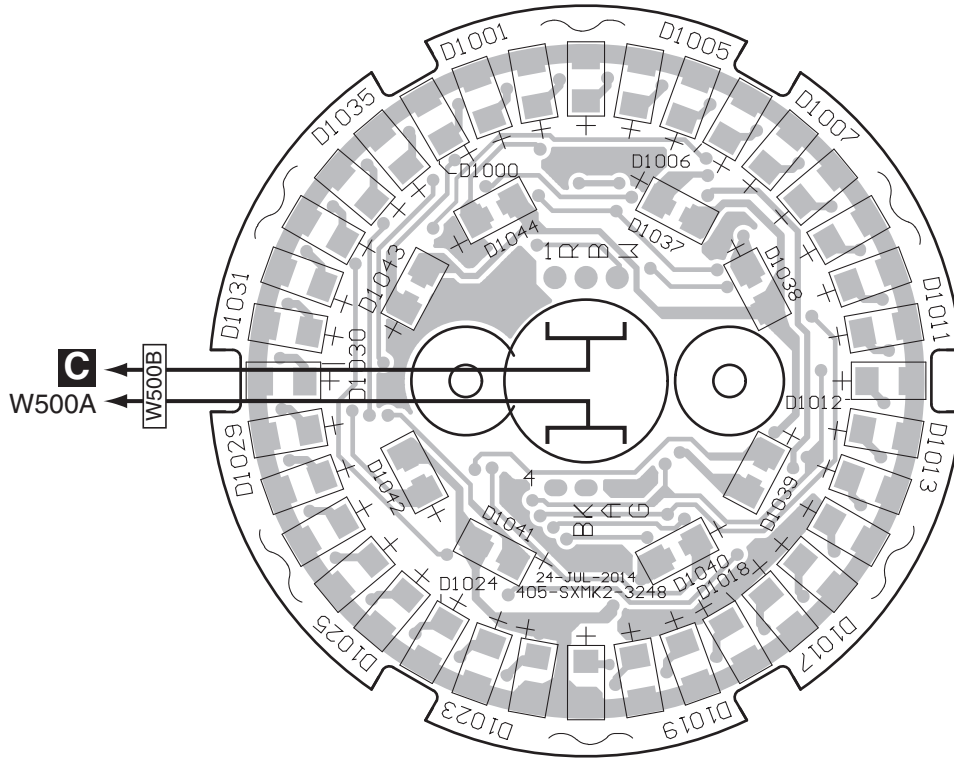


11.5 LED PCB ASSY

SIDE A

SIDE A

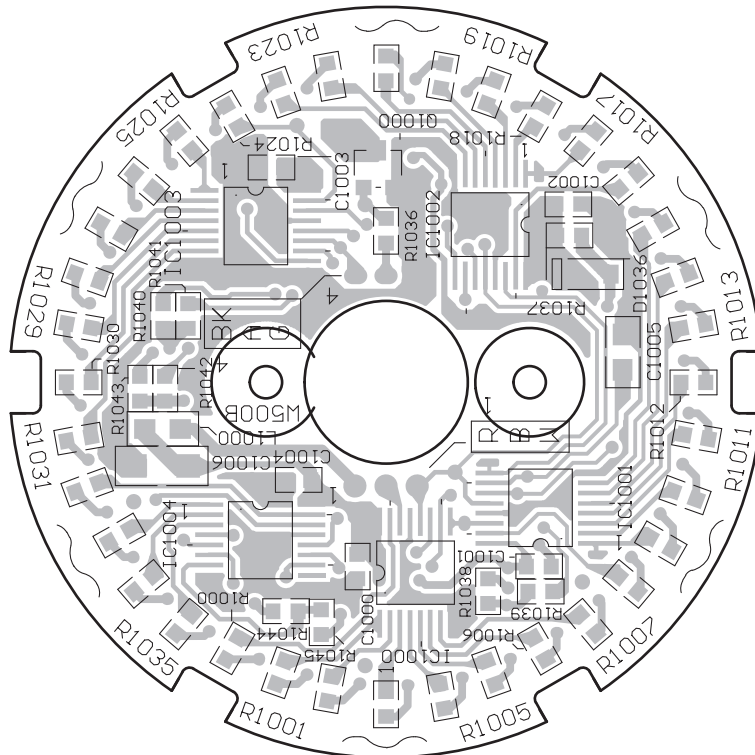
K LED PCB ASSY



SIDE B

SIDE B

K LED PCB ASSY



- Q1000
- IC1003
- IC1002
- IC1001
- IC1004
- IC1000

K

12. PCB PARTS LIST

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

● The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

● Although the cables that are directly mounted on each PCB Assy are listed individually as electrical parts of the corresponding PCB Assy in the parts list, those cables are included with each PCB Assy for service when it is supplied.
● Parts not described here are not registered as service parts. In principle, such parts cannot be supplied as service parts.

Mark	No.	Description	Part No.
LIST OF ASSEMBLIES			
	1..	CR FADER PCB ASSY	704-EN1000-9788
	1..	SENSOR PCB ASSY	704-PDJ33-A007-HA
	1..	MIX PCB ASSY	704-S1MK2-B091
	1..	CONTROL PCB ASSY A	704-S1MK2-A953
	1..	CONTROL PCB ASSY B	704-S1MK2-A954
	1..	FRONT PCB ASSY	704-S1MK2-B092
	1..	TOUCH PCB ASSY	704-S1MK2-A957
	1..	TRANSFER PCB ASSY	704-S1MK2-A960
	1..	I/O & FIX PLATE ASSY	704-S1MK2-A985
	2..	DSP PCB ASSY	704-S1MK2-B090
	2..	OUTPUT PCB ASSY	704-S1MK2-A958
	1..	BAL. PCB & FIXED PLATE ASSY	704-S1MK2-A986
	2..	BAL. PCB ASSY	704-S1MK2-A956
	1..	LED & COVER ASSY	704-S1MK2-A961
	2..	LED PCB ASSY	704-S1MK2-A959

Mark	No.	Description	Part No.
A		CONTROL PCB ASSY A	
B		CONTROL PCB ASSY B	
SEMICONDUCTORS			
	IC511		417-DDJLE-1078
	IC500-504,508-510		417-DDJLE-1080
	IC506		417-MP3-429
	IC507		417-RMP3-936
	Q500-502		416-MC6000-374
	D515,531		410-S1MK2-441
	D523-530,533-540		410-S1MK2-443
	D547-574,577,582		414-CD1000-075A-HA
	ZD500,575		414-RMP3-285-HA
	D514		410-CDI600-357T
	D500,501,503-513,516,519-522		410-DJ5000-253T
	D532,541-546		410-DJ5000-253T
	D517		410-HDJ2000-162T
	D518		410-SR-437

MISCELLANEOUS

SW529	ENCODER	403-DDJLE-418-HA
CN502	10P FFC CONNECTOR	404-CDMIX2-1142
CN501	4P SOCKET	404-DCM270E3-878A-HA
CN2B	37P 1.0 FFC SOCKET (for CONTROL PCB ASSY A)	404-S1-3740
CN3B	37P 1.0 FFC SOCKET (for CONTROL PCB ASSY B)	404-S1-3740

Mark	No.	Description	Part No.
	CN142	P 2.5 CONNECT WIRE	404-S1MK2-3883
	W500	6P 2.0 CONNECT WIRE LEAD WIRE	404-S1MK2-3886 406-HF6011B-523
		CHASSIS TO CHASSIS1P GROUNDING WIRE	406-S1-1239-HA
	L500	INDUCTANCE	415-USOLOPA-342-HA
	L501	CHIP BEAD	415-COMBO-421
	L502	CHIP BEAD	415-EN2000-376
	SW527,528	TACT SW	403-DDJLE-416-HA
	SW500-526,530	TACT SW	403-DDJLE-419-HA
RESISTORS			
	R557		412-3113-078-HA
	VR500-502	ROTARY VR (20KB)	418-S1-694-HA
	P500	SLIDE VR (10*2)	418-S1-695-HA
	R517,518,532,533,535,536,538,539		412-CDVD2001-554
	R541,574,591,593,594,596,597,599		412-CDVD2001-554
	R600,602,603,605		412-CDVD2001-554
CAPACITORS			
	C523,537		413-CDN34-355-HA
	C521,522		413-CDVD2001-265-HA
	C524-527		413-HMA2200-5017-HA
	C508		413-SPPW3-235-HA
	C500-505,507,511-514,518-520		413-DCM280-773
	C528,538-543,549,550,557		413-DCM280-773

C TRANSFER PCB ASSY

MISCELLANEOUS

6P SOCKET	404-90V1-101
-----------	--------------

D DSP PCB ASSY

SEMICONDUCTORS

IC13	417-3113-018-HA
IC40	417-CDN34A-314
\triangle IC16,39	417-200USB-1071
IC20	417-22SM-982
\triangle IC18,41	417-CTB200-500-HA
IC21	417-DAIA-711
IC19	417-HDJ2000-503-HA
\triangle IC28	417-IQ2UM-1004-HA
IC30-33	417-IQ2UM-940-HA
IC29	417-IQ2UM-941
IC22,26,27	417-IQ2UM-970A-HA
\triangle IC17	417-PDJ33-1045-HA
IC1-12,37,43,44	417-ST150-599-HA
IC14	417-DJM250-1054-HA
Q9,10,12,13,15,16,21-24,29-32,35-46	416-3000-378-HA

Mark	No.	Description	Part No.
A	Q4,7,17,18		416-CDN88-044-HA
	Q6		416-CDN88-045-HA
	Q1		416-CTB200-166-HA
	Q11,14		416-CTB200-178-HA
	Q8		416-HDJ9700-210
	Q5		416-MC6000-373
	Q2,3,47		416-UDJ200-347-HA
	D3,4,18,23		414-007USB-148-HA
	D5-7,12-14		414-CD1000-075A-HA
	ZD5		414-DDJLE-332-HA
B	D8-11,28-31,34-39		414-DJ1100G-207-HA
	ZD6-12		414-DJM4000-331-HA
	D33		414-RMP3-285-HA
	D24-27,32		414-UDJ200-284-HA

Mark	No.	Description	Part No.
	C248-254,264,269,305,364,368,374		413-DCM280-773
	C378,379,380,423,424,430,443,441		413-DCM280-773
	C442,444,471,472,478,479,482,483		413-DCM280-773
	C487,488-492,493-499,501-503		413-DCM280-773
	C508,511-522,524,525,528-532		413-DCM280-773
	C539,540,547		413-DCM280-773
	C82,106		413-MAIE-1211-HA
	C16,17,24,27,52,367,371,474,523		413-MC6000-1180
	C35,36,80,105,550,551		413-007USB-828-HA
	C180,181,210,211		413-205-958A-HA
	C182,183,212,213		413-900-934A-HA
	C37,132,178,179,208,209		413-CDVD2001-265-HA
	C350-352,425		413-CDVD2001-265-HA
	C147,244,485,486		413-DM1000-346
	C421,422		413-DV300-292-HA

MISCELLANEOUS

JK8	JACK GROUND PLATE	300-300-1171-HA
SW1	FIXED PLATE (M3*P0.5)	300-4500-2010A-HA
JK2	USB FIXED PLATE	300-S1-2069-HA
SW1	POWER SWITCH	403-VP9812-162-HA
CN8	5P SOCKET	404-1210S-094A-HA

C420		413-6K2-1296
C148,245		413-HC1421FR-277
C38,109,169,199,229,263		413-HMA2200-5017-HA
C6,12		413-HT8015-169-HA
C81,104,354-361		413-HT801K-192-HA

CN7	6P SOCKET	404-3113-052A-HA
CN5A,5B	8P SOCKET	404-DV300-506A
CN6,12,13	3P SOCKET	404-HP1010K-259A-HA
CN14A,14B	2P 2.5 SOCKET	404-KMD1500-607A
CN4A	7P CONNECTOR WIRE	404-S1-3760-HA

C286,287,298-301,330-333		413-HT801K-193-HA
C526,527		413-KT300-102
C13,266,280,281,304,317-324		413-MC6000-1191-HA
C363,366		413-MC6000-1191-HA
C362		413-QSPAND-632-HA

W9	4P 2.0 CONNECT WIRE	404-S1MK2-3885
L8	INDUCTANCE	415-IM-302
L1	CHOKE COIL	415-KM280A-021
L20	CORE	415-MC2-401-HA
L11	CORE	415-PDJ33-381-HA

C5,167,168,176,177,197,198,206		413-SPPW3-235-HA
C207,227,228,261,262,336		413-SPPW3-235-HA
C163,164,193,194,223,224,257,258		413-SPPW3-236-HA
C342,343		413-SPPW3-237-HA
C265		413-810-920

JK11	DC POWER JACK	420-CDMIX1-078-HA
JK4-7	2P RCA JACK	420-CDN24A-051
JK3	MIC JACK	420-MH2-223-HA
JK8	MIC JACK	420-Q3433-107-HA
JK2	USB JACK	420-S1-377-HA

C475		413-X050-1058-HA
------	--	------------------

E OUTPUT PCB ASSY

MISCELLANEOUS

X1	CRYSTAL (6 MHz)	427-S1-143-HA
X2,3	CRYSTAL (24 MHz)	427-S1-144-HA
X4	CRYSTAL (24.576 MHz)	427-S1-145-HA
L24-32	FIXED PLATE ASSY	703-200U-1170A-HA
	CHIP BEAD	415-EN2000-376

JACK GROUND PLATE	300-300-1171-HA
3P CONNECTOR WIRE	404-S1-3754-HA
5P 2.0 CONNECT WIRE	404-S1MK2-3881
3P HEADPHONE	420-CDMIX1-086
2P RCA JACK	420-CDN24A-051

L16	TDK COMMON FILTERS	415-FU800-305-HA
L15	TDK CHIP BEAD	415-FU801-316
L2,4-7,9,10,12-14,17-19,21	BEAD CORE	415-HV3500K-090-HA
L23	INDUCTOR (10UH T-26MM)	415-MPG100-047-HA

F BAL. PCB ASSY

MISCELLANEOUS

RESISTORS

R233,297		412-900-987
R228,229,292,458		412-900-994
R32,33,42,44,204,205,218,219		412-CDVD2001-554
R306-309,362,363,397,486-493		412-CDVD2001-554
R34		412-PDJ1-1291

6P 2.0 CONNECT WIRE	404-S1MK2-3879
XLR JACK	420-S1-375A
SMD FUSE	422-S1-111-HA

R409,410		412-CDG11-466-HA
R415,416		412-HT801K-219-HA
R411,412		412-SA12-566-HA

G MIX PCB ASSY

SEMICONDUCTORS

C1-3,7-10,15,20,23,26,30,33,34		413-DCM280-773
C39-51,59,60,63,83,84,91,107,108		413-DCM280-773
C110-131,139,140,143,144		413-DCM280-773
C154-160,170,171,184-190,200,201		413-DCM280-773
C214-220,230,231,238,239		413-DCM280-773

IC700-702	417-DDJLE-1080
IC706	417-MP3-429
IC704,705,707	417-QSPAND-432-HA
Q700	416-MC6000-374
D756-759	410-S1MK2-441
D797	414-DFX1-144-HA
D776-796	414-CD1000-075A-HA
D798	414-RMP3-285-HA
D754,755,760,761	410-CDI600-357T
D700-705,750-753,762-775	410-DJ5000-253T

Mark	No.	Description	Part No.
------	-----	-------------	----------

	D706-719		410-HDJ2000-162T
	D720-749		410-SR-437

MISCELLANEOUS

	SW719	ENCODER	403-DDJLE-418-HA
	SW720-723	SLIDE SW	403-ID-333-HA
	CN1B	30P 1.0 FFC SOCKET	404-S1-3739
	W700	CONNECTOR WIRE	404-S1-3756-HA
	W702	3P 2.0 CONNECT WIRE	404-S1MK2-3884

	W701	3P 2.0 CONNECTOR WIRE	404-S1MK2-3906
	J246	1P WIRE	406-S1MK2-1307
	SW700-718	TACT SW	403-DDJLE-419-HA

RESISTORS

	R739,740		412-3113-068-HA
	VR700-715,722	ROTARY VR (20KB)	418-S1-693-HA
	VR717,718,720,721	ROTARY VR (20KB)	418-S1-694-HA
	VR723-727	SLIDE VR	418-S1MK2-725
	VR716,719	ROTARY VR	418-S1MK2-726

CAPACITORS

	C702-704,707,709-731,736-740		413-DCM280-773
	C742-745,749,767,770		413-DCM280-773
	C708		413-3113-035-HA
	C748		413-CDN34-355-HA
	C746		413-DV300-5155-HA
	C706,747		413-HMA2200-5017-HA



CR FADER PCB ASSY

MISCELLANEOUS

	CN01	3P SOCKET	404-KMD3500-609A-HA
		PC SHEET	501-EN2000-2469

RESISTORS

	P115	SLIDE VR	418-EN2000-427
--	------	----------	----------------



FRONT PCB ASSY

SEMICONDUCTORS

	IC1100		417-MP3-429
--	--------	--	-------------

MISCELLANEOUS

		FIXED PLATE (M3*P0.5)	300-4500-2010A-HA
	VR1102,1103	VR FIXED PLATE	300-6000-1874-HA
		PH FIXED PLATE	300-S1-2061-HA
		FIXED PLATE	300-SC1M-1621-HA
	SW1100-1103	SLIDE SW	403-S1-420-HA

	CN9	4P SOCKET	404-DCM270E3-878A-HA
	CN4B	7P SOCKET	404-HMD5000-785A-HA
	CHASSIS	1P GROUNDING WIRE	406-S1-1240-HA
	JK1101	3P HEADPHONE JACK	420-CDMIX1-086
		SPACER	501-MAIE-2451

RESISTORS

	VR1102,1103	ROTARY VR	418-S1MK2-735
	R1100-1107		412-DFX1-653-HA
	R1108-1111		412-DV300-291-HA

CAPACITORS

	C1113,1114		413-DCM280-773
	C1103-1106,1108-1110		413-3113-035-HA
	C1111,1112		413-CDVD2001-265-HA

Mark	No.	Description	Part No.
------	-----	-------------	----------

J TOUCH PCB ASSY

SEMICONDUCTORS

	IC475		417-S1-1081
--	-------	--	-------------

MISCELLANEOUS

	W5	8P 2.0 CONNECT WIRE	404-S1MK2-3882
	L475-478	CHIP BEAD	415-JKME3-369

CAPACITORS

	C475,476		413-DCM280-773
	C477		413-MC6000-1180

K LED PCB ASSY

SEMICONDUCTORS

	IC1000-1004		417-DDJLE-1080
	Q1000		416-MC6000-374
	D1037-1044		410-HDJ9700-214
	D1000-1035		410-S1-419
	D1036		414-CD1000-075A-HA

MISCELLANEOUS

	R	1P SIGNAL WIRE	407-S1MK2-251
	B	1P SIGNAL WIRE	407-S1MK2-252
	W	1P SIGNAL WIRE	407-S1MK2-253
	BK	1P SIGNAL WIRE	407-S1MK2-254
	G	1P SIGNAL WIRE	407-S1MK2-255

	A	1P SIGNAL WIRE	407-S1MK2-256
	L1000	CHIP BEAD	415-1300-240A

CAPACITORS

	C1000-1004		413-DCM280-773
	C1006		413-MC6000-1180

SENSOR PCB ASSY

SEMICONDUCTORS

	M301		417-PS2-504
--	------	--	-------------

MISCELLANEOUS

	M301	4P CONNECTOR WIRE	404-PDJ33-3591V-HA
--	------	-------------------	--------------------